

BUSINESS, MANAGEMENT AND ECONOMICS: B.A., B.S., B.P.S.

As students of Business, Management and Economics will investigate the world of accounting, business administration, economics, finance, human resources, information systems, international business, labor relations, management, marketing and public administration. Students will develop analytical, management, communication and quantitative skills, increase understanding of economic principles and disciplinary methods and learn about the effective use of information technologies to support career or personal goals and aspirations.

Degree programs in Business, Management and Economics offer students the opportunity to develop individualized degree plans based on their intellectual, professional, and personal interests. General program guidelines can be found on the "Program Details" tab, and students will work with an academic mentor to choose courses that meet the guidelines and address each student's individual interests. Students can also work with their academic mentors to identify applicable transfer credit, prior college-level learning, and possible course equivalencies. Working with a mentor and using SUNY Empire's educational planning process, students can develop a specialized concentration in Business, Management and Economics by following the general program guidelines as well as any applicable concentration guidelines. Students may also develop their own concentrations.

For more information about general undergraduate degree requirements, please visit Earning an Undergraduate Degree (<http://catalog.esc.edu/undergraduate/earning-undergraduate-degree/>).

For sample degree programs and other degree planning resources, please visit the Department of Accounting, Economics and Finance (<https://www.sunyempire.edu/accounting-economics-finance/degree-planning-resources/>), Department of Management and Human Resource Management (<https://www.sunyempire.edu/management/degree-planning-resources/>), or Department of Business, International Business and Marketing (<https://www.sunyempire.edu/business-international-business-marketing/degree-planning-resources/>) Degree Planning Resources web pages.

For more information about Business, Management and Economics, please visit the School of Business web site (<https://www.sunyempire.edu/undergraduate-studies/school-business/>).

Business, Management and Economics programs are expected to meet the University Learning Goals (<https://www.sunyempire.edu/policies/?search=cid%3D61278>), which include active learning, breadth and depth of knowledge, social responsibility, communication skills, critical thinking and problem-solving skills, quantitative literacy, information and digital media literacy.

Academic Planning takes the form of a course (commonly but not exclusively referred to as "Educational Planning") wherein students develop a degree plan and rationale essay with their primary faculty advisor/mentor.

In their degree programs and rationale essays, students must address the BM&E Area of Study general guidelines and then the concentration

guidelines, the registered program guidelines, or the individualized concentration they develop in consultation with their primary mentor.

Programs in Business, Management and Economics include the following seven foundations:

1. Communications Skills
2. Information Management
3. Economics
4. Ethical and Social Responsibility
5. Quantitative Skills
6. Understanding People in a Broader Context
7. Understanding Organizations within Broader Context

These foundations may be met through transcript credit; college-level knowledge demonstrated through individual prior learning assessment (iPLA), professional learning evaluations (PLE), or credit by examination; or individual courses, a series of courses, or components within individual courses with Empire State University. The student's **Degree Plan Rationale Essay** should clearly explain how the degree plan meets each of the foundations in the Area of Study, what will be learned, and how the student will build on these foundations to meet personal, academic, or career goals. For details about the academic planning process and requirements, please see the Student Degree Planning Guide (<https://www.sunyempire.edu/degree-planning-academic-review/degree-program/student-degree-planning-guide/>).

BACHELOR OF ARTS (BA), BACHELOR OF SCIENCE (BS) AND BACHELOR OF PROFESSIONAL STUDIES (BPS)

Students must meet **all seven** foundations. Below are courses that will meet each foundation.

Foundation #1: COMMUNICATION SKILLS

| Code | Title | Credits |
|-----------|---|---------|
| ACCT 3015 | Federal Income Tax I: Individual Income Tax | 4 |
| ACCT 3020 | Federal Income Tax II: Business Income Tax | 4 |
| ACCT 3035 | Principles of Fraud Examination & Financial Forensics | 4 |
| ACCT 4005 | Accounting Information Systems | 4 |
| ACCT 4015 | Auditing | 4 |
| BUSN 1005 | Business Communication | 4 |
| MRKT 4040 | Marketing Strategy | 4 |
| BUSN 2005 | Business Law II | 4 |

Foundation #2: INFORMATION MANAGEMENT

| Code | Title | Credits |
|-----------|--|---------|
| ACCT 4005 | Accounting Information Systems | 4 |
| BUSN 2015 | Computer Applications in Business Management & Economics | 4 |
| BUSN 3122 | Management Information Systems | 4 |
| HRMS 3020 | Human Resources Information System | 4 |
| MGMT 3050 | Operations Management | 4 |

Foundation #3: ECONOMICS

| Code | Title | Credits |
|-----------|---|---------|
| ECON 2005 | Principles of Economics | 4 |
| ECON 2010 | Introductory Economics: Micro & Macro 6 Cr. | 6 |
| ECON 2015 | Macroeconomics | 4 |

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|-----------|--|-----|
| ECON 2020 | Microeconomics | 4 |
| ECON 3005 | Applied Microeconomics | 4 |
| ECON 3010 | Behavioral Economics | 4 |
| ECON 3015 | Behavioral Economics & Finance ^{International Programs Only} | 4 |
| ECON 3025 | Econometrics | 4 |
| ECON 3035 | Economics of Crime | 4 |
| ECON 3040 | Economics of Gender Work & Family | 4 |
| ECON 3045 | Economics of Labor Markets | 4 |
| ECON 3050 | Environmental Economics & Policy | 4 |
| ECON 3055 | Economic Issues in Health Care | 4 |
| ECON 3065 | Industrial Economics ^{International Programs Only} | 4 |
| ECON 3070 | Industrial Organization | 4 |
| ECON 3075 | Intermediate Macroeconomics | 4 |
| ECON 3080 | Intermediate Microeconomics | 4 |
| ECON 3085 | International Economics | 4 |
| ECON 3090 | International Political Economy | 4 |
| ECON 3095 | International Trade & Finance ^{International Programs Only} | 3,4 |
| ECON 3100 | Public Finance | 4 |
| ECON 3105 | Public Finance & Economics ^{International Programs Only} | 4 |
| ECON 3122 | Money & Banking | 4 |
| ECON 3125 | New Perspectives in Economics ^{International Programs Only} | 4 |
| ECON 3130 | Topics in Contemporary Business & Economic Issues ^{International Programs Only} | 3 |

Foundation #4: ETHICAL AND SOCIAL RESPONSIBILITY

| Code | Title | Credits |
|-----------|---|---------|
| ACCT 3035 | Principles of Fraud Examination & Financial Forensics | 4 |
| ACCT 4015 | Auditing | 4 |
| BUSN 3010 | Business Ethics | 4 |
| BUSN 3055 | Ethics & the Ecology of Business | 4 |
| ECON 3135 | Business Government & Society | 4 |
| FSMA 3020 | Finance Society & Ethics ^{International Programs Only} | 4 |
| MGMT 3015 | Ethics for a Global Economy | 4 |
| MGMT 3040 | Managing Sustainable Organizations | 4 |
| MGMT 3073 | Current Issues in Healthcare Management | 4 |

Foundation #5: QUANTITATIVE SKILLS

| Code | Title | Credits |
|-----------|--|---------|
| ACCT 1005 | Accounting for Decision Makers | 6 |
| ACCT 2005 | Introductory Accounting I: Financial Accounting | 4 |
| ACCT 2010 | Introductory Accounting II: Managerial Accounting | 4 |
| ACCT 3005 | Accounting For Governmental & Not-For-Profit Organizations | 4 |
| ACCT 3010 | Cost Accounting | 4 |
| ACCT 3025 | Intermediate Accounting I | 4 |
| ACCT 3030 | Intermediate Accounting II | 4 |
| BUSN 2010 | Business Statistics | 4 |
| BUSN 3127 | Business Analytics | 4 |
| ECON 3025 | Econometrics | 4 |

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|-----------|---|---|
| FSMA 2010 | Personal Finance Management | 4 |
| FSMA 3005 | Behavioral Finance ^{International Programs Only} | 4 |
| FSMA 3010 | Corporate Finance | 4 |
| FSMA 3015 | Entrepreneurial Finance for Small Business | 4 |
| FSMA 3025 | Healthcare Finance | 4 |
| FSMA 3030 | International Finance | 4 |
| FSMA 3045 | Investment Management | 4 |
| FSMA 3055 | Risk Management & Insurance | 4 |
| FSMA 4005 | Financial Markets & Institutions | 4 |
| FSMA 4010 | Security Analysis & Portfolio Management | 4 |
| MGMT 3030 | Logistics Management | 4 |
| MGMT 3075 | Supply Chain Management | 4 |
| MGMT 3080 | Supply Chain Management In The Global Context | 4 |
| MGMT 4025 | Manufacturing Management | 4 |
| MGMT 4030 | Project Management for Business | 4 |

Foundation #6: UNDERSTANDING PEOPLE IN AN ORGANIZATIONAL CONTEXT

| Code | Title | Credits |
|-----------|---|---------|
| HRMS 3015 | Human Resource Management | 4 |
| HRMS 3030 | Labor Management Relations for Business | 4 |
| HRMS 3035 | LGBTQ Workplace Issues | 4 |
| HRMS 4015 | Organization Development & Change | 4 |
| MGMT 3025 | Leadership | 4 |
| MGMT 3060 | Organizational Behavior | 4 |
| MGMT 3090 | Women in Management | 4 |
| MGMT 4005 | Change Management | 4 |

Foundation #7: UNDERSTANDING ORGANIZATIONS WITHIN BROADER CONTEXT

| Code | Title | Credits |
|-----------|--|---------|
| ACCT 4010 | Advanced Accounting | 4 |
| BUSN 3005 | Business Enterprise in American History | 4 |
| BUSN 3040 | Electronic Commerce (e-Commerce) | 4 |
| BUSN 4030 | International Business | 4 |
| BUSN 4035 | International Business Law | 4 |
| ECON 3020 | Ecological Economics | 4 |
| ECON 3030 | Economic Policies of the European Union ^{International Programs Only} | 3 |
| ECON 3085 | International Economics | 4 |
| ECON 3090 | International Political Economy | 4 |
| ECON 3095 | International Trade & Finance ^{International Programs Only} | 3,4 |
| ECON 3110 | Social & Economic Contexts of Globalization ^{International Programs Only} | 3 |
| ECON 3115 | The Global Financial Crisis & the Great Recession ^{International Programs Only} | 3 |
| ECON 3120 | Economic Policies of the European Union ^{International Programs Only} | 4 |
| FSMA 3015 | Entrepreneurial Finance for Small Business | 4 |
| FSMA 3030 | International Finance | 4 |
| HRMS 4020 | Strategic Human Resource Management | 4 |
| HRMS 3010 | Diversity in the Workplace | 4 |
| MRKT 4025 | International Marketing | 4 |

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|-----------|---|---|
| MGMT 3010 | Cross Cultural Management | 3 |
| MGMT 3020 | International Cross Cultural Management | 4 |
| MGMT 4035 | Strategic Management | 4 |

- Foundation 1: Communication Skills; Students will be able to identify and apply appropriate basic communications skills necessary to successfully function in an organizational environment. At a minimum, students should have acquired the competencies in a course such as English Composition that meet SUNY General Education requirements for Basic Communication.
- Foundation 2: Information Management; Students will be able to use information technology tools and systems to collect, manage, and analyze data for decision making relevant to the business environment. Studies can be introductory or advanced level but must be beyond basic computer applications.
- Foundation 3: Economics; Students will be able to solve economic problems using appropriate economic principles and concepts and analytical models.
- Foundation 4: Ethical and Social Responsibility; Students will be able to examine, explain or apply moral theories, ethical standards and social responsibilities in the business environment.
- Foundation 5: Quantitative Skills; Students will be able to demonstrate an understanding of quantitative reasoning and analytical tools and an ability to apply these tools to problems in the business environment.
- Foundation 6: Understanding People in an Organizational Context; Students will be able to examine and reflect on organizational culture and apply the concepts that explain how individuals and groups behave in the organization.
- Foundation 7: Understanding Organizations Within Broader Context; Students will be able to evaluate challenges to organizations in a complex and changing world by describing the strategic impact of diversity, political, International, technological or environmental issues in the business environment.

Concentration Guidelines

Specific guidelines have been developed for concentrations in the following areas:

- Accounting Practices, Bachelor level only (p. 3)
- Economics (p. 5)
- Finance (p. 5)
- Information Systems (p. 6)
- International Business (p. 8)
- Labor Relations (p. 9)
- Marketing (p. 9)
- Public Administration (p. 10)

If you are interested in an area not listed here, please contact your mentor about designing your own concentration.

Accounting Practices - For students matriculated beginning Spring 2019 Under – AOS Guidelines: Business, Management and Economics Degree Options

Empire State University offers a Bachelor of Science in Business, Management and Economics (BME) with a concentration in Accounting

Practices. Students who choose accounting practice as a concentration can choose, but are not limited to, from the following options: Accounting Practices: Financial Accounting; Accounting Practices: Managerial Accounting; Accounting Practices: Governmental and Not-for-Profit Organizations; Accounting Practices: Forensic Accounting; Accounting Practices: Internal Auditing. Empire State University also offers a B.S. in Accounting (<http://catalog.esc.edu/undergraduate/areas-study-degrees-certificates/bs-accounting/>).

An Empire State University B.S. degree with a concentration in Accounting Practices enables a student to design and pursue a degree program that is tailored toward their particular accounting career goals and objectives. Through the educational planning process, the student should examine which degree meets their intended career path.

Information on Career Options in Accounting

There are many employment opportunities and professional licenses in the public, private and nonprofit sectors, which require specific coursework. Accordingly, it is the student's responsibility, in designing the degree plan, to check with their state board and professional associations regarding the current requirements for any professional designations they are interested in pursuing. In general, being an accountant does not require state licensing or professional certification unless the student is interest in pursuing work in public accountancy as a certified public accountant.

BME Guidelines

A BME degree plan in any of the Accounting Practices concentrations is expected to satisfy the general guidelines for the Business, Management and Economics Area of Study.

Accounting Practices Core Courses

The following are the foundation core courses (or equivalent) for a concentration in Accounting Practices (Transfer equivalent classes can be three credits):

| Code | Title | Credits |
|-----------------------|---|---------|
| ACCT 2005 | Introductory Accounting I: Financial Accounting | 4 |
| ACCT 2010 | Introductory Accounting II: Managerial Accounting | 4 |
| ACCT 3025 | Intermediate Accounting I | 4 |
| ACCT 3030 | Intermediate Accounting II | 4 |
| ACCT 4005 | Accounting Information Systems | 4 |
| One of the following: | | 4 |
| BUSN 1010 | Business Law I | |
| One of the following: | | 4 |
| MATH 1065 | Statistics | |
| Or | | |
| BUSN 2010 | Business Statistics | |
| One of the following: | | 4 |
| ECON 2015 | Macroeconomics | |
| Or | | |
| ECON 2020 | Microeconomics | |
| MGMT 3060 | Organizational Behavior | 4 |

Accounting Practices Concentrations

Accounting Practices: Financial Accounting

Financial accounting career focuses on understanding various accounting and industries practices. This includes, but is not limited to understanding accounting cycle, external financial reporting, financial statements analysis, and tax preparation for various forms of businesses.

In addition to Accounting Practices Core Courses, students are expected to take the following courses:

| Code | Title | Credits |
|-----------|---|---------|
| ACCT 3010 | Cost Accounting | 4 |
| ACCT 4010 | Advanced Accounting | 4 |
| ACCT 3015 | Federal Income Tax I: Individual Income Tax | 4 |
| ACCT 4015 | Auditing (Auditing must be upper-level course.) | 4 |
| ACCT 3020 | Federal Income Tax II: Business Income Tax (Recommended, yet optional.) | 4 |
| FSMA 3010 | Corporate Finance | 4 |

Accounting Practices: Management Accounting

Students may choose to pursue a career in management accounting. Management accountants are strategic financial-management professionals who integrate accounting expertise with advanced management skills to drive business performance inside organizations. Management accountants monitor, interpret and communicate operating results, evaluate performance, control operations, and make decisions about the strategic direction of the organization.

In addition to Accounting Practices Core Courses, students are expected to take the following courses:

| Code | Title | Credits |
|--|---|---------|
| ACCT 3010 | Cost Accounting | 4 |
| ACCT 4010 | Advanced Accounting | 4 |
| ACCT 3015 | Federal Income Tax I: Individual Income Tax | 4 |
| FSMA 3010 | Corporate Finance | 4 |
| In addition to two (2) of the following courses: | | 8 |
| ACCT 4020 | Financial Statements Analysis | |
| BUSN 3127 | Business Analytics | |
| MGMT 4035 | Strategic Management | |
| MRKT 1005 | Marketing Principles | |
| MATH 4020 | Quantitative Methods for Management | |
| INFT 3005 | Data Analytics | |

Accounting Practices: Governmental and Not-For Profit

Governmental and Not-for-Profit Accountants perform similar tasks as financial/corporate accountants but in the public sector. This includes, but is not limited to, not-for-profit organizations, voluntary health and welfare organizations, colleges and universities, religious and charity organizations, and federal, state, and local governmental agencies.

In addition to the Accounting Practice Core Courses, students are expected to take the following courses:

| Code | Title | Credits |
|--|--|---------|
| ACCT 3010 | Cost Accounting | 4 |
| ACCT 4015 | Auditing | 4 |
| ACCT 3005 | Accounting For Governmental & Not-For-Profit Organizations | 4 |
| ECON 3100 | Public Finance | 4 |
| In addition to two (2) of the following courses: | | |
| ACCT 3035 | Principles of Fraud Examination & Financial Forensics | |
| MGMT 3045 | Not-For-Profit Management | |
| PAFF 3137 | Managing Municipal Government | |

| | |
|-----------|---------------------------------------|
| PAFF 2122 | Introduction to Public Administration |
| POLI 2005 | New York State & Local Government |

Accounting Practices: Forensic Accounting

Forensic accounting is a vast growing practice professional career in accounting. Forensic accountants work in the areas of fraud: examination, prevention, detection, deterrence, and investigation. They are considered investigative auditors. Forensic accountants perform a full range of tasks from diagnostic analysis to consulting and serving as expert-witnesses in various litigations.

In addition to the Accounting Practice Core Courses, students are expected to take the following courses:

| Code | Title | Credits |
|--|---|---------|
| ACCT 4010 | Advanced Accounting | 4 |
| ACCT 3015 | Federal Income Tax I: Individual Income Tax | 4 |
| ACCT 4015 | Auditing | 4 |
| ACCT 3035 | Principles of Fraud Examination & Financial Forensics | 4 |
| FSMA 3010 | Corporate Finance | 4 |
| In addition to two (2) of the following courses: | | 8 |
| BUSN 3127 | Business Analytics | |
| INFT 3020 | Cyber Crime & Computer Forensics | |
| PSYC 4080 | Forensic Psychology | |
| INFT 3010 | Advanced Digital Crime & Digital Terrorism | |
| CRJS 3020 | Law Enforcement Intelligence Analysis | |
| INFT 4010 | Data Analytics & Data Mining | |

Accounting Practices: Internal Auditing

Students may choose the practice of internal auditor, who is an employee of the business, as opposed to an external auditor (CPA). Internal auditors evaluate risk exposures relevant to an organization and governance's structure, effectiveness and efficiency of its operations, reliability of its internal control procedures, integrity of the accounting information system, and compliance with laws, regulations, and contracts.

In addition to the Accounting Practice Core Courses, students are expected to take the following courses:

| Code | Title | Credits |
|-----------|---|---------|
| ACCT 4010 | Advanced Accounting | 4 |
| ACCT 3015 | Federal Income Tax I: Individual Income Tax | 4 |
| ACCT 4015 | Auditing | 4 |
| ACCT 3020 | Federal Income Tax II: Business Income Tax (Recommended, yet optional.) | 4 |
| FSMA 3010 | Corporate Finance | 4 |
| ACCT 3035 | Principles of Fraud Examination & Financial Forensics | 4 |

Becoming a CPA

An Empire State University B.S. degree –whether it is the B.S. in Accounting, or the B.S. in BME with an Accounting Practices concentration –is 124 credits. The educational requirement for the CPA license is 150 credits. Students must sign an Accounting Certification Disclaimer (<https://www.sunyempire.edu/media/academic-affairs/aos/Accounting-Certificate-Disclaimer-9.4.2018ADA.pdf>) indicating that they understand this total credits requirements. Students may complete the additional 26 credits necessary to meet the 150-credit hour educational requirement, and its distribution, through graduate and/or undergraduate

courses. For information on the NYS Public Accountancy requirements, go to New York State Education Department's Public Accountancy web page (<https://www.op.nysed.gov/certified-public-accountants/>).

Economics Concentration For Students Matriculated After Jan. 1, 2020

Background

A focus on economics within the Business, Management and Economics Area of Study deals with how people make choices and organize production, distribution and consumption of goods and services.

A concentration in economics provides a foundation for employment in a wide range of fields, including teaching, business research, policy analysis, government service, banking, insurance and general business. All require a solid theoretical base and ability to analyze data. Therefore, a blend of theoretical and applied studies is advisable.

All concentrations in economics should reflect a progression of studies from the introductory to the advanced level, which respond to the student's own personal, academic and professional goals. They can cover a range of possibilities such as (a) a purely theoretical orientation, especially for those interested in graduate study; (b) an applied orientation for those whose interest is mainly in working in industry; and (c) a policy orientation for those who wish to pursue careers with the government.

Foundation

Students will develop an understanding of the language of macroeconomics; the structure of the aggregate economy; the roles and impacts of government and institutions on the economy; tools of fiscal and monetary policy; an ability to use algebraic graphical analysis in problem solving; and the ability to apply these concepts to the real world. This would normally be accomplished in a study of Principles of Macroeconomics or equivalent study.

Students will develop an understanding of the language of microeconomics; roles of economic decision making at the individual and firm level; an ability to use graphical analysis in problem solving; and the ability to identify an appropriate concept for application and reason through to logical conclusions. This would normally be accomplished in a study of Principles of Microeconomics or equivalent study.

The study of economics requires facility with algebra, statistics (including probability) and one semester of calculus. Building on the vocabulary and concepts learned at the introductory level, as well as facility with the tools learned in algebra, statistics and calculus, students must deepen their understanding of both macroeconomics and microeconomics.

Advanced

At the advanced level, students will demonstrate increasing levels of sophistication in solving problems as well as becoming familiar with the professional literature. Tools for analysis include both calculus and more advanced graphical analysis, as well as a deeper understanding of theory. Students typically gain this knowledge in studies of Intermediate Macroeconomics and Intermediate Microeconomics.

In order to both understand the economics literature and apply economic concepts to real-world data, students must study data analysis at the advanced level (e.g., econometrics; financial data analysis; advanced statistics; or forecasting).

Students are expected to demonstrate that they can apply sophisticated analysis to a broad range of fields. They will do this by including at least three additional advanced level studies in economics. These studies must be distributed across different fields of economics. (Including, but not limited to: International Economics, Behavioral Economics, Labor Economics, Economics of Gender, Work & Family, Environmental Economics and Policy, Ecological Economics, Healthcare Economics, History of Economic Thought, Industrial Organization, Applied Economics, Money and Banking, International Political Economy. Students may wish to add focus to one or more fields by adding additional advanced level studies.

Students pursuing Economics Concentration under Business Management and Economics must satisfy the Business, Management & Economics Area Of Study Guidelines under the "Program Details" tab.

For more information on careers and fields of study, students may wish to consult the American Economics Association (<http://www.aeaweb.org/students/>)

Finance Concentration For Students Matriculated After Jan. 1., 2020

Background

Finance is a branch of applied economics which studies monetary and financial decision making under conditions of risk and uncertainty. Firms and investors utilize various instruments and institutions to manage the transfer of funds from those who save to those who invest in regulated markets.

Concentration

The concentration in finance includes principles and concepts of Macroeconomics and Microeconomics, Financial and Managerial Accounting, and Legal Environment of Business or Business law, or equivalent studies. Problem solving in finance uses quantitative methods, including statistical analysis and often calculus.

The finance function consists of a set of activities involving; assessing, analyzing, and finding the appropriate financial resources needed for businesses [profit or not-for-profit] and/or individuals to successfully carry on operational and investment strategies. These activities are impacted by several environmental drivers that shape its implementation (e.g. political, economic, legal, informational, and social elements), and utilize various quantitative analytical methodologies. Students must comprehend the tools and techniques used in evaluating the financial performance of a business. Accordingly, they would be able to recommend the appropriate course of action to obtain the needed financial resources (e.g., Corporate Finance or Financial Management).

Building on this, students explore financial instruments, investment valuation, and risk management (e.g., Investment Management or Security Analysis and Portfolio Management).

Due to the complex nature of the financial market, it is crucial to understand its dynamics, structure, and regulation relevant to transfer of funds between entities. (e.g. Money and Banking or Financial Markets and Institutions).

Trades, economics and financial activities of government and business organizations (conglomerate or small business) are conducted on a global scale. It is extremely important to understand the international financial market laws, derivatives, and regulations that impact the

exchange of financial instruments among countries and techniques used to hedge financial risk (e.g. International Finance).

Financial modeling software and electronic spreadsheets are used in "real world" simulations and require using advanced quantitative skills and methodologies (e.g. Econometrics or Quantitative Methods for Management or Business Analytics).

Career Paths

There are various career opportunities in finance. Among them are:

- Working within a corporate financial structure.
- Theoretical analyzer of finance.
- Financial professions as an investment banker or trader.
- Public finance professional.
- Wealth management advisor.

For students wishing to study finance as a path to corporate management, many of the studies in the management or business administration concentrations (such as accounting, strategic management and leadership) are also appropriate. Other students may wish to focus more on the theory of finance and would find additional studies in economics, corporate finance, portfolio theory and research methods appropriate. Those interested in pursuing a "Wall Street" path, may consider international accounting, federal income taxes, financial risk analysis, data analytics, and symbolic logic, or equivalent studies.

Students pursuing Finance Concentration under Business Management and Economics must satisfy the Business, Management & Economics Area Of Study Guidelines under the "Program Details" tab.

Students who are interested in Certified Financial Planner professional may consult with the CFP Board (<https://www.cfp.net/become-a-cfp-professional/>).

Students who are interested in Chartered Financial Analyst may consult with the CFA Institute (<https://www.cfainstitute.org/>).

Information Systems Concentration Guidelines For Students Matriculated Effective Sept. 1, 2015

Statements

About Information Systems

Information systems specialists focus on integrating information technology solutions and business processes to meet the information needs of businesses and other enterprises, enabling them to achieve their objectives in an effective, efficient way. This discipline's perspective on information technology emphasizes information and views technology as an instrument for generating, processing and distributing information. Professionals in the discipline are primarily concerned with the information that computer systems can provide an enterprise to aid in defining and achieving its goals and the processes that an enterprise can implement or improve using information technology. Students of IS must understand both technical and organizational factors and they must be able to help an organization determine how information and technology-enabled business processes can provide a competitive advantage.

"The information systems specialist plays a key role in determining the requirements for an organization's information systems and is active in their specification, design, and implementation. As a result, such professionals require a sound understanding of organizational principles and practices so that they can serve as an effective

bridge between the technical and management communities within an organization, enabling them to work in harmony to ensure that the organization has the information and the systems it needs to support its operations. Information systems professionals are also involved in designing technology-based organizational communication and collaboration systems." (Computing Curricula 2005, p. 14).

Our guiding authority for this document is Computing Curricula 2005 and the IS 2010 Body of Knowledge. This joint effort by the Association for Computing Machinery (ACM), the Association for Information Systems (AIS) and The Computer Society (IEEE-CS) includes current curricular recommendations from the leading professional organizations in the computing fields. Students should read Computing Curricula 2005 to understand how computing disciplines are related. It is important for students to think carefully about their primary interest. Information systems, as a disciplinary concentration, probably would not be the best choice for someone primarily interested in computing infrastructure needs of the organization; for such individuals, a concentration in information technology would be more appropriate. On the other hand, students interested primarily in the abstract, theoretical concepts of computing would be better served by a concentration in computer science.

There are, of course, many ways to approach information systems. Many professionals and educators have tried to identify different approaches by adding adjectives, which has led to terms such as "management information systems" and "computer information systems." The general understanding was that MIS would be more focused on the management aspects, while CIS focused on the technical aspects. However, as the area has developed, the differentiation between the managerial and the technical has certainly blurred. These guidelines have, therefore, adopted the more general title of "Information Systems," but they apply to both of those titles as well. Similarly, titles such as "Information Systems Management" also cover the same content.

At Empire State University, the variation among degrees in information systems occurs with the identification of the area of study. Each student must design a degree program that meets the general guidelines for an area of study. The information systems curricular guidelines represent a common core of knowledge, which any information systems degree will contain within those general guidelines. Students who are interested in information systems within the business and managerial perspective might find it appropriate to place their concentration within the Business Management and Economics area of study, while students who are interested in the technological perspective might find it appropriate to place their concentration within the Science, Mathematics and Technology area of study (or, if they are seeking the narrower BPS, this would be done as a concentration within the registered program Technology). All students should make sure that the degree they are interested in is appropriate for their future career and education goals.

Foundation

Communication: All students should already have (or develop) skill and confidence with communication, particularly communicating in writing. Technical communication, that is the specialty of communicating technical information, is of particular value to individuals in this field.

Quantitative reasoning: Students must develop their quantitative reasoning and mathematical skills. At the most basic level, students should have facility with statistics to support in-depth analysis of data. Typically, in order to be prepared for a course in statistics, students should have facility with algebra.

The choice of mathematical subject matter for development of quantitative reasoning will depend on the student's background and interest. It should be recognized that, as a part of these studies and any other work in mathematics, students should develop skill and confidence with the interpretation of material containing quantitative information and mathematical symbols, and they should have (or develop) an ability to express ideas using mathematical symbols and language. That is, it is important to be able to articulate an understanding of mathematics, not just be able to do calculations.

SMT students must develop their quantitative reasoning and mathematical skill in areas such as discrete mathematics. The discrete mathematics supports algorithmic thinking and such study would cover logic, the concept of complexity, introduction to methods of proof and graph theory. Typically, students need facility in the knowledge gained from pre-calculus to have a strong experience in discrete mathematics.

BME students would benefit from a study in advanced quantitative methods for management, which includes topics such as decision making under uncertainty and linear programming and applications of regression analysis in management.

Information Technology

Foundational learning in IT: SMT students should already have (or develop) an understanding of programming, not just coding. This involves using problem solving with logic. BME students should have an understanding of the fundamentals of computing in organizations and the use of information systems in organizations.

Databases: Students should also demonstrate an understanding of data modeling, database programming and basic database administration concepts at the enterprise-scale.

IT infrastructure: Students should be familiar with the technical foundations of information systems. This typically includes knowledge in operating systems and networks. Students are expected to be able to explain the capabilities and limitations of different networking devices. Students have a clear understanding of different types of networks and network protocols, layers, standards and topologies. Students are able to explain the benefits of small office/home office (SOHO) networks and the technology requirements essential to install, configure and maintain them. Students should be prepared to keep up with new developments in the networking field. For BME students, their understanding of IT infrastructure should include the technologies of e-commerce.

Security: Students are able to describe different types of security risks and threats against networks and information assets and have basic knowledge in designing secure systems and detecting and mitigating threats to the systems.

Professional Behavior And Responsibilities

Professional, legal and ethical responsibilities: Students must understand their ethical, social and professional responsibilities as information systems professionals. This would typically include analysis of professional roles and responsibilities, exploration of major categories of issues, and identification of ethical issues and value conflicts, analysis and evaluation of claims using ethical frameworks. For SMT students, this also should include analysis of the context for the technological system, including recognizing the organizational and legal context and identifying the stakeholders.

Organizational understanding and professional behavior: Students should develop an understanding of how individuals and groups function or behave in organizations. It is expected that students will develop,

either through direct study or as a part of other activities, their skills in leadership, collaboration and negotiation.

Theory, Development, And Management Of Systems

Systems analysis and design: Students must include systems analysis and design as central to understanding information systems. This knowledge should encompass an understanding of the systems lifecycle along with issues in requirements definition and system implementation. This knowledge should be at the advanced level. The student should know the system analysis and design lifecycle from analyzing the business case through requirements modeling and system architecture to system operations and support and the major activities in each phase, as well as understand how the process helps address the larger organizational needs

Project management: Students must also have skills in and knowledge of project management methodologies and skill in applying the techniques of project management. This would include the project lifecycle from planning to closing, and the key knowledge areas such as scope, cost and time management to ensure that organizational resources are planned and deployed effectively and that evaluation and quality are maintained in the system development process.

Information Systems in the Broader Context: Students are expected to apply the concepts of IT strategy to evaluate the organization's use of IT in the context of its overall strategy, analyze the relationships between business and IT and apply these concepts to real-world situation.

Individual Context

Each student brings his or her own goals and background to the study of IS. It is these goals for future study or work which will provide the context for the student's degree. Students should address their choice in the rationale.

Students in SMT should develop an appreciation for the type(s) of organization in which they work, or intend to work, as well as the interpersonal and communication skills needed to be successful in that environment. For example, a student who intends to work in government (federal, state, local) should understand bureaucracies, politics and regulations, while a student who works in a scientific research environment should understand how scientists view data, design studies, etc., and a student who works in a health care setting should include informatics as well as policy issues.

Students in BME are expected to understand the business context within which they will be working. As such, they need a background of at least two of the functional areas, such as accounting, finance, marketing, human resources and operations management. Since this expectation is very dependent on the student's individual goals, it is vital that students, in consultation with their mentor, identify their learning needs and explain their reasoning in their rationale.

Currency

Information systems and the environment in which they exist are always changing. Degree programs must demonstrate currency in the field and show understanding of emerging and evolving technology and environment relevant to their individual context.

Currency can be viewed in two ways: on the one hand, currency refers to current technologies; on the other hand, currency can be seen as not-obsolete. If students want to use earlier learning in their programs, they should consider several issues related to how old, how specialized and how extensive the earlier learning is. Courses which encompassed analysis, problem definition, algorithms, data structures, programming

concepts and testing methodology may provide a useful foundation to explore recent developments in computer technology. Courses which are product-specific (hardware or software) may be less useful. When earlier learning is judged to provide a useful foundation within the program, students should be sure to incorporate opportunities to bridge to newer platforms or applications within their degree program.

Rationale

Students should explicitly discuss in their rationale essay how each of the above topics is incorporated in their degree program, how the program is designed to meet their goals and how the program meets the currency criteria discussed above. It is not necessary that the specific terms used above appear in individual study titles.

Additional Studies

Students who wish to enhance their knowledge and skills might consider incorporating additional areas into their studies including human-computer interaction, which would include concepts and approaches, such as user differences, user experience and collaboration, human factors, ergonomics, accessibility issues and standards, user and task analysis and the ability to implement user-centered design and evaluation methods.

International Business Concentration For Students Matriculated After July 1, 2013

For the concentration in international business, an awareness of the different sociocultural, political and legal environments in international business and the resultant consequences on international business planning and decision-making processes adopted by managers operating in that context is crucial.

Because international business concentrations may offer many diverse career opportunities, the career exploration in the research phase of degree program planning is particularly important. Many career opportunities exist in private industry, global commerce, international organizations, government, or banking, among others. In some careers, specialized knowledge specific to employers' needs may be desirable for employment (for example, banking or government work). However, for the majority of industry careers, specialized knowledge may not be required. Instead, a basic program in international business and then on-the-job experience in the industry and/or any international experience inside or outside of the home country is helpful to career progression. Students should carefully consider their employment options and expectations in the design of their degree programs. These experiences often can be complemented or enhanced through individualized learning contracts, which allow students to pursue topics relevant to their employment situations or goals.

The guidelines that follow provide guidance to a basic program in International Business. These should be augmented with additional knowledge in areas personally relevant. Students pursuing an International Business concentration should meet the General AOS Guidelines for Business, Management and Economics, and demonstrate fundamental knowledge in each of the following areas:

- economics
- management
- accounting
- marketing
- finance.

Students should demonstrate a broad-based understanding of the International Business domain through study or college-level equivalent experience in the following areas:

- international business
- international economics
- international marketing
- international finance
- international business law.

Additionally, knowledge in the following optional areas would enrich the degree plan:

- international cross-cultural management
- economic geography
- emerging markets
- ethics in a cross-cultural perspective
- global strategy
- global business history
- international accounting
- comparative political economy
- business and the state
- international organizations
- international negotiations
- international financial institutions
- international human resource management
- international relations
- comparative management
- sustainable development
- outsourcing
- globalization.

In addition, students can pursue studies with specific geographic focus or studies in international or comparative development.

A focus of the general education requirements might consider areas that could provide a foundation for and enrich the concentration. Appropriate choices include American history, world history, Western and other world civilizations, political science (world governments and U.S. government), comparative literature or world literature, art history, statistics or algebra, world philosophies and religions and a language other than English (with at least an intermediate level of competence). Depending on the world region on which the student wants to focus in his/her career, theme-based or geographic area knowledge related to that area would be valuable. Students should be sensitive to the impression that their concentration titles may have on prospective employers or graduate school admission committees. Programs may be quite traditional (e.g., Business Administration) or much more individualized (e.g., Organizational Studies or Non-Profit Management), and the titles should reflect those.

Empire State University offers the opportunity to complete a number of different concentrations related to international business. There are also a number of international affairs-related concentration titles that a student may design. These may include some knowledge of international business, but an "International Business" concentration should reflect the guidelines provided here. In addition to international business, BME concentrations with an international emphasis might include international marketing, international finance, international

economics, international human resource management, or international management.

Labor Relations Concentration

The area of labor relations is related to economics, personnel management and labor studies. Whether students approach labor relations from a managerial perspective or a union perspective, the basic core concepts are the same.

The study of labor-management relations is only one subject area within the diverse field of industrial relations. By its very nature, a degree in labor relations must be broad. Programs that go beyond studies in classic labor areas and business will be most helpful to students who intend to work in this field.

The labor relations concentration addresses issues that affect relations among organized groups of workers, employers and government officials and agencies, and requires integration of knowledge from sociology, psychology, law, economics, politics and history.

Students who seek a concentration in the area of labor relations will be prepared to work in union management negotiations (collective bargaining), contract administration, union organizing efforts and what management calls "preventative labor relations."

The guidelines that follow provide a basic program outline that can be augmented with additional relevant studies.

Highly recommended foundation studies include:

- psychology
- sociology
- macro and micro economics
- American business or labor history
- logic
- the use of computers
- oral communication skills
- writing skills
- math
- statistics.

Studies that are specific and essential to the field of labor relations include:

- labor economics: looks at the underlying relationship between wages, skills, number of people looking for work and related issues
- labor relations: examines the relationship between organized labor and management
- labor law: looks at all of the laws that govern the work place (but with an emphasis on the National Labor Relations Act and amendments, which govern the formal relationship between labor and management)
- labor history: looks at the social, political and legal history of organized labor within the United States
- collective bargaining: examines the formal process between labor and management in arriving at a labor contract.

Depending on a student's goals and interests, additional studies in the field of labor relations could include studies in:

- labor arbitration or dispute settlement
- labor and politics
- international labor relations
- state labor laws
- labor leaders
- issues dealing with unions, multinational firms and globalization
- free trade and its impact on unions
- human resources
- wage and price theory
- employee benefits theory
- employee assistance programs
- total quality management
- participative management concepts
- organizational behavior
- how science and technology is impacting society and the workplace
- demographics
- changing nature of the work force (women, minorities, different cultures)
- women in unions
- the role of minorities in unions
- accounting
- finance
- other related topics.

Marketing Concentration For Students Matriculated After July 1, 2010

Background

A concentration in marketing will prepare students to make decisions to deliver value to consumers, their organizations and the wider environment. Career opportunities are numerous, as a need for marketing expertise is developing in every profit and nonprofit arena, in business-to-business (B2B) and business-to-consumer (B2C) relationships and in small businesses and multinational corporations. Roles vary, including those in advertising, international marketing, e-marketing, promotions, direct marketing, public relations, sales, marketing research and brand management.

Issues that currently face professionals in this field include:

- the drive for new products
- technological changes impacting research, production and promotion
- increased consumer awareness and fatigue
- globalization of production and marketing channels
- ethical concerns at all levels.

Preparatory Knowledge/Studies

To prepare for a career or studies in marketing, a broad liberal arts background is expected. This includes fulfilling SUNY's minimum general education requirements. Recommended studies could include: statistics, psychology, sociology and oral and written communications. These types of studies prepare students to understand consumers and the market and to be able to present and communicate well with clients.

Students should have an understanding of ethics, globalization, diversity and cross-cultural differences and organizations. Additional related competencies and skills that all marketing students should have include

technology, communication and teamwork. Knowledge of these areas can be obtained through studies directly addressing them or prior learning, or can be integrated into other general-education, business or marketing studies.

Please see the "Program Details" tab for a review of the business-related knowledge that students are expected to have.

Marketing Knowledge/Studies

All students are expected to take marketing at the introductory level followed by at least three out of the four following upper level studies:

1. marketing communications or equivalent
2. marketing research
3. consumer behavior or buyer behavior
4. marketing management or marketing strategy

In addition, students could consider the following studies that help in the development of knowledge and competencies in specialized areas of marketing:

- advertising
- brand management
- direct marketing
- international marketing
- marketing communications
- marketing research
- Internet marketing
- business-to-business marketing
- sales management
- logistics
- supply chain management
- purchasing
- database marketing
- new product development
- e-commerce
- nonprofit marketing
- public relations

Potential Titles Of Related And/Or Subconcentrations

- advertising
- brand management
- direct marketing
- international marketing
- marketing studies
- marketing communications
- marketing research
- Internet marketing
- sales
- logistics
- supply chain management
- purchasing
- public relations

Students may wish to develop individual concentrations or subconcentrations through consultation with their mentors.

Public Administration Concentration

Public administration combines preparation for administrative responsibility in the public service with the study of the political environment.

The delivery of government services and the concern for the public welfare include:

- study of organization and management, the nature of the government and political decision making
- analysis of the public policy process
- evaluation of the results of government action.

Note: Public administration differs from business administration in that the focus is on the public sector and the dynamics of governmental and bureaucratic processes which impact the administrative role.

The study of public administration involves an appreciation of the tension between political values (e.g., individual rights, representation, advocacy) and administrative values (e.g., ethics, bureaucratic efficiency, political neutrality) and the way in which the process of policy implementation affects the nature of these values.

A student with a concentration in public administration would be expected to develop an understanding of the following areas, which are essential to such a concentration:

- administrative or management theory
- American government (national, state, local)
- public personnel and/or labor relations
- public budgeting, finance and/or financial administration
- organizational theory and/or organizational behavior
- quantitative/research tools (e.g., statistics, computer)
- and public policy.

While the study of public policy would be expected to include policy concepts, it may well be addressed by using specific policy issues (e.g., environmental, health care, education, civil rights, etc.) for qualitative and quantitative analysis.

For an understanding of the role and function of government bureaucracy in society and the issues and challenges faced by an administrator in such bureaucracy, students are encouraged to include studies in areas such as:

- economics
- law (constitutional or administrative)
- intergovernmental relations
- governmental accounting
- history of public administration
- bureaucracy
- political parties and interest groups
- comparative politics
- international relations
- public sector ethics.

Public administration has traditionally been studied as a graduate discipline. Students who expect to continue with graduate-level work are advised to investigate graduate-program requirements to minimize duplication of core studies. Their degree programs may benefit from the inclusion of ample supportive studies from other disciplines to broaden

their understanding of the political and societal issues which concern and influence the practice of public administration.

Degree programs in public administration may be submitted under the registered area of business, management and economics or under social theory, social structure and change, depending on whether the degree program is constructed to be predominately reflective of administrative aspects or of the political environment in which public administration is practiced.

The general guidelines for the area of study should be consulted for those elements common to all degree programs in that registered area.