# SE SAN FRANCISCO BAY UNIVERSITY 

## Frequently Asked Questions

If you have any questions or concerns, please call the university administration office.
Tel: (510) 803-SFBU (7328)
The university website address is https://www.sfbu.edu.
For Admissions Office: e-mail admissions@sfbu.edu; Tel (510) 803-7328 ext. 1

- How can I apply to SFBU?

See admission and application information on pages 3 (ADMISSIONS POLICIES), 50 (School of Engineering, Undergraduate Programs), 69-71 (School of Engineering, Masters Programs), 98 (School of Business, Undergraduate Program), 121-122 (School of Business, Graduate Management Certificate), 132 (School of Business, Master's Program), 167-168 (Intensive English Program).

- How can I get an application form? What should I submit for the application?

Start the application by creating an account on MySFBU applicant portal accessible from the SFBU website. Admissions officers are also available to assist with the application.

For degree programs, the required application materials are listed on SFBU's website in the "Admissions" section and in the "Undergraduate Admissions" and "Graduate Admissions" subsections. This information is also provided on the online application form.

- $\quad$ Are the admissions requirements the same for online and physical programs?

Yes, the admissions requirements are exactly the same.

- How can I see an admission officer or an academic counselor?

Admission officers and academic counselors are available virtually as well as on campus to assist the applicants and the students during office hours posted on the SFBU Website at https://www.sfbu.edu/contact-us. Also, see Academic Advising on page 14.

- What courses do I need to complete for my major?

See Curriculum under various degree programs:
School of Engineering: page 55 (Undergraduate programs graduation requirements), 74 (Master's programs graduation requirements),

School of Business: page 105 (Undergraduate program graduation requirements), 136 (Master's program graduation requirements).

- I want to know the costs of taking courses, pursuing a degree, academic certificate, or the Intensive English Program.
See the tuition and fees information on pages 6 (Tuition), 6 (Fees), 54 (School of Engineering, Undergraduate programs), 73 (School of Engineering, Masters Programs), 103 (School of Business, Undergraduate Program), 123 (School of Business, Graduate Management Certificate), 135 (School of Business, Master's Program), 168 (Intensive English Program).
- How do I register for classes?

See Registration and related information on page 15.

- Where can I find the directions to SFBU?

See page 184 or on our website at http://www.sfbu.edu/contact-us.

## 2024 Academic Calendar

```
Spring Semester (1/8-4/20)
```

January

| $\mathbf{1}$ | New Year Holiday Observed; Campus Closed |
| :--- | :--- |
| $\mathbf{4}$ | New students report to campus/Orientation |
| $\mathbf{8}$ | Semester and classes begin |
| $\mathbf{8 - 1 3}$ | • Late registration |
|  | - Add/Drop |
| $\mathbf{1 3}$ | - Last day to add/drop (without affecting official records) <br>  <br> $\mathbf{1 5}$Faculty classroom observation begins |

## February

15 Summer semester application deadline for international students
19-24 Mid-term exams

## March

4-9 Check point - student counseling
25 - Summer class schedule and registration packages ready

- Deadline for graduation petition for summer semester (without late fee)
- Deadline for changing program (without late fee)


## April

$1 \cdot$ Begin registration for the summer semester

- Faculty evaluation - by students

5 Summer semester application deadline for local and international transfer students
6 - Summer registration ends (for current students)

- Faculty classroom observation ends

7 Late registration for summer semester begins (for current students)
15-20 Course review and final exams
25 - Posting final grades for the spring semester

- Check point - student counseling

May
$2 \quad$ New students report to campus/Orientation

```
Summer Semester (5/6 - 8/17)
```


## May

6 Semester and classes begin
6-11 • Late registration

- Add/Drop
$11 \cdot$ Last day to add/drop (without affecting official records)
- Deadline for semester break request

13 Faculty classroom observation begins
27 Memorial Day Holiday; Campus Closed

| June |  |
| :---: | :---: |
| 15 | Fall semester application deadline for international students |
| 17-22 | Mid-term exams |
| July |  |
| 1-6 | Check point - student counseling |
| 4 | Independence Day Holiday; Campus Closed |
| 22 | - Fall class schedule and registration packages ready |
|  | - Deadline for graduation petition for fall semester (without late fee) |
|  | - Deadline for changing program (without late fee) |
| 29 | - Begin registration for the fall semester |
|  | - Faculty evaluation - by students |
| August |  |
| 3 | - Fall registration ends (for current students) |
|  | - Faculty classroom observation ends |
| 4 | Late registration for fall semester begins (for current students) |
| 5 | Fall semester application deadline for local and international transfer students |
| 12-17 | Course review and final exams |
| 22 | - Posting final grades for the summer semester |
|  | - Check point - student counseling |
| 26 | New students report to campus/Orientation |

```
Fall Semester (8/29-12/21)
```


## August

| $\mathbf{2 9}$ | - Semester and classes begin |
| :--- | :--- |
| $\mathbf{2 9 - 3 1}$ | - Late registration |
|  | • Add/Drop |

## September

| $\mathbf{1 - 4}$ | $\cdot$ Late registration |
| :--- | :--- |
|  | $\cdot$ Add/Drop |

## October

152025 spring semester application deadline for international students
17-23 Mid-term exams

## November

1-7 Check point - student counseling
$9 \quad$ Deadline for graduation petition for next spring semester (without late fee)

- Deadline for changing program (without late fee)

112025 spring class schedule and registration packages ready
$18 \cdot$ Begin registration for the 2025 spring semester

- Faculty evaluation - by students
$23 \cdot 2025$ Spring registration ends (for current students)
- Faculty classroom observation ends

24 Late registration for 2025 spring semester begins (for current students)
28-30 Thanksgiving Holiday; Campus Closed

## December

52025 spring semester application deadline for local and international transfer students
16-21 Course review and final exams
25 - Posting final grades for the fall semester

- Check point - student counseling

25-31 Winter Break; Campus Closed

## January 2025

1 New Year Holiday; Campus Closed
3 New students report to campus/Orientation

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## INTRODUCTION

The San Francisco Bay University (SFBU) catalog is an annual publication containing information on academic requirements, learning facilities, tuition and fees, and disciplinary issues concerning all applicants and students at SFBU. Student handbooks, for local and for international students, are published separately every semester and posted on the MySFBU student portal. New students are introduced to the MySFBU student portal on the New Student Orientation Day. The handbooks provide additional information to help the students adjust to the school environment quickly and learn how to use the administrative services provided to them.

The majority of the information contained in this catalog and other pertinent information is also available on the university website at www.sfbu.edu.

## - Mission

## Mission Statement

San Francisco Bay University provides diverse learners with inclusive, innovative, and inspirational education for lifelong personal and career success.

## - Vision

San Francisco Bay University will set the standard as a national and international model of engaged and transformative higher education in service of the common good.

## - Values

Care for the Whole Student
Deliver Teaching Excellence
Provide Access and Inclusion
Offer Affordable Higher Education Opportunities
Reflect the Vibrancy of the Silicon Valley

## - Institutional Learning Outcomes

San Francisco Bay University has adopted Institutional Learning Outcomes that represent our degrees, academic certificates, and general education outcomes. These are supported through each of our major areas of study, general education courses, and through our administrative and educational support programs.

SFBU graduates are expected to demonstrate the following institutional student learning outcomes:
Written Communication - Write sustained, coherent arguments or explanations.
Oral Communication - Utilize effective oral communication strategies.
Quantitative Reasoning - Utilize mathematical concepts and methods to analyze and explain issues in quantitative terms.

Information Literacy - Identify, locate, evaluate, and effectively and responsibly use and share information in support of academic, personal, and professional needs.

Critical Thinking - Explore and analyze issues, ideas, artifacts, and/or events to formalize an opinion or conclusion.

Specialized Knowledge - Achieve knowledge and skill required in a specialized field of study appropriate to the degree level.

## - Diversity Statement

San Francisco Bay University strongly believes in diversity in all of its many forms at every level of our university as we find having a broad spectrum of perspectives and backgrounds vital to accomplishing our mission. Diversity is essential in furthering social justice, educational quality, and career success. SFBU is dedicated to fostering a culture that promotes, supports, and respects diversity throughout our university. Diversity includes, but is not limited to, race, color, religion, age, marital status, sexual orientation, gender, ethnic origin, national origin, ancestry, military or veteran status, and physical impairment.

## ■ Faculty

The University faculty maintains a tradition of personal attention to students and devotion to teaching and research. Many members of the faculty have been cited for excellence in teaching. Some of them are leaders in their disciplines and professional organizations. Members of the faculty have had the experience of working in high-tech fields and various business professions; some also acted as consultants to educational institutions, industry, businesses, government, and foundations.

## - Accreditation

San Francisco Bay University is accredited by the WASC Senior College and University Commission (WSCUC), 1080 Marina Village Parkway, Suite 500, Alameda, CA 94501, 510.748.9001.

## - Corporate Status

San Francisco Bay University is organized under California Corporate Law as a nonprofit, public-benefit corporation and is deemed tax-exempt, as applies to corporations falling within the IRS 501(c)(3) ruling.

SAN FRANCISCO BAY UNIVERSITY ADMINISTERS ALL ITS PROGRAMS WITHOUT REGARD TO RACE, ETHNIC ORIGIN, AGE, OR SEX. SFBU CONFRONTS AND REJECTS ALL MANIFESTATIONS OF DISCRIMINATION IN ITS EDUCATIONAL POLICIES, ADMISSION POLICIES, SCHOLARSHIPS, OR OTHER SCHOOL ADMINISTERED PROGRAMS.

## - Governing Board

SFBU is governed by its Board of Directors. Board members follow applicable nonprofit rules, as SFBU is a nonprofit, public-benefit educational institution.

## - Community Involvement

The University is first and foremost an institution of learning and teaching, committed to serving the needs of society and involved in the academic and civic communities of which it is a part. The SFBU administrators participate in job fairs and work with businesses to provide job opportunities for our students. SFBU sponsors and promotes various community activities and encourages participation of its students in community outreach and volunteering programs. SFBU believes that community involvement by its students help develop social responsibility.

## - Non-Discrimination Policy

SFBU, in accordance with applicable Federal and State law and University policy, does not discriminate on
the basis of race, color, national, and/or ethnic origin, sex, marital status, gender identity, sexual orientation, pregnancy, ${ }^{1}$ physical or mental disability, medical condition (cancer related or genetic characteristics), ancestry, religion, service in the uniformed services, ${ }^{2}$ or age. SFBU also prohibits unlawful harassment including sexual harassment and sexual violence. This policy of non-discrimination applies to all aspects of admission, education, employment, financial aid, student activities, and other schooladministered programs. SFBU is obligated to investigate all discrimination complaints, including harassment in an unbiased, thorough manner.

Anyone with questions about SFBU's non-discrimination policy or complaints is encouraged to contact the Compliance Team at compliance@sfbu.edu.
${ }^{1}$ Pregnancy includes pregnancy, childbirth, and medical conditions related to pregnancy or childbirth.
${ }^{2}$ Service in the uniformed services includes membership, application for membership, performance of service, application for service, or obligation for service in the uniformed services.

## - Reasonable Accommodation for Students with Disabilities

SFBU adheres to the Americans with Disabilities Act (ADA) requirements and provides reasonable accommodations for students who are otherwise qualified but have disabilities. Such disabilities may include learning disabilities, health impairments, and other documented disabling conditions.

## ADMISSION POLICIES

- SFBU admits all qualified individuals into the university without regard to race, religion, sex, ethnic origin, or disability.
- SFBU makes education available to all individuals who meet the qualifications for entrance into SFBU.

Semester: The school's annual calendar and course offering are based on a semester system of three 15week semesters starting in January, May, and September of the year. An applicant may apply for entrance in any of the three semesters each year. Separately, the Intensive English Program follows an 8-week session schedule throughout the year.

The application deadline for each semester is given in the Academic Calendar included in this catalog as well as posted on the SFBU website. Applicants are advised to apply online at https://www.sfbu.edu/admissions.

Late Application: Late applications may be received after the deadline each semester. Overseas applicants should apply earlier to allow sufficient time for processes related to visa application and international travel. The online Application Guide provides application details.

## - Application Requirements

Refer to the description on application requirements in the section for the school and level of program of your choice. These application requirements are the same for all modalities.

Non-degree, non-academic certificate seeking students should refer to application requirements under the Academic Information section in this catalog.

Please note that SFBU does not admit ability-to-benefit students.

## - Official Transcripts

Official transcripts are required for registration/enrollment into a degree program. Late submissions are permitted only with the approval of the Admissions Committee. Students enrolled in courses at another institution at the time of application will have 60 days after the completion of the courses to provide SFBU with the updated transcripts. Failure to submit official transcripts on time may result in placement of the applicant in a non-degree status or withdrawal from the university.

Admission Evaluation: The SFBU Admissions Committee provides individualized admission evaluation service and follows the approved credit transfer policy to transfer credit for each applicant. A copy of the evaluation report will be provided to the accepted applicant.

## - Document Submission

Please note all documents that you submit, or are submitted on your behalf, in support of your application for admission, or to fulfill enrollment requirements, become the exclusive property of SFBU. SFBU will under no circumstances release the documents to you or any other party, nor will SFBU provide you with any copies of the documents.

## - Notification of Admission

Upon approval of admission, prospective students will receive a notification of admission status. An admitted applicant will receive an acceptance package. An applicant denied admission will receive an explanation for their denied application. Processing times will vary. Processing begins upon receipt of all required documents as instructed.

## - Tuition Deposit

All accepted applicants are required to submit a tuition deposit to reserve their place in the accepted term. Instructions, applicable fees, and due dates are provided in the acceptance package.

## - Cancellation of Admission and Readmission

If an applicant is accepted into a degree program for a given semester and does not begin classes in that semester, admission will automatically be canceled. The prospective student's application records (transcripts from previous colleges and English language proficiency records) are kept on file for a period of six months from the semester start date. If the applicant then wishes to be considered for readmission in a later semester, he/she will be required to resubmit an application online with the initial account ID. A reevaluation of admission will be made for the applicant. If reapplication is made more than six months from the initial admission term, the applicant may be required to submit an entire new set of the application materials.

## - Returning Students

When a former SFBU student returns to continue his/her study in an unfinished program after skipping more than one term, the returning student must submit a new online application. The student will receive a new evaluation and study plan based on the graduation requirements specified in the current catalog. Applicable courses and credits earned in the unfinished program may be applied towards the new study plan.

## o F-1 International Students

SFBU is authorized under federal law to enroll non-immigrant international students. SFBU Designated School Officials are authorized to issue Forms I-20. However, SFBU does not provide visa services, nor does SFBU vouch for student status. Please note that the only language of instruction shall be English.

Note: The Graduate Certificate in Management (GCM), the Master of Science in Business Analytics (MSBAn), and the Master of Science in Data Science do not support F-1 International Students, as of this writing.

## - SFBU Institution Codes for Standardized Tests

| ACT | $\mathbf{1 7 5 0}$ | SAT | $\mathbf{4 3 3 5}$ |
| :--- | :--- | :--- | :--- |
| GMAT | $\mathbf{5 4 8 5}$ | GRE | $\mathbf{5 4 8 5}$ |
| TOEFL | $\mathbf{9 6 2 6}$ | CLEP | $\mathbf{7 5 6 9}$ |
| DANTES | $\mathbf{9 6 7 0}$ | FCE | UX357 |

## - New Student Orientation

All new students are required to attend the New Student Orientation program conducted at SFBU before each semester starts.

## - Transfer and Articulation Agreements

SFBU has established transfer or articulation agreements with various academic institutions such as:

- Ohlone College
- Evergreen Valley College
- Merritt College
- College of San Mateo
- Chabot College
- Laney College
- Las Positas College
- San Jose City College
- Berkeley City College
- Mendocino College
- Mission College
- Bakersfield College
- Yuba College
- Cerro Coso Community College
- West Valley College
- City College of San Francisco

In general, these agreements include details of the courses that may be transferred to satisfy SFBU's program requirements. The full list of institutions and the agreements are published on the SFBU website.

## ENROLLMENT AGREEMENT

To enroll in SFBU, a student must execute an enrollment agreement. The enrollment agreement is presented digitally through the student online portal (MySFBU). The agreement indicates the student's
program, estimated length of study, estimated costs, and other information. As a prospective student, you are encouraged to review this catalog prior to signing an enrollment agreement.

## TUITION AND FEES

## - Tuition

## Undergraduate

- Program Unit Rate: $\$ 330$ per unit
- Estimated Tuition per Semester: $\$ 3,960$; based upon a 12 -unit course load


## Graduate:

- Program Unit Rate: $\$ 450$ per unit
- Estimated Tuition per Semester: $\$ 4,050$; based upon a 9-unit course load

IEP:

- Tuition for full-time students
(four courses, 20 hours/week): $\$ 2000$ per session.
- Tuition for part-time students (one course, 5 hours/week): $\$ 500$ per session.
- Tuition for part-time students (two courses, 10 hours/week): $\$ 1000$ per session.
- Tuition for part-time students (three courses, 15 hours/week): $\$ 1500$ per session.

Special tuition rates: Special tuition rates may apply to the following groups of students:

- SFBU faculty or family members taking courses for credit. The policy is posted on the MySFBU faculty portal.
- SFBU staff members approved to take courses for credit or staff family members taking courses at SFBU.

In general, tuition scholarships do not apply to students in these groups.

## - Fees

Notice: Please observe deadlines to avoid late fees. All late fees are $\$ 50$ unless otherwise specified below.

| Item | Amount | Notes |
| :--- | :--- | :--- |
| Tuition Deposit | $\$ 150$ | Non-refundable. If student reports to SFBU and enrolls, first <br> semester tuition is discounted by Tuition Deposit amount. |
| Campus Fee | $\$ 180$ | Per semester. |
| Registration Fee | $\$ 75$ | Per semester. |
| IEP Registration Fee | $\$ 75$ | Per session. |
| Learning Resource Fee | $\$ 200$ | Per semester. |
| Graduation Petition Fee | 150 | Academic certificate |


|  | \$300 | Degree programs |
| :---: | :---: | :---: |
| Re-petition Graduation Fee | \$50 | Fee is per each re-petition to graduate. |
| Health Insurance Premium | \$495 | Per semester. All students, except $100 \%$ online modality students, are required to have health insurance. Refunds are subject to and processed in accordance with the third-party insurance carrier's terms and conditions, which can be found in the plan brochure posted on the university website. |
| Add/Drop Request Processing Fee | \$10 | First request to modify registration for a particular semester |
|  | \$20 | Second Request to modify registration for a particular semester |
|  | \$50 | Third Request to modify registration for a particular semester |
|  | \$100 | Fourth Request to modify registration for a particular semester |
| Late Registration Fee (New Student Only) | \$20 | Applies if student registers during Week 1 |
|  | \$120 | Applies if student registers during Week 2 |
| Late Registration Fee (Continuing Student Only) | \$50 | Applies if student registers late during the period from the beginning of Week 12 of the previous semester to the end of the previous semester. |
|  | \$75 | Applies if student registers late during the period from the end of the previous semester to the start of the semester. |
|  | \$100 | Applies if student registers late after the semester starts. |
| Payment Plan Service Fee | \$100 | Service fee to enroll in a two-installment payment plan |
| Payment Plan Late Fee | \$50 | Applies if student misses second installment payment deadline (i.e., Week 6) and pays during Week 7 |
|  | \$100 | Applies if student misses second installment payment deadline (i.e., Week 6) and pays during Week 8 or thereafter |
| Change Major or Program of Study | \$50 |  |
| Change to New Curriculum | \$50 | SFBU may from time to time update its program curriculum and requirements. In such circumstance, a student may, at student's discretion, change student's study plan to the updated program curriculum and requirements. |
| Undergraduate Student Challenge Exam Fee | \$100 | Fee is per course challenged. If the challenge is successful, student must also pay tuition for the challenged course. |
| Proficiency Exam Fee | \$150 | Fee is per program background requirement that student seeks to clear. If successful, student will clear the requirement, but shall not receive any credits. |
| Graduation Cap and Gown Fee | \$30 | Undergraduate Student |
|  | \$50 | Graduate Student |
| Transcript Fee | \$5 | Each copy after first two copies |
| Duplicate Diploma Processing Fee | \$150 | Applies if the student requests a duplicate diploma |
| Express Service Fee | \$120 | For expedited one business day processing of I-20, transcript, and other requests |


| Express Mail Service Fee | \$50 | Applies if student requests that university generated documents (e.g., transcript, diploma, I-20, etc.) are mailed using USPS Express Mail Service. Fee includes tracking service. |
| :---: | :---: | :---: |
| Excess Deposit Processing Fee | \$100 | SFBU is not a bank and lacks the resources to intake, process, and disburse funds deposited to the student's university account in excess of amounts owed by the student to SFBU. Therefore, students are strongly discouraged from having third parties transfer to the university funds that are intended for the student's living expenses, discretionary spending, and the like. <br> SFBU may pay out a student's positive credit balance, not resulting from the student's withdrawal or cancellation, to the student by check. The student must request a check payout by submitting a copy of the "Excess Deposit Processing Request Form" to the Finance Office. There is a $\$ 100$ service fee for each request. For purposes of clarity, the excess deposit processing fee does not apply to refunds for withdrawal or cancellation. |
| Returned/Bad Check Fee | \$25 | First returned or bad check |
|  | \$35 | Each returned or bad check after the first |
| Chargeback Fee | \$100 | Fee assessed if the following criteria are not satisfied. <br> Before initiation of a chargeback request to the credit/debit card provider for any disputed credit/debit card charge, an applicant or student shall make a formal dispute request in writing directly with SFBU's finance office regarding such disputed charge. SFBU shall have 15 business days to resolve the issue. |
|  | \$200 | If a chargeback is initiated after SFBU makes a final determination on the formal dispute request required above, and that chargeback is denied by the credit/debit card provider, SFBU will charge a chargeback fee of $\$ 200$. This typically, but not exclusively, occurs in fraudulent chargeback situations. |
| Student ID Replacement Fee | \$10 |  |
| F-1 International Student TransferOut Processing Fee | \$150 | Does not apply to SFBU graduates. |
| Optional Practical Training <br> Extension Service Fee  | \$20 |  |
| International Student Change of Status | \$50 | Applies if student changes to F-1 student status from another immigrant or nonimmigrant status, such as, but not limited to, F-2 and H-4. |
| Duplicate I-20 Service Fee | \$5 |  |
| Dependent I-20 Service Fee | \$5 |  |
| Student Housing Fee | \$3000 | Per semester. Optional, students are not required to reside in university housing. |
| Student Housing Deposit | \$500 | Use and refund in accordance with California law. Only required for students residing in university housing. Students are not required to reside in university housing. |

NOTICE: For any student who does not fulfill his/her financial obligation to the school on time, a penalty of $\$ 20 /$ month will be debited from the student's financial account until his/her obligation is fulfilled. In addition, the late fee and automatic withdrawal rule will also apply.

## STUDENT'S RIGHT TO CANCEL

You have a right to cancel this enrollment agreement and obtain a refund of charges paid if notice of cancellation is received by SFBU through attendance at the first class session, or the 7th day after enrollment, whichever is later. You shall provide notice of cancellation in writing through the MySFBU Student Portal using the following navigation links: My Requests $>$ Non-Academic $>$ Transfer Out/Withdrawal. Cancellation shall be effective when successfully submitted.

## REFUND POLICY

Students who withdraw by the end of the first week of class in a period of attendance will receive a full refund. Following the first week of class and up through completion of 75 percent of the period of attendance, students may withdraw from SFBU and obtain a pro rata refund of unearned institutional charges. The tuition deposit is non-refundable.

SFBU shall refund any credit balance on the student's account within 45 days after the date of the student's completion of, or withdrawal from, the student's educational program.

A withdrawal may be effectuated preferably by the student's written notice, as described above under cancellation, or by the student's conduct, including, but not necessarily limited to, a student's lack of attendance, as further detailed below.

A student is deemed to have been withdrawn when any of the following occurs: (1) the student drops all enrolled courses in a period of attendance, (2) the student submits a written notice to withdraw through the portal, as described in the cancellation section, (3) SFBU suspends or expels the student due to misconduct, unsatisfactory academic performance, or overdue fees, (4) SFBU terminates an F-1 student for violation of U.S. Department of Homeland Security regulations, (5) the student fails to return from a leave of absence, or (6) the student, without prior approval, fails to attend four consecutive classes for all enrolled courses in a period of attendance.

A student that drops one or more courses, but not all courses, will receive a pro rata refund of tuition for the dropped courses.

## Calculation of Refund

Refund amount $=$ total paid by student - amount owed
Amount Owed $=($ total institutional charge/hours in program $) *$ hours attended or scheduled to attend prior to withdrawal

## MINIMUM TERMS FOR TUITION PAYMENTS

The student is only obligated for the portion of the program cost applicable to each semester in which the student is enrolled in the school. The student must pay the school the applicable cost (i.e. semester tuition, other required fees) at the time of registration, unless the student and school agree in writing to a tuition payment plan.

Students whose tuition/fees are overdue are subject to withdrawal from classes by the school. Students who fail to fulfill their financial obligations to the school may be suspended from school and may be considered for reenter only after full payment of the delinquent portion of their account unless the school has agreed in writing to a different payment arrangement.

Penalty: For any student whose tuition/fees are past due, a penalty of $\$ 20 /$ month will be debited to the student's financial account until his/her obligation is fulfilled.

If the student withdraws or is terminated from the program for any reason and subsequently applies to reenter the school, the school will determine in its sole discretion whether to allow the applicant to reenter. If the school allows the applicant to reenter, the student must execute a new enrollment agreement and pay all the current program costs.

## PAYMENT PLANS

## Eligibility

Generally, a student is eligible to enroll in a payment plan for any semester after the first semester. To apply for a payment plan, the student must clear all financial obligations pertaining to or arising out of student's prior semester/s enrollment.

## Two Installments

The first installment is due by the end of week 12 of the semester prior to the semester for which the payment plan is requested. The second installment is due by the end of week 6 of the semester. For example, if a student is permitted to enroll in a payment plan for 2022 summer semester, the first installment will be due by the end of week 12 of 2022 spring semester, and the second installment will be due by the end of week 6 of 2022 summer semester.

The first installment includes amounts for half of the tuition, the full health insurance premium, and all required fees. The second installment is for the remaining tuition.

## Payment Plan for Exceptional Circumstance

A payment plan for students with exceptional circumstances may qualify for a customized payment plan. These plans are typically for those who are facing severe economic hardship. The student must provide evidence of severe economic hardship. Such examples are receipt of CalWORKs benefits or U.S. Citizenship and Immigration Services Employment Authorization based on severe economic hardship. These cases are reviewed on a case-to-case basis and approved sparingly.

## Payment Plan Enrollment and Withdraw

Payment Plan Enrollment at the Time of Registration: Students enroll in a payment plan at the time of registration via the student portal. Eligible students may select and enroll in a payment plan without administrative approval.

Later Payment Plan Enrollment: If a student wishes to enroll in a payment plan after registration, the student must (a) contact SFBU Finance to have the plan manually added to the student's account, (b) pay the payment plan service fee, and (c) pay or have paid an amount equal to or greater than the first installment amount.

Withdraw from payment plan: If a student wishes to withdraw from a payment plan, the student may do so prior to the first installment deadline by contacting SFBU Finance to have the plan removed from the student's account. At the time of withdraw from the payment plan, the student must pay or have paid an amount equal to or greater than the total amount owed by student to SFBU for student's registration. The payment plan service fee will be credited back to the student's account.

## Failure to Pay Installments

Failure to make timely payment of the first installment will result in automatic cancellation of a student's registration. Students that fail to make timely payment of the second installment will be assessed a late fee. A student that fails to pay the second installment by the end of week 8 will be withdrawn from courses. Students with nominal balances may be given additional time to settle their accounts.

## Fee Amounts

Please see the fee schedule for all payment plan related fees.

## DEBTS OWED TO THE UNIVERSITY

Should a student or former student fail to pay a debt owed to the University, SFBU may withhold permission to register, to use facilities for which a fee is authorized to be charged, to receive services and materials, or any combination of the above from any person owing a debt until the debt is paid (see Title 5, California Administrative Code, Sections 42380 and 42381). The University will withhold issuance of official transcripts of grades to any person owing a debt. If a student believes that he or she does not owe all or part of an unpaid obligation, the student should contact the campus Finance Office. The Finance Office will review the pertinent information, including any information the student may wish to present, and will advise the student of its conclusions with respect to the debt.

## SCHOLARSHIPS

Tuition scholarships are offered to qualified applicants, current students, and SFBU alumni.

## - Undergraduate Scholarships

| GPA Band | Scholarship \% | Name |
| :--- | :--- | :--- |
| $2.0-2.49$ | $25 \%$ | SFBU |
| $2.50-2.74$ | $30 \%$ | Seeker |
| $2.75-2.99$ | $40 \%$ | Collaborator |
| $3.0-3.24$ | $50 \%$ | Changemaker |
| $3.25-3.49$ | $60 \%$ | Achiever |
| $3.5-3.99$ | $75 \%$ | Leadership |
| $4.0+$ | $100 \%$ | Presidential |

The following terms and conditions apply:

- The continued distribution of all tuition scholarships is contingent upon maintaining Satisfactory Academic Progress. Students also must maintain a good standing with the university by upholding the university's academic standards and integrity.
- Students are required to enroll in a minimum of twelve credits per semester and maintain a minimum cumulative GPA of 2.00 .
- The program must be completed within ten semesters, excluding any approved breaks.
- The scholarship is valid for tuition payments only. Any unused tuition scholarship will be forfeited. The scholarship has no cash value and does not cover the following student fees*:
- $\quad \$ 150$ Tuition Deposit (this goes towards tuition)
- \$180 Campus Fee
- $\quad \$ 75$ Registration Fee
- $\$ 200$ Learning Resource Fee
- $\$ 495$ Health Insurance Fee (unless waived)
- Housing Fees
- SEVIS Fee (international applicants)
- The tuition scholarship payments shall not exceed the program's minimum total credits required for completion.
- Students are not eligible to receive any other SFBU academic scholarship, unless, students apply for, and are awarded, the Startup Scholars Scholarship, in which case the Startup Scholars Scholarship would replace this scholarship.
- If students are unable to meet any of the terms, the tuition scholarship will be rescinded.
- The university reserves the right to rescind a scholarship if it deems the decision to be in the best interest of the university.


## ■ Graduate Scholarships

| GPA Band | Scholarship \% | Name |
| :--- | :--- | :--- |
| $2.50-2.74$ | $0 \%$ | - |
| $2.75-2.99$ | $0 \%$ | - |
| $3.0-3.24$ | $50 \%$ | Changemaker |
| $3.25-3.49$ | $60 \%$ | Achiever |
| $3.5-3.99$ | $75 \%$ | Leadership |
| $4.0+$ | $100 \%$ | Presidential |

The following terms and conditions apply:

- The continued distribution of all tuition scholarships is contingent upon maintaining Satisfactory Academic Progress. Students also must maintain a good standing with the university by upholding the university's academic standards and integrity.
- Students are required to enroll in a minimum of nine credits per semester and maintain a minimum cumulative GPA of 3.00 .
- The program must be completed within four semesters, excluding any approved breaks.
- The scholarship is valid for tuition payments only. Any unused tuition scholarship will be forfeited. The scholarship has no cash value and does not cover the following student fees*:
- $\$ 150$ Tuition Deposit (this goes towards tuition)
- The tuition scholarship payments shall not exceed the program's minimum total credits required for completion.
- Students are not eligible to receive any other SFBU academic scholarship.
- If students are unable to meet any of the terms, the tuition scholarship will be rescinded.
- The university reserves the right to rescind a scholarship if it deems the decision to be in the best interest of the university.

Note: the scholarships are subject to change.

## ■ Outstanding Student Scholarship

Tuition scholarships are awarded to current students in the fall semester. Up to ten $\$ 1,000$ scholarships are awarded to qualified students who are pursuing degrees at SFBU. Application for the scholarship must be received by the SFBU Scholarship Committee by the deadline - June $30^{\text {th }}$. The following are the qualifications:

- The student must have completed at least two semesters of coursework towards his/her degree goal at SFBU.
- The student has maintained a cumulative GPA of at least 3.80 at SFBU.
- The student must be recommended by at least one faculty member for the scholarship award.
- The student must be in good standing with the University.
- The student must be a contributing member of the SFBU Student Association or student extracurricular activities.
- The student must be an active member in at least one professional society.
- The student is required to submit a Statement of Purpose and give a presentation in an open forum to clearly state the student's academic goal, services provided to the community, or fellow schoolmates, personal qualities and skills obtained, and other points that the student chooses to make. The Scholarship Committee is responsible for arranging the presentation schedule.
- The scholarship is applied towards tuition payment. No payments will be made directly to the student for any reason. Any refunds of tuition amount will not include scholarship awards. The scholarship is valid for tuition payments only. The scholarship has no cash value. Any unused tuition scholarship will be forfeited.


## STUDENT EMPLOYMENT AT THE UNIVERSITY

Limited university openings are available on an as-needed basis to highly qualified degree and academic certificate seeking students. Applications are submitted via the MySFBU Student Portal. Students may apply for positions such as Teaching Assistant (TA), Administrative Assistant, and Facility Assistant. These assistantships are offered primarily on the basis of outstanding academic and professional achievement. Students selected to perform these services must be diligent, demonstrate a strong work ethic, and be compassionate towards fellow students, in addition to meeting the academic qualifications.

## PRACTICUM AND INDUSTRIAL COOPERATIVE PROJECTS

Practicum is a supervised practical experience that is the application of previously studied theory. Normally, three hours of work in a practical setting has the credit equivalency of one hour of classroom lecture. Under the supervision of a faculty or staff member, a written agreement shall be developed that outlines the arrangement between the institution and the practicum site, including specific learning objectives, course requirements, and evaluation criteria. Details of the qualifications are specified in the application process for the student. The supervising staff is responsible for checking the students' qualifications.

F-1 International students must observe additional rules required by the U.S. Immigration \& Customs Enforcement on Curricular Practical Training (CPT).

## ACADEMIC INFORMATION

## - Study Plan

Upon admission to a degree or academic certificate program, the new student receives a copy of his/her admission evaluation form which also includes his/her graduation requirements. The electronic file of the student's study plan will be maintained by designated administrative staff as the student continues his/her study at SFBU. The student will have access to his/her own study plan through his/her MySFBU student portal. The student is advised to check his/her online study plan regularly and report any error to the administrative staff immediately.

Follow Proper Sequence: In general, a student should complete lower-level courses before taking higherlevel courses.

Follow Original Plan: A student should follow his/her original study plan to complete his/her study in the program. When courses are replaced due to a catalog update, the student should take the replacement courses as substitutes accordingly. The student may also submit an online request, via the MySFBU student portal, to "Request Substitution of a Required Course" for each such update of a course.

Use New Curriculum: As the school catalog is updated each semester, a student is allowed to submit a request for upgrading his/her study plan by using the graduation requirements specified in the newer and current catalog. The evaluation committee will make a new study plan for the students. The student may risk additional course requirements with such a request since the new requirements are different from the previous ones for the same program. The student is advised to make a careful decision before submitting such a request as the process is not reversible.

Returning Student: When a student returns to SFBU to continue his/her study in an unfinished program after skipping more than one term, the returning student must submit a new application form. The student will receive a new study plan based on the graduation requirements specified in the current catalog. Applicable courses and credits earned in the unfinished program may be applied towards the new study plan.

## - Academic Advising and Counseling

Academic advising and counseling are an essential element of the educational process. Designated faculty members and staff advisors serve as academic advisors and counselors to the students. Academic advising and counseling involve both the student and the advisor/academic counselor.

Although registration via MySFBU student portal is available to the student, he/she is welcome to meet with an academic advisor before and during the course registration period each semester. Appointments can be made for either an in-person or a virtual meeting. During the meeting the advisor and the student will examine the student's study plan and academic records, verify course prerequisites, and choose suitable courses to enroll in. Academic advising is also available to students throughout the school year. In addition to helping students plan course schedules, academic advisors may also encourage students to explore their academic options and personal goals in preparation for entering the professional world.

To ensure satisfactory progress of each student, designated administrative staff maintain close contact with the faculty and the teaching assistants to monitor those students who may need extra help. Class attendance records, available online to the managing staff, are used as one input for student counseling. The student is to be contacted for counseling when either of the following occurs: (1) The managing staff is informed by any instructor who is concerned about the student's performance in the class at any checkpoint during the semester, (2) the student has a poor attendance record, (3) the student is placed in academic-probation status.

## ■ Class Schedule

Classes are scheduled every semester. The class schedule is published approximately $7-8$ weeks before the semester starts, and it falls on the timeline after the mid-term point in the preceding semester.

Many degree program classes, especially graduate courses, are conducted on weekday evenings and on Saturdays to allow both non-working students and working professionals to pursue their studies during after-work hours. A number of degree courses and most English Language classes are conducted on weekdays in the daytime. Since the Learning Resource Center is open during the day and on Saturday, fulltime students may use weekdays' daytime to study, conduct research, do homework, practice hands-on exercises in the labs or work on projects in the practicum labs, or get involved in extracurricular activities. Administrative personnel are available during office hours to assist students, faculty, and prospective applicants.

## - Address of Instruction

The address where the class sessions will be held is as follows:
Main Campus: 161 Mission Falls Lane, Fremont, CA 94539

## - Registration

The registration calendar is listed in the University catalog and on the SFBU website. The semester registration notice is sent to the students by e-mail and posted on the SFBU website and bulletin boards. The registration packages are available online. Late registration fees will be imposed on all continuing students who register after the official pre-registration deadline.

1. All applicants to SFBU must first be admitted into the University by the Admissions department before enrolling and attending classes.
2. Except for new students registering for courses in the first semester, all on-going students must register on or before the scheduled pre-registration deadline for each semester.

New students who have received their acceptance documents are scheduled to register during the reporting and orientation period before the semester starts.
3. All students are urged to register via MySFBU student portal. Designated staff advisors are ready to assist the students in course selection or counseling.
4. Tuition and fees are due and payable in full at the time of registration unless the student has signed up for a tuition payment plan. Tuition payment plans are not applicable to new students in their initial registration for their first semester of studies at SFBU.
5. Working professionals who enjoy education benefits offered by their employers and receive tuition reimbursements may follow SFBU's special payment plan by submitting supporting documents to the SFBU Administration Office prior to registration.
6. An undergraduate student wishing to enroll in more than 16 units and a graduate student in more than 12 units in a given semester must obtain permission from the student's school dean. In order to submit such a request, the following requirements must be met:
a. The student must have completed at least two semesters of study in the current program (the grades from the second term have all been published), counting only program-specific credit courses.
b. The student's CGPA in the current program: Undergraduate student - minimum CGPA of 3.5; graduate student - minimum CGPA of 3.7.
c. The student did not fail any course in the past two semesters in the program.
7. Students on academic probation may be advised to enroll with limited course load.
8. Any student attending a class without officially registering in the class will be required to pay a fine as defined by the administration.
9. Students may enroll as full-time or part-time students. F-1 International students are required to enroll as full-time students (see definition in the next section). Various limitations apply to students on other nonimmigrant visas.
10. All students are required to have a valid health insurance plan. They are required to purchase coverage under the SFBU Student Health Insurance Group Plan offered by Global Benefits Group (GBG) and pay the insurance fee at registration time. Students with alternative U.S. based coverage may waive out of the plan if they satisfy all of the waiver eligibility criteria. To review the criteria, please see the waiver request page in the MySFBU student portal. Students who are enrolled in $100 \%$ online modality are exempt from this health insurance requirement.
11. Students are required prior to arriving on campus to
a. undergo Tuberculosis (TB) testing. You will need to visit your primary care physician or a clinician prior to arriving at SFBU. Required forms are available on the MySFBU student portal and on the website.
12. Registration is complete when all fees are paid.
13. Students with a prior bad-check record will not be allowed to pay by check again.

## - Credit Hour Policy

SFBU follows federal guidelines regarding credit hours.
Pursuant to 34 C.F.R. $\S 600.2$, a credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement that is an institutionally established equivalency that reasonably approximates not less than -
(1) One hour of classroom or direct faculty instruction and a minimum of two hours of out of class student work each week for approximately fifteen weeks for one semester or semester hour of
credit, or ten to twelve weeks for one quarter hour of credit, or the equivalent amount of work over a different amount of time or
(2) At least an equivalent amount of work as required in paragraph (1) of this definition for other academic activities as established by the institution including laboratory work, internships, practica, studio work, and other academic work leading to the award of credit hours.

The above shall apply to both in-person and distance education modalities.
One hour of classroom = One contact hour
One contact hour $=50$ minutes of instruction

## - Full-Time Students

Undergraduate students taking 12 or more units per semester and graduate/academic certificate students taking 9 or more units per semester are considered full-time students for the enrolled term.

## Notice to F-1 International Students

All international students with F-1 Student Visas must be engaged in a full course of study towards completion of the degree program listed on their Forms I-20. A "full course of study" is fulfilled when a student enrolls in a full-time load of credit-bearing courses counting towards the degree program listed on that student's Form I-20. A "full-time load" is at least twelve (12) units for undergraduates and at least nine (9) units for graduate students. In SFBU's semester calendar system, an international student is allowed to take a semester break or take less than a full course of study for one term after maintaining full-time status for the prior two consecutive semesters. International students must observe the SFBU class attendance policy, maintain satisfactory progress towards completion of their degree objectives, and maintain good standing with the University. See an International Student Advisor in the Administration Office if you have questions about how to maintain a full course of study at SFBU.

## - Part-Time Course Load

Undergraduate students taking less than 12 units per semester and graduate/academic certificate students taking less than 9 units per semester are considered taking part-time course load in the enrolled term.

## - Non-degree and Academic Certificate Students

A person may wish to take courses at SFBU as a non-degree student. It is the non-degree student's responsibility to prove that he/she meets the prerequisite requirement when enrolling in a course. Therefore, a non-degree student is advised to submit his/her previous academic records, official or unofficial, to the Admissions Office. Additionally, all non-degree students must at a minimum possess a high school diploma or equivalent certification.

A student pursuing a degree study may be placed in non-degree status when the student violates certain rules. Examples are failure to submit official transcript or other required documents by a given deadline, failure to maintain satisfactory academic progress, failure to follow the student's study plan. A student placed in non-degree status is required to remedy the flaw within a limited period of time. Violation of this limitation may result in termination of the student's study at SFBU.

Academic Certificate students have the responsibility to ensure that they have the ability to successfully complete applicable courses and maintain an acceptable CGPA.

## - Change Study Status

In the event that the non-degree student decides to apply for degree study at SFBU, he/she must go through the regular degree program application procedures. No more than $\mathbf{1 2}$ units earned in non-degree status at SFBU may be applied to the degree requirements. Courses that have been reviewed and currently approved as part of a formal SFBU articulation/transfer agreement are guaranteed to transfer up to the programs' transfer limit.

In the event that a SFBU academic Graduate Certificate in Business Management student, who within 7years of the certificate program completion, proceeds on to the MBA program may transfer all of their graduate certificate credits into the MBA program in either by course matching or by unit-wise.

## ■ Academic Program Change

Current SFBU students may request to change their degree program of study. This academic program change policy applies to both change of academic program and change of school (Business to Engineering, or vice versa).

- Students are permitted to change the program only once during their course of study at SFBU.
- Students requesting to change schools must meet the admissions criteria specified by that school.
- Credits and grades earned from applicable courses taken at SFBU in the original program may be applied towards the new program requirements. The grades are included in the cumulative grade point average (CGPA) calculation for the new program at the same degree level. The credits are excluded from the maximum program length (MPL).
- Students who are placed on academic warning/probation must meet with their respective school dean to determine their eligibility to change programs.


## - Adding and Dropping Courses

After registering for a semester, a student may add/drop courses by a deadline which is specified in the school calendar. Adding courses is allowed in the first week of the semester and is on a space available basis. Only four Add/Drop requests (for one or multiple courses) are allowed by the add/drop deadline after each registration except for courses affected by cancellations made by the administration. A student may drop courses without records' effect if it is made before the deadline - end of the first week of the semester.

From the second through the fourteenth week of the semester, a student may drop courses for serious and compelling reasons after discussing this with an academic counselor. The student will be issued a grade of "W".

To add/drop courses, the student must:

1. Add/drop courses via MySFBU student portal if the online registration activity is open. Otherwise, meet with a staff advisor to add/drop courses. The Records Officers will review the add/drop request and approve or deny the request. F-1 International students must observe the "full-time" requirement.
2. Pay applicable fees (including Add/Drop fee except for courses affected by cancellations made by the administration).

The late registration fee is not assessed for courses added under this policy. Any refund for dropped courses will be calculated according to the Refund Policy.

No official withdrawal: Students who leave a course without official withdrawal (drop) are subject to a failing grade in the course.

## - Grading Policy and Academic Standards

## - Grades

The instructors are requested to submit their semester grades for their classes within one week after the last day of the semester. A portal-based grade entry system is used by the instructors to enter grades. Each student may check his/her own academic records online. Grades are not given out over the telephone. The following symbols shall be used in evaluating student performance. The symbols reflect the quality of the student's accomplishments relative to standards set for each course.

- $\mathrm{A}=$ Highest level, showing excellence.
- $\quad \mathrm{B}=$ Performance is good, but not at the highest level.
- $\mathrm{C}=$ Performance is adequate in an undergraduate course and passing in a master's degree course. (Note: graduate courses with a C- grade or below are not counted towards meeting graduation requirements.)
- $\mathrm{D}=$ Performance is passing in an undergraduate course and failing in a graduate course.
- $\mathrm{F}=($ Fail $)$ Course requirements have not been met. Credits are not earned by the student.
- I = Incomplete grade is issued with approval by the faculty and the Records Office. Coursework was passing at the time. Completion of coursework and grade conversion must follow the academic policy in effect.
- $\mathrm{CR}=$ Credit by passing challenge examination.
- $S=$ Satisfactory performance (for project/thesis/practicum courses only). Credits are earned by the student.
- $\quad \mathrm{P}=$ Pass without credit. The student passed the course which was offered on a pass/no-pass basis.
- $\quad \mathrm{NP}=($ Not pass) Student did not pass the course which was offered on a pass/no-pass basis. No credit was earned.
- $\quad \mathrm{IP}=($ In progress $)$ performance is satisfactory, but a final grade has not yet been assigned.
- $\mathrm{AU}=($ Audit $)$ Student was enrolled on a non-credit basis.
- $\mathrm{W}=($ Withdrawal $)$ Student dropped a course after the add/drop deadline.
- $\mathrm{NC}=($ No credit) The student did not pass a challenge examination. Prior to May 1998 the grade NC might also be issued to a student taking an ESL course.
- $\mathrm{U}=$ (Unauthorized withdraw) The student did not withdraw from the course but failed to meet attendance and course requirements. "U" grade equals "F" grade.
- $\quad *=$ Course has been repeated.

Grades assigned by each course instructor conform to individual policies as stated in the published course syllabus. A grade submitted by an instructor is considered final and may be changed only for one of the following reasons:

1. Error in recording a score for a student product (test, quiz, paper, etc.)
2. Miscalculation of a score, including the cumulative score for a semester.
3. Omission from consideration of valid student products that were submitted in time.

No other reason constitutes a basis for appealing a grade. All appeals for grade changes must be submitted to the Records Office no later than the end of add/drop week of the following semester. Under no condition will a grade change be permitted after a degree has been awarded. A grade will not be changed after one semester from the date of its issuance unless it has been repeated.

## - Passing Grades

## 1. Undergraduate Programs

In each undergraduate program, the passing grade for courses taken at SFBU is D or better.

## 2. Master's Degree and Graduate Level Academic Certificate Programs

In each master's degree and graduate level academic certificate program, C is the passing grade for each course taken to earn credit towards graduation. "A" to "C" level grades earned from undergraduate level courses to clear background preparation requirements are considered meeting the requirement.
(Note: graduate courses with a C- grade or below are not counted towards meeting graduation requirements.

## - Grade Point Average (GPA and CGPA)

The grade point average (GPA) is based on courses in which letter grades are earned. Instructors may add plus $(+$ ) or minus ( - ) options to letter grades in order to refine evaluation procedures. GPA may be calculated either based on semester, or cumulatively (CGPA). CGPA is calculated based on all courses and grades earned to meet a degree program's graduation requirements. To compute the GPA or CGPA, divide the total number of grade points by the total number of units attempted in courses receiving letter grades. Use the following table for grade point assignments:

| Grade | Points per Unit |
| :--- | :---: |
|  |  |
| A+ | 4.0 |
| A | 4.0 |
| A- | 3.7 |
| B+ | 3.3 |
| B | 3.0 |
| B- | 2.7 |
| C+ | 2.3 |
| C | 2.0 |
| C- | 1.7 |
| D+ | 1.3 |
| D | 1.0 |
| D- | 0.7 |
| F | 0 |
| U | 0 |

All other grading symbols receive no grade points, and units for those courses are excluded from computation for GPA or CGPA.

Graduate level programs require a CGPA of 3.0 or higher to meet graduation requirements. Undergraduate degree programs require a CGPA of 2.0 or higher to meet graduation requirements

## - Incomplete

In order to receive a grade of " I ", a student must have completed all homework and tests/quizzes to date, passed the mid-term exam, and have serious and compelling circumstances beyond the student's control that occur within the last two weeks of the semester preventing the student from taking the final exam or submitting the final project. Issuance of an "I" grade requires approvals from both the course instructor and the responsible Records Officer.

If approval is granted, an "I" grade will be issued to the student. The "incomplete" work must be made up and a final grade issued by the instructor by the end of the 4th week of the following semester. An " $F$ " grade will be issued to the student if an " $I$ " grade is not cleared within the 4-week deadine.

## - Auditing Courses

A student may audit a course instead of enrolling for credit. No credit is earned by the student and the grade symbol of "AU" is received by the student for auditing a course. SFBU views auditing classes as an opportunity for students and alumni to review courses previously taken or to become informed about current information on a subject. The following categories of courses cannot be taken with auditing status: CPT (practicum), Intensive English Program (IEP) courses, lab courses, and project courses.

Priority will be given to students enrolled in a class for credit toward graduation. When enrollments in a class exceed the class limit, the University reserves the right to remove auditing students from the registration list and refund tuition paid for the class.

A student may change his/her status from audit to credit or from credit to audit by the add/drop deadline by conducting a regular $\mathrm{ADD} / \mathrm{DROP}$ process.

Attendance: A student enrolled in a class on audit status must observe the SFBU attendance policy and rules set by the instructor although the student is not required to do homework or take exams given to the class.

## - Repetition of Courses

A student may repeat a course due to several reasons: (a) To meet the graduation requirements on CGPA, (b) To earn a better grade for a subject, or (c) To gain a better understanding of the subject. In such cases, both grades will appear on the student's permanent record, but only the latest grade earned for the same course will be calculated towards the student's cumulative grade point average. When repeating a course, the student pays at the regular tuition rate.

## 1. Undergraduates

For purposes of academic renewal, any course taken to meet graduation requirements in which a failing grade was earned must be repeated if offered or otherwise substituted.

## 2. Graduates

Master's degree and graduate level academic certificate students who receive a grade of C - or below in a course taken to meet graduation requirements must repeat if offered or otherwise take a substitute course. Such a repetition is permitted for purposes of academic renewal.

## - Forms of Instruction

SFBU offers on-site, online, and hybrid-fix forms of instruction.

1. On-site: Courses are offered $100 \%$ on campus.
2. Online: Courses are offered $100 \%$ online in a synchronous or asynchronous format for the entire semester. *
3. Hybrid-Fix: A Hybrid-Fix course combines on-site modality students and online modality students in the same class. Students may choose the modality but must attend the course based on the chosen modality (i.e., students may not freely switch modalities during the course).*

* Notice to F-1 International Students: International students in F-1 status must comply with the SEVP requirements and cannot take more than one online course per semester (either an Online or a Hybrid-Fix course via online modality). However, if an F-1 student has only three units left to graduate, the course must be taken on-site (On-site or Hybrid-Fix course via on-site modality).


## ■ Attendance

## - General Attendance Policy

Attendance in class is required for all students, including those "auditing" a course. Students must attend all class meetings, in their assigned modality, unless the Registrar's Office gives permission. If a student is absent, the student is required to complete class assignments as assigned and maintain communication with his/her instructors. Responsibility for class attendance rests with the individual student, and since regular and punctual class attendance is expected, the student must accept the consequence of failure to attend.

A student who fails to attend a total of three classes is required to meet with a counselor.
A student who fails to attend a total of four classes or more may be withdrawn from the class based on the decision of the Attendance Committee.
A student who fails to attend four consecutive classes for all enrolled courses in a period of attendance shall be withdrawn from all courses.

## - Semester Break

All students who are eligible and wish to take a semester break must register for a semester break through their student portal. Students are allowed to take a break upon approval. Failure to comply with this procedure may lead to withdrawal from the University.

Notice to F-1 International Students: Failure to comply with this procedure will lead to withdrawal from the University and auto-termination of your SEVIS record.

## - Leave of Absence

Students who are ineligible for a semester break may request a leave of absence, which must be formally requested through the student portal. The request must be approved by the administration before the leave is taken; otherwise, the student may be withdrawn from the university.

The maximum Leaves of Absence may not exceed a cumulative total of three semesters during the course of study at that program level. Such Leave of Absence must be requested on a semester basis. If the student fails to register for classes or fails to request an additional leave of absence prior to the initial leave's end, the student will be withdrawn from the university.

## Notice to F-1 International Students:

International students (F-1 immigration status) must follow immigration rules and thus should seek the advice of an international student advisor before taking a Short-Term Absence or a Leave of Absence. In general, students must maintain a full course of study to maintain their immigration status. A Short-Term Absence is considered a brief leave amounting to no more than three consecutive classes per course. A Short-Term Absence or a Leave of Absence must be formally requested through the student portal. Students must have a valid reason for the leave and are required to inform their instructors and obtain permission. Administration must give final approval before the absence or leave is taken.

Students wishing to take a Leave of Absence, if ineligible for a semester break, may only make such requests due to personal illness or medical condition, as per immigration rules. No other reasons are permitted. Per immigration rules, the maximum time allowed is a total of 12 months during the course of study at that program level.

## - Standards of Satisfactory Progress (SSP)

SFBU has a policy on satisfactory academic progress that measures whether students are maintaining satisfactory academic progress in their degree program. It requires each student to meet the minimum qualitative and quantitative components of the standards. When the student fails to maintain the standard at
various checkpoints, the student will be placed in one of the following statuses: On Academic Probation, or Dismissal.

There are two primary factors affecting the student's academic status: [1] Cumulative Grade Point Average (CGPA - refer to the subsection on GPA and CGPA in the section on Grading Policy and Academic Standards) and [2] Percentage of successful course completion of courses attempted.

Although currently SFBU does not offer any government financial aid program, the term "financial aid" may be mentioned below for students' information purposes. In order to state SFBU's policy of satisfactory academic progress, the terms of "Maximum Program Length" (MPL) and "Academic Year" must be defined:

## - Maximum Program Length (MPL)

Program length is the number of units required for the student to complete his/her program. It is determined at the time when the student's admission evaluation has been made. The maximum program length is equal to $150 \%$ of the program length. The student is expected to successfully complete his/her program within his/her MPL in order to receive the academic credential/degree he/she is pursuing.

## - Academic Year

A period of two (2) semesters is equivalent to one (1) academic year in evaluating the academic progress of a student.

## - Evaluation Points in the Student's Academic Program

A student is evaluated at the end of every semester and, at this point, the student's CGPA determines whether the student should be placed in academic-probation status. In addition, at the checkpoints listed in the tables below, the combination of CGPA and the percentage of successful course completion of courses attempted determines whether the student maintains satisfactory academic progress or not. Each table shows that the required minimum percentage of successful course completion versus courses attempted increases as the student earns an increasing number of credits in the program.

## - Meeting Standards of Satisfactory Progress (SSP)

A student is considered meeting the standards of satisfactory progress if the following requirements are met:

## SSP Chart for Undergraduate Students

| Evaluation <br> Point (end of <br> period) | Min. <br> CGPA | Min. Successful <br> Course <br> Completion \% \% <br> of Courses <br> Attempted |
| :--- | :--- | :--- |
| 1st academic yr | 2.0 | $55 \%$ |
| $2^{\text {nd }}$ academic yr | 2.0 | $60 \%$ |
| Subsequent yr | 2.0 | $65 \%$ |

## SSP Chart for Graduate Students

| Evaluation <br> Point (end of <br> period) | Min. <br> CGPA | Min. Successful <br> Course <br> Completion \% <br> of Courses <br> Attempted |
| :--- | :--- | :--- |
| 1st academic yr | 3.0 | $60 \%$ |
| $2^{\text {nd }}$ academic yr | 3.0 | $65 \%$ |
| Subsequent yr | 3.0 | $75 \%$ |

## - Effect of Grades on Satisfactory Academic Progress and Successful Course-Completion Percentage

- Withdrawal (W):

A student dropping a course after the add/drop deadline will receive a withdrawal (W) in that course. Withdrawals do not affect the semester GPA or CGPA. Withdrawal from a course is counted as credits attempted but not completed.

- Incomplete (I):

An incomplete (I) grade is a temporary grade issued to a student who has completed all homework and tests/quizzes to date, passed the mid-term exam, and have serious and compelling circumstances beyond the student's control that occur within the last two weeks of the semester preventing the student from taking the final exam or submitting the final project. Issuance of an "I" grade requires approval from the course instructor and the responsible Records Officer. The incomplete work must be made up by the end of the $4^{\text {th }}$ week of the following semester. An "F" grade will be issued to the student if an "I" grade is not cleared within the 4-week deadline. An "I" grade does not affect the semester GPA or CGPA as this grade will change to a failing or a passing grade after the end of $4^{\text {th }}$ of the following semester.

- Repeated Courses:

A "*" is assigned to the course that has been repeated. A student may repeat a course due to several reasons: (a) To meet the graduation requirements on CGPA, (b) To earn a better grade for a subject, or (c) To gain a better understanding of the subject. In such cases, both grades will appear on the student's permanent record, but only the latest grade earned for the same course will be calculated towards the student's CGPA.

- Non-punitive Grades:

Non-punitive grades are assigned if
a. the student withdraws from a course. A "W" grade is assigned to the course.

These grades do not affect the semester GPA or CGPA. These courses are counted as credits attempted but not completed.

- Non-Credit Courses:

The grades of $P$ (pass without credit), AU (audit), and non-credit courses do not count for credit attempted nor completed. These grades have no effect on the calculations of semester GPA or CGPA, or percentage of successful course completion. Examples of non-credit courses are Intensive English Program (IEP) courses.

- Changing Academic Programs:

Credits and grades earned from applicable courses taken at SFBU in the original program may be applied towards the new program requirements. The grades are included in the CGPA calculation for the new program at the same degree level. The credits are excluded from the maximum program length (MPL).

- Earning an Additional Credential/Degree:
a. Students Starting a New Program in the same Undergraduate/Graduate Degree Level - Credits and grades earned from applicable courses taken at SFBU may be applied towards the new program requirements. The grades are included in the CGPA calculation for the new program at the same degree level.
b. Students Starting a Master's Degree after Earning a Bachelor's Degree at SFBU/Other Institutions: Grades and credits earned at a bachelor's degree level (for bachelor credit) are not applied towards the master's degree. Bachelor students earning master level credit at SFBU are advised to talk with their counselor about transferability into the MBA program.
- Transfer of Credits from Other Institutions:

Credits transferred, performed at the time of admission evaluation, will reduce the program length. Credit transferred from any outside institution is excluded from the maximum program length and has no effect on the calculation of the student's GPA or CGPA.

## - Academic Probation

The following students are placed on academic warning/probation:

1. In any semester, an undergraduate student's CGPA is below 2.0 , or a graduate student's CGPA is below 3.0,
2. Students who fail to meet the Standard of Satisfactory Progress at checkpoints listed in the two SSP charts above.

## - Academic Probation Policy

1. Bachelor's Students:

- An undergraduate student shall be placed on Academic Warning for the following semester if the student fails to earn a CGPA of 2.0 or above at the end of the previous semester.
- An undergraduate student shall be placed on Academic Probation for the following semester if, at the end of the semester during which the student was placed on Academic Warning, the student's CGPA remains below 2.0.
- If an undergraduate student continues to hold a CGPA below 2.0 at the end of the semester spent on Academic Probation, the student is subject to immediate dismissal. The Academic Probation Committee shall review and determine whether to dismiss the student or allow him or her to remain on Academic Probation for one additional semester, after which time it is expected that the student will have removed him or herself from Academic Probation. Barring extraordinary circumstances, failure to do so will result in immediate dismissal.

2. Master's Degree and Graduate Level Academic Certificate Students:

- A graduate student shall be placed on Academic Warning for the following semester if the student fails to earn a CGPA of 3.0 or above at the end of the previous semester.
- A graduate student shall be placed on Academic Probation for the following semester if, at the end of the semester during which the student was placed on Academic Warning, the student's CGPA remains below 3.0.
- If a graduate student continues to hold a CGPA below 3.0 at the end of the semester spent on Academic Probation, the student is subject to immediate dismissal. The Academic Probation Committee shall review and determine whether to dismiss the student or allow him or her to
remain on Academic Probation for one additional semester, after which time it is expected that the student will have removed him or herself from Academic Probation. Barring extraordinary circumstances, failure to do so will result in immediate dismissal.
Rule Related to Financial Aid (for information only): A student receiving federal financial aid who does not meet the CGPA standards at the end of the second year will no longer be eligible for financial aid, may not be placed on probation, and must be dismissed, unless the student wishes to continue without being eligible for federal financial aid. However, a student not meeting the CGPA standards at the end of the second year may remain as an enrolled student who is eligible for federal financial aid if there are documented mitigating circumstances (i.e., death in the family, sickness of the student, etc.).
- Removing Academic Warning/Probation Status

A student who is able to remedy the condition and reestablish satisfactory progress within the terms specified in the above section of Academic Probation Policy will be removed from academic probation. Observations will be made on the student every semester thereafter.

## - Counseling

Students are required to seek academic counseling immediately upon entering academic probation. While in academic probation, students are required to attend at least one counseling session per semester or as often as required by the Counselor.

## - Dismissal

A student will be dismissed from the university if:

1. The Academic Probation Committee's decision is to dismiss the student.
2. The student is unable to remedy the condition in the additional semester provided by the Academic Probation Committee.

## - Appealing Academic Probation Status or Dismissal

A student who has been placed on probation or dismissal and disagrees with the finding may appeal according to the grievance procedures set forth in this catalog and posted on the MySFBU student portal. The Administration Office will hold a hearing and decide on the probation/dismissal.

## - Examinations

SFBU has different types of examinations:

## - Course Examinations

Most courses at the University have at least two examinations in a semester: a midterm and a final. These examinations may be comprehensive or partially comprehensive, so students need to ascertain from their instructors the precise scope of the examinations. Course examinations can consist of information found in the textbook, course Learning Management System (LMS), outside reading, assigned videos, lectures, etc.; thus, students should review and synthesize all of the course material. Furthermore, the structure of course examinations can use any modality and be a combination of essay, multiple-choice answers, calculations, oral, and short answers. At the end of each semester, the students are required to take final examinations.

## - Examination for Challenging a Course

SFBU recognizes that exceptional undergraduate students, for example, by reason of independent studies or overlapping course work, may have achieved the learning objectives of a course. Therefore, undergraduate
students with the course background may petition to receive credit for the course by completing a "Challenge Examination".

Students wishing to challenge a course by examination must enroll for the course and pay tuition fees in the same manner as courses to be completed by regular class attendance.

The course to be challenged must be:

- listed on the schedule of classes for the semester; and
- numbered at or below 350 level.


## How many challenge exams can I take?

- A student may request up to 2 challenge exams per semester.
- The maximum number of requests to take a challenge exam is five courses with the corresponding labs, if any (whether pass or fail), for the entire duration of the program study.


## How do I submit my request?

- A formal online petition, via the MySFBU student portal, for challenge must be submitted to the Records Office at the time of registration, which must be before the beginning of the semester.
- Permission from the academics team and the dean of the program is required.
- A fee per examination for the challenged course is charged to the student.


## - Proficiency Examinations

Graduate students who have knowledge of a background (undergraduate) subject but have not taken a course in the subject may clear the background preparation requirements by taking a proficiency examination. The proficiency exam should be taken early enough to satisfy the "prerequisite" requirement for higher-level courses.

An undergraduate student may be required to take a proficiency examination on a major subject if the subject was taken more than ten years ago and the student has not had relevant experience in the subject for ten years.

Passing the Test: The instructor giving the proficiency examination grades the test and determines whether the student passes the test or not. A non-refundable fee is charged to the student for taking a proficiency examination. The student is allowed to apply to take a proficiency examination on a subject only once. If the student misses a pre-scheduled proficiency examination, the exam fee is non-refundable, and the student loses his/her chance of taking the examination on the subject.

Proficiency Examinations are not applicable to students enrolled in the Graduate Certificate in Business Management.

## - Teaching Assistants

Each semester designated administrative staff assign Teaching Assistants (TAs) to assist faculty teaching in a number of courses. TAs are assigned based on class/course requirements and needs. Under designated faculty supervision, TAs provide additional assistance to students to support their learning. These services are provided by the University to the students free of charge.

Designated administrative staff may assign Exam Proctors (Proctors) to assist faculty in administering exams and quizzes. Proctors are assigned based on class/course need and instructor requests for support. Faculty administer the exams; however, proctors may point out unusual activity to the faculty.

## 0 Graduation

## - Bulletin Requirements

The SFBU catalog serves as the school's contract with the students. Therefore, students fall under the graduation requirements written in the catalog used at the time of the student's entrance to the program as a degree or academic certificate seeking student. The section on "Study Plan" in "Academic Information" describes the rules for the student to follow for the graduation requirements.

## - Petition to Graduate

As a student approaches the end of his/her undergraduate/graduate study, he/she must initiate a review process for the Records Officers to verify the student's eligibility for graduation. The student must file an online petition form one semester in advance - prior to his/her last registration - by using the MySFBU student portal to submit this request. The Records Office staff will then make a graduation evaluation in time for the petitioner to register for the last time before graduation. The student will receive his/her evaluation report to confirm the courses left for him/her to complete in order to meet his/her graduation requirements. A graduation fee is charged for each graduation petition.

## - Re-petition to Graduate

A student is required to resubmit the request and pay a re-petition fee after filing the original graduation request if any of the following occurs:

1. If the petition for graduation is denied.
2. If the student is unable to complete his/her coursework as required by the approved graduation date.
3. If otherwise required by the administration.

A re-evaluation of the student's graduation requirements will be made, and a new checklist will be provided to the student.

Students are responsible for compliance with the announcements and regulations specified in the catalog and with all policies, rules, and regulations of the University. Upon completion of their study programs and fulfilling their financial obligations to the University, students are granted degrees and receive diplomas.

## - Completion of a Program

The semester in which a student fulfills the graduation requirements, including course requirements, project completion (if applicable), and any financial obligations, is the semester the student graduates and is the date that is shown on the diploma.

The student will not have his/her degree or academic certificate awarded or diploma or transcript released until all university fees have been paid, library records cleared, and an online exit survey conducted.

Enrollment in the Last Semester: A student must be enrolled at SFBU in the semester he/she graduates.

## - Withdrawal from the University

A student is deemed to have been withdrawn when any of the following occurs: (1) the student drops all enrolled courses in a period of attendance when the student is required to remain enrolled to maintain his/her academic status, (2) the student submits a written notice to withdraw through the portal, as described in the cancellation section, (3) SFBU suspends or expels the student due to misconduct, unsatisfactory academic performance, or overdue fees, (4) SFBU terminates an F-1 student for violation of
U.S. Department of Homeland Security regulations, (5) the student fails to return from a leave of absence, or (6) the student, without prior approval, fails to attend four consecutive classes for all enrolled courses in a period of attendance when the student is required to remain enrolled to maintain his/her academic status, or (7) the student has not enrolled at SFBU for two consecutive semesters or more.

The student must clear his/her financial obligation to the school as well as his/her library records upon withdrawal from the University.

Withdrawal during the first week of a semester will not be recorded on the permanent transcript. For withdrawal after the first week and before the final exams, a "W" grade for each enrolled course is posted on the permanent transcript. A student withdrawing from the University without formal notification to the Records Office is subject to a "U" grade which is posted on the permanent transcript.

Refer to the "Refund Policy" section for the policy on refunds for students withdrawing from SFBU. Students who withdraw from SFBU without clearing their financial balances will not be issued their official transcripts.

## - Re-entry to SFBU

Any student who withdraws from SFBU and is absent for more than one semester before resuming studies at a later date must submit a new application via MySFBU student portal. The student falls under the admissions and graduation requirements in effect at the time of reentrance.

## - F-1 International Students

International students who plan to transfer to another institution must follow the transfer rules published by the U.S. Citizenship and Immigration Services.

## - Notice Concerning Transferability of Credits and Credentials Earned at our Institution

The transferability of credits you earn at SFBU is at the complete discretion of an institution to which you may seek to transfer. Acceptance of the degree or certificate you earn in the educational program is also at the complete discretion of the institution to which you may seek to transfer. If the credits and degree or certification that you earn at this institution are not accepted at the institution to which you seek to transfer, you may be required to repeat some or all of your coursework at that institution. For this reason, you should make certain that your attendance at this institution will meet your educational goals. This may include contacting an institution to which you may seek to transfer after attending SFBU to determine if your credits and degree or certification will transfer.

## ■ Teach-Out Policy

In the event of the closure of any program or modality of an existing program, SFBU will implement a teach-out plan supporting all currently enrolled students to finish their program by their projected graduation date provided that they maintain continuous enrollment. SFBU will also support students electing to transfer to other institutions and make efforts towards a smooth transition. No new students will be admitted to the closed program.

## EDUCATIONAL RECORDS

San Francisco Bay University has adopted the following policies and procedures regarding student records.

## - Definitions

1. Student: any person who attends or has attended SFBU.
2. Education Records: any record maintained by the school, which is directly related to a student; except: sole possession records, employment records, school security records, counseling records, and alumni records.

## - Student Rights

Students have a right to inspect education records within forty-five days of submission of a written request to the registrar's office, except for the financial records of the student's parent and confidential recommendations to which the student has waived access. When a record contains information about more than one student, the student may only inspect the portion pertaining to the student.

Students may obtain copies of education records upon payment of a reproduction fee. However, SFBU reserves the right to deny copies of education records if the student has an unpaid financial obligation to SFBU, or if there is an unresolved disciplinary action against the student.

Students may request that SFBU amend an education record that the student believes is inaccurate, misleading, or in violation of their privacy rights. All such requests must be made in writing to the registrar's office, and clearly identify the part of the record that the student would like to amend and specify why the record should be amended. If SFBU decides to not comply with the request, SFBU will notify the student of the decision, advise the student of his or her right to a hearing, and provide additional information regarding the hearing.

## 口 Directory Information

SFBU may at its discretion disclose the following types of directory information without consent: name, address, email address, phone number, birth date, birthplace, major field of study, participation in recognized activities and sports, dates of attendance, degrees, academic certificates, honors, and awards received, the most recent previous educational institution attended, and photographs.

Upon receipt by the registrar's office of a written request to withhold directory information, SFBU will withhold disclosure of all directory information indefinitely. Please note that in such circumstance (1) the student's information will not appear in any commencement materials, (2) SFBU will inform employers, credit card companies, scholarship committees, and other requesters looking to verify enrollment or degree information that SFBU has no information available about the student's attendance at SFBU, (3) SFBU has no duty to contact the student to request permission to release the directory information, and (4) SFBU shall not be responsible or liable for any consequences arising from or related to withholding directory information. A student may revoke the hold by submitting a written request to the registrar's office.

## ■ Disclosure

In addition to directory information, SFBU may release, without prior written consent, information from an education record to school officials with a legitimate educational interest. Education records may also be shared with parties outside of SFBU in certain circumstances, including, for example, (a) to other schools, in which the students seeks or intends to enroll; (b) to federal, state, and local authorities in connection with certain state or federally supported education programs; (c) to DHS or ICE in connection with SEVIS requirements; (d) to accrediting agencies; (e) to parents that claim the student as a dependent; (f) in connection with financial aid; (g) to comply with a judicial order or lawfully issued subpoena; (h) to
appropriate parties in a health or safety emergency; (i) the results from a disciplinary proceeding to an alleged victim of a crime of violence or sexual assault; or ( j ) to organizations conducting studies for or on behalf of SFBU.

## RECORDKEEPING POLICY

San Francisco Bay University ("SFBU") takes seriously its obligations to preserve information, documentation, and records.

1. Custodian of Records

The Custodian of Records for student academic records is the Registrar and the Custodian of Records for student financial records is the Chief Financial Officer.
2. Required Student Records

SFBU shall maintain the following records for each student who is enrolled in an educational program at SFBU:
a. The name
b. Address
c. E-mail address and
d. Telephone number

SFBU shall maintain, for each student granted a degree or certificate by that institution, permanent records of all of the following:
a. The degree or certificate granted and the date on which that degree or certificate was granted.
b. The courses and units on which the certificate or degree was based.
c. The grades earned by the student in each of those courses.

## 3. Required Institutional Records

SFBU shall maintain, for a period of not less than five years, at its principal place of business in this state, complete and accurate records of all of the following information:
a. The educational programs offered by SFBU and the curriculum for each.
b. The names and addresses of the members of the institution's faculty and records of the educational qualifications of each member of the faculty.
c. Any other records required to be maintained by this chapter, including, but not limited to, records maintained pursuant to Article 16 of the California Private Postsecondary Education Act of 2009 regarding Completion, Placement, Licensure, and Salary Disclosure information.

## 4. Student Records

SFBU shall maintain a file for each student who enrolls whether or not the student completes the educational service.

In addition to the information required in Paragraph 2, the file shall contain all of the following pertinent student records:
a. Written records and transcripts of any formal education or training, testing, or experience that are relevant to the student's qualifications for admission or the award of credit or acceptance of transfer credits including the following:
i. Verification of high school completion or equivalency or other documentation establishing the student's ability to do college level work, such as successful completion of an ability-to-benefit test.
ii. Records documenting units of credit earned at other institutions that have been accepted and applied by the institution as transfer credits toward the student's completion of an educational program.
iii. Grades or findings from any educational achievement used for admission or college placement purposes.
b. Personal information regarding a student's age, gender, and ethnicity if that information has been voluntarily supplied by the student.
c. Copies of all documents signed by the student, including contracts, instruments of indebtedness, and documents relating to financial aid.
d. Records of the dates of enrollment and, if applicable, withdrawal from the institution, leaves of absence, and graduation; and
e. A transcript showing all of the following:
i. The courses or other educational programs that were completed, or were attempted but not completed, and the dates of completion or withdrawal.
ii. Credit for courses earned at other institutions.
iii. Credit based on any educational achievement used for admission or college placement purposes.
iv. The name, address, website address, and telephone number of the institution.
f. For independent study courses, course outlines or learning contracts signed by the faculty and administrators who approved the course.
g. The dissertations, theses, and other student projects submitted by graduate students.
h. A copy of documents relating to student financial aid that are required to be maintained by law or by a loan guarantee agency.
i. A document showing the total amount of money received from or on behalf of the student and the date or dates on which the money was received.
j. A document specifying the amount of a refund, including the amount refunded for tuition and the amount for other itemized charges, the method of calculating the refund, the date the refund was made, and the name and address of the person or entity to which the refund was sent.
k. Copies of any official advisory notices or warnings regarding the student's progress; and

1. Complaints received from the students.

## 5. Document Maintenance

As of the Fall 2015 term, SFBU implemented policies to minimize paper forms for recordkeeping. Therefore, most, if not all, information and documents for student recordkeeping are now stored in electronic form. All information and documents received are inputted into the Campus Management System ("CAMS") and/or scanned into CAMS or the designation network folder, as applicable. Electronic documents will be retained as if they were paper documents. Therefore, any electronic files will be maintained for the appropriate amount of time.

SFBU shall maintain all records required by law. SFBU shall maintain for a period of 5 years the pertinent student records from the student's date of completion or withdrawal.

SFBU is not required to maintain records relating to federal financial aid programs since SFBU does not offer federal financial aid.

A record is considered current for three years following a student's completion or withdrawal. A record may be stored on microfilm, microfiche, computer disk, or any other method of record storage only if all of the following apply:
a. The record may be stored without loss of information or legibility for the period within which the record is required to be maintained.
b. For a record that is current, SFBU maintains functioning devices that can immediately reproduce exact, legible printed copies of stored records. The devices shall be maintained in reasonably close proximity to the stored records at SFBU's primary administrative location in California. For a record that is no longer current, SFBU shall be able to reproduce exact, legible printed copies within two (2) business days.
c. SFBU has personnel scheduled to be present at all times during normal business hours who know how to operate the devices and can explain the operation of the devices.

## 6. Security and Safekeeping

SFBU's records will be stored in a safe and secure manner.

All information and documents in paper form that are within the retention period are kept secured in fireproof safes locked in file rooms located in the Administration Building. The doors to these rooms remain locked at all times. Unauthorized personnel may not enter these Student File Rooms. Documents removed from the Student File Room must be checked out by the person removing the document and maintained by that person in a secure manner until its prompt return.

All information and documents in electronic form are stored in the Campus Management System ("CAMS") and/or designated network folders. All data should be backed up. Currently, two backup systems are in place: 1) a local backup performed nightly and 2) a remote backup performed weekly.

## 7. Length of Record Retention

Student records for all students are kept for five years; they include both academic and financial information.

## 8. Student's Right to Inspect and Review Records

Students have a right to inspect education records within forty-five days of submission of a written request to the registrar's office, except for the financial records of the student's parent and confidential recommendations to which the student has waived access. When a record contains information about more than one student, the student may only inspect the portion pertaining to the student.

Students may request copies of education records. However, SFBU reserves the right to deny copies of education records if the student has an unpaid financial obligation to SFBU, or if there is an unresolved disciplinary action against the student.

Students may request that SFBU amend an education record that the student believes is inaccurate, misleading, or in violation of their privacy rights. All such requests must be made in writing to the registrar's office, and clearly identify the part of the record that the student would like to amend and specify why the record should be amended. If SFBU decides to not comply with the request, SFBU will notify the student of the decision, advise the student of his or her right to a hearing, and provide additional information regarding the hearing.

## 9. Document Destruction

The Compliance Department is responsible for the ongoing process of identifying its records, which have met the required retention period, and overseeing their destruction. Destruction of financial and personnelrelated documents will be accomplished by shredding.

## 10. Legal Hold

From time to time, the President may issue a notice, known as a "legal hold," suspending the destruction of records due to pending, threatened, or otherwise reasonably foreseeable litigation, audits, government
investigations, or similar proceedings. No records specified in any legal hold may be destroyed, even if the scheduled destruction date has passed, until the legal hold is withdrawn in writing by the President.

## 11. Compliance

The failure on the part of employees to follow this policy can result in possible civil and criminal sanctions against SFBU and its employees and possible disciplinary action against responsible individuals. The President and the Compliance Department will periodically review these procedures to ensure that they are following new or revised regulations.

## ACADEMIC INTEGRITY POLICY

Honesty and integrity are the virtues that SFBU holds in high regards. Students are expected to uphold high moral standards in the pursuit of their academic degree or certificate, as well as their professional career. SFBU encourages the students to exercise them as a part of their daily lives, not only while they are at the university or because they are required to do so.

SFBU takes the acts of academic misconduct very seriously. A student who violates the university's policy is deemed dishonest and is subject to appropriate disciplinary actions. For an international student, the consequence may adversely impact one's immigration status and possibly result in a dismissal from the university and the United States.

## 1. Definition of Academic Integrity

Integrity is the quality of being honest and having strong moral principles. Students should take pride in earning their grades and degrees through dedication, hard work, and honesty. This means knowing and following the ethical standards when making decisions and completing one's work. Both the faculty members and the students share the responsibility of maintaining academic integrity to ensure that the university degrees and the public trust are not compromised.

## 2. Types of Academic Misconduct

Academic misconduct is strictly prohibited by the university and is dealt with in a diligent manner. Students should avoid committing such acts and learn the proper conduct for accomplishing required tasks. The following are the common forms of academic dishonesty and their implications.

### 2.1 Plagiarism

Plagiarism is the practice of taking someone else's ideas, designs, or body of work and representing them as one's own without giving proper credit or submitting one's own work twice for academic credit (selfplagiarism) without proper citation.

The act of plagiarism includes but not limited to:
a. Failing to give credit to the source of work including use of Artificial Intelligence (AI), ideas, designs, or written materials (including excerpts from such materials) and claiming as one's own work.
b. Utilizing computer programs, user interface designs, images, photographs, charts, diagrams, figures, or similar work created by artificial intelligence or someone else without giving credit or receiving permission.

Proper credits should be given to the originator (including AI) of the materials used in academic work. Students have a duty to learn and apply the appropriate methods for citing and referencing the source of information, and in the case of AI including prompts, and validation of correctness. In addition, copyrighted materials should not be reproduced and used without permission.

### 2.2 Cheating

Cheating is obtaining or attempting to obtain credit for academic work through dishonesty, deception, or fraud. Whether one commits the act oneself or helps others to perform such an infraction, both parties are considered responsible for cheating. True learning is accomplished by performing one's own work honestly and diligently.

Cheating includes but not limited to:
a. Copying (either in part or in whole) course work such as homework assignments, quizzes, exams, projects, reports, data, etc.
b. Allowing or aiding another person to copy course work as stated above in any form.
c. Collaborating with other people on a course work without an expressed consent from the instructor
d. Submitting work used in another course either from the previous or the current semester, unless expressly approved by the course instructor.
e. Submitting work done by another person in any form or manner (paid or unpaid)
f. Using unauthorized materials or equipment during a quiz or an exam
g. Communicating or passing information during a quiz or an exam
h. Taking a quiz or an exam by using or acting as a surrogate for another person
i. Impersonating as or for someone else in the classroom for attendance or other purposes
j. Obtaining unauthorized copies (written or photographed) of course materials for one's own use or for someone else.

Students should understand the differences between collaborating, helping, and cheating. Working together (if permitted by the instructor) to achieve a common goal or assisting a fellow student to learn and be able to complete the work by himself/herself is honorable. Providing answers or committing acts identified above as cheating is dishonest.

### 2.3 Falsification/Misrepresentation

Providing falsified information or misleading statements to the professor, TA, or administrative staff is considered a breach of the policy. Students must provide truthful information and answer questions honestly.

### 2.4 Sabotage

One should not obstruct or stop another student from completing course work for personal gain or advantage.

### 2.5 Coercion/Intimidation

Faculty, TAs, and staff shall be treated with respect and be allowed to perform their work without improper interference. It is unacceptable for a student to pressure or intimidate another person into awarding a favorable grade or helping to circumvent the proper requirements. SFBU does not tolerate such behavior and may impose strict penalties if such incidents occur.

### 2.6 Gross Transgression

Gross transgression occurs when a student commits a serious violation, which can lead to dismissal from the university. This includes but not limited to:
a. Gaining or attempting to gain unauthorized access to documents, electronic files/records, or IT properties that belong to the university or the faculty.
b. Presenting falsified documents to SFBU administration
c. Interfering with the grading process or alteration of records
d. Stealing data or information from the university, the instructor, or the TA
e. Destroying/Altering documents, records, or equipment in order to cover up any wrongdoings or to impede the investigation process.
f. Inflicting physical or psychological harm to another person in an attempt to commit any type of academic dishonesty.

## 3. Roles and Responsibilities

Faculties and students play important roles in advocating and upholding academic integrity.

### 3.1 Student

The student's responsibilities are to:
a. Read and understand the academic integrity policy.
b. Comply with the stated rules and policies at all times.
c. Not commit any sort of academic misconduct, deliberately or not.
d. Not participate, assist, or enable others in actions that result in a breach of the policy.
e. Report any knowledge of activities that violate the policy.
f. Know the consequences of taking part in academic dishonesty.

### 3.2 Faculty

The faculty's roles in enforcing the policy are to:
a. Ensure that the students are aware of the academic integrity policy and understand its importance.
b. Make every reasonable effort to prevent any form of cheating or plagiarism in the class.
c. Decide the appropriate disciplinary action for the student who commits academic misconduct.
d. Maintain adequate records of the incidents.
e. Report to the university administration if an incident is deemed severe (morally reprehensible) or if the student is a repeat offender.

## 4. Disciplinary Actions

Professors and administrative staff shall have the discretion and latitude to determine what acts qualify as academic misconduct and to decide the proper disciplinary actions for the student who violates the policy.

An offense is an incident or an attempt at academic dishonesty. These offenses shall be documented as a permanent part of students' records, and the number of offenses shall be determined based on overall records (not on a per course basis).

Subject to the frequency (number of offenses) and severity of the infractions, the academic sanctions may result in:
a. A stern warning from the professor with the offense being noted on record.
b. No credit or score being awarded for the particular assignment, quiz, or exam.
c. An "F" grade for the entire course
d. Requirement to perform community services.
e. A statement on the student's transcript
f. Dismissal from the university

## STUDENT DISCIPLINE

## - Inappropriate Conduct

Inappropriate conduct by students or by applicants for admission is subject to disciplinary action up to and including dismissal from or denial of admission to the university. The following is a non-exhaustive list of examples of inappropriate conduct:
a. Forgery, alteration, or misuse of campus documents, records, or identification, or knowingly furnishing false information to the University.
b. Violation of any federal, state, or local law.
c. Misrepresentation of oneself, another individual, or of an organization to be an agent of the university or another institution.
d. Obstruction or disruption of the campus educational process, administrative process, or other campus function, whether on or off campus.
e. Physical abuse on or off campus of the person or property of any member of the campus community or of members of his or her family, or the threat of such physical abuse.
f. Theft of, or non-accidental damage to, campus property or property in the possession of, or owned by, a member of the campus community.
g. Unauthorized entry into, unauthorized use of, or misuse of campus property; unauthorized entry into classes.
h. On campus property, the sale or knowing possession of dangerous drugs, restricted drugs, or narcotics, except when lawfully prescribed pursuant to medical or dental care.
i. Possession or use of explosives, dangerous chemicals, or weapons on campus property or at a campus function.
j. Engaging in lewd, indecent, or obscene behavior on or using campus property or at a campus function, either in person or by correspondence.
k. Abusive behavior directed toward, or hazing of, a member of the campus community

1. Violation of any order, rule, or policy of the University.
m . Failure to cooperate with a university or police investigation.
n. Endangering the health or safety of others on or from campus property.

## POLICIES AND STATEMENTS ADDRESSING THE INVESTIGATION AND TREATMENT OF STUDENTS, STAFF, AND FACULTY REGARDING SEXUAL HARASSMENT AND ASSAULT

## - Policy Regarding Sexual Harassment

## Policy Statement

San Francisco Bay University ("SFBU") strives to ensure a safe academic and work environment, free of sexual harassment, for all members of the SFBU community. To that end, SFBU has a zero-tolerance policy for sexual harassment.

## Scope

This policy shall apply to all members of the SFBU community, including students, faculty, staff, vendors, and contractors. This policy applies equally to all, regardless of sex, gender and gender identity, or sexual orientation. The application of this policy includes SFBU programs and activities on and off-campus, overseas programs, conduct occurring in university housing or other university property, and off-campus conduct by a member of the SFBU community directed at another member of the SFBU community.

## Definition

Sexual harassment includes a broad spectrum of conduct including harassment based on sex, gender, gender transition, gender identity or expression, or sexual orientation.

## Examples

The following is a non-inclusive list of conduct that may constitute sexual harassment:
a. Offering or implying an employment-related (e.g., promotion, raise, preferential assignments) or education-related (grades, letter of recommendation, assistance finding employment, admission to a program or activity) reward in exchange for sexual favors or submission to sexual conduct.
b. Making threats or insinuations that a person's employment or education life may be adversely affected by not submitting to sexual advances.
c. Unwelcome sexual propositions, invitations, solicitations, and flirtation.
d. Repeatedly asking someone for a date or accompaniment after the person has expressed disinterest.
e. Leering, staring, or elevator eyes.
f. Making sexual gestures.
g. Unnecessary and unwanted physical conduct (e.g., touching, impeding or blocking movements, patting).
h. Displaying or transmitting suggestive objects, pictures, cartoons, or other visual media or content.
i. Electronically sending or posting sexually related text messages, videos, or images.
j. Verbal abuse of a sexual nature, graphic verbal comments about an individual's appearance or anatomy, sexually degrading words used to describe an individual, and suggestive or obscene letters, notes, or invitations.
k. Physical conduct such as touching, kissing, groping, assault, or blocking movement.

1. Physical or verbal abuse concerning an individual's gender, gender transition, gender identity, or gender expression.
m . Verbal abuse concerning a person's characteristics such as pitch voice, facial hair, or the size of shape of a person's body, including remarks regarding an individual's masculinity or femininity.
n. Making or using derogatory comments, epithets, slurs, and jokes.
o. Making unwelcome suggestive or insulting sounds (e.g., whistling and cat calls).
p. Commenting on or asking about a person's body, dress, appearance, gender, sexual relationships, preferences, activities, or experience; or
q. Unwelcome personal gifts.

## Reporting

## Reporting is Highly Encouraged

SFBU strongly encourages all individuals to report incidents of sexual harassment to the university's Human Resources department ("HR").

## Mandatory Reporting for Employees

All SFBU employees and any contractors/consultants with teaching or supervisory authority are required to report sexual harassment of which they come aware to HR.

## External Reporting

Both state and federal law prohibit sexual harassment. In addition to reporting and within the university, individuals may pursue complaints directly with government agencies that deal with unlawful harassment and discrimination claims, such as the State of California Department of Fair Employment and Housing ("DFEH"). Please see the DFEH website for DFEH contact information (https://www.dfeh.ca.gov/contactus).

## Complaint Process and Disciplinary Action

## General Process

Generally, the SFBU complaint process begins with an individual's submission of a written statement to HR. One or more members of HR, or, in the event of a conflict, other university representatives or external investigators, will review the complaint and then commence a fact-finding investigation as soon as practicable. The investigator(s) will afford the complainant an opportunity to describe his or allegations and present supporting witnesses or other evidence. The investigator(s) will also afford the alleged wrongdoer an opportunity to respond to the allegations and present supporting witnesses or other evidence. To the extent possible, the investigators will preserve the privacy and confidentiality of all persons involved. The one or more university administrators will review the investigation findings and render a decision.

Complainants have the right to simultaneously file and pursue a criminal complaint with law enforcement or other government agencies.

Complainants may report violations of this policy anonymously by emailing compliance@sfbu.edu. Please note that if the complainant requests anonymity or is reluctant to proceed with a complaint, SFBU's ability to respond to the allegations may be limited. Notwithstanding the preceding, SFBU reserves the right to take appropriate action in certain circumstances, such as where there are concerns for the safety or wellbeing of the broader SFBU community, even if the complainant requests to remain anonymous or is reluctant to proceed.

## Interim Measures

SFBU may provide reasonable interim accommodations or remedies to a complainant to ensure a safe environment pending investigation and resolution of a complaint.

## Disciplinary Action

Violations of this policy will result in disciplinary actions, including, but not limited to, written warning, loss of privileges, community service, mandatory training/counseling, probation/suspension, demotion, exclusion, expulsion, and termination.

## Confidentiality

SFBU will respect confidentiality and privacy to the extent reasonably possible during the investigation and thereafter, but SFBU cannot promise complete confidentiality. Additionally, in some circumstances, the university may be unable to maintain confidentiality, such as when disclosure is required by law or university policy.

## Retaliation

SFBU will not tolerate any retaliatory action against any individual who in good faith reports information about behavior that may be a violation of this policy. Retaliatory action is in itself a violation of this policy, and any individual engaging in retaliatory action may be subject to disciplinary action, including and up to termination of employment or dismissal from the university.

## Duty to Cooperate

All members of the SFBU community shall cooperate to the fullest extent possible with any internal investigation, or investigation conducted by external investigators due to a conflict of interest, of an alleged violation of this policy. Failure to cooperate is in itself a violation of this policy and may subject the uncooperative individual to disciplinary action, including and up to termination of employment or dismissal from the university.

## Contacts and External Resources

## Contacts

Individuals with concerns about or information to report pertaining to sexual harassment may contact any member of HR in person in the Administrative Building, or by emailing hr@sfbu.edu.

## External Resources

The following external resources are available to discuss sexual harassment and assault. Please note that these resources are external to the university, therefore, (1) disclosing information to these resources does not constitute reporting to SFBU and will not result in any formal action by SFBU, and (2) SFBU makes no warranties or representations regarding these resources.
A. YWCA Silicon Valley, Sexual Assault Counseling
https://yourywca.org
B. SFWAR, 24-hour Crisis Line
(415) 647-7273
http://www.sfwar.org
C. Berkeley Free Clinic, Peer Counseling
https://www.berkeleyfreeclinic.org/peer-counseling

## Policy History, Authority, and Review

This policy was approved by the university president and went into effect on January 1, 2003. It was amended March 16, 2017. It is subject to periodic review, and any comments or suggestions should be forwarded to HR.

## - Treatment of Complaints

The Administrative Office will call for a special committee to handle harassment complaints. The committee's treatment of complaints will be guided by the following principles, which are intended to protect the legitimate interest of all persons.

Next, committee members will decide if there is any conflict of interest that requires any of them to withdraw from consideration of the complaint. The committee will then decide on a course of action.

Should the committee decide to take no action, the committee will inform the student and explain what, if any, other course of action the student might take.

Should the committee decide that the complaint requires formal institutional action (i.e. notification of the police) the committee will transmit the complaint directly to the President.

If a less serious complaint is judged to fall under the committee's mandate, then one or more members of the committee, one of whom is a member of the faculty or the administration, will speak with the person(s) involved in order to obtain further information and report the results to the committee.

The committee will limit its informal investigation to what it deems necessary to resolve the complaint or to make a recommendation to the President. Should it appear necessary for the committee to address any persons other than the parties involved in the complaint, the committee will do so only after informing the involved parties.

After review, the committee may decide (1) that there is no basis on which to pursue the complaint, or (2) that the complaint has been resolved, or (3) that the complaint is to be forwarded with recommendations to the President. The President will inform the committee of the final disposition of complaints forwarded.

One responsible member of the committee will be in communication with the student making the complaint until the complaint is resolved. The student will be informed of general actions taken, although not of specific conversations held with the person named in the complaint.

If either the person making the complaint or the person named in the complaint is not satisfied with the recommendations of the committee, she or he may discuss the matter with the President.

## o Sexual Assault

An allegation of sexual assault must promptly be reported to administration, who will, in turn, report the allegation to the Police Department. The University will not attempt to adjudicate allegations of felonious acts.

## STUDENT GRIEVANCE POLICY AND PROCEDURE

SFBU takes grievances very seriously. Students have the right to file a grievance that concerns SFBU, whether such grievances are with personnel, the course of study, general university policies, or other related matters. This policy describes the grievance procedure available to students.

## 1) INFORMAL RESOLUTION

SFBU highly encourages students to attempt and informally resolve concerns directly with the aggrieving party or department. Students are particularly encouraged to informally resolve academic matters, such as those involving course policies, with their instructor, or, if their instructor is not available, with their respective dean, prior to filing a grievance. Grade appeals may be made as described in the section of this catalog entitled "Grading Policy and Academic Standards."

Even after initiating the formal grievance process, students are encouraged to seek informal resolution of their concerns. A student whose concerns are resolved may withdraw a formal grievance at any point in the process.

With regard to appeals of disciplinary action and all other grievances, including those related to harassment and discrimination, no student is obligated to attempt informal resolution and may bring a formal grievance to the administration as outlined in this policy.

## 2) TIMING

Academic grievances and appeals of disciplinary action must be received by the administration within 30 days of the close of the academic term in which the first incident giving rise to the grievance occurred or the notice date of the disciplinary action.

There is no deadline for other types of complaints.

## 3) GRIEVANCE PROCEDURE AND RESOLUTION

All grievances and supporting documentation shall be submitted in writing to the SFBU Compliance Department. The grievance should be made using the SFBU Grievance Form, which is available on the SFBU website.

Please note that if a grievance is being filed in order to appeal disciplinary action, the grievance must include a description of the basis of appeal. Failure to state the basis of the appeal in the initial grievance may result in denial of the appeal. The following are the only valid bases of appeal: (i) new evidence which could reasonably be expected to cause the individual(s) reviewing the grievance to overrule prior disciplinary action, (ii) failure to follow published SFBU policies in a way that materially disadvantaged the student; (iii) demonstrated bias or discrimination and (iv) the sanction imposed is substantially disproportionate to the severity of the violation.

The grievance may be sent via email to compliance@sfbu.edu or delivered in person to the front desk of the SFBU Administrative Building during normal business hours. If the grievance is regarding SFBU Compliance or its personnel, then the grievance may be sent to the Chief Academic Officer via email or in person delivery to the front desk of the SFBU Administrative Building during normal business hours. In such a case, the complainant should specify that the grievance is regarding compliance or its personnel.

Intake personnel, generally a member of SFBU Compliance, will review the form. If the form is complete, intake personnel will, within 5 business days of receipt, acknowledge receipt of the grievance and forward it to the appropriate party for review and resolution. Matters are generally forwarded as follows:
a. Academic matters and appeals of disciplinary action are forwarded to the Chief Academic Officer, or the Chief Academic Officer's designee.
b. All other complaints are assigned to a member of SFBU Compliance.

Depending upon the type and complexity of the grievance, the appropriate party may, in their discretion, adjudicate the matter or assign the matter to a Grievance committee.

Within 60 days of receipt of the grievance, SFBU shall provide a written response to the grievance via email. If further investigation is needed, the complainant will be provided with a written response to the grievance within 10 business days after completion of the investigation.

The complainant may appeal SFBU's resolution by filing a statement of appeal that clearly describes the basis of appeal within 5 business days of the date of the written response. The President of SFBU, or the President's designee, shall adjudicate the appeal within 30 days of SFBU's receipt of complainant's statement of appeal.
If a complainant has exhausted all grievance procedures provided under SFBU's policies, the complainant may contact:

The WASC Senior College and University Commission (WSCUC), 1080 Marina Village Parkway, Suite 500, Alameda, CA 94501, 510.748.9001.

## 4) NO RETALIATION

No member of the SFBU community shall be subject to adverse action by SFBU based upon the reasonably good faith filing or participation in a grievance.

## 5) MAINTENANCE OF RECORDS

Records for student complaints are maintained for at least 6 years. Records for grievances made by nonstudents are maintained in accordance with applicable university policy.

## STUDENT LIFE

Our mission at San Francisco Bay University is to provide a welcoming and supportive environment for students, while maximizing their opportunities for career growth and personal development. We believe that student life is not only an integral part of the campus community but also a fundamental part of the educational process. Student services at the University are designed to meet the needs of our student body. These include both academic and non-academic issues and activities. Many of our students work part-time or full-time and come from a variety of social and ethnic backgrounds. As such, our services are tailored to meeting the needs and concerns of a mature and multicultural student body.

## - University Orientation

All new students regardless of program, modality, full-time or part-time status are required to attend the new student orientation program offered before the beginning of each semester. Orientation packages are distributed to the new students prior to the orientation workshop; presentation materials cover essential information for the students, including the facility and learning resources information, administrative services provided to the students, and important rules and policies for the students to stay focused on their academic objectives. The staff advisors also assist the new students to register in classes. F-1 International
students are provided with a health insurance plan and information on particular regulations they must observe in compliance with the Federal regulations for international students.
All SFBU students are welcome to attend the orientation to welcome the new students and receive current university information.

## - Housing

While students are responsible for making their own housing arrangements, the University does provide a limited number of student housing units, primarily university-owned condominium units within a two-mile radius of the instructional buildings. Residence in university-owned student housing is optional and generally assigned on a first-come-first-served basis. Because of the limited number of units, SFBU cannot guarantee housing. Student housing commitments are for one semester, and students are eligible to reside in student housing for a maximum of two semesters. To be eligible for student housing, a student must be a regularly enrolled, full-time SFBU student. Housing reservations are effective only after submission of a housing application and SFBU's receipt of the required rent and deposit. Please visit the SFBU housing webpage https://www.sfbu.edu/student-life/housing for important housing-related deadlines.

Non-university housing in the immediate area is available in the form of house and apartment rentals, but students should note that local housing is highly competitive, with monthly rents for a one-bedroom unit exceeding $\$ 2,000$. SFBU advises students living outside of university housing to begin their housing search as early as possible in order to find suitable accommodations. Students may contact the SFBU housing office at housing@sfbu.edu for questions related to on or off-campus housing.

## - AC Transit Bus Pass; Public Transportation

Full-time SFBU students are eligible for an annual bus pass from AC Transit. For more information regarding the pass, please see: https://www.sfbu.edu/student-life/transportation-easypass.
Other public transportation information is included on the website and in the Student Handbook posted on the MySFBU student portal.

## - Non-academic Counseling

The Student Services Office offers assistance with personal and interpersonal issues such as relationships, cultural differences, assertiveness, and self-esteem. If a student needs a professional counselor, the Student Services Office will help the student find a suitable counselor. Additionally, the Student Services Office helps students with educational/vocational concerns such as coping with university life, academic performance, test anxiety, reentry adjustment, and determining life goals. Students are encouraged to seek assistance from a counselor in dealing with any problems that might affect their success at SFBU.

## - Professional Development Seminars

Offering professional development seminars is an integral part of the Student Services. The seminars are intended to enhance the students' abilities in their professional lives - in cultural, communicative, and technical aspects. The seminar information is emailed to students as well as posted on the SFBU website, social media pages, and digital display board on campus.

## - Career Services

As a key component of Student Services, career placement services provide students with career planning and job search assistance prior to and after graduation in the following ways: (1) career planning, resume preparation and interview skills enhancement, and networking (2) career seminars and job fairs (3) internship opportunities, and (4) various library materials containing information about employment opportunities. The Career Center has a computer dedicated to career planning for students to conduct job searches and access information. The MySFBU student portal also contains employment information on the job posting board through the eCareer Center tab.

## - Student Handbooks

The SFBU Student Handbook describes important policies and regulations that affect the students' status at SFBU. It also provides relevant information affecting the students' lives during their studies at SFBU.
The Student Handbook and the International Student Handbook are posted on the MySFBU student portal. In the New Student Orientation Workshop, the students are informed and receive handouts pointing to the online location for these handbooks. The handbooks complement the information contained in the University Catalog. All students are urged to read and refer to the information in the most current editions of both the student handbooks and the University Catalog - all are also available online.

## O Affiliation to Professional Societies

To expand and enrich student life on campus, SFBU students are encouraged to get involved in a variety of professional organizations. Such involvement also takes the students a step closer to the professional world. Examples include activities sponsored by the IEEE local chapter and various other professional activities regularly held in Silicon Valley.

## - IEEE

The Institute of Electrical and Electronics Engineers, Inc. (IEEE) is the world's largest technical professional society. A non-profit organization, IEEE promotes the development and application of electrotechnology and applied sciences for the benefit of humanity, the advancement of the profession, and the well-being of its members. IEEE members participate in its activities in approximately 150 countries. The technical objectives of the IEEE focus on advancing the theory and practice of electrical, electronics and computer engineering and computer science.

Students are encouraged to join the IEEE student club on-campus. The club provides students the opportunities to participate in IEEE activities. The participants are able to connect with the latest technical information, research, career opportunities, and a community of innovators who inspire the students to strive for success in their chosen profession. This connection enables the engineering students to have convenient access to valuable IEEE publications and participate in organized IEEE activities, particularly the ones held in Silicon Valley. Several faculty members serve as senior advisors to enroll the students.

## - Business Students

Students in the School of Business are encouraged to join at least one of the following professional organizations or others:

- Institute of Management Accountants
- American Institute of CPAs
- California Society of CPAs
- United States Association for Small Business and Entrepreneurship
- Project Management Institute


## - Toastmasters Club

Students interested in improving their public speaking skills are welcome to join the on-campus Toastmasters Club. The Club holds weekly meetings and is supervised by a designated administrator. A number of students in the club have participated in regional competitions and won awards. Refer to the SFBU website for more information.

## - Student Organizations

The purpose of student organizations is to foster student involvement for a common purpose or goal to enhance academic, career, personal and/or community development. They are created to enhance student engagement, promote leadership and learning, and foster shared interests. Refer to the SFBU website for more information or contact the Student Services team.

## - Student Health Insurance

All students must have health insurance coverage for each term they are enrolled in and during semester breaks. Students who are enrolled in $100 \%$ online modality are exempt from this health insurance requirement. The SFBU student health insurance plan is provided by Aetna Student Health Insurance. Detailed information can be found on the SFBU website.

## DONATIONS TO THE UNIVERSITY

From time to time, we receive calls from generous individuals, representing themselves or corporations, wishing to donate funds or items useful to the academic development of the University. We appreciate their consideration and altruistic action. San Francisco Bay University enjoys tax-exempt status with the IRS; therefore, gifts of money and items of value are tax deductible. We encourage individuals to consult their personal or company tax advisors for details on how these gifts may benefit the giver as well as the University.

## FACILITIES

## ■ Campus Description

In accordance with the University's curricular emphasis on technology and business, SFBU's campus is located in a high-technology R\&D and business development area in southern Fremont, occupying modern research and development building complexes and their surrounding areas. The University is located in a peaceful setting, conveniently accessible from highways I-880 and I-680 via Mission Boulevard and Warm Springs Boulevard. The abundant and fully landscaped parking areas provide smooth traffic flow and easy building access.

SFBU's facilities are focused on creating a transformative and empowering campus experience for the benefit of its students and for building recognition, visibility, and outreach. The facilities provide a warm and inviting environment for students to stay on campus longer and to engage in the services and activities the institution offers. Moreover, the campus building has a modern, yet inviting exterior façade to create a positive influence in and enhance the community.

Main features:

1. LEARNING RESOURCE CENTER, CAFE, DINING HALL and RECREATION

This large open area allows the following services to be accessible both visually and physically (with exceptions), in hopes that students and faculty engage in various activities happening at once: the Library, Quiet Study Area, Career Services, Recreational and Student Lounge, Dining Lounge, Cafe, Computer Center, and Faculty Offices.

## 2. LECTURE HALL

The signature lecture hall is used for classes as well as for special events, community seminars, etc. The room's stadium seating can accommodate approximately 70 people. It opens to a large hallway for pre- and post-event gatherings.

## 3. ACTIVE LEARNING CLASSROOMS

A variety of fixed and mobile seating classrooms are offered to fit the needs of instructors and students. Each classroom has energy-efficient LED lighting and temperature control units and is equipped with an LCD screen connected to the instructor's demo computer, which has access to the campus network system and the internet, in addition to other standard classroom provisions.

## 4. OUTDOOR SPACE

Quad Area allows students to study, eat, and lounge outdoors.

## 5. ADMINISTRATIVE OFFICES

Admission, Records, Finance, and other student services departments are located separately to provide privacy on more individual matters.

## - Health, Security, and Safety

The University and its campus sites are compliant with all local and state fire and safety codes, and regulations in reference to NFPA 25, CFC, Cal OSHA, and the City of Fremont.

Building and classroom occupancies are all within the stated guidelines of $\mathrm{CBC} / \mathrm{IBC} / \mathrm{CFC} 1006.2,1004$ codes.

## - Teaching and Research Facilities

SFBU's teaching, research, and laboratory facilities are equipped with the required hardware and software tools. Keeping pace with the advancement of information technology, SFBU's IT Department provides a modern digital campus environment to students, faculty, and administrative staff.

To support teaching activities, classrooms are set up at the beginning of each semester according to the hardware and software requirements of each course. Modern design, simulation, and testing tools are installed for instructors to use in class. Outside teaching resources may be set up to provide faculty members with additional teaching and research tools.

All classrooms are also equipped with modern, state-of-the-art equipment to enhance student learning. Practice laboratories are ready for students to gain hands-on experience after class or during lab sessions.

Computer Networks: There are a variety of high-performance computers on campus to support teaching and learning, including high-capacity servers, advanced workstations, and modern PCs. Wireless and wired network connections for high-speed internet access are provided to students on campus. The campus networks are connected to the internet via Comcast Internet service, allowing faculty and students to access email and various websites. Each student and faculty member has an individual computer account for accessing the MySFBU portal, Canvas LMS, the intranet resources, and various servers on campus.

Examples of available computer science teaching and learning software tools and packages include Oracle server/client tools, Microsoft SQL server/client tools, Microsoft Visual Studio, JDK, MS Office, and various popular software QA and testing programs such as Selenium. In addition to the MS Windows system, Mac computers and CentOS Linux are provided to students for iPhone development and other learning needs. The embedded systems labs cover Embedded Linux, Raspberry Pi, and the Android System.

## - Learning Resources and Laboratories

Designated learning laboratories are open for students to conduct after-class hands-on practice as well as to take laboratory courses. Practice focuses on the following:

- Big data, data mining, and machine learning
- Data Engineering/Data Science
- Artificial Intelligence

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The Internet of Things (IoT)
Mobile Apps design
Computer networking, systems administration, and network security
Database administration and database design
VLSI/SOC design
Embedded systems design
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Other applications: Students also use the computer laboratory facility to do homework and projects in areas such as machine learning, artificial intelligence, blockchain, object-oriented design and programming, Linux system programming, Java/C++/Python programming, MATLAB, website design, e-business programming, software testing, digital media and graphics, and business auditing.

## - The University Library and Digital Campus

The SFBU administration strives to provide an up-to-date digital campus facility to the students and faculty to increase their learning/teaching effectiveness. The university library not only maintains traditional service functions but also provides commercially available digital libraries easily accessible online by students, faculty, and staff.

The MySFBU portal is the gateway for students and faculty to access SFBU's unique online environment. Faculty members use the portal to manage their courses, and students use the portal to submit online request to administrative staff as well as to access learning resources, personal records, career information, and library information and resources. The MySFBU portal is maintained by the SFBU IT Department.

## - Library Services

Besides learning in class, students are encouraged to pursue independent research using resources provided by the San Francisco Bay University Library. SFBU Library's physical collections of resources consists of books and periodicals. The online resources include databases from ProQuest, a leading academic content provider to researchers and libraries worldwide. ProQuest One Business is the most comprehensive business database on the market, providing access to over 2000 online newspapers, magazines, and journals and thousands of company, industry, and country reports. SFBU Library also provides access to over 75,000 digital copies of business, computer science, engineering, and technical books to faculty and students through subscription to O'Reilly for Higher Education and ProQuest eBook Central.

To encourage and help students stay current in their chosen fields, SFBU Library maintains print subscriptions of core periodicals in business and engineering.

San Francisco Bay University Library aims to continuously adapt and increase its resources in response to the educational and research needs and interests of SFBU students and faculty. The SFBU Library welcomes suggestions from faculty and students on new acquisitions.

## Information Literacy

The SFBU Library is committed to teaching students information literacy skills, enabling them to develop their abilities to assess their information needs, find the needed information efficiently, evaluate information critically, and use it ethically. These information literacy skills will prepare our students for life-long learning.
Library assistance is provided in person at the Library Information Desk and via email, phone, or Zoom.
Library patrons can access the library catalog from the library's website and the library databases via the SFBU student/faculty portals.

Library users can find help by using Ask-a-Librarian on the library website.
To access the library catalog, library patrons have two options:

1) Using the computer in the library lobby whose home page is the catalog
2) Access the catalog from the library's website

To access the library's electronic collection, library users have three options:

1) Using the computer in the library lobby
2) Access the e-library via the link on the student/faculty portal:
a. Go to: https://my.sfbu.edu/
b. Click e-Services tab, top right
c. Select eLibrary > ProQuest or O'Reilly
3) $24 / 7$ access from anywhere is provided via EZProxy:
a. Go to: https://elib.sfbu.edu/login
b. Enter your on-campus computer login information
c. Click on "ProQuest Digital Library" or "O'Reilly for Higher Education

- MySFBU portal for Faculty and Students

Faculty members use the Canvas LMS and MySFBU faculty portal as tools to help them manage their courses online, including maintaining their students’ academic and attendance records, posting and updating course syllabi, assignments, instructions, and handout materials. Teaching Assistants access the system to post homework-related information and useful learning materials for individual courses. Faculty members and teaching assistants can also send messages to their students through these electronic facilities.

Each current student is assigned accounts to access the MySFBU and LMS student portals. The systems are designed such that student users can access all general information but only their own personal data and academic records. Using the systems, students can obtain their course-related information, update their personal contact data, and check their own study plan, financial records, and attendance records.

## - Audio/Video/Photographic Recording

Students wishing to take photographs or make any type of video and/or audio recordings of lectures presented by SFBU faculty members and/or visiting lecturers must obtain the written consent of those faculty members or lecturers.

## ACADEMIC PROGRAMS

SFBU's undergraduate and graduate programs are designed to prepare students for the practice of electrical engineering, embedded systems engineering, computer science, data science, business analytics, decision making, marketing, and business administration at a professional level. In particular, the degree curricula are designed to keep pace with the development of Silicon Valley's major industries, including electronics, computer engineering, information technology, enterprise management, and global business development.

As Silicon Valley is a dynamic and fast changing high-technology hub where the only constant is fierce competition among the employers, the employers in the Valley are more demanding on workers' qualifications. Therefore, job seekers in the Valley are required to be well prepared in their background training and have the understanding that continued education is a general requirement in the workplace.

SFBU's program committees in various disciplines hold regular meetings to ensure that the curriculum design and facility support in hardware and software can meet the industry standards. Furthermore, faculty members who teach major and related courses must have had previous or current industry experience and are equipped with up-to-date knowledge and skills in their teaching subjects.

Degree programs are offered by two schools: The School of Engineering and the School of Business. Each School offers degree programs at two levels: bachelors and master's levels. In addition, the School of Business offers an academic Graduate Certificate in Business Management. The following are program information divided by School and, within each School, by degree level.

## SCHOOL OF ENGINEERING

The School of Engineering offers degree programs in three disciplinary areas: Computer Science, Data Science, and Electrical Engineering. The Chief Academic Officer, School Dean, program advisory committees, as well as the faculty members of the School of Engineering are responsible for the School's academic affairs. The program advisory committees are comprised of industry professionals, potential employers, and community leaders who advise, review, and provide recommendations on the undergraduate and graduate programs. Practical applications are emphasized throughout the students' learning process although theoretical background is taught in each course subject as fundamentals.

## - Purpose

Degree programs offered by the School of Engineering are designed for students who intend to become professional engineers in the high-technology electronics or computer industry, as well as for those who desire a modern, general education based on the problems and the promises of a technological society. The environment in which students are educated is as important in shaping their future as their classroom experiences. The School of Engineering offers a friendly atmosphere and a variety of academic programs that have made SFBU engineering graduates highly valued in high-tech firms and Bay Area communities.

## ■ Faculty

All SFBU engineering faculty members possess the following qualities: advanced degrees earned in engineering and science disciplines, high-tech work experience, and enthusiasm in teaching and helping the students. Engineering is not a homogeneous discipline; it requires many special talents. Some faculty members in the School are goal-oriented designers, concerned with teaching students how to solve problems - how to synthesize relevant information and ideas and apply them in a creative, feasible design. Other engineering faculty members function more typically as method-oriented scientists, using the techniques of their disciplines in their teaching and research to investigate various natural and artificial phenomena.

## - Objectives

The course offerings and hands-on experiences offered to the engineering students aim to achieve the following objectives:

- To provide each student a goal-oriented education by tailoring each student's study plan based on the student's background and interests.
- To provide in-depth professional training with state-of-the-art learning resources to the student.
- To provide relevant laboratory experience throughout each program as an integral part of the education.
$\square$ To provide undergraduate students with well-rounded and balanced undergraduate studies.
- To nurture a learning environment which leads to professional values recognizing high quality and integrity in a true engineer.
$\square$ To provide graduate students an opportunity to pursue advanced training and professional development to practice their profession with increased competence.


## - Undergraduate Programs

The School of Engineering offers one undergraduate degree program:
Bachelor of Science in Computer Science (BSCS)

## - Credential Requirements

The undergraduate program accepts qualified high school graduates and college transfer students.

- First-year applicants: Undergraduate applicants who have not completed at least $\underline{\mathbf{3 0}}$ semester units of college credit.


## - Application Requirements

To apply for admission into a bachelor's degree program, the applicant is required to complete the application form online and submit the following to the SFBU Admissions Office:

## - Domestic Students

1. Unofficial and/or Official transcripts from ALL previously attended institutions; first-year applicants are required to submit their official final high school transcript upon high school graduation. Applicants must have been in good academic standing at the last institution attended.

- a high school/college CGPA of 2.5 or above is recommended. Lower CGPAs may require an interview with a member of the admissions committee. A GPA below 2.0 does not qualify for admission.

2. An English proficiency document is required for non-native English speakers: an official transcript with English course records or TOEFL/IELTS/iTEP/PTE Academic/Duolingo/Cambridge B2 First score report or equivalent will suffice. See English Proficiency Requirement below for detailed information on the English entrance requirement.

- F-1 International Students: In addition to the above general application requirements, an international applicant is required to submit the following additional documents:

1. Copy of passport
2. Foreign Credential Evaluation: Foreign transcripts must be evaluated by a member of National Association of Credential Evaluation Services (NACES), Association of International Credential Evaluators (AICE), or American Association of Collegiate Registrars and Admissions Officers (AACRAO)'s International Education Services
3. A financial support document: provide a recent financial support document indicating a minimum amount of $\$ 40,000$ available to pursue study in the first academic year at SFBU.

- a current bank letter and bank statement; or
- a loan letter from a lending institution; or
- Copies of fixed deposits.

An affidavit of support or sponsor letter is required if the funds are not in the applicant's name.
4. A transfer student (from a U.S. institution) is required to submit a photocopy of his/her

- previous I-20 form,
- visa, and

I-94 (U.S Department of Homeland Security issued arrival/departure form).
HSE/HiSET/CPP/GED: SFBU recognizes the High School Equivalency (HSE), the California Proficiency Program (CPP), and General Educational Development (GED) tests and accepts such graduates.

- GED score of 456 or above is recommended. Lower scores may require an interview with a member of the admissions committee.

Applicants interested in applying for scholarships need to provide additional documentation. Please refer to the section on Scholarships in this catalog and on the website.

## - Credential Evaluation Requirement

Applicants who have earned their high school or college credentials at a foreign institution must provide a course-by-course credential evaluation analysis. This credential evaluation must be completed by a member of National Association of Credential Evaluation Services (NACES), Association of International Credential Evaluators (AICE), or American Association of Collegiate Registrars and Admissions Officers (AACRAO)'s International Education Services. This credential evaluation must be in the original sealed envelope, if it is a hard copy; an electronic copy may be sent directly from the evaluation agency to SFBU. Note: International schools/colleges accredited by U.S. regional accrediting bodies are exempt from this requirement.

## - English Proficiency Requirement

Non-native English speakers are considered meeting the entrance English proficiency requirement if they meet any of the following requirements:

- An official IELTS (Academic), TOEFL (iBT), TOEFL Essentials, iTEP Academic, PTE Academic, Duolingo, or Cambridge B2 First test score report. Minimum Score:
- IELTS (Academic) 5.5 band
- TOEFL (iBT) 59
- TOEFL Essentials 6.5 band
- iTEP Academic 3.7
- PTE Academic and PTE Academic Online 50
- Duolingo 100
- Cambridge B2 First 168
- Successful completion of IEP Upper Intermediate Level B with a grade of B or better in all four courses
- An English assessment report from a few U.S. English language institutions recognized by major universities in the U.S.
- A high school diploma earned, or a college-level English credit course passed at an institution located in the U.S., U.K., Ireland, Australia, New Zealand, or Canada
- A degree earned at an institution in which the language of instruction is strictly English. Applicants from the following countries meet this criteria: Anguilla, Antigua \& Barbuda, Ascension, Australia, Bahamas, Barbados, Belize, Bermuda, Botswana, British Virgin Islands, Canada (except Quebec), Cayman Islands, Dominica, England, Eritrea, Fiji, Gambia, Ghana,

Gibraltar, Grenada, Guyana, Ireland, Jamaica, Kenya, Kiribati, Lesotho, Liberia, Malawi, Mauritius, Namibia, New Zealand, Nigeria, Papua New Guinea, Saint Helena, Saint Kitts \& Nevis, Saint Lucia, Saint Vincent \& The Grenadines, Scotland, Sierra Leone, Singapore, Solomon Islands, Swaziland, Tanzania, Tonga, Trinidad \& Tobago, Tuvalu, Uganda, Wales, Zambia, and Zimbabwe.

## - General Background Requirements for Pursuing Bachelor's Degrees

Remedial courses are not offered at SFBU except for English as a Second Language classes. Applicants to all programs are required to have completed pre-calculus subjects in algebra, trigonometry, and geometry prior to admission into any program.

## - Transfer of Credit from Other Institutions

Course credit earned at other institutions of higher education may be transferable. Credit transfer is made by the admission evaluators while conducting the admission evaluation or by formal transfer agreement between institutions. The transfer of credit is done at the program-of-study level, topic area level, the major and major selectable levels and on a case-by-case basis. The following statements apply to all transfer credits:

- The SFBU Admissions Office must receive all official transcripts prior to the student's joining a degree program. Without preapproval, transcripts received after the student joins SFBU cannot be used in transferring credits, except for records from the term immediately preceding the student's starting semester at SFBU. Up to 75 units of courses that have been reviewed and currently approved as part of a formal SFBU articulation/transfer agreement are guaranteed to transfer.
- The student was officially enrolled in the course.
- Courses eligible for transfer by prearranged transfer / articulation agreement shall follow the details contained in the agreement. Courses eligible for one-to-one matching course transfer will be evaluated based on the comparability in content, quality, and rigor with SFBU's courses. Required courses require a closer comparability match. Courses eligible for topic area transfer may be mapped to the program's relevant topic area unit requirements without the need for one-to-one course matching and may have their units used in lieu of required units with the approval of the Registrar and School Dean. The transfer evaluation will include, but is not limited to, course descriptions, course syllabi, and/or general public information. Students may be asked to provide course catalogs or syllabi if needed. Up to 75 semester units of courses that have been reviewed and currently approved as part of a formal SFBU articulation/transfer agreement are guaranteed to transfer.
- When evaluating any foreign transcript, the admission evaluators may accept, or transfer credit based on their knowledge of the course contents in comparison with similar courses offered in the U.S.
- Without prior approval courses for transfer to SFBU may not be completed concurrently at another institution while a student is matriculated in an SFBU degree program.
- College English courses taken at an institution where English is not an official language cannot be transferred for general education credit.
- The credits under consideration for transfer must be earned at (1) institutions approved by the Bureau for Private Postsecondary Education, (2) public or private institutions of higher learning accredited by an accrediting association recognized by the U. S. Department of Education, or (3) foreign institutions of higher learning. Credits earned at a foreign institution degree must be evaluated by a member of National Association of Credential Evaluation Services (NACES), Association of International Credential Evaluators (AICE), or American Association of Collegiate Registrars and Admissions Officers (AACRAO)'s International Education Services.
- Professional Development Units (PDUs) offered by professional/industry organizations cannot be transferred to SFBU for academic credit.
- Continuing Education Units (CEUs) offered on a non-academic basis by other academic institutions cannot be transferred to SFBU for academic credit.
- The total credits transferred from other institutions to meet the student's undergraduate program requirements are limited to 75 semester units. Students must take at least 45 units at SFBU.
- Credits transferred at the time of admission evaluation will reduce program length. Credit transferred from any outside institution has no effect on the calculation of the student's GPA or CGPA.
- Credits transferred from any outside institution are excluded from the maximum attempted units for the program.
- Credits are transferred by the following conversion:


## a. Definition of a Semester Unit:

One semester credit hour equals, at a minimum, 15 contact classroom hours of lecture, 30 contact hours of laboratory, or 45 contact hours of practicum.
b. Conversion Factor:
$\mathbf{1}$ quarter unit $=\mathbf{0 . 6 6}$ semester unit

- Grades Required for Transfer Credit

In the bachelor's degree programs, applicable courses completed with an equivalency of a letter grade of "C" or better are transferable. Courses completed with Pass/No Pass are not transferable unless the transcript states that the general grading policy is not based on letter grades. This policy must be in writing from the institution (transcript key or a letter of verification).

- Other Types of Undergraduate Transfer Credit

The following other types of credit may be transferable:
a. AP/IB course credit earned is considered to be equivalent to college credit.
b. Credit by Examination - CLEP

SFBU grants credit to those students who pass examinations in English, natural sciences, humanities, and social science subjects offered by the College Level Examination Program (CLEP). Only General Education credits will be granted. Students should consult with the Admissions Office for information on acceptable CLEP scores and units. The CLEP Institution Code for SFBU is 7569.
c. Transfer of Credit from Defense Activity for Nontraditional Education Support (DANTES) and Military Services
Credits will be allowed for DANTES Subject Standardized Tests and professional military education evaluated by the American Council on Education (ACE). The maximum transferable credits follow the same policies as specified above. SFBU's evaluation of an application is made prior to the student's admission to a program unless otherwise approved by the authorizing VA office. The DANTES Institution Code for SFBU is 9670.

- Proficiency Exams: A student may be required to demonstrate proficiency in a subject taken more than ten years prior to application with SFBU by successful completion of a proficiency examination.


## - Experiential Learning

SFBU does not award credit for prior experiential learning.

## - Tuition

Tuition is charged per unit. Tuition for courses taken to fulfill the undergraduate degree requirement is $\$ 330.00$ per unit.

## - Tuition per Unit for Courses Audited

For courses audited (without earning credit), the tuition is half the regular unit rate. Not all courses can be taken with "audit" status.

## - Estimated Total Charges for On-time Completion of Entire Educational Program

- Tuition: \$39,600
- Fees: $\$ 4,550$
- Graduation Petition Fee: \$300
- Textbooks \& Software Costs: $\$ 6000$
- Health Insurance Premium: \$4,950
- BSCS: $\$ 55,400$

Please note that this estimate includes tuition, fees, textbooks costs, and health insurance premium, which is subject to change. All students are required to pay current rates for tuition and fees each semester. Additional fees may apply, depending on the services requested (see Tuition and Fee section). The cost of textbooks is estimated to be approximately $\$ 150$ per course. The actual cost of textbooks can vary significantly from course to course.

## - Graduation Requirements

Each program requires coursework in the following areas:
(1) General education,
(2) Major study, and
(3) Electives.

An overall G.P.A. of 2.0 or better and a $D$ grade or higher on all courses towards the degree are required. The student must be in good standing with the University and have an approved petition to graduate on file.

## 1. General Education Requirements

All undergraduate students in the engineering programs must complete at least 40 semester units in general education (GE). GE courses cover subjects in the following areas: (a) English language communication and critical thinking, (b) mathematics and natural sciences, (c) arts and humanities, and (d) social sciences.
Examples of courses that fall under each area of general education are as follows:

- Area A: English Language Communication and Critical Thinking: Expository Writing, Critical Thinking, Public Speaking, Small Group Communication, Intercultural Communication, American Literature.
- Area B: Mathematics and Natural Sciences: Calculus, Linear Algebra, Probability \& Statistics, Physical Sciences, Physics.
- Area C: Arts and Humanities: Introduction to Philosophy, Art/Music Appreciation, Principle of Ethics.
- Area D: Social Sciences: American Experience, American/California History, Emotional Intelligence, Introduction to Psychology, Multiculturalism, Public Administration, Sociology.


## General Education Student Learning Outcomes

SFBU has determined that the first five institutional learning outcomes will also serve as general education outcomes, with one modification: The general education outcome for critical thinking has been modified to include an introductory phrase, "Using various disciplinary perspectives, explore and analyze issues, ideas, artifacts, and/or events to formalize an opinion or conclusion." This inclusion allows for a clear mapping between general education courses in natural sciences, social sciences, communications, and humanities.
All undergraduate students are expected to demonstrate the following general education student learning outcomes:

Written Communication - Write sustained, coherent arguments or explanations.
Oral Communication - Utilize effective oral communication strategies.
Quantitative Reasoning - Utilize mathematical concepts and methods to analyze and explain issues in quantitative terms.
Information Literacy - Identify, locate, evaluate, and effectively and responsibly use and share information in support of academic, personal, and professional needs.
Critical Thinking - Utilizing various disciplinary perspectives, explore and analyze issues, ideas, artifacts, and / or events to formalize an opinion or conclusion.

## 2. Major Study Requirements

The BSCS program is designed to include a series of major study coursework. The courses provide the student with the foundation and training in computer $\&$ database technologies, programming languages, network engineering, data science, structured programming, algorithms, and engineering mathematics and science areas.

Professional Development: The Career Development, Professional \& Technical Writing, and Senior Capstone Project courses prepare engineering students for their professional careers.

## 3. Electives

Electives are built in each program to promote breadth as well as depth in the study program. The student must complete a sufficient number of elective courses to meet the graduation requirements.

Course numbers: Courses numbered in the 100s and 200s are lower-division courses; courses numbered in the 300 s and 400 s are upper-division courses.

The following is the description of the undergraduate engineering program.

## - Bachelor of Science in Computer Science (BSCS)

Program Objectives: The Bachelor of Science in Computer Science curriculum is designed to provide indepth professional training in a range of current computer science subjects, including artificial intelligence, cybersecurity, data science, structured programming, object-oriented analysis and program design, computer organization principles and operating systems, database principles and applications, and principles of computer networks. It is designed to equip the student with both a theoretical background and hands-on experience.

The curriculum provides training in software engineering and prepares the students for employment in computer software related areas, such as computer software design and development, and computer software applications in computer networks and Internet systems. After completing the undergraduate degree, a student is also prepared to enter an advanced degree program in a computer science related field if he/she desires.

Program Learning Outcomes: Students graduating with a BSCS degree are expected to demonstrate the following program learning outcomes -

Written \& Oral Communication - Communicate proficiently on topics that are related to computer science and computer systems with a range of audiences.
Quantitative Reasoning \& Problem Solving - Utilize general knowledge in areas such as data management, algorithms, networking, or quantitative analysis to solve computing problems.
Information Literacy - Search, locate, and utilize information pertaining to current computing practices, technology used in the industry, and software tools to fulfill specified requirements.
Inquiry, Analysis, \& Critical Thinking - Demonstrate rational thinking over the selection and application of suitable computing solutions appropriate to the discipline.
Specialized Knowledge \& Foundations/Integrative Learning - Apply computer science principles and skills acquired in the degree program to work on programming assignments and projects.

Graduation Requirements: A minimum of $\mathbf{1 2 0}$ units are required for graduation. They include the following:

1) 40 units of general education courses including (a) 12 units in English language communication and critical thinking, (b) 16 units in mathematics and natural sciences, (c) 6 units in arts and humanities, and (d) 6 units in social sciences,
2) $\mathbf{6 5}$ units of major courses, and
3) $\mathbf{1 5}$ units of electives.

## BSCS Curriculum

(Total $\mathbf{1 2 0}$ units)

## 1. General Education (minimum 40 units)

The purpose of general education is to give breadth to the student's education. With a general background in English language communication and critical thinking, mathematics and natural sciences, arts and humanities, and the social sciences, the student will be prepared for his/her roles both in society and at work. Students who have not completed the general education requirements upon entering a degree program at SFBU are required to observe the following curriculum to meet the general education requirements.

Area A: English Language Communication and Critical Thinking (12 units) Units
(ENGL101, ENGL115, AND ENGL425 are required courses. Other listed courses are suggested subjects.)

ENGL101 Expository Writing (3)
ENGL102 Critical Thinking (3)
ENGL115 Public Speaking (3)
ENGL220 Small Group Communication (3)
ENGL320 Intercultural Communication (3)
ENGL425 Modern American Literature

Area B: Mathematics and Natural Sciences (16 units)
(MATH201, MATH202, MATH203, MATH208, PHYS201, and PHYS201L are required courses.
Other listed courses are suggested subjects.)
MATH201 Calculus - I
MATH202 Calculus - II
MATH203 Linear Algebra
MATH208 Probability and Statistics

| PHYS101 | Introduction to Physical Sciences | (3) |
| :--- | :--- | :--- |
| PHYS201 | Physics - I | (3) |
| PHYS201L | Physics Lab - I | (1) |
| PHYS202 | Physics - II | (3) |
| PHYS202L | Physics Lab - II | (1) |

Area C: Arts and Humanities (6 units)
(The students can select any 6 units from the following suggested subjects.)

| HU210 | Introduction to Philosophy | (3) |
| :--- | :--- | :--- |
| HU230 | Art Appreciation | (3) |
| HU240 | Music Appreciation | (3) |
| HU280 | Principles of Ethics | (3) |
| HU420 | Critical Analysis of Film | Information Literacy for Academics, Life, and the Workplace |

Area D: Social Sciences (6 units)
(The students can select any 6 units from the following suggested subjects.)

| SOC201 | California History | $(3)$ |
| :--- | :--- | :--- |
| PSY210 | Introduction to Psychology | $(3)$ |
| SOC215 | Introduction to Sociology | $(3)$ |
| SOC235 | Multiculturalism in the United States | $(3)$ |
| SOC250 | Public Administration | $(3)$ |
| SOC260 | Civilization and Urbanization | $(3)$ |
| SOC275 | The American Experience | $(3)$ |
| HIST340 | Modern American History | $(3)$ |
| HIST400 | Early American History | $(3)$ |
| SOC450 | Emotional Intelligence | $(3)$ |

## 2. Major Requirements (minimum 65 units)

[Computer \& database technologies, programming languages, data science, structured programming, algorithms, artificial intelligence, network engineering, professional/career development, and capstone project courses to prepare for professional career]

| Core Courses (50 units) | Units |  |
| :--- | :--- | :---: |
| CS200 | Discrete Logic | $(3)$ |
| CS230 | Linux and Shell Scripting | $(3)$ |
| CS230L | Linux and Shell Scripting Lab | $(1)$ |
| CS250 | Introduction to Programming | $(3)$ |
| CS250L | Introduction to Programming Lab | $(1)$ |
| CE305 | Computer Organization | $(3)$ |
| CS350 | Data Structures | $(3)$ |
| CS350L | Data Structures Lab | $(1)$ |
| CS360 | Programming in C and C++ | $(3)$ |
| CS360L | Programming in C and C++ Lab | $(1)$ |
| CS380 | Operating Systems | $(3)$ |
| BUS450 | Professional and Technical Writing | $(3)$ |
| P450 | Career Development | $(1)$ |
| CS455 | Algorithms \& Structured Programming | $(3)$ |
| CS457 | Data Modeling and Implementation Techniques | $(3)$ |
| CS457L | Database Technologies Lab | $(1)$ |
| CS480 | Java and Internet Applications | $(3)$ |
| CS480L | Java Programming Lab | $(1)$ |
| CS483 | Fundamentals of Artificial Intelligence | $(3)$ |
| CS483L | Artificial Intelligence \& Machine Learning Lab | $(1)$ |


| CS487 | Object-oriented Design and Implementations | (3) |
| :--- | :--- | :--- |
| CS494 | Senior Capstone Project - I | (3) |
|  |  |  |
| Specialization Courses - Complete Five Courses from Below: (15 units) |  |  |
| CE450 | Fundamentals of Embedded Engineering | (3) |
| CS453 | Compiler Design | (3) |
| CS470 | Network Engineering and Management | (3) |
| CS477 | Ethical Hacking and Penetration Testing | (3) |
| CS478 | Blockchain Technology and Applications | (3) |
| CS481 | Introduction to Data Science | (3) |

## 3. Electives (minimum 15 units)

The student may select courses in any discipline to fulfill this requirement to promote breadth as well as depth in their study program. Course prerequisite requirements must be met. When applicable, the student may take curricular practicum courses and engage in practical training to work on company projects that are directly related to the student's course of study.

## Suggested Course Study Flow for On-time Degree Completion

The key objectives for the first few semesters are to complete prerequisite courses and earn credits for lower-division general education \& major requirement courses. The table below shows suggested course sequence for a full-time student who plans to complete the program ( 120 units) in 10 semesters. Course selections for a semester may vary based on course availability and whether the prerequisites have been completed.

The duration to complete the degree may be shortened to 9 semesters by taking extra course loads during the course of study. Please consult with an Academic Advisor for rules pertaining to extra course loads and to map out an alternative study plan.

| Semester | Course | Title | Units | Prerequisite |
| :--- | :--- | :--- | :--- | :--- |
| First | CS200 | Discrete Logic | 3 | Pre-Calculus |
|  | ENGL101 | Expository Writing | 3 |  |
|  | MATH201 | Calculus - I | 3 | Pre-Calculus |
|  | MATH208 | Probability and Statistics | 3 | Pre-Calculus |
| Second | CS250 | Total Units | 12 |  |
|  | CS250L |  |  |  |
|  | ENGLxxx | Introduction to Programming | 3 |  |
|  | HUxxx | Introduction to Programming Lab | 1 |  |
|  | MATH202 | English (Lower-Division) | 3 |  |
| Third | CS230 | Camanities (Lower-Division) | 3 |  |
|  | CS230L | Total Units | 3 | MATH201 |
|  | ENGL115 |  | 13 |  |
|  | PHYS201 | Linux and Shell Scripting |  |  |
|  | PHYS201L | Pinux and Shell Scripting Lab | 3 |  |
|  |  | Physic Speaking | 1 |  |
|  |  | Physics Lab - I | 3 |  |
|  |  | Social Sciences (Lower-Division) | 3 | MATH201 |
|  |  | Total Units | 1 | MATH201 |
|  |  |  | 3 |  |
|  |  | Computer Organization | 14 |  |
|  |  | Data Structures | 3 |  |
|  | CS305 |  | 3 | CS250 |


|  | CS350L | Data Structures Lab | 1 | CS250L |
| :---: | :---: | :---: | :---: | :---: |
|  | HUxxx | Humanities (Lower-Division) | 3 |  |
|  | MATH203 | Linear Algebra | 3 | MATH201 |
|  |  | Total Units | 13 |  |
| Fifth | CS360 | Programming in C and $\mathrm{C}++$ | 3 | CS250 |
|  | CS360L | Programming in C and $\mathrm{C}++\mathrm{Lab}$ | 1 | CS250L |
|  | CS380 | Operating Systems | 3 | CS250 |
|  | ENGL425 | Modern American Literature | 3 | ENGL101 |
|  |  | Elective Course | 3 |  |
|  |  | Total Units | 13 |  |
| Sixth | BUS450 | Professional and Technical Writing | 3 | ENGL101 |
|  | CS455 | Algorithms \& Structured Programming | 3 | CS350 |
|  | CS457 | Data Modeling and Implementation Techniques | 3 | CS250 |
|  | CS457L | Database Technologies Lab | 1 | CS250L |
|  |  | Elective Course | 3 |  |
|  |  | Total Units | 13 |  |
| Seventh | CS480 | Java and Internet Applications | 3 | CS250 |
|  | CS480L | Java Programming Lab | 1 | CS250L |
|  | CS487 | Object-Oriented Design and | 3 | CS250 |
|  | CS487 | Implementations |  |  |
|  | CS4xx | Specialization Course for Major | 3 | CSxxx |
|  |  | Elective Course | 3 |  |
|  |  | Total Units | 13 |  |
| Eighth | CS483 | Fundamentals of Artificial Intelligence | 3 | CS250 |
|  | CS483L | Artificial Intel. \& Machine Learning Lab | 1 | CS250L |
|  | CS4xx | Specialization Course for Major | 3 | CSxxx |
|  | CS4xx | Specialization Course for Major | 3 | CSxxx |
|  |  | Elective Course | 3 |  |
|  |  | Total Units | 13 |  |
| Ninth | CS4xx | Specialization Course for Major | 3 | CSxxx |
|  | CS4xx | Specialization Course for Major | 3 | CSxxx |
|  |  | Social Sciences (Upper-Division) | 3 |  |
|  |  | Elective Course | 3 |  |
|  |  | Total Units | 12 |  |
| Tenth | CS494 | Senior Capstone Project - I | 3 | Senior Year |
|  | P450 | Career Development | 1 |  |
|  |  | Total Units | 4 |  |

## - Course Descriptions Bachelor Degree Programs, School of Engineering

For undergraduate programs, lower division courses are numbered in the 100 s and 200 s, and upper division courses are numbered in the 300 s and 400 s.

| Course No. | Description | Course No. | Description |
| :--- | :--- | :---: | :---: |
| $100-199$ | Freshman level courses | $200-299$ | Sophomore level courses |
| $300-399$ | Junior level courses | $400-499$ | Senior level courses |
| $450-499$ | Senior level specialized skills courses taken for undergraduate level credit |  |  |

## Courses are listed by subject: Business, Computer Engineering, Computer Science, Curricular Practicum, English, Humanities, Mathematics, Physics and Physical Sciences, Professional Development, and Social Science.

Each course description is followed by its prerequisite/co-requisite information expressed in course numbers.

Each 1-unit lab course requires at least 2 contact hours of lab work each week. Each 1 unit of a practicum course requires at least 45 contact hours of practical experience related to the student's program curriculum.

## Business

## BUS450 Professional and Technical Writing (3 units)

This course presents students with practical instructions about communicating in different kinds of academic and workplace environments, as well as professional/technical communities. Students will learn how to organize and produce common professional writing work, such as technical reports, white papers, proposals, and theses. The course also covers different forms of effective writing, writing styles, approaches, formats, and citation of referenced materials.

## Computer Systems Engineering

## CE305 Computer Organization (3 units)

This course is designed to provide a fundamental understanding of the issues and challenges involved in designing and implementing modern computer systems. The primary goal is to help students become more skilled in their understanding of computer systems, including how the hardware and software interact with each other. This course will also provide an understanding of where computers came from and where they are going, as well as understanding their strengths and weaknesses, such as why compiled code will always execute faster than JAVA code. Subjects will include: RISC vs. CISC CPU design approach, instruction sets, pipelining, instruction scheduling (branch prediction, speculative and out-of-order execution, etc.), cache, and storage hierarchy design. Additional key focuses will be on modern I/O architectures such as PCI, PCI-X, SATA, SCSI, USB, etc., and their importance on performance and compatibility.

## CE450 Fundamentals of Embedded Engineering (3 units)

This is the first in a series of embedded systems courses designed for students who are interested in learning realtime embedded systems and practicing real-time programming of embedded systems. Topics include hardware issues including platform, microprocessors commonly used in these systems and how a microprocessor works in such systems, concept of memory, registers, I/O; interrupt generation and handling in an embedded system; the concept of real-time programming, multi-task, concurrency, mutual exclusion; overview of real-time kernel/OS, drivers; system initialization and startup, and debug issues. Hands-on exercises are required.
Prerequisite: CS250

## CE450L Embedded Engineering Lab (1 unit)

This is a drill course designed to be taken with the course CE450 Fundamentals of Embedded Engineering. The students gain hands-on experience with embedded systems programming and design. They are also guided to work on projects involving controller systems.
Prerequisite: CS250L

## Computer Science

## CS200 Discrete Logic (3 units)

This course is designed to introduce students to discrete logic concepts related to computer science and a broad spectrum of applications. Topics include logic set theory, Boolean matrix algebra, relations, structures, combinatorics, computational methods, elements of logic design, graphs theory and its applications to computer science and telecommunications, and design and analysis of efficient algorithms.
Prerequisite: Pre-calculus subjects.

## CS230 Linux \& Shell Scripting (3 units)

This course is designed to familiarize the students with the Linux environment. Topics include concepts of the Linux operating system, Shell commands, Visual editor, file manipulation and securities, Linux utility commands, Shell features and Shell environment, online manual, controlling user processes and managing jobs, introduction of Regular Expression and its usage with grep, sed, and awk power utilities, basic Shell programming techniques, large file management, and the user programming environment customization. Students are also introduced to Linux shells (bash, Bourne, and Korn), shell programming, basic Linux file system, and resource management. The students will be able to write shell scripts to accomplish routine tasks for software development and testing. Hands-on exercises are required.

## CS230L Linux \& Shell Scripting Lab (1 unit)

This course is designed to be taken with the course CS230 Linux \& Shell Scripting. The students gain hands-on experience with Unix/Linux commands, vi editor, Linux utility, Shell scripting/programming, security issues, and managing long files and customization of user environment.

## CS250 Introduction to Programming (3 units)

This course is an introduction to computer science using Python programming language. Major topics covered include defining and analyzing problems, developing algorithms, implementation, debugging, and documentation of programs, coverage of basic algorithms, programming concepts and data types. Students will write computer programs that include control structures, iteration, methods and argument passing, and classes.

## CS250L Introduction to Programming Lab (1 unit)

This course is designed to be taken with the course CS250 Introduction to Programming. It is aimed at students new to the language who may, or may not, have experience with other programming languages. Students will learn (a) how Python works and its place in the world of programming languages, (b) to work with and manipulate strings, (c) to perform math operations, (d) to work with Python sequences, (e) to collect user input and output results, (f) flow control processing, (g) to write to, and read from, files, (h) to write functions, and (i) to handle exceptions.

## CS350 Data Structures (3 units)

This course is designed to teach efficient use of data structures and algorithms to solve problems. Students study the logical relationship between data structures associated with a problem and physical representation. Topics include introduction to algorithms and data organization, arrays, stacks, queues, trees, graphs, sorting, hashing, and heap structures. Hands-on exercises are required.
Corequisite: CS250

## CS350L Data Structures Lab (1 unit)

This course is designed to be taken with the course CS350 Data Structures. C language - a structured programming language - is further investigated. Topics include pointer structure, structure and union, stack, queue, linked list, sort, binary tree, and heaps.
Corequisite: CS250L

## CS360 Programming in C and C++ (3 units)

This course is designed to develop the students' abilities to design, code, and document application programs using C and $\mathrm{C}++$ programming languages. Emphasis is on establishment of design objectives, criteria and specifications, processes of synthesis, analysis, construction, testing, and evaluation of open-ended problems. Topics include an introduction to procedural C programming and general object-oriented programming as implemented in $\mathrm{C}++$, data
types, expression, statements, functions, program scope, run-time memory allocation, function overloading, template functions, class mechanism, derivation, inheritance, and migration from C to $\mathrm{C}++$. Labs may accompany lectures in partial class meetings during the semester. Hands-on exercises are required.
Prerequisite: CS250

## CS360L Programming in $\mathbf{C}$ and $\mathrm{C}++$ Lab (1 unit)

This course is designed to be taken with the course CS360 Programming in C and C++ to practice and develop programming skills in both C and $\mathrm{C}++$.
Prerequisite: CS250L

## CS380 Operating Systems (3 units)

This course covers the fundamental concepts and implementation techniques of modern operating systems. Topics include processes, threads, concurrency, memory management, file systems, I/O systems, security, and OS virtualization. Popular operating systems will be selected for case studies including Linux/UNIX, Windows, Android, and VMWare hypervisors. Hands-on exercises and projects are required.
Prerequisite: CS250

## CS453 Compiler Design (3 units)

This course is designed to give students a fundamental knowledge of compilers and interpreters for modern computer languages. Topics include a study of modern computer languages, regular expressions, lexical analysis, parsing techniques, context-free grammars, and syntax-directed translation. Hands-on exercises and semester projects are required.
Prerequisite: CS350

## CS455 Algorithms \& Structured Programming (3 units)

This course introduces students to the design, analysis, and implementation of algorithms to solve engineering problems using an object-oriented programming language. It covers the common algorithms, algorithmic complexity, and data structures used to solve these problems. The course concentrates on the design of algorithms and the analysis of their efficiency.
Prerequisite: CS350

## CS457 Data Modeling and Implementation Techniques (3 units)

This is the first of a series designed to teach relational database concepts, design, and applications. Topics include database architecture, relational model, structured query language (SQL), data manipulation language (DML), data definition language (DDL), database design, ER modeling, database normalization, denormalization, and physical database design. Popular database systems, such as Oracle and Microsoft SQL server, are used for hands-on exercises and projects.
Corequisite: CS250

## CS457L Database Technologies Lab (1 unit)

This is a drill course designed to be taken with the course CS457 Data Modeling and Implementation Techniques. The students gain hands-on experience in database applications using popular database systems including Oracle database and Microsoft SQL server. They are also guided in working on database design projects.
Corequisite: CS250L

## CS470 Network Engineering and Management (3 units)

This course is designed to introduce network communications. Topics include network layered models (OSI, TCP/IP), architecture, principles, service models and protocols; data communication basics, switching, routing, security, network management, and wireless and mobile networks. Modern Internet technologies and implementations are presented in case studies. Hands-on exercises are required.
Prerequisite: CS250

## CS477 Ethical Hacking and Penetration Testing (3 units)

An ethical hacker is usually employed by an organization which trusts him or her to attempt to penetrate networks and/or computer systems, using the same methods as a hacker, for the purpose of finding and fixing computer security vulnerabilities. This course goes in-depth into computer hacking techniques. The students leave with the ability to quantitatively assess and measure threats to information assets; and discover where the organization is most vulnerable to hacking. This allows system administrators to deploy proactive countermeasures and stay ahead of information security developments and exploited vulnerabilities.
Prerequisite: CS250

## CS478 Blockchain Technology and Applications (3 units)

This course explores the fundamentals and applications of blockchain technology; the transparent, secure, immutable and distributed database used currently as the underlying technology for Cryptocurrency. Types of blockchain will be introduced and studied with real-life cases. This course will introduce students to the workings and applications of this potentially disruptive technology and its potential impact on all aspects of business world and society with practical cases and research assignments.

## CS480 Java and Internet Applications (3 units)

This course introduces students to the Java language, programming with object-oriented construct, GUI design and graphics programming, and core Java libraries. Students will learn Java language basics such as syntax and classes, inheritance, interfaces, reflection, graphics programming, event handling, user-interface components with Swing, Java applets, exception handling, stream, and files. Hands-on exercises are required.
Prerequisite: CS250 or CS360

## CS480L Java Programming Lab (1 unit)

This is a drill course designed to be taken with the course CS480 Java and Internet Applications. The students gain Java programing skills through hands-on exercises in this weekly lab course. Weekly hands-on exercises normally correspond with the lecture material offered each week.
Prerequisite: CS250L or CS360L

## CS481 Introduction to Data Science (3 units)

Data science is an interdisciplinary field that combines mathematics, statistics, programming languages, and specific domain knowledge. The course describes (1) the process of gaining knowledge and insights from data in both a structured and an unstructured way, (2) scientific methods, processes, algorithms, and systems that can be employed to analyze, design, develop, and implement solutions to challenging novel and existing data science problems.
Prerequisite: MATH208

## CS483 Fundamentals of Artificial Intelligence (3 units)

This course covers artificial intelligence applications in problem solving, reasoning, planning, natural language understanding, computer vision, autonomous car navigation, machine learning, business intelligence, robot design, and so on. In order to solve artificial intelligence problems, the major algorithms include machine learning, search, Markov decision processes, constraint satisfaction, graphical models, and logic. The main goal of the course is to equip students with the tools in Python library to tackle a variety of AI problems in industries.
Prerequisite: CS250

## CS483L Artificial Intelligence \& Machine Learning Lab (1 unit)

Students will learn python programming in Google colab platform with numpy, pandas, matplotlib, scikit-learn, seaborn, tensorflow models and Keras API to implement algorithms covered in the lecture from different raw dataset sources. And they will have the chance to build system for several hand-on design projects. In a two hour lab session, student will be getting familiar with algorithm functions in above libraries to implement different data processes in machine learning, search, Markov decision processes, constraint satisfaction, graphical models, logic, and optimize design system by plotting data process curves and error analysis in the model.
Prerequisite: CS250L

## CS485 JavaScript and Internet Programming (3 units)

This course is designed to provide students with advanced programming knowledge and skills for application development on the Internet. Students study both client-side and server-side scripting including HTML, JavaScript, and CSS to develop interactive and responsive web sites. Other topics covered include jQuery, Bootstrap, Node.js Express Framework, RESTful API, MongoDB (NoSQL) and various JavaScript frameworks such as Angular and React. Hands-on exercises are required.
Prerequisite: CS250

## CS487 Object-Oriented Design and Implementations (3 units)

This course is designed to use an object-oriented programming language to achieve the goal of teaching the students the design methodology for algorithm development. The objective is to develop the students' programming ability with proper logical and object-oriented thinking processes, as well as basic design patterns. The course covers two main topics: (1) Problem specification and analysis - understand the problem, analyze it, and translate the human thinking into a computer program; (2) Object-oriented design and analysis - understand data abstraction, encapsulation, aggregation, and inheritance. These concepts are the foundation for object-oriented programming languages such as Python, Java, C++, and C\#,. Hands-on practices using Python is required.
Corequisite: CS250

## CS494 Senior Capstone Project - I (3 units)

The senior capstone project course is designed to develop the creativity of every graduating senior in Computer Science through the exercise of the design effort and implementation skills on a self-selected project. The design approach must employ modern design techniques and methodologies in the related fields that were acquired during the course of program study. Completion of the project entails (1) proper research on relevant topics, (2) formulation of a design problem statement, (3) design specifications, (4) consideration of alternative solutions, (5) development plan, (6) actual implementation, and (7) submission of a final report. The student must discuss with and follow the guidelines provided by the instructor through the period of research, implementation, testing, report writing, and related procedures.
Prerequisite: Must be in the senior year of the program.

## CS495 Senior Capstone Project - II (3 units)

This is the second part of the senior capstone project series. The student may choose to continue to work on the project developed during the CS494 Senior Capstone Project - I course. The goal is to allow students to enhance or expand their projects to gain more experience in product development, as well as apply additional knowledge/skills acquired during the course of program study or through individual research. Upon completion of the project, the student is required to conduct an open-forum presentation of the project and submit a professional report.
Prerequisite: CS494

## Curricular Practicum

## CPT401 Curricular Practicum (1 unit)

Curricular practicum, or curricular practical training, is a supervised practical experience that is the application of previously studied theory. The curricular practicum must provide students with valuable learning experience and must significantly increase their knowledge in their program of study. It is defined as alternative work/study, internship, cooperative education, or any other type of required internship or practicum that is offered by sponsoring employers through cooperative agreements with the school and the course is an integral part of an established curriculum. At least three hours of work in a practical setting has the credit equivalency of one hour of classroom lecture ( 1 unit). To be eligible to take this course, the student must be in good standing, have completed at least two semesters of coursework required in his/her degree program, obtained a written agreement that outlines the arrangement between the institution and the practicum site (including specific learning objectives, course requirements, and evaluation criteria), and received approval by a designated advisor. F-1 International students must follow additional rules required by the U.S. Immigration and Customs Enforcement. The student must use SFBU's online tool to submit his/her application for taking this course before meeting with a designated advisor for an assessment of eligibility. Information and instructions concerning this course are provided in the application form. This is a part-time practicum course taken by the undergraduate student to work no more than twenty hours each week during the approved practicum period. Failure in this course will prevent the student from taking any curricular practicum course afterwards.
Prerequisite: Refer to the instructions on the application and agreement documents.

## CPT402 Curricular Practicum (2 units)

Curricular practicum, or curricular practical training, is a supervised practical experience that is the application of previously studied theory. The curricular practicum must provide students with valuable learning experience and must significantly increase their knowledge in their program of study. It is defined as alternative work/study, internship, cooperative education, or any other type of required internship or practicum that is offered by sponsoring employers through cooperative agreements with the school and the course is an integral part of an established curriculum. At least three hours of work in a practical setting has the credit equivalency of one hour of classroom lecture ( 1 unit). To be eligible to take this course, the student must be in good standing, have completed at least two semesters of coursework required in his/her degree program, obtained a written agreement that outlines the arrangement between the institution and the practicum site (including specific learning objectives, course requirements, and evaluation criteria), and received approval by a designated advisor. F-1 International students must follow additional rules required by the U.S. Immigration and Customs Enforcement. The student must use SFBU's online tool to submit his/her application for taking this course before meeting with a designated advisor for an assessment of eligibility. Information and instructions concerning this course are provided in the application form. This is a full-time practicum course taken by the undergraduate student to work more than twenty hours but not to exceed forty hours each week during the approved practicum period. Failure in this course will prevent the student from taking any curricular practicum course afterwards.
Prerequisite: Refer to the instructions on the application and agreement documents.

## English

(GE in English and Communication area)

## ENGL100 English Structure and Composition (0 units)

This course focuses on the structural components of academic writing, starting with the parts of speech, the parts of a sentence, and the building blocks of phrases and clauses. It covers sentence types and variety, parallelism, proper word usage and punctuation, and avoiding sentence errors. This course also emphasizes unity and coherence, as well as the structure of paragraphs and standard academic essays.

## ENGL101 Expository Writing (3 units)

This fundamental level college writing course is based on a systematic approach to address students' needs to acquire knowledge and skills in written communication. It explores an integrated approach to the mechanics of communication, encompassing a full range of basic concerns in informative writing, going from its processes to its forms, to the popular techniques writers have used to make their works outstanding. Students enhance their writing skills through the process of prewriting, organizing, drafting, revising, and editing of expository essays. By the end of the semester, students should have functional knowledge of English grammar, sentence structure, and punctuation, and be able to write effective academic expository and persuasive essays.

## ENGL102 Critical Thinking (3 units)

This course focuses on learning to be an effective provider and consumer of ideas in our information-saturated society. Students will learn to identify the intent of the message, to judge the soundness of the argument, and to evaluate the validity of the evidence. Rigorous training will help learners go beyond feelings and personal biases to clear, impartial, and accurate problem solving and decision making that are essential to all human communication: speaking, writing, debating, and persuading.

## ENGL115 Public Speaking (3 units)

This course is designed to develop effective skills in extemporaneous speaking, formal presentations, and listening. Students will learn about nonverbal communication, cultural differences in communication, and research methodology.

## ENGL220 Small Group Communication (3 units)

This course is designed to accomplish the following learning goals: 1) to help the students understand theories and principles of small group decision making and problem solving, 2) to provide students with hands-on experience working in small groups, the most powerful tool in modern industry, and 3) to offer students opportunities to observe the development and operation of real-life task-oriented groups.

## ENGL320 Intercultural Communication (3 units)

This course introduces theories and practices regarding intercultural relationships and communication. It helps students adapt to a rapidly diversified workforce both in Silicon Valley and in other parts of the world. From the vantage point of this course, students will see the forces that shape cultures and influence intercultural contacts. They will be enabled to build harmonious and productive relationships with individuals from all national, ethnic, and linguistic backgrounds.

## ENGL425 Modern American Literature (3 units)

This course examines fiction and non-fiction writing produced by American authors in the 20th and 21st century. This course will cover the themes, styles, and content of modern American authors. Genres such as Drama, Action and Science Fiction will be investigated. Students will be asked to analyze context, culture, time and structure. This course requires critical thinking on essays written about various readings.

## Prerequisite: ENGL101

## Humanities

## (GE in Humanities area)

## HU210 Introduction to Philosophy (3 units)

This course is an introduction to the great questions of philosophy, using an historical approach. The class covers Western and non-Western traditions from the pre-Socratic and Confucius to modern times.

## HU230 Art Appreciation (3 units)

A crash course in western art aesthetic from ancient art to post-modernism, this course gives the student a historical western art background that makes comparisons to the East, as well as the tools to analyze paintings through their own cultural point of view.

## HU240 Music Appreciation (3 units)

This course is designed for students to explore the fundamentals of music through easy listening examples from all aspects of sound: tone, color, harmony, rhythm, mood, dynamics, tempo, themes, and forms. Students will analyze music in respect to the historical and cultural context as well as to daily life.

## HU280 Principles of Ethics (3 units)

This course is designed to teach students ethical principles and problems applicable to their lives. Topics include application of ethical principles, background and philosophical principles of ethics, ethical practices, and practical ethical problems and solutions.

## HU420 Critical Analysis of Film (3 units)

This course examines the impact of film on society, and vice versa. Students will review, critique, and analyze several films throughout the semester. Knowledge, insight, and critical analysis will be required to demonstrate how the selected films reflect and impact cultures. This course examines content, meaning, history and culture of American and foreign films. Various genres and film movements will be viewed and discussed.

HU450 Information Literacy for Academics, Life, and the Workplace ( 3 units)
This course will give students a skill that they will be able to use and benefit from for the rest of their lives: the ability to read, evaluate and understand newspapers, magazines, websites, journalistic materials, business writing and journals. Students will be able to evaluate and analyze bias, propaganda, agenda, point-of-view, and misinformation. Students will be able to interpret, organize and synthesize information from various sources to achieve a specific purpose with clarity and depth.
Prerequisite: ENGL101

## Mathematics

## MATH201 Calculus - I (3 units)

This course is the first of a series in calculus designed for students to build up the fundamental background of calculus and to learn its applications to very basic problems. Topics include functions, limits, continuous functions, derivatives and applications, antiderivatives, composite functions and chain rule, graphing techniques using derivatives, implicit differentiation, finite integrals, and fundamental theorems of calculus.
(GE - in Mathematics area)
Prerequisite: Pre-calculus subjects

## MATH202 Calculus - II (3 units)

This course is the second of the calculus series designed for students to understand integration techniques and extend the differentiation notion and methods to functions of multiple variables. Topics include logarithmic and exponential functions and their derivatives, inverse trigonometric functions, and derivatives, L'Hopital's rule, integration techniques and their applications, sequence, series, partial derivatives, and improper integrals.
Prerequisite: MATH201

## MATH203 Linear Algebra (3 units)

Linear Algebra is one of the topics to prepare students for higher-level math courses such as Differential Equations. It is also relevant to computer and business students interested in Data Science since linear problems are often the simplest models of the natural world. In this course students learn the language, concepts, and techniques, from the ground up; the course starts with geometric representation of systems by equations, and later manipulation of abstract ideas as Singular Value Decomposition.
Prerequisite: MATH201

## MATH208 Probability and Statistics (3 units)

This course is designed for students to understand the concepts, theory, and applications of probability and statistics. Topics include permutation, combination, random variables, distribution, means and variance, normal distribution, random sampling, estimation, confidence interval, hypothesis testing, linear correlation, and regression.
(GE - in Mathematics area)
Prerequisite: Pre-calculus subjects

## Physics and Physical Sciences

## PHYS101 Introduction to Physical Sciences (3 units)

This is an introductory course to expose the students to physical science subjects including the basics of astronomy, chemistry, earth science, and physics.
(GE- in Sciences area)
Prerequisite: Pre-calculus subjects

## PHYS201 Physics - I (3 units)

This course is designed to be the first of a series in physics for engineering students. Topics include vectors, motion and Newton's laws, gravitation, work and energy, momentum, mechanics of rigid bodies, oscillations, kinetic theory of gases, waves and sound, and thermodynamics. Laboratory practices are conducted formally each week.
Prerequisite: MATH201
PHYS201L Physics Lab - I (1 unit)
This course is designed to be taken with the course PHYS201 Physics - I. The student first learns to use the general measuring equipment, the proper experimental procedures, and lab safety issues. The student is expected to gain skills in data analysis and lab report writing throughout the semester. Lab topics include measurements of position and velocity, kinematics, Newton's laws of motion, energy, momentum, conservation laws of energy and momentum, collisions, torque, rotational dynamics, waves, and thermodynamic behaviors.
Prerequisite: MATH201

## PHYS202 Physics - II (3 units)

This course is the second of a series in physics for engineering students. Topics include Coulomb's law and electric fields, currents and DC circuits, magnetic fields, time-varying EM fields, AC circuits, optics, interference, diffraction, and an introduction to modern physics. Laboratory practices are conducted formally each week.
Prerequisite: PHYS201

## PHYS202L Physics Lab - II (1 unit)

This course is designed to be taken with the course PHYS202 Physics - II. The student learns to use electrical measuring equipment to conduct the first of several experiments related to electromagnetism. Lab safety as well as skills in data analysis and lab report writing are stressed. Lab topics include measurement of electric field and potential, simple circuits, resistors, DC circuits, Kirchhoff's laws, capacitors, RC circuits, magnetic effects, inductors, AC circuits, electromagnetic induction, RLC circuits, geometrical optics, lenses, and light as a wave.
Prerequisite: PHYS201L

## Professional Development

## P450 Career Development (1 unit)

This course is designed for the students to take in preparation for becoming working professionals. Topics include effective communication strategies, emotional intelligence, diversity and cultural awareness, professional behavior, and interview skills.

## Social Science

(GE - in Social Sciences area)

## SOC201 California History (3 units)

This course is designed to expose the students to the uniqueness of California history and its evolution. Topics include the social, economic, and political development of the "Golden State" over the last three centuries, spanning the Native-American, Spanish, Mexican, and American periods. Lectures, case studies, and field trips for research are the forms of study in this course.

## PSY210 Introduction to Psychology (3 units)

This psychology course reflects on theories and concepts of behavior and processes of the mind. Students will be introduced to topics such as motivation, emotion, personality, social behavior, perception, learning, and development. Different areas of psychology will be examined, such as cognitive, forensic, social, and developmental psychology. Additional topics may include environmental and biological factors affecting behavior, adaptation to stress and adversity, common disorders, experimental methods, current research trends, etc.

## SOC215 Introduction to Sociology (3 units)

This course provides a study of culture, social organization, and social relations. Additional topics include the major social problems in society, with an emphasis on how those problems are interrelated and the role of society in their creation and perpetuation. Issues and problems related to cross culture and diversity will also be addressed.

## SOC235 Multiculturalism in the United States (3 units)

This course looks into various aspects of multiculturalism in American society, exploring issues related to race, ethnicity, gender, sexual orientation, disability, and other social group identities.

## SOC250 Public Administration (3 units)

This course serves as an introduction to public administration. Early key thinkers in the development of public administration will be examined. During the semester, topics such as public policy formation, public management, human resources, reinvention, privatization, e-Government, public finance, performance measurement, and ethics will be reviewed. Students will become familiar with the primary issues and challenges facing public administrators today.

## SOC260 Civilization and Urbanization (3 units)

This is an introductory course designed to cover the 5,000 -year shift from rural to urban throughout the world. The city is civilization's greatest work of art but has many challenges. The ancient walled cities, utopian writings, urban theories, religious experiments, English Garden Cities and new towns, American Greenbelt Towns, company towns, flight to the suburbs, Neo-traditional planning, the New Urbanism, and current sustainable development, Smart Growth, to the more recent Greening and Healthy Cities will be described and the actual city and regional planning practices are shown.

## SOC275 The American Experience (3 units)

This course is designed to lead the students to examine the 20th century rise of the United States as a modern multiethnic society with emphasis on the socioeconomic and political forces that have shaped its development.

## HIST340 Modern American History (3units)

This course covers the development of the United States from post-Civil War (1865) to the present. Students will further develop their historical research, writing, critical thinking, and presentation skills throughout this course. Covered topics start with the 1800's Reconstruction, Immigration, Industrialization, Western Expansion and American Urbanization, followed by the 20th century's World War I, The Great Depression, The New Deal, World War 2, Korean War, Baby Boom Generation, Vietnam War, Civil Rights Movement and Globalization. The course concludes with the 21 st Century including the impact of September 11, 2001, Terrorism, and Modern Technology

## HIST400 Early American History (3 units)

This course is designed to lead the students to examine the early periods of American history that shaped the development of the nation, including America before Columbus, European expansion, the founding era and Revolution, the Constitution and the new republic, and subsequent periods of civic and political growth up to the Civil War.
Prerequisite: ENGL101

## SOC450 Emotional Intelligence (3 units)

Emotional Intelligence (EI) or Emotional Quotient (EQ) defines the skills or capacity to recognize ones' own emotions and those of others and how to control these emotions. In this course, the students will learn about Emotional Intelligence (EQ) and how to manage interpersonal relations and why it's important in their life and career. They will learn how to increase their EQ in developing their abilities in perceiving, using, understanding, and managing emotions. EQ is a type of intelligence that unlike IQ can be increased and the benefits of it are apparent in one's life and career. Knowing yourself is the essence of EQ. Students will learn about themselves by assessing their EQ at the beginning of the class and at the end of the term to see if any improvement took place. In recent years, EQ has become a major indicator of achievement. This course will provide the means to increase and manage your EQ.

## - Master's Degree Programs

The School of Engineering offers three master's degree programs:

- Master of Science in Computer Science (MSCS)
- Master of Science in Data Science (MSDS)
- Master of Science in Electrical Engineering (MSEE)


## - Objective

The objective of the master's degree programs is to provide advanced engineering training to those who wish to practice their profession with increased competence in the high-technology electronics and computer industries. Each program emphasizes both mastery of subject matter and an understanding of related research and research methodology. This emphasis implies development of the student's ability to integrate and apply the subject matter.

## - Committee Oversight

The responsibility for developing, modifying, and maintaining each master's degree program is performed by the Academic Committee for this School. The Academic Committee is led by a designated group of members who invite input from qualified students, faculty, administrators, employers, as well as the Advisory Committee members to conduct their duties.

## - Credential Requirements

Master's degree program applicants must hold a valid bachelor's degree. Applicants must have been in good academic standing at the last institution attended. A bachelor's degree with a minimum CGPA of 2.5 is required. A bachelor's degree with a CGPA below 2.5 does not qualify for admission. However, if the applicant holds a graduate degree which demonstrates significant improvement in academic performance and yields a combined CGPA of 2.5 or above, this applicant may qualify for admission.

An applicant who holds (or is pursuing) a master's or doctoral degree must provide the transcripts for those degree programs. Academic achievements and CGPA earned from the applicant's graduate studies will also be used in the credential evaluation process.

## - Distance Learning

The MSCS program is approved for distance learning. This allows students to mix and match on-site \& online courses or choose to take $100 \%$ online courses. Online courses may be offered in a synchronous or an asynchronous modality.

## - Application Requirements

Graduate program admission follows a holistic review process. Academic and non-academic achievements are considered while assessing an applicant's ability to succeed in the master's programs. An interview with the Academic team may also be conducted if necessary.

To apply for admission into a master's degree program, the applicant is required to complete the application form online and submit the following to the SFBU Admissions Office:

1. Copy of passport or a government issued I.D.
2. Official transcripts from ALL previously attended institutions
3. Foreign Credential Evaluation: Foreign transcripts must be evaluated by a member of National Association of Credential Evaluation Services (NACES), Association of International Credential Evaluators (AICE), or American Association of Collegiate Registrars and Admissions Officers (AACRAO)'s International Education Services
4. A document certifying completion of a bachelor's degree; a transcript printed with degree completion information will suffice
5. An English proficiency document is required for non-native English speakers: An official transcript with English course records or TOEFL/IELTS/ iTEP/PTE Academic/Duolingo/Cambridge B2 First score report or equivalent will suffice. See English Proficiency Requirement below for detailed information on the English entrance requirement.

Additional suggested indicators of potential success at SFBU. Provide evidence of one or more of the following:

- Additional undergraduate and/or graduate degrees and certifications
- Previous coursework or training in the intended field of study
- Work experience
- Achievement in sports, music and/or other creative pursuits
- Involvement in community/volunteer services
- Fluency in multiple foreign languages
- Personal statement with background and purpose for seeking the degree
- Other special skills
- F-1 International Students: In addition to the above general application requirements, an international applicant is required to submit the following additional documents:

1. A financial support document - provide a recent financial support document indicating a minimum amount of $\$ 39,800$ available to pursue study in the first academic year at SFBU.

- A current bank letter and bank statement; or
- A loan letter from a lending institution; or
- Copies of fixed deposits.

An affidavit of support or sponsor letter is required if the funds are not in the applicant's name.
2. A transfer student (from a U.S. institution) is required to submit a photocopy of his/her

- previous I-20 form,
- visa, and
- I-94 (U.S Department of Homeland Security issued arrival / departure form).

Applicants interested in applying for scholarships need to provide additional documents. Please refer to the section on Scholarships in this catalog and on the website.

## - Credential Evaluation Requirement

Applicants who have earned their bachelor's credentials at a foreign institution must provide a course-bycourse credential evaluation analysis. This credential evaluation must be completed by a member of National Association of Credential Evaluation Services (NACES), Association of International Credential Evaluators (AICE), or American Association of Collegiate Registrars and Admissions Officers (AACRAO)'s International Education Services. This credential evaluation must be in the original sealed envelope, if it is a hard copy; an electronic copy may be sent directly from the evaluation agency to SFBU.
Note: International schools/colleges accredited by U.S. regional accrediting bodies are exempt from this requirement.

## - English Proficiency Requirement

Non-native English speakers are considered meeting the entrance English proficiency requirement if they meet any of the following requirements:

- An official IELTS (Academic), TOEFL (iBT), TOEFL Essentials, iTEP Academic, PTE Academic, Duolingo, or Cambridge B2 First test score report. Minimum Score:
- IELTS (Academic) 5.5 band
- TOEFL (iBT) 59
- TOEFL Essentials 6.5 band
- iTEP Academic 3.7
- PTE Academic and PTE Academic Online 50
- Duolingo 100
- Cambridge B2 First 168
- Successful completion of IEP Upper Intermediate Level B with a grade of B or better in all four courses
- An English assessment report from a few U.S. English language institutions recognized by major universities in the U.S.
- A degree earned or a college-level English credit course passed at an institution located in the U.S., U.K., Ireland, Australia, New Zealand, or Canada
- A degree earned at an institution in which the language of instruction is strictly English. Applicants from the following countries meet this criteria: Anguilla, Antigua \& Barbuda, Ascension, Australia, Bahamas, Barbados, Belize, Bermuda, Botswana, British Virgin Islands, Canada (except Quebec), Cayman Islands, Dominica, England, Eritrea, Fiji, Gambia, Ghana, Gibraltar, Grenada, Guyana, Ireland, Jamaica, Kenya, Kiribati, Lesotho, Liberia, Malawi, Mauritius, Namibia, New Zealand, Nigeria, Papua New Guinea, Saint Helena, Saint Kitts \& Nevis, Saint Lucia, Saint Vincent \& The Grenadines, Scotland, Sierra Leone, Singapore, Solomon Islands, Swaziland, Tanzania, Tonga, Trinidad \& Tobago, Tuvalu, Uganda, Wales, Zambia, and Zimbabwe.


## - Entrance Assessment Test

GRE test score is optional. Applicants may submit GRE or other national level exam scores to strengthen their application.

SFBU's institution Code for reporting the GRE score is 5485 .

## - General Background Preparation Requirements

Each individual graduate program may require additional background preparation requirements before acceptance into the program. Background preparation requirements and information on how to clear those requirements are found under the graduate program sections of the Catalog.

## - Transfer of Credit from Other Institutions

Graduate course credit earned at other accredited higher education institutions may be transferable to meet the student's graduation requirements if the courses are closely related to the engineering course requirements in the student's intended program of study and the grade earned meets the requirement stated below. Such course credits are considered qualified transfer credits. Credit transfer is made by the admission evaluators while conducting the admission evaluation.

The following statements apply to qualified transfer credits:

- The SFBU Admissions Office must receive all official transcripts prior to the student's joining a degree program. Without preapproval, transcripts received after the student joins SFBU cannot be used in
transferring credits, except for records from the term immediately preceding the student's starting semester at SFBU.
- The student was officially enrolled in the course.
- Courses eligible for transfer will be evaluated based on the comparability in content, quality, and rigor of SFBU's courses. The transfer evaluation will include, but is not limited to, course descriptions, course syllabi, and/or general public information. Students may be asked to provide course catalogs or syllabi if needed.
- M.S. in Computer Science (MSCS) Program: No more than 12 units of qualified graduate-level course credits may be transferred. Students must take at least 24 units at SFBU degree program.
- M.S. in Data Science (MSDS) Program: No more than 9 units of qualified graduate-level course credits may be transferred. Students must take at least 21 units at SFBU degree program.
- Without prior approval, courses for transfer to SFBU may not be completed concurrently at another institution while a student is matriculated in an SFBU.
- The credits contemplated for transfer must be earned at (1) institutions approved by the Bureau for Private Postsecondary Education, (2) public or private institutions of higher learning accredited by an accrediting association recognized by the U. S. Department of Education, or (3) foreign institutions of higher learning. Credits earned at a foreign institution degree must be evaluated by a member of National Association of Credential Evaluation Services (NACES), Association of International Credential Evaluators (AICE), or American Association of Collegiate Registrars and Admissions Officers (AACRAO)'s International Education Services.
- Professional Development Units (PDUs) offered by professional/industry organizations cannot be transferred to SFBU for academic credit.
- Continuing Education Units (CEUs) offered on a non-academic basis by other academic institutions cannot be transferred to SFBU for academic credit.
- Credits transferred at the time of admission evaluation will reduce program length. Credit transferred from any outside institution has no effect on the calculation of the student's GPA or CGPA.
- Credits transferred from any outside institution are excluded from the maximum attempted units for the program.
- Credits are transferred by the following conversion:


## a. Definition of a Semester Unit:

One semester credit hour equals, at a minimum, 15 contact classroom hours of lecture, 30 contact hours of laboratory, or 45 contact hours of practicum.

## b. Conversion Factor:

$\mathbf{1}$ quarter unit $=\mathbf{0 . 6 6}$ semester unit

- Grades Required for Transfer Credit

In the master's degree programs, qualified courses completed with an equivalency of a letter grade of "B" or better are transferable. Courses completed with Pass/No Pass are not transferable unless the transcript states that the general grading policy is not based on letter grades. This policy must be in writing from the institution (transcript key or a letter of verification).

- Proficiency Exams: A student may be required to demonstrate proficiency in an undergraduate background subject taken more than ten years prior to application with SFBU by successful completion of a proficiency examination.

A student may also select to take proficiency exams to clear the background preparation required by the program. Rules for taking proficiency exams must be observed by the student. Of particular importance is the timing for taking each proficiency exam. Clearance of a background subject must be completed early enough to meet two conditions: (1) There must be sufficient time for administrative processing of the exam and (2) Processing of the exam must be completed prior to the student's registration in any course with the background preparation subject as a prerequisite for the course.

## - Experiential Learning

SFBU does not award credit for prior experiential learning.

## - Tuition

Tuition is charged per unit. Tuition for courses taken to fulfill the master's degree requirement is $\$ 450.00$ per unit.

## - Tuition per Unit for Courses Audited

For courses audited (without earning credit), the tuition is half the regular unit rate. Not all courses can be taken with "audit" status.

## - Estimated Total Charges for On-time Completion of Entire Educational Program for MSCS or MSEE

- Tuition: \$16,200
- Fees: $\$ 1,820$
- Graduation Petition Fee: \$300
- Textbooks \& Software Costs: $\$ 1,800$
- Health Insurance Premium: $\$ 1,980$
- MSCS: $\$ 22,100$
- MSEE: $\$ 22,100$


## - Estimated Total Charges for On-time Completion of Entire Educational Program for MSDS

- Tuition: \$13,500
- Fees: $\$ 1,820$ (if completed in 4 semesters) or $\$ 1,365$ (if completed in 3 semesters)
- Graduation Petition Fee: \$300
- Textbooks \& Software Costs: \$1,500
- Health Insurance Premium: $\$ 1,980$ (if completed in 4 semesters) or $\$ 1,485$ (if completed in 3 semesters)
- MSDS: $\$ 19,100$ ( $\$ 18,150$ if completed in 3 semesters)

Please note that this estimate includes tuition, fees, textbooks costs, and health insurance premium, which is subject to change. All students are required to pay current rates for tuition and fees each semester. Additional fees may apply, depending on the services requested (see Tuition and Fee section). The cost of textbooks is estimated to be approximately $\$ 150$ per course. The actual cost of textbooks can vary significantly from course to course.

## - Graduation Requirements

The specified minimum number of units of graduate-level coursework is required for each master's degree program.

- 36 units for MSCS or MSEE
- 30 units for MSDS

The following conditions must also be met in order for a student to be eligible for graduation:

- Maintain a grade of C or better for all courses taken towards the degree requirements,
- Maintain an overall G.P.A. of 3.0 or better,
- Maintain good standing with the University - with clear financial, library, and other school records,
- The student is approved to graduate after filing a petition for graduation.
$\bullet$ Capstone Course

The capstone course in each engineering master's degree program is intended to integrate the knowledge and hands-on experience that the student has acquired from the coursework taken in the program. The capstone course instructor determines the course objectives and scope based on the degree curriculum and technology trend. With this learning experience, the student is prepared to pursue his/her career in the high-technology industry.

The student shall take the capstone course near the end of his/her program of study.

## - Career Planning

Students are encouraged to gain real-world experience by engaging in curricular practicum training (internship) when applicable. For career planning, students meet one-on-one with the Career Center staff in their first term of enrollment. Students learn to prepare their resumes and participate in job searches and other activities. The students may utilize the online eCareer Center from their portal for job listing and offcampus job fairs.
The following are descriptions of the master's engineering degree programs, each with a statement of objectives, a description of the background preparation for the program, and the program curriculum.

Course Numbers: Courses numbered from 450G to 499 G are cross-listed specialized courses taken for graduate-level credits; courses numbered in the 500s and above are graduate-level courses. Cross-listed specialized courses and graduate-level courses are taken to meet the graduation requirements.

## - Master of Science in Computer Science (MSCS) CIP Code: 11.0701

Program Description: The MSCS degree program is designed to provide advanced knowledge and handson experience in computer science to students who are interested in gaining expertise in software engineering as well as modern Internet technologies and applications. Through the learning process, the students not only acquire knowledge in modern computer technologies but also cultivate abilities in software design, development, deployment, and integration aspects of professional learning. They are encouraged to apply
their knowledge and skills to course projects that match industry trends.
Program Learning Outcomes: Students graduating with an MSCS degree are expected to demonstrate the following program learning outcomes -

Written \& Oral Communication - Effectively present the concepts, designs, and outcomes for software development projects in written and oral forms.
Quantitative Reasoning \& Problem Solving - Employ current computer science technologies, methodologies, and quantitative analysis to examine modern industry challenges and formulate suitable solutions.
Information Literacy - Demonstrate proficiency and resourcefulness in utilizing multiple sources of information to research, design, or implement complex programming projects.
Critical Thinking, Analysis \& Creative Thinking - Apply critical thinking and problem-solving skills to analyze computing problems and derive solutions based on evidences and practicality.

Specialized Knowledge, Integrative Learning \& Creative Thinking - Practice specialized knowledge relevant to the area of expertise and the skills attained in the program study to complete required tasks in professional manners.

## Background Preparation

Students admitted into the MSCS degree program are required to have a bachelor's degree (BS / BA / BE) in computer science/engineering or in another field with a sufficient background in computer science and mathematics, including course work and/or experience equivalent to (as deemed appropriate by the Academic team) all the following subjects:

1. Mathematics - Calculus, Linear Algebra, and Statistics/Probability
2. Introduction to Python Programming Language and Programming Logic
3. Data Structures

Additional documents and/or an interview may be requested by the Academic team to assess and validate the qualification of an applicant who did not complete an undergraduate degree in Computer Science/ Engineering.

A student who lacks any of the background preparation requirements listed above is expected to clear them by either (1) taking the course at SFBU or another approved institution/organization that is comparable in subject matter, quality, and rigor as SFBU and earning a grade of at least C or higher, or (2) taking and passing a proficiency exam on the subject. The student must clear background preparation requirements before acceptance to the MSCS program.

## MSCS Curriculum

A minimum of $\mathbf{3 6}$ semester units of graduate study are required for the MSCS program. They include a few required foundation courses, a number of specialization courses based on the student's selection of technical pursuit, a required capstone course, and electives. The software engineering coursework is to develop technical skills beneficial to the student for career planning. The student also has the opportunity to take elective courses outside of computer science to broaden the student's skillset.

The student must meet prerequisite requirements before enrolling in any course. Upon clearing background preparation work, the student starts to take courses to meet the degree requirements. The student must begin his/her graduate study with the subjects listed in the Foundation Requirements section.

## I. Foundation Requirements (11 units)

(Required subjects)

| CS455G | Algorithms \& Structured Programming or |
| :--- | :--- |
| CS501 | Practical Application of Algorithms; and |
| CS457G | Data Modeling and Implementation Techniques |
| CS457LG | Database Technologies Lab |
| CS500 | Object-Oriented Design in Python |
| CS500L | Object-Oriented Design in Python Lab |

## II. Specialization Requirements (12 units)

The student is advised to consider industry trends and career choices when selecting computer science courses. Before taking the Capstone Course near the end of the program, the student will have taken a minimum of 12 units of graduate level software engineering courses, (or those corresponding to one of the chosen concentrations below), and 10 units of electives.

## Concentrations

The student may choose one of the three concentrations shown below and complete 12 units of the associated courses listed under the concentration. After completing these selected courses, the student will be able to request that the concentration area be specified on the transcript and the diploma to highlight the field of specialization.

## Cybersecurity:

CS535 Network Security Fundamentals
CS571 Cloud Computing Infrastructure
CS581 Cloud Security
CS589 Special Topics (related to Cybersecurity)
CS477G Ethical Hacking and Penetration Testing (taken as an Elective course)

## Data Science:

CS550 Machine Learning and Business Intelligence
CS570 Big Data Processing \& Analytics
CS589 Special Topics (related to Data Science)
CS481G Introduction to Data Science (taken as an Elective course)
Network Engineering:
CS515 UNIX/Linux Network Programming
CS535 Network Security Fundamentals
CS565 Advanced Network Management
CS575 Network Analysis and Testing
The following are examples of cluster courses that the student may select to strengthen the knowledge and skills related to an area of interest without declaring a concentration for their MSCS degree:

Cloud Computing and Big Data:
CS550 Machine Learning and Business Intelligence
CS570 Big Data Processing \& Analytics
CS571 Cloud Computing Infrastructure
Mobile Application Technologies:
CS548 Web Services Techniques and REST Technologies
CS551 Mobile Computing for Android Mobile Devices
CS556 Mobile Applications on iPhone Platform
QA Engineering:

CS521 Software Project Management
CS522 Software Quality Assurance and Test Automation
CS548 Web Services Techniques and REST Technologies
CS575 Network Analysis and Testing
Selecting any four (4) courses from the above lists will meet the Specialization Course Requirements. Taking four (4) courses in a cluster area will also help the student develop desirable skills that support the chosen area of interest and profession

Other CS5xx level courses offered by the School of Engineering may also be taken to complement the knowledge and skills desired. A cross disciplinary study of areas of interest can be desirable as the
changing computer industry has become more demanding on engineers to have multidisciplinary skillsets.

## III. Electives (10 units)

The student may take any graduate-level courses, including those outside of software engineering, to meet the electives requirement of 10 units. At least 6 of these units must comprise of courses with numbers at or higher than 500. When applicable, the student may take Curricular Practicum courses and engage in practical training to work on company projects that are directly related to the student's course of study. No more than 6 units of practicum coursework may be counted towards graduation.

## IV. Capstone Course (3 units)

(A required subject)
Upon completing all or most coursework for this program, the student is required to take the capstone course and, under the guidance of the course instructor, integrate the knowledge and skills learned from all of the courses taken during the program.

CS595 Computer Science Capstone Course

## - Master of Science in Data Science (MSDS) CIP Code: $\mathbf{3 0 . 7 0 0 1}$

Program Description: The MSDS program focuses on exploring, processing, and analyzing large-scale data sources from the perspectives of computer science, data representation, data analytics, mathematics, and applied statistics. Students learn the theory and acquire practical, hands-on skills in algorithm development, software design \& programming, data management, data mining, trend analysis, and data visualization. The program incorporates real-world applications of Data Science in various disciplines, such as artificial intelligence, computer vision, data-driven engineering, business intelligence, and the Internet of Things (IoT).

Program Learning Outcomes: Upon completion of the MS in Data Science program, the students will be able to:

1. Written \& Oral Communication - Effectively communicate the results of data analysis to both technical and non-technical audiences.
2. Quantitative Reasoning \& Creative Thinking - Collect, clean, and organize data from various sources and apply statistical and machine learning techniques to data.
3. Information Literacy - Demonstrate proficiency and resourcefulness in utilizing multiple sources of information to research, design, or implement solutions to problems.
4. Critical Thinking \& Problem-Solving - Apply critical thinking about data, identify patterns and trends, and solve problems using data analysis.
5. Specialized Knowledge \& Integrative Learning - Analyze and draw meaningful insights from complex datasets using advanced statistical and computational techniques.
6. Ethical Reasoning - Identify and address ethical challenges related to data collection, privacy, bias in data analysis, and how to use data responsibly.

## Background Preparation

Students admitted into the MSDS degree program are required to have a bachelor's degree (BS / BA / BE) in computer science/data science/engineering or in another field with a sufficient background in computer/data science and mathematics, including course work and/or experience equivalent to (as deemed appropriate by the Academic team) all the following subjects:

1. Mathematics - Calculus, Linear Algebra, and Statistics/Probability
2. Introduction to Python Programming Language and Programming Logic
3. Data Structures

Additional documents and/or an interview may be requested by the Academic team to assess and validate the qualification of an applicant who did not complete an undergraduate degree in Computer Science/ Engineering.

A student who lacks any of the background preparation requirements listed above is expected to clear them by either (1) taking the course at SFBU or another approved institution/organization that is comparable in subject matter, quality, and rigor as SFBU and earning a grade of at least C or higher, or (2) taking and passing a proficiency exam on the subject. The student must clear background preparation requirements before acceptance to the MSDS program.

## MSDS Curriculum

A minimum of $\mathbf{3 0}$ semester units of graduate study are required for the MSDS program. They include three foundation courses, four courses based on the student's selection of specialization in Data Science, a required capstone course, and electives. The student also has the opportunity to choose elective courses outside of data science to broaden the student's skillset.

The student must meet prerequisite requirements before enrolling in any course. Upon clearing background preparation work, the student starts to take courses to meet the degree requirements. The student must begin his/her graduate study with the subjects listed in the Foundation Requirements section.

## I. Foundation Course Requirements (9 units - Required Subjects)

$$
\begin{array}{ll}
\text { CS481G } & \text { Introduction to Data Science } \\
\text { DS500 } & \text { Mathematics and Statistics for Data Science } \\
\text { DS501 } & \text { Python Programming for Data Science }
\end{array}
$$

## II. Specialization Requirements (12 units)

The student is advised to consider industry trends and career choices when selecting data science courses. Before taking the Capstone Course near the end of the program, the student will have taken a minimum of 12 units of graduate-level courses shown below and 6 units of electives.

```
    CS550 Machine Learning and Business Intelligence
    CS570 Big Data Processing & Analytics
    DS512 Data Engineering
    DS520 Deep Learning
    DS535 Large Language Models (LLM)
    DS540 Natural Language Processing (NLP)
    DS565 Generative AI-Driven Intelligent Apps Development
    DS589 Special Topics (related to Data Science)
```

Selecting any four (4) courses from the above lists will meet the Specialization Course Requirements. Taking four (4) courses in a cluster area will also help the student develop desirable skills that support the chosen area of interest and profession

## III. Electives (6 units)

Students may select 6 units (a combination of 1, 2, or 3-unit courses) of subjects that earn graduate-level credits in Data Science or other majors to fulfill the elective requirement. When applicable, the student may take Curricular Practicum courses and engage in practical training to work on company projects that are directly related to the student's course of study. CPT501 (part-time internship) and CPT502 (full-time internship) courses, which earn one unit and two units, respectively, may be counted as elective courses. No more than 3 units of practicum coursework may be counted towards graduation.

## IV. Capstone Course (3 units - Required Subject)

Upon completing all or most coursework for this program, the student is required to take the capstone course and, under the guidance of the course instructor, integrate the knowledge and skills learned from all of the courses taken during the program.

DS595 Data Science Capstone Course

## - Master of Science in Electrical Engineering (MSEE) CIP Code: 14.1001

Program Description: The MSEE degree program is designed to provide students with advanced knowledge and hands-on experience in electronics and embedded system engineering, with an emphasis on the Internet of Things (IoT). Through the learning process, the students not only acquire knowledge in modern electronics and embedded system technologies but also cultivate abilities in designing, simulating, and integrating the engineering subjects learned. They are encouraged to apply their knowledge and skills to course projects that match industry trends.

Program Learning Outcomes: Students graduating with an MSEE degree are expected to demonstrate the following program learning outcomes -

Written Communication \& Critical Thinking - Create reports for engineering projects that demonstrate an advanced level of proficiency and evidence-based decision making ability.
Specialized Knowledge \& Written/Oral Communication - Apply the specialized skills relevant to graduate level work to examine problems, synthesize the data/information, and communicate the requirements and the solutions effectively.
Quantitative Reasoning - Prepare engineering prototype models, conduct experiments, collect measurements, analyze the data, and effectively interpret the results.
Information Literacy - Demonstrate the expertise and resourcefulness in utilizing multiple sources of information to research and strategize solutions necessary to complete engineering projects.
Integrative Learning, Problem Solving \& Creative Thinking - Produce robust hardware/software solutions to meet industry needs in the modern technology areas by utilizing existing technology in a novel manner.

## Background Preparation

Students admitted into the MSEE degree program are required to have a bachelor's degree (BS / BA / BE) in electrical or in another field with a sufficient background in engineering, mathematics, and science, including course work and/or experience equivalent to (as deemed appropriate by the Academic team) all the following subjects:

1. Mathematics: Calculus, Linear Algebra, and Statistics/Probability.
2. Sciences: Physics;
3. Electrical and Computer Engineering Subjects: C Programming, Python Programming, Circuit Theory, and Logic Design.

Additional documents and/or an interview may be requested by the Academic team to assess and validate the qualification of an applicant who did not complete an undergraduate degree in Electrical Engineering.

A student who lacks any of the background preparation requirements listed above is expected to clear them by either (1) taking the course at SFBU or another approved institution/organization that is comparable in subject matter, quality, and rigor as SFBU and earning a grade of at least C or higher, or (2) taking and
passing a proficiency exam on the subject. The student must clear background preparation requirements before acceptance to the MSEE program.

## MSEE Curriculum

A minimum of $\mathbf{3 6}$ semester units of graduate study are required for the MSEE program. They include a few required foundation courses, a number of engineering courses based on the student's selection of technical pursuit, a required capstone course, and electives. The engineering coursework in the ranges of electronics and computer engineering will develop technical skills beneficial to the student for career planning. The student also has the opportunity to take elective courses outside of the electronics or computer engineering areas to broaden the student's skillset.
The student must meet prerequisite requirements when taking any course. Upon clearing background preparation work, the student starts to take courses to meet the degree requirements. The student must begin his/her graduate study with the subjects listed in the Foundation Requirements section.

## I. Foundation Requirements (11 units)

(Required subjects)

> CE450G Fundamentals of Embedded Engineering
> CE450LG Embedded Engineering Lab
> EE461G Digital Design and HDL
> EE461LG Digital Design and HDL Lab
> EE488G Computer Architecture

## II. Engineering Course Requirements (12 units)

The student is advised to consider industry trends when selecting electronics and computer engineering courses. Before taking the Capstone Course near the end of the program, the student will take a minimum of 12 units of graduate level engineering courses and 10 units of electives. Choices of field of study include the following: Internet of Things (IoT), embedded systems, multi-core computing, and modern IC technologies.

The following are examples of cluster courses for each area of interest area:
Internet of Things (IoT) and Embedded Systems:
EE517 Introduction to the Internet of Things (IoT)
CE521 Real-time Systems and Programming
CE522 Embedded Design in Networking Environment
CE523 Embedded Design in Device Driver Environment
CE530 Embedded Software Design in Linux
Multi-core Computing:
$\begin{array}{ll}\text { EE504 } & \text { Advanced Computer Architecture } \\ \text { EE553 } & \text { System on Chip (SoC) Design }\end{array}$
EE553 System on Chip (SoC) Design
Modern IC Technologies:
EE505 Advanced Digital IC Design
EE511 Advanced Analog IC Design
EE520 Advanced FPGA Design and Implementations
EE577 Design Verification with System Verilog
Each semester when the course offering list is published, instructions on graduate level courses belonging to various areas of interest are also published along with the course offering list. Every
graduate student is advised to refer to these instructions to select courses and build his/her expertise area. In addition, a cross disciplinary study of engineering areas of interest can be desirable as the fastchanging electronics and computer industries have become more demanding on engineers to have multidisciplinary skillsets.

## III. Electives (10 units)

The student may take any graduate-level courses, even outside of engineering, to meet the electives requirement of 10 units. When applicable, the student may take Curricular Practicum courses and engage in practical training to work on company projects that are directly related to the student's field of study. No more than 6 units of practicum coursework may be counted towards degree requirements.

## IV. Capstone Course (3 units)

(A required subject)
Upon completing all or most of the coursework for this program, the student is required to take the capstone course and, under the guidance of the course instructor, integrate the knowledge and skills learned from all of the courses taken during the program.

EE595 Electrical Engineering Capstone Course


## - Course Descriptions

## Master's Degree Programs, School of Engineering

Master's degree courses are numbered in the 500 s . Each master's degree program allows for a limited number of credits for 400 level courses with a "G" suffix.

Course No. Description
450G-499G Cross-listed specialized skills courses taken for graduate level credits
500-599 Graduate level courses
For information on prerequisite subjects numbered below 450, refer to the section on Course Descriptions for the Undergraduate Degree Programs, School of Engineering.

## Courses are listed by subject: Embedded Systems Engineering, Computer Science, Curricular Practicum, Electrical Engineering, and Professional Development.

Each course description is followed by its prerequisite information expressed in course numbers.
Each 1 unit of a practicum course requires at least 45 contact hours of practical experience related to the student's program curriculum.

## Embedded Systems Engineering

## CE450G Fundamentals of Embedded Engineering (3 units)

This is the first in a series of embedded systems courses designed for students who are interested in learning realtime embedded systems and practicing real-time programming of embedded systems. Topics include hardware issues including platform, microprocessors commonly used in these systems and how a microprocessor works in such systems, concept of memory, registers, I/O; interrupt generation and handling in an embedded system; the concept of real-time programming, multi-task, concurrency, mutual exclusion; overview of real-time kernel/OS, drivers; system initialization and startup, and debug issues. Hands-on exercises are required.
Prerequisite: CS250

## CE450LG Embedded Engineering Lab (1 unit)

This is a drill course designed to be taken with the course CE450 Fundamentals of Embedded Engineering. The students gain hands-on experience with embedded systems programming and design. They are also guided to work on projects involving controller systems.
Prerequisite: CS250L

## CE521 Real-Time Systems and Programming (3 units)

This is the second in the embedded systems series. By examining an off-the-shelf real-time operating system, students will gain hands-on experience in real-time operating system programming and implementations. Specific topics include a review of embedded system design, the concept of real-time systems, real-time specification and design techniques, real-time kernels, system performance analysis, memory management, task management, time management, synchronization of inter-task communication, queuing models, real-time operating system tools for embedded systems, and real-time programming examples. Hands-on exercises are required.

## Prerequisite: CE450

## CE522 Embedded Design in Networking Environment (3 units)

This course is designed for the students to learn protocol stack implementation/porting in a real-time operating system (RTOS) kernel environment. Students learn the concept of network protocol stack implementation/porting, embedded real-time system software architecture, and real-time operating systems. They also learn to design and write programs as a collection of independent and concurrent tasks, non-preemptive and preemptive multi-tasking, task scheduling, and task synchronization and intertask communication including semaphores and message queues. Industry standard RTOS will be used for practice and projects.
Prerequisites: CE450

## CE523 Embedded Design in Device Driver Environment (3 units)

This course investigates the operating system (Windows NT, Linux, or Unix) components that interact with device drivers, the device driver building and debugging process, device driver architecture, functionality, and the relevant kernel APIs. Topics include operating system architecture; I/O API; operating system kernel; building, loading and debugging device drivers; device driver entry points; device driver data structures; I/O request processing; plug, play and power management; interrupts and timers; memory management; direct memory access; and timing. The goal of the course is to present comprehensive coverage of the operating system kernel, HAL, device drivers and the related APIs. Upon completion of the course, the student should be able to develop, build, install and test basic device drivers, as well as to port existing drivers from one operating system to another. Hands-on practice is required.
Prerequisite: CE450

## CE530 Embedded Software Design in Linux (3 units)

This course prepares students to enter the challenging world of embedded Linux. It covers the following key topics: comparing Linux and traditional embedded environments, comparing leading embedded Linux processors, understanding the details of the Linux kernel initialization process, learning the basic concepts about Linux drivers, learning about the special role of bootloaders in embedded Linux systems - with specific emphasis on U-Boot, using embedded Linux file systems, understanding the Memory Technology Devices subsystem for flash (and other) memory devices, mastering debugging tools such as gdb, KGDB, learning many tips and techniques for debugging within the Linux kernel, learning how to maximize productivity in cross-development environments, learning to prepare an entire development environment, including TFTP, DHCP, and NFS target servers; and learning to configure, build, and initialize BusyBox to support a set of unique requirements. Hands-on exercises are required.
Prerequisite: CE450

## Computer Science

## CS453G Compiler Design (3 units)

This course is designed to give students a fundamental knowledge of compilers and interpreters for modern computer languages. Topics include a study of modern computer languages, regular expressions, lexical analysis, parsing techniques, context-free grammars, and syntax-directed translation. Hands-on exercises and semester projects are required.
Prerequisite: CS350

## CS455G Algorithms \& Structured Programming (3 units)

This course introduces students to the design, analysis, and implementation of algorithms to solve engineering problems using an object-oriented programming language. It covers the common algorithms, algorithmic complexity, and data structures used to solve these problems. The course concentrates on the design of algorithms and the analysis of their efficiency.
Prerequisite: CS350

## CS457G Data Modeling and Implementation Techniques (3 units)

This is the first of a series designed to teach relational database concepts, design, and applications. Topics include database architecture, relational model, structured query language (SQL), data manipulation language (DML), data definition language (DDL), database design, ER modeling, database normalization, denormalization, and physical database design. Popular database systems, such as Oracle and Microsoft SQL server, are used for hands-on exercises and projects.
Prerequisite: CS250

## CS457LG Database Technologies Lab (1 unit)

This is a drill course designed to be taken with the course CS457 Data Modeling and Implementation Techniques. The students gain hands-on experience in database applications using popular database systems including Oracle database and Microsoft SQL server. They are also guided to work on database design projects.
Prerequisite: CS250L

## CS470G Network Engineering and Management (3 units)

This course is designed to introduce network communications. Topics include network layered models (OSI, $\mathrm{TCP} / \mathrm{IP}$ ), architecture, principles, service models and protocols, data communication basics, switching, routing, security, network management, and wireless and mobile networks. Modern Internet technologies and implementations are presented in case studies. Hands-on exercises are required.
Prerequisite: CS250

## CS477G Ethical Hacking and Penetration Testing (3 units)

An ethical hacker is usually employed by an organization which trusts him or her to attempt to penetrate networks and/or computer systems, using the same methods as a hacker, for the purpose of finding and fixing computer security vulnerabilities. This course goes in-depth into computer hacking techniques. The students leave with the ability to quantitatively assess and measure threats to information assets; and discover where the organization is most vulnerable to hacking. This allows system administrators to deploy proactive countermeasures and stay ahead of information security developments and exploited vulnerabilities.
Prerequisite: CS250

## CS478G Blockchain Technology and Applications (3 units)

This course explores the fundamentals and applications of blockchain technology; the transparent, secure, immutable, and distributed database used currently as the underlying technology for Cryptocurrency. Types of blockchain will be introduced and studied with real-life cases. This course will introduce students to the workings and applications of this potentially disruptive technology and its potential impact on all aspects of business world and society with practical cases and research assignments.

## CS480G Java and Internet Applications (3 units)

This course introduces students to the Java language, programming with object-oriented construct, GUI design and graphics programming, and core Java libraries. Students will learn Java language basics such as syntax and classes, inheritance, interfaces, reflection, graphics programming, event handling, user-interface components with Swing, Java applets, exception handling, stream, and files. Hands-on exercises are required.
Prerequisite: CS250 or CS360

## CS480LG Java Programming Lab (1 unit)

This is a drill course designed to be taken with the course CS480 Java and Internet Applications. The students gain Java programing skills through hands-on exercises in this weekly lab course. Weekly hands-on exercises normally correspond with the lecture material offered each week.
Prerequisite: CS250 or CS360L

## CS481G Introduction to Data Science (3 units)

Data science is an interdisciplinary field that combines mathematics, statistics, programming languages, and specific domain knowledge. The course describes (1) the process of gaining knowledge and insights from data in both a structured and an unstructured way, (2) scientific methods, processes, algorithms, and systems that can be employed to analyze, design, develop, and implement solutions to challenging novel and existing data science problems.
Prerequisite: MATH208

## CS483G Fundamentals of Artificial Intelligence (3 units)

This course covers artificial intelligence applications in problem solving, reasoning, planning, natural language understanding, computer vision, autonomous car navigation, machine learning, business intelligence, robot design, and so on. In order to solve artificial intelligence problems, the major algorithms include machine learning, search, Markov decision processes, constraint satisfaction, graphical models, and logic. The main goal of the course is to equip students with the tools in Python library to tackle a variety of AI problems in industries.
Prerequisite: CS250

## CS483LG Artificial Intelligence \& Machine Learning Lab (1 unit)

Students will learn python programming in Google colab platform with numpy, pandas, matplotlib, scikit-learn, seaborn, tensorflow models and Keras API to implement algorithms covered in the lecture from different raw dataset sources. And they will have the chance to build system for several hand-on design projects. In two hours, lab session, student will be getting familiar with algorithm functions in above libraries to implement different data processes in machine learning, search, Markov decision processes, constraint satisfaction, graphical models, logic, and optimize design system by plotting data process curves and error analysis in the model.
Prerequisite: CS250L

## CS485G JavaScript and Internet Programming (3 units)

This course is designed to provide students with advanced programming knowledge and skills for application development on the Internet. Students study both client-side and server-side scripting including HTML, JavaScript, and CSS to develop interactive and responsive web sites. Other topics covered include jQuery, Bootstrap, Node.js Express Framework, RESTful API, MongoDB (NoSQL) and various JavaScript frameworks such as Angular and React. Hands-on exercises are required.
Prerequisite: CS250

## CS500 Object-Oriented Design in Python (3 units)

This course is designed to use an object-oriented programming language to achieve the goal of teaching the students the object-oriented design methodology for software development. The objective is to develop the students' programming ability with proper logical and object-oriented thinking processes, as well as software design patterns. The course covers three main topics: (1) Object-oriented design and analysis - requirement analysis, design process, data abstraction, encapsulation, aggregation, and inheritance. (2) Design Patterns - reusable solutions to commonly occurring problems such as Abstract Factory, Observer, Command, Decorator, Adaptor, Iterator and State. (3) Python language - data types, control structures, functions, parameter passing, library functions, lists, tuples and dictionaries, I/O, modules, functional programming, and advanced python syntax. Hands-on practices using Python are required.
Prerequisite: CS250

## CS500L Object-Oriented Design in Python Lab (1 unit)

This course is designed to be taken with the course CS500 Object-oriented Analysis and Design in Python to practice object-oriented design and develop programming skills in Python.
Prerequisite: CS250

## CS501 Practical Application of Algorithms (3 units)

This course is designed to expand a student's knowledge of algorithms by concentrating on the practical application to solve real-world computational problems. Students will be trained in the process of "Algorithmic Thinking", allowing them to develop a good conceptual understanding and improve the ability to solve challenging problems. Students will learn how to implement abstract algorithmic thoughts in programs, explain them to others, and formulate simpler, more efficient solutions to real-life problems faced during an interview or in the workplace.
Prerequisite: CS250

## CS510 Advanced UNIX/Linux Programming (3 units)

This course is designed for students to gain fundamental knowledge of and hands-on experience with programming in the UNIX/Linux environment. Students will learn to program in C with UNIX/Linux system calls and other advanced topics such as the UNIX file system, process control, signals, and inter-process communications. Students are required to do a term project with a substantial amount of programming. Upon completion of this course, students should be able to develop real-world UNIX/Linux applications. Hands-on practice and projects are required.
Prerequisite: CS230 and CS250

## CS515 UNIX/Linux Network Programming (3 units)

This course is designed for graduate students to gain hands-on experience in UNIX/Linux network programming. The students will learn to develop UNIX/Linux network applications using a number of UNIX/Linux network programming interface techniques including Sockets, XTI, and RPC. Topics include: an overview of transport layer (TCP/UDP), TCP sockets, UDP sockets, threads and client-server design, XTI, RPC, and Streams. Hands-on exercises and projects are required.
Prerequisite: CS230 and CS250

## CS521 Software Project Management (3 units)

This course teaches students to apply current software development approaches to managing modern complex software projects. Practical strategies, tactics, and designs are discussed together with realistic exercises. Topics include software development process, project planning, requirements definition, design specification, usability engineering, verification and validation, project and change management, and process quality improvement. Students are required to participate in all course activities to develop a real-world software product.
Prerequisite: CS250

## CS522 Software Quality Assurance and Test Automation (3 units)

This course teaches students to learn practical static and dynamic techniques that allow software development teams to engineer high quality products. The course begins with an overview of modern software development approaches. It then introduces quality management and test development based on preventive and agile principles as well as quality risk analysis. It covers system, unit, integration, performance, and automated testing techniques. Quality improvement models for software development and testing are discussed. Several test automation tools are demonstrated in class. Students gain hands-on experience through homework assignments and exercises and learn to test real-world applications.
Prerequisite: CS250

## CS526 Advanced Web Programming (3 units)

This course teaches students to learn how to build modern web applications with web application frameworks. It helps students understand how the web application framework performs and shows students how to use various features of the framework to solve many problems in real-world development scenarios they're likely to face. In the process, students will learn how to work with HTML, CSS, JavaScript, the Object-relational Mapping Framework, and other web technologies. Students will start by learning core concepts such as the Model-View-Controller architectural pattern, and then work their way toward advanced topics as well as mobile web development techniques.
Prerequisite: CS250 or CS480

## CS531 Python Applications Programming (3 units)

This course introduces the fundamental and advanced features of Python programming language and how to utilize them to develop Python applications. The students will start by learning about the development environment, basic syntax, variable types, basic operators, control flows and loops, functions, modules, files I/O, and exceptions. The course further progresses to include advanced topics such as classes/objects, object-oriented programming, regular expressions, multithreading, interface with Linux commands and C programs. Upon completion, the students will be able to develop Python applications that involve CGI programming, database access, networking, XML processing, GUI programming, and functional programming.
Prerequisites: CS230 and CS500

## CS532 Advanced Internet Programming and Design (3 units)

This course is designed to give the students an in-depth understanding of Java programming techniques. The course focuses on advanced Java language features and packages which are essential for building a variety of application architectures. Topics include Java techniques of XML, JNI, thread, network programming, generic programming concept and internalization. Upon completion of this course, the students should be well prepared to create enterprise-wide, Java-centric solutions to client/server problems involving Java and networks. Each technology topic will cover its uses, implementation, and language issues. Students are required to implement a project for each Java technique. Hands-on exercises are required.
Prerequisite: CS480

## CS535 Network Security Fundamentals (3 units)

This course addresses the security issues on the internet and the web. Major topics include issues related to internet infrastructure and applications running on the internet, techniques to reduce security risks, and an introduction to the role of security as an enabling technology for electronic commerce. The course includes an overview of internet and web security, its applications and legal issues, encryption and cryptography, SSL and browsers, web servers, and Java security.
Prerequisite: CS250

## CS540 Advanced Database Administration (3 units)

This course provides an in-depth understanding of the Oracle Database Management System. The emphasis is on the latest Oracle database architecture, database configuration and administration. Topics include logical/physical database layout, database server processes, database creation, various database physical objects; client/server configuration, multi-threaded server configuration, database storage management, database security, database utilities, database monitoring, partitions, and database backup/recovery methods. Hands-on practice is required.
Prerequisite: CS457

## CS547 Advanced Database Design and Analysis (3 units)

This course is intended for graduate students to further explore database server development and database tuning. The course specifically details procedural extensions to SQL to develop stored procedures, functions, packages and database triggers. In addition, it covers database performance tuning from an application development point of view by exploring query optimizer, database hints, and various database access methods. Hands-on exercises are required. Prerequisite: CS457

## CS548 Web Services Techniques and REST Technologies (3 units)

This course covers the fundamental concepts of the 3-tier model commonly used in Enterprise Application development. Topics include the Spring Framework, JDBC with database applications, JPA (Java Persistence API), Hibernate, Spring MVC, Java Servlets, and JavaBeans. In addition, the students will learn the best practice development approach using the Sprint Framework with JDBC or ORM (Object Relational Mapping) tools to map business domain object models to the underlying relational database. At the end of this course, the students shall have a fresh view of both the fundamental and advanced skills to implement large scale enterprise systems. Hands-on exercises are an integral part of the course.
Prerequisite: CS480

## CS550 Machine Learning and Business Intelligence (3 units)

This course introduces methods and techniques for using stored business data to make business decisions. The student will learn data types including operational or transactional data such as data for sales, cost, and inventory; nonoperational data such as forecast data and macroeconomic data; and meta data, and learn their patterns, associations, or relationships, and how to use this information for decision making. Modern data warehouse concepts will also be introduced. Specific examples of businesses using data mining techniques will be given in the course. The student is required to work on course projects by using modern data analysis software and referring to cases studied.
Prerequisite: CS457

## CS551 Mobile Computing for Android Mobile Devices (3 units)

Google's Android mobile phone software platform may be the next major opportunity for application software developers. Android has the potential for removing the barriers to successful development and sales of a new generation of mobile phone application software. Just like PCs which have created markets for desktop and server software, Android will create a new market for mobile applications by providing a standard mobile phone application environment. This hands-on course focuses on developing applications for Android, including mapbased applications, camera-based applications, SMS, etc. Advanced development topics are also covered, including security, IPC, and certain advanced graphics and user interface techniques.
Prerequisite: CS500

## CS556 Mobile Applications on iPhone Platform (3 units)

This course provides an in-depth study of the design, development, and publication of object-oriented applications for the iPhone platform using the Apple SDK. Students will learn to utilize Xcode, SwiftUI, and UIKit to create iOS apps for iPhones.
Prerequisite: CS360 or CS500

## CS565 Advanced Network Management (3 units)

This course is designed to give graduate students an in-depth understanding of and a hands-on experience in the management of network systems and applications. Emphases are on simple network management protocol (SNMP) management, MIB, management tools, system, and applications. Current widely used applications by industry will be used to demonstrate the management concepts. Computer-based training software will be used to check/verify the students' network management skills in order to ensure they are prepared for the industry challenges. Topics include Network Management fundamentals; OSIMAN, SNMP and TMN standards; RMON and ITU TMN architecture; inside structure and practical applications of SNMP, SNMP2, SNMP3, RMON, RMON2, and MIBs. Hands-on exercises are required.
Prerequisite: CS470

## CS570 Big Data Processing \& Analytics (3 units)

This course aims to provide students an understanding in the operating principles and hands-on experience with mainstream Big Data computing systems such MapReduce and Hadoop, and most recently Apache Spark, a fast, inmemory distributed collections framework written in Scala. Applying these techniques to big data processing and analytic problems, such as PageRank, machining learning, and social network graph mining would be discussed. Prerequisite: CS500

## CS571 Cloud Computing Infrastructure (3 units)

This course first gives an overview of cloud computing infrastructure, including cloud computing frameworks, patterns, virtualization, and applications, and then discusses container technologies like Docker. According to Gartner (Gartner, Feb - 2019), by 2022, more than $75 \%$ of global organizations will be running containerized applications in production. The course then focuses on the discussion of container orchestration system Kubernetes. Kubernetes is taking the app development world by storm. Kubernetes radically changes the way applications are built and deployed in the cloud. Since its introduction in 2014, Kubernetes has become one of the largest and most popular open-source projects in the world. Legend has it that Google deploys over two billion application containers a week throughout Kubernetes.
Prerequisite: CS500

## CS572 Blockchain Development (3 units)

This course teaches the students the basics of blockchain technology as well as languages and tools required to build decentralized applications on the Ethereum platform. This course introduces everything needed to understand technology, write smart contracts and build applications that interact with them. Participants will learn about the Ethereum platform, the programming language Solidity, how to use Web3.js and the Truffle framework and lastly, how to tie everything together. Step by step, participants build a fully functioning decentralized application, deploy it and test it.
Prerequisite: CS500

## CS575 Network Analysis and Testing (3 units)

This course covers computer network analysis, testing techniques, and experience-based strategies to isolate and solve network problems. Topics include wiring and cable testing issues, transmission encoding techniques, dissecting the IEEE 48-bit MAC address, the impact of different types of broadcast traffic, operational details and analysis considerations for switches, Ethernet and Token Ring operational details and analysis, the IEEE 802.2 LLC protocol, datagrams and routing, IP specifics, protocol analysis and troubleshooting, baselining throughput and latency. Hands-on exercises using protocol analyzer are required to reinforce the topics.
Prerequisite: CS250

## CS581 Cloud Security (3 units)

This course covers the basics of cloud infrastructure technologies such as computers, storage, containers, serverless, IAM, asset management, etc. Challenges of scalability and security in multi-cloud and hybrid-cloud environments are examined. Students will learn how various Cybersecurity principles apply to cloud technology, such as Least Privilege, Defense in Depth, Attack Vector, Trust Boundaries, Shared Responsibility Model, etc.
Prerequisite: Cloud Computing Fundamentals

## CS589 Special Topics (3 units)

Special topics courses are offered to graduate students in the Computer Science program by current faculty members or invited guest speakers to expose the students to emerging technologies related to their studies. These courses are conducted the same way as regular courses.
Prerequisite: Depending on topic

## CS595 Computer Science Capstone Course (3 units)

The capstone course is intended to integrate the knowledge and hands-on experience that the student has acquired from the foundation, core, and elective coursework required for the program in the course under the guidance of the course instructor. The instructor determines the course objectives and scope based on the computer science curriculum and technology trend. The instructor guides the students to develop their integration ability. The student shall take the capstone course near the end of his/her program of study.
Prerequisite: Must be in the final semester of the program.

## Curricular Practicum

## CPT501 Curricular Practicum (1 unit)

Curricular practicum, or curricular practical training, is a supervised practical experience that is the application of previously studied theory. The curricular practicum must provide students with valuable learning experience and must significantly increase their knowledge in their program of study. It is defined as alternative work/study, internship, cooperative education, or any other type of required internship or practicum that is offered by sponsoring employers through cooperative agreements with the school and the course is an integral part of an established curriculum. At least three hours of work in a practical setting has the credit equivalency of one hour of classroom lecture ( 1 unit). To be eligible to take this course, the student must be in good standing, have completed at least two semesters of coursework required in his/her degree program, have obtained a written agreement that outlines the arrangement between the institution and the practicum site (including specific learning objectives, course requirements, and evaluation criteria), and received approval by a designated advisor. F-1 International students must follow additional rules required by the U.S. Immigration and Customs Enforcement. Information and instructions concerning this course are provided in the online application form. This is a part-time practicum course taken by the graduate student to work no more than twenty hours each week during the approved practicum period. Failure in this course will prevent the student from taking any curricular practicum course afterwards.
Prerequisite: Refer to the instructions on the application and agreement documents.

## CPT502 Curricular Practicum (2 units)

Curricular practicum, or curricular practical training, is a supervised practical experience that is the application of previously studied theory. The curricular practicum must provide students with valuable learning experience and
must significantly increase their knowledge in their program of study. It is defined as alternative work/study, internship, cooperative education, or any other type of required internship or practicum that is offered by sponsoring employers through cooperative agreements with the school and the course is an integral part of an established curriculum. At least three hours of work in a practical setting has the credit equivalency of one hour of classroom lecture ( 1 unit). To be eligible to take this course, the student must be in good standing, have completed at least two semesters of coursework required in his/her degree program, have obtained a written agreement that outlines the arrangement between the institution and the practicum site (including specific learning objectives, course requirements, and evaluation criteria), and received approval by a designated advisor. F-1 International students must follow additional rules required by the U.S. Immigration and Customs Enforcement. Information and instructions concerning this course are provided in the online application form. This is a full-time practicum course taken by the graduate student to work more than twenty hours but not to exceed forty hours each week during the approved practicum period. Failure in this course will prevent the student from taking any curricular practicum course afterwards.
Prerequisite: Refer to the instructions on the application and agreement documents.

## Data Science

## DS500 Mathematics and Statistics for Data Science (3 units)

This course is designed to provide students with a solid foundation in the fundamental mathematical and statistical concepts essential for success in the field of data science. It aims to equip students with the necessary quantitative skills to analyze and interpret data, make informed decisions, and derive meaningful insights from complex datasets. Prerequisite: MATH208

## DS501 Python Programming for Data Science (3 units)

In this foundation course, students will embark on a journey to master the fundamental programming skills required for effective data analysis and manipulation using the Python programming language. Throughout the course, the instructor will engage students in hands-on coding exercises and projects to reinforce their learning. Students will be equipped with the skills necessary to tackle data science challenges and develop programs to perform data analysis using Python.
Prerequisite: CS250

## DS512 Data Engineering (3 units)

This course is designed to provide students with a comprehensive understanding of the key principles, techniques, and tools involved in data engineering. As organizations increasingly rely on data-driven decision-making, the role of data engineers has become critical in managing, processing, and transforming raw data into valuable insights. Students will explore various data storage solutions, data processing \& integration, data warehousing, data security, and scalability/performance optimization.

## DS520 Deep Learning (3 units)

This course is designed to provide students with a solid understanding of the core concepts, techniques, and applications of deep learning. Deep learning, a subset of machine learning, has revolutionized the field of artificial intelligence and has become an impetus behind advancements in various domains, including computer vision, natural language processing, and speech recognition. Students will learn the concepts of Neural Networks (CNNs \& RNNs), development of generative models, and applications of DL in artificial intelligence.
Prerequisite: CS500 or DS501

## DS540 Natural Language Processing (NLP) (3 units)

Natural language processing (NLP) is the subfield within data science involving supervised and unsupervised learning on textual data.

This course covers the fundamental concepts, methods, and applications in NLP. It covers tokenization, syntactic and semantic analysis, named entity recognition, part-of-speech tagging, text classification, machine translation, sentiment analysis, and language models. It also covers different models and algorithms, such as n-grams, Hidden Markov Models, text classifiers, and recurrent neural networks. Practical assignments and projects allow students to apply their knowledge to real-world applications and use cases such as sentiment analysis, chatbot development, and search engine relevance.
Prerequisite: DS500

## DS565 Generative AI-Driven Intelligent Apps Development (3 units)

In the fast-changing world of technology, the demand for intelligent applications powered by AI and ML is rapidly increasing. This course aims to provide students with the necessary expertise to develop cutting-edge applications and harness the potential of generative AI technology. Intelligent apps using generative AI technology stand apart
from traditional apps by offering enhanced creativity, adaptive learning, personalized user experiences, automation and decision-making capabilities, as well as human-like conversational abilities.

This course equips students with the skills to develop innovative apps that leverage the power of AI. Topics include an introduction to generative AI, deep learning, and machine learning techniques, implementing generative models for various domains, ethical considerations, and deploying AI-driven apps. Through hands-on projects and realworld case studies, students gain practical experience in designing and deploying generative AI models within a development framework. By course end, students are prepared to contribute to the field of intelligent app development with a strong understanding of AI ethics.
Prerequisite: CS500 or DS501

## DS589 Special Topics (3 units)

Special topics courses are offered to graduate students in the Data Science program by current faculty members or invited guest speakers to expose the students to emerging technologies related to their studies. These courses are conducted the same way as regular courses.
Prerequisite: Depending on the topic

## DS595 Data Science Capstone Course (3 units)

The capstone course is intended to integrate the knowledge and hands-on experience that the student has acquired from the foundation, core, and elective coursework required for the program in the course under the guidance of the course instructor. The instructor determines the course objectives and scope based on the data science curriculum and technology trend. The instructor guides the students to develop their integration ability. The student shall take the capstone course near the end of his/her program of study.
Prerequisite: Must be in the final semester of the program.

## Electrical Engineering

## EE461G Digital Design and HDL (3 units)

This course develops the students' ability to design commonly used basic building blocks of modern digital systems and provides them with a fundamental knowledge of the state-of-the-art design methodology, design considerations, and verification strategies for complicated digital hardware design. Topics include Verilog HDL basics, Logic modeling, state machine design and memory modeling using Verilog HDL. Additional topics on FPGA architectures, device vendors, FPGA design tools, FPGA applications and latest trend in the programmable logic industry are also covered. Students can use Verilog tools such as Synopsys VCS, Mentor Modelsim, Cadence NC Verilog, and Silo III Verilog Simulator from SimuCAD for their homework and design projects. Hands-on practice is required. Students are encouraged to take the HDL based sequence of courses EE461 and EE512 to gain knowledge and experience in semi-custom IC design using industry grade EDA design tools.
Prerequisite: Logic Design

## EE461LG Digital Design and HDL Lab (1 unit)

This is a drill course designed to be taken with the course EE461 Digital Design and HDL. The students gain handson experience with Verilog simulation tools to learn logic design. They will have the chance to work on several design projects. They will also learn the essentials of several popular scripting languages: Perl, Python, Unix/Linux Shell.
Prerequisite: Logic Design

## EE468G Microelectronics Circuit Design and Analysis (3 units)

This course provides an in-depth understanding of electronic circuit design and analysis at the transistor level. It is in preparation for studying more advanced analog or digital courses. The topics include differential and multistage amplifiers, current source and bias circuits, amplifier frequency response and feedback, output stages, operational amplifier, inverter, combinational logic, and sequential logic. The lab is run in conjunction with the course material and industry standard CAD tools are applied.
Prerequisite: Circuit Theory

## EE488G Computer Architecture (3 units)

This course introduces the organization, design, and applications of modern computer architectures from both hardware and software perspectives. Topics include performance benchmark, instruction set (for both RISC and CISC), computer arithmetic, memory, parallelism (instruction, data, and thread levels), I/O and storage, multicore processors and programming and GPU (Graphics Processing Unit). Hands-on labs involving HDL and SPIM simulations, assemblers, linkers, and multithread programming are required to enhance classroom learning
Prerequisites: EE461 and CS250

## EE504 Advanced Computer Architecture (3 units)

This course is designed to further investigate modern computer design. Topics include an in-depth study of multiprocessor architecture and interconnection networks, pipeline, data flow, algorithm structures, memory system design, cache memory design, and a comparison of the performance and design among various computer architectures. Hands-on project experience is required.
Prerequisite: EE461

## EE505 Advanced Digital IC Design (3 units)

EE505 is an advanced course in digital circuit design that applies the knowledge of advanced circuit design concepts to Digital IC in state-of-the-art CMOS technologies. It emphasizes the design and optimization of circuit/layout for combinational logic gates, sequential logic circuits, arithmetic building blocks, and memory circuits. The challenges of today's digital integrated circuit design, such as scaling, process variation, signal integrity, timing issues, interconnectivity, and power consumption will be addressed specially. The circuit simulation tool (HSPICE), layout design tool (Virtuoso), and schematic entry tool (Composer) are used for homework assignments and projects.
Prerequisite: EE461
EE508 VLSI Design - Place and Route (3 units)
This course is the third in the VLSI Design series and introduces ASIC place and route. The course introduces the students to state-of-the-art physical design automation tools and techniques. Topics include design flow, library review, tool graphical interface, floor planning, power planning, timing driven placement, static time analysis (STA), CT-Gen, special routing, final routing, engineering change order (ECO), and run batch mode jobs. Hands-on exercises and projects are required.
Prerequisite: EE461

## EE509 Mobile and Wireless Communication (3 units)

This course covers the concepts of frequency re-use, wireless communication channel characteristics, modulation and demodulation for wireless communications, equalization and channel coding, speech coding, multiple access techniques such as FDMA, TDMA, CDMA, FDD and TDD, and commercial wireless communication standards such as AMPS, GSM, IS136 (TDMA), IS-95 (CDMA). Hands-on simulations are used to help students gain an indepth understanding of wireless communication. Familiarity with communication theory and simulation tools such as MATLAB or system view is required.
(Note: This is an introductory course on wireless technologies. Any topic, such as GSM, TDMA, or CDMA can be expanded to a full-semester course under Special Topics offerings.)
Prerequisite: CE450

## EE511 Advanced Analog IC Design (3 units)

This course offers students extensive exposure to concepts and techniques in analysis and design of analog IC, including device modeling, basic circuit building blocks, feedback system, frequency response and noise. EDA tools may be used in homework assignments and projects.
Prerequisite: EE461

## EE512 Application Specific Integrated Circuit Design (ASIC) (3 units)

In connection with EE461, this course is designed for students who intend to become logic designers using HDL based design methodologies. Topics include ASIC/CPLD/FPGA Library modeling, cell characterization, static timing analysis, place and route algorithms, design for testability, fault modeling, industry standard formats for design information interchange, and a survey of the most popular EDA tools. Industry grade design tools such as Synopsys Design Compiler, Cadence Verilog-XL, Synopsys DesignTime (under dc_shell), Synopsys Prime Time, Cadence Silicon Ensemble, Mentor Calibre LVS/DRC, and Synplicity Synplify are used for homework assignments and projects.
Prerequisite: EE461

## EE517 Introduction to the Internet of Things (IoT) (3 units)

The Internet of Things promises to make "things" including consumer electronic devices or home appliances, such as refrigerator, security cameras, and temperature sensors, etc. part of the Internet environments. To realize the full potential of the IoT paradigm, this introductory course will address challenges and the various solutions available. The course content will cover IoT concepts and architectures, IoT enabler and solutions, IoT data and knowledge management, and IoT security and reliability. The students will need to complete a term project to demonstrate the concept of IoT for a chosen application based on an embedded system or a development platform.

## Prerequisites: CS230 and CS250

## EE520 Advanced FPGA Design and Implementations (3 units)

Digital design using FPGAs is a very important activity in industries due to reduced cost, compared with ASIC design, and faster time-to-market. In order to design a digital system using FPGA, the designers must understand the architectures of the FPGA as well as the accompanying CAD tools. The course will cover two major Xilinx FPGA architectures in detail. The student will learn to build various digital blocks such as combinational logic, sequential logic, finite state machines, RAM, and DSP by studying the architectures of the FPGAs. Hands-on exercises are required.
Prerequisite: EE461

## EE553 System on Chip (SoC) Design (3 units)

System on Chip ( SoC ) is composed of many functional modules such as processor, memory, digital IPs, analog/mixed signal modules, RF and interfaces on a single chip. This course will focus on ARM based on-chip bus platform, digital IP verification, and the trend and integration of SoC.
Prerequisite: EE488

## EE577 Design Verification with System Verilog (3 units)

This course is designed to cover the design verification methodologies commonly used in system-on-chip (SOC) design. Topics include design verification basics, introduction of various verification strategies, verification of soft and hard IP blocks, verification for networking/ communication ASIC, verification for audio/video signal processing ASIC, how to build an efficient and effective verification platform, automation of verification flow, test case coverage, how to create design models using PLI routine, and formal verification, etc. The students will also be informed that design verification is becoming the bottleneck in modern ASIC design cycles, especially in system on chip (SOC) design. The verification cycle could take up to $70 \%$ of the design cycle.
Prerequisite: EE461

## EE589 Special Topics (3 units)

Special topics courses are offered to graduate students in the electrical engineering program by current faculty members or invited guest speakers to expose the students to emerging technologies related to their studies. These courses are conducted the same way as regular courses.
Prerequisite: Depending on topic

## EE595 Electrical Engineering Capstone Course (3 units)

The capstone course is intended to integrate the knowledge and hands-on experience that the student has acquired from the foundation, core, and elective coursework required for the program in the course under the guidance of the course instructor. The instructor determines the course objectives and scope based on the electrical engineering curriculum and technology trend. The instructor guides the students to develop their integration ability. The student shall take the capstone course near the end of his/her program of study.
Prerequisite: Must be in the final semester of the program.

## Professional Development

P450G Career Development (1 unit)
This course is designed for the graduate students to take in preparation for becoming working professionals. Topics include effective communication strategies, emotional intelligence, diversity and cultural awareness, professional behavior, and interview skills.


## Standard Occupational Classification (SOC) - 2010 \& 2018

(Based on United States Department of Labor - Bureau of Labor Statistics)

## For Bachelor of Science in Computer Science

| $\begin{aligned} & 2010 \\ & \text { SOC Code* } \end{aligned}$ | $\begin{aligned} & 2018 \\ & \text { SOC Code } \end{aligned}$ | SOC Title and Direct Match Title |
| :---: | :---: | :---: |
|  | 13-1151 | Training and Development Specialists: Computer Software Training Specialist, Computer Training Specialist |
| 15-1121 | 15-1211 | Computer Systems Analysts: Applications Analyst, Computer Systems Consultant, Data Processing Systems Analyst, Information Systems Analyst, Information Systems Planner, Programmer Analyst, Systems Architect |
| 15-1122 | 15-1212 | Information Security Analysts: Computer Security Specialist, Computer Systems Security Analyst, Information Security Analyst, Information Systems Security Analyst, IT Risk Specialist, Network Security Analyst |
| 15-1131 | 15-1251 | Computer Programmers: Applications Programmer, Computer Language Coder, Computer Programmer, IT Programmer, Junior Software Developer, Mainframe Programmer, Systems Programmer |
| $\begin{aligned} & 15-1132 \\ & 15-1133 \end{aligned}$ | 15-1252 | Software Developers: Application Integration Engineer, Applications Developer, Computer Applications Developer, Computer Applications Engineer, Computer Systems Engineer, Computer Systems Software Architect, Computer Systems Software Engineer, Embedded Systems Software Developer, Enterprise Systems Engineer, Mobile Applications Developer, Software Applications Architect, Software Applications Designer, Software Applications Engineer, Software Engineer, Software Systems Engineer, Systems Software Designer, Systems Software Developer, Systems Software Specialist |
|  | 15-1253 | Software Quality Assurance Analysts and Testers: Applications Tester, Software Quality Assurance Technician, Software Quality Control Specialist, Software Quality Engineer, Software Test Engineer |
| 15-1134 | 15-1254 | Web Developers: Intranet Developer, Web Applications Developer, Web Architect, Web Content Developer, Web Developer |
|  | 15-1255 | Web and Digital Interface Designers: Digital Designer, Web Content Specialist |
| 15-1141 | 15-1242 | Database Administrators: Automatic Data Processing Planner, Database Administration Manager, Database Coordinator, Database Programmer, Database Security Administrator |
|  | 15-1243 | Database Architects: Data Architect, Data Integration Specialist, Data Warehousing Specialist, Database Developer |
| 15-1142 | 15-1244 | Network and Computer Systems Administrators: LAN Administrator, LAN Systems Administrator, Local Area Network Administrator, Network Analyst, Network Coordinator, Network Support Coordinator, Network Support Manager, Network Systems Administrator, Network Systems Coordinator, WAN Systems Administrator, Wide Area Network Administrator |
| 15-1143 | 15-1241 | Computer Network Architects: Computer Network Engineer, Network Designer, Network Developer, Network Engineer |
| 15-1151 | 15-1232 | Computer User Support Specialists: Computer Customer Support Specialist, Computer Help Desk Specialist, End-User Support Specialist, Help Desk Analyst, Help Desk Technician, IT Support Specialist |
| 15-1152 | 15-1231 | Computer Network Support Specialists: Network Diagnostic Support Specialist, Network Support Technician, Network Technician |
| 15-1199 | 15-1299 | Computer Occupations, All Other: Computer Laboratory Technician, Data Center Operator |


| $17-2199$ | $17-2199$ | Engineers, All Other: Calibration Engineer, Mechatronics Engineer |
| :--- | :--- | :--- |
| $27-3042$ | $27-3042$ | Technical Writers: Engineering Writer, Specifications Writer |
| $41-9031$ | $41-9031$ | Sales Engineers |
|  | $43-9111$ | Statistical Assistants: Data Analysis Assistant |

For Master of Science in Computer Science

| $\begin{aligned} & 2010 \\ & \text { SOC Code* } \end{aligned}$ | $\begin{aligned} & 2018 \\ & \text { SOC Code } \end{aligned}$ | SOC Title and Direct Match Title |
| :---: | :---: | :---: |
| 11-3021 | 11-3021 | Computer and Information Systems Managers: Computer Operations Manager, Computer Security Manager, Data Processing Manager, Information Systems Manager, Internet Technology Manager |
|  | 11-9041 | Architectural and Engineering Managers: Engineering Design Manager, Engineering Manager, Engineering Research Manager, Process Engineering Manager |
|  | 13-1151 | Training and Development Specialists: Computer Software Training Specialist, Computer Training Specialist |
| 15-1111 | 15-1221 | Computer and Information Research Scientists: Computer Scientist, Control System Computer Scientist, Programming Methodology and Languages Researcher |
| 15-1121 | 15-1211 | Computer Systems Analysts: Applications Analyst, Computer Systems Consultant, Data Processing Systems Analyst, Information Systems Analyst, Information Systems Planner, Programmer Analyst, Systems Architect |
| 15-1122 | 15-1212 | Information Security Analysts: Computer Security Specialist, Computer Systems Security Analyst, Information Security Analyst, Information Systems Security Analyst, IT Risk Specialist, Network Security Analyst |
| 15-1131 | 15-1251 | Computer Programmers: Applications Programmer, Computer Language Coder, Computer Programmer, IT Programmer, Junior Software Developer, Mainframe Programmer, Systems Programmer |
| $\begin{aligned} & 15-1132 \\ & 15-1133 \end{aligned}$ | 15-1252 | Software Developers: Application Integration Engineer, Applications Developer, Computer Applications Developer, Computer Applications Engineer, Computer Systems Engineer, Computer Systems Software Architect, Computer Systems Software Engineer, Embedded Systems Software Developer, Enterprise Systems Engineer, Mobile Applications Developer, Software Applications Architect, Software Applications Designer, Software Applications Engineer, Software Engineer, Software Systems Engineer, Systems Software Designer, Systems Software Developer, Systems Software Specialist |
| 15-1134 | 15-1254 | Web Developers: Intranet Developer, Web Applications Developer, Web Architect, Web Content Developer, Web Developer |
| 15-1141 | 15-1242 | Database Administrators: Automatic Data Processing Planner, Database Administration Manager, Database Coordinator, Database Programmer, Database Security Administrator |
| 15-1142 | 15-1244 | Network and Computer Systems Administrators: LAN Administrator, LAN Systems Administrator, Local Area Network Administrator, Network Analyst, Network Coordinator, Network Support Coordinator, Network Support Manager, Network Systems Administrator, Network Systems Coordinator, WAN Systems Administrator, Wide Area Network Administrator |
| 15-1143 | 15-1241 | Computer Network Architects: Computer Network Engineer, Network Designer, Network Developer, Network Engineer |
| 15-1152 | 15-1231 | Computer Network Support Specialists: Network Diagnostic Support Specialist, Network Support Technician, Network Technician |


| $15-1199$ | $15-1299$ | Computer Occupations, All Other: Computer Laboratory Technician, Data <br> Center Operator |
| :--- | :--- | :--- |
|  | $15-1243$ | Database Architects: Data Architect, Data Integration Specialist, Data <br> Warehousing Specialist, Database Developer |
|  | $15-1253$ | Software Quality Assurance Analysts and Testers: Applications Tester, <br> Software Quality Assurance Technician, Software Quality Control Specialist, <br> Software Quality Engineer, Software Test Engineer |
| $15-2051$ | $15-1255$ | Web and Digital Interface Designers: Digital Designer, Web Content <br> Specialist |
| $17-2199$ | $17-2199$ | Data Scientists: Business Intelligence Developer, Data Analytics Specialist, <br> Data Mining Analyst, Data Visualization Developer |
| $25-1021$ | $25-1021$ | Engineers, All Other: Calibration Engineer, Mechatronics Engineer <br> Computer Science Teachers, Postsecondary: C++ Professor, Computer <br> Information Systems Professor, Computer Programming Professor, <br> Information Systems Professor, Information Technology Professor, IT |
| Professor, Java Programming Professor |  |  |

## For Master of Science in Electrical Engineering

$\left.\begin{array}{|l|l|l|}\hline 2010 & \mathbf{2 0 1 8} \\ \text { SOC Code* } & \text { SOC Code } & \text { SOC Title and Direct Match Title } \\ \hline 11-3021 & 11-3021 & \begin{array}{l}\text { Computer and Information Systems Managers: Computer Operations } \\ \text { Manager, Computer Security Manager, Data Processing Manager, } \\ \text { Information Systems Manager, Internet Technology Manager }\end{array} \\ \hline & 11-9041 & \begin{array}{l}\text { Architectural and Engineering Managers: Engineering Design Manager, } \\ \text { Engineering Manager, Engineering Research Manager, Process Engineering } \\ \text { Manager }\end{array} \\ \hline 15-1111 & 15-1221 & \begin{array}{l}\text { Computer and Information Research Scientists: Computer Scientist, } \\ \text { Control System Computer Scientist, Programming Methodology and } \\ \text { Languages Researcher }\end{array} \\ \hline 15-1121 & 15-1211 & \begin{array}{l}\text { Computer Systems Analysts: Applications Analyst, Computer Systems } \\ \text { Consultant, Data Processing Systems Analyst, Information Systems Analyst, } \\ \text { Information Systems Planner, Programmer Analyst, Systems Architect }\end{array} \\ \hline 15-1122 & 15-1212 & \begin{array}{l}\text { Information Security Analysts: Computer Security Specialist, Computer } \\ \text { Systems Security Analyst, Information Security Analyst, Information } \\ \text { Systems Security Analyst, IT Risk Specialist, Network Security Analyst }\end{array} \\ \hline 15-1131 & 15-1251 & \begin{array}{l}\text { Computer Programmers: Applications Programmer, Computer Language } \\ \text { Coder, Computer Programmer, IT Programmer, Junior Software Developer, } \\ \text { Mainframe Programmer, Systems Programmer }\end{array} \\ \hline 15-1132 & 15-1252 & \begin{array}{l}\text { Software Developers: Application Integration Engineer, Applications } \\ \text { Developer, Computer Applications Developer, Computer Applications }\end{array} \\ 15-1133 & \text { Engineer, Computer Systems Engineer, Computer Systems Software } \\ \text { Architect, Computer Systems Software Engineer, Embedded Systems } \\ \text { Software Developer, Enterprise Systems Engineer, Mobile Applications } \\ \text { Developer, Software Applications Architect, Software Applications Designer, } \\ \text { Software Applications Engineer, Software Engineer, Software Systems } \\ \text { Engineer, Systems Software Designer, Systems Software Developer, Systems } \\ \text { Software Specialist }\end{array}\right\}$

|  |  | Administration Manager, Database Coordinator, Database Programmer, Database Security Administrator |
| :---: | :---: | :---: |
| 15-1142 | 15-1244 | Network and Computer Systems Administrators: LAN Administrator, LAN Systems Administrator, Local Area Network Administrator, Network Analyst, Network Coordinator, Network Support Coordinator, Network Support Manager, Network Systems Administrator, Network Systems Coordinator, WAN Systems Administrator, Wide Area Network Administrator |
| 15-1143 | 15-1241 | Computer Network Architects: Computer Network Engineer, Network Designer, Network Developer, Network Engineer |
| 15-1151 | 15-1232 | Computer User Support Specialists: Computer Customer Support Specialist, Computer Help Desk Specialist, End-User Support Specialist, Help Desk Analyst, Help Desk Technician, IT Support Specialist |
| 15-1152 | 15-1231 | Computer Network Support Specialists: Network Diagnostic Support Specialist, Network Support Technician, Network Technician |
| 15-1199 | 15-1299 | Computer Occupations, All Other: Computer Laboratory Technician, Data Center Operator |
|  | 15-1243 | Database Architects: Data Architect, Data Integration Specialist, Data Warehousing Specialist, Database Developer |
|  | 15-1253 | Software Quality Assurance Analysts and Testers: Applications Tester, Software Quality Assurance Technician, Software Quality Control Specialist, Software Quality Engineer, Software Test Engineer |
|  | 15-1255 | Web and Digital Interface Designers: Digital Designer, Web Content Specialist |
| 17-2061 | 17-2061 | Computer Hardware Engineers: Computer Hardware Designer, Computer Hardware Developer |
| 17-2071 | 17-2071 | Electrical Engineers: Electrical Design Engineer, Electrical Systems Engineer, Power Distribution Engineer |
| 17-2072 | 17-2072 | Electronics Engineers, Except Computer: Circuit Design Engineer, Electronic Design Automation Engineer, Electronic Engineer, Electronic Parts Designer, Telecommunication Engineer |
| 17-2199 | 17-2199 | Engineers, All Other: Calibration Engineer, Mechatronics Engineer |
|  | 17-3012 | Electrical and Electronics Drafters: Circuit Board Drafter, Electrical Computer Aided Design and Drafting Technician, Electrical Drafter, Electrical Systems Drafter, Electronic Drafter, Printed Circuit Board Drafter |
|  | 17-3023 | Electrical and Electronic Engineering Technologists and Technicians: Electrical and Electronic Engineering Technologist, Electrical Engineering Technician, Electronic Instrument Testing Technician, Programmable Logic Controller Programmer, Semiconductor Development Technician |
|  | 17-3024 | Electro-Mechanical and Mechatronics Technologists and Technicians: Electro-Mechanical and Mechatronics Technologist, Robotics Testing Technician |
|  | 17-3029 | Engineering Technologists and Technicians, Except Drafters, All Other: Non-Destructive Testing Specialist |
| 25-1032 | 25-1032 | Engineering Teachers, Postsecondary: Electrical Engineering Professor |
| 27-3042 | 27-3042 | Technical Writers: Engineering Writer, Specifications Writer |
| 41-9031 | 41-9031 | Sales Engineers |
|  | 51-2022 | Electrical and Electronic Equipment Assemblers: Battery Builder, Electrical Controls Assembler, Electronic Assembler, Electronic Sensing Equipment Assembler |
|  | 51-2023 | $\begin{array}{l}\text { Electromechanical } \\ \text { Controller Assembler }\end{array}$ Equipment Assemblers: Programmable Logic   <br>     |
|  | 51-9141 | Semiconductor Processing Technicians: Electronic Semiconductor Processor, Semiconductor Assembler |

## SCHOOL OF BUSINESS

The School of Business offers one degree program at the bachelor's, and two at the master's level, plus one academic certificate at the graduate level; Bachelor of Science in Business Administration (CIP: 52.0101), Graduate Certificate in Management (CIP: 52.0201), Master of Business Administration (CIP: 52.0299), and Master of Science in Business Analytics (CIP:30.7012). These are educational programs in the business administration and management disciplines intended to prepare individuals to make sustained contributions to organizations and society in a global, diverse, and dynamic environment, focusing on developing an individual's interdisciplinary problem-solving skills, interpersonal and communication skills, ability to adapt to changing information technology and business environments, entrepreneurial innovations, and ethical and professional values. Successful completion requires an understanding of not only the required business subjects but also modern information analytics and internet technology pertinent to e-business applications.

## - Faculty

All the business faculty members possess the following qualities: advanced degrees earned in business, computer science or mathematics disciplines, work experience relevant to their teaching subjects, and enthusiasm in teaching and helping the students. To increase the students' learning effectiveness, they bring their real-world experience into the classrooms as well as use case studies to stimulate the students' minds and exemplify various lecture topics.

## - Objectives

The objectives of the business programs are:

- To prepare students for professional careers in modern-day businesses.
- To equip the students with not only business knowledge but also the ability to make use of the best practices for decision making, analytics, and technology in the business environment.
- To provide a simulated enterprise environment as well as professional development opportunities for those who wish to practice the profession of business administration, management, marketing, and business analytics with increased competence.
- The undergraduate program also develops the students' communication skills, analytical skills, and understanding of organization and cross-culture issues, and increases their awareness of business and social issues for them to be thoroughly grounded in ethical principles.


## - Undergraduate Program

## BSBA

The School of Business offers one undergraduate degree program: A nominal 4-year, 120 semester unit Bachelor of Science in Business Administration degree (BSBA).

## - Committee Oversight

The responsibility for developing, modifying, and maintaining the undergraduate degree program is performed by the School of Business Curriculum Committee which is led by a faculty group. Input from other stakeholders, such as qualified students, the dean, librarian, assessment coordinator, administrators, and employers is welcomed.

## - Distance Learning

The BSBA program is approved for distance learning. This allows students to mix and match on-site \& online courses or choose to take $100 \%$ online courses. Online courses may be offered in a synchronous or an asynchronous modality.

## - Concentration

The BSBA program offers students the option to select a concentration in Business Analytics of 12-units (typically 4 courses of 3 units each). Choosing concentration is not required.

## - Credential Requirements

The undergraduate program accepts qualified high school graduates and college transfer students.
First-year applicants:: Undergraduate applicants who have not completed at least $\underline{\mathbf{3 0}}$ semester units of college credit.

California Community College Applicants: Graduates from California Colleges who have earned Associate Degrees designed for Transfer (ADT, AA-T, AS-T) with a CGPA of 2.5, will be guaranteed admission to the BSBA program, providing they have met the program's other admissions requirements (such as English proficiency, etc.).

## - Application Requirements

To apply for admission into a bachelor's degree program, the applicant is required to complete the application form online and submit the following to the SFBU Admissions Office:

## - Domestic Students:

1. Unofficial and/or Official transcripts from ALL previously attended colleges; first-year applicants are required to submit their official high school transcript upon high school graduation. Applicants must have been in good academic standing at the last institution attended.

- a high school/college CGPA of 2.5 or above is recommended. Lower CGPAs may require an interview with a member of the admission committee. A GPA below 2.0 does not qualify for admission.

2. An English proficiency document is required for non-native English speakers: An official transcript with English course records or TOEFL/ IELTS/iTEP/PTE Academic/Duolingo/Cambridge B2 First test score report or equivalent will suffice. See English Proficiency Requirement below for detailed information on the English entrance requirement.

- F-1 International Students: In addition to the above general application requirements, an international applicant is required to submit the following additional documents:

1. Copy of passport.
2. Foreign Credential Evaluation: Foreign transcripts must be evaluated by a member of National Association of Credential Evaluation Services (NACES), Association of International Credential Evaluators (AICE), or American Association of Collegiate Registrars and Admissions Officers (AACRAO)'s International Education Services. A financial support document - provide a recent financial support document indicating a minimum amount of $\$ 40,000$ available to pursue study in the first academic year at SFBU.

- a current bank letter and bank statement; or
- a loan letter from a lending institution; or
- Copies of fixed deposits.

An affidavit of support or sponsor letter is required if the funds are not in the applicant's name.
3. A transfer student (from a U.S. institution) is required to submit a photocopy of his/her

- previous I-20 form,
- visa, and
- I-94 (U.S Department of Homeland Security issued arrival / departure form).

HSE/HiSET/CPP/GED: SFBU recognizes the High School Equivalency (HSE), the California Proficiency Program (CPP), and General Educational Development (GED) tests and accepts such graduates.

- GED score of 456 or above is recommended. Lower scores may require an interview with a member of the admissions committee.

Applicants interested in applying for scholarships need to provide additional documentation. Please refer to the section on Scholarships in this catalog and on the website.

## - Credential Evaluation Requirement

Applicants who have earned their high school or college credentials at a foreign institution must provide a course-by-course credential evaluation analysis. This credential evaluation must be completed by a member of National Association of Credential Evaluation Services (NACES), Association of International Credential Evaluators (AICE), or American Association of Collegiate Registrars and Admissions Officers (AACRAO)'s International Education Services. This credential evaluation must be in the original sealed envelope, if it is a hard copy; an electronic copy may be sent directly from the evaluation agency to SFBU. Note: International schools/colleges accredited by U.S. regional accrediting bodies are exempt from this requirement.

## - English Proficiency Requirement

Non-native English speakers are considered meeting the entrance English proficiency requirement if they meet any of the following requirements:

- An official IELTS (Academic), TOEFL (iBT), TOEFL Essentials, iTEP Academic, PTE Academic, Duolingo, or Cambridge B2 First test score report. Minimum Score:
- IELTS (Academic) 5.5 band
- TOEFL (iBT) 59
- TOEFL Essentials 6.5 band
- iTEP Academic 3.7
- PTE Academic and PTE Academic Online 50
- Duolingo 100
- Cambridge B2 First 168
- Successful completion of IEP Upper Intermediate Level B with a grade of B or better in all four courses
- An English assessment report from a few U.S. English language institutions recognized by major universities in the U.S.
- A degree earned or a college-level English credit course passed at an institution located in the U.S., U.K., Ireland, Australia, New Zealand, or Canada
- A degree earned at an institution in which the language of instruction is strictly English. Applicants from the following countries meet this criteria: Anguilla, Antigua \& Barbuda, Ascension, Australia, Bahamas, Barbados, Belize, Bermuda, Botswana, British Virgin Islands, Canada (except Quebec), Cayman Islands, Dominica, England, Eritrea, Fiji, Gambia, Ghana, Gibraltar, Grenada, Guyana, Ireland, Jamaica, Kenya, Kiribati, Lesotho, Liberia, Malawi, Mauritius, Namibia, New Zealand, Nigeria, Papua New Guinea, Saint Helena, Saint Kitts \& Nevis, Saint Lucia, Saint Vincent \& The Grenadines, Scotland, Sierra Leone, Singapore, Solomon Islands, Swaziland, Tanzania, Tonga, Trinidad \& Tobago, Tuvalu, Uganda, Wales, Zambia, and Zimbabwe.


## - Transfer of Credit from Other Institutions

Course credit earned at other institutions of higher education may be transferable. Credit transfer is made by the admission evaluators while conducting the admission evaluation or by formal transfer agreement between institutions. The transfer of credit is done at the program-of-study level, general education topic area level, the major levels and on a case-by-case basis. The following statements apply to all transfer credits:

- The SFBU Admissions Office must receive all official transcripts prior to the student's joining a degree program. Without preapproval, transcripts received after the student joins SFBU cannot be used in transferring credits, except for records from the term immediately preceding the student's starting semester at SFBU. Up to 75 units of courses that have been reviewed and currently approved as part of a formal SFBU articulation/transfer agreement are guaranteed to transfer.
- The student was officially enrolled in the course.
- Courses eligible for transfer by prearranged transfer / articulation agreement shall follow the details contained in the agreement. Courses eligible for one-to-one matching course transfer will be evaluated based on the comparability in content, quality, and rigor with SFBU's courses. Required courses require a closer comparability match. Courses eligible for topic area transfer may be mapped to the program's relevant topic area unit requirements without the need for exact one-to-one course matching and may have their units used in lieu of required units with the approval of the Registrar and School Dean. The transfer evaluation will include, but is not limited to, course descriptions, course syllabi, and/or public information. Students may be asked to provide course catalogs or syllabi if needed. Up to 75 semester units of courses that have been reviewed and currently approved as part of a formal SFBU articulation/transfer agreement are guaranteed to transfer.


## General Education - California Community College Applicants:

All graduates from California Community Colleges (CCC) who have earned Associate Degrees designed for Transfer (ADT, AA-T, AS-T) or a verified GE/IGETC certification may maximize their credit transfer via a "topic area" style transfer based on units, rather than exact course matching. Topic Area unit-based transfer results in most or all units transferring by using the table below and eliminating exact course-by-course matching. Note: There are some upper-division requirements that must be observed. Any units in excess of SFBU general education requirements may be applied to meet the BSBA program's free electives requirements.

In progress CCC Students who have not yet graduated are also eligible for general education unitbased topic area transfers if they have otherwise followed a pathway for transfer degree program or a GE/IGETC certification. For example: An AS-T Business Administration or AA-T Economics pathway student would be able transfer unit wise into SFBU's general education Area D Social Sciences a Sociology \& Criminology course even though SFBU does not have an exact matching criminology course.
Individual CCC Courses and High School Students with CCC transferrable units:

- Upon a case-by-case review, CCC students may have courses approved for CSU, UC, or SFBU transfer applied to the BSBA program by exact match or by topic area unit matching. Example: A high school student with CCC transfer eligible (CSU, UC) units from an Optics and Modern Physics course may transfer the units into the BSBA's General Educations Topic Area B (Mathematics and Natural Sciences) on a unit basis even though the SFBU does not offer an exact matching physics course. To request a personalized BSBA credit transfer review for individual courses please reach out to SFBU's admissions department.

| Topic <br> Area | SFBU BSBA | Topic Area | California GE Certification | Topic Area | CSU GE | Topic Area | IGETC | Topic Area |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Units |  | Units |  | Units |  | Units |  |
| A/1 | 9 lowerdivision and 3 upperdivision | English Language Communication and Critical Thinking | 9 | English Language Communication and Critical Thinking | 9 | English Language Communication and Critical Thinking | 9 | English <br> Communication (6 units for UC or 9 Units CSU) |
| B/2 | 9 | Mathematics and Natural Sciences | 12 | Scientific Inquiry and Quantitative Reasoning | 10 | Scientific Inquiry and Quantitative Reasoning | 3 | Mathematical Concepts and Quantitative Reasoning |
| C/3 | 6 | Arts and Humanities | 9 lowerdivision and 3 upper-division | Arts and Humanities | 9 | Arts and Humanities | 3 | Arts and Humanities |
| D/4 | 9 | Social Sciences | 6 lowerdivision and 3 upper-division | Social Sciences | 6 | Social Sciences |  |  |
| 5 |  | Mapped to Area B |  |  |  |  | 7 to 9 | Physical and Biological Sciences |
| E |  | Mapped to Electives | 3 | Lifelong Learning and SelfDevelopment | 3 | Lifelong Learning and Self- <br> Development |  |  |
| F/7 |  | Mapped to Electives | 3 | Ethnic Studies | 3 | Ethnic Studies | 3 | Ethnic Studies |
|  | $\begin{gathered} \text { Excess >36 } \\ \text { Units } \end{gathered}$ | Mapped to Electives |  |  |  |  |  |  |
| Reference: |  |  |  |  |  |  |  |  |
| CA Certification Total: 39 lower-division and 9 upper-division semester-units, 48 total units |  |  |  |  |  |  |  |  |
| CSU Total: 39 lower-division units |  |  |  |  |  |  |  |  |
| IGETC: UC Total: 34 lower-division units, CSU Total: 37 lower-division units |  |  |  |  |  |  |  |  |
| SFBU Total: 33 lower-division units and 3 upper-division units, upper-division units can be substituted for lower-division units |  |  |  |  |  |  |  |  |
| SFBU BSBA Program: Has 24 units of electives |  |  |  |  |  |  |  |  |

## Business Major Courses - California Community College Applicants:

CCC graduates with a designated transferable Business Administration degree can expect almost all or all their major courses to transfer although some may transfer as free electives.

## Required BSBA major courses:

Credit transfers are done on a course-by-course basis (example: CCC microeconomics for SFBU BSBA microeconomics).

## Major Related but Non-Exact-matching CCC courses:

SFBU's BSBA program contains a pool of major courses that students may select from. CCC courses which are related to topics contained within the BSBA's major pool may be transferred on a unit basis. Example: CCC CS123 the Java Programming Language can be unit wise transferred to satisfy the BSBA's selectable major course pool requirement which contains the Python Programming Language even though it is not an exact match. Both are computer languages that use the imperative programming paradigm, and both are used in a similar manner to implement various general purpose business applications.

## Free Electives - California Community College Applicants:

Courses from the BSBA's major selectable course pool are distinct from and should not be confused with free electives. More broadly free electives may also include non-related and non-exact matching

CCC courses (eligible for CSU or UC transfer) which are outside the scope of the business administration major. Example: Students may use as free electives engineering, robotics, political science, sign language courses.

- When evaluating any foreign transcript, the admission evaluators may accept, or transfer credit based on their knowledge of the course contents in comparison with similar courses offered in the U.S.
- Without prior approval, courses for transfer to SFBU may not be completed concurrently at another institution while a student is matriculated in an SFBU degree program
- College English courses taken at an institution where English is not an official language cannot be transferred for general education credit.
- The credits contemplated for transfer must be earned at (1) institutions approved by the Bureau for Private Postsecondary Education, (2) public or private institutions of higher learning accredited by an accrediting association recognized by the U. S. Department of Education, or (3) foreign institutions of higher learning. Credits earned at a foreign institution degree must be evaluated by a member of National Association of Credential Evaluation Services (NACES), Association of International Credential Evaluators (AICE), or American Association of Collegiate Registrars and Admissions Officers (AACRAO)'s International Education Services.
- Professional Development Units (PDUs) offered by professional/industry organizations cannot be transferred to SFBU for academic credit.
- Continuing Education Units (CEUs) offered on a non-academic basis by other academic institutions cannot be transferred to SFBU for academic credit.
- The total credits transferred from other institutions to meet the student's undergraduate 120 -unit BSBA program requirements are limited to 75 semester units. Students must take at least 45 units at SFBU.
- Credits transferred at the time of admission evaluation will reduce program length. Credit transferred from any outside institution has no effect on the calculation of the student's GPA or CGPA.
- Credits transferred from any outside institution are excluded from the maximum attempted units for the program.
- Credits are transferred by the following conversion:


## a. Definition of a Semester Unit:

One semester credit hour equals, at a minimum, 15 contact classroom hours of lecture, 30 contact hours of laboratory, or 45 contact hours of practicum.

## b. Conversion Factor:

$\mathbf{1}$ quarter unit $=\mathbf{0 . 6 6}$ semester unit

- Grades Required for Transfer Credit

In the bachelor's degree programs, courses completed with a grade of " C " or better are transferable. Courses completed with Pass/No Pass are not transferable unless the transcript states that the general grading policy is not based on letter grades. This policy must be in writing from the institution (transcript key or a letter of verification).

- Other Types of Undergraduate Transfer Credit

The following other types of credit may be transferable:
a. AP/IB course credit earned is considered to be equivalent to college credit.
b. Credit by Examination - CLEP

SFBU grants credit to those students who pass examinations in English, natural sciences, humanities, and social science subjects offered by the College Level Examination Program
(CLEP). Only General Education credits will be granted. Students should consult with the Admissions Office for information on acceptable CLEP scores and units. The CLEP Institution Code for SFBU is 7569.
c. Transfer of Credit from Defense Activity for Nontraditional Education Support (DANTES) and Military Services
Credits will be allowed for DANTES Subject Standardized Tests and professional military education evaluated by the American Council on Education (ACE). The maximum transferable credits follow the same policies as specified above. SFBU's evaluation of an application is made prior to the student's admission to a program unless otherwise approved by the authorizing VA office. The DANTES Institution Code for SFBU is 9670.

- Proficiency Exams: A student may be required to demonstrate proficiency in a subject taken more than ten years prior to application with SFBU by successful completion of a proficiency examination.


## - Experiential Learning

SFBU does not award credit for prior experiential learning.

## - Access to Computers

Students taking courses from the SFBU School of Business are expected to have access to computers upon which they will install various software packages, applications, microphones, cameras, connect to cloud applications, implement course assignments, and take examinations. Students should expect some courses to require software use/licensing fees comparable to the cost of a classic textbook. Example computer uses include; a web server, a relational database, the Python/JavaScript/PHP programming language, data visualization and analytics tools, making a business web site, creating analytical models, performing statistics on data sets, machine learning, use for oral presentations, downloading of course materials and project templates, uploading of assignments, accessing the student portal and course learning management systems, use of cloud based applications, virtual office meetings with the professor, delivery of student services, interaction with the administration and staff, etc. For interactive online/hybrid classroom meetings and group video conferencing, the recommended bandwidth is $\geq 3 \mathrm{Mbps}$ in both the upstream and downstream directions. Remote students are expected to have their web cameras on during any interactive online virtual class meeting and during examinations. For individual peer-to-peer video conferencing 1 Mbps is the recommended minimum bandwidth. For an improved video experience, use of a wired connection/adapter can reduce interaction latency and the number of dropped packets compared to a WiFi connection.

## - Tuition

Tuition is charged per unit. Tuition for courses taken to fulfill the undergraduate degree requirement is $\$ 330.00$ per unit. Undergraduate students taking courses for graduate level credit need to pay the graduate level fee rate.

## - Tuition per Unit for Courses Audited

For courses audited (without earning credit), the tuition is half the regular unit rate. Not all courses can be taken with "audit" status.

## - Estimated Total Charges for On-time Completion of the Entire 120-unit BSBA Educational Program

- Tuition: \$39,600
- Fees: \$4,550
- Graduation Petition Fee: \$300
- Textbooks \& Software Costs: $\$ 6000$
- BSBA: $\$ 55,400$

Please note that this estimate includes tuition, fees, textbooks costs, and health insurance premium, which is subject to change. All students are required to pay current rates for tuition and fees each semester. Additional fees may apply, depending on the services requested (see Tuition and Fee section). The cost of course materials including textbooks and course-related software is estimated to be approximately $\$ 150$ per course. The actual cost of course materials can vary significantly from course to course.

## - Graduation Requirements

The BSBA degree program requires course work in the following areas:

1. General education,
2. Major study, and
3. Electives.

A minimum of $\mathbf{1 2 0}$ semester units are required for graduation. No more than $\mathbf{7 5}$ units may be transferred. An overall G.P.A. of 2.0 or better and a $D$ grade or higher on all courses towards the degree are required to meet the graduation requirements. Courses with a grade of D - cannot be applied towards the graduation requirements. The student must be in good standing with the University and have an approved petition for graduation on file.

## 1. General Education Requirements

All students must complete at least 36 semester units in general education (GE). GE courses cover subjects in the following areas: (a) English language communication and critical thinking, (b) mathematics and natural sciences, (c) arts and humanities, and (d) social sciences.

Examples of courses that fall under the general education topic areas are as follows:

- Area A: English Language Communication and Critical Thinking: Expository Writing, Critical Thinking, Public Speaking, Small Group Communication, Intercultural Communication, Modern American Literature.
- Area B: Mathematics and Natural Sciences: Calculus, Statistics, Physical Sciences, Physics.
- Area C: Arts and Humanities: Introduction to Philosophy, Art Appreciation, Music Appreciation, Principles of Ethics.
- Area D: Social Sciences: California History, Introduction to Sociology, Introduction to Psychology, Emotional Intelligence.


## General Education Student Learning Outcomes

SFBU has determined that the first five institutional learning outcomes will also serve as general education outcomes, with one modification: The general education outcome for critical thinking has been modified to include an introductory phrase, "Using various disciplinary perspectives, explore and analyze issues, ideas, artifacts, and/or events to formalize an opinion or conclusion." This inclusion allows for a clear mapping between general education courses in natural sciences, social sciences, communications, and humanities.

All undergraduate students are expected to demonstrate the following general education student learning outcomes:
(PLO 1) Written Communication - Write sustained, coherent arguments or explanations.
(PLO 2) Oral Communication - Utilize effective oral communication strategies.
(PLO 3) Quantitative Reasoning - Utilize mathematical concepts and methods to analyze and explain issues in quantitative terms.
(PLO 4) Information Literacy - Identify, locate, evaluate, and effectively and responsibly use and share information in support of academic, personal, and professional needs.
(PLO 5) Critical Thinking - Utilizing various disciplinary perspectives, explore and analyze issues, ideas, artifacts, and / or events to formalize an opinion or conclusion.

## 2. Major Study Requirements

The BSBA curriculum aims to provide the students with a foundation and training in business administration, analytics, and information technology. Students are encouraged to use computers to gain hands-on experience in online business, analytics, and computation.

Professional Development: The Career Development course P450 prepares the students for their professional careers.

## 3. Free Electives

Electives are built into the program to promote breadth as well as depth in the study program. The student must complete a sufficient number of elective courses to meet the graduation requirements in the program.

Course Numbers: Courses numbered in the 100s and 200s are lower-division courses; courses numbered in the 300 s and 400 s are upper-division courses. Courses numbered from 450 G to 499 G are cross-listed specialized skills courses taken for graduate-level credits. Prerequisites must be met before taking a course. Corequisites may be taken at the same time the course is taken. Advisory: Students should expect graduatelevel $4 x x G$ courses to have noticeably higher-level assignments compared to 4 xx undergraduate workloads.

## Prerequisites/Corequisites

For the purposes of meeting prerequisites or corequisites, lower-division status means undergraduate students with less than 60 completed semester units, and upper division status means undergraduate students with 60 or more completed semester units.

The following is the description of the BSBA degree program with a statement of the program objective, suggested GE and major courses, illustrative degree program maps for academic planning, and the program curriculum.

## - Bachelor of Science in Business Administration (BSBA) <br> 120 Semester Units <br> CIP Code: 52.0101

Program Objective: The objective of the BSBA program is to help students bridge the intersection where business, technology, and people come together. With a balanced mixture of business knowledge and information science students will be able to holistically blend modern management principles, best professional practices, data management techniques, business analytics, and computer scripting to address the needs of business in the age of ubiquitous data, ecommerce, and automation.

## - BSBA Concentration in Business Analytics

The BSBA program offers students the option to select a concentration in Business Analytics of 12-units (typically 4 courses). Choosing concentration is not required.

Business Analytics Concentration: Students who complete their BSBA with 12 units or more of Business Analytics specialization (BAN, including MGT460/L, and 500 level BAN courses) may
request the Registrar's office to have their transcripts marked with Concentration in Business Analytics.

An approved concentration will appear on the student's official transcript. If no concentration is selected the transcript will show the program title without any concentration notation.

Students may have only one formal concentration.
Concentrations are open to both on-campus classroom and distance learning modality students.
Courses counting towards the concentration unit requirement may be taken as either Major or Electives.
Students are advised to complete the 12 units applicable to their concentration before meeting with the Registrar's Office to formally request their desired concentration. Due to logistics and diploma printing time requirements spanning multiple months, last-minute concentration requests and changes may not be approved at the discretion of the Registrar's Office.

## Courses Applicable to the BSBA Business Analytics Concentration:

| BAN223 | SQL \& Relational Databases |
| :--- | :--- |
| BAN335 | Python Introduction for Commerce |
| BAN337 | JavaScript |
| BAN452 | Excel for Finance, Accounting \& Analytics |
| BAN455 | Server-Side Data Processing Using Python/PHP |
| BAN460 | Introduction to Business Analytics |
| BAN460L | Introduction to Business Analytics Lab |
| BAN463 | Data Visualization |
| BAN470 | Introduction to Machine Learning Based Prediction Modeling and |
|  | Forecasting |
| BAN472 | Introduction to Artificial Intelligence (AI) |
| BAN501 | Quantitative Methods for Business |
| BAN520 | Business Analytics for Dashboards |
| BAN524 | Intermediate Business Analytics |
| BAN572 | Process Management for Analytics |
| BAN589 | Special Topics on Analytics, Strategy, and Applied Information |
| MGT501 | Agile Project Management |
| MGT460 | Production and Operations Management |
| MGT460L | Production and Operations Management Lab |

Program Learning Outcomes (PLOs): Students graduating with a BSBA degree are expected to demonstrate the following program learning outcomes -
(PLO 1) Written Communication - Use written language that communicates complex business concepts and enabling technology approaches.
(PLO 2) Oral Communication - Orally explain to one's peers complex business and supporting technology concepts.
(PLO 3) Quantitative Reasoning - Apply (computer and non-computer assisted) quantitative methods in a comprehensive manner in a business setting.
(PLO 4) Information Literacy - Access, review and then meaningfully apply information in business and management decision making.
(PLO 5) Critical Thinking - Analyze business issues and recommend solutions which apply business concepts and technology practices.
(PLO 6) Specialized Knowledge - Apply business concepts in the areas of management, finance, accounting, marketing, and information technology to various business scenarios. Evaluate and propose information technology solutions to improve an organization's operational efficiency.

Graduation requirements: A minimum of $\mathbf{1 2 0}$ units are required for graduation. They include the following:

1. 36 units of general education courses including (a) 12 units in English language communication and critical thinking, (b) 9 units in mathematics and natural sciences, (c) 6 units in arts and humanities, and (d) 9 units in social sciences,
2. 60 units of major courses ( $\mathbf{3 4}$ required and $\mathbf{2 6}$ selectable from major pool), and
3. 24 units of free electives.

BSBA Curriculum
(Total of $\mathbf{1 2 0}$ Units)
Courses in bold are required

## 1. General Education (minimum 36 units)

The purpose of general education is to give breadth to the student's education. With a general background in English language communication and critical thinking, mathematics and natural sciences, arts and humanities, and the social sciences, the student will be prepared for his/her roles both in society and at work. Students who have not completed the general education requirements upon entering a degree program at SFBU are required to observe the following curriculum to meet the general education requirements.

## Units

Area A: English Language Communication and Critical Thinking (12 units required)
(ENGL101, ENGL115, AND ENGL425 are required courses. Other listed courses are suggested subjects which may be used as electives.)

| ENGL101 | Expository Writing | $(3)$ |
| :--- | :--- | ---: |
| ENGL102 | Critical Thinking | $(3)$ |
| ENGL115 | Public Speaking | $(3)$ |
| ENGL220 | Small Group Communication | $(3)$ |
| ENGL320 | Intercultural Communication | $(3)$ |
| ENGL425 | Modern American Literature | (3) |

Area B: Mathematics and Natural Sciences (9 units required)
(MATH208 is required, at least 3 units in Natural Sciences, plus 3 additional units in Mathematics and Natural Sciences).

| PHYS101 | Introduction to Physical Sciences | (3) |
| :--- | :--- | ---: |
| PHYS201 | Physics - I | (3) |
| PHYS201(L) | Physics Lab -I | (1) |
| PHYS202 | Physics - II | (3) |
| PHYS202(L) | Physics Lab - II | (1) |
| PHYS301 | Introduction to Device Physics | (3) |
| MATH201 | Calculus - I | (3) |
| MATH202 | Calculus - II | (3) |
| MATH203 | Linear Algebra | (3) |
| MATH208 | Probability and Statistics | (3) |

Area C: Arts and Humanities (6 units required)
(The students can select any 6 units from the following suggested subjects.)

| HU210 | Introduction to Philosophy |  |
| :--- | :--- | :---: |
| HU230 | Art Appreciation | $(3)$ |
| HU240 | Music Appreciation | $(3)$ |
| HU280 | Principles of Ethics | $(3)$ |
| HU420 | Critical Analysis of Film |  |
| HU450 | Information Literacy for Academics, Life, and |  |
|  | the Workplace |  |

Area D: Social Sciences (9 units required)
(The students can select any 9 units from the following suggested subjects.)

| SOC201 | California History | (3) |
| :--- | :--- | ---: |
| PSY210 | Introduction to Psychology | (3) |
| SOC215 | Introduction to Sociology | $(3)$ |
| SOC235 | Multiculturalism in the United States | $(3)$ |
| SOC250 | Public Administration | $(3)$ |
| SOC260 | Civilization and Urbanization | $(3)$ |
| SOC275 | The American Experience | $(3)$ |
| HIST340 | Modern American History | $(3)$ |
| HIST400 | Early American History | Emotional Intelligence |

2. Major Requirements (minimum 60 units: 34 required course units $\mathbf{+} \mathbf{2 6}$ units selectable from the major pool listed below)
The purpose of the major courses is to provide students with specialized topic knowledge including business administration and information technology courses and professional career development.

| ACC110 | Financial Accounting | (3) |
| :--- | :--- | :--- |
| BLAW310 | Introduction to Business Law | (3) |
| BUS450 | Professional \& Technical Writing | (3) |
| ECON201 | Principles of Macroeconomics | (3) |
| ECON202 | Principles of Microeconomics | (3) |
| FIN310 | Fundamentals of Finance | (3) |
| MGT310 | Principles of Management | (3) |
| MGT451 | Project Management | (3) |
| MGT480 | Entrepreneurship | (3) |
| MKT310 | Principles of Marketing | (3) |
| BAN460* | Introduction to Business Analytics | (1) |

## Plus 26 student selectable units from the major pool list below

| ACC110L | Financial Accounting Lab | (1) |
| :--- | :--- | ---: |
| ACC120 | Managerial Accounting | (3) |
| ACC120L | Managerial Accounting Lab | (1) |
| ACC450 | Cost Accounting | (3) |
| ACC451 | Intermediate Accounting - I | (1) |
| ACC451L | Intermediate Accounting - I Lab | (3) |
| ACC452 | Intermediate Accounting - II | (3) |
| ACC490 | Introduction to Taxation | (3) |
| BAN223* | SQL \& Relational Databases | (3) |
| BAN335* | Python Introduction for Commerce | (3) |
| BAN337* | JavaScript | (3) |


| BAN455* | Server-Side Data Processing Using Python/PHP | (3) |
| :---: | :---: | :---: |
| BAN460L* | Introduction to Business Analytics Lab | (1) |
| BAN463* | Data Visualization | (3) |
| BAN470 | Introduction to Machine Learning Based |  |
|  | Prediction Modeling and Forecasting | (3) |
| BAN472* | Introduction to Artificial Intelligence (AI) | (3) |
| BUS493 | Senior Project | (3) |
| CPT401 | Curricular Practicum | (1) |
| CPT402 | Curricular Practicum | (2) |
| MGT450 | Organizational Behavior and Management | (3) |
| MGT460* | Production and Operations Management | (3) |
| MGT460L* | Production and Operations Management Lab | (3) |
| MGT482 | Launching Innovative Startups | (3) |
| MKT221 | HTML \& CSS Web Page Construction | (3) |
| MKT450 | Marketing Management | (3) |
| MKT483 | Monetizing Intellectual Property | (3) |
| SOC501 | Emotional Intelligence Essentials | (1) |

* Business Analytics Concentration applicable, BAN5xx courses may also be used (applied as free electives)
** SOC501 may be used as a substitute for P450
*** Note: Major course units not applied to the major unit requirement may be used towards the Free Electives unit requirement.


## 3. Free Electives (minimum 24 units)

Free electives include any course offered for academic credit not already applied by the student towards the BSBA General Education or Major unit requirements. Free electives may include courses from General Education, the School of Business, the School of Engineering, courses bearing graduate level credit, and courses transferred in. Major courses not applied to the major unit requirement may be used towards Free Elective unit requirement.

Prerequisite/Corequisites requirements must be met when taking any course. Recommendations are optional recommendations.

BSBA students who are more interested in business administration may select courses in any field from the School of Business to fulfill this requirement and are encouraged to take management and marketing courses

BSBA students who are more interested in Information Science are encouraged to take Computer Science courses from the School of Engineering as electives. They are also encouraged to take business analytics electives such as BAN455 Server-Side Data Processing Using Python/PHP.

BSBA students who are considering a future career as a Certified Public Accountant (CPA) should; seek additional advising, study the California Board of Accountancy's (CBA - www.dca.ca.gov/cba/) numerous requirements, and from the start of their studies focus where possible all electives and General Education choices towards meeting the CBA's numerous academic requirements. The CBA requires substantial additional academic education and professional training outside the scope of the BSBA program.

When applicable, the student may take Curricular Practicum Training (CPT) courses, CPT401 or CPT402, and engage in practical internship training to gain work experience on company projects that are directly related to the student's course of study. The student must observe the rules required for taking the practicum courses. No more than 6 units of practicum coursework may be counted towards graduation of the 120 -unit BSBA program.

## Illustrative BSBA degree maps for academic planning/ Suggested Study Plan Course Sequence:

Degree Maps are guides for outlining a pathway towards degree completion. They each showcase one way but not the only way to complete a degree.
The 8 semester (approximately 2.6 calendar years) and 10 semester (approximately 3.3 calendar years) degree maps below are advising tools that outline pathways that students may wish to consider for completing the 120 -semester BSBA unit requirements for graduation.

Table \#1: The "Typical" illustrative degree map showcases a 10 -semester schedule with at a 12 -unit course load pace. Student study plans incorporating summer breaks, lighter course loads, repeated courses, and scheduling congestion should expect to take upwards of four or more years to complete.

Table \#2: The "Fast" sequencing (15-unit course load pace) has been highly optimized to reduce the elapsed calendar time needed to complete the BSBA degree program. It showcases a schedule of 8 semesters (approximately 2.6 calendar years including summer terms).

When developing their study plans students should use the illustrative degree maps in consultation with their advisors and the School of Business to identify any additional requirements (such as grade minimums) that may affect them.
First, it is recommended that students target scheduling flexibility by prioritizing General Education (English Language Communication and Critical Thinking, Mathematics and Natural Sciences, Arts and Humanities, and Social Sciences), and program requirements early on, followed by taking most of their free electives towards the end of their studies.

Second, it is recommended that strong BSBA students plan for a target of a fast course load pace of 15 units per semester to prioritize first the reduction of elapsed calendar time. Reducing the elapsed calendar time will both reduce associated living costs and pull forward the rewards of potential employment opportunities. Undergraduate students need to take a minimum 12-unit course load to maintain a full-time status. Students may take courses during the Summer semester to reduce the elapsed calendar time needed for degree completion.

Third, SFBU undergraduate students planning on directly progressing into the MBA or MSBAn program immediately upon graduation are advised to acquire up to 12 units or 9 units respectively of graduate level ( 4 xxG or 5 xx ) course work in their undergraduate course load, excluding Business Capstone (BUS595). Courses registered for graduate level credit are priced at the graduate fee level. Courses registered for undergraduate level credit are priced at the undergraduate level. Up to $12 / 9$ units of graduate level work from either the School of Business or the School of Engineering may be counted in the MBA/MSBAn program. The result of direct progression can be considerable time savings to the student.

Fourth, SFBU undergraduate students planning on directly progressing into the Academic Graduate Certificate in Management program are advised to meet with an academic advisor to discuss acquiring graduate level ( 4 xxG or 5 xx ) School of Business course work in their undergraduate course load, excluding Business Capstone (BUS595). Courses registered for graduate level credit are priced at the graduate fee level.
Students are expected to review their study plan each semester because not all courses are offered every term. It is recommended that students meet with their advisors every semester for compliance with requirements and scheduling optimization.

Students transferring credit into the BSBA program are issued a customized study plan during the admissions process.

After consulting with their advisors and getting pre-approvals students may take some courses from either the Master of Business Administration (MBA) or the Master of Science in Business Analytics (MSBAn) program or the School of Engineering. Some illustrative examples are included in the sample roadmaps.
$\mathrm{R}=$ Required Major courses
$\mathrm{M}=$ Major courses selectable from a pool list
$\mathrm{G}=$ Selectable General Education pool courses
$\mathrm{E}=$ Free Electives

Table 1 BSBA Degree Map / Suggested Course Sequence

| Semester 1 | Fall | Units |  |
| :---: | :---: | :---: | :---: |
| ENGL101 | Expository Writing | R | 3 |
| MATH208 | Probability and Statistics | R | 3 |
| ACC110 | Financial Accounting | R | 3 |
| ACC110L | Financial Accounting Lab | G | 3 |
| 13 | Cumulative / Current Units |  | 13 |
| Semester 3 | Summer |  | Units |
| ENGL115 | Public Speaking | R | 3 |
| MKT310 | Principles of Marketing | R | 3 |
| ECON202 | Principles of Microeconomics | R | 3 |
| MKT221 | HTML \& CSS Web Page Construction | M | 3 |
| 37 | Cumulative / Current Units |  | 12 |
| Semester 5 | Spring |  | Units |
| BUS450 | Professional \& Technical Writing | R | 3 |
| MKT450 | Marketing Management | M | 3 |
| BAN335 | Python Introduction For Commerce | M | 3 |
| FIN310 | Fundamentals of Finance | R | 3 |
| 61 | Cumulative / Current Units |  | 12 |


| Semester 2 | Spring |  | Units |
| :--- | :--- | :---: | :---: |
| ENGL102 | Critical Thinking | G | 3 |
| HU280 | Principles of Ethics | M | 3 |
| ACC120 | Managerial Accounting | R | 3 |
| ECON201 | Principles of Macroeconomics |  |  |
|  |  |  |  |
| 25 |  | Cumulative / Current Units |  |
| Fall Units |  |  |  |


| Semester 4 | Units |  |  |
| :--- | :--- | :---: | :---: |
| BLAW310 | Introduction to Business Law | R | 3 |
| SOC260 | Civilization and Urbanization | G | 3 |
| MGT310 | Principles of Management | R | 3 |
| BAN223 | SQL \& Relational Databases | M | 3 |
|  |  |  |  |
| 49 | Cumulative / Current Units |  | 12 |


| Semester 6 | Summer |  | Units |  |
| :--- | :--- | :---: | :---: | :---: |
| SOC250 | Public Administration | G | 3 |  |
| MGT450 | Organizational Behavior and <br> Management | M | 3 |  |
| BAN452 | Excel for Finance, <br> Accounting, \& Analytics | M | 3 |  |
| BAN337 | JavaScript | M | 3 |  |
|  |  |  |  |  |
| 73 | Cumulative / Current Units |  | 12 |  |


| Semester 7 | Fall | Units |  |
| :---: | :---: | :---: | :---: |
| BAN460 | Introduction to Business Analytics | R | 3 |
|  |  | M | 3 |
| MATH201 | Calculus - I | G | 2 |
| MGT480 | Entrepreneurship | R | 3 |
| P450 | Career Development | R | 1 |
| 64 | Cumulative / Current Units |  | 13 |
| Semester 9 | Summer | Units |  |
| MGT451 | Project Management | R | 3 |
| MGT500 | Risk Management | E | 3 |
| SOC450 | Emotional Intelligence | G | 3 |
| ACC490 | Introduction to Taxation | E | 3 |
| 110 | Cumulative / Current Units |  | 12 |


| Semester 8 | Spring | Units |  |
| :--- | :--- | :---: | :---: |
| BAN470 | Introduction to Machine <br> Learning Based Prediction <br> Modeling and Forecasting | M | 3 |
| ACC451 | Intermediate Accounting | E | 3 |
| BAN463 | Data Visualization | E | 3 |
| SOC501 | Emotional Intelligence <br> Essentials | E | 1 |
| Fall |  |  |  |
| Semester 10 | Cumulative / Current Units |  | 10 |
| ENGL425 | Modern American Literature | R | 3 |
| HU240 | Music Appreciation | G | 3 |
| MGT538 | International Business <br> Management | E | 3 |
| FIN510 | Investment Analysis | E | 3 |
|  |  |  |  |
| 120 | Cumulative / Current Units |  | 12 |

120 units $=60$ major +24 free electives +12 English +6 Humanities +9 Math \& Science +9 Social Sciences
Optional Business Analytics Concentration 12-unit requirement has been met.

* 12 graduate - level units suitable for transfer to the MBA. Note the " $G$ " suffix and the $450 \mathrm{G}+$ and 500 credit levels

Table 2
Illustrative Fast Paced 3 calendar year BSBA Degree Map with MBA Track Transfer

| Semester 1 | Fall |  | Units |
| :---: | :---: | :---: | :---: |
| ENGL101 | Expository Writing | R | 3 |
| MATH208 | Probability and Statistics | R | 3 |
| PHYS101 | Introduction to Physical Sciences | R | 3 |
| ACC110 | Financial Accounting | R | 3 |
| ACC110L | Financial Accounting Lab | E | 1 |
| BAN452 | Excel for Finance, Accounting \& Analytics | M | 3 |
| 15 | Cumulative / Current Units |  | 16 |
| Semester 3 | Summer |  | Units |
| ENGL115 | Public Speaking | R | 3 |
| SOC250 | Public Administration | G | 3 |
| MKT310 | Principles of Marketing | R | 3 |
| ECON202 | Principles of Microeconomics | R | 3 |
| MKT221 | HTML \& CSS Web Page Construction | M | 3 |
| 46 | Cumulative / Current Units |  | 15 |
| Semester 5 | Spring |  | Units |
| BUS450 | Professional \& Technical Writing | R | 3 |
| MKT450 | Marketing Management | M | 3 |
| ACC451 | Intermediate Accounting | E | 3 |
| ACC490 | Introduction to Taxation | M | 3 |
| FIN310 | Fundamentals of Finance | R | 3 |
| 76 | Cumulative / Current Units |  | 15 |


| Semester 7 | Fall |  | Units |  |
| :--- | :--- | :---: | :---: | :---: |
| BAN460 | Introduction to Business <br> Analytics | R | 3 |  |
| BAN460L | Introduction to Business <br> Analytics Lab | E | 1 |  |
| MGT460 | Production and Operations <br> Management | R | 3 |  |
| MGT480 | Entrepreneurship | R | 3 |  |
| BAN463 | Data Visualization | E | 3 |  |
| P450 | Career Development | R | 1 |  |
| 106 | Cumulative / Current Units |  | 14 |  |

120 Units Required
R = Required
M = Major Selectable
G = Selectable GenEd
E = Free Elective

| Semester 2 | Spring |  | Units |  |
| :--- | :--- | :---: | :---: | :---: |
| ENGL102 | Critical Thinking | G | 3 |  |
| HU210 | Introduction to Philosophy | G | 3 |  |
| HU280 | Principles of Ethics | G | 3 |  |
| ACC120 | Managerial Accounting | M | 3 |  |
| ECON201 | Principles of <br> Macroeconomics | R | 3 |  |
| 31 | Cumulative / Current <br> Units |  | 15 |  |


| Semester 4 | Fall |  | Units |  |
| :--- | :--- | :---: | :---: | :---: |
| ENGL425 | Modern American <br> Literature | R | 3 |  |
| SOC260 | Civilization and <br> Urbanization | G | 3 |  |
| MGT310 | Principles of Management | R | 3 |  |
| BLAW310 | Introduction to Business <br> Law | R | 3 |  |
| BAN223 | SQL \& Relational <br> Databases | M | 3 |  |
| Cumulative / Current <br> Units |  | 15 |  |  |


| Semester 6 | Summer | Units |  |
| :--- | :--- | :---: | :---: |
| SOC450 | Emotional Intelligence | G | 3 |
| MGT450 | Organizational Behavior <br> and Management | R | 3 |
| MATH201 | Calculus - I | G | 3 |
| MGT451 | Project Management | R | 3 |
| BAN335 | Python Introduction for <br> Commerce | M | 3 |
| 91 |  |  |  |
|  | Cumulative / Current <br> Units |  | 15 |

Semester 8 Spring Units

| BAN470 | Introduction to Machine <br> Learning Based Prediction <br> Modeling and Forecasting | M | 3 |
| :--- | :--- | :---: | :---: |
| ACC451G* | Intermediate Accounting | M | 3 |
| ACC450G* | Cost Accounting | M | 3 |
| FIN510* | Investment Analysis | E | 3 |
| MGT542G | Technology and Product <br> Management | E | 3 |
|  | Cumulative / Current <br> Units |  | 15 |
| 120 |  |  |  |

120 units $=60$ major +24 free electives +12 English +6 Humanities +9 Math \& Science +9 Social Sciences
Optional Business Analytics Concentration 12-unit requirement has been met

* 12 graduate - level units suitable for transfer to the MBA. Note the "G" suffix and the $450 \mathrm{G}+$ and 500 credit levels

Table 3a | 4-Year Fast BSBA + MBA |
| :---: |
| Combination / Suggested |
| Course Sequence |

BSBA 120 Units
MBA 37 Units
Required
M = Major
Selectable
E $=$ Free Elective

| Semester 9 | Summer MBA |  | Units | Semester 10 | Fall MBA | $\begin{gathered} \text { Unit } \\ \mathrm{s} \\ \hline \end{gathered}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FIN501 | Financial Management | R | 3 | BUS595 | Business Capstone | R | 3 |
| MGT530 | Logistics and Operations Management | R | 3 | MGT501 | Agile Project <br> Management | M | 3 |
| HRM531 | Human Resource Management | R | 3 | MGT542 | Technology and Product Management | M | 3 |
| MKT550 | Consumer and Buyer Behavior | M | 3 | BUS595 | Business Capstone | R | 3 |
|  | Transferred FIN510 | M | 3 |  |  |  |  |
|  | Transferred units ACC490G, ACC450G, MGT542 - Elective | E | 9 |  |  |  |  |
| 24 | Cumulative / Current Units |  | 24 | 36 | Cumulative / Current Units |  | 12 |

36 units $=9$ Required Foundation +12 Selectable Core Pool +12 Free Electives +3 Business Capstone

## - Course Descriptions

## Bachelor's Degree Program <br> School of Business

For the undergraduate program, lower division courses are numbered in the 100 s and 200 s , and upper division courses are numbered in the 300s and 400s.

| Course No. | Description | Course No. | Description |
| :--- | :--- | :--- | :--- |
| $100-199$ | Freshman level courses | $200-299$ | Sophomore level courses |
| $300-399$ | Junior level courses | $400-499$ | Senior level courses |
| $450-499$ | Senior level specialized skills courses taken for undergraduate level credit |  |  |
| 450G-499G | Cross-listed specialized skills courses taken for graduate level credits |  |  |
| $500-599$ | Graduate level courses |  |  |

For information on subjects numbered 500 and above, refer to the section on the Course Descriptions for the Master's Degree Program, School of Business.

Courses are listed below by subject area:

| ACC | Accounting, |
| :--- | :--- |
| BAN | Business Analytics, |
| BLAW | Business Law, |
| BUS | Business, |
| CPT | Curricular Practicum, |
| ECON | Economics, |
| ENGL | English, |
| FIN | Finance, |
| HU | Humanities, |
| MATH | Mathematics, |
| MGT | Management, |
| MKT | Marketing, |
| P | Career Development, |
| PHYS | Physical Sciences, and |
| SOC | Social Science |

Each course description is followed by its prerequisite/corequisite, recommendation information expressed in course numbers and/or text.

Each 1-unit lab course requires at least 30 contact hours, often scheduled as 2 contact hours of lab work each meeting.

Each 1 unit of a practicum course requires at least 45 contact hours of practical experience related to the student's program curriculum.

Students should expect that not all courses and delivery modalities will be offered every semester.

## Accounting (3 units required)

## ACC110 Financial Accounting (3 units) - Required

This is the study of accounting as an information system, examining why it is important and how it is used by investors, creditors, and others to make decisions. The course covers the accounting information system, including recording and reporting of business transactions with a focus on the accounting cycle, the application of generally accepted accounting principles, the financial statements, and statement analysis. Includes issues relating to asset, liability, and equity valuation, revenue and expense recognition, cash flow, internal controls, and ethics

## ACC110L Financial Accounting Lab (1 unit)

This lab course (ACC110L) is designed to be taken concurrently with ACC110 Financial Accounting course. However, this is a separate course with its own separate syllabus and topics. This lab includes an introduction to software accounting tools such as QuickBooks (or alternative as designated by the instructor). This course will teach students about software accounting tools to manage business accounting tasks such as the sales process, tracking revenue, tracking expenses, inventory, bank reconciliation, reports and graphs, company file set up, and maintenance.

## ACC120 Managerial Accounting (3 units)

This is the study of how managers use accounting information in decision-making, planning, directing operations and controlling. Focuses on cost terms and concepts, cost behavior, cost structure and cost-volume-profit analysis. Includes issues relating to cost systems, cost control, profit planning, and performance analysis in manufacturing and service environments.

## ACC120L Managerial Accounting Lab (1 unit)

This lab course is designed to be taken concurrently with the course ACC120 Managerial Accounting. Topics include company file setup and maintenance, inventory, sales tax, time and billing, payroll setup, payroll processing, adjustments, and the yearend procedures. Hands-on practice is required.
Prerequisite/Corequisite: ACC120 or ACC110L

## ACC450 Cost Accounting (3 units)

This class applies the essentials of financial accounting to the practice of management. Students will understand cost definitions, cost concepts, cost behavior and cost estimation; also, how cost accounting is applied to manufacturing and service organizations, the principles of planning and control for effective cost-related management, capital budgeting, cash flow statements, and how to analyze financial statements.
Prerequisite/Corequisite: ACC110 or ACC120 or Equivalent or Upper Division/Graduate Level Status

## ACC451 Intermediate Accounting - I (3 units)

This course is designed for students who are interested in pursuing careers as accounting professionals. This course enhances the student's understanding of the principles of accounting. Topics include understanding financial accounting and accounting standards, financial statement preparation, required disclosures, and in-depth study of current assets, revenue recognition and fixed assets.
Prerequisite/Corequisite: ACC120 or ACC450 or Equivalent

## ACC451L Intermediate Accounting- I Lab (1 unit)

Upon completing this practical lab, students will be able to handle complex accounting situations using real-world examples from the accounting topics covered in ACC451. During class meetings, students will interact with specific issues such as multi-year accrual recognition of delayed revenues, in-depth study of current assets, and determine how to address them both theoretically and in the finer details of recording. Students may have to modify their accounting software configuration in order to properly reflect the given issue according to their accounting needs.
Prerequisite/Corequisite: ACC120L or ACC450 or Equivalent

## ACC452 Intermediate Accounting - II (3 units)

This course is a continuation of Intermediate Accounting - I. Subject matter includes current and long-term liabilities, stockholders' equity, investments, pension and post-retirement benefits, leases, and cash flow statements.
Prerequisite/Corequisite: ACC451 or Equivalent

## ACC490 Introduction to Taxation (3 units)

This course covers taxation concepts applied to an individual's income, deductions, credits, property transactions, and tax accounting methods. An understanding of the concepts will enable students to prepare quality individual income tax returns as a professional. The course will also cover taxation rules governing financial planning.
Prerequisite/Corequisite: Upper Division/Graduate Level Status

## Business Analytics ( $\mathbf{3}$ units required, 12 units required for BAN concentration)

Note: BAN5xx courses may also be used to meet the BAN concentration's 12-unit requirement)

## BAN223 SQL and Relational Databases (3 units)

The course emphasis is using SQL/RDMSs as a tool in support of business \& data analytics. After completing this course, students will be able to explain the theory and best practices supporting Relational Database Management Systems (RDMSs) and be able to use SQL's (Structured Query Language) friendly approach for entering, retrieving, updating, sorting data, calculating statistics, and modify the structure of the internal data storage tables. Time permitting, use of a programming language to establish remote connections will also be covered.

## BAN335 Python Introduction for Commerce (3 units)

Python is a popular and flexible general-purpose programming language with a vast variety of libraries ranging from database interfaces, mathematical \& Stochastic modeling, functions for business analytics supporting decision making, graphical interface toolkits for visual analytics, image handlers, HTTP based dashboard support, and so much more. This course takes a balanced approach with students learning the core mechanics of the language and how to apply Python to analytics and commercial applications via instructor led course assignments and projects.
Note 1: It is suggested that analytical students wishing to use Python in the future for database connections first take BAN223.
Note 2: School of Business students may substitute BAN335 with CS250 with CS250L counting towards BSBA selectable or elective units.

## BAN337 JavaScript (3 units)

JavaScript is a versatile dynamic programming language with a high degree of interoperability making it ideal for front-end information handling, clean data assurance, and implementation of light weight front-end algorithms. After this course students will have a working knowledge of JavaScript's core, client-side, and time permitting server-side functionality. Students will be able to use their JavaScript skills to present visual analytics, check and process customer data, preprocess client files before sending to backend for additional analysis and processing, add interactivity to customer facing web sites, provide connections to backend databases, and call other languages. Course examples and assignment will include examples from the field of business analytics.
Prerequisite/Corequisite: MKT221 or BAN335 or Knowledge of a Computer Programming Language (excluding SQL)
Note 1: With respect to supporting server-side content and applications, it is suggested but not required that School of Business students learn JavaScript after learning SQL and Python.
Note 2: School of Business students may substitute BAN337 with CS485 counting towards BSBA selectable or elective units.

## BAN452 Excel for Finance, Accounting \& Analytics (3 units)

Excel is a widely used tool and its' skillful use provides multiple benefits over one's professional career. Students will learn to master many areas of Excel's flexibility including graphics, conditional formatting, sorting, pivot tables, conditional calculations, data loading, use of Excel's powerful functions and Analysis Tool Pak/ Solver extensions. Time permitting business modeling will be introduced.

## BAN455 Server-Side Data Processing Using Python/PHP (3 units)

After completing this course students will be able to implement industrial scale business algorithms, process complex data sets and business models with active code to powerful backend analytics and relational database engines. Students will learn how to add smart logic and information passing connections using server-side languages/scripts such as Python or PHP. Students are expected to have access to a computer or cloud account upon which they will install a web server, database, instructor determined Python or PHP for the programming language. Recommendation: A working knowledge of HTML and a procedural programming language is recommended.

## BAN460 Introduction to Business Analytics (3 units) - Required

This course teaches the basics of business analytics. The students learn to use popular data analysis tools to analyze business data for the purpose of understanding business trends, making business forecast, and improving organization's decision making and business strategies.
Recommendation: A working knowledge of Excel and statistics is recommended

## BAN460L Introduction to Business Analytics Lab (1 unit)

This course is designed to be taken with the course BAN460 Introduction to Business Analytics. The students gain hands-on experience with business analytics. The students learn to use popular data analysis tools.

## BAN463 Data Visualization (3 units)

Students will learn how to explore data and provide insight to others using data visualization techniques. After completing this course, students will be able to design, develop, analyze, and interpret various types of visualizations. They will also be able to develop compelling presentations and insightful stories, based on a given case study. The approach used will include theory as well as a hands-on component.

## BAN470 Introduction to Machine Learning Based Prediction Modeling and Forecasting (3 units)

Students will gain a working knowledge of applying machine learning to real world business prediction, forecasting, and decision making. After an introduction to the history and theory of machine learning, students will then learn how to compare and contrast the benefits of various models/algorithms and select the best models for the task at hand, prepare and import data, address data anomalies, train their models, modify and optimize their models, perform final model evaluation, and make recommendations based on their model's predictions to decision makers.
Prerequisite: MATH208, or BAN199, or Equivalent, or a Computer Science Course In; Artificial Intelligence, Machine Learning, Data Science, or Algorithms

## BAN472 Introduction to Artificial Intelligence (AI) (3 units)

This course provides a comprehensive introduction to Artificial Intelligence (AI), covering its history, fundamental concepts, applications, risks, and mitigation strategies. It offers insights into AI components and technologies, development processes, and ethical considerations, preparing students to understand the evolving world of AI.
Note: This course is not open to students enrolled in the School of Engineering without prior written approval from the Dean, School of Engineering. Engineering students are encouraged to take CS483/CS483L Fundamentals of Artificial Intelligence.

## Business Law (3 units required)

## BLAW310 Introduction to Business Law (3 units) - Required

This course is designed as an introductory-level course in U.S. business law. The focus will be on preparing students to spot potential legal issues in the operation of businesses so they can operate legally and know when to consult an attorney before taking action. The course begins with an overview of the U.S. legal system, its fundamental structures and processes. Emphasis is placed on fundamental legal principles pertaining to business transactions. Topics include sources of law and ethics, contracts, torts, agency, criminal law, business organizations, and judicial and administrative processes.

## Business (3 units required)

## BUS450 Professional and Technical Writing (3 units) - Required

This course presents students with practical instructions about communicating in different kinds of academic and workplace environments, as well as professional/technical communities. Students will learn how to organize and produce common professional writing work, such as technical reports, white papers, proposals, theses, and resumes. The course also covers different forms of effective writing, writing styles, approaches, formats, and citation of referenced materials.

## BUS493 Senior Project (3 unit)

This instructor-driven course implements a senior project as a culminating undergraduate experience in a student's professional area of interest, wherein students successfully demonstrate mastery of specialized knowledge and effectively communicate their results in writing and in oral presentations. Projects may later be used to showcase a student's skills to potential industry employers or as material to support graduate level studies.
Prerequisite: Open to School of Business Undergraduate Students who have earned 90 semester units before starting their senior project.

## Curricular Practicum

## CPT401 Curricular Practicum (1 unit)

Curricular practicum, or curricular practical training, is a supervised practical experience that is the application of previously studied theory. The curricular practicum must provide students with valuable learning experience and must significantly increase their knowledge in their program of study. It is defined as alternative work/study, internship, cooperative education, or any other type of required internship or practicum that is offered by sponsoring employers through cooperative agreements with the school and the course is an integral part of an established curriculum. At least three hours of work in a practical setting has the credit equivalency of one hour of classroom
lecture ( 1 unit). To be eligible to take this course, the student must be in good standing, have completed at least two semesters of coursework required in his/her degree program, obtained a written agreement that outlines the arrangement between the institution and the practicum site (including specific learning objectives, course requirements, and evaluation criteria), and received approval by a designated advisor. F-1 International students must follow additional rules required by the U.S. Immigration and Customs Enforcement. The student must use SFBU's online tool to submit his/her application for taking this course before meeting with a designated advisor for an assessment of eligibility. Information and instructions concerning this course are provided in the application form. This is a part-time practicum course taken by the undergraduate student to work no more than twenty hours each week during the approved practicum period. Failure in this course will prevent the student from taking any curricular practicum course afterwards.
Prerequisite: Refer to the instructions on the application and agreement documents.

## CPT402 Curricular Practicum (2 units)

Curricular practicum, or curricular practical training, is a supervised practical experience that is the application of previously studied theory. The curricular practicum must provide students with valuable learning experience and must significantly increase their knowledge in their program of study. It is defined as alternative work/study, internship, cooperative education, or any other type of required internship or practicum that is offered by sponsoring employers through cooperative agreements with the school and the course is an integral part of an established curriculum. At least three hours of work in a practical setting has the credit equivalency of one hour of classroom lecture ( 1 unit). To be eligible to take this course, the student must be in good standing, have completed at least two semesters of coursework required in his/her degree program, obtained a written agreement that outlines the arrangement between the institution and the practicum site (including specific learning objectives, course requirements, and evaluation criteria), and received approval by a designated advisor. F-1 International students must follow additional rules required by the U.S. Immigration and Customs Enforcement. The student must use SFBU's online tool to submit his/her application for taking this course before meeting with a designated advisor for an assessment of eligibility. Information and instructions concerning this course are provided in the application form. This is a full-time practicum course taken by the undergraduate student to work more than twenty hours but not to exceed forty hours each week during the approved practicum period. Failure in this course will prevent the student from taking any curricular practicum course afterwards.
Prerequisite: Refer to the instructions on the application and agreement documents.

## Economics (6 units required)

## ECON201 Principles of Macroeconomics (3 units) - Required

An introductory course focusing on aggregate economic analysis. Topics include: aggregate measures of economic activity, macroeconomic equilibrium, money and financial institutions, monetary and fiscal policy, international economics, and economic growth.
(Lower Division GE - Social Sciences area for non-business majors)

## ECON202 Principles of Microeconomics (3 units) - Required

This is an introductory course focusing on choices of individual economic decision-makers. Topics include scarcity, specialization and trade, market equilibrium, elasticity, production and cost theory, market structures, factor markets, and market failure.
(Lower Division GE - Social Sciences area for non-business majors)

## English (12 units required, at least 3 units need to be upper division)

(GE in English and Communication area)

## ENGL100 English Structure and Composition (0 units)

This course focuses on the structural components of academic writing, starting with the parts of speech, the parts of a sentence, and the building blocks of phrases and clauses. It covers sentence types and variety, parallelism, proper word usage and punctuation, and avoiding sentence errors. This course also emphasizes unity and coherence, as well as the structure of paragraphs and standard academic essays.

## ENGL101 Expository Writing (3 units) - Required

This fundamental level college writing course is based on a systematic approach to address students' needs to acquire knowledge and skills in written communication. It explores an integrated approach to the mechanics of communication, encompassing a full range of basic concerns in informative writing, going from its processes to its
forms, to the popular techniques writers have used to make their works outstanding. Students enhance their writing skills through the process of prewriting, organizing, drafting, revising, and editing of expository essays. By the end of the semester, students should have functional knowledge of English grammar, sentence structure, and punctuation, and be able to write effective academic expository and persuasive essays.

## ENGL102 Critical Thinking (3 units)

This course focuses on learning to be an effective provider and consumer of ideas in our information-saturated society. Students will learn to identify the intent of the message, to judge the soundness of the argument, and to evaluate the validity of the evidence. Rigorous training will help learners go beyond feelings and personal biases to clear, impartial, and accurate problem solving and decision making that are essential to all human communication: speaking, writing, debating, and persuading.

## ENGL115 Public Speaking (3 units) - Required

This course is designed to develop effective skills in extemporaneous speaking, formal presentations, and listening. Students will learn about nonverbal communication, cultural differences in communication, and research methodology.

## ENGL220 Small Group Communication (3 units)

This course is designed to accomplish the following learning goals: 1) to help the students understand theories and principles of small group decision making and problem solving, 2) to provide students with hands-on experience working in small groups, the most powerful tool in modern industry, and 3) to offer students opportunities to observe the development and operation of real-life task-oriented groups.

## ENGL320 Intercultural Communication (3 units)

This course introduces theories and practices regarding intercultural relationships and communication. It helps students adapt to a rapidly diversified workforce both in Silicon Valley and in other parts of the world. From the vantage point of this course, students will see the forces that shape cultures and influence intercultural contacts. They will be enabled to build harmonious and productive relationships with individuals from all national, ethnic, and linguistic backgrounds.

## ENGL425 Modern American Literature (3 units) - Required

This course examines fiction and non-fiction writing produced by American authors in the 20th and 21st centuries. This course will cover the themes, styles and content of modern American authors. Genres such as Drama, Action and Science Fiction will be investigated. Students will be asked to analyze context, culture, time, and structure. This course requires critical thinking on essays written about various readings.

## Prerequisite: ENGL101

## Finance (3 units required)

## FIN310 Fundamentals of Finance (3 units) -- Required

This course introduces the student to the world of finance. Financial management is concerned with the efforts of the corporation's managers to raise and allocate capital in a manner that will maximize and stabilize the firm's future cash flows. This course examines the concepts and techniques available to financial managers as they address various aspects of financing and investment questions. Topics include financial background, a review of accounting, financial statements, and taxes; cash flow and financial analysis, the financial system and interest, time value of money, the valuation and characteristics of bonds, the valuation and characteristics of stocks, risk and return, capital budgeting, and international finance. A case study will be applied to assist students' learning.

## Humanities (6 units required)

(GE in Humanities area)

## HU210 Introduction to Philosophy (3 units)

This course is an introduction to the great questions of philosophy, using an historical approach. The class covers Western and non-Western traditions from the pre-Socratic and Confucius to modern times.

## HU230 Art Appreciation (3 units)

A crash course in western art aesthetic from ancient art to post-modernism, this course gives the student a historical western art background that makes comparisons to the East, as well as the tools to analyze paintings through their own cultural point of view.

## HU240 Music Appreciation (3 units)

This course is designed for students to explore the fundamentals of music through easy listening examples from all aspects of sound: tone, color, harmony, rhythm, mood, dynamics, tempo, themes, and forms. Students will analyze music in respect to the historical and cultural context as well as to daily life.

## HU280 Principles of Ethics (3 units)

This course is designed to teach students ethical principles and problems applicable to their lives. Topics include application of ethical principles, background and philosophical principles of ethics, ethical practices, and practical ethical problems and solutions.

## HU420 Critical Analysis of Film (3 units)

This course examines the impact of film on society, and vice versa. Students will review, critique, and analyze several films throughout the semester. Knowledge, insight, and critical analysis will be required to demonstrate how the selected films reflect and impact cultures. This course examines content, meaning, history and culture of American and foreign films. Various genres and film movements will be viewed and discussed.

## HU450 Information Literacy for Academics, Life, and the Workplace ( $\mathbf{3}$ units)

This course will give students a skill that they will be able to use and benefit from for the rest of their lives: the ability to read, evaluate and understand newspapers, magazines, websites, journalistic materials, business writing and journals. Students will be able to evaluate and analyze bias, propaganda, agenda, point-of-view, and misinformation. Students will be able to interpret, organize and synthesize information from various sources to achieve a specific purpose with clarity and depth.
Prerequisite: ENGL101

## Mathematics (3 or 6 units required)

## MATH201 Calculus - I (3 units)

This course is the first of a series in calculus designed for students to build up the fundamental background of calculus and to learn its applications to very basic problems. Topics include functions, limits, continuous functions, derivatives and applications, antiderivatives, composite functions and chain rule, graphing techniques using derivatives, implicit differentiation, finite integrals, and fundamental theorems of calculus.
(GE - in Mathematics area)
Prerequisite: Pre-calculus subjects

## MATH202 Calculus - II (3 units)

This course is the second of the calculus series designed for students to understand integration techniques and extend the differentiation notion and methods to functions of multiple variables. Topics include logarithmic and exponential functions and their derivatives, inverse trigonometric functions, and derivatives, L'Hopital's rule, integration techniques and their applications, sequence, series, partial derivatives, and improper integrals.
(GE - in Mathematics area)
Prerequisite: MATH201

## MATH203 Linear Algebra (3 units)

Linear Algebra is one of the topics to prepare students for higher-level math courses such as Differential Equations. It is also relevant to computer and business students interested in Data Science since linear problems are often the simplest models of the natural world. In this course students learn the language, concepts, and techniques, from the ground up; the course starts with geometric representation of systems by equations, and later manipulation of abstract ideas as Singular Value Decomposition.
(GE - in Mathematics area)
Prerequisite: MATH201

## MATH208 Probability and Statistics (3 units) - Required

This course is designed for students to understand the concepts, theory, and applications of probability and statistics. Topics include permutation, combination, random variables, distribution, means and variance, normal distribution, random sampling, estimation, confidence interval, hypothesis testing, linear correlation, and regression.
(GE - in Mathematics area)
Prerequisite: Pre-calculus subjects

## Management

## MGT310 Principles of Management (3 units) - Required

This course is designed for students to learn the basic skills, applications, and foundations of management. Specifically, students will learn organizational structure and environment, and develop skills in planning, organizing, leadership, motivation, decision-making, communication, negotiation, and managing information for decision making. This course serves as a foundation for a more in-depth study of various aspects of management in other courses.
Preparation Recommendation: ECON201, ECON202

## MGT450 Organizational Behavior and Management (3 units)

This course explores the complex dimension of organizational behavior including examination of experiential and conceptual approaches to communication, self-awareness, perception, motivation, problem solving and culture. Students apply interpersonal and intrapersonal exploration to the management of change, leadership theories and organizational issues.

## MGT451 Project Management (3 units) - Required

This course introduces the principles of project and program management, the roles of project management, matrix organization in both private and public segments, and project management techniques leading to the efficient execution and completion of projects. Proposal development, case studies, and independent projects are required.

## MGT460 Production and Operations Management (3 units)

This course balances theory and practice of Production and Operations Management, covering quantitative, qualitative, and behavioral aspects. Students will learn how to identify and apply strategies, business process design principles, and quantitative techniques. This knowledge will then be applied to optimize business operations, enhance efficiency, and improve competitiveness. Students will develop quantitative models and use software tools such as Microsoft Excel Analysis ToolPak and Solver to create solutions for multivariate operational constraints. Typical control cases include service and product design choices, sales forecasting, scheduling, metrics for production/inventory control, statistical quality control, and logistical constraints.

## MGT460L Production and Operations Management Lab (1 unit)

Designed to be taken with MGT460, during this hands-on lab course students will learn software-based techniques to solve various time, labor, material, forecasting, capacity, take control of the conversion process from input to outputs, and costs optimizations in classic production planning and operations scenarios. Students will be expected to develop their own mathematical models, transform their models into software-based implementations and then determine the optimized best fit business solution. Students should be comfortable with or refresh themselves on solving multivariate simultaneous equations before the first-class meeting. Students should be comfortable installing software on their machines and/or using cloud-based services.

## MGT480 Entrepreneurship (3 units) - Required

This course explores the full range of the entrepreneurial process including the evaluation, development, and creation of a successful business. It will help potential entrepreneurs and professionals visualize and experience entrepreneurial development. The course explores the entrepreneurial approach to resources such as the development of an organizational structure, market analysis, financing entrepreneurial ventures, and screening venture opportunities. Individuals will experiment and evaluate what it takes to be an entrepreneur including developing the plan for a new business.

## MGT482 Launching Innovative Startups (3 units)

From introduction to mastery this hands-on project based course is ideal for entrepreneurs, future entrepreneurs, business owners, and innovators alike. In order to put your dream into action the logical entrepreneur development process will be covered from the ideation and business modeling phases through to the funding and marketing launch phases. Discussions are flexible with student suggested discussion topics welcome such as: design thinking, lean startup, validating the market opportunity, tips for successful start-up team management, low cost marketing tactics, pricing strategy, etc.

## Marketing ( 3 units required)

## MKT221 HTML \& CSS Web Page Construction (3 units) - Required

Students completing this course will gain a deep and technically accurate understanding of how websites work, display and gather data, and become proficient using HTML \& CSS to create, modify, and maintain user facing (client side) web pages. HyperText Markup Language (HTML) is the web page's working language that surrounds content. Cascading Style Sheets (CSS) provide a consistent look and feel styling across the website. Time permitting
the instructor may also introduce other technologies such as JavaScript and SQL and explain how they bring advanced functionality to a website.

MKT310 Principles of Marketing (3 units) - Required
This course introduces the major principles of marketing, marketing's role within the company, and its role in the global economy. Studies will focus on how to find marketing opportunities with market segmentation, how to get information for marketing decisions, the elements of product planning and new product development, wholesalers and retailers and their strategies, pricing, and promotion.

## MKT450 Marketing Management (3 units)

This course studies marketing management by analyzing real-world cases. Students will learn to implement and execute the marketing process through situation assessment, strategy formulation, marketing planning, marketing implementation and evaluation.
Prerequisite//Corequisite: MKT310 or Upper Division/Graduate Level Status

## MKT483 Monetizing Intellectual Property (3 Units)

Intellectual Property (IP) is a firm's most valuable asset. Ideal for social media content creators and going beyond traditional IP definition and usage, students in this course will learn innovative models and interesting strategies for generating capital and value from intangible assets. The rapidly growing USA market for leasing of intellectual property is already greater than $\$ 63$ billion per year. Course topics include: Out-right Sales, Third-Party Licensing, Royalty Securitizations, Bowie Bonds, Collateralization, Donations, Copyrights, Trademarks, Trade Secrets and Patents, etc. This course contains assignments with research and role playing.

## Professional Development

## P450 Career Development (1 unit) - Required

This course is designed for students to take in preparation for becoming working professionals. Topics include effective communication strategies, emotional intelligence, diversity and cultural awareness, professional behavior, and interview skills.

Note: SOC501 Emotional Intelligence Essentials may be used as a substitute for P450.

## Physical Sciences ( $\mathbf{3}$ or 6 units required)

PHYS101 Introduction to Physical Sciences (3 units)
This is an introductory course to expose the students to physical science subjects including the basics of astronomy, chemistry, earth science, and physics.
(GE - in Sciences area)
Prerequisite: Pre-calculus subjects

## PHYS201 Physics - I (3 units)

This course is designed to be the first of a series in physics for engineering students. Topics include vectors, motion and Newton's laws, gravitation, work and energy, momentum, mechanics of rigid bodies, oscillations, kinetic theory of gases, waves and sound, and thermodynamics. Laboratory practices are conducted formally each week.
(GE - in Sciences area)
Prerequisite: MATH201

## PHYS201L Physics Lab - I (1 unit)

This course is designed to be taken with the course PHYS201 Physics - I. The student first learns to use the general measuring equipment, the proper experimental procedures, and lab safety issues. The student is expected to gain skills in data analysis and lab report writing throughout the semester. Lab topics include measurements of position and velocity, kinematics, Newton's laws of motion, energy, momentum, conservation laws of energy and momentum, collisions, torque, rotational dynamics, waves, and thermodynamic behaviors.
(GE - in Sciences area)
Prerequisite: MATH201

## PHYS202 Physics - II (3 units)

This course is the second of a series in physics for engineering students. Topics include Coulomb's law and electric fields, currents and DC circuits, magnetic fields, time-varying EM fields, AC circuits, optics, interference, diffraction, and an introduction to modern physics. Laboratory practices are conducted formally each week.

## PHYS202L Physics Lab - II (1 unit)

This course is designed to be taken with the course PHYS202 Physics - II. The student learns to use electrical measuring equipment to conduct the first several experiments related to electromagnetism. Lab safety as well as skills in data analysis and lab report writing are stressed. Lab topics include measurement of electric field and potential, simple circuits, resistors, DC circuits, Kirchhoff's laws, capacitors, RC circuits, magnetic effects, inductors, AC circuits, electromagnetic induction, RLC circuits, geometrical optics, lenses, and light as a wave.
(GE - in Sciences area)
Prerequisite: PHYS201L

## Social Science (9 units required)

(GE - in Social Sciences area)

## SOC201 California History (3 units)

This course is designed to expose the students to the uniqueness of California history and its evolution. Topics include the social, economic, and political development of the "Golden State" over the last three centuries, spanning the Native-American, Spanish, Mexican, and American periods. Lectures, case studies, and field trips for research are the forms of study in this course.

## PSY210 Introduction to Psychology (3 units)

This psychology course reflects on theories and concepts of behavior and processes of the mind. Students will be introduced to topics such as motivation, emotion, personality, social behavior, perception, learning, and development. Different areas of psychology will be examined, such as cognitive, forensic, social, and developmental psychology. Additional topics may include environmental and biological factors affecting behavior, adaptation to stress and adversity, common disorders, experimental methods, current research trends, etc.

## SOC215 Introduction to Sociology (3 units)

This course provides a study of culture, social organization, and social relations. Additional topics include the major social problems in society, with an emphasis on how those problems are interrelated and the role of society in their creation and perpetuation. Issues and problems related to cross culture and diversity will also be addressed.

## SOC235 Multiculturalism in the United States (3 units)

This course looks into various aspects of multiculturalism in American society, exploring issues related to race, ethnicity, gender, sexual orientation, disability, and other social group identities.

## SOC250 Public Administration (3 units)

This course serves as an introduction to public administration. Early key thinkers in the development of public administration will be examined. During the semester, topics such as public policy formation, public management, human resources, reinvention, privatization, e-Government, public finance, performance measurement, and ethics will be reviewed. Students will become familiar with the primary issues and challenges facing public administrators today.

## SOC260 Civilization and Urbanization (3 units)

This is an introductory course designed to cover the 5,000 year shift from rural to urban throughout the world. The city is civilization's greatest work of art but has many challenges. The ancient walled cities, utopian writings, urban theories, religious experiments, English Garden Cities and new towns, American Greenbelt Towns, company towns, flight to the suburbs, Neo-traditional planning, the New Urbanism, and current sustainable development, Smart Growth, to the more recent Greening and Healthy Cities will be described and the actual city and regional planning practices are shown.

## SOC275 The American Experience (3 units)

This course is designed to lead the students to examine the 20th century rise of the United States as a modern multiethnic society with emphasis on the socioeconomic and political forces that have shaped its development.

## HIST340 Modern American History (3 units)

This course covers the development of the United States from post-Civil War (1865) to the present. Students will further develop their historical research, writing, critical thinking and presentation skills throughout this course. Covered topics start with the 1800's Reconstruction, Immigration, Industrialization, Western Expansion and American Urbanization, followed by the 20th century's World War I, The Great Depression, The New Deal, World

War 2, Korean War, Baby Boom Generation, Vietnam War, Civil Rights Movement and Globalization. The course concludes with the 21st Century including the impact of September 11, 2001, Terrorism, and Modern Technology.

## HIST400 Early American History (3 units)

This course is designed to lead the students to examine the early periods of American history that shaped the development of the nation, including America before Columbus, European expansion, the founding era and Revolution, the Constitution and the new republic, and subsequent periods of civic and political growth up to the Civil War.
Prerequisite: ENGL101

## SOC450 Emotional Intelligence (3 units)

Emotional Intelligence (EI) or Emotional Quotient (EQ) defines the skills or capacity to recognize ones' own emotions and those of others and how to control these emotions. In this course, the students will learn about Emotional Intelligence (EQ) and how to manage interpersonal relations and why it's important in their life and career. They will learn how to increase their EQ in developing their abilities in perceiving, using, understanding and managing emotions. EQ is a type of intelligence that unlike IQ can be increased and the benefits of it is apparent in one's life and career. Knowing yourself is the essence of EQ. Students will learn about themselves by assessing their EQ in the beginning of the class and at the end of the term to see if any improvement took place. In recent years, EQ has become a major indicator of achievement. This course will provide the means to increase and manage your EQ.

## - Graduate Certificate in Business Management - Overview

The School of Business offers one academic certificate program: Graduate Certificate in Business Management (GCM). This 18-unit (6-graduate courses) program provides an extensive foundation in management, equivalent to the first academic year of SFBU's 36 -unit MBA program utilizing actual SFBU MBA courses and university faculty. Students earn graduate level credit on an official SFBU transcript, and upon successful completion and official certificate diploma.

The GCM program may be completed in two semesters (one academic year) by taking 9-units (3 courses of 3 units each) during each semester.

The GCM utilizes SFBU's MBA applicable courses and follows the MBA program's 15 -week Spring, Summer, and Fall semester calendar, course start and times, course modality (on-campus, online, hybrid), grading, etc.

GCM students have full campus and e-library access. Students also enjoy convenient access to the greater San Francisco Bay \& San Jose' Silicon Valley areas.

All courses completed with a B or better may be transferred into SFBU's MBA program for those students that continue on into the MBA program.

## - Distance Learning

The GCM and MBA programs are accredited for distance learning. This allows students to mix and match on-site and online courses or choose to take $100 \%$ online courses. Online courses may be offered in a synchronous, hybrid or asynchronous modality. Not all courses are offered or offered in all modalities each term.

## - Committee Oversight

The responsibility for developing, modifying, and maintaining the graduate certificate program is performed by the School of Business Curriculum Committee which is led by a faculty group. Input from other stakeholders, such as qualified students, the dean, librarian, assessment coordinator, administrators, and employers is welcomed.

## - Application Requirements

Students must be over 18 years of age.
Admissions in the Graduate Certificate in Business Management follows an open and inclusive admissions process, with the student taking the responsibility to determine their readiness and ability to successfully address graduate level academic courses.

Applicants are recommended to have previously completed a high school, associates, bachelors, master's or doctoral level degree. Having a bachelor's degree is highly recommended.

To apply for admission into a GCM certificate program, the applicant is required to complete the application form online and submit the following documentation to the SFBU Admissions Office:

1. Copy of passport or a government issued I.D.
2. An English proficiency document is required for non-native English speakers: An official transcript with English course records or TOEFL/IELTS/ iTEP/PTE Academic/Duolingo/Cambridge B2 First score report or equivalent will suffice. See English Proficiency Requirement below for detailed information on the English entrance requirement.

## - English Proficiency Requirement

Non-native English speakers are considered meeting the entrance English proficiency requirement if they meet any of the following requirements:

- An official IELTS (Academic), TOEFL (iBT), TOEFL Essentials, iTEP Academic, PTE Academic, Duolingo, or Cambridge B2 First test score report. Minimum Score:
- IELTS (Academic) 5.5 band
- TOEFL (iBT) 59
- TOEFL Essentials 6.5 band
- iTEP Academic 3.7
- PTE Academic 50
- Duolingo 100
- Cambridge B2 First 168
- Successful completion of IEP Upper Intermediate Level B with a grade of B or better in all four courses
- An English assessment report from a few U.S. English language institutions recognized by major universities in the U.S.
- A degree earned or a college-level English credit course passed at an institution located in the U.S., U.K., Ireland, Australia, New Zealand, or Canada
- A degree earned at an institution in which the language of instruction is strictly English. (Applicants from the following countries meet this criteria: Anguilla, Antigua \& Barbuda, Ascension, Australia, Bahamas, Barbados, Belize, Bermuda, Botswana, British Virgin Islands, Canada (except Quebec), Cayman Islands, Dominica, England, Eritrea, Fiji, Gambia, Ghana, Gibraltar, Grenada, Guyana, Ireland, Jamaica, Kenya, Kiribati, Lesotho, Liberia, Malawi, Mauritius, Namibia, New Zealand, Nigeria, Papua New Guinea, Saint Helena, Saint Kitts \& Nevis, Saint Lucia, Saint Vincent \& The Grenadines, Scotland, Sierra Leone, Singapore, Solomon Islands, Swaziland, Tanzania, Tonga, Trinidad \& Tobago, Tuvalu, Uganda, Wales, Zambia, and Zimbabwe.
- F-1 International Students: The GCM is currently not accepting F-1 international students. Interested students are advised to consider the MBA program which supports F-1 international student applications.


## - Transfer of Credit from Other Institutions

The GCM program does not accept transfer credit from other institutions. Undergraduate SFBU students may transfer up to $\mathbf{9}$ units of SFBU graduate level business units into the GCM.

- Proficiency Exams:

The GCM program does not offer proficiency exams.

## - Experiential Learning

SFBU does not award credit for prior experiential learning.

## - Access to Computers

Students taking courses from the SFBU School of Business are expected to have access to computers upon which they will install various software packages, applications, microphones, cameras, connect to cloud applications, implement course assignments, and take examinations. Students should expect some courses may require software use/licensing fees comparable to the cost of a classic textbook. Example computer uses include; a web server, a relational database, the Python/JavaScript/PHP programming language, data visualization and analytics tools, making a business web site, creating analytical models, performing
statistics on data sets, machine learning, use for oral presentations, downloading of course materials and project templates, uploading of assignments, accessing the student portal and course learning management systems, use of cloud based applications, virtual office meetings with the professor, delivery of student services, interaction with the administration and staff, etc. For interactive online/hybrid classroom meetings and group video conferencing, the recommended bandwidth is $\geq 3 \mathrm{Mbps}$ in both the upstream and downstream directions. Remote students are expected to have their web cameras on during any interactive online virtual class meeting and during examinations. For individual peer-to-peer video conferencing 1 Mbps is the recommended minimum bandwidth. For an improved video experience, use of a wired connection/adapter can reduce interaction latency and the number of dropped packets compared to a WiFi connection.

## - Tuition

Tuition is charged per unit at the same rate as MBA courses. Tuition for courses taken to fulfill the GCM requirements are SFBU standard graduate level rate of $\mathbf{\$ 4 5 0 . 0 0}$ per unit.

## - Tuition per Unit for Courses Audited

For courses audited (without earning credit), the tuition is half the regular unit rate. Not all courses can be taken with "audit" status.

## - Estimated Total Charges for On-time Completion of Entire Educational Program

- Tuition: \$8,100
- Fees: \$855
- Graduation Petition Fee: $\$ 150$
- Textbooks \& Software Costs: \$900
- GCM: \$ 10,005

Please note that this estimate includes tuition, fees, textbooks costs, which is subject to change. All students are required to pay current rates for tuition and fees each semester. Additional fees may apply, depending on the services requested (see Tuition and Fee section). The cost of course material including textbooks and course-related software is estimated to be approximately $\$ 150$ per course. The actual cost of course materials can vary significantly from course to course. Living expenses such as housing, food, recreation, transportation, etc. are not included above.

## - Graduation Requirements

The GCM requires a minimum of 18 units of graduate-level business courses earned at SFBU. The GCM requires coursework in the following categories:

1. Core Required Courses, (6 units)
2. Major Courses Selectable from a Pool, (12 units)

The following are required for graduation:

- Maintain a grade of C or better for all courses taken towards the certificate requirements,
- Maintain an overall G.P.A. of 3.0 or better,
- Maintain good standing with the University - with clear financial, library, and other school records,
- The student is approved to graduate after filing a petition for graduation.
- Not more than 3 units of practicum coursework may be counted towards the GCM.


## - Career Planning

For career planning, students are advised to meet one-on-one with the Career Center staff in their first term of enrollment.

The following is the description of the GCM program, with a statement of its objectives, the background preparation required, and the program curriculum.

## - Graduate Certificate in Business Management (GCM) CIP Code: 52.0201

The GCM shares the MBA Program's Objective: The objective of the program is to provide aspiring leaders a broad base of field-proven interdisciplinary business concepts in management, marketing, human resources, finance, analytics, and technology that will enable them to launch their professional careers to the next level. Program graduates will have acquired the flexibility of thought to make wise decisions in today's complex, diverse, multicultural, and global business settings and to enhance their careers.

The GCM shares the MBA Program's Learning Outcomes (PLOs): Graduating students are expected to demonstrate the following program learning outcomes -
(PLO 1) Written Communication - In a contextually appropriate manner, write strategic business plans and tactical implementation plans.
(PLO 2) Oral Communication - In a business setting, craft and deliver compelling messages, based on logic and variety of supporting materials.
(PLO3) Quantitative Reasoning - Convert relevant information into insightful mathematical portrayals and apply it across a wide range of business situations.
(PLO 4) Information Literacy - Determine, acquire, and analyze data needed from multiple sources in order to create recommendations for complex business situations.
(PLO 5) Critical Thinking - Methodically solve multi-criteria business and managerial problems.
(PLO 6) Specialized Knowledge - Synthesize concepts in management, finance, accounting, and marketing to resolve complex business challenges.

## GCM Curriculum

A minimum of $\mathbf{1 8}$ semester units of graduate study earned at SFBU are required for the GCM program. The GCM curriculum includes MBA acceptable coursework. Students must earn a CGPA of 3.0 to earn the Certificate. The Graduate Certificate in Business Management admissions follows an open and inclusive approach admissions process, with the student taking the responsibility to determine their readiness and ability to successfully address graduate level academics, hence, course prerequisite/corequisites are not enforced for GCM students.
I. Core Required Management Courses (6 units)

Take at least 2 out of the 3 following the courses below to gain a knowledge base of business theories and techniques.

| FIN501 | Financial Management |
| :--- | :--- |
| HRM531 | Human Resource Management |
| MGT530 | Logistics and Operations Management |

The third course if taken will be counted towards Section II below for selectable business courses.
II. Selectable Business Courses Selectable from the MBA Acceptable Pool (12 units)

Beyond Core Requirements, the student is required to take at least 12 units of graduate level business (major) coursework (courses numbered $4 \mathrm{xxG}, 5 \mathrm{xx}$ ) to meet this requirement. Courses must be from the School of Business, or CPT, or Career Development. Refer to individual course descriptions listed under the MBA program.

Curricular Practicum: Not more than 3 units of practicum coursework may be counted towards the GCM. When applicable, the student may take curricular practicum courses (CPT501 or CPT502) and engage in practical training to work on company projects that are directly related to the student's course of study. The student must observe the rules required for taking the practicum courses.

## Career Development: P450G Career Development (1 unit)

This course is designed for students to take in preparation for becoming working professionals. Topics include effective communication strategies, emotional intelligence, diversity and cultural awareness, professional behavior, resume writing, job searching skills, and interviewing skills.

Emotional Intelligence: Emotional Intelligence courses SOC501 (1 unit) Emotional Intelligence and SOC450G (3 units) Emotional Intelligence are considered major pool courses and are acceptable to be taken in the GCM as either major or electives. Emotional Intelligence (EI/EQ) is essential for successfully managing and controlling interpersonal relations and therefore helpful to those aspiring to management positions.

Courses from the School of Engineering are not allowed.
Note: BUS595 MBA Capstone course is not applicable to the GCM program and is not available for GCM student enrollment.
Note: The GCM program does not offer formal concentrations.

## BSBA to GCM to MBA Program Pathway Sequence:

Undergraduate SFBU students planning on enrolling into the MBA program may first enter the GCM program and transfer the earned credits into the SFBU MBA.

Continuing undergraduate students can enroll into the GCM at any time. Only students with bachelor degrees can transfer the GCM earned credit into the SFBU MBA program. The SFBU MBA program requires a bachelor's degree.

SFBU BSCS or SFBU BSBA students who took SFBU MBA graduate level credits as electives can transfer those units, but engineering units are not transferable. For example, SFBU students may earn BSBA/BSCS degrees, a GCM and finally an MBA. Required GCM core and selectable courses do not need to be retaken and will be credited within the MBA program.

## Joint MBA and GCM

Actively enrolled SFBU MBA students may request after paying the GCM graduation fee, a Graduate Certificate in Business Management certificate upon completing all GCM graduation requirements, even if they have not completed their SFBU MBA program.

## - Course Descriptions

Refer to: Master of Business Administration Degree Program
Master's degree courses are numbered in the 500 s. The MBA degree program allows for a limited number of credits for 400 level courses with a " $G$ " suffix.

## Course No. Description

450G-499G Cross-listed specialized courses taken for graduate level credits 500-599 Graduate level courses

## Illustrative Advising Road Map GCM/Suggested Study Plan Course Sequence:

Course Numbers: Courses numbered from 450G to 499G are cross-listed specialized courses taken for graduate-level credits; courses numbered in the 500 s and above are graduate level courses. Advisory: Students should expect graduate level $4 \times x$ courses to have noticeably higher-level assignments compared to 4 xx undergraduate workloads.

The GCM Roadmap with a 9 unit course load pace is a guide for outlining a pathway towards certificate completion. It showcases one way but not the only way to complete a certificate. The 2 semester ( 1 academic year) road map below is an advising tool that students may wish to consider for completing the 18 -semester unit GCM requirement for graduation. Students are advised to take core courses whenever they are offered as not all courses are offered every term.

C $=$ Core Required Courses
S = Selectable from MBA Pool
Figure 1 Illustrative Typical GCM Program Map
Table A Illustrative Typical GCM Roadmap
18 min Units Required
$\mathrm{C}=$ Core Courses
$\mathrm{S}=$ Selectable from MBA List

| Semester 1 |  |  | Units | Semester 2 |  |  | Units |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FIN501 | Financial Management | C | 3 | MGT542 | Technology and Product Management | S | 3 |
| MGT530 | Logistics and Operations Management | C | 3 | MGT501 | Agile Project Management | S | 3 |
| HRM531 | Human Resource <br> Management  | C | 3 | FIN510 | Investment Analysis | S | 3 |
| 9 | Cumulative/Current Units |  | 9 | 18 | Cumulative/Current Units |  | 9 |

18 units $=6$ Core Required +12 Major Selectable Pool and/or Core


## ■ Master's Degree Program

The School of Business offers two master's degree program:

- Master of Business Administration (MBA)

Optional 12-unit Concentrations in:

- Marketing Management
- Management
- Business Analytics
- Master of Science in Business Analytics (MSBAn)


## - Objective

The objective of the master's degree programs is to provide advanced training to those who wish to practice their profession with increased competence in the global business industries. The program emphasizes both mastery of subject matter and an understanding of related research and research methodology. This emphasis implies development of the student's ability to integrate and apply the subject matter.

## - Committee Oversight

The responsibility for developing, modifying, and maintaining the graduate program is performed by the School of Business Curriculum Committee which is led by a faculty group. Input from other stakeholders, such as qualified students, the dean, librarian, assessment coordinator, administrators, and employers is welcomed.

## - Distance Learning

The MBA program is approved for distance learning. This allows students to mix and match on-site \& online courses or choose to take $100 \%$ online courses. Online courses may be offered in a synchronous or an asynchronous modality.

As of this writing the MSBAn is approved only for in-person on-campus learning. Thus, MSBAn students must take more than $50 \%$ of their course units in the on-campus modality.

## - Concentrations

The MBA program offers students the option to select a single concentration of 12-units (typically 4 courses). Choosing concentration is not required. The three optional concentrations students may choose from are:

- Marketing Management
- Management
- Business Analytics

The MSBAn does not offer concentration.

## - Credential Requirements

Master's degree program applicants must hold a valid bachelor's degree. Applicants must have been in good academic standing at the last institution attended. A bachelor's degree with a minimum CGPA of 2.5 is required. A bachelor's degree with a CGPA below 2.5 does not qualify for admission.

However, applicants who have previously completed a master's or doctoral level degree from an accredited institution will be granted admission to the MBA or MSBAn program, provided they have met the program's other admissions requirements (such as English proficiency, etc.).

Note: It is recommended that applicants considering the MSBAn program feel confident and comfortable with probability, statistics, and programming in at least one computer language.

## - Application Requirements

Graduate program admission follows a holistic review process. Academic and non-academic achievements are considered while assessing an applicant's ability to succeed in the master's programs. An interview with the Academic team may also be conducted if necessary.

To apply for admission into a master's degree program, the applicant is required to complete the application form online and submit the following to the SFBU Admissions Office:

1. Copy of passport or a government issued I.D.
2. Official transcripts from ALL previously attended institutions
3. Foreign Credential Evaluation: Foreign transcripts must be evaluated by a member of National Association of Credential Evaluation Services (NACES), Association of International Credential Evaluators (AICE), or American Association of Collegiate Registrars and Admissions Officers (AACRAO)'s International Education Services
4. A document certifying completion of degree/s earned (bachelor's/master's/doctoral level degrees); a transcript printed with degree completion information will suffice
5. An English proficiency document is required for non-native English speakers: An official transcript with English course records or TOEFL/IELTS/ iTEP/PTE Academic/Duolingo/Cambridge B2 First score report or equivalent will suffice. See English Proficiency Requirement below for detailed information on the English entrance requirement.

Additional suggested indicators of potential success at SFBU. Provide evidence of one or more of the following:

- Additional undergraduate and/or graduate degrees and certifications
- Previous coursework or training in the intended field of study
- Work experience
- Achievement in sports, music and/or other creative pursuits
- Involvement in community/volunteer services
- Fluency in multiple foreign languages
- Personal statement with background and purpose for seeking the degree
- Other special skills

Note: The MSBAn program does not support F-1 international student visas as of this writing

- MBA F-1 International Students: In addition to the above general application requirements, an international applicant is required to submit the following additional documents:

1. A financial support document - provide a recent financial support document indicating a minimum amount of $\$ 39,800$ available to pursue study in the first academic year at SFBU.

- A current bank letter and bank statement; or
- A loan letter from a lending institution; or
- Copies of fixed deposits.

An affidavit of support or sponsor letter is required if the funds are not in the applicant's name.
2. A transfer student (from a U.S. institution) is required to submit a photocopy of his/her

- previous I-20 form,
- visa, and
- I-94 (U.S Department of Homeland Security issued arrival / departure form).

Applicants interested in applying for scholarships need to provide additional documents. Please refer to the section on Scholarships in this catalog and on the website.

## - Credential Evaluation Requirement

Applicants who have earned their bachelor's credentials at a foreign institution must provide a course-bycourse credential evaluation analysis. This credential evaluation must be completed by a member of National Association of Credential Evaluation Services (NACES), Association of International Credential Evaluators (AICE), or American Association of Collegiate Registrars and Admissions Officers (AACRAO)'s International Education Services. This credential evaluation must be in the original sealed envelope, if it is a hard copy; an electronic copy may be sent directly from the evaluation agency to SFBU. Note: International schools/colleges accredited by U.S. regional accrediting bodies are exempt from this requirement.

## - English Proficiency Requirement for MSBAn and MBA programs

Non-native English speakers are considered meeting the entrance English proficiency requirement if they meet any of the following requirements:

- An official IELTS (Academic), TOEFL (iBT), TOEFL Essentials, iTEP Academic, PTE Academic, Duolingo, or Cambridge B2 First test score report. Minimum Score:
- IELTS (Academic) 5.5 band
- TOEFL (iBT) 59
- TOEFL Essentials 6.5 band
- iTEP Academic 3.7
- PTE Academic and PTE Academic Online 50
- Duolingo 100
- Cambridge B2 First 168
- Successful completion of IEP Upper Intermediate Level B with a grade of B or better in all four courses
- An English assessment report from a few U.S. English language institutions recognized by major universities in the U.S.
- A degree earned or a college-level English credit course passed at an institution located in the U.S., U.K., Ireland, Australia, New Zealand, or Canada
- A degree earned at an institution in which the language of instruction is strictly English. (as determined solely by SFBU) Applicants from the following countries meet this criteria: Anguilla, Antigua \& Barbuda, Ascension, Australia, Bahamas, Barbados, Belize, Bermuda, Botswana, British Virgin Islands, Canada (except Quebec), Cayman Islands, Dominica, England, Eritrea, Fiji, Gambia, Ghana, Gibraltar, Grenada, Guyana, Ireland, Jamaica, Kenya, Kiribati, Lesotho, Liberia, Malawi, Mauritius, Namibia, New Zealand, Nigeria, Papua New Guinea, Saint Helena, Saint Kitts \& Nevis, Saint Lucia, Saint Vincent \& The Grenadines, Scotland, Sierra Leone, Singapore, Solomon Islands, Swaziland, Tanzania, Tonga, Trinidad \& Tobago, Tuvalu, Uganda, Wales, Zambia, and Zimbabwe.


## - Transfer of Credit from Other Institutions

Graduate course credit earned at other accredited higher education institutions may be transferable to meet the student's graduation requirements if the courses are closely related to the business management course requirements in the MBA or MSBAn programs and the grade earned meets the requirement stated below. Such course credits are considered qualified transfer credits. Credit transfer is made by the admission evaluators while conducting the admission evaluation. The following statements apply to qualified transfer credits:

- The SFBU Admissions Office must receive all official transcripts prior to the student's joining a degree program. Without preapproval, transcripts received after the student joins SFBU cannot be used in transferring credits, except for records from the term immediately preceding the student's starting semester at SFBU. Up to 12 (MBA)/ 9 (MSBAn) units of courses that have been reviewed and currently approved as part of a formal SFBU articulation/transfer agreement are guaranteed to transfer into the MBA and MSBAn program, respectively.
- The student was officially enrolled in the course.
- Courses eligible for transfer will be evaluated based on the comparability in content, quality, and rigor of SFBU's courses. The transfer evaluation will include, but is not limited to, course descriptions, course syllabi, and/or general public information. Students may be asked to provide course catalogs or syllabi if needed. Up to 12 units for the MBA program or 9 units for the MSBAn program of course units that have been reviewed and currently approved as part of a formal SFBU articulation/transfer agreement are guaranteed to transfer.
- For the MBA program no more than $\mathbf{1 2}$ units of qualified graduate-level course credits may be transferred. Students must take at least 24 units at SFBU.
- For the MSBAn program no more than 9 units of qualified graduate-level course credits may be transferred. Students must take at least 21 units at SFBU.
- Without prior approval, courses for transfer to SFBU may not be completed concurrently at another institution while a student is matriculated in an SFBU degree program.
- The credits contemplated for transfer must be earned at (1) institutions approved by the Bureau for Private Postsecondary Education, (2) public or private institutions of higher learning accredited by an accrediting association recognized by the U. S. Department of Education, or (3) foreign institutions of higher learning. Credits earned at a foreign institution degree must be evaluated by a member of National Association of Credential Evaluation Services (NACES), Association of International Credential Evaluators (AICE), or American Association of Collegiate Registrars and Admissions Officers (AACRAO)'s International Education Services.
- Professional Development Units (PDUs) offered by professional/industry organizations cannot be transferred to SFBU for academic credit.
- Continuing Education Units (CEUs) offered on a non-academic basis by other academic institutions cannot be transferred to SFBU for academic credit.
- Credits transferred at the time of admission evaluation will reduce program length. Credit transferred from any outside institution has no effect on the calculation of the student's GPA or CGPA.
- Credits transferred from any outside institution are excluded from the maximum attempted units for the program.
- Credits transferred, performed at the time of admission evaluation, will reduce the program length. Credit transferred from any outside institution is excluded from the program length and has no effect on the calculation of the student's GPA or CGPA.
- Credits are transferred by the following conversion:


## a. Definition of a Semester Unit:

One semester credit hour equals, at a minimum, 15 contact classroom hours of lecture, 30 contact hours of laboratory, or 45 contact hours of practicum.

## b. Conversion Factor:

$\mathbf{1}$ quarter unit $=\mathbf{0 . 6 6}$ semester unit

## - Grades Required for Transfer Credit

In the master's degree programs, qualified courses completed with an equivalency of a letter grade of " B " or better are transferable. Courses completed with Pass/No Pass are not transferable unless the transcript states that the general grading policy is not based on letter grades. This policy must be in writing from the institution (transcript key or a letter of verification).

## - Transfer of Credit from SFBU's Graduate Certificate in Business Management

Graduate course credit earned in the GCM is transferable to meet the student's MBA graduation requirements if transferred within 7-years of completing the GCM.

Graduate course credit earned in the GCM MAY be transferable to meet the student's MSBAn graduation requirements if transferred within 7-years of completing the GCM and the courses to be transferred overlap with the MSBAn course pool (BAN, MGT, and MKT courses, free electives). Courses not within the current MSBAn course pool cannot be transferred.

- Proficiency Exams: A student may be required to demonstrate proficiency in an undergraduate background subject taken more than ten years prior to application with SFBU by successful completion of a proficiency examination.


## - Experiential Learning

SFBU does not award credit for prior experiential learning.

## - Access to Computers

Students taking courses from the SFBU School of Business are expected to have access to computers upon which they will install various software packages, applications, microphones, cameras, connect to cloud applications, implement course assignments, and take examinations. Students should expect some courses may require software use/licensing fees comparable to the cost of a classic textbook. Example computer uses include; a web server, a relational database, the Python/JavaScript/PHP programming language, data visualization and analytics tools, making a business web site, creating analytical models, performing statistics on data sets, machine learning, use for oral presentations, downloading of course materials and project templates, uploading of assignments, accessing the student portal and course learning management systems, use of cloud based applications, virtual office meetings with the professor, delivery of student services, interaction with the administration and staff, etc. For interactive online/hybrid classroom meetings and group video conferencing, the recommended bandwidth is $\geq 3 \mathrm{Mbps}$ in both the upstream and downstream directions. Remote students are expected to have their web cameras on during any interactive online virtual class meeting and during examinations. For individual peer-to-peer video conferencing 1 Mbps is the recommended minimum bandwidth. For an improved video experience, use of a wired-connection/adapter can reduce interaction latency and the number of dropped packets compared to a WiFi connection.

## - Tuition

Tuition is charged per unit. Tuition for courses taken to fulfill the master's degree requirement is $\mathbf{\$ 4 5 0 . 0 0}$ per unit.

## - Tuition per Unit for Courses Audited

For courses audited (without earning credit), the tuition is half the regular unit rate. Not all courses can be taken with "audit" status.

## - Estimated Total Charges for On-time Completion of Entire 36-unit MBA Educational Program

- Tuition: $\$ 16,200$
- Fees: \$ \$1,820
- Graduation Petition Fee: \$300
- Textbooks \& Software Costs: \$1,800
- Health Insurance Premium: \$1,980
- Total MBA program: $\$ 22,100$

Please note that this estimate includes tuition, fees, textbooks costs, and health insurance premium, which is subject to change. All students are required to pay current rates for tuition and fees each semester. Additional fees may apply, depending on the services requested (see Tuition and Fee section). The cost of course material including textbooks and course-related software is estimated to be approximately $\$ 150$ per course. The actual cost of course materials can vary significantly from course to course.

## - Estimated Total Charges for On-time Completion of Entire 30-unit MSBAn Educational Program

- Tuition: $\$ 13,500$
- Fees: $\$ 1,820$
- Graduation Petition Fee: \$300
- Textbooks \& Software Costs: $\$ 1,800$
- Health Insurance Premium: \$1,808
- Total MSBAn program: $\$ 19,228$

Please note that this estimate includes tuition, fees, textbooks costs, and health insurance premium, which is subject to change. All students are required to pay current rates for tuition and fees each semester. Additional fees may apply, depending on the services requested (see Tuition and Fee section). The cost of course material including textbooks and course-related software is estimated to be approximately $\$ 150$ per course. The actual cost of course materials can vary significantly from course to course.

## - Graduation Requirements MBA and MSBAn

The Master of Business Administration degree program requires a minimum of $\mathbf{3 6}$ units of graduate-level courses. The Master of Science in Business Analytics degree program requires a minimum of $\mathbf{3 0}$ units of graduate-level courses.

The MBA and MSBAn degree programs require- coursework in the following categories:

1. Core Required Courses,
2. Major Courses Selectable from a Pool,
3. Electives, and
4. A Required Capstone Course.

The following are required for graduation:

- Maintain a grade of C or better for all courses taken towards the degree requirements,
- Maintain an overall G.P.A. of 3.0 or better,
- Maintain good standing with the University - with clear financial, library, and other school records,
- The student is approved to graduate after filing a petition for graduation.


## - Capstone Course

The Business Capstone Course (BUS595) is intended to integrate the knowledge and skills that the student has acquired from the courses taken in the respective program. The capstone course instructor determines the course objectives and scope based on the program curriculum and business trend. With this learning experience, the student is prepared to pursue his/her career in the changing global business arena.

The student shall take the capstone course near the end of his/her program of study.

## $\checkmark$ Career Planning

Students are encouraged to gain real-world experience by engaging in curricular practicum training (internship) when applicable. For career planning, students meet one-on-one with the Career Center staff in their first term of enrollment. Students learn to prepare their resumes and participate in job searches and other activities. The students may utilize the online eCareer Center from their portal for job listing and offcampus job fairs.

The following is the description of the MBA degree program, with a statement of its objectives, the background preparation required, and the program curriculum.

## Background Recommendations

Students admitted into the MBA or MSBAn degree programs are required to have proper background for taking graduate level coursework. English proficiency is required. Refer to the section on "English Proficiency Requirement" in the chapter "Admission Policies" for details.

For students who lack college level mathematics, statistics (preferred), business math, or the equivalent it is recommended that they take SFBU course BAN460G Introduction to Business Analytics (3 units). BAN460G is considered an elective in the MBA or MSBAn programs.

For students who lack professional career experience or a career planning course such as P450 or the equivalent, it is recommended that they take SFBU course P450G Career Development (1 unit). P450G is considered an elective in the MBA and MSBAn programs.

The following is the description of the MBA degree program, with a statement of its objectives, the background preparation required, and the program curriculum.

## - Master of Business Administration (MBA) CIP Code: 52.0299

MBA Program Objective: The objective of the MBA program is to provide aspiring leaders a broad base of field-proven interdisciplinary business concepts in management, marketing, human resources, finance, analytics, and technology that will enable them to launch their professional careers to the next level. Program graduates will have acquired the flexibility of thought to make wise decisions in today's complex, diverse, multicultural, and global business settings.

## MBA Concentrations:

The MBA program offers three concentration choices. Choosing concentration is not required.
Marketing Management Concentration: Students who complete their MBA with 12 units or more of Marketing (MKT, SOC) specialization may request the Registrar's office to have their transcripts and printed diploma marked with "Concentration in Marketing Management."

Management Concentration: Students who complete their MBA with 12 units or more of Management, Green Business Management, and/or Human Resource Management (MGT, GBM, HRM, SOC) specialization (excluding MGT530 and HRM531 core required courses) may request the Registrar's office to have their transcripts and printed diploma marked with "Concentration in Management."

Business Analytics Concentration: Students who complete their MBA with 12 units or more of Business Analytics (BAN, including MGT460/L) specialization may request the Registrar's office to have their transcripts marked with "Concentration in Business Analytics."

- An approved concentration will appear on the student's official transcript and printed diploma. If no concentration is selected the transcript will show MBA without any concentration notation.
- Students may have only one formal concentration.
- Concentrations are open to both on-campus classroom and distance learning modality students.
- Courses counting towards the concentration unit requirement may be taken as either Major or Electives. Required Core courses and the Capstone course do not count towards concentration.
- Students are advised to complete the 12 units applicable to their concentration before meeting with the Registrar's Office to formally request their desired concentration. Due to logistics and diploma printing time requirements spanning multiple months, last-minute concentration requests and changes may not be approved at the discretion of the Registrar's Office.

MBA Program Learning Outcomes (PLOs): Students graduating with a Master of Business Administration degree are expected to demonstrate the following program learning outcomes -
(PLO 1) Written Communication - In a contextually appropriate manner, write strategic business plans and tactical implementation plans.
(PLO 2) Oral Communication - In a business setting, craft and deliver compelling messages, based on logic and variety of supporting materials.
(PLO 3) Quantitative Reasoning - Convert relevant information into insightful mathematical portrayals and apply across a wide range of business situations.
(PLO 4) Information Literacy - Determine, acquire, and analyze data needed from multiple sources in order to create recommendations for complex business situations.
(PLO 5) Critical Thinking - Methodically solve multi-criteria business and managerial problems.
(PLO 6) Specialized Knowledge - Synthesize concepts in management, finance, accounting, and marketing to resolve complex business challenges.

## MBA Curriculum

A minimum of $\mathbf{3 6}$ semester units of graduate study are required for the MBA program. The MBA curriculum includes coursework in the following categories: Core Required Courses, Major Required Courses, Elective Courses, and a Capstone Course. A number of areas of interest are shown in the section of Major Requirements; each is listed with a cluster of courses. Students taking courses in an area of interest will gain in-depth knowledge and skills in the corresponding business professional field. Additionally, taking courses in an area of interest can be beneficial to the student for career planning. The student must meet prerequisite/corequisite requirements when taking any course.
I. Core Required Courses (9 units)

The following required courses provide a knowledge base of interdisciplinary business theories and techniques. Core courses may be taken at any time during the program.

FIN501 Financial Management
HRM531 Human Resource Management
MGT530 Logistics and Operations Management

## II. Major Courses Selectable from the School of Business Graduate Course Pool (12 units)

Beyond Core Requirements, the student is required to take at least 12 units of 500 level business (major) coursework. Although not required, the student has the opportunity to select a concentration or an area of interest and take courses in the chosen area to meet the major requirements. Taking a sufficient number of courses in a concentration or an area of interest is beneficial to the student for entering the corresponding business profession.

## Concentrations (Optional)

Management (excludes HRM531 and MGT530):

| MGT450G | Organizational Behavior and Management |
| :--- | :--- |
| MGT451G | Project Management |
| MGT460G | Production and Operations Management |
| MGT460LG | Production and Operations Management Lab |
| MGT480G | Entrepreneurship |
| MGT500 | Risk Management |
| MGT501 | Agile Project Management |
| MGT540 | Management of Innovation |
| MGT542 | Technology and Product Management |
| MGT550 | Global Outsourcing Project Management |
| GBM500 | Green and Socially Responsible Management |
| HRM532 | Strategic Workforce Planning |
| SOC450G | Emotional Intelligence |
| SOC501 | Emotional Intelligence Essentials |

## Marketing:

| MKT450G | Marketing Management |
| :--- | :--- |
| MKT541 | Strategic Marketing |
| MKT542 | Global Marketing |
| MKT545 | Global Trade and Operations |
| MKT550 | Consumer and Buyer Behavior |
| MKT551 | Sales Management |
| MKT552 | Brand Management and Marketing |
| MKT553 | Digital Marketing and Social Media |
| MKT554 | Search Engine Optimization (SEO) |
| SOC450G | Emotional Intelligence |
| SOC501 | Emotional Intelligence Essentials |

## Business Analytics:

| BAN452G | Excel for Finance, Accounting \& Analytics |
| :--- | :--- |
| BAN455G | Server-Side Data Processing Using Python/PHP |
| BAN460G | Introduction to Business Analytics |
| BAN460LG | Introduction to Business Analytics Lab |
| BAN463G | Data Visualization |
| BAN470G | Introduction to Machine Learning Based Prediction Modeling and |
|  | Forecasting |
| BAN472G | Introduction to Artificial Intelligence (AI) |
| BAN501 | Quantitative Methods for Business |
| BAN520 | Business Analytics for Dashboards |
| BAN524 | Intermediate Business Analytics |
| BAN572 | Process Management for Analytics |
| BAN589 | Special Topics on Analytics, Strategy, and Applied Information |
| MGT501 | Agile Project Management |
| MGT460G | Production and Operations Management |
| MGT460LG | Production and Operations Management Lab |

## Areas of Interest

## Finance:

FIN501 Financial Management (Required Core Course)
FIN510 Investment Analysis
FIN512 Financial Risk Management
FIN522 International Trade and Investment
FIN568 Corporate Finance
FIN580 Portfolio Management
FIN585 International Finance

## Accounting:

| ACC450G | Cost Accounting |
| :--- | :--- |
| ACC451G | Intermediate Accounting - I |
| ACC452G | Intermediate Accounting - II |
| ACC490G | Introduction to Taxation |
| ACC501 | Advanced Accounting |
| ACC512 | Federal Taxation of Business Enterprises |
| ACC530 | Auditing |

MBA students who are considering a future career as a Certified Public Accountant (CPA) should; seek additional advising, study the California Board of Accountancy's (CBA www.dca.ca.gov/cba/) numerous requirements, and from the start of their studies focus where possible all core and elective choices towards meeting the CBA's numerous academic requirements. The CBA requires substantial additional academic education and professional training outside the scope of the MBA program.

Unlike concentrations, areas of interest are informal and are not shown on a student's transcript or printed diploma.

Note: Emotional Intelligence courses SOC501 (1 unit) Emotional Intelligence Essentials and SOC450G (3 units) Emotional Intelligence are considered major pool courses and are also acceptable to be taken as electives. Emotional Intelligence (EI / EQ) is essential for successfully managing and controlling interpersonal relations, and therefore helpful to those aspiring to management positions.

## III. Free Electives (12 units)

The student may elect any graduate-level courses (courses numbered $4 \mathrm{xxG}, 5 \mathrm{xx}$ ) to meet the Electives requirement. Free electives may include courses from the School of Business, the School of Engineering, CPT, Career Development, and courses transferred in.

Curricular Practicum: When applicable, the student may take curricular practicum courses (CPT501 or CPT502) and engage in practical training to work on company projects that are directly related to the student's course of study. The student must observe the rules required for taking the practicum courses. No more than 6 units of practicum coursework may be counted towards the MBA's graduation requirements.

## Career Development: P450G Career Development (1 unit)

This course is designed for students to take in preparation for becoming working professionals. Topics include effective communication strategies, emotional intelligence, diversity and cultural awareness, professional behavior, and interview skills.
IV. Capstone Course (3 units)
(A required subject)
Upon completing most of the coursework for this program, the student is required to take the capstone course and, under the guidance of the course instructor, integrate the knowledge and skills learned from all of the courses taken during the program to form a complete business plan as the class project.

## BUS595 Business Capstone Course

## Illustrative Advising Road Map MBA/Suggested Study Plan Course Sequence:

Course Numbers: Courses numbered from 450 G to 499 G are cross-listed specialized courses taken for graduate-level credits; courses numbered in the 500s and above are graduate level courses. Advisory: Students should expect graduate level 4 xxG courses to have noticeably higher-level assignments compared to 4 xx undergraduate workloads. Cross-listed specialized courses and graduate-level courses are to meet the graduation requirements. Prerequisites must be met before taking a course. Corequisites may be taken at the same time the course is taken.

Note: If a new graduate business student took accounting or business law courses in foreign a country and desires to professionally work in areas requiring detailed American accounting or law knowledge then they are strongly advised to take the equivalent topic area American courses.

Degree Maps are guides for outlining a pathway towards degree completion. They each showcase one way but not the only way to complete a degree.

The 3 semester (approximately 1 calendar year) and 4 semester (approximately 1.3 calendar years) road maps below are advising tools that outline pathways that students may wish to consider for completing the 36 semester unit MBA requirement for graduation.

Table \#A: With its' 12 unit course load reduces the elapsed calendar time needed to complete the MBA degree program. It showcases a schedule of 3 semesters to earn the required 36 -units (approximately 1 calendar year including summer terms).

Table \#B: Illustrative study plan showcases a 4 semester schedule with 9 unit course load pace for a nominal 2 calendar year completion pace. Student study plans incorporating summer breaks, lighter course loads, repeated courses, and scheduling congestion should be expected to take upwards of two or more years to complete. Student study plans incorporating summer breaks, lighter course loads, repeated courses, and scheduling congestion should be expected to take upwards of two or more years to complete.

When developing their study plans students should use the program maps in consultation with their advisors and the School of Business to identify any additional requirements (such as grade minimums) that may affect them.

First, it is recommended that students target scheduling flexibility at the end of their study plan by prioritizing program requirements early on, followed by taking most of their free electives towards the end of their studies.

Second, it is recommended that strong MBA students plan for a target course load of 12 units per semester to prioritize first the reduction of elapsed calendar time. Reducing the elapsed calendar time will both reduce associated living costs and pull forward the rewards of potential employment opportunities. Graduate students need to take a minimum 9 -unit course load to maintain a full-time status. Students may take courses during the Summer semester to reduce the elapsed calendar time needed for degree completion.

Third, SFBU undergraduate students planning on directly progressing into the MBA program immediately upon undergraduate graduation at SFBU are advised to acquire up to 12 units of graduate level ( 4 xxG or 5 xx ) course work in their undergraduate course load, excluding Business Capstone (BUS595). Courses registered for graduate level credit are priced at the graduate fee level. Courses registered for undergraduate level credit are priced at the undergraduate level. Up to 12 semester units of graduate level work from either the School of Business or the School of Engineering may be counted in the MBA program. The result of direct progression can be considerable time savings to the student. The undergraduate student will need to meet the admissions criteria for the MBA program, including CGPA requirements.

Students are expected to review their study plan each semester, because not all courses are offered every term, nor are they offered in all modalities every term. It is recommended that students meet with their advisors for compliance with requirements and scheduling optimization.

Students transferring credit into the MBA program are issued a customized study plan during the admissions process.

C $=$ Core Required Courses
M = Major Courses Selectable from a Pool
$\mathrm{R}=$ Required courses
$\mathrm{E}=$ Free Electives

Figure 1 Illustrative 12-unit MBA Degree Map
Table A $\begin{aligned} & \text { Illustrative 12-unit load MBA } \\ & \text { Course Sequence }\end{aligned}$

## 36 min Units Required

C = Core Required Courses
M = Major Courses Selectable from a Pool
R = Required courses
E = Free Electives

| Semester 1 | Fall |  | Units |
| :--- | :--- | :--- | :--- |
| FIN501 | Financial Management | C | 3 |
| MGT530 | Logistics and Operations <br> Management | C | 3 |
| HRM531 | Human <br> Management | Resource | C |
| MKT450 | Marketing Management | M | 3 |
|  | Cumulative/Current Units |  | 12 |
| 12 |  |  |  |


| Semester 2 | Spring |  | Units |
| :--- | :--- | :--- | :--- |
| MKT552 | Brand Management and <br> Marketing | M | 3 |
| MKT500 | Consumer and Buyer <br> Behavior | M | 3 |
| MKT553 | Digital Marketing and Social <br> Media | M | 3 |
| MGT542 | Technology and Product <br> Management | E | 3 |
| 24 | Cumulative/Current Units | 12 |  |


| Semester 3 | Summer |  | Units |
| :--- | :--- | :--- | :--- |
| MGT500 | Risk Management | E | 3 |
| MGT510 | Agile Project Management | E | 3 |
| MGT450G | Organizational Behavior and <br> Management | E | 3 |
| BUS595 | Business Capstone | R | 3 |
| 36 | Cumulative/Current Units |  | 12 |

36 units $=9$ Core Required +12 Major Selectable Pool +12 Free Electives +3 Business Capstone
Optional Graduate Certificate in Business Management requirements have been met
Optional Marketing Management Concentration 12-unit requirement has been met
Figure 2 Illustrative 9-unit load MBA Degree Map
Table B Illustrative 9-unit load MBA Course 36 min Units Required

Sequence

C = Core Required Courses
$\mathbf{M}=$ Major Courses Selectable from a Pool
R = Required courses
E = Free Electives

| Semester 1 | Fall |  | Units |
| :--- | :--- | :--- | :--- |
| FIN501 | Financial Management | C | 3 |
| MGT530 | Logistics and Operations <br> Management | C | 3 |
| HRM531 | Human <br> Management | Resource | C |
|  | 3 |  |  |
| 9 | Cumulative/Current Units |  | 9 |


| Semester 3 | Summer |  | Units |
| :--- | :--- | :--- | :--- |
| BAN470G | Introduction to Machine <br> Learning Based Prediction <br> Modeling and Forecasting | M | 3 |
| BAN520 | Business Analytics for <br> Dashboards | E | 3 |
| MGT538 | International Business <br> Management | M | 3 |
| 27 | Cumulative/Current Units |  | 9 |


| Semester 2 | Spring |  | Units |
| :--- | :--- | :--- | :--- |
| BAN4600G | Introduction to Business <br> Analytics | M | 3 |
| MGT501 | Agile Project Management | M | 3 |
| FIN510 | Investment Analysis | M | 3 |
|  |  |  |  |
| 18 | Cumulative/Current Units |  | 9 |

36 units $=9$ Core Required +12 Major Selectable Pool +12 Free Electives +3 Business Capstone
Optional Business Analytics Concentration 12-unit requirement has been met

The following is the description of the MSBAn degree program, with a statement of its objectives, the background preparation required, and the program curriculum.

## - Master of Science in Business Analytics (MSBAn) STEM CIP Code: 30.7102

MSBAn Program Objective: The objective of the Master of Science in Business Analytics program is to enable aspiring business analysts, modelers, operational managers, and expert advisors to solve business challenges by bringing optimized quantitative driven recommendations into decision making and forecasting processes. Successful students will learn to use a combination of probability-based methods, high speed computational processing, and visual analytics, in conjunction with modern management, marketing and logistics strategies.

MSBAn Program Learning Outcomes (PLOs): Students graduating with a Master of Science in Business Analytics degree are expected to demonstrate the following program learning outcomes and abilities.
(PLO 1) Written Communication - For the intended audience, skillfully communicate focused insights and recommendations in context of the wider business situation and challenges while illustrating fluency in the supporting quantitative analysis and mastery of the underlying data.
(PLO 2) Oral Communication - Create a cohesive presentation with messages that are precisely stated and delivered in a compelling manner with supporting visual analytics, with polished language and appropriate technical detail.
(PLO 3) Quantitative Reasoning - Convert relevant business factors and data sets into insightful multivariable analytical models suitable for computerized processing with the processing steps optimized to fit given business restrictions such as: value of expected information / decisions, available time, budget, and computational resources.
(PLO 4) Information Literacy - For the business challenge at hand, proactively determine the scope of needed information and data from multiple sources, determine optimal search approaches, filter and organize the resulting information and data for the chosen analysis methods, properly handle the information in terms of legal, ethical, and confidentiality restrictions.
(PLO 5) Critical Thinking - For the issue at hand, develop a clear situation statement, systematically analyze the involved assumptions, evaluate, and interpret the available information to form a comprehensive analysis, assign value weights, develop a specific position, state the limits of the created position and its perspective to other positions.
(PLO 6) Specialized Knowledge - Innovatively synthesize competitive advantages and situation dependent optimal solutions / positions using relevant business theories, modern decision-making techniques, and quantitative based analytics.

## MSBAn Curriculum

A minimum of $\mathbf{3 0}$ semester units of graduate study are required for the MSBAn program. The MSBAn curriculum includes coursework in the following categories: Core Required Courses, Major Required Courses, Elective Courses, and a Capstone Course.

## I. Core Required Courses (9 units)

The following required courses provide a knowledge base of interdisciplinary business theories and techniques.

| BAN501 | Quantitative Methods for Business |
| :--- | :--- |
| FIN510 | Investment Analysis |
| MGT530 | Logistics and Operations Management |

## II. Major Courses Selectable from the Pool listed below (9 units)

Beyond Core Requirements, the student is required to take at least 6 units of 500 level business analytics (BAN5xx major) coursework and 3 additional major units (for a total of 9 units) from the list below.

These courses, if not already counted towards the Major Requirement, may be used towards the Elective Requirement.

6 units are required from the list below ( 500 level business analytics):

| $\boldsymbol{B} A N 520$ | Business Analytics for Dashboards |
| :--- | :--- |
| $\boldsymbol{B} A N 524$ | Intermediate Business Analytics |
| $\boldsymbol{B} \boldsymbol{A N}$ 572 | Process Management for Analytics |
| $\boldsymbol{B A N 5 8 9}$ | Special Topics on Analytics, Strategy, and Applied Information |
|  |  |
| 3 units are required from the major pool list below: |  |
| BAN452G | Excel for Finance, Accounting \& Analytics |
| BAN455G | Server-Side Data Processing Using Python/PHP |
| BAN460G | Introduction to Business Analytics |
| BAN460LG | Introduction to Business Analytics Lab |
| BAN463G | Data Visualization |
| BAN470G | Introduction to Machine Learning Based Prediction Modeling and |
|  | Forecasting |
| BAN472G | Introduction to Artificial Intelligence (AI) |
| MGT460G | Production and Operations Management |
| MGT460LG | Production and Operations Management Lab |
| MGT450G | Organizational Behavior and Management |
| MGT451G | Project Management |
| MGT480G | Entrepreneurship |
| MGT500 | Risk Management |
| MGT501 | Agile Project Management |
| MGT540 | Management of Innovation |
| MGT542 | Technology and Product Management |
| MKT545 | Global Trade and Operations |
| MKT550 | Consumer and Buyer Behavior |
| MKT554 | Search Engine Optimization (SEO) |

## III. Free Electives (9 units)

The student may elect any graduate-level courses (courses numbered $4 x x G, 5 x x$ ) to meet the Electives requirement. Free electives may include courses from the School of Business, the School of Engineering, CPT, Career Development, and courses transferred in.

It is recommended that MSBAn students consider taking BAN, computer science, and data science courses related to data and information processing. For example, MSBAn students may find interesting as an elective CS478 Blockchain Technology and Applications. Blockchain technology is the foundation for Cryptocurrency and Blockchain enabled digital business contracts. Other courses that may interest MSBAn students include: CS481 Introduction to Data Science, DS512 Data Engineering, DS520 Deep Learning, DS540 Natural Language Processing, etc.

Curricular Practicum: When applicable, the student may take curricular practicum courses (CPT501 or CPT502) and engage in practical training to work on company projects that are directly related to the student's course of study. The student must observe the rules required for taking the practicum
courses. No more than 3 units of practicum coursework may be counted towards the MSBAn graduation requirements.

## Career Development: P450G Career Development (1 unit)

This course is designed for students to take in preparation for becoming working professionals. Topics include effective communication strategies, emotional intelligence, diversity and cultural awareness, professional behavior, and interview skills.

Note: Emotional Intelligence courses SOC501 (1 unit) Emotional Intelligence Essentials and SOC450G (3 units) Emotional Intelligence are considered acceptable as electives. Emotional Intelligence (EI / EQ) is essential for successfully managing and controlling interpersonal relations, and therefore helpful to those aspiring to management and decision-making positions.

## IV. Capstone Course (3 units)

(A required subject)
Upon completing most of the coursework for this program, the student is required to take the capstone course and, under the guidance of the course instructor, integrate the knowledge and skills learned from all of the courses taken during the program.

## Illustrative Advising Road Map MSBAn Suggested Study Plan Course Sequence:

Course Numbers: Courses numbered from 450G to 499G are cross-listed specialized courses taken for graduate-level credits; courses numbered in the 500s and above are graduate level courses. Advisory: Students should expect graduate level $4 x x G$ courses to have noticeably higher-level assignments compared to 4 xx undergraduate workloads. Cross-listed specialized courses and graduate-level courses are to meet the graduation requirements. Prerequisites must be met before taking a course. Corequisites may be taken at the same time the course is taken.

Degree Maps are guides for outlining a pathway towards degree completion. A degree map showcases one way but not the only way to complete a degree.

The 3 semester (nominally 1 calendar year) road map below is an advising tool that outlines a pathway that students may wish to consider for completing the 30 -semester unit MSBAn requirement for graduation.

Table \#A: The "Typical" illustrative study plan showcases a 3 -semester schedule with 12, 9, 9 -unit pattern course load pacing. Student study plans incorporating summer breaks, lighter course loads, repeated courses, and scheduling congestion should be expected to take upwards of two or more calendar years to complete.

When developing their study plans students should use the program maps in consultation with their advisors and the School of Business to identify any additional requirements (such as grade minimums) that may affect them.

First, it is recommended that students target scheduling flexibility at the end of their study plan by prioritizing program requirements early on, followed by taking most of their free electives towards the end of their studies.

Second, it is recommended that strong MSBAn students plan for a target fast course load with upwards of 12 units per semester to prioritize first the reduction of elapsed calendar time. Reducing the elapsed calendar time will both reduce associated living costs and pull forward the rewards of potential employment opportunities. Graduate students need to take a minimum 9-unit course load to maintain a fulltime status. Students may take courses during the Summer semester to reduce the elapsed calendar time needed for degree completion.

Third, SFBU undergraduate students planning on directly progressing into the MSBAn program immediately upon graduation are advised to acquire up to 9 units of graduate level ( 4 xxG or 5 xx ) course work in their undergraduate course load, excluding Business Capstone (BUS595). Courses registered for graduate level credit are priced at the graduate fee level. Courses registered for undergraduate level credit are priced at the undergraduate level. Up to 9 units of graduate level work from either the School of Business or the School of Engineering may be counted in the MSBAn program. The result of direct progression can be considerable time savings to the student. The undergraduate student will need to meet the admissions criteria for the MSBAn program, including CGPA requirements.

Students are expected to review their study plan each semester, because not all courses are offered every term, nor in every modality. It is recommended that students meet with their advisors for compliance with requirements and scheduling optimization.

Students transferring credit into the MSBAn program are issued a customized study plan during the admissions process.

C $=$ Core Required Courses
M = Major Courses Selectable from a Pool
$\mathrm{R}=$ Required courses
$\mathrm{E}=$ Free Electives
Figure 1 Illustrative Typical MSBAn Degree Map
Table A Illustrative Typical Road Degree MSBAn / 30 min Units Required Suggested Course Sequence

C = Core Required Courses
M = Major Courses Selectable from a Pool
R = Required courses
E = Free Electives

| Semester 1 | Fall |  | Units |
| :--- | :--- | :--- | :--- |
| BAN501 | Quantitative Methods for <br> Business | C | 3 |
| MGT530 | Logistics and Operations <br> Management | C | 3 |
| FIN510 | Investment Analysis | C | 3 |
| BAN520 | Business Analytics for <br> Dashboards | M | 3 |
| 12 | Cumulative/Current Units |  | 12 |


| Semester 2 | Spring |  | Units |
| :--- | :--- | :--- | :--- |
| BAN470G | Introduction to Machine <br> Learning Based Prediction <br> Modeling and Forecasting | E | 3 |
| BAN524 | Intermediate Business <br> Analytics | M | 3 |
| MGT500 | Risk Managements | M | 3 |
|  | Cumulative/Current Units |  | 9 |
| 21 |  |  |  |


| Semester 3 | Summer |  | Units |
| :--- | :--- | :--- | :--- |
| MGT550 | Consumer and Buyer <br> Behavior | E | 3 |
| BAN589 | Special Topics on Analytics, <br> Strategy, and Applied <br> Information | M <br> $/$ | 3 |
| BUS595 | Business Capstone | R | 3 |
| 30 | Cumulative/Current Units |  | 9 |

30 units $=9$ Core Required +9 Major Selectable Pool +9 Free Electives +3 Business Capstone

## - Master Level Course Descriptions School of Business

Master's degree courses are numbered in the 500s. The MBA and MSBAn degree program allow for a limited number of credits for 400 level courses with a " $G$ " suffix.

Course No. Description
450G-499G Cross-listed specialized courses taken for graduate level credits
500-599 Graduate level courses
For information on prerequisites, corequisites and/or subjects numbered below 450 , refer to the section on Course Descriptions for the Bachelor's Degree Program, School of Business.

## Courses are listed below by subject area:

| ACC | Accounting, |
| :--- | :--- |
| BAN | Business Analytics, |
| BLAW | Business Law, |
| BUS | Business, |
| CPT | Curricular Practicum, |
| FIN | Finance, |
| GBM | Green Business Management, |
| HRM | Human Resource Management, |
| MGT | Management, |
| MKT | Marketing, |
| SOC | Social Science |

Each course description is followed by its prerequisite/corequisite, or recommendation information expressed in course numbers and/or text

Each 1 unit of a practicum course (CPT) requires at least 45 hours of practical experience related to the student's program curriculum.

Students should expect that not all courses and delivery modalities will be offered every semester.

## ACC450G Cost Accounting (3 units)

This class applies the essentials of financial accounting to the practice of management. Students will understand cost definitions, cost concepts, cost behavior and cost estimation; also, how cost accounting is applied to manufacturing and service organizations, the principles of planning and control for effective cost-related management, capital budgeting, cash flow statements, and how to analyze financial statements.
Prerequisite/Corequisite: ACC110, or ACC120 or Equivalent, or Upper Division/Graduate Level Status
ACC451G Intermediate Accounting - I (3 units)
This course is designed for students who are interested in pursuing careers as accounting professionals. This course enhances the student's understanding of the principles of accounting. Topics include understanding financial accounting and accounting standards, financial statement preparation, required disclosures, and in-depth study of current assets, revenue recognition and fixed assets.
Prerequisite/Corequisite: ACC120 or ACC450 or Equivalent

## ACC451LG Intermediate Accounting - I Lab (1 unit)

Upon completing this practical lab, students will be able to handle complex accounting situations using real-world examples from the accounting topics covered in ACC451. During class meetings, students will interact with specific issues such as multi-year accrual recognition of delayed revenues, in-depth study of current assets, and determine how to address them both theoretically and in the finer details of recording. Students may have to modify their accounting software configuration in order to properly reflect the given issue according to their accounting needs.
Prerequisite/Corequisite: ACC120L or ACC450 or ACC451 or Equivalent

## ACC452G Intermediate Accounting - II (3 units)

This course is a continuation of Intermediate Accounting - I. Subject matter includes current and long-term liabilities, stockholders' equity, investments, pension and post-retirement benefits, leases and cash flow statements.
Prerequisite/Corequisite: ACC451 or Equivalent

## ACC490G Introduction to Taxation (3 units)

This course covers taxation concepts applied to an individual's income, deductions, credits, property transactions, and tax accounting methods. An understanding of the concepts will enable students to prepare quality individual income tax returns as a professional. The course will also cover taxation rules governing financial planning.
Prerequisite/Corequisite: Upper Division/Graduate Level Status

## ACC501 Advanced Accounting (3 units)

This course is designed for accounting graduate students who want to have a complete understanding of the concept of consolidation requirements, consolidated financial statements, and accounting techniques relating to particular types of business and non-business entities. The student will also explore various tax aspects of consolidated financial statements and participate in case studies.
Prerequisite/Corequisite: ACC451 or ACC452 or Equivalent

## ACC512 Federal Taxation of Business Enterprise (3 units)

This course is designed to give students an understanding of the concepts of federal taxation of corporations, partnerships, estates and trusts. An understanding of the concepts will enable students to prepare corporation and partnership tax returns in a professional environment. Also covered are rules governing estates and trusts.

## Prerequisite/Corequisite: Upper Division/Graduate Level Status

## ACC530 Auditing (3 units)

In this course, students learn auditing techniques, procedures, practice and programs based on United States generally accepted accounting principles; students will learn best practices for working documents preparation and report writing.
Prerequisite/Corequisite: ACC451 or ACC452 or ACC501 or Upper Division/Graduate Level Status with the permission of the instructor.

## Business Analytics

BAN452 Excel for Finance, Accounting \& Analytics (3 units)
Excel is a widely used tool and its' skillful use provides multiple benefits over one's professional career. Students will learn to master many areas of Excel's flexibility including; graphics, conditional formatting, sorting, pivot tables, conditional calculations, data loading, use of Excel's powerful functions and Analysis Tool Pak/ Solver extensions. Time permitting business modeling will be introduced.
Recommendation: A working knowledge of statistics is recommended

## BAN455G Server-Side Data Processing Using Python/PHP (3 units)

After completing this course students will be able to implement industrial scale business algorithms, process complex data sets and business models with active code to powerful backend analytics and relational database engines. Students will learn how to add smart logic and information passing connections using server-side languages/scripts such as Python or PHP. Students are expected to have access to a computer or cloud account upon which they will install a web server, database, instructor determined Python or PHP for the programming language. Recommendation: A working knowledge of HTML and a procedural programming language is recommended.

## BAN460G Introduction to Business Analytics (3 units)

This course teaches the basics of business analytics. The students learn to use popular data analysis tools to analyze business data for the purpose of understanding business trends, making business forecast, and improving organization's decision making and business strategies.

## BAN460LG Introduction to Business Analytics Lab (1 unit)

This course is designed to be taken with the course BAN460 Introduction to Business Analytics. The students gain hands-on experience with business analytics. The students learn to use popular data analysis tools.

## BAN463G Data Visualization (3 units)

Students will learn how to explore data and provide insight to others using data visualization techniques. After completing this course, students will be able to design, develop, analyze, and interpret various types of visualizations. They will also be able to develop compelling presentations and insightful stories, based on a given case study. The approach used will include theory as well as a hands-on component.

## BAN470G Introduction to Machine Learning Based Prediction Modeling and Forecasting (3 units)

Students will gain a working knowledge of applying machine learning to real world business prediction, forecasting, and decision making. After an introduction to the history and theory of machine learning, students will then learn how to compare and contrast the benefits of various models and select the best models for the task at hand, identify and import the appropriate data, remove data anomalies, train their models, modify and optimize their models for improved results or execution speed, perform final discrepancy analysis, and make a recommendation based on their model's predictions to decision makers.
Prerequisite: MATH208, or BAN452, or Equivalent, or a Computer Science Course In; Artificial Intelligence, Machine Learning, Data Science, or Algorithms

## BAN472 Introduction to Artificial Intelligence (AI) (3 units)

This course provides a comprehensive introduction to Artificial Intelligence (AI), covering its history, fundamental concepts, applications, risks, and mitigation strategies. It offers insights into AI components and technologies, development processes, and ethical considerations, preparing students to understand the evolving world of AI.
Note: This course is not open to students enrolled in the School of Engineering without prior written approval from the
Dean, School of Engineering. Engineering students are encouraged to take CS483/CS483L Fundamentals of Artificial Intelligence.

## BAN501 Quantitative Methods for Business (3 units) - MSBAn Required

This course is designed to introduce students to contemporary business decision-making methodologies and develop the students' ability to analyze complex systems. Quantitative methods of management science and operations research using quantitative analysis are the focus of this course. The students learn to evaluate models from realworld examples as well as techniques to analyze and solve the problems. Students also learn to use quantitative analysis software, critically evaluate the results, and perform sensitivity analysis.

## BAN520 Business Analytics for Dashboards (3 units)

This course will teach you how to display data analysis results in dashboards. You will learn how to design and build dashboards, as well as the data visualizations to be displayed in them, using a leading analytics tool. You will learn how to present data, using charts and other types of visualizations, in the most effective way by following the best practices for data visualization and dashboards. The assignments and project will enable you to design, develop, and modify visualizations and dashboards. Out-of-class activities include reading assignments, case study analysis, and the project.
Prerequisite/Corequisite: Upper Division/Graduate Level Status

## BAN524 Intermediate Business Analytics (3 units)

This course is designed to teach business analytics as applied by enterprises to utilize tools to make business data analysis in order to make business strategies and decisions for improving business performance. The students will learn the foundations of business analytics, tools and methods of data analysis, major models and application techniques used to achieve the purpose of making business decisions. The course will also introduce analytics trend by discussing the emerging role of big data and big analytics. Hands-on exercises are required.

## BAN572 Process Management for Analytics (3 units)

Students in this course will learn how to design and implement a self-service analytics (SSA) business process pipeline to increase productivity and become self-sufficient for their reporting and analytics needs. They will gain the ability to make optimal trade-offs among various computer technologies using a ranking and selection methodology. Students will be able to apply their SSA pipeline to solve business challenges at the enterprise level.

## BAN589 Special Topics on Analytics, Strategy, and Applied Information (3 units)

Special topics courses are offered by current faculty members or invited guest speakers to expose the students to emerging best practices and innovative technologies that apply data science to solve business challenges. Including such topics as; machine learning, optimization methods, computer algorithms, probability and stochastic models,
information economics, logistics, strategy, consumer behavior, marketing, and visual analytics. These courses are conducted the same way as regular courses.
Prerequisite/Corequisite: Subject Dependent

## Business

## BUS450G Professional and Technical Writing (3 units)

This course presents students with practical instructions about communicating in different kinds of academic and workplace environments, as well as professional/technical communities. Students will learn how to organize and produce common professional writing work, such as technical reports, white papers, proposals, theses, and resumes. The course also covers different forms of effective writing, writing styles, approaches, formats, and citation of referenced materials.

## BUS589 Special Topics (3 units)

Special topics courses are offered by current faculty members or invited guest speakers to expose the students to emerging business topics. These courses are conducted the same way as regular courses.
Prerequisite/Corequisite: Subject Dependent

## BUS595 Business Capstone Course (3 units) - MBA and MSBAn Required

The capstone course is intended to integrate the knowledge and hands-on experience that the student has acquired from the foundation, core, and elective coursework required for the program in the course under the guidance of the course instructor. The instructor determines the course objectives and scope based on the business curriculum and trends. The instructor guides the students to develop their integration ability. The student shall take the capstone course near the end of his/her program of study.
Prerequisite/Corequisite: $\mathbf{2 4}$ or more units completed in the related graduate business program

## Curricular Practicum

## CPT501 Curricular Practicum (1 unit)

Curricular practicum, or curricular practical training, is a supervised practical experience that is the application of previously studied theory. The curricular practicum must provide students with valuable learning experience and must significantly increase their knowledge in their program of study. It is defined as alternative work/study, internship, cooperative education, or any other type of required internship or practicum that is offered by sponsoring employers through cooperative agreements with the school and the course is an integral part of an established curriculum. At least three hours of work in a practical setting has the credit equivalency of one hour of classroom lecture ( 1 unit). To be eligible to take this course, the student must be in good standing, have completed at least two semesters of coursework required in his/her degree program, have obtained a written agreement that outlines the arrangement between the institution and the practicum site (including specific learning objectives, course requirements, and evaluation criteria), and received approval by a designated advisor. F-1 International students must follow additional rules required by the U.S. Immigration and Customs Enforcement. Information and instructions concerning this course are provided in the online application form. This is a part-time practicum course taken by the graduate student to work no more than twenty hours each week during the approved practicum period. Failure in this course will prevent the student from taking any curricular practicum course afterwards.
Prerequisite: Refer to the instructions on the application and agreement documents.

## CPT502 Curricular Practicum (2 units)

Curricular practicum, or curricular practical training, is a supervised practical experience that is the application of previously studied theory. The curricular practicum must provide students with valuable learning experience and must significantly increase their knowledge in their program of study. It is defined as alternative work/study, internship, cooperative education, or any other type of required internship or practicum that is offered by sponsoring employers through cooperative agreements with the school and the course is an integral part of an established curriculum. At least three hours of work in a practical setting has the credit equivalency of one hour of classroom lecture ( 1 unit). To be eligible to take this course, the student must be in good standing, have completed at least two semesters of coursework required in his/her degree program, have obtained a written agreement that outlines the arrangement between the institution and the practicum site (including specific learning objectives, course requirements, and evaluation criteria), and received approval by a designated advisor. F-1 International students must follow additional rules required by the U.S. Immigration and Customs Enforcement. Information and instructions concerning this course are provided in the online application form. This is a full-time practicum course taken by the graduate student to work more than twenty hours but not to exceed forty hours each week during the approved practicum period. Failure in this course will prevent the student from taking any curricular practicum course afterwards.

Prerequisite: Refer to the instructions on the application and agreement documents.

## Finance

## FIN501 Financial Management (3 units) - MBA Required

This course is designed to introduce modern financial theories, tools, and methods used for the analysis of financial problems. The point of view of corporate financial managers will be taken to interact with efficient capital markets. Therefore, while making the best use of constrained resources is necessary, maximizing shareholders' equity is also vitally important. The primary focus is on analysis and forecast of internal operations and the use of short-term and long-term capital.

## FIN510 Investment Analysis (3 units) - MSBAn Required

This course covers the foundations of investment management. Topics include theory and empirical evidence related to portfolio theory, market efficiency, asset pricing models, factor models, and option pricing theory. Students are expected to create optimal investment strategies.

## FIN512 Financial Risk Management (3 units)

This course is designed to further introduce modern financial theories, tools, and methods in dealing with financial risks. Financial risk management has become an extremely important discipline for corporations, financial institutions, and many government enterprises, particularly in challenging economic times.
Prerequisite/Corequisite: FIN501, or FIN510, or Equivalent
FIN522 International Trade and Investment (3 units)
This course covers the theories of international trade, through comparative advantage and related corporate strategies, the impacts of emerging regional economic blocks, the institutions of the multilateral trading system, and trade barriers. Students will learn the mechanics of international payment, shipping, and distribution.

## FIN568 Corporate Finance (3 units)

This course belongs to the accounting/finance area of interest. The first part of the course covers essential corporate finance subjects including executive compensation, corporate governance, and bankruptcy law. Lectures, discussions, and case studies will be the form used for this part of study. The second part of the course consists of discussions of corporate financing such as mergers, acquisitions, valuations; corporate restructuring, LBOs, MBOs, and merchant banking.
Prerequisite/Corequisite: FIN501, or FIN510, or Equivalent

## FIN580 Portfolio Management (3 units)

This course teaches advanced portfolio decision making. Topics include index models, portfolio performance measures, bond portfolio management and interest immunization, stock market anomalies and market efficiency.
Prerequisite/Corequisite: FIN501, or FIN510, or Equivalent

## FIN585 International Finance (3 units)

This course prepares the students for a career in international finance. The course discusses the financial environment in which the multinational firm and its managers must function. The course focuses on foreign exchange management and financial management in a multinational firm. It points out to the students the basic principles of profit-seeking and risk avoidance practices in the volatile global financial markets.
Prerequisite/Corequisite: FIN501, or FIN510, or Equivalent

## Green Business Management

GBM500 Green and Socially Responsible Management (3 units)
Upon completing this course students will be able to, (a) identify and explain multiple environmental and social responsibility demands being faced by modern businesses, (b) utilize socially responsible methodologies and bestpractices in the production of products, and the delivery of services to generate societal benefits beyond classic financial profit and (c) formulate enterprise-wide policies which integrate social responsibility and green sustainability values.

## Human Resource Management

## HRM531 Human Resource Management (3 units) - MBA Required

This course provides students and practicing managers with a comprehensive overview of essential personnel management concepts and techniques. The focus is on essential topics such as job analysis, candidate screening,
interviewing, testing, hiring, evaluating, training, motivating, promoting, compensating and their associated legal constraints. Additional topics covered include global HR, diversity awareness and training, and sexual harassment legal requirements. Practical applications such as how to appraise performance and benefits and handle grievances are explored. Additionally, developing independent work teams that foster creativity and innovation will be discussed.

## HRM532 Strategic Workforce Planning (3 units)

This course begins with the discussion of the need for manpower planning and gives samples of plans developed for various types of organizations such as manufacturing, high-tech, small business, etc. This course would give students an opportunity to learn about and develop a manpower plan which is part of the business plan and also an ongoing dynamic document developed as a part of the strategic planning component of the organization. It also has to do with scheduling, rosters and succession planning which is a process of identifying a long-term plan for the orderly replacement of key employees. The course also explores cases of developing a manpower plan including developing a Gap Analysis to determine manpower needs and budgeting for the manpower needs. Developing new HR manpower configurations such as self-managed teams, telecommuting, outsourcing, temps-to-hire and other methods to make companies more flexible and offer economical solutions to the high cost of knowledge workers. The course includes case studies and actual writing of several manpower plans for various sizes of organizations.

## Management

## MGT450G Organizational Behavior and Management (3 units)

This course explores the complex dimension of organizational behavior including examination of experiential and conceptual approaches to communication, self-awareness, perception, motivation, problem solving and culture. Students apply interpersonal and intrapersonal exploration to the management of change, leadership theories and organizational issues.

## MGT451G Project Management (3 units)

This course introduces the principles of project and program management, the roles of project management, matrix organization in both private and public segments, and project management techniques leading to the efficient execution and completion of projects. Proposal development, case studies, and independent projects are required.

## MGT460G Production and Operations Management (3 units)

This course balances theory and practice of Production and Operations Management, covering quantitative, qualitative, and behavioral aspects. Students will learn how to identify and apply strategies, business process design principles, and quantitative techniques. This knowledge will then be applied to optimize business operations, enhance efficiency, and improve competitiveness. Students will develop quantitative models and use software tools such as Microsoft Excel Analysis ToolPak and Solver to create solutions for multivariate operational constraints. Typical control cases include service and product design choices, sales forecasting, scheduling, metrics for production/inventory control, statistical quality control, and logistical constraints.

## MGT460LG Production and Operations Management Lab (1 unit)

During this hands-on lab course students will learn software-based techniques to solve various time, labor, material, forecasting, capacity, take control of the conversion process from inputs to outputs, and costs optimizations in classic production planning and operations scenarios. Students will be expected to develop their own mathematical models, transform their models into software-based implementations and then determine the optimized best fit business solution. Students should be comfortable with or refresh themselves on solving multivariate simultaneous equations before the first-class meeting. Students should be comfortable installing software on their machines and/or using cloud-based services.

## MGT480G Entrepreneurship (3 units)

This course explores the full range of the entrepreneurial process including the evaluation, development, and creation of a successful business. It will help potential entrepreneurs and professionals visualize and experience entrepreneurial development. The course explores the entrepreneurial approach to resources such as the development of an organizational structure, market analysis, financing entrepreneurial ventures, and screening venture opportunities. Individuals will experiment and evaluate what it takes to be an entrepreneur including developing the plan for a new business.

## MGT482G Launching Innovative Startups (3 units)

From introduction to mastery this hands-on project based course is ideal for entrepreneurs, future entrepreneurs, business owners, and innovators alike. In order to put your dream into action the logical entrepreneur development process will be covered from the ideation and business modeling phases through to the funding and marketing launch
phases. Discussions are flexible with student suggested discussion topics welcome such as: design thinking, lean startup, validating the market opportunity, tips for successful start-up team management, low cost marketing tactics, pricing strategy, etc.

## MGT500 Risk Management (3 units)

This course is designed to teach the students risk management concepts, process, strategy making and implementation in a corporate environment. Topics covered include the nature and concept of risks, risk management structure and process flow, information and gathering techniques, data analysis methodology and tools, and risk management techniques. Case studies and a project are required.

## MGT501 Agile Project Management (3 units)

Agility in management has been a hallmark factor behind many Silicon Valley success stories. The Scrum based agile approach stands in stark contrast to traditional approaches which rely on slow bureaucratic and paperwork heavy planning approaches. After introducing Scrum, students will master Scrum's adaptive principles, plus its iterative and incremental methodologies and learn how to apply them from small projects to large programs. Students as project managers will learn how to create "user stories", apply multiple estimation techniques, pivot appropriately to changing requirements, enhance customer collaborations, measure progress, measure value, reduce costs, and ensure technical excellence. Course knowledge areas also include: Sprints, multilevel planning, estimation and velocity, product functionality backlog, and the different team member roles of; Scrum Master, Product Owner, and Development Team Member. To provide students additional theoretical depth throughout the course classical and alternative project management frameworks will be contrasted and tradeoffs compared.

## MGT530 Logistics and Operations Management (3 units) - MBA and MSBAn Required

The field of Logistics and Operations Management optimizes the management of continuous activities of the processes of production, warehousing, transportation of goods, and the delivery of services. The combination of Ecommerce and Globalization has created many challenges with new behaviors, increased product variety, advancement in technology, and deep integration with other functional areas of the business (sales, marketing, finance, etc.). In this course, students will learn how to use quantitative based analytical techniques to make Logistics and Operations decisions.

## MGT538 International Business Management (3 units)

Students will begin by appraising and deconstructing the environment of international business by examining economic, financial, political, and cultural aspects of global trade. Next students will learn how to assess and critique global organizational design and international business management techniques for various situations. After examining business practices and opportunities in various regions around the world students will prepare a country screening analysis, or similar project, as a way to apply their knowledge of strategic international business management concepts to real-world situations.

## MGT540 Management of Innovation (3 units)

This course is designed to equip the students with the knowledge and management skills to address the needs of new and innovative enterprises in a changing and uncertain environment. Topics include technology forecasting and assessment, program or product selection and control, market development, financial management, regulations, and ethics.

## MGT542 Technology and Product Management (3 units)

This course is designed to give students practical experience in product development and focuses on the management of engineering and technology activities. Topics include technology product design, planning, production, marketing, sales, and maintenance; technological product life cycle from research and development through new product introduction, marketing requirement documentation (MRD), product positioning, channel inventory management, outbound communications, and the organizational role of the product marketing manager. Case studies and project presentations are required.

## MGT550 Global Outsourcing Project Management (3 units)

In today's increasingly competitive and globalized business landscape, effective global outsourcing management has emerged as a critical area of focus for organizations. As companies strive to enhance their performance and gain a competitive edge, the management of suppliers plays a pivotal role in shaping overall costs and facilitating differentiation strategies. This course offers students a comprehensive understanding of the profound impact that sourcing and supply management have on the success and profitability of modern businesses. We delve into the intricacies of sourcing and supplier management decisions, considering factors such as costs, pricing dynamics, ethical considerations, globalization trends, and risk management strategies. Furthermore, we explore how sourcing and supply management practices intersect with other functional areas within organizations, including product design and inventory management. Through a blend of engaging lectures and in-depth case study discussions,
students will gain practical insights into the complexities of sourcing and supply management, equipping them with the knowledge and skills needed to navigate these challenges effectively in today's dynamic business environment.

## Marketing

## MKT450G Marketing Management (3 units)

This course studies marketing management by analyzing real-world cases. Students will learn to implement and execute the marketing process through situation assessment, strategy formulation, marketing planning, marketing implementation and evaluation.

## MKT483G Monetizing Intellectual Property (3 Units)

Intellectual Property (IP) is a firm's most valuable asset. Ideal for social media content creators and going beyond traditional IP definition and usage, students in this course will learn innovative models and interesting strategies for generating capital and value from intangible assets. The rapidly growing USA market for leasing of intellectual property is already greater than $\$ 63$ billion per year. Course topics include: Outright Sales, Third-Party Licensing, Royalty Securitizations, Bowie Bonds, Collateralization, Donations, Copyrights, Trademarks, Trade Secrets and Patents, etc. This course contains assignments with research and role playing.

## MKT541 Strategic Marketing (3 units)

This course will teach the students fundamental concepts and practices in marketing research and marketing data analysis, and use of the data and financial analysis to set strategic positioning strategies. Emphasis will be on practical marketing research skills development and basic analysis mechanisms leading to strategic marketing. Students will learn both the primary source (such as surveys) as well as secondary sources (internet, publications, etc.) in research techniques. Students will also engage in their own marketing research projects. Although statistical analysis will be covered in the course, quantitative analysis skills will be the main focus. The course also covers an overview of quantitative and qualitative tools for strategic marketing, market segmentation process, strategic positioning, and channel marketing issues. Case studies and marketing requirements reports are required.

## MKT542 Global Marketing (3 units)

From an international business perspective students will learn how to develop global marketing strategies involving marketing research, segmentation, and positioning. Students will then incorporate global product policy decisions into a comprehensive market entry plan, or similar project, in order to bring these marketing concepts to life.

## MKT545 Global Trade and Operations (3 units)

The course is designed to develop the knowledge and understanding of the global marketing environment and of the concepts, tools, and theory that will prepare the students to take the responsibility for successful global market penetration for his/her business organization. The perspective of the course is managerial, i.e., the ability to identify opportunity, resolve problems, and implement solutions and programs.

## MKT550 Consumer and Buyer Behavior (3 units)

Students guided by the instructor will gain insight into the minds of buyers. This course applies modern behavior theory to the complex purchasing decision making processes used by consumers and organizations. Topics include; the psychology of consumption, brand loyalty, group vs individual decision making, intuitive vs rational decision making, etc. After completing this course, the student will be able to: Describe key motivations within individual purchasing decisions, explain situational influences on purchasing behavior, explain how purchasing behaviors can be integrated into marketing and sales strategies to improve revenues.

## MKT551 Sales Management (3 units)

With a strong focus on selling as a career, this course covers a spectrum of selling strategies, sales force management, strategic/relationship/product selling approaches ownership of the customer relationship and building customer personas. Additional topics may include forecasting, pricing and negotiation strategies, recruitment, territory assignment, quotas, channel management, etc. After completing this course, the student will be able to build and manage a sales team, formulate and implement sales programs, evaluate and control the sales process.

## MKT552 Brand Management and Marketing (3 units)

With a focus on corporate branding this course covers building, measuring, and increasing brand equity. Topics include creating brand strategy, branding in the digital era, naming new products, building brand extensions, etc. After completing this course, the student will be able to explain the importance of brands to profitability, measure the equity value of a brand, map a brand's competitive market position, and apply brand equity to new business opportunities.

## MKT553 Digital Marketing and Social Media (3 units)

Using a robust combination of creativity, critical thinking, data analysis, and project tracking skills students will master digital marketing and social media influence. After completing this course, the student will be able to explain in detail the ASCOR Digital Marketing Framework (Assessment phase, Strategy phase, Channel and communication plan, Digital marketing operations, Refinement phase), optimize a firm's online value proposition by aligning its strengths with ever changing market economics, and create a multi-stage digital marketing campaign from the initial activities through final deployment.

## MKT554 Search Engine Optimization (SEO) (3 units)

It is critical for your website/blog etc. to be highly ranked to achieve both high quantity and quality traffic. Compared to paid advertising, SEO is a significantly lower cost way to build traffic. Throughout this course, students gain insight into the algorithms and approaches used by search engines and then gain a mastery of common optimization techniques. Web scrapers, indexing, and other related concepts will be part of the classroom discussion. A working knowledge of HTML is assumed. Topics Include: keyword research, selection of keywords, editing of website meta tags, alternatives to Google's search engine, etc.

## Professional Development

## P450G Career Development (1 unit)

This course is designed for students to take in preparation for becoming working professionals. Topics include effective communication strategies, emotional intelligence, diversity and cultural awareness, professional behavior, and interview skills.

## Social Science

## SOC450G Emotional Intelligence (3 units)

In this course, students will learn about Emotional Intelligence (EQ) and why it is important in their life and career. This is a type of intelligence that unlike IQ can be increased and the benefits of it is apparent in one's life and career. Knowing yourself is the essence of EQ. Students will learn about themselves by assessing their EQ in the beginning of the class and at the end to see any improvement. In recent years, EQ has become a major indicator of achievement. Students completing this course will have the means to increase and manage their EQ.

## SOC501 Emotional Intelligence Essentials (1 unit)

Mastery of Emotional Intelligence (EI) also known as Emotional Quotient (EQ) is essential for successfully managing and controlling interpersonal relations. The first half of this course will focus on enhancing the student's skills at recognizing multi-variate EQ issues in others and in themselves. The second half of this course will focus on improving students' skills for synthesizing appropriate solutions in complex professional and personal relationships.
*************

- Standard Occupational Classification (SOC) - 2010 \& 2018 (Based on United States Department of Labor - Bureau of Labor Statistics)


## Applicable Program Reference Key

Bachelor of Science in Business Administration (BSBA) including concentrations $=\mathrm{b}$ Master of Business Administration (MBA), including concentrations $=\mathrm{B}$ Master of Science in Business Analytics (MSBAn) $=\mathrm{N}$

| Program | 2018 / 2010 <br> SOC Code | SOC Title and Direct Match Title |
| :---: | :---: | :--- |


|  |  | Superintendent, Production Control Manager <br> Purchasing Managers: Contract Administrator, Contracting <br> Manager, Director of Strategic Sourcing, Procurement Manager, <br> Purchasing Director Sourcing Manager |
| :---: | :---: | :---: |
| bBN | 11-3061 |  |
| bBN | 11-3071 | Transportation, Storage, and Distribution Managers: Called Storage Supervisor, Distribution Center Manager, Logistics Manager, Logistics Supply Officer, Transportation Manager, Warehouse Manager, Warehouse Operations Manager |
| bB | 11-3111 | Compensation and Benefits Managers: Compensation Director, Employee Benefits Coordinator, Employee Benefits Director, Employee Benefits Manager, Wage and Salary Administrator |
| bB | 11-3121 | Human Resources Managers: Employee Relations Manager, Job Analysis Manager, Labor Relations Director, Personnel Administrator, Personnel Director, Personnel Manager, Position Description Manager |
| bB | 11-3131 | Training and Development Managers: E-Learning Manager, Employee Development Director, Employee Development Manager, Labor Training Manager |
| bB | 11-9021 | Construction Managers: Construction Coordinator, Construction Superintendent, General Contractor, Masonry Contractor Administrator |
| bB | 11-9051 | Food Service Managers: Banquet Director, Banquet Manager, Cafeteria Director, Food and Beverage Manager, Food Service Director, Restaurant General Manager, Tavern Operator |
| bBN | 11-9071 | Gambling Managers: Gambling Department Head, Gambling Manager, Slot Operations Director, Slots Manager, Table Games Manager |
| bB | 11-9072 | Entertainment and Recreation Managers, Except Gambling: Amusement Park Manager, Boat Club Manager, Fitness Club Manager, Golf Club Manager, Marina Club Manager, Skating Rink Manager, Ski Resort Manager, Tennis Club Manager, Theme Park Manager |
| bB | 11-9081 | Lodging Managers: Bed and Breakfast Innkeeper, Hotel Director, Hotel Operations Manager, Lodging Facilities Manager |
| bBN | 11-9111 |  |
| bB | 11-9131 | Postmasters and Mail Superintendents: Postal Supervisor, <br> Postmaster 而 |
| bB | 11-9141 | Property, Real Estate, and Community Association Managers: Apartment Manager, Building Rental Manager, Community Association Manager, Homeowner Association Manager, Land Acquisition Manager, Leasing Property Manager, Property Manager, Real Estate Manager |
| bB | 11-9151 | Social and Community Service Managers: Community Service Organization Director, Neighborhood Service Center Director, Youth Program Director |
| bB | 11-9179 | Personal Service Managers, All Other: Day Spa Director, Nail |


|  |  | Salon Manager, Travel Agency Manager <br> bBN |
| :---: | :---: | :--- |
| bBN | $11-9199$ | Managers, All Other: Environmental Control Administrator, Safety <br> Coordinator, Utilities Manager |
| bB-1000 | Business Operations Specialists: All <br> bB | Agents and Business Managers of Artists, Performers, and <br> Athletes: Artist Manager, Artist Representatives, Author's Agent, <br> Band Manager, Booking Agent, Booking Manager, Flight Manager, <br> Literary Agent, Modeling Agent, Talent Agent, Theatrical Agent |
| bBN | $13-1011$ | $13-1020$ | | Buyers and Purchasing Agents: All |
| :--- |
| bBN |
| bBN |


| bB | 13-1121 | Meeting, Convention, and Event Planners: Certified Meeting Professional, Conference Organizer, Conference Planner, Conference Planning Manager, Conference Services Director, Conference Services Manager, Convention Planner, Convention Services Manager, Corporate Meeting Planner, Event Planner, Events Manager, Wedding Planner |
| :---: | :---: | :---: |
| bB | 13-1131 | Fundraisers: Campaign Fundraiser, Donor Relations Officer |
| bB | 13-1141 | Compensation, Benefits, and Job Analysis Specialists: Benefits Analyst, Compensation Analyst, Compensation Specialist, Employee Benefits Specialist, Job Analyst Job Specification Writer, Occupational Analyst, Pension Administrator, Position Classification Specialist, Retirement Plan Specialist |
| bBN | 13-1151 | Training and Development Specialists: Corporate Trainer, Employee Development Specialist, Insurance Employee Trainer, Job Training Specialist, Training Coordinator, Training Specialist |
| bBN | 13-1161 | Market Research Analysts and Marketing Specialists: Advertising Analyst, Market Research Analyst, Market Research Specialist, Marketing Analyst, Marketing Consultant, Marketing Forecaster, Marketing Specialist, Search Marketing Specialist |
| bB | 13-1199 | Business Operations Specialists, All Other: Mystery Shopper, Ship Purser, All business operations specialists not listed separately. |
| bBN | 13-2011 | Accountants and Auditors: Account Auditor, Accountant, Auditor, Auditor-In-Charge, Certified Public Accountant, Cost Accountant, CPA, Field Auditor, Financial Accountant, Financial Auditor, Funded Accountant, Internal Auditor, Payroll Auditor, Tax Accountant |
| bBN | 13-2031 | Budget Analyst: Budget Analyst, Budget Coordinator, Budget Examiner, Budget Officer, Cost Analyst |
| bBN | 13-2041 | Credit Analysts: Chief Credit Analyst, Credit Analyst, Credit Assessment Analyst, Credit Risk Analyst, Factorer |
| bBN | 13-2051 | Financial and Investment Analysts: Corporate Financial Analyst, Corporate Securities Research Analyst, Corporate Statistical Financial Analyst Institutional Commodity Analyst, Organizational Investment Analyst |
| bBN | 13-2052 | Personal Financial Advisors: Certified Financial Planner, Estate Planner, Estate Planning Counselor, Financial Counselor, Individual Pension Advisor Individual Pension Consultant, Personal Financial Planner, Personal Investment Advisor |
| bBN | 13-2053 | Insurance Underwriters: Automobile and Property Underwriter, Bond Underwriter, Insurance Analyst, Insurance Underwriter, Insurance Writer, Underwriting Account Representative, Underwriting Service Representative |
| bBN | 13-2054 | Financial Risk Specialists: Financial Risk Analyst |
| bBN | 13-2061 | Financial Examiners: Bank Compliance Officer, Bank Examiner, Financial Compliance Examiner, Home Mortgage Disclosure Act Specialist, <br> Payroll <br> Examiner <br> Pension Examiner, Credit Counselor, Debt Management Counselor, Student Financial Aid Counselor, Enforce or ensure compliance with laws and regulations governing financial and securities institutions and financial and real estate transactions. May examine, verify, or authenticate records. |


| bBN | $13-2071$ | Credit Counselors: Credit Counselor, Debt Management Counselor, <br> Student Financial Aid Counselor, Student Loan Counselor |
| :---: | :---: | :--- |
| bBN | $13-2072$ | Loan Officers: Branch Lending Officer, Commercial Lender, Loan <br> Analyst, Loan Officer, Loan Reviewer, Payday Loan Officer, Real <br> Estate Loan Officer |
| bBN And Collectors, and Revenue Agents: City |  |  |
| bBN |  | Tax Examiners and <br> Collector, Customs Appraiser, Income Tax Adjuster, Internal Revenue <br> Agent, Internal Revenue Service Agent, Revenue Collector, Revenue <br> Enforcement Agent, Tax Compliance Officer, Tax Compliance <br> Representative, Tax Examiner, Tax Investigator, Tax Revenue Officer |
| bBN | $13-2081$ | $13-2082$ |


|  |  | May develop and supply optimal time, cost, or logistics networks for <br> program evaluation, review, or implementation. Operations Analyst, <br> Procedure Analyst, Process Analyst |
| :---: | :---: | :--- |
| b | $15-1232$ | $15-1151$ | | Computer User Support Specialists: Computer Customer Support |
| :--- |
| Specialist, Computer Help Desk Specialist, End-User Support |
| Specialist |\(\left|\begin{array}{l}burvey Researchers: Pollster, Survey Methodologist, Survey <br>


Questionnaire Designer\end{array}\right|\)| bBN |
| :--- |
| bBN |
| bBN |
| $19-3022$ |


|  |  | Calculus Professor, Statistics Professor <br> BN |
| :--- | :--- | :--- |
| BN | $25-1063$ | Economics Teachers, Postsecondary: Econometrics Professor, <br> Industrial Economics Professor, Labor Economics Professor, <br> Macroeconomics Professor, Microeconomics Professor |
| BN | $25-1199$ | Postsecondary Teachers, All Other: Packaging Professor |
| bBN | $25-3040$ | Substitute Teachers, Short-Term |
| Tutors: Standardized Test Tutor |  |  |
| BN | $25-9031$ | Instructional Coordinators: Curriculum and Assessment Director, <br> Curriculum and Instruction Director, Curriculum Coordinator, <br> Curriculum Designer, Curriculum Specialist, Instructional Materials <br> Director, School Curriculum Developer |
| BN | $25-9044$ | Teaching Assistants, Postsecondary: Assistant Instructor, University <br> Teaching Assistant |
| bBN | $27-3031$ | Public Relations Specialists: Press Agent, Press Secretary, Public <br> Affairs Officer, Public Relations Counselor, Public Relations Officer, <br> Public Relations Representative, Publicist, Advertising Editor, <br> Publicity Agent, Publicity Writer |
| bBN | $27-3090$ | Miscellaneous Media and Communication Workers |
| bB | $41-1011$ | First-Line Supervisors of Retail Sales Workers: Assistant Store <br> Manager, Cashier Manager, Cashier Supervisor, Salesclerk Supervisor |
| bB | $41-4011$ | First-Line Supervisors of Non-Retail Sales Workers: Insurance <br> Sales Supervisor, Radio Time Sales Supervisor, Real Estate Sales |
| Supervisor, Stockbroker Supervisor, Telemarketer Supervisor, |  |  |
| Telemarketing Manager, Tele sales Supervisor |  |  |


| bB | 41-4012 | Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products: Bottling Equipment Sales Representatives, Freight Broker, Hotel Supplies Salesperson, Mortician Supplies Sales Representatives, Pulpwood Dealer, Wholesale Diamond Broker |
| :---: | :---: | :---: |
| bBN | 41-9031 | Sales Engineers |
| b | 41-9099 | Sales and Related Workers, All Other: Auctioneer, Blood Donor Recruiter, Pawn Shop Clerk |
| bB | 43-1011 | First-Line Supervisors of Office and Administrative Support Workers: Accounts Payable Supervisor, Billing Department Supervisor, Billing Supervisor, Clerical Supervisor, Data Entry Supervisor, Medical Billing Supervisor, Office Services Supervisor, Payroll Supervisor, Records Supervisor, Telling Supervisor, Timekeeping Supervisor |
| b | 43-3011 | Bill and Account Collectors: Accounts Collector, Bill Collector, Billing Representative, Collection Agent, Collections Clerk, Collections Representative, Debt Collector, Installment Agent, Installment Loan Collector, Insurance Collector, Payment Collector, Repossessor |
| b | 43-3021 | Billing and Posting Clerks: Billing Clerk, Invoice Clerk, Invoice Control Clerk, Posting Clerk, Statement Clerk, Statement Distribution Clerk, Statement Processor |
| bBN | 43-3031 | Bookkeeping, Accounting, and Auditing Clerks: Accounts Receivable Assistant, Accounts Receivable Clerk, Auditing Clerk, Bookkeeper, Fixed Capital Clerk, Foreign Exchange Position Clerk, Mortgage Accounting Clerk |
| b | 43-3051 | Payroll and Timekeeping Clerks: Flight Crew Time Clerk, Payroll Bookkeeper, Personnel Scheduler, Time and Attendance Clerk, Time Clerk, Timekeeper |
| b | 43-3061 | Procurement Clerks: Procurement Assistant, Purchasing Assistant, Purchasing Clerk |
| b | 43-3071 | Tellers: Bank Teller, Commercial Teller, Exchange Teller, Foreign Bank Note Teller, Foreign Exchange Clerk, Loan Teller, Money Order Clerk, Receiving Teller, Savings Teller, Securities Teller |
| b | 43-3099 | Financial Clerks, All Other: Bank Vault Custodian, Financial Operations Clerk, Financial Reserve Clerk, Safety Deposit Clerk |
| bBN | 43-4011 | Brokerage $\quad$ Clerks: Brokerage Purchase-and-Sale Clerk, <br> Commodities Clerk, Dividend Clerk, Securities Clerk   |
| bBN | 43-4041 | Credit Authorizers, Checkers, and Clerks: Charge Authorizer, Commercial Credit Reviewer, Credit Authorizer, Credit Charge Authorizer, Credit Checker, Credit Investigator, Credit Processor, Credit Rating Checker, Credit Reference Clerk, Credit Report Checker |
| bB | 43-4051 | Customer Service Representatives: Complaint Clerk, Contact Center Specialists, Customer Complaint Clerk, Customer Contact Specialist, Customer Relations Representative, Customer Support Representative, Gas Distribution and Emergency Clerk, Passenger Relations Representative, Policyholder Information Clerk, Warranty Clerk |
| bB | 43-4081 | Hotel, Motel, and Resort Desk Clerks: Assistant Innkeeper, Hotel Registration Clerk, Resort to Desk Clerk |


| bBN | 43-4131 | Loan Interviewers and Clerks: Loan Interviewer, Loan Processor, Mortgage Closing Clerk, Mortgage Loan Closer, Mortgage Loan Processing Clerk, Mortgage Loan Processor, Mortgage Processor |
| :---: | :---: | :---: |
| b | 43-4151 | Order Clerks: Catalog Clerk, Order Desk Clerk, Service Order Clerk, Subscription Clerk |
| bB | 43-4161 | Human Resources Assistants, Except Payroll and Timekeeping: Employment Clerk, HR Clerk, Personnel Clerk |
| bBN | 43-4199 | Information and Record Clerks, All Other: Election Clerk, Flight Crew Scheduler, Probate Clerk, Student Admissions Clerk |
| bB | 43-5011 | Cargo and Freight Agents: Expedite and route movement of incoming and outgoing cargo and freight shipments in airine, train, and trucking terminals and shipping docks. Take orders from customers and arrange pickup of freight and cargo for delivery to loading platform. Prepare and examine bills of lading to determine shipping charges and tariffs.. Cargo Router, Freight Shipping Agent. |
| b | 43-5061 | Production, Planning, and Expediting Clerks: Expediter, Material Control Clerk, Material Expediter, Production Control Clerk, Production Control Coordinating Clerk, Production Control Coordinator, Production Scheduler, Work Ticket Distributor |
| b | 43-5071 | Shipping, Receiving, and Inventory Clerks: Incoming Freight Clerk, Inventory Control Clerk, Inventory Taker, Receiving Clerk, Reconsignment Clerk, Route Delivery Clerk, Shipping and Receiving Clerk, Shipping Order Clerk, Stockroom Attendant, Supply Clerk, Tool Crib Attendant, Warehouse Clerk |
| b | 43-9041 | Insurance Claims and Policy Processing Clerks: Insurance Claims Clerk, Insurance Clerk, Insurance Examining Clerk, Insurance Policy Issue Clerk, Underwriting Assistant, Underwriting Clerk |
| b | 43-9199 | Office and Administrative Support Workers, All Other: Fingerprint Clerk, Investigation Clerk, Notary Public |
| bBN | 51-1011 | First-Line Supervisors of Production and Operating Workers: Assembly Line Supervisor, Printing Supervisor, Printing Worker Supervisor |
| bBN | 51-9061 | Inspectors, Testers, Sorters, Samplers, and Weighers: Machine Departs Quality Inspector, Petroleum Sampler, Quality Assurance Inspector, Quality Control Inspector, Quality Inspector |
| bBN | 53-1040 | First-Line Supervisors of Transportation and Material Moving Workers |

## INTENSIVE ENGLISH PROGRAM

## - Mission Statement

The Intensive English Program supports San Francisco Bay University’s mission by equipping non-native speakers with the English language skills needed to successfully advance towards their academic and career goals. Along with providing an orientation to academic culture in the U.S. and fostering a diverse international community, the IEP helps students overcome the linguistic difficulties involved in studying a subject in English in a university setting.

## - Purpose

The IEP at SFBU is open to non-native speakers of English who want to improve their English language skills quickly. This program is designed for students preparing for university study, working professionals, and learners who want to increase their ability to communicate in English in general. Classes meet on the SFBU campus and/or online. The course of study is based on a communicative, student-centered approach with listening, speaking, reading, writing, and grammar components. Fluency and accuracy in both spoken and written English are emphasized. Classes are small, and they will never exceed 15 students. The small class size allows each participant a maximum amount of individual attention and an opportunity to develop conversational skills in an intimate setting.

## - Faculty

All IEP faculty members possess the following qualities: Master's degree in TESOL, Applied Linguistics, English, or closely related field; at least three years of experience teaching in a higher education/postsecondary environment, preferably in an intensive program; knowledge of modern pedagogy and learner-centered approaches, particularly Communicative Language Teaching (CLT); knowledge of English for Academic Purposes (EAP); excellent proficiency in English; and willingness to work with the IEP team on student success strategies.

## ■ Programmatic Accreditation

The Intensive English Program is accredited by the Commission on English Language Program Accreditation (CEA) for the period December 2020 to December 2025, and agrees to uphold the CEA Standards for English Language Programs and Institutions. CEA is recognized by the U.S. Secretary of Education as a nationally recognized accrediting agency for English language programs and institutions in the U.S. For further information about this accreditation, please contact the Commission on English Language Program Accreditation, 1001 N. Fairfax St., Suite 630, Alexandria, VA 22314, (703) 6653400, www.cea-accredit.org.

## - Application Requirements

To apply for the IEP, applicants must complete and submit the IEP application form online. Please visit our website at www.sfbu.edu/iep. Upon receiving your application form, an adviser will contact you to advise you on the status of your application and the next steps to take.

F-1 International Students: In addition to the general application requirements, an international applicant is required to submit the following additional documents:

1. Copy of passport
2. A financial support document - provide a recent financial support document indicating a minimum amount of $\$ 38,600$ available to pursue study in the first academic year at SFBU.

- A current bank letter and bank statement; or
- A loan letter from a lending institution; or
- Copies of fixed deposits.

An affidavit of support or sponsor letter is required if the funds are not in the applicant's name.
3. A transfer student (from a U.S. institution) is required to submit a photocopy of his/her

- previous I-20 form,
- visa, and
- I-94 (U.S Department of Homeland Security issued arrival / departure form).


## - Placement Test

New IEP students must attend a new student orientation before the first day of the IEP session. During or prior to the orientation, students will take a placement test to identify their level of English proficiency. Students will be placed into a level based on their results. The placement test might be waived if the original copy of a TOEFL or IELTS test report form, obtained within two years prior to applying, is provided by the student.

## - Minimum Entry Requirements

IEP students must be at least 18 years of age by the first day of class. Students must have a proficiency level higher than a true beginner in the English language to be accepted into the IEP. Elementary Level is the upper elementary, or CEFR A2, level, within IELTS band 4, and it equates approximately to a TOEFL iBT score of 31 and a TOEFL Essentials band score of 3.5. Online IEP students must have regular access to an electronic device with audio and video capabilities, and a reliable internet connection.

## - Tuition, Costs, and Refund

The IEP is delivered in levels. Students enroll in one level at a time, with no obligation to continue. The estimated total cost to complete Elementary Level ( 7.5 weeks) is $\$ 2,405.00$. The estimated total cost to complete Lower Intermediate Level, Upper Intermediate Level, or Advanced Level ( 15 weeks each) is $\$ 4,750$.. This estimation includes tuition, registration fees, and books. The IEP offers both full-time and part-time options to meet the needs of students. The breakdown of program costs is as follows:

- Tuition for full-time students (four courses, 20 hours/week)
- $\quad \$ 2000$ per 7.5-week session.
- Tuition for part-time students (one course, 5 hours/week)
- $\quad \$ 500$ per 7.5 -week session.
- Tuition for part-time students (two courses, 10 hours/week)
- $\quad \$ 1000$ per 7.5-week session.
- Tuition for part-time students (three courses, $\mathbf{1 5}$ hours/week)
- $\quad \$ 1500$ per 7.5-week session.
- Books

Registered IEP students have the option of purchasing the books for each level from the IEP office at SFBU. The cost of books for each course is estimated at $\$ 50-\$ 110$.

## - Student's Right to Cancel

Students have the right to cancel the enrollment agreement and obtain a refund of charges paid if notice of cancellation is received by SFBU through attendance at the first class meeting, or the 7th day after enrollment, whichever is later. Students shall provide notice of cancellation in writing through the MySFBU Student Portal using the following navigation links: My Requests > Non-Academic > Transfer Out/Withdrawal. Cancellation shall be effective when successfully submitted.

## - Refund Policy

Students who withdraw by the end of the first-class meeting in a period of attendance, or 7 days after enrollment, whichever is later, will receive a full refund. Following the first class meeting and up through completion of 75 percent of the period of attendance, students may withdraw from SFBU and obtain a pro rata refund of unearned institutional charges.

SFBU shall refund any credit balance on the student's account within 45 days after the date of the student's completion of, or withdrawal from, the student's educational program.
A withdrawal may be effectuated preferably by the student's written notice, as described above under cancellation, or by the student's conduct, including, but not necessarily limited to, a student's lack of attendance, as further detailed below.

A student is deemed to have been withdrawn when any of the following occurs: (1) the student drops all enrolled courses in a period of attendance, (2) the student submits a written notice to withdraw through the portal, as described in the cancellation section, (3) SFBU suspends or expels the student due to misconduct, unsatisfactory academic performance, or overdue fees, (4) the student fails to return from a leave of absence, or (5) the student misses a total of five hours or more of any course, based on the decision of the Attendance Committee.
A student that drops one or more courses, but not all courses, will receive a pro rata refund of tuition for the dropped courses.

- Calculation of Refund

Refund amount = total paid by student minus the amount owed.
Amount Owed = (total institutional charge/ hours in program) multiplied by the hours attended or scheduled to attend prior to withdrawal.

## - Intensive English Program Objectives

1. Students will develop fluency and accuracy in both spoken and written English.
2. Students will develop effective oral communication strategies to interpret auditory input and express concrete and abstract ideas, in formal as well as informal settings, and with increasingly native-like pronunciation.
3. Students will demonstrate comprehension of a variety of texts of increasing complexity, evaluate texts using critical reading skills, and identify useful and reliable sources when doing research.
4. Students will write sentences, paragraphs, and essays using connecting expressions and developing ideas with supporting evidence; follow the conventions of standard paragraph and essay format; and synthesize and cite information from various sources.
5. Students will accurately use grammatical structures of greater complexity as well as employ vocabulary of increasing variety and precision.

## - Structure of the Intensive English Program

The IEP teaches practical English skills for general, academic, and professional purposes. Based on the Common European Framework of Reference (CEFR), the four levels of the IEP range from upper elementary to advanced. Elementary Level and Lower Intermediate Level concentrate on General English, while Upper Intermediate Level and Advanced Level focus on English for Academic Purposes (EAP). All IEP courses can be offered on campus or online via synchronous livestreaming. Please note: International students with F-1 immigration status may enroll only in oncampus IEP courses.

## - Elementary Level and Lower Intermediate Level

In Elementary Level and Lower Intermediate Level, students concentrate on developing fundamental English skills in an interactive classroom setting. Course work emphasizes those skills necessary for effective oral and written communication. Instruction covers all areas of language development: practical vocabulary, basic language structures, and the essentials of reading, writing, listening and speaking, and grammar.

## - Upper Intermediate Level and Advanced Level

In Upper Intermediate Level and Advanced Level, students continue to develop fluency and accuracy. Course work focuses on both comprehensive skills and English for Academic Purposes (EAP). This includes essay and research paper writing and the development of critical reading, listening, and notetaking skills.

After successfully completing IEP Upper Intermediate Level B with a minimum grade of B in all four courses, IEP students meet the English language proficiency requirement for admission to SFBU degree programs.

Each level is comprised of 4 courses (Listening \& Speaking, Reading, Writing, and Grammar), and each course consists of 5 hours of classroom instruction per week, making a total of 20 hours per week.

| Advanced Level B | $\begin{aligned} & \text { CEFR } \\ & \mathrm{C} 1 \end{aligned}$ | IELTS <br> band <br> 7.0 | $\begin{aligned} & \text { TOEFL } \\ & 94-101 \end{aligned}$ | IEP410B Listening \& Speaking IEP420B Reading IEP430B Writing IEP440B Grammar | Advanced <br> Level B <br> Student Learning <br> Outcomes* |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Advanced Level A | $\begin{aligned} & \text { CEFR } \\ & \text { B2 } \end{aligned}$ | IELTS band 6.5 | $\begin{aligned} & \hline \text { TOEFL } \\ & 79-93 \end{aligned}$ | IEP410A Listening \& Speaking IEP420A Reading IEP430A Writing IEP440A Grammar | Advanced <br> Level A <br> Student Learning <br> Outcomes* |
| Upper Intermediate Level B | $\begin{aligned} & \text { CEFR } \\ & \text { B2 } \end{aligned}$ | IELTS band 6.0 | $\begin{aligned} & \text { TOEFL } \\ & 60-78 \end{aligned}$ |  <br> Speaking <br> IEP320B Reading <br> IEP330B Writing <br> IEP340B Grammar | Upper <br> Intermediate Level <br> B <br> Student Learning <br> Outcomes* |
| Upper Intermediate Level A | $\begin{aligned} & \text { CEFR } \\ & \text { B2 } \end{aligned}$ | IELTS band 5.5 | $\begin{aligned} & \text { TOEFL } \\ & 46-59 \end{aligned}$ | IEP310A Listening \& Speaking IEP320A Reading IEP330A Writing IEP340A Grammar | Upper <br> Intermediate Level <br> A <br> Student Learning <br> Outcomes* |


| Lower Intermediate Level B | CEFR B1 | IELTS band $5.0$ | $\begin{aligned} & \text { TOEFL } \\ & 35-45 \end{aligned}$ | IEP210B Listening \& Speaking IEP220B Reading IEP230B Writing IEP240B Grammar | Lower <br> Intermediate <br> Level B <br> Student Learning <br> Outcomes* |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Lower Intermediate Level A | CEFR <br> B1 | IELTS band 4.5 | $\begin{aligned} & \text { TOEFL } \\ & 32-34 \end{aligned}$ | IEP210A Listening \& Speaking IEP220A Reading IEP230A Writing IEP240A Grammar | Lower Intermediate Level A Student Learning Outcomes* |
| Elementary Level | $\begin{aligned} & \text { CEFR } \\ & \text { A2 } \end{aligned}$ | IELTS band 4.0 | $\begin{aligned} & \text { TOEFL } \\ & 31 \end{aligned}$ | IEP110 Listening \& Speaking IEP120 Reading IEP130 Writing IEP140 Grammar | Elementary Level Student Learning Outcomes* |

*Student Learning Outcomes for each level are available on the SFBU website at https://www.SFBU.edu/iep/learning_outcomes

## - Grading System, Progression through the Program, and Repeating Courses

A letter grade (A, B, C, D, F, or W) will be assigned for each course at the end of every session. Students must earn a grade of C (70\%) or better in an IEP course in order to take that course at the next level. Students who pass an IEP course with a grade of C (70\%) or better are not eligible to take that course at a lower level.

| Letter Grade | Percentage |
| :--- | :--- |
| A | $90 \%-100 \%$ |
| B | $80 \%-89 \%$ |
| C | $70 \%-79 \%$ |
| D | $60 \%-69 \%$ |
| F | $0 \%-59 \%$ |
| W | Withdrawal |

A student can fail (earn a grade of D or F) only one IEP course during the course of study; a second failing grade in any IEP course will result in the student's removal from the IEP. If circumstances out of the student's control contributed to the failure, the student must provide supporting documentation from a professional. An SFBU administrative committee will determine whether to approve the student's request to repeat the second failed course.

IEP Appeals for Grade Changes: Grades assigned by each course instructor conform to individual policies as stated in the published course syllabus. A grade submitted by an instructor is considered final and may be changed only for one of the following reasons:

1. Error in recording a score for a student product (test, quiz, paper, etc.)
2. Miscalculation of a score, including the cumulative score for a session.
3. Omission from consideration of valid student products that were submitted in time.

No other reason constitutes a basis for an appeal for grade change. All appeals for grade changes must be submitted to the ESL Administrator no later than the end of the add/drop week of the following session. Under no condition will a grade change be permitted after a degree has been awarded. A grade will not be changed after one session from the date of its issuance unless it has been repeated.

## - Incomplete Grades

An IEP instructor may give a student an extension of one week (an incomplete) after the current IEP session ends, if the student was unable to finish the requirements of the course due to an emergency at the end of the session.

## - Academic Advising

A cumulative GPA of at least 2.0 (C average) must be maintained. IEP students whose cumulative GPA falls below 2.0 will be placed on academic probation for one 7.5 -week IEP session. Students on academic probation who fail to raise their cumulative GPA above 2.0 in that 7.5 -week session will be dismissed from the program.

## - Attendance Policy

Students who miss one class meeting are required to meet with the ESL Administrator.
Students who miss a total of five hours or more of any one course will be referred to Counseling. These students may be withdrawn from that course, based on the decision of the Attendance Committee.

## Notice to F-1 International Students:

International students with F-1 immigration status must follow immigration rules. In general, students must maintain a full course of study to keep their immigration status. Failure to do this will lead to withdrawal from the University and automatic termination of the SEVIS record.

## - Session Break for F-1 International Students

F-1 International students are allowed to take a break for two (2) consecutive sessions (equivalent to one semester) after every four (4) sessions. Students who are eligible and wish to take session breaks must register for breaks through their student portal. Students are allowed to take session breaks upon approval. Failure to comply with this procedure will lead to withdrawal from the University and auto-termination of their SEVIS record.

## - Full-time and Part-time Course Load

Students are considered full time if they are enrolled in all four courses of a level in the IEP. Students enrolled in fewer than four IEP courses are considered part time.

## - Adding and Dropping Courses

Students may add or drop an IEP course during the first week of class before the second class meeting. It is not possible to add an IEP course after it has had two class meetings.

Students may drop an IEP course with a grade of W after the second class meeting and through the end of week 6 . After the end of week 6 , it is not possible to drop an IEP course.

## - University Policies

IEP students must refer to the following university policies listed at the beginning of this catalog:

- Educational Records
- Recordkeeping Policy
- Academic Integrity Policy
- Student Discipline
- Policies and Statements Addressing the Investigation and Treatment of Students, Staff, and Faculty Regarding Sexual Harassment and Assault
- Student Grievance Policy and Procedure
- Facilities
- Housing
- Course Descriptions

Courses are listed by levels.

|  | Listening <br> \& Speaking | Reading | Writing | Grammar |
| :--- | :--- | :--- | :--- | :--- |
| Elementary Level | IEP110 | IEP120 | IEP130 | IEP140 |
| Lower Intermediate Level A | IEP210A | IEP220A | IEP230A | IEP240A |
| Lower Intermediate Level B | IEP210B | IEP220B | IEP230B | IEP240B |
| Upper Intermediate Level A | IEP310A | IEP320A | IEP330A | IEP340A |
| Upper Intermediate Level B | IEP310B | IEP320B | IEP330B | IEP340B |
| Advanced Level A | IEP410A | IEP420A | IEP430A | IEP440A |
| Advanced Level B | IEP410B | IEP420B | IEP430B | IEP440B |

## Elementary Level

## IEP110 Listening \& Speaking

This upper elementary (CEFR A2) listening and speaking course develops a variety of oral communication skills as well as vocabulary and critical thinking skills. Listening skills include identifying main ideas, details, steps, examples, and reasons from an audio text. Students also practice taking notes using various strategies. Speaking and presentation activities involve making small talk and eye contact; giving examples, reasons, and sources of information; expressing opinions; agreeing and disagreeing; and presenting with graphics. This course also presents question intonation as well as how to pronounce contractions, verb endings, unstressed syllables, be going to, and can and can't.

## IEP120 Reading

This upper elementary (CEFR A2) reading course concentrates on the reading and interpretation of informative articles, but also examines the literary elements of short stories. This course develops the skills of skimming, scanning, previewing, predicting, taking notes, and completing a summary. It also emphasizes identifying examples and reasons; interpreting visual data; and understanding main ideas, details, pronoun references, quotes, and purpose. This course develops vocabulary as well as various critical reading skills such as inferring meaning from context, evaluating, synthesizing, personalizing, applying ideas, and analyzing sequence and arguments.

## IEP130 Writing

This upper elementary (CEFR A2) writing course establishes a strong foundation in sentence basics and moves the student writer into paragraphs, using past, present, and future verb forms. This course also presents vocabulary, connecting expressions, sentence variety and errors, and various grammar points, such as adjective clauses, adverbs, modals, and prepositional phrases.

## IEP140 Grammar

This upper elementary (CEFR A2) grammar course covers present simple and progressive, past simple, and future verb forms, as well as past time clauses. It also includes adjectives and adverbs, together with their comparative and superlative forms; count and noncount nouns and quantifiers; and gerunds and infinitives.

## Lower Intermediate Level A

## IEP210A Listening and Speaking

This entry intermediate (CEFR B1) listening and speaking course develops the listening skills of identifying main ideas, understanding a speaker's purpose, making inferences, and taking notes using various strategies. Students practice listening for examples, definitions, and reasons. Speaking and presentation activities include introducing and speaking about oneself, expressing failure to understand, clarifying, telling a story, agreeing and disagreeing, using signal words, and asking follow-up questions. This course addresses vocabulary and critical thinking skills as well as the pronunciation topics of question intonation, syllable and word stress, and -ed verb endings.

## IEP220A Reading

This entry intermediate (CEFR B1) reading course concentrates on the reading and interpretation of informative articles, but also examines the literary elements of short stories. This course develops the skills of predicting, skimming, scanning for specific information, taking notes, categorizing, and summarizing. It emphasizes identifying examples, facts, speculations, and sequencing. This course helps students understand main ideas, supporting ideas, details, purpose, analogies, and idioms. This course also develops vocabulary as well as the critical reading skills of inferring, reflecting, synthesizing, evaluating, and applying ideas.

## IEP230A Writing

This entry intermediate (CEFR B1) writing course focuses on skills for developing ideas and writing various types of paragraphs: narrative, process, definition, descriptive, and opinion. It includes academic vocabulary, sentence types and fragment errors, connecting expressions, unity, adding details, and various grammar points. This course also introduces strategies for avoiding plagiarism, locating sources, and using quotations.

## IEP240A Grammar

This entry intermediate (CEFR B1) grammar course reviews and expands upon present simple and progressive, imperative, and past simple verb forms, as well as past time clauses. It introduces present perfect, present perfect progressive, and habitual past verb forms. It also presents count and noncount nouns, articles, pronouns, adjectives and adverbs, and prepositions.

## Lower Intermediate Level B

## IEP210B Listening \& Speaking

This low intermediate (CEFR B1) listening and speaking course develops the ability to listen for main ideas and important details, reasons, and explanations. It promotes asking questions while listening, and taking notes using various strategies. Speaking and presentation activities include using the right volume, making eye contact, pausing, keeping a conversation going, giving reasons, making suggestions, asking for and giving an opinion, and asking for and giving clarification. This course builds vocabulary and critical thinking skills as well as the pronunciation skills of linking words together and stressing certain syllables and words.

## IEP220B Reading

This low intermediate (CEFR B1) reading course concentrates on the reading and interpretation of informative articles, but also examines the literary elements of short stories. The following skills are emphasized: predicting; reflecting; understanding main ideas, details, processes, and sequencing; taking notes; and identifying and justifying opinions. This course also develops vocabulary and the critical reading skills of interpreting visual information, inferring meaning, synthesizing, analyzing problems and solutions, and evaluating an argument.

## IEP230B Writing

This low intermediate (CEFR B1) writing course advances student writing from paragraphs to essays, examining descriptive and definition paragraphs as well as opinion, classification, and process essays. This course introduces academic vocabulary and connecting expressions, and explores ways of avoiding plagiarism, such as paraphrasing and citing sources. It also covers various grammar points, coherence, unity, clarity, and sentence variety and errors.

## IEP240B Grammar

This low intermediate (CEFR B1) grammar course presents future time clauses and future conditionals, adjective and adverb clauses, and conjunctions. It introduces a variety of modal verbs, transitive and intransitive verbs, and phrasal verbs. It also reviews and expands upon comparative and superlative adjectives and adverbs as well as gerunds and infinitives.

## Upper Intermediate Level A

## IEP310A Listening \& Speaking

This intermediate (CEFR B2) listening and speaking course develops a variety of oral communication skills, as well as vocabulary and critical thinking skills. Listening skills include taking notes and recognizing examples and numerical data from an audio text. Speaking activities include participating in a discussion, summarizing, interrupting and returning to a topic, speaking at the right pace, and using transitions. This course develops presentation skills and addresses the pronunciation topics of syllable stress, thought groups, and intonation of sentences and questions.

## IEP320A Reading

This intermediate (CEFR B2) reading course concentrates on the reading and interpretation of informative articles, but also examines the literary elements of short stories. The following skills are emphasized: scanning for specific information and identifying main ideas, details, relevant information, and pros and cons. This course also develops vocabulary and the critical reading skills of inferring meaning; evaluating arguments, evidence, and sources for credibility; understanding metaphors and similes; synthesizing; applying textual information; and differentiating theories from facts.

## IEP330A Writing

This intermediate (CEFR B2) writing course develops the skills of taking notes, paraphrasing, synthesizing, and evaluating and citing sources. It focuses on writing comparison and contrast, summary-response, and argument essays. This course also includes academic vocabulary, connecting expressions, unity, parallel structure, sentence variety and errors, faulty logic, and various grammar points.

## IEP340A Grammar

This intermediate (CEFR B2) grammar course reviews and expands upon the twelve verb tenses and aspects in English plus habitual past structures, time clauses, and modal verbs; nouns, pronouns, articles, and quantifiers; and the use of gerunds and infinitives.

## Upper Intermediate Level B

## IEP310B Listening \& Speaking

This high intermediate (CEFR B2) listening and speaking course develops a variety of oral communication skills. Listening skills include identifying main ideas and details, recognizing a speaker's attitude as well as digressions, and taking notes. Speaking and presentation activities involve using statistics; asking indirect and rhetorical questions; suggesting; persuading; and expressing probability, agreement and disagreement, and an opinion. This course also continues to develop critical thinking skills and vocabulary, and covers the pronunciation topics of intonation, syllable and word stress, and linking.

## IEP320B Reading

This high intermediate (CEFR B2) reading course concentrates on the reading and interpretation of informative articles, but also examines the literary elements of short stories. The following skills are emphasized: identifying and understanding main ideas, details, purpose, processes, pros and cons, referencing, and sequence; and inferring meaning. This course also develops vocabulary and the critical reading skills of summarizing, synthesizing, categorizing, analyzing, evaluating, and applying textual and visual information and evidence.

## IEP330B Writing

This high intermediate (CEFR B2) writing course further develops skills to conduct research and avoid plagiarism. It focuses on writing narrative, comparison and contrast, cause and effect, problem-solution, summary-response, and argument essays, as well as timed writing for test taking. This course also includes academic vocabulary, connecting expressions, paraphrasing and summarizing, coherence, parallel structure, sentence variety and errors, counterargument and refutation, and various grammar points.

## IEP340B Grammar

This high intermediate (CEFR B2) grammar course presents noun clauses, adjective clauses, and adverb clauses; and connecting information with conjunctions, prepositions, and transitions. It also explores negative questions and tag questions, indirect speech, real and unreal conditionals, and passive voice.

## Advanced Level A

## IEP410A Listening \& Speaking

This pre-advanced (CEFR B2) listening and speaking course develops a variety of oral communication skills and expands upon vocabulary and critical thinking skills. It develops the ability to understand inferences, referents, and a speaker's purpose. This course promotes listening for supporting details and consequences as well as taking notes. Speaking and presentation activities involve introducing a talk, using body language, making comparisons and analogies, using descriptive language, presenting a process, defending an opinion, and interacting with the audience. Pronunciation topics include tag question intonation, pausing, and stress patterns in phrasal verbs.

## IEP420A Reading

This pre-advanced (CEFR B2) reading course concentrates on the reading and interpretation of informative articles, but also examines the literary elements of short stories, emphasizing predicting; summarizing; identifying arguments, counterarguments, and sequencing; understanding main ideas, supporting ideas, details, referencing, certainty, effects, and problems and solutions; inferring meaning, attitude, and purpose; and interpreting and evaluating visual information. This course also develops vocabulary and the ability to apply ideas and synthesize and analyze arguments.

## IEP430A Writing

This pre-advanced (CEFR B2) writing course leads the student through the steps of writing a college-level research paper: choosing a research question; evaluating, taking notes from, and citing sources; paraphrasing and summarizing; creating a detailed outline; writing all parts of the research paper in several drafts; integrating evidence from reliable sources to support ideas; and building cohesion.

## IEP440A Grammar

This pre-advanced (CEFR B2) grammar course explores sentence structure and combining ideas using coordinators, subordinators, and transitions, as well as parallel construction. It reviews and expands upon real and unreal conditionals; adjective, adverb, and time clauses; comparatives and superlatives; demonstratives, articles, and quantifiers; time signals; past perfect simple and progressive; and past modals. It also introduces common patterns and expressions, as well as -ing participle phrases and complex noun phrases.

## Advanced Level B

## IEP410B Listening \& Speaking

This advanced (CEFR C1) listening and speaking course develops various listening skills, including understanding the introduction to a lecture and listening for specific information, for shifts in topic, and for clarification. It reviews various note-taking strategies and enhances vocabulary and critical thinking skills. Speaking and presentation activities include debating and responding to an argument, defining terms, emphasizing important information, referencing research studies, asking rhetorical questions, managing nervousness, and handling audience questions. Pronunciation topics include intonation for clarification and various types of linking.

## IEP420B Reading

This advanced (CEFR C1) reading course concentrates on the reading and interpretation of informative articles, but also examines the literary elements of short stories, emphasizing annotating texts; asking questions while reading; understanding main ideas, supporting ideas, details, and purpose; summarizing; identifying problems, reasons, and solutions; inferring meaning and author's attitude; and recognizing cohesion, chronology, and levels of formality. This course also develops vocabulary and the ability to apply ideas and synthesize, analyze evidence and point of view, interpret visual data, and evaluate sources.

## IEP430B Writing

This advanced (CEFR C1) writing course guides the writing of a research paper on a topic of the student's choice. It develops the skills of reading and writing critically, examines various problematic grammatical, syntactical, lexical, and writing style points, and considers issues of coherence, cohesion, and use of supporting evidence, to sharpen the advanced writer's command of research writing.

## IEP440B Grammar

This advanced (CEFR C1) grammar course reviews and expands upon passive voice; present perfect and present perfect progressive as well as ways of expressing future actions; adjective, adverb, and noun clauses; noun and adverb phrases; appositives; past unreal conditionals; and a variety of phrases and transitions useful in the rhetorical modes of academic writing.


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## UNIVERSITY MILESTONES

The university was founded on January 2, 1984, and incorporated as a California nonprofit, public-benefit institution on March 27, 1984. Because of the strong demand in Silicon Valley for qualified engineers, the School of Engineering began to offer the Bachelor of Science in Electrical Engineering degree in November 1984, followed by the Master of Science in Electrical Engineering in 1985. The university opened the Computer Systems Engineering programs at both the bachelor's and master's degree levels in 1987. Under high-spirited teamwork, the university grew quickly from a budding school of a few students and faculty in 1984 to a well-established school by 1989. February 23, 1989 marked a milestone for the university as it attained full institutional approval from the California Department of Education. When the entrepreneurial spirit in Silicon Valley demanded students with business training, the university established the School of Business and began to offer the Master of Business Administration and Bachelor of Business Administration and Information Sciences degrees in 1995. At the same time, the School of Engineering continued to expand its programs by offering bachelor's and master's degrees in computer science with curricula emphasizing computer software applications in various fields based on the industry trends. In January 1998, the Accrediting Council for Independent Colleges and Schools (ACICS) recognized the university to award bachelor's and master's degrees. In April 2005, ACICS recognized the university to award two doctorate degree programs: Doctor of Business Administration and Doctor of Computer Engineering. In August 2018, ACICS renewed the university's accreditation until December 31, 2022. On November 21, 2018, the U.S. Department of Education issued a final decision to continue recognition of ACICS as a federally recognized accrediting agency. On March 4, 2019, WASC Senior College and University Commission (WSCUC) recognized the university as a Candidate for Accreditation. On July 8, 2020, the university received accreditation from the WASC Senior College and University Commission (WSCUC). On December 17, 2020, the Intensive English Program (IEP) received programmatic accreditation from the Commission on English Language Program Accreditation (CEA). On February 25, 2021, the Master of Business Administration (MBA) program was approved for distance education modality by the WASC Senior College and University Commission (WSCUC). Effective 2021 Summer, the Bachelor of Business Administration and Information Sciences (BBAIS) degree name was changed to the Bachelor of Science in Business Administration (BSBA). On January 20, 2022, the Master of Science in Computer Science (MSCS) program was approved for distance education modality by the WASC Senior College and University Commission (WSCUC). On February 11, 2022, the Bachelor of Science in Business Administration (BSBA) program was approved for distance education modality by the WASC Senior College and University Commission (WSCUC). On April 14, 2022, the Intensive English Program (IEP) was approved for synchronous online course delivery by the Commission on English Language Program Accreditation (CEA). On September 8, 2023, the Master of Science in Data Science (MSDS) program was approved by the WASC Senior College and University Commission (WSCUC). On November 15, 2023, the Master of Science in Business Analytics (MSBAn) program was approved by the WASC Senior College and University Commission (WSCUC).

## BOARD OF DIRECTORS

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M.B.A.: Master of Business Administration, California State University East Bay, CA, 1983
B.S.: Bachelor of Science, Electrical Engineering, Worcester Polytechnic University, MA, 1981
Marketing management, product and project management, new business development, computer networks, communication engineering, Unix/Linux systems, cloud computing.

## Reginald Duhe

Ed.D: Doctor of Education, Organizational Leadership, Northeastern University, Boston, MA, 2020
M.A.: Master of Arts, Management, Organizational Leadership, Gonzaga University, Spokane, WA
B.A.: Bachelor of Arts, Political Science, University of California, Berkeley, CA
Marketing, Consumer Science, Organizational Behavior, and Business Communications

## Steven Fichera

J.D.: Juris Doctor, Law, Rutgers School of Law, NJ, 1998
M.S.: Master of Science, Business Administration, Rutgers School of Business, NJ, 1998
B.A.: Bachelor of Arts, History, Rutgers University, NJ, 1992

Business law, copyright law, business management.

## Mariam Ghazvini

Ed.D.: Doctor of Education, University of Southern California, CA, 1997
M.B.A.: Master of Business Administration, San Francisco Bay University, CA, 2014
M.A.: Master of Arts, Counseling, Santa Clara University, CA, 2004
M.A.: Master of Arts, Higher Education, San Jose State University, CA, 1994
B.A.: Bachelor of Arts, Sociology, San Jose State University, CA, 1983

Organizational behavior, leadership development, career planning, counseling, communication.

## Hari Hirani

M.S.: Master of Science, Master of Science in Computer and Information Engineering, University of Florida, Gainesville, FL, 1979
B.Tech.; Bachelor of Technology, Maharaja Sayajrao University of Baroda, Vadodara, India, 1977
Project management, program management, new product development, optimization of business systems, decision theory, information economics.

## Arshad Khan

MBA, Marketing Management, Pace University, New York, NY, 1976
ME, Chemical Engineering, Stevens Institute of Technology, Hoboken, NJ, 1977
B.E., Chemical Engineering, NIT, Srinagar, India, 1973

Strategic and tactical analytics, performance improvement, business process redesign, supply chain and operations consulting, enterprise software training, as well as authoring books, including 6 on analytics.

## Stanislav Kelman

M.B.A: Marketing and Entrepreneurship, Columbia University, New York, NY, 2007
M.S: Master of Science Mechanical Engineering. University of Illinois, 1998
B.S.M.E.:, Bachelor of Science Mechanical Engineering, Christian Brothers University, 1996
Business Analytics, artificial intelligence, machine learning, business statistics, innovation, marketing analysis

## Angie Liu

Doctor of Philosophy, The University of Sydney, 2022
Bachelor of Commerce, The University of Sydney, 2017
Quantitative analytics, algorithmic trading, data visualization, machine learning, Programming Python, SQL, R, investment banking.

## James Nysather

D.B.A.: Doctor of Business Administration, San Francisco Bay University, CA, 2015
M.B.A.: Master of Business Administration, International Management, Thunderbird School of Global Management, AZ, 1999
B.S.: Bachelor of Science, Marketing, St. Cloud State University, MN, 1988
Business development, marketing, business management.

## Gul Sabit

M.S.: Master of Science, Finance and Economics, West Texas A\&M University, TX, 2021
M.P.A.: Master of Public Administration, California State University East Bay, CA, 2006
B.S.B.A.: Bachelor of Science in Business Administration, Berea College, KY, 1999
International finance and banking, strategy and policy development, risk management, accounting, payment systems, compliance, project management, public financial management, international trade, and public administration

## Daniel Shim

M.B.A.: Master of Business Administration, Sloan School of Management, Massachusetts Institute of Technology, Cambridge, MA, 2010
B.B.A.: Bachelors in Business Administration, University of California, Berkeley, Berkeley, CA, 2002
Marketing Strategy, product marketing, vertical marketing, competitive intelligence, online product \& services, digital marketing, innovation.

## Swapna Sinha

D.B.A.: Doctor of Business Administration, Golden Gate University, CA, 2006
B.A.: Bachelor of Arts, History, University of Lucknow, India, 1986

Business development, marketing, finance, strategic management.

## Nicole Smith

J.D.; Juris Doctor, University of Pennsylvania Law School, Philadelphia, PA, 2019
M.B.A.: University of Pennsylvania Wharton School of Business, Philadelphia, PA, 2019
B.A.; Bachelor of Arts in Economics, University of Rochester, Rochester, NY

## Majid Nik Tehrani

Ph.D., Business Administration, Northcentral University, Scottsdale, Az
M.B.A., Master of Business Administration, Pepperdine University, Malibu, CA
M.S., Master of Science Engineering Management, International

Technological University, San Jose, CA
B.S.: Bachelor of Science Electrical Engineering, Cogswell Polytechnic College, San Jose, CA
Entrepreneurship \& Business Ventures, product management, marketing, business development

## General Studies

## Michael Bailey

Degree of Engineer: Electrical Engineering, Stanford University, Stanford, CA, 1992
M.B.A.: Master of Business Administration, Finance, Santa Clara University, CA, 2001
M.A.: Master of Arts, Physics, University of California, Santa Barbara, CA, 1981
B.A.: Bachelor of Arts, Physics, University of California, San Diego, CA, 1979
Semiconductor physics, RF/microwave design, product management, finance.

## Wayne Chow

D.M.A.: Doctor of Musical Arts, Music Composition, Louisiana State University, Louisiana, 1987
M.M.: Master of Music, Music Theory, Pittsburg State University, Kansas, 1984
B.M.: Bachelor of Music, Piano, Pittsburg State University, Kansas, 1983

Music composition, music theory and history.

## Mariam Ghazvini

Ed.D.: Doctor of Education, University of Southern California, CA, 1997
M.B.A.: Master of Business Administration, San Francisco Bay University, CA, 2014
M.A.: Master of Arts, Counseling, Santa Clara University, CA, 2004
M.A.: Master of Arts, Higher Education, San Jose State University, CA, 1994
B.A.: Bachelor of Arts, Sociology, San Jose State University, CA, 1983

Organizational behavior, leadership development, career planning, counseling, communication.

## Michael Leinhos

M.E.: Master of Education, Temple University, PA, 1994
B.A.: Bachelor of Arts, Political Science, Temple University, PA, 1993

Social sciences, communication, humanities.

## Intensive English Program

## Natalia Monteiro

M.A: Master of Arts, Teaching English to Speakers of Other Languages
(TESOL), San Francisco State University, CA, 2022
English as a Second Language, Materials Development

## Jennie O'Connor

M.Ed.: Master of Education, Curriculum and Instruction, Teaching English to Speakers of Other Languages (TESOL), Cleveland State University, OH, 2008
M.A.: Master of Arts, English, Cleveland State University, OH, 2006

English as a second language (ESL)

## George Shamshayooadeh

Ph.D.: Doctor of Philosophy, English, Old Dominion University, VA, 2018 English as a second language (ESL) reading and writing, English composition, English literature

## DIRECTIONS TO SFBU

- From I-880: Exit I-880 at Mission Blvd.-Warren Ave. and take Mission Blvd. East (towards the hills). Turn right onto Warm Springs Blvd. Drive past Warren Ave. and turn right on Mission Falls Lane. Turn right again to enter the university parking lot.
- From I-680: Exit I-680 at Mission Blvd.-Warm Springs District and drive west on Mission Blvd. (towards the Bay) to Warm Springs Blvd. Turn left onto Warm Springs Blvd. Drive past Warren Ave. and turn right on Mission Falls Lane. Turn right again to enter the university parking lot

1. Main Campus (Building 1) 161 Mission Falls Lane, Fremont, CA 94539

SFBU Campus Map


## SAN FRANCISCO BAY UNIVERSITY

## AMENDMENTS TO CATALOG

## Bold - addition <br> Strikethrough - removal



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    *- Earned an associate degree or a minimum of 60 transferable credits at a California community
                college. Transferable credits must be counted towards bachelor's degree requirement.
    - Minimum cumulative grade point average of 3.00 on a 4.00 scale (college level CGPA).
    - Personal Statement
    - At least one letter of recommendation from a teacher or professor
She seholarship may be limited in number, and early applieations are highly encouraged. Minimmm
eligibility does not guarantee a scholarship. The university reserves the right to deny an application for any
reason.
Terms:
\(400 \%\) tuition seholarship, awarded as a discount on the applicable tuition price prior to the beginning of
each semester in which the student is eligible for the scholarship.
-The continued distribution of the full tuition scholarship is contingent on ongoing progress toward the
completion of the program entered and the degree eamed
-The student is required to pay fees (approximately \(\$ 400-455\) per semester).
-The student is required to pay for health insurance (approximately \(\$ 450500\) per semester) unless waived.
-The scholarship is valid for tuition payments only. The scholarship has no cash value. Any umused tuition scholarship will be forfeited.
-The tuition scholarship payments shall not exceed the program's minimum total credits required for completion. Credits taken in excess of the amount required for completion will be charged at the applicable tuition rate.
-The student is required to enroll in a minimum of 12 credits per semester (unless eligible for a semester break) and maintain a minimum GPA of 3.0 each semester. In addition, a minimum grade of "C" is required in all courses. Exception: if the student is working professional and is mable to enroll in a full time course load, a part time course load may be approved at the diseretion of the Academic Team.
SThe student's program must be completed within 6 semesters, excluding breaks, by students emrolled in a full-time course load. Part-time students must complete the program within 10 consecutive semesters.
The student must maintain gooda good standing with the university by upholding the university's academic standards and integrity.
-The student is eligible to receive this scholarship only once (per degree level).
-The student receiving this scholarship is not eligible for any other SFBU seholarships, with the exception that the student may qualify for the Outstanding Student Scholarship.
-If the student is unable to meet any of the terms, the tuition scholarship will be rescinded.
-The university reserves the right to rescind a scholarship if it deems the decision to be in the best interest of the university.
a President's Scholarship (Master's)
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San Francisco Bay University grants a full tuition scholarship to approved qualified applicants in the master's programs.

## Minimmm Eligibility for Consideration:

- Applicants must be applying for a master's degree in computer seience (MSCS), electrical engineering (MSEE), data science (MSDS), business analytics (MSBAn), or business administration (MBA).
- Standard admission requirements; PLUS
- Minimum cumulative grade point average (undergraduate level) of 3.30 on a 4.00 scale.
- Personal Statement.
- At least one letter of recommendation from a professor or an employer.
- Minimum English proficiency seore (for non-native English speakers) on any of the following: - TOEFL 78 (iBT)
- TOEFL Essentials - 8.0 band
- IELTS (Academic) - 6.0 band
- PTE Academic 58
- iTEP Academic - 4.0
- English proficiency requirement met based on the standard admission requirements
- The scholarship may be limited in number, and early applications are highly encouraged. Minimum eligibility does not guarantee a seholarship. Minimmm eligibility does not gurantee a scholarship. The university reserves the right to deny an application for any reason.
Terms:
$100 \%$ tuition seholarship, awarded as a diseount on the applicable tuition price prior to the beginning of each semester in which the student is eligible for the scholarship.
The continued distribution of the full trition scholarship is contingent on ongoing progress toward the completion of the program entered and the degree eamed.
-The student is required to pay fees (approximately $\$ 400-455$ per semester).
The student is required to pay for health instrance (approximately $\$ 450-500$ per semester) unless waived.
-The scholarship is valid for tuition payments only. The scholarship has no cash value. Any unused tuition scholarship will be forfeited.
-The tuition scholarship payments shall not exceed the program's minimum total credits required for completion. Credits taken in excess of the amount required for completion will be charged at the applicable tuition rate.
-The student is required to enroll in a minimum of 9 credits per semester (unless eligible for a semester break) and maintain a minimum semester GPA of 3.30 . In addition, a minimum grade of " $B$-" is required in all courses. (Exception: if the student is a working professional and is unable to enroll in a full-time course
load, a part-time course load may be approved at the discretion of the Academic Team. After approval, this student must register for at least one course per term).
-The program must be completed within 4 semesters, excluding breaks, by students enrolled in a full-time course load. Part-time students must complete the program within 12 semesters from the term of enrollment. These students must pay full tuition for any credits enrolled beyond 12 semesters.
-Students requiring prerequisites may be eligible for up to an additional 2 semesters if cireumstances warrant, as determined by the Scholarship Committee.
-The student must maintain gooda good standing with the university by upholding the university's academic standards and integrity.
The student is eligible to receive this scholarship only once (per degree level). Exception: this requirement does not apply to U.S. domestic students.
-The student receiving this seholarship is not eligible for any other SFBU seholarships, with the exception that the student may qualify for the Housing Scholarship and Outstanding Student Seholarship.
-If the student is unable to meet any of these requirements, the tuition scholarship will be rescinded.
-The university reserves the right to rescind a scholarship if it deems the decision to be in the best interest of the university.
a-Housing Scholarship (Bachelor's and Master's Degree)
San Franciseo Bay University grants a scholarship awarding free SFBU-owned housing to approved qualified President's Scholarship recipients in the bachelor's and master's degree programs.

Minimmm Eligibility for Consideration:
Standard admission requirements and satisfaction of minimum requirements of the Presidential Scholarship applicable to the program for which the applicant is applying; PLUS satisfaction of two of the following three criteria:
$\theta$ Minimum cumalative grade point average 3.50 on a 4.00 seale.

- Freshmen applicants (Bachelor's): High school CGPA
- Transfer applicants (Bachelor's) (30 or more transferable units): College level CGPA
- Master's applicants: Undergraduate CGPA or, if applicable, CGPA from a completed graduate program.
$\theta$ Minimum English proficiency score (for non-native English speakers) on any of the following: - TOEFL - 80 (iBT)
- TOEFL Essentials 8.5 band
- IELTS (Academic) - 6.5 band
- PTE Academic - 64
- iTEP Academic - 4.2
- English proficiency requirement met based on the standard admission requirements.
$\theta$ Prior completion of a degree at the same level or higher than the one for which the student is applying (e.g., a Master's student already in possession of a Master's or Doctorate degree meets this criterion).
The housing seholarship may be limited in number, available on a first come first serve basis, and is subject to continted availability of housing. Minimum eligibility does not guarantee a seholarship. The university reserves the right to deny an application for any reason.
Terms:
-All terms applicable to the relevant Presidential Scholarship (Bachelor's or Master's) apply. If a student with a Presidential Scholarship fails to adhere to its terms, the student's Housing Scholarship will be rescinded.
-Housing is limited and thus, the housing scholarship is contingent on the housing availability and a spot is not guaranteed until it is confirmed by the Housing department.
-Once granted, the Housing Scholarship is only available for a period of two consecutive semesters, beginning in the semester during which a student commences the student's course of study. In the event the student does not enroll in classes in any of the subsequent consecutive semesters or takes a semester break, the university shall have the right, but not the obligation, to extend the Housing Scholarship such that the student receives the scholarship for two full non consecutive semesters. The university's right may be exercised in at the university's sole diseretion.
- A student granted a Housing Scholarship will be expected to share living facilities with other students and shall have no discretion as to who is housed with them. A student is not guaranteed his or her own room and, depending on the demand for housing, may be required to share a room with another student. The university reserves the right to assign roommates.
- At the university's sole discretion, a student who has been granted a Housing Scholarship may be moved and relocated to a different residence at any time, which may be of a different size, location, and arrangement from the student's prior residence.
-The scholarship is valid for housing payments only. The scholarship has no cash value. Any unused portion of housing payments will be forfeited.
-While living in university housing, students must abide by all SFBU Housing Regulations, Rules and Policies. Failure in this regard may result in a loss of the Housing Scholarship and a forfeiture of housing eligibility.
-The United States Internal Revenue Service (IRS) generally treats scholarships in excess of the cost of tuition, such as scholarships for housing, as taxable income. Students receiving the Housing Scholarship are advised to discuss any potential tax implications with their tax professional. SFBU will comply with all

|  | IRS rules and regulations, including with respect to tax withholding and end-of-year tax reporting. <br> 0 <br> Housing Scholarship (Master's Degree) <br> San Francise Bay University grants a scholarship awarding free SFBU owned housing to approved qualified Presidential Scholarship recipients in the master's degree programs. <br> Minimum Eligibility for Consideration: <br> $\ominus$ Standard admission requirements and satisfaction of minimmm requirements of the Presidential Scholarship applieable to the program for which the applieant is applying; PLUS satisfaction of the following criteria: <br> Minimum cumulative grade point average 3.70 on a 4.00 seale. <br> $\ominus$ CGPA from all completed undergraduate and graduate degrees. <br> $\theta$ Minimum English proficiency score (for non-native English speakers) on any of the following: <br> $\bigcirc$ TOEFL 80 (iBT) <br> $\theta$ TOEFL Essentials - 8.5 band <br> $\ominus$ IELTS (Academic) - 6.5 band <br> $\ominus$ PTE Academic - 64 <br> $\ominus$ iTEP Academic - 4.2 <br> $\theta$ English proficiency requirement met based on the standard admission requirements. <br> The housing scholarship may be limited in number, available on a first-come-first-serve basis, and is subject to the continted availability of housing. Minimum eligibility does not gurantee a seholarship. The university reserves the right to deny an application for any reason. <br> Terms: <br> - All terms applicable to the relevant Presidential Scholarship (Master's) apply. If a student with a Presidential Scholarship fails to adhere to its terms, the student's Housing Scholarship-will be rescinded. <br> - Housing is limited, and thus, the housing scholarship is contingent on housing availability, and a spot is not guaranteed until it is confirmed by the Housing department. <br> - Once granted, the Housing Scholarship is only available for a period of two consecutive semesters, beginning in the semester during which a student commences the student's course of study. In the event the student does not enroll in classes in any of the subsequent consecutive semesters or takes a semester break, the university shall have the right, but not the obligation, to extend the Housing Scholarship such that the student receives the scholarship for two full non-consecutive semesters. The university's right may be exercised at the university's sole diseretion. <br> - A student granted a Housing Scholarship will be expected to share living facilities with other students and shall have no discretion as to who is housed with them. A student is not guaranteed his or her own room and, depending on the demand for housing, may be required to share a room with another student. The university reserves the right to assign roommates. <br> - At the university's sole diseretion, a student who has been granted a Housing Scholarship may be moved and reloeated to a different residence at any time, which may be of a different size, location, and arrangement from the student's prior residence. <br> - The scholarship is valid for housing payments only. The scholarship has no cash value. Any unused portion of housing payments will be forfeited. <br> - While living in university housing, students must abide by all SFBU Housing Regulations, Rules and Policies. Failure in this regard may result in a loss of the Housing Scholarship and a forfeiture of housing eligibility. <br> - The United States Internal Revenue Service (IRS) generally treats scholarships in excess of the cost of tuition, such as scholarships for housing, as taxable income. Students receiving the Housing Scholarship are advised to diseuss any potential tax implications with their tax professional. SFBU will comply with all IRS rules and regulations, including with respect to tax withholding and end-ofyear tax reporting. |  |
| :---: | :---: | :---: |
| Page 11-15 | a-President's Scholarship (Bachelor's) <br> San Franciseo Bay University grants a full tuition seholarship to approved qualified students. <br> Minimum Eligibility for Consideration: <br> Domestic students with a 2.75 GPA or higher will receive a seholarship that covers $\mathbf{1 0 0 \%}$ of tuition. <br> International students with a 2.75 GPA or higher will receive a scholarship that covers $75 \%$ of tuition. <br> The following terms and conditions apply: <br> The continued distribution of the full tuition seholarship is contingent upon maintaining Satisfactory <br> Academic Progress. Students also must maintain a good standing with the university by upholding the university's academic standards and integrity. <br> Students are required to enroll in a minimum of twelve credits per semester and maintain a minimum eumulative GPA of 2.00 . <br> The program must be completed within ten semesters, excluding any approved breaks. <br> The scholarship is valid for tuition payments only. Any unused tuition scholarship will be forfeited. The scholarship has no cash value and does not cover the following student fees: <br> $\$ 150$ Tuition Deposit (this goes towards tuition) <br> $\$ 180$ Campus Fee <br> $\$ 75$ Registration Fee | 02/25/2024 |

$\$ 200$ Learning Resource Fee
The tuition scholarship payments shall not exceed the program's minimum total credits required for completion.
Students are eligible to receive this scholarship only once.
Students are not eligible to receive any other SFBU academic scholarships, unless students apply for, and
are awarded, the Startup Scholars Scholarship, in which case the Startup-Scholars Scholarship would replace this scholarship.
If students are unable to meet any of the terms, the tuition scholarship will be reseinded.
The university reserves the right to rescind a scholarship if it deems the decision to be in the best interest of the university.

- President's Scholarship (Master's)

San Franciseo Bay University grants a large tuition seholarship to approved qualified students.
Minimum Eligibility for Consideration:
Students with a 3.3 GPA or higher will receive a scholarship that covers $\mathbf{7 5 \%}$ of tuition.

The following terms and conditions apply:
The continued distribution of the full tuition scholarship is contingent upon maintaining Satisfactory Academic Progress. Students also must maintain a good standing with the university by upholding the university's academic standards and integrity.
Students are required to enroll in a minimum of twelve credits per semester and maintain a minimum emmalative GPA of 3.00 .
The program must be completed within four semesters, excluding any approved breaks.
The scholarship is valid for tuition payments only. Any untrsed tuition scholarship will be forfeited. The scholarship has no cash value and does not cover the following student fees:
$\$ 150$ Tuition Deposit (this goes towards tuition)
$\$ 180$ Campus Fee
\$75 Registration Fee
$\$ 200$ Learning Resource Fee
The tuition scholarship payments shall not exceed the program's minimum total credits required for completion.
Students are eligible to receive this scholarship only once.
Students are not eligible to receive any other SFBU academic scholarships.
If students are unable to meet any of the terms, the tuition scholarship will be rescinded.
The university reserves the right to rescind a scholarship if it deems the decision to be in the best interest of the university.

- SFBU Scholarship (Bachelor's)

San Franciseo Bay University grants a large tuition seholarship to approved qualified students.
Minimum Eligibility for Consideration:
Domestic students with a 2.5-2.74 GPA will receive a scholarship that covers 75\% of tuition.
International students with a 2.5-2.74 GPA or higher will receive a scholarship that covers $\mathbf{5 0 \%}$ of tuition.
The following terms and conditions apply:
The continued distribution of the full tuition scholarship is contingent upen maintaining Satisfactory Academic Progress. Students also must maintain a good standing with the university by upholding the university's academic standards and integrity.
Students are required to enroll in a minimum of twelve credits per semester and maintain a minimum eumulative GPA of 2.00 .
The program must be completed within ten semesters, excluding any approved breaks.
The scholarship is valid for tuition payments only. Any unused tuition scholarship will be forfeited. The scholarship has no cash value and does not cover the following student fees*:
$\$ 150$ Tuition Deposit (this goes towards tuition)
\$180 Campus Fee
\$75 Registration Fee
\$200 Learning Resource Fee
The fuition scholarship payments shall not exceed the program's minimmm total credits required for eompletion.
Students are eligible to receive this scholarship only once.
Students are not eligible to receive any other SFBU academic scholarships.
If students are unable to meet any of the terms, the tuition scholarship will be rescinded.
The university reserves the right to reseind a scholarship if it deems the decision to be in the best interest of the university.

- SFBU Scholarship (Master's)

San Francisco Bay University grants a large tuition scholarship to approved qualified students.
Minimum Eligibility for Consideration:
Students with a 3.0-3.29 GPA will receive a scholarship that covers $50 \%$ of tuition.


|  | Graduate Sc <br> th <br> GPA Band <br> $2.50-2.74$ <br> $2.75-2.99$ <br> $3.0-3.24$ <br> $3.25-3.49$ <br> $3.5-3.99$ <br> $4.0+$ <br> The followin <br> Note: the sc | best interest of th <br> Scholarship \% <br> $0 \%$ <br> $0 \%$ <br> $50 \%$ <br> $60 \%$ <br> $75 \%$ <br> $100 \%$ <br> erms and condit <br> continued distr factory Academ ersity by uphold ents are require imum cumulative program must b scholarship is va ited. The schola <br> \$150 Tuiti <br> \$180 Cam <br> $\$ 75$ Regist <br> \$200 Lear <br> \$495 Heal <br> Housing F <br> SEVIS Fee <br> tuition scholars <br> ired for complet <br> ents are not eligi <br> udents are unabl <br> university reser <br> best interest of th <br> arships are subje | niversity. <br> apply: <br> tion of all tui Progress. Stud the university' enroll in a mi PA of 3.00. mpleted within for tuition pay ip has no cas <br> Deposit (this go Fee ion Fee g Resource Fee nsurance Fee ( <br> ternational ap payments shal <br> to receive any meet any of th the right to res niversity. <br> to change. |  |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{aligned} & \text { Pages 51, 71, } \\ & 99,126,133 \end{aligned}$ | English Profic <br> - A degree e solely by SF <br> Barbuda, A <br> Islands, Ca <br> Ghana, Gib <br> Mauritius, <br> Saint Lucia, <br> Swaziland, | ncy Requirement ed at an institutio ). Applicants f nsion, Australia da (except Queb tar, Grenada, G mibia, New Zeal aint Vincent \& T zania, Tonga, T | in which the lan the following Bahamas, Barb Cayman Isl na, Ireland, Ja , Nigeria, Papu Grenadines, Sc dad \& Tobago, | 04/25/2024 |
| Page 121 | MGT482 La <br> From introd entrepreneu logical entre phases thro suggested d opportunity strategy, etc. | ching Innovative tion to mastery business owner eneur developm to the funding ussion topics wel ips for successfu | tartups (3 units) hands-on proj nd innovators process will be d marketing la ne such as: de tart-up team | 04/25/2024 |
| Page 122 | MKT483 M <br> Intellectual going beyon and interes growing US Course topic | tizing Intellectu <br> operty (IP) is a $f$ raditional IP def strategies for market for leasin include: Outright | Property (3 Units) <br> 's most valuab ion and usage, nerating capita f intellectual pr les, Third-Part | 04/25/2024 |


|  | Collateralization, Donations, Copyrights, Trademarks, Trade Secrets and Patents, etc. This course contains assignments with research and role playing. |  |
| :---: | :---: | :---: |
| Pages 141-143 | Illustrative Advising Road Map MBA/Suggested Study Plan Course Sequence: updated | 04/25/2024 |
| Page 154 | MGT482G Launching Innovative Startups (3 units) <br> From introduction to mastery this hands-on project based course is ideal for entrepreneurs, future entrepreneurs, business owners, and innovators alike. In order to put your dream into action the logical entrepreneur development process will be covered from the ideation and business modeling phases through to the funding and marketing launch phases. Discussions are flexible with student suggested discussion topics welcome such as: design thinking, lean startup, validating the market opportunity, tips for successful start-up team management, low cost marketing tactics, pricing strategy, etc. | 04/25/2024 |
| Page 155 | MGT550 Global Outsourcing Project Management (3 units) <br> In today's increasingly competitive and globalized business landscape, effective global outsourcing management has emerged as a critical area of focus for organizations. As companies strive to enhance their performance and gain a competitive edge, the management of suppliers plays a pivotal role in shaping overall costs and facilitating differentiation strategies. This course offers students a comprehensive understanding of the profound impact that sourcing and supply management have on the success and profitability of modern businesses. We delve into the intricacies of sourcing and supplier management decisions, considering factors such as costs, pricing dynamics, ethical considerations, globalization trends, and risk management strategies. Furthermore, we explore how sourcing and supply management practices intersect with other functional areas within organizations, including product design and inventory management. Through a blend of engaging lectures and in-depth case study discussions, students will gain practical insights into the complexities of sourcing and supply management, equipping them with the knowledge and skills needed to navigate these challenges effectively in today's dynamic business environment. | 04/25/2024 |
| Page 156 | MKT483G Monetizing Intellectual Property (3 Units) <br> Intellectual Property (IP) is a firm's most valuable asset. Ideal for social media content creators and going beyond traditional IP definition and usage, students in this course will learn innovative models and interesting strategies for generating capital and value from intangible assets. The rapidly growing USA market for leasing of intellectual property is already greater than $\$ 63$ billion per year. Course topics include: Outright Sales, Third-Party Licensing, Royalty Securitizations, Bowie Bonds, Collateralization, Donations, Copyrights, Trademarks, Trade Secrets and Patents, etc. This course contains assignments with research and role playing. | 04/25/2024 |
| Page 180 | Administration <br> Anne Sutardji, Chief Financial Officer <br> B.S.: Bachelor of Science, Finance, San Franciseo State University, CA <br> Nelly Mangarova, M.D., Vice-President of Academic Affairs, Chief Academic Officer <br> Doctor of Medicine, Medical University, Bulgaria <br> Lisa Millora, Vice President \& Chief Operating Officer <br> Ph.D.: Doctor of Philosophy, Higher Education and Organizational Change, UCLA, CA <br> M.A.: Master of Arts, Higher Education and Organizational Change, UCLA, CA <br> M.A.: Master of Arts, Higher Education Administration, Boston College, MA <br> B.A.: Bachelor of Arts, Political Science, Boston College, MA <br> Syed Asif Ijaz, Vice-President of Business Incubation and Acceleration <br> MBA.: Master of Business Administration, Operations \& Supply Chain Management, Cal State East <br> Bay, <br> M.S.: Master of Science, Electrical Engineering, The University of Texas at Arlington, TX <br>  <br> Technology, Karachi, Pakistan <br> Stephanie Krusemark, Vice-President of Enrollment Management and Student Affairs <br> Ph.D.: Doctor of Philosophy, Higher Education, University of Denver, CO <br> M.A., Master of Arts, Arts Administration, Saint Mary's University of Minnesota, MN <br> B.A., Bachelor of Arts, Art History, University of St. Thomas, MN <br> Peter Maribei, PhD <br> Assistant Vice President of Student Affairs <br> PhD.: Doctor of Philosophy, Leadership Studies, University of San Diego, CA <br> M.A.: Master of Arts, Leadership Studies, International Leadership University - Kenya, Nairobi, Kenya <br> B.Sc.: Bachelor of Science, Computer Science, University of Nairobi, Kenya | 04/25/2024 |
| Page 183 | School of Business Faculty <br> Nicole Smith <br> J.D.; Juris Doctor, University of Pennsylvania Law School, Philadelphia, PA, 2019 <br> M.B.A.: University of Pennsylvania Wharton School of Business, Philadelphia, PA, 2019 | 04/25/2024 |

