

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 hands-on 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 in-depth 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-trimester 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 Synplify 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 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 trimester 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.

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■ Standard Occupational Classification (SOC) – 2010 & 2018
(Based on United States Department of Labor - Bureau of Labor Statistics)

For Bachelor of Science in Computer Science

2010 SOC Code*	2018 SOC Code	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
15-1132 15-1133	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

2010 SOC Code*	2018 SOC Code	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
15-1132 15-1133	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 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
15-2051	15-2051	Data Scientists: Business Intelligence Developer, Data Analytics Specialist, Data Mining Analyst, Data Visualization Developer
17-2199	17-2199	Engineers, All Other: Calibration Engineer, Mechatronics Engineer
25-1021	25-1021	Computer Science Teachers, Postsecondary: C++ Professor, Computer Information Systems Professor, Computer Programming Professor, Information Systems Professor, Information Technology Professor, IT Professor, Java Programming Professor
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 Electrical Engineering

2010 SOC Code*	2018 SOC Code	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
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
15-1132 15-1133	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
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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	Electromechanical Equipment Assemblers: Programmable Logic Controller Assembler
	51-9141	Semiconductor Processing Technicians: Electronic Semiconductor Processor, Semiconductor Assembler

SCHOOL OF BUSINESS

The School of Business offers one degree program at each level: bachelor's, and master's, 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). 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 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 latest information 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 and management 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

The School of Business offers one undergraduate degree program: 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.

- **Credential Requirements**

The undergraduate programs accept qualified high school graduates and college transfer students.

Freshmen Applicants: Undergraduate applicants who have not completed at least **30** semester units of college credit are considered **freshmen**.

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 submit the following to the SFBU Admissions Office:

1. Application Form (online)
2. Nonrefundable application fee
3. Copy of passport or a government issued I.D.
4. Official transcripts from previously attended colleges; freshman applicant is required to submit his/her official high school transcript and document certifying high school completion. Applicant 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 the Academic team. A GPA below 2.0 does not qualify for admission.
5. 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
6. An English proficiency document is required for non-native English speakers: An official transcript with English course records or TOEFL/ IELTS/iTEP/PTE Academic/ 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. 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.
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).

GED: SFBU recognizes the General Educational Development (GED) tests and accepts the GED graduates.

- GED score of 456 or above is recommended. Lower scores may require an interview with the Academic team

Applicants interested to apply 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 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
 - 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)

• **Entrance Assessment Test**

The entrance assessment test, SAT/ACT, is optional for freshmen students. Applicants may submit SAT/ACT or other national level exam scores to strengthen their application.

SFBU's Institution Code for reporting

- SAT scores: 4335.
- ACT scores: 1750.

• **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 trimester 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 trimester 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 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 BSBA program requirements are limited to 75 trimester 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 Trimester Unit:**
One trimester 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:**

1 quarter unit = **0.66** trimester 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** which 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 in the BSBA program are expected to have access to computers upon which they will install various software packages, applications, microphones, cameras, connect to cloud applications, and implement course assignments. 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, making a business web site, creating analytical models, performing statistics on data sets, 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, interactions with the administration and staff, etc. Remote students are expected to have their web cameras on during any interactive online virtual class meeting and during exams. For interactive online classroom meetings and group video conferencing, the recommended bandwidth is ≥ 3 Mbps in both the upstream and downstream directions. For individual peer-to-peer video conferencing 1 Mbps is the recommended minimum bandwidth. For an improved video experience, use of a wired-connection/adaptor 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 Entire Educational Program

- Tuition: \$39,600
- Fees: \$4,000
- Graduation Petition Fee: \$300
- Textbooks & Software Costs: \$6000
- Health Insurance Premium: \$4,950

- BSBA: \$54,850

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 trimester. 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 **120 trimester units** are required for graduation. **No more than 75 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 for meeting 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 trimester 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 area 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:

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 BSBA curriculum aims to provide the student a foundation and training in business administration 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. 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 300s and 400s are **upper-division** courses. Courses numbered from 450G to 499G 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 graduate-level 4xxG courses to have noticeably higher-level assignments compared to 4xx undergraduate workloads.

Prerequisites/Corequisites

For the purposes of meeting prerequisites or corequisites, lower-division status means undergraduate students with less than 60 completed trimester units, and upper division status means undergraduate students with 60 or more completed trimester 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)**

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.

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

Written Communication - Use written language that communicates complex business concepts and enabling technology approaches.

Oral Communication - Orally explain to one's peers complex business and supporting technology concepts.

Quantitative Reasoning - Apply (computer and non-computer assisted) quantitative methods in a comprehensive manner in a business setting.

Information Literacy - Access, review and then meaningfully apply information in business and management decision making.

Critical Thinking - Analyze business issues and recommend solutions which apply business concepts and technology practices.

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 **120 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**, and
3. **24 units of electives**.

BSBA Curriculum

(Total of **120 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)

(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	(3)

Area B: Mathematics and Natural Sciences (9 units)

(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)

(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	(3)
HU450	Information Literacy for Academics, Life, and the Workplace	(3)

Area D: Social Sciences (9 units)

(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	(3)
SOC450	Emotional Intelligence	(3)

2. Major Requirements (minimum 60 units = 45 major course units + 15 units from the list 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)
BAN199	Excel for Finance, Accounting, & Analytics	(2)
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)
MGT450	Organizational Behavior and Management	(3)
MGT451	Project Management	(3)
MGT460	Production and Operations Management	(3)
MGT480	Entrepreneurship	(3)

MKT221	HTML & CSS Web Page Construction	(3)
MKT310	Principles of Marketing	(3)
MKT450	Marketing Management	(3)
P450*	Career Development	(1)

Plus 15 student selectable major units from the list below

ACC110L	Financial Accounting Lab	(1)
ACC120	Managerial Accounting	(3)
ACC120L	Managerial Accounting Lab	(1)
ACC450	Cost Accounting	(3)
ACC490	Introduction to Taxation	(3)
BAN223	SQL & Relational Databases	(3)
BAN335	Python Introduction for Commerce	(3)
BAN337	JavaScript	(3)
BAN460	Introduction to Business Analytics	(3)
BAN460L	Introduction to Business Analytics Lab	(1)
BAN470	Introduction to Machine Learning Based Prediction Modeling and Forecasting	(3)
CPT401	Curricular Practicum	(1)
CPT402	Curricular Practicum	(2)

* P450 Career Development may be substituted with SOC501 Emotional Intelligence Essentials

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 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.

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 trimester (approximately 2.6 calendar years) and 10 trimester (approximately 3.3 calendar years) degree maps below are advising tools that outline pathways that students may wish to consider for completing the 120 trimester unit BSBA requirement for graduation.

Table #1: The "Typical" illustrative degree map showcases a 10 trimester 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 trimesters (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 trimester 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 trimester to reduce the elapsed calendar time needed for degree completion.

Third, SFBU undergraduate students planning on directly progressing into the MBA program immediately upon graduation are advised to acquire up to 12 units of graduate level (4xxG or 5xx) 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 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.

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 (4xxG or 5xx) 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 trimester because not all courses are offered every term. It is recommended that students meet with their advisors every trimester 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) program or the School of Engineering. Some illustrative examples are included in the sample roadmaps.

R = Required Major courses

M = Major courses selectable from a pool list

G = Selectable General Education pool courses

E = Free Electives

Note: Major courses not applied to the major unit requirement may be used towards the Free Elective unit requirement.

Table 1 **Illustrative Typical Degree Map**
BSBA / Suggested Course Sequence

120 Units Required
R = Required
M = Major Selectable
G = Selectable GenEd
E = Free Elective

Trimester 1 Fall Units				Trimester 2 Spring Units			
ENGL101	Expository Writing	R	3	ENGL102	Critical Thinking	G	3
MATH208	Probability and Statistics	R	3	HU280	Principles of Ethics	G	3
ACC110	Financial Accounting	R	3	ACC120	Managerial Accounting	M	3
PHYS101	Introduction to Physical Sciences	G	3	ECON201	Principles of Macroeconomics	R	3
12	Cumulative / Current Units		12	24	Cumulative / Current Units		12
Trimester 3 Summer Units				Trimester 4 Fall Units			
ENGL115	Public Speaking	R	3	BLAW310	Introduction to Business Law	R	3
MKT310	Principles of Marketing	R	3	SOC260	Civilization and Urbanization	G	3
ECON202	Principles of Microeconomics	R	3	MGT310	Principles of Management	R	3
MKT221	HTML & CSS Web Page Construction	R	3	BAN223	SQL & Relational Databases	M	3
36	Cumulative / Current Units		12	48	Cumulative / Current Units		12
Trimester 5 Spring Units				Trimester 6 Summer Units			
BUS450	Professional & Technical Writing	R	3	SOC250	Public Administration	G	3
MKT450	Marketing Management	R	3	MGT450	Organizational Behavior and Management	R	3
BAN335	Python Introduction For Commerce	M	3	MATH201	Calculus - I	G	3
FIN310	Fundamentals of Finance	R	3	BAN337	JavaScript	M	3
60	Cumulative / Current Units		12	72	Cumulative / Current Units		12
Trimester 7 Fall Units				Trimester 8 Spring Units			
BAN460G	Introduction to Business Analytics	M	3	BAN470	Introduction to Machine Learning Based Prediction Modeling and Forecasting	M	3
MGT460	Production and Operations Management	R	3	ACC451	Intermediate Accounting	E	3
BAN199	Excel for Finance, Accounting & Analytics	R	2	ACC450	Cost Accounting	E	3
MGT480	Entrepreneurship	R	3	FIN510	Investment Analysis	E	3
P450	Career Development	R	1				
84	Cumulative / Current Units		12	96	Cumulative / Current Units		12
Trimester 9 Summer Units				Trimester 10 Fall Units			
MGT451	Project Management	R	3	ENGL425	Modern American Literature	R	3
MGT500	Risk Management	E	3	HU240	Music Appreciation	G	3
SOC450	Emotional Intelligence	G	3	MGT538	International Business Management	E	3
ACC490	Introduction to Taxation	E	3	BUS493	Senior Project	E	3
108	Cumulative / Current Units		12	120	Cumulative / Current Units		12

120 units = 60 major + 24 free electives + 12 English + 6 Humanities + 9 Math & Science + 9 Social Sciences

Table 2 Illustrative Fast Degree Map BSBA / Suggested Course Sequence

120 Units Required
R = Required
M = Major Selectable
G = Selectable GenEd
E = Free Elective

Trimester 1				Trimester 2			
Fall		Units		Spring		Units	
ENGL101	Expository Writing	R	3	ENGL102	Critical Thinking	G	3
MATH208	Probability and Statistics	R	3	HU210	Introduction to Philosophy	G	3
PHYS101	Introduction to Physical Sciences	R	3	HU280	Principles of Ethics	G	3
ACC110	Financial Accounting	R	3	ACC120	Managerial Accounting	M	3
ACC110L	Financial Accounting Lab	E	1	ECON201	Principles of Macroeconomics	R	3
BAN199	Excel for Finance, Accounting & Analytics	R	2				
15	Cumulative / Current Units		15	30	Cumulative / Current Units		15

Trimester 3				Trimester 4			
Summer		Units		Fall		Units	
ENGL115	Public Speaking	R	3	ENGL425	Modern American Literature	R	3
SOC250	Public Administration	G	3	SOC260	Civilization and Urbanization	G	3
MKT310	Principles of Marketing	R	3	MGT310	Principles of Management	R	3
ECON202	Principles of Microeconomics	R	3	BLAW310	Introduction to Business Law	R	3
MKT221	HTML & CSS Web Page Construction	R	3	BAN223	SQL & Relational Databases	M	3
45	Cumulative / Current Units		15	60	Cumulative / Current Units		15

Trimester 5				Trimester 6			
Spring		Units		Summer		Units	
BUS450	Professional & Technical Writing	R	3	SOC450	Emotional Intelligence	G	3
MKT450	Marketing Management	R	3	MGT450	Organizational Behavior and Management	R	3
ACC451	Intermediate Accounting	E	3	MATH201	Calculus - I	G	3
ACC490	Introduction to Taxation		3	MGT451	Project Management	R	3
FIN310	Fundamentals of Finance	R	3	BAN337	JavaScript	M	3
75	Cumulative / Current Units		15	90	Cumulative / Current Units		15

Trimester 7				Trimester 8			
Fall		Units		Spring		Units	
BAN460	Introduction to Business Analytics	M	3	BAN470	Introduction to Machine Learning Based Prediction Modeling and Forecasting	M	3
BAN460L	Introduction to Business Analytics Lab	E	1	ACC451	Intermediate Accounting	M	3
MGT460	Production and Operations Management	R	3	ACC450	Cost Accounting	M	3
MGT480	Entrepreneurship	R	3	FIN510	Investment Analysis	E	3
CS230	Linux & Shell Scripting	E	3	MGT542	Technology and Product Management	E	3
CS230L	Linux & Shell Scripting Lab	E	1				
P450	Career Development	R	1				
105	Cumulative / Current Units		15	120	Cumulative / Current Units		15

120 units = 60 major + 24 free electives + 12 English + 6 Humanities + 9 Math & Science + 9 Social Sciences