Graduate Study

The College of Business Administration offers five graduate degrees: the Doctor of Business Administration (DBA), the Doctor of Philosophy in Business Administration (Ph.D.), the Master of Business Administration (MBA), the Master of Science in Information Systems (MS in IS), and the Master of Accounting (MAcc). All programs carry the prestigious accreditation of AACSB-International.

Admission Requirements

The admissions decision is based on a combination of factors. Consideration is given to a candidate's academic record, scores on the Graduate Management Admissions Test (GMAT), work and leadership experience, a personal narrative on the application form, and recommendations.

As in most AACSB-accredited graduate business programs, the UMSL College of Business generally requires Graduate Management Admissions Test (GMAT) scores. Information on the GMAT exam can be obtained at www.mba.com. The examination tests one's ability to read, understand, and to reason logically with both verbal and quantitative material. The test is not a measure of achievement or business knowledge. Under certain conditions, the applicant may petition for waiver of the GMAT requirement, based on possession of an advanced degree and/or the ability to supply acceptable scores from an equivalent test.

Doctor of Philosophy in Business Administration (Ph.D.)

The Ph.D. program includes an emphasis in Logistics & Supply Chain Management (LSCM). This is the only LSCM emphasis in a doctoral business program offered in Missouri. Courses are taught by full-time, nationally known scholars who have been recognized as one of the most academically prolific faculties in America. The Ph.D. program is designed to prepare scholars who will excel in the national and international marketplace, especially in academic and research organizations, but graduates may also find opportunities in the growing private sector demand for advanced LSCM expertise.

Doctor of Business Administration (DBA)

The Doctor of Business Administration program is a three-year, cohort-based program that offers a flexible format, with limited monthly visits to campus. Over the course of the program, participants will make only three weekend trips to campus per term.

DBA students move through the program in a cohort and meet face-to-face one weekend a month, then engage and collaborate with faculty and students in the online learning platform for discussions. The first two years cover an array of cutting-edge business and management topics and the third year is spent focusing on the candidate’s dissertation research.

The DBA is designed to train engaged management scholars in a learning community supported by select internationally renowned faculty with close ties to business and recognized for their research impact and expertise in graduate education.

Master of Accounting Program (MAcc)

The MAcc program prepares students to enter the accounting profession or to further existing accounting careers.

It is designed to accommodate students who have earned an undergraduate degree with an accounting major. Students who have not completed an undergraduate accounting degree must complete the following courses prior to entry into the MAcc program:

- ACCTNG 2400: Fundsamentals of Financial Accounting (3)
- ACCTNG 2410: Managerial Accounting (3)
- ACCTNG 3401: Financial Accounting and Reporting I (3)
- ACCTNG 3402: Financial Accounting and Reporting II (3)
- ACCTNG 3411: Cost Accounting (3)
- ACCTNG 3421: Accounting Information Systems (3)
- ACCTNG 3441: Income Taxes (3)

These requirements may be waived with appropriate prior coursework. Candidates who have not completed the preparatory courses may apply and be provisionally accepted into the MAcc program, but must complete the courses before registration as a Master of Accounting student can be finalized.

Students must complete a minimum of 30 credit hours while enrolled as a graduate student.

MAcc Degree Requirements

Quantitative Methods

All students must complete the following course:

- SCMA 5300: Statistical Analysis for Management Decisions (3)

Finance Requirement

- FINANCE 6500: Financial Management (3)

Business Breadth

Select four of the following courses:

- BUS AD 5100: Managerial Communication
- BUS AD 5900: Law, Ethics and Business
- BUS AD 6990: Strategy Formulation And Implementation
- INFSYS 5800: Management Information Systems
- SCMA 5320: Production and Operations Management
- MGMT 5600: Managing People in Organizations
- MKTG 5700: Contemporary Marketing Concepts

Accounting Course Requirements

Students must complete the following three courses:

- ACCTNG 4401: Financial Accounting And Reporting III (3)
- ACCTNG 4402: Financial Accounting and Reporting IV (3)
- ACCTNG 4435: Auditing (3)

Research Course

Select one of the following:

- ACCTNG 5402: Professional Accounting Research (3)
- ACCTNG 5406: Research and Professional Writing in Accounting
- ACCTNG 5441: Tax Research

Graduate Topics

Select one of the following:

- ACCTNG 5403: Graduate Topics in Financial Accounting (3)
- or ACCTNG 5412: Graduate Topics in Management Accounting: Controllership (3)
The MBA is available in three formats: the FlexMBA (formerly evening MBA), the Professional MBA (an accelerated Internet-enhanced weekend program), and the International MBA program. All programs are fully accredited by AACSB International – The Association to Advance Collegiate Schools of Business, the premier accrediting body in collegiate business education. The MBA programs are designed to prepare students for administrative and professional positions. They also provide an appropriate foundation for students contemplating doctoral work and eventual careers in college teaching and research. The programs admit students with bachelor’s degrees from accredited institutions, including those with undergraduate backgrounds in the sciences, engineering, humanities, or arts as well as business. Graduate Business program information is available at the College of Business Administration website.

### Master of Business Administration Program (MBA)

The MBA is available in three formats: the FlexMBA (formerly evening MBA), the Professional MBA (an accelerated Internet-enhanced weekend program), and the International MBA program. All programs are fully accredited by AACSB International – The Association to Advance Collegiate Schools of Business, the premier accrediting body in collegiate business education. The MBA programs are designed to prepare students for administrative and professional positions. They also provide an appropriate foundation for students contemplating doctoral work and eventual careers in college teaching and research. The programs admit students with bachelor’s degrees from accredited institutions, including those with undergraduate backgrounds in the sciences, engineering, humanities, or arts as well as business. Graduate Business program information is available at the College of Business Administration website.

### Degree Requirements

Depending on the student’s previous background, programs will range from 30 to 45 hours. Coursework must be completed within a six-year period. At least 2/3 of coursework must be taken while enrolled as an MBA candidate at UMSL.

Candidates must take at least one course from either the core or elective sections in each of the following six areas: accounting, finance, management, marketing, information systems, and logistics and operations management. Also, no more than 15 credits may be taken in any one of the six areas.

### Electives

Students must complete 15 hours of electives including at least six hours of Accounting courses.

**Accounting Electives**

Select at least two of the following (Not all courses are offered each year):

- ACCTNG 5402 Professional Accounting Research
- ACCTNG 5403 Graduate Topics in Financial Accounting
- ACCTNG 5406 Research and Professional Writing in Accounting
- ACCTNG 5408 Fraud Examination
- ACCTNG 5412 Graduate Topics in Management Accounting: Controllership
- ACCTNG 5435 Graduate Topics in Auditing
- ACCTNG 5436 Systems Auditing
- ACCTNG 5441 Tax Research
- ACCTNG 5446 Advanced Topics in Taxation
- ACCTNG 5451 Accounting and Auditing in Governmental and Not-for-Profit Entities
- ACCTNG 5480 International Accounting
- ACCTNG 5490 Graduate Internship in Accounting
- ACCTNG 5491 Contemporary Issues In Accountancy
- ACCTNG 5498 Graduate Seminar in Accounting
- ACCTNG 6441 Graduate Topics in Taxation

**Non-Accounting Courses**

Students may complete up to 9 hours from other business disciplines (maximum: 9 credit hours at the graduate level)

- Any BUS AD 5000 and above
- Any FINANCE 6500 and above
- Any INF SYS 5800 and above
- Any SCMA 5300 and above
- Any MGMT 5600 and above
- Any MKTG 5700 and above

Total Hours: 48

### Learning Outcomes

- Develop the ability to write and deliver a professional presentation.
- Develop the ability to form teams and work in teams.
- Understand ethical considerations in all dimensions of business.
- Be aware of international issues in business.
- Have the ability to critically evaluate information.
- Be able to independently research a topic in business.
- Develop skill in using technology to solve business problems.
- Understand basic management principles and practices and how they affect the success of an organization.
- Understand basic finance principles and practices and how they affect the success of an organization.
- Understand basic accounting principles and practices and how they affect the success of an organization.
- Understand basic operations and logistics management principles and practices and how they affect the success of an organization.
- Understand basic marketing principles and practices and how they affect the success of an organization.
- Develop skill to think strategically about the business.
Prerequisites
All students must demonstrate knowledge of quantitative skills, microeconomics and macroeconomics, managerial communication, and business statistics.

If students have completed equivalent undergraduate courses, prerequisites may be waived. If not, the following options are available:

To satisfy the quantitative skills, students can take the Quantitative skills boot camp (for dates please check with the Graduate Business Office).

To satisfy the economics requirement, students can take either BUS AD 5000 Economics for Managers or the Economics skills boot camp (for dates please check with the Graduate Business Office).

To satisfy the communication requirement students can take BUS AD 5100 Managerial Communication.

To satisfy the statistics requirement, students can take either SCMA 5300 Statistical Analysis for Management Decisions or the Statistical skills boot camp (for dates please check with the Graduate Business Office).

Business Core (0-21 credits)
The following courses or their equivalents are required of all degree candidates.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTNG 5400</td>
<td>Financial and Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BUS AD 5900</td>
<td>Law, Ethics and Business</td>
<td>3</td>
</tr>
<tr>
<td>FINANCE 6500</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 5320</td>
<td>Production and Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>INFSYS 5800</td>
<td>Management Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 5600</td>
<td>Managing People in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 5700</td>
<td>Contemporary Marketing Concepts</td>
<td>3</td>
</tr>
</tbody>
</table>

Advanced Topics (0-18 credits)
MBA candidates must take at least one course in each functional area: Accounting, Finance, Information Systems, Logistics and Operations Management, Management, Marketing. If ACCTNG 5400 is waived, the student must complete ACCTNG 5401. Students can take no more than a total of 15 credits in any functional area.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTNG 5401</td>
<td>Financial Reporting And Analysis (Only if ACCTNG 5400 is waived)</td>
<td>3</td>
</tr>
<tr>
<td>FINANCE Elective</td>
<td>(Only if FINANCE 6500 is waived)</td>
<td>3</td>
</tr>
<tr>
<td>INFSYS Elective</td>
<td>(Only if INFSYS 5800 is waived)</td>
<td>3</td>
</tr>
<tr>
<td>SCMA Elective</td>
<td>(Only if SCMA 5320 is waived)</td>
<td>3</td>
</tr>
<tr>
<td>MGMT Elective</td>
<td>(Only if MGMT 5600 is waived)</td>
<td>3</td>
</tr>
<tr>
<td>MKTG Elective</td>
<td>(Only if MKTG 5700 waived)</td>
<td>3</td>
</tr>
</tbody>
</table>

Global Management Required (3 credits)
Take one of the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS AD 6990</td>
<td>Strategy Formulation And Implementation</td>
<td>3</td>
</tr>
<tr>
<td>INTL BUS 5289</td>
<td>International Business Strategies</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 4614</td>
<td>Entrepreneurship/Small Business Management</td>
<td>3</td>
</tr>
</tbody>
</table>

1 For students with a non-business undergraduate degree, the Global Management requirement is satisfied with BUS AD 6990.

Previous Education
Based on a formal review and evaluation by the Graduate Business Programs Office, students may be granted waivers in the Business Core section. Waivers depend on the applicability of, and performance in, prior coursework. Regardless of the number of courses waived, all students must complete at least 30 credit hours to earn the MBA degree.

Candidates must take at least one course at either the core level or from the business breadth requirements list in each of the following six areas: accounting, finance, management, marketing, information systems, and logistics and operations management. Also, no more than 15 credit hours may be taken in any one of the six areas. Students are also required to have completed the equivalent of ECON 4105, Quantitative Methods and Modeling in Economics, Business, and the Social Sciences, by the end of their first 15 hours in the program.

Required Courses
The following courses or their equivalents are required of all degree candidates.

General Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECON 4105</td>
<td>Quantitative Mth &amp; Modeling In Econ, Business &amp; Social Sciences</td>
<td>3</td>
</tr>
<tr>
<td>BUS AD 5000</td>
<td>Economics For Managers</td>
<td>3</td>
</tr>
<tr>
<td>BUS AD 5100</td>
<td>Managerial Communication</td>
<td>3</td>
</tr>
<tr>
<td>BUS AD 6990</td>
<td>Strategy Formulation And Implementation</td>
<td>3</td>
</tr>
<tr>
<td>LOG OM 5300</td>
<td>Statistical Analysis For Management Decisions</td>
<td>3</td>
</tr>
<tr>
<td>BUS AD 5900</td>
<td>Law, Ethics And Business</td>
<td>3</td>
</tr>
</tbody>
</table>

Core Requirements

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCTNG 5400</td>
<td>Financial And Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>FINANCE 6500</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 5600</td>
<td>Organizational Behavior And Administrative Processes</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 5700</td>
<td>Contemporary Marketing Concepts</td>
<td>3</td>
</tr>
<tr>
<td>INFSYS 5800</td>
<td>Management Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>LOG OM 5320</td>
<td>Production And Operations Management</td>
<td>3</td>
</tr>
</tbody>
</table>

Business Breadth Requirements - 9 hours
A student must take a second-level course in three of the following areas:

- Accounting: ACCTNG 5401, Financial Reporting and Analysis
- Finance: Any approved graduate-level course beyond FINANCE 6500
- Management: Any approved graduate-level course beyond MGMT 5600 (https://nextbulletin.umsl.edu/courseleaf/js/fckeditor/editor/fckeditor.html?InstanceName=attr_businessadministrationtext&Toolbar=PageWizard)
- Marketing: Any approved graduate-level course beyond MKTG 5700 (https://nextbulletin.umsl.edu/courseleaf/js/fckeditor/editor/fckeditor.html?InstanceName=attr_businessadministrationtext&Toolbar=PageWizard)
- Information Systems: Any approved graduate-level course beyond INFSYS 5800 (https://nextbulletin.umsl.edu/
Students must complete at least 30 credit hours to earn the MBA. Only courses that are substantially different from courses taken for credit in a student’s undergraduate program will be acceptable. A maximum of 15 hours in any functional area will count toward degree requirements. Emphasis in International Business: MBA students seeking an emphasis in International Business must complete a minimum of 12 credits from International Business courses or courses approved by the director of the International Business Institute. A maximum of 15 hours in any functional area will count toward degree requirements. Emphasis in Information Systems: MBA students seeking an emphasis in Information Systems must complete a minimum of 12 hours of Information Systems electives beyond INFSYS 5800. Emphasis in Logistics and Supply Chain Management: MBA students seeking an emphasis in Logistics & Supply Chain Management (LSCM) must complete 3 hours from approved courses in addition to the following four courses: SCMA 5300, SCMA 5320, SCMA 6330, and MKTG 5770. Emphasis in Management: MBA students seeking an emphasis in Management must complete a minimum of 12 hours of Management electives beyond MGMT 5600. Only courses that are substantially different from courses taken for credit in a student’s undergraduate program will be acceptable. Students must complete at least 30 credit hours to earn the MBA. Electives: The student must take a minimum of nine hours of elective courses. A maximum of six hours of electives may be taken at the undergraduate level. Only courses that are substantially different from courses taken for credit in a student’s undergraduate program will be acceptable. Electives at the graduate level may be used to complete additional work in these courses. Nine elective hours may be taken outside the College of Business Administration if the student has approval in advance from a graduate adviser for the specific courses desired. Emphasis Areas: MBA students may obtain an emphasis in Accounting, Finance, Information Systems, International Business, Logistics and Supply Chain Management, Management, Marketing, and Operations Management. Emphasis in Accounting: MBA students seeking an emphasis in Accounting must complete a minimum of 12 hours of Accounting electives beyond ACCTNG 5400. (ACCTNG 5400 does not count toward the Emphasis in Accounting.) The following 4000-level Accounting classes may be counted toward the emphasis: ACCTNG 4401-Financial Accounting & Reporting III, ACCTNG 4402- Financial Accounting & Reporting IV, ACCTNG 4435- Auditing. A maximum of 15 hours in any functional area will count toward degree requirements. Only courses that are substantially different from courses taken for credit in a student’s undergraduate program will be acceptable. Students must complete at least 30 credit hours to earn the MBA. Emphasis in Finance: MBA students seeking an emphasis in Finance must complete a minimum of 12 hours of Finance electives beyond FINANCE 6500. (FINANCE 6500 does not count toward the emphasis in Finance). A maximum of 15 hours in any functional area will count toward degree requirements. Only courses that are substantially different from courses taken for credit in a student’s undergraduate program will be acceptable. Students must complete at least 30 credit hours to earn the MBA. Emphasis in Information Systems: MBA students seeking an emphasis in Information Systems must complete a minimum of 12 hours of Information Systems electives beyond INFSYS 5800. A maximum of 15 hours in any functional area will count toward degree requirements. Only courses that are substantially different from courses taken for credit in a student’s undergraduate program will be acceptable. Students must complete at least 30 credit hours to earn the MBA. Emphasis in International Business: MBA students seeking an emphasis in International Business must complete a minimum of 12 credits from International Business courses or courses approved by the director of the International Business Institute. A maximum of 15 hours in any functional area will count toward degree requirements. Only courses that are substantially different from courses taken for credit in a student’s undergraduate program will be acceptable. Students must complete at least 30 credit hours to earn the MBA. Emphasis in Logistics and Supply Chain Management: MBA students seeking an emphasis in Logistics & Supply Chain Management (LSCM) must complete 3 hours from approved courses in addition to the following four courses: SCMA 5300, SCMA 5320, SCMA 6330, and MKTG 5770. A maximum of 15 hours in any functional area will count toward the degree requirements. A student cannot receive an emphasis in both Operations Management and Logistics & Supply Chain Management for the same set of courses. Only courses that are substantially different from courses taken for credit in a student’s undergraduate program will be acceptable. Students must complete at least 30 credit hours to earn the MBA. List of approved courses for the LSCM emphasis:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCMA 5312</td>
<td>Advanced Statistical Methods for Management Decisions</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 5322</td>
<td>Lean Production</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 5324</td>
<td>Service Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 5325</td>
<td>Environmental Analysis and Sustainability in Business Operations</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 5326</td>
<td>Quality Management</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 5334</td>
<td>Internship in Logistics and Supply Chain Management</td>
<td>1</td>
</tr>
<tr>
<td>SCMA 5340</td>
<td>Transportation Economics for Business Managers</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 5349</td>
<td>Project Consulting and Execution</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 5354</td>
<td>Simulation for Managerial Decision Making</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 5381</td>
<td>International Logistics and Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 5399</td>
<td>Individual Research in Logistics and Operations Management</td>
<td>1-3</td>
</tr>
<tr>
<td>SCMA 6331</td>
<td>Logistics and Supply Chain Operational Modeling</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 6332</td>
<td>Logistics and Supply Chain Strategic Modeling</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 6338</td>
<td>Business Processes: Design, Management &amp; Integration</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 6345</td>
<td>Business Analytics and Data Mining</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 6347</td>
<td>LOM Project Management</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 6350</td>
<td>Management Science Methods</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 6354</td>
<td>Advanced Operations Research Topics</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 6360</td>
<td>Advanced Logistics and Operations Management Applications</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 6395</td>
<td>Seminar in Logistics and Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS AD 5198</td>
<td>Seminar in Business Administration</td>
<td>3</td>
</tr>
<tr>
<td>INFSYS 6833</td>
<td>Decision Support Systems for Business Intelligence</td>
<td>3</td>
</tr>
</tbody>
</table>
requirements. Only courses that are substantially different from courses taken for credit in a student’s undergraduate program will be acceptable. Students must complete at least 30 credit hours to earn the MBA.

Emphasis in Marketing
MBA students seeking an emphasis in Marketing must complete a minimum of 12 hours of Marketing electives beyond MKTG 5700, including MKTG 5701 (MKTG 5700 does not count toward the emphasis in Marketing). A maximum of 15 hours in any functional area will count toward degree requirements. Only courses that are substantially different from courses taken for credit in a student’s undergraduate program will be acceptable. Students must complete at least 30 credit hours to earn the MBA.

Emphasis in Operations Management
MBA students seeking an emphasis in Operations Management (OM) must complete 9 hours from approved courses in addition to SCMA 5320 and SCMA 5320. A maximum of 15 hours in any functional area will count toward the degree requirements. A student cannot receive an emphasis in both Operations Management and Logistics & Supply Chain Management for the same set of courses. An overlap of up to 3 credit hours from approved courses, other than SCMA 5300 and SCMA 5320 is allowed. Only courses that are substantially different from courses taken for credit in a student’s undergraduate program will be acceptable. Students must complete at least 30 credit hours to earn the MBA.

List of approved courses for the OM emphasis:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCMA 5312</td>
<td>Advanced Statistical Methods for Management Decisions</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 5322</td>
<td>Lean Production</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 5324</td>
<td>Service Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 5325</td>
<td>Environmental Analysis and Sustainability in Business Operations</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 5326</td>
<td>Quality Management</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 5334</td>
<td>Internship in Logistics and Supply Chain Management</td>
<td>1</td>
</tr>
<tr>
<td>SCMA 5340</td>
<td>Transportation Economics for Business Managers</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 5349</td>
<td>Project Consulting and Execution</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 5354</td>
<td>Simulation for Managerial Decision Making</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 5381</td>
<td>International Logistics and Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 5399</td>
<td>Individual Research in Logistics and Operations Management</td>
<td>1-3</td>
</tr>
<tr>
<td>SCMA 6330</td>
<td>Business Logistics Systems</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 6331</td>
<td>Logistics and Supply Chain Operational Modeling</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 6332</td>
<td>Logistics and Supply Chain Strategic Modeling</td>
<td>3</td>
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<tr>
<td>SCMA 6338</td>
<td>Business Processes: Design, Management &amp; Integration</td>
<td>3</td>
</tr>
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<td>SCMA 6345</td>
<td>Business Analytics and Data Mining</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 6347</td>
<td>LOM Project Management</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 6350</td>
<td>Management Science Methods</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 6354</td>
<td>Advanced Operations Research Topics</td>
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<td>SCMA 6360</td>
<td>Advanced Logistics and Operations Management Applications</td>
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<td>SCMA 6395</td>
<td>Seminar in Logistics and Operations Management</td>
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<tr>
<td>BUS AD 5198</td>
<td>Seminar in Business Administration</td>
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</tr>
<tr>
<td>INF SYS 6833</td>
<td>Decision Support Systems for Business Intelligence</td>
<td>3</td>
</tr>
</tbody>
</table>

Professional MBA Program
A weekend-based Internet-enhanced version of the MBA program exists as an alternative to the traditional part-time evening program. This program is a 42 credit hour program for professionals with busy work or travel schedules. Students meet on campus monthly, with the remainder of the interaction between instructor and students taking place online. Students proceed through the program as part of a cohort and complete the requirements for the degree in less than two years.

The first 24 hours of the Internet-based program consist of the core courses required in the Flex program plus BUS AD 5100 Managerial Communication. The remaining 18 hours consist of the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT NG 5401</td>
<td>Financial Reporting And Analysis</td>
<td>3</td>
</tr>
<tr>
<td>FINANCE 6590</td>
<td>Seminar in Finance</td>
<td>3</td>
</tr>
<tr>
<td>INF SYS 6891</td>
<td>Seminar in Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>INTL BUS 5289</td>
<td>International Business Strategies</td>
<td>3</td>
</tr>
<tr>
<td>or BUS AD 6990</td>
<td>Strategy Formulation And Implementation</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 6395</td>
<td>Seminar in Logistics and Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 5795</td>
<td>Seminar in Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

An international trip of 7 to 12 days is a degree requirement and takes place during the second year of the program.

International MBA Program
An international version of the MBA program also exists as an alternative to the Flex MBA program. This program is a two-year, full-time program. Students take courses the first year outside the U.S. at a partner university and then take courses the second year on the University of Missouri–St. Louis campus.

International MBA Program Degree Requirements
All participants in the International MBA program must meet the same general and core requirements as those in the Flex MBA program. In addition, the International MBA program may entail an internship (outside the U.S. for Americans and in the U.S. for all others). The program also requires proficiency in the language spoken at the destination university. Coursework at the partner-schools is typically in English.

Master of Science in Information Systems (MS in IS)
The Master of Science in IS program is designed to provide the technical and managerial knowledge to operate successfully in careers associated with the design, development and management of computer-based information, telecommunications, and Internet applications. The program accommodates students with undergraduate degrees specializing in IS, business, and computer science, as well as students with undergraduate degrees outside business.
MS in IS Program Degree Requirements

The program may require as few as 30 hours for students with undergraduate business degrees from AACSB-accredited institutions. Because of the need to attain general business core competencies as a foundation of the MS in IS requirements, students with no academic business background will be required to take additional hours as outlined below.

General Requirements

All students must meet course requirements in quantitative reasoning, general business and IS. Students must complete a minimum of 30 credit hours beyond the general business core. Of the 30 hours beyond the general business core, at least 24 hours must cover topics beyond INFSYS 5800 and INFSYS 6805. Students with a B.S.B.A. with an emphasis in IS or a B.S. in IS from an AACSB-accredited institution may, at the student’s discretion, substitute two electives for INFSYS 5800 and INFSYS 6805. Waivers may be granted for other courses with appropriate undergraduate course work.

Quantitative Reasoning Requirement

Students are required to have completed by the end of their first semester in the program the equivalent of ECON 4105, Quantitative Methods and Modeling in Economics, Business and the Social Sciences with a grade of C or better. Students are also required to complete the equivalent of SCMA 5300 Statistical Analysis for Management Decisions with a grade of C or better. These courses do not count towards the graduate degree, but waivers may be granted with appropriate undergraduate course work.

General Business Core

Students must have a B.S. in IS, or a B.S.B.A. with an emphasis in MIS that requires a managerial communication course, and coursework equivalent to at least five of the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS AD 5900</td>
<td>Law, Ethics and Business</td>
<td>3</td>
</tr>
<tr>
<td>ACCTNG 5400</td>
<td>Financial and Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>FINANCE 6500</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 5600</td>
<td>Managing People in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 5700</td>
<td>Contemporary Marketing Concepts</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 5320</td>
<td>Production and Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS AD 6990</td>
<td>Strategy Formulation And Implementation</td>
<td>3</td>
</tr>
</tbody>
</table>

Students who have not met this prerequisite must complete BUS AD 5100 Managerial Communication and course work from at least five of the courses listed above.

Program Requirements

A. Basic IS courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFSYS 5800</td>
<td>Management Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>INFSYS 6805</td>
<td>Applications of Programming for Business Solutions</td>
<td>3</td>
</tr>
<tr>
<td>INFSYS 6840</td>
<td>Information Systems Analysis</td>
<td>3</td>
</tr>
<tr>
<td>INFSYS 6845</td>
<td>Database Management Systems</td>
<td>3</td>
</tr>
<tr>
<td>INFSYS 6850</td>
<td>Information Systems Design</td>
<td>3</td>
</tr>
</tbody>
</table>

Select five of the following: 15

[In the document, there is a table listing additional courses and their credit hours, followed by the condition that students must complete the equivalent of ECON 4105, Quantitative Methods and Modeling in Economics, Business and the Social Sciences with a grade of C or better. Students are also required to complete the equivalent of SCMA 5300 Statistical Analysis for Management Decisions with a grade of C or better. These courses do not count towards the graduate degree, but waivers may be granted with appropriate undergraduate course work.]

Total Hours 30

Doctor of Business Administration

Admission Requirements

Candidates must be committed to a rigorous program of study requiring periodic residence at the University of Missouri-St. Louis College of Business Administration as well as substantial reading and academic inquiry throughout the program. Applicants are expected to hold an MBA or other relevant advanced degree from an acceptable academic institution and to have ten years of significant professional and/or senior level management experience with high levels of responsibility. In exceptional cases, individuals without an advanced degree but other forms of advanced education and substantial managerial experience may be considered; other experience or qualifications may also compensate for less than 10 years of professional or managerial experience. Applicants must submit:

- Most recent transcript(s). Scanned transcripts will be sufficient for the preliminary application. Official Transcripts in sealed envelopes will be required for final acceptance.
- Résumé or Curriculum Vitae (C.V.)
- Names and contact information of two people who can provide insights into the applicant’s academic potential and ability to think critically.
- Two essays (Statement of Commitment & Statement of Research Interest)

For more information and application deadlines, please go to http://dba.umsl.edu.

Degree Requirements

The DBA in the College of Business Administration requires completion of 60 credit hours. To ensure sufficient background for doctoral-level courses, students must demonstrate appropriate competence in quantitative reasoning, which is evidenced through completion of BUS AD 7301 and BUS AD 5000 or their equivalent to be determined by the DBA Director.

Course Requirements
Students are required to take:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS AD 7301</td>
<td>Statistical Modeling</td>
<td>3</td>
</tr>
<tr>
<td>BUS AD 5000</td>
<td>Economics For Managers</td>
<td>3</td>
</tr>
<tr>
<td>BUS AD 7100</td>
<td>Scientific Inquiry in Business</td>
<td>3</td>
</tr>
<tr>
<td>BUS AD 7101</td>
<td>Quantitative Research Methods I in Business Administration</td>
<td>3</td>
</tr>
<tr>
<td>BUS AD 7102</td>
<td>Qualitative Research Methods I in Business Administration</td>
<td>2</td>
</tr>
<tr>
<td>BUS AD 7103</td>
<td>Quantitative Research Methods II in Business Administration</td>
<td>2</td>
</tr>
<tr>
<td>BUS AD 7104</td>
<td>Quantitative Research Methods II in Business Administration</td>
<td>2</td>
</tr>
<tr>
<td>BUS AD 7300</td>
<td>Management of Supply Chains</td>
<td>2</td>
</tr>
<tr>
<td>BUS AD 7400</td>
<td>The Role of Accounting Information in Firms and Markets</td>
<td>2</td>
</tr>
<tr>
<td>BUS AD 7500</td>
<td>Finance Theory and Applications Seminar</td>
<td>2</td>
</tr>
<tr>
<td>BUS AD 7600</td>
<td>Managing Talent for Strategic Advantage</td>
<td>2</td>
</tr>
<tr>
<td>BUS AD 7700</td>
<td>Contemporary Marketing Intelligence and Decision Making</td>
<td>2</td>
</tr>
<tr>
<td>BUS AD 7800</td>
<td>Management of Sustaining and Disruptive Information Technologies</td>
<td>2</td>
</tr>
<tr>
<td>BUS AD 7105</td>
<td>Special Topics in Business Administration (two semesters)</td>
<td>4</td>
</tr>
<tr>
<td>BUS AD 7106</td>
<td>Strategic Business Analysis</td>
<td>2</td>
</tr>
<tr>
<td>BUS AD 7107</td>
<td>Capstone Project Research in Business Administration</td>
<td>6</td>
</tr>
<tr>
<td>BUS AD 7108</td>
<td>Research Practicum in Business Administration (three semesters)</td>
<td>18</td>
</tr>
</tbody>
</table>

Total Hours: 60

Other Requirements

Students will be evaluated annually for satisfactory progress. Students deemed not to be making adequate progress are subject to the policies of the Graduate School and the College of Business Administration regarding probation and dismissal from the program.

**Ph.D. in Business Administration**

**Admissions Requirements**

Admission decisions are made on the basis of past academic record, intellectual ability, GMAT or GRE scores, and career commitment. Applications are accepted from students who have baccalaureate or graduate degrees. Past graduate work may be credited toward degree requirements where appropriate. Applicants must submit:

- Official academic transcripts
- Official GMAT or GRE results in fields approved by the College of Business Administration.
- Three letters of recommendation (at least two from individuals with earned doctorates).
- A statement of objectives for the course of study.

**Graduate Assistantships**

Stipends for research and teaching assistantships (20 hours per week) are awarded on a competitive basis. Educational fees are waived for graduate assistants.

**Degree Requirements**

The Ph.D. in the College of Business Administration requires a minimum of 69 course credit hours and a minimum of 6 dissertation credit hours beyond the baccalaureate degree. To ensure sufficient background for doctoral-level courses, students must demonstrate appropriate competence in quantitative reasoning, which is evidenced through completion of ECON 4105 and BUS AD 5000 or their equivalent. Students must also demonstrate appropriate competence in managerial communication, which is evident through completion of BUS AD 5100 or equivalent to be determined by the Ph.D. Coordinator.

**Course Requirements**

The Ph.D. in Business Administration has a common set of requirements in three areas: Business & Research Foundation (Section I), Supporting Field (Section II), and Other Requirements (Section IV). Requirements specific to the area of emphasis are in Section III.

**I. Business & Research Foundation Requirement: 27 credit hours (9 courses)**

Students are required to take:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFSYS 5800</td>
<td>Management Information Systems</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 5300</td>
<td>Statistical Analysis for Management Decisions</td>
<td>3</td>
</tr>
<tr>
<td>BUS AD 5900</td>
<td>Law, Ethics and Business</td>
<td>3</td>
</tr>
<tr>
<td>ACCTNG 5400</td>
<td>Financial and Managerial Accounting</td>
<td>3</td>
</tr>
<tr>
<td>FINANCE 6500</td>
<td>Financial Management</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 5600</td>
<td>Managing People in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 5700</td>
<td>Contemporary Marketing Concepts</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 5320</td>
<td>Production and Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>BUS AD 7300</td>
<td>Management of Supply Chains</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours: 27

1 The first eight courses INFSYS 5800SCMA 5300, BUS AD 5900, ACCTNG 5400,FINANCE 6500, MGMT 5600, MKTG 5700, SCMA 5320 will normally be waived if students had the courses as part of an UMSL MBA, MS in IS, or MAcc degree, or had equivalent graduate course work at an institution approved by the Graduate Business Programs Office and the Ph.D. Coordinator.

**II. Supporting Field Requirement (9 credit hours)**

Students must take 9 credit hours of graduate-level courses beyond foundation course work in a supporting field approved by the Ph.D. Coordinator. Supporting fields may include courses within or outside the College of Business Administration and are designed in consultation with the Ph.D. Coordinator.
III. Emphasis Area Requirements
Logistics & Supply Chain Management (LSCM) Emphasis

The Logistics & Supply Chain Management emphasis requirement includes 33 credit hours.

Students are required to take the following six courses:

- SCMA 6330 Business Logistics Systems 3
- SCMA 6350 Management Science Methods 3
- SCMA 7381 International Supply Chain Management 3
- SCMA 7390 Research Seminar in LSCM 3
- SCMA 7393 Special Topics in LSCM 3
- MKTG 5770 Supply Chain Management Strategy 3

And select at least one of the following: 3

- SCMA 6331 Logistics and Supply Chain Operational Modeling
- SCMA 6332 Logistics and Supply Chain Strategic Modeling

Total Hours 33

IV. Other Requirements

- At least two semesters of supervised teaching in the College of Business Administration are required of all doctoral students.
- Students are required to demonstrate competency in teaching during the first year in which they teach in the College of Business Administration. This requirement may be met by successfully completing one or more courses.
- The degree is awarded upon successful completion and defense of the Ph.D. dissertation and satisfaction of all Graduate School requirements. The dissertation must be defended within three years of approval of a Ph.D. dissertation proposal.

Graduate Certificate Programs in Business Studies

The College of Business Administration offers five 18-hour graduate certificates. To be admitted to a graduate certificate program, students must meet the same requirements as those needed for a graduate degree program in business (see Admission Requirements in the Graduate Studies in Business Administration section of this Bulletin).

Certificate programs allow qualified graduate students to pursue an intensive course of study in a specialized business topic without requiring completion of a full graduate business degree program. Certificate programs provide students with the opportunity to obtain the advanced knowledge available through a graduate course of study in a relatively brief period.

In order to successfully complete a certificate program, students must earn a 3.0 cumulative GPA in certificate classes. Unless otherwise specified, the coursework must be completed within six years. Students must also comply with all requirements related to matters such as prerequisites, academic probation, and other graduate business program policies.

Graduate Certificate Program in Business Administration

This is an 18-hour program designed to accommodate individuals with an undergraduate/graduate degree in a non-business field seeking core business knowledge. The program emphasizes coursework designed to cover the major disciplines within the field of business. Upon completion, the student will have knowledge of common business theories, practices, and procedures.

For more information about our graduation rates, the median debt of students who completed this graduate certificate program, and other important information, please visit our Gainful Employment Disclosure website: http://umsl.edu/go/Bot.

To earn the certificate, students must complete six courses as prescribed below. All course prerequisites and all course waivers are applicable. Substitute courses may be approved by the appropriate department chairperson and the director of Graduate Studies in Business. In all cases, 18 hours are needed to complete the graduate certificate.

Program Requirements

- ACCTNG 5400 Financial and Managerial Accounting 3
- MGMT 5600 Managing People in Organizations 3
- MKTG 5700 Contemporary Marketing Concepts 3
- INFSYS 5800 Management Information Systems 3

Select one of the following: 3

- FINANCE 6500 Financial Management
SCMA 5320 Production and Operations Management 3

Elective Course
Select one of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS AD 5100</td>
<td>Managerial Communication</td>
</tr>
<tr>
<td>BUS AD 5900</td>
<td>Law, Ethics and Business</td>
</tr>
<tr>
<td>FINANCE 6500</td>
<td>Financial Management 1</td>
</tr>
<tr>
<td>SCMA 5320</td>
<td>Production and Operations Management</td>
</tr>
</tbody>
</table>

Total Hours 18

Graduate Certificate in Digital and Social Media Marketing

The Graduate Certificate in Digital and Social Media Marketing is an 18-hour program designed to provide a focused, intensive study of the applications of digital and social media marketing management within organizations. This program serves marketing managers wanting to understand a true integrated marketing approach to sales, brand management, promotion, and consumer behavior.

For more information about our graduation rates, the median debt of students who completed this graduate certificate program, and other important information, please visit our Gainful Employment Disclosure website: http://www.umsl.edu/divisions/graduate/Graduate%20Programs/gedt-002519-52.1499.htm

To obtain the certificate, students must complete the following 4 “foundation” marketing courses, the "research and analytics" course and the "special seminar" course for a total of 18 credits:

Marketing Foundation Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 5700</td>
<td>Contemporary Marketing Concepts</td>
</tr>
<tr>
<td>MKTG 5721</td>
<td>Digital Marketing Strategies and Measurement</td>
</tr>
<tr>
<td>MKTG 5722</td>
<td>Social Media Marketing Strategy</td>
</tr>
<tr>
<td>MKTG 5730</td>
<td>Clinical Study in Digital and Social Media Marketing</td>
</tr>
</tbody>
</table>

Research and Analytics Course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 5710</td>
<td>Consumer Motivation And Behavior</td>
</tr>
</tbody>
</table>

Seminar Course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 5731</td>
<td>Special Seminars in Digital and Social Media Marketing</td>
</tr>
</tbody>
</table>

Total Hours 12

Graduate Certificate in Business Intelligence

The Business Intelligence certificate blends analytics and information systems in a unique program. Students will gain exposure to the systems as well as analytics component of Business Intelligence, but will specialize in one of five concentration through their choice of electives.

For more information about our graduation rates, the median debt of students who completed this graduate certificate program, and other important information, please visit our Gainful Employment Disclosure website: http://umsl.edu/go/BoA.

This program consists of a six-course sequence, comprising four required courses and two elective courses. Elective courses may be taken in any of five sub-tracks: Business Intelligence Infrastructure, Digital Strategies, Predictive Analytics, Prescriptive Analytics, or Advanced Computation. Students are responsible for any prerequisites to these classes. The list of courses is as follows:

Required Courses (12 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFSYS 6833</td>
<td>Decision Support Systems for Business Intelligence</td>
</tr>
<tr>
<td>INFSYS 6849</td>
<td>Data Warehouse Design and Implementation 1</td>
</tr>
<tr>
<td>or INFSYS 6860</td>
<td>Data Integration</td>
</tr>
<tr>
<td>INFSYS 6851</td>
<td>Practicum in Business Intelligence</td>
</tr>
<tr>
<td>SCMA 6345</td>
<td>Business Analytics and Data Mining</td>
</tr>
</tbody>
</table>

Areas of Concentration

Choose two classes from any of the five tracks below. Both classes must be from the same concentration:

Business Intelligence Infrastructure

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFSYS 6806</td>
<td>Managerial Applications of Object- Oriented Technologies</td>
</tr>
<tr>
<td>INFSYS 6808</td>
<td>Advanced Object-Oriented Programming For Business</td>
</tr>
<tr>
<td>INFSYS 6840</td>
<td>Information Systems Analysis</td>
</tr>
<tr>
<td>INFSYS 6847</td>
<td>Project Management</td>
</tr>
<tr>
<td>INFSYS 6848</td>
<td>Knowledge Management And Business Intelligence</td>
</tr>
<tr>
<td>INFSYS 6850</td>
<td>Information Systems Design</td>
</tr>
<tr>
<td>INFSYS 6860</td>
<td>Data Integration</td>
</tr>
<tr>
<td>INFSYS 6891</td>
<td>Seminar in Information Systems (Topic subject to approval)</td>
</tr>
</tbody>
</table>

Digital Strategies

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MKTG 5721</td>
<td>Digital Marketing Strategies and Measurement</td>
</tr>
<tr>
<td>MKTG 5795</td>
<td>Seminar in Marketing</td>
</tr>
</tbody>
</table>

Predictive Analytics

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCMA 5312</td>
<td>Advanced Statistical Methods for Management Decisions</td>
</tr>
<tr>
<td>ECON 5110</td>
<td>Topics in Applied Econometrics</td>
</tr>
<tr>
<td>ECON 5120</td>
<td>Advanced Topics In Time Series and Financial Econometrics</td>
</tr>
<tr>
<td>ECON 5130</td>
<td>Advanced Topics in Business and Economic Forecasting</td>
</tr>
</tbody>
</table>

Prescriptive Analytics

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCMA 5312</td>
<td>Advanced Statistical Methods for Management Decisions</td>
</tr>
<tr>
<td>SCMA 5354</td>
<td>Simulation for Managerial Decision Making</td>
</tr>
<tr>
<td>SCMA 6330</td>
<td>Business Logistics Systems</td>
</tr>
<tr>
<td>SCMA 6331</td>
<td>Logistics and Supply Chain Operational Modeling</td>
</tr>
<tr>
<td>SCMA 6350</td>
<td>Management Science Methods</td>
</tr>
<tr>
<td>SCMA 6395</td>
<td>Seminar in Logistics and Operations Management</td>
</tr>
</tbody>
</table>

Advanced Computation

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMP SCI 4300</td>
<td>Introduction to Artificial Intelligence</td>
</tr>
<tr>
<td>CMP SCI 4340</td>
<td>Introduction to Machine Learning</td>
</tr>
</tbody>
</table>
Graduate Certificate in Human Resources Management

The Graduate Certificate in Human Resources Management is an 18-hour course of study designed to focus on the multidimensional aspects of personnel operations within business organizations. The course of study emphasizes both formal and informal aspects of human resources management.

Requirements

Students must complete the following six courses or appropriate substitutes if course waivers are appropriate:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGMT 5600</td>
<td>Managing People in Organizations</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 5621</td>
<td>Managing Human Resources</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 5622</td>
<td>Union-Management Relations and Collective Bargaining</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 5623</td>
<td>Compensation and Benefits</td>
<td>3</td>
</tr>
<tr>
<td>MGMT 5625</td>
<td>Selected Topics in Human Resource Management</td>
<td></td>
</tr>
<tr>
<td>SCMA 5300</td>
<td>Statistical Analysis for Management</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Decisions</td>
<td></td>
</tr>
</tbody>
</table>

Total Hours: 18

MGMT 5600, MGMT 5621 and SCMA 5300 may be waived with equivalent undergraduate courses. If a student is able to waive any or all of these three courses, substitute courses (approved by both the chairperson of the Management and the director of Graduate Studies in Business) will be provided. Substitute courses may include MGMT 5611, Advanced Organizational Behavior and Administrative Processes, or a course from outside the College of Business Administration. In all cases, 18 hours are needed to complete the Graduate Certificate in Human Resources Management.

1  This course will not be offered in 2017-2018. Please contact the department for more information.

Graduate Certificate in Logistics and Supply Chain Management

The Graduate Certificate in Logistics and Supply Chain Management is an 18-hour program designed to provide a focused, intensive study of important issues within logistics and, more broadly, in supply chain management. Three required courses provide thorough background in operations, logistics and supply chain management. Three elective courses allow specialization in areas such as logistics and supply chain software, international logistics, operations research, e-commerce, and quality.

For more information about our graduation rates, the median debt of students who completed this graduate certificate program, and other important information, please visit our Gainful Employment Disclosure website: http://umsl.edu/go/Bph.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCMA 5320</td>
<td>Production and Operations Management</td>
<td>3</td>
</tr>
<tr>
<td>SCMA 6330</td>
<td>Business Logistics Systems</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 5770</td>
<td>Supply Chain Management Strategy</td>
<td>3</td>
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<td></td>
<td>Nine additional hours (generally 3 courses) from</td>
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</tr>
<tr>
<td>SCMA 5301</td>
<td>Introduction to Geographic Information Systems</td>
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<tr>
<td>SCMA 5312</td>
<td>Advanced Statistical Methods for Management Decisions</td>
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<tr>
<td>SCMA 5322</td>
<td>Lean Production</td>
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<tr>
<td>SCMA 5324</td>
<td>Service Operations Management</td>
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<tr>
<td>SCMA 5326</td>
<td>Quality Management</td>
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<tr>
<td>SCMA 5334</td>
<td>Internship in Logistics and Supply Chain Management</td>
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<tr>
<td>SCMA 5381</td>
<td>International Logistics and Operations Management</td>
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<tr>
<td>SCMA 5399</td>
<td>Individual Research in Logistics and Operations Management</td>
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<tr>
<td>SCMA 6331</td>
<td>Logistics and Supply Chain Operational Modeling</td>
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<tr>
<td>SCMA 6332</td>
<td>Logistics and Supply Chain Strategic Modeling</td>
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<tr>
<td>SCMA 6350</td>
<td>Management Science Methods</td>
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<tr>
<td>SCMA 6360</td>
<td>Advanced Logistics and Operations Management Applications</td>
<td></td>
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<tr>
<td>SCMA 6395</td>
<td>Seminar in Logistics and Operations Management</td>
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<tr>
<td>MKTG 5775</td>
<td>Domestic Transportation</td>
<td></td>
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<tr>
<td>BUS AD 5198</td>
<td>Seminar in Business Administration</td>
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<tr>
<td>INFSYS 6833</td>
<td>Decision Support Systems for Business Intelligence</td>
<td></td>
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<tr>
<td>INFSYS 6835</td>
<td>IT-Enabled Business</td>
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<tr>
<td>INFSYS 6847</td>
<td>Project Management</td>
<td></td>
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</tbody>
</table>

Total Hours: 18

1  At least 3 of the 9 elective hours for the certificate shall be from among the following courses: SCMA 5301, SCMA 5312, SCMA 5322, SCMA 5324, SCMA 5326, SCMA 5333, SCMA 5354, SCMA 5381, SCMA 5399, SCMA 6331, SCMA 6332, SCMA 6350, SCMA 6354, SCMA 6360, SCMA 6395.

Substitute courses must be approved by the chairperson of the Supply Chain & Analytics Department and the director of Graduate Studies in Business. In all cases, 18 hours are needed to complete the Graduate Certificate in Logistics and Supply Chain Management.
Graduate Certificate in Marketing Management

The Graduate Certificate in Marketing Management is an 18#hour program designed to provide a focused intensive study of the marketing management activity within organizations. This program is designed to serve a broad group of marketing managers, including those with an interest in sales, brand management, promotion, and consumer behavior.

For more information about our graduation rates, the median debt of students who completed this graduate certificate program, and other important information, please visit our Gainful Employment Disclosure website: http://umsl.edu/go/BpQ.

Requirements

Students must complete the following six courses or appropriate substitutes if course waivers are appropriate:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>MKTG 5700</td>
<td>Contemporary Marketing Concepts</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 5710</td>
<td>Consumer Motivation And Behavior</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 5740</td>
<td>Marketing And Business Research</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 5701</td>
<td>Marketing Planning And Strategy</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 5720</td>
<td>Marketing Communications</td>
<td>3</td>
</tr>
<tr>
<td>MKTG 5730</td>
<td>Clinical Study in Digital and Social Media Marketing</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours: 18

All course prerequisites and all course waivers are applicable. The Marketing department chairperson and the director of Graduate Studies in Business must approve substitute courses. In all cases, 18 hours (including at least 12 hours in Marketing) are needed to complete the certificate.

Accounting Courses

**ACCTNG 2400 Fundamentals of Financial Accounting: 3 semester hours**

Prerequisites: MATH 1030 and completion of 27 credit hours. MATH 1030 may be taken concurrently. This is a one semester course in financial accounting theory and practice. The primary emphasis is on the corporate financial statements of income, financial position and cash flow-their content and interpretation; and the impact of financial transactions upon them.

**ACCTNG 2410 Managerial Accounting: 3 semester hours**

Prerequisites: MATH 1030 and ACCTNG 2400. This is an advanced course that goes beyond the scope of a second-semester course in fundamentals of accounting. The development, interpretation, and use of relevant cost behavior, control, and traceability concepts for management planning, controlling and decision making are emphasized. Topics include: an introduction to product costing, the contribution concept, direct costing, performance standards and variance analysis, responsibility accounting, segment profitability, alternative choice decisions, and capital budgeting.

**ACCTNG 3401 Financial Accounting and Reporting I: 3 semester hours**

Prerequisites: A minimum 2.0 campus GPA, MATH 1030, ACCTNG 2410, and 57 credit hours Review of the foundations of financial accounting theory and of the financial statement preparation process. Accounting theory and practice related to current assets (except for investments in securities). The course includes an emphasis on unstructured case problem solving skills, communication skills, and interpersonal skills.

**ACCTNG 3402 Financial Accounting and Reporting II: 3 semester hours**

Prerequisites: MATH 1030 and ACCTNG 3401; also a minimum campus GPA of 2.0 and minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UM-St. Louis. Accounting theory and practice related to topics such as investments in securities, operational assets, current and long-term liabilities, and leases. The course includes an emphasis on unstructured case problem solving skills, communication skills, and interpersonal skills.

**ACCTNG 3411 Cost Accounting: 3 semester hours**

Prerequisites: MATH 1030 and ACCTNG 3401; also a minimum campus GPA of 2.0 and minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UM-St. Louis. The study of the basic principles of cost determination for, and control of, manufacturing and distribution activities. Topics include job-order costing, process costing, cost allocations, and the development and use of standard costs within a system of absorption costing.

**ACCTNG 3421 Accounting Information Systems: 3 semester hours**

Prerequisites: MATH 1030, INF SYS 2800, ACCTNG 2410, ACCTNG 3401, and a minimum campus GPA of 2.0. Examines the fundamentals of accounting information systems, including hardware and software considerations, internal controls, and transaction processing cycles. Also focuses upon the development of efficient spreadsheets as applied to financial and managerial accounting concepts.

**ACCTNG 3441 Income Taxes: 3 semester hours**

Prerequisites: MATH 1030 and ACCTNG 3401; also a minimum campus GPA of 2.0 and minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UM-St. Louis. Fundamentals of Federal income taxation. Topics include taxable entities, income, deductions, tax accounting methods, tax basis, and property transactions at both the conceptual and operational levels.

**ACCTNG 3451 Accounting for Governmental and Not-For-Profit Entities: 3 semester hours**

Prerequisites: A minimum campus GPA of 2.0; a minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UM-St; also MATH 1030 and ACCTNG 3402. Principles of fund accounting and financial reporting for governmental and nonprofit entities. This course includes an emphasis on unstructured case problem solving skills, communication skills, and interpersonal skills.

**ACCTNG 3460 Accounting Career Strategies: 3 semester hours**

Prerequisites: ACCTNG 3401; minimum campus GPA of 2.0 and a minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UMSL. This is a course in career and professional development. The primary emphasis is developing and executing a career strategy, enhancing business and client communication skills, and preparing for the transition to the accounting profession.
**ACCTNG 3490 Internship in Accounting: 1-3 semester hours**
Prerequisites: ACCTNG 3401, a minimum campus GPA of 2.0, a minimum GPA of 2.7 in all accounting courses at the 3000-level and above taken at UM-St. Louis, consent of supervising instructor and accounting internship coordinator. Students are employed in the field of Accounting where they apply the knowledge and skills learned in the classroom. Professional development and obtaining specialized work experience are primary goals. An accounting faculty member will monitor the student's program with the student providing a formal written report at the end of the project.

**ACCTNG 3495 Special Administration Problems - Accounting (VITA) Program: 1-3 semester hours**
Prerequisites: ACCTNG 2400, ACCTNG 2410 and ACCTNG 3401; minimum campus GPA of 2.0, minimum GPA of 2.2 in all accounting courses at the 2000-level and above taken at UMSL; completion of nine semester hours of accounting. Enrollment in the course is restricted to Volunteer Income Tax Assistance (VITA) program student participants. The class offers practical tax experience, networking opportunities, potential managerial experience, and personal satisfaction derived from community service. It is taken on a satisfactory/unsatisfactory basis. The course offers one to three hours of undergraduate business elective credit and may be repeated for up to 3 hours credit.

**ACCTNG 3498 Seminar in Accounting: 1-3 semester hours**
Prerequisite: To be determined each time the course is offered and to include a minimum campus GPA of 2.0 and a minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UMSL. This course is a selected special topic in the field of accounting. May be repeated for credit with different topics.

**ACCTNG 3499 Independent Study in Accounting: 1-3 semester hours**
Prerequisites: Minimum campus GPA of 2.0, a minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UMSL and approval by the supervising professor and the department chair. Special individual study in accounting under the supervision of a full-time accounting faculty member.

**ACCTNG 4401 Financial Accounting and Reporting III: 3 semester hours**
Prerequisites: MATH 1030; ACCTNG 3402; a minimum campus GPA of 2.0 and minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UM-St. Louis. This course is a selected special topic in the field of accounting. May be repeated for credit with different topics.

**ACCTNG 4402 Financial Accounting and Reporting IV: 3 semester hours**
Prerequisites: MATH 1030; ACCTNG 3402; a minimum campus GPA of 2.0 and minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UM-St. Louis. This course is a selected special topic in the field of accounting. May be repeated for credit with different topics.

**ACCTNG 4405 Professional Accounting Research: 3 semester hours**
Prerequisites: ACCTNG 4401; a minimum campus GPA of 2.0 and minimum GPA of 2.2 in all accounting courses at the 3000-level and above taken at UM-St. Louis. Discussion of the research tools and methods available to resolve questions concerning accounting standards and practices. Critical analysis of topics of current interest and importance in accounting practice is the focal point of the course.

**ACCTNG 4435 Auditing: 3 semester hours**
Prerequisites: MATH 1105; ACCTNG 3402; ACCTNG 3421 or INFSYS 3810; also a minimum campus GPA of 2.0 and minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UM-St. Louis. An introduction to auditing practice. Includes the social role of auditing and the services offered by auditors in internal, governmental, and public accounting practice. Emphasis is on the financial auditing process, including professional ethics, audit risk assessment, study and evaluation of internal control, gathering and evaluating audit evidence, and audit reporting decisions.

**ACCTNG 4441 Advanced Federal Income Tax: Business Taxation: 3 semester hours**
Prerequisites: ACCTNG 3441 with a grade of B- or above; a minimum campus GPA of 2.0 and minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UM-St. Louis. Focuses on federal income taxation of corporations, S corporations, partnerships, LLCs and their owners.

**ACCTNG 5400 Financial and Managerial Accounting: 3 semester hours**
This course provides an introduction to accounting, with emphasis on preparation of financial statements for external parties (financial accounting) and accumulation of cost information to aid internal planning and control (managerial accounting). Topics covered include measurement of assets and liabilities, revenues and expenses, the accounting cycle, financial statements, cost terminology, cost behavior, product costing, and relevant costs for decision making. This course provides the necessary background for ACCTNG 5401.

**ACCTNG 5401 Financial Reporting And Analysis: 3 semester hours**
Prerequisites: ACCTNG 5400 or the equivalent. This course builds on the foundations covered in ACCTNG 5400, emphasizing in-depth analysis of published financial statements. The course begins with discussion of the role of financial accounting information in capital markets and contracting, and continues with examination of a number of specific accounting issues. Students are encouraged to look behind the numbers to better understand the economics of the underlying transactions, and properly interpret what the reported numbers mean about a firm's future prospects.

**ACCTNG 5402 Professional Accounting Research: 3 semester hours**
Prerequisites: ACCTNG 4401; a minimum campus GPA of 2.0; a minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UMSL. Discussion of the research tools and methods available to resolve questions concerning accounting standards and practices. Critical analysis of topics of current interest and importance in accounting practice.

**ACCTNG 5403 Graduate Topics in Financial Accounting: 3 semester hours**
Prerequisites: ACCTNG 4401; a minimum campus GPA of 2.0; a minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UMSL. A study of current financial reporting issues. Analysis of current problems and approaches pertaining to the communication of corporate financial information to the U.S. and international investment communities.

**ACCTNG 5404 Professional Accountancy I: 3 semester hours**
Prerequisites: MATH 1030; ACCTNG 2410; a minimum 2.0 campus GPA; graduate standing. This is the first professional-level course in financial reporting. The course includes a study of the conceptual framework underlying Generally Accepted Accounting Principles (GAAP) and issues pertaining to accounting for current assets and liabilities.
ACCTNG 5405 Professional Accountancy II: 3 semester hours
Prerequisites: MATH 1030; ACCTNG 3401; a minimum campus GPA of 2.0; a minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UMSL; graduate standing. This is the second professional-level course in financial reporting. The course includes an in-depth study of issues pertaining to accounting for operational assets, liabilities and owners equity.

ACCTNG 5406 Research and Professional Writing in Accounting: 3 semester hours
Prerequisites: Completion of ACCTNG 4401 and enrollment in Master of Accounting Program. This course employs the professional accounting literature and authoritative databases to analyze contemporary issues in accounting. Students will refine their communication skills in preparation for leadership roles in the accounting profession.

ACCTNG 5408 Fraud Examination: 3 semester hours
Prerequisites: ACCTNG 3402 or ACCTNG 5405; a minimum campus GPA of 2.0; a minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UMSL. This course is designed for graduate students who are interested in fraud and its effects. Students will be introduced to theoretical concepts of fraud and practical responses to it. Course coverage includes an overview of the fraud problem; prevention and detection of fraud; elements of fraud investigation, interview techniques, fraud types, and laws governing the prosecution of fraud cases.

ACCTNG 5411 Cost Systems Analysis: 3 semester hours
Prerequisites: MATH 1030; ACCTNG 3401; a minimum campus GPA of 2.0; a minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UMSL; graduate standing. The development, interpretation, and use of accounting reports and supplementary information for management planning, control and decision making. Emphasizes the application of relevant cost behavior, control and traceability concepts in the preparation of internal accounting reports, with a secondary emphasis upon product costing techniques as appropriate to financial accounting needs. Topics include break-even analysis, operational budgeting, direct costing, absorption costing, standard costs and variance analysis, business segment analysis, responsibility accounting distribution cost accounting, and gross profit analysis.

ACCTNG 5421 Information Systems in Accounting: 3 semester hours
Prerequisites: MATH 1030; INFSYS 1800; ACCTNG 2410; ACCTNG 3401; a minimum campus GPA of 2.0; graduate standing. This is a professional-level course in accounting information systems. The course includes examination of transaction cycles, structured analysis and design of accounting information systems, and internal controls.

ACCTNG 5435 Graduate Topics in Auditing: 3 semester hours
Prerequisite: ACCTNG 4435; a minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UMSL. A study of advanced auditing and attestation issues, with an emphasis on operational auditing. Topics include professional ethics, risk analysis, internal control, fraud detection, analytical procedures, determining and assessing operational objectives, and reporting and implementing audit findings.

ACCTNG 5436 Systems Auditing: 3 semester hours
Prerequisite: ACCTNG 5400, INFSYS 6800 or consent of instructor. Study of techniques involved in the control and audit of computer-based systems. Emphasis on the review of internal controls at operational and administrative levels and on computer-assisted audit techniques.

ACCTNG 5441 Tax Research: 3 semester hours
Prerequisite: ACCTNG 3441; a minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UMSL; or consent of instructor. Application of the research tools and methods available to resolve questions pertaining to the tax laws. Addresses techniques for locating and evaluating relevant authority. Students will be expected to complete written tax research memos. A basic understanding of federal income tax law is presumed.

ACCTNG 5446 Advanced Topics in Taxation: 3 semester hours
Prerequisites: ACCTNG 3441. Address advanced topics in taxation selected by the instructor.

ACCTNG 5447 Taxation of Individuals and Businesses: 3 semester hours
Prerequisites: MATH 1030; ACCTNG 3401 or both ACCTNG 5400 and FINANCE 6590 with the topic "Practice of Personal Financial Planning" with grades of B or better in both; graduate standing. This is the first professional-level course in taxation. The course includes a general introduction to the concepts of taxation. It will enable students to understand the role of taxes in evaluating decisions typically confronted by individual taxpayers and businesses.

ACCTNG 5451 Accounting and Auditing in Governmental and Not-for-Profit Entities: 3 semester hours
Prerequisite: ACCTNG 3402 and graduate standing; a minimum campus GPA of 2.0 and minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UMSL. A study of accounting for use in the public sector and in not-for-profit organizations. Principles of fund accounting and financial reporting for governmental and not-for-profit entities, as well as auditing in the public sector.

ACCTNG 5490 Graduate Internship in Accounting: 1-3 semester hours
Prerequisites: ACCTNG 3401 or ACCTNG 5404; a minimum graduate GPA of 2.0; a minimum GPA of 3.0 in all accounting courses at the 3000-level and above taken at UMSL; consent of supervising instructor and accounting internship coordinator. The student works in an accounting internship that contains sufficient content and rigor to merit graduate credit. The student's program will be monitored by a member of the Graduate Faculty in Accounting. The course requires several meetings with the faculty advisor and a graduate-level written assignment. The course will be graded on a Satisfactory/Unsatisfactory basis. A student who has previously taken ACCTNG 3490 may not take ACCTNG 5490.

ACCTNG 5498 Graduate Seminar in Accounting: 3 semester hours
Prerequisites: To be determined each time the course is offered and to include a minimum 2.0 overall GPA and a minimum GPA of 2.3 in all accounting courses at the 3000-level and above taken at UMSL. Study of selected special problems in accounting. May be repeated for credit with different topics.

ACCTNG 5499 Individual Research in Accounting: 1-3 semester hours
Prerequisites: Consent of instructor, department chair and graduate director; a minimum 3.0 graduate GPA; a minimum GPA of 5.0 in all accounting courses at the 3000-level and above taken at UMSL. Special individual research topics in Accounting under the guidance of a specific professor.
BUS AD 1000 Introduction to Business: 3 semester hours
Overview of the functional business disciplines, including, but not limited to principles of Accounting, Finance, Information Systems, Law, Logistics and Operations Management, Management, and Marketing.

BUS AD 1001 Introduction to Entrepreneurship: 3 semester hours
This course focuses on the fundamental ideas of entrepreneurship. Students will develop a working knowledge of entrepreneurial concepts, vocabulary, skills, and tools through case studies and practical applications. Students will actively participate in hands-on learning and team building exercises and will prepare a business simulation.

BUS AD 1900 Introduction to Personal Law: 3 semester hours
This course introduces students to the American legal system and the basic issues every individual must deal with in our society. The course will be of interest to anyone seeking a job, leasing an apartment, buying a car or house, borrowing money, buying insurance, getting married or divorced, entering contracts, filing a law suit, writing a will, or accumulating wealth. May not be used for credit in any undergraduate business program.

BUS AD 2000 Topics in Business Administration: 1-3 semester hours
Prerequisites: Vary with topic; contact the School of Business Administration. Study of selected special problems in business and administration. May be repeated for credit with different topics.

BUS AD 2030 Business in the Arts: 3 semester hours
This course takes an in-depth look at business aspects through the lens of the arts, with an emphasis on cultivating and developing an entrepreneurial perspective.

BUS AD 2900 Legal Environment of Business: 3 semester hours
Prerequisites: Sophomore Standing. An introduction to the nature and meaning of law, sources of law, legal process and institutions. The legal environment of business is defined as: the attitude of the government toward business, the historical development of this attitude; current trends of public control in taxation, regulation of commerce and competition; freedom of contract, antitrust legislation and its relationship to marketing, mergers and acquisitions; and labor management relations.

BUS AD 3040 Creativity and Systems for Innovation: 3 semester hours
Prerequisites: BUS AD 1001 or permission of the Instructor. This course examines systems theory, and its application to entrepreneurship and intrapreneurship. Students will develop the ability to understand and solve problems, and initiate opportunities by thinking in new ways. Here students will learn about the entrepreneurial ecosystem, including the economic, social, and political factors acting on it, and how to use it to increase good outcomes.

BUS AD 3090 Internship in Business Administration: 1-3 semester hours
Prerequisites: Minimum campus GPA of 2.0; one must have completed and/or be currently enrolled in at least 6 hours of Business Administration electives and have consent of supervising instructor and Area Coordinator. Students are employed in the field of Business Administration where they apply the knowledge and skills learned in the classroom. Professional development and obtaining specialized work experience are primary goals. A Business Administration faculty member will monitor the student's program with the student providing a formal written report at the end of the project. BUS AD 3090 may not be counted toward the minimum credit hours for any emphasis area.

BUS AD 3099 Independent Study In Business Administration: 1-3 semester hours
Prerequisites: Minimum campus GPA of 2.0 and approval by the supervising professor and the Associate Dean. Special individual study in business under the supervision of a full-time faculty member.

BUS AD 3990 Internship in Business Law: 1-3 semester hours
Prerequisites: BUS AD 2900, 3 credit hours of Business Law electives, and a Business College 2.5 GPA. Must have completed and/or be currently enrolled in at least 3 credit hour of Business Law electives and have consent of supervising instructor and Area Coordinator. Students are employed in the field of Business Law where the knowledge and skills learned in the classroom are applied. Professional development and obtaining specialized work experience are primary goals. A Business Law faculty member will monitor the student's program with the student providing a formal written report at the end of the project.

BUS AD 4198 Business Administration Senior Seminar: 1-10 semester hours
Prerequisites: To be determined each time the course is offered and to include minimum 2.0 campus GPA. An intensive study of a specific area of business administration, of some specific business or economic phenomenon, or a specific problem or theory. Several different courses may be offered under this course number. May be repeated for credit as long as the topic differs.

BUS AD 5000 Economics For Managers: 2-3 semester hours
Prerequisites: Graduate Standing. The concepts and tools of economic analysis are applied to the production and distribution functions of organizations. The last portion is devoted to the macroeconomic influence of labor market, the influence of interest rates, inflation, and the business cycle.

BUS AD 5001 Managerial Economic Analysis: 3 semester hours
Prerequisites: BUS AD 5000 or ECON 1001 and ECON 1002. Microeconomic analysis of consumers, firms, and government. The concepts and mathematical tools of economic analysis are applied to the production and distribution functions of organizations.

BUS AD 5002 Analysis Of National Economic Environment: 3 semester hours
Prerequisites: BUS AD 5000 or ECON 1001 and ECON 1002. The character and functioning of the national economic system; analyzing and forecasting fluctuations in national income and product, employment, and prices; the influence of monetary and fiscal policies. Emphasis is on the acquisition of knowledge concerning forces affecting all business firms.
**BUS AD 5100 Managerial Communication:** 3 semester hours
An analysis of business writing and speaking, and the communication conventions common in organizations. Emphasis is placed on developing skills critical to career advancement and necessary for effective organizational functioning. A second goal is to prepare students for assignments in other business courses. This course must be taken within the first 12 credit hours of study, preferably in the student's first semester.

**BUS AD 5198 Seminar in Business Administration:** 3 semester hours
An intensive study of a specific area of business administration of some specific business or economic phenomenon, or a specific problem or theory. Several different courses may be offered under this course number.

**BUS AD 5299 Individual Research:** 1-3 semester hours
Prerequisite: Consent of instructor and graduate director. Special individual research topics under the guidance of a specific professor.

**BUS AD 5450 Governmental Budgeting and Financial Control:** 3 semester hours
Prerequisite: ACCTNG 5400. A study of municipal and federal financial control and budgeting procedures with emphasis on public policy. The impact of financial control on top management decisions and the effect of budget strategies on the allocations of public funds.

**BUS AD 5900 Law, Ethics and Business:** 3 semester hours
Analysis of the relationship between law and business with emphasis on the ability of, and extent to which, governments regulate business activities. Topics covered include the employer-employee relationship, protection of consumers, antitrust regulation, and securities law. Also discussed are ethical issues confronting management of the modern business enterprises.

**BUS AD 6990 Strategy Formulation and Implementation:** 3 semester hours
Prerequisites: FINANCE 6500, MGMT 5600, MKTG 5700, SCMA 5320 and special consent. Graduate program capstone course examining concepts and methods that integrate functional areas of business. The perspective is that of general management charged with directing the total enterprise. Interactions between the environment, organization, strategy, policies and the implementation of plans are explored. Special emphasis is given to globalization of business and ethical perspectives. This course should be taken during the semester prior to graduation. In no case may it be taken sooner than two semesters prior to graduation.

**BUS AD 6991 Graduate Business Assessment Testing:** 0 semester hours
Prerequisites: Concurrent enrollment in BUS AD 6990 (or INTL BUS 5289 or MGMT 4814 if taken in lieu of BUS AD 6990). A one-time lab during which a major field exam in business is administered. Course graded on a satisfactory/unsatisfactory basis. Satisfactory grade required for graduation.

**BUS AD 7001 Doctoral Research:** 1-12 semester hours
Prerequisites: Must have Ph.D. Program Director or Area Coordinator approval. Investigation of an advanced nature culminating in preparation for comprehensive examinations and/or development of dissertation proposal. The course may be repeated for credit.

**BUS AD 7002 Dissertation Research:** 1-12 semester hours
Prerequisites: Must have Ph.D. Program Director or Area Coordinator approval. Investigation of an advanced nature culminating preparation of a doctoral dissertation. The course may be repeated.

**BUS AD 7021 Qualitative Methods and Philosophical Foundations of BA Research:** 3 semester hours
Prerequisites: Admittance into the Ph.D. Program This course investigates the ontology and epistemology of business administration research, particularly as they pertain to qualitative research methods, such as case studies, action research, and ethnomethodology.

**BUS AD 7100 Scientific Inquiry in Business:** 3 semester hours
Prerequisites: Consent of Program Director. This course provides an overview of research methods for studying business problems including extraction of information from secondary sources, and primary data collection with surveys, interviews, participant observation, action research, field experiments, controlled experiments, case studies, design sciences and simulations. The course covers foundations of business research (substantive theories, formal theories, and frameworks). Students will learn the types of variables used to test theories, and develop the skills required for reviewing the literature and conceptualizing research questions that are important for practice. Ethical issues related to conducting and publishing research will be discussed. Students will become nationally certified in protecting human research participants and in responsible research conduct.

**BUS AD 7101 Quantitative Research Methods I in Business Administration:** 3 semester hours
Prerequisites: Consent of Program Director. This course provides an understanding of the application of quantitative analytical techniques to problems in the planning and management of business enterprises and service operations. The course provides experience in structuring analytical models and drawing inferences from their results. Topics include techniques for descriptive, predictive and diagnostic analytics, and may cover general linear statistical models, logistical regression, techniques for extrapolating time series, and statistical methods for testing conceptual models.

**BUS AD 7102 Qualitative Research Methods II in Business Administration:** 2 semester hours
Prerequisites: Consent of Program Director. Working in groups, students will design and execute a qualitative research project using interviews or direct observations. During the course, students will prepare a qualitative research proposal that includes well-formed research questions, clearly positions the research as a contribution to knowledge, critically reviews the academic literature relevant to the student's topic, develops qualitative research instruments (such as an interview guide), executes the research, analyzes the data and writes up the report. Students will learn how to abstract their findings into lessons for scholars and/or practitioners. One important output of this seminar is a completed research paper suitable for publication in a respected practitioner or academic outlet.

**BUS AD 7103 Quantitative Research Methods III in Business Administration:** 2 semester hours
Prerequisites: Consent of Program Director. This course provides an advanced understanding of quantitative research with special attention to prescriptive analytics. Emulating work in prior published studies, students identify and frame research questions, determine appropriate metrics, develop hypotheses, build and test quantitative models, and discuss the advantages and shortcomings of alternative quantitative approaches. One important output of this course is a completed research paper.
**BUS AD 7104 Qualitative Research Methods II in Business Administration:** 2 semester hours
Prerequisites: Consent of Program Director. Working in groups, students design and execute a qualitative research study using a case study method or action research. Students prepare a qualitative research proposal that includes well-formed research questions, clearly positions the research as a contribution to knowledge, and critically reviews the academic literature relevant to the topic. Students develop qualitative research instruments (or design an experimental intervention), execute the research, analyze the data and produce a report that presents lessons for scholars and/or practitioners. An important product of this seminar is a completed research paper suitable for publication in a respected practitioner or academic outlet.

**BUS AD 7105 Special Topics in Business Administration:** 2 semester hours
Prerequisites: Consent of Program Director. Special topics examined from the business administration perspective. Topics may vary by semester.

**BUS AD 7106 Strategic Business Analysis:** 2 semester hours
Prerequisites: Consent of Program Director. The objective of this capstone course is to synthesize theoretical and empirical research from the different business disciplines (and other non-management sciences and disciplines) to give new insight for public policy or managerial practice. Course projects may address contemporary challenges in the global economy, regulatory processes, taxation, management of innovation, management of risk and disruptive events, consequences of international agreements, environmental issues, sustainability of business practices and business alliances, corporate governance, cultural challenges in international business relations, and other contemporary problems specific to students' places of employment.

**BUS AD 7107 Capstone Project Research in Business Administration:** 6 semester hours
Prerequisites: Consent of Program Director. Students develop a formal proposal for their capstone research projects that includes a draft of all parts of the project that precede the data collection. This proposal includes research questions or hypotheses based on prior research, and the methodology to be employed for addressing the research questions or corroborating the hypotheses. This course will be coordinated by the Academic Director of the DBA Program, and attended by interested faculty, especially those serving as Chairs. By the conclusion of this course, each capstone project proposal is approved by a capstone project committee (consisting of the Chair of the capstone project committee and two other members).

**BUS AD 7108 Research Practicum in Business Administration:** 6 semester hours
Prerequisites: Consent of Program Director. In the research practicum, each student independently addresses some aspect of a capstone research project under the supervision of a senior researcher. Ad-hoc seminars and presentations are organized involving students, faculty, and guest speakers. Each student will produce a paper in proper academic form with the expectation of submitting it for publication and will defend the work in an oral examination.

**BUS AD 7300 Management of Supply Chains:** 2 semester hours
Prerequisites: Consent of Program Director. This course provides a comprehensive overview of supply chain management, including procurement, sourcing, operations, production and logistics, with special attention to international issues. Topics include designing and operating multinational logistics systems; managerial issues and strategies for sourcing, transportation, and inventory management; legal and financial issues in import and export; risk identification and management; and the relationship of supply chain management to other activities. The course also provides students with an understanding of quantitative techniques used in the design and management of global supply chains.

**BUS AD 7301 Statistical Modeling:** 2-3 semester hours
Prerequisites: SCMA 5300; consent of program director. Study of multivariate analytical techniques and their application to the analysis of business systems. Topics include the construction and adaptation of statistical models and extrapolative techniques to accommodate factor interactions, nonlinearities, and periodic effects. Methodologies include multiple regression, ANOVA, and general linear model, MANOVA, structural equation modeling, and time series modeling.

**BUS AD 7400 The Role of Accounting Information in Firms and Markets:** 2 semester hours
Prerequisites: Consent of Program Director. This course examines how the role of accounting information in valuation, the role of accounting information in firm contracting, structural cost management, executional cost management, and governance and controls.

**BUS AD 7500 Finance Theory and Applications Seminar:** 2 semester hours
Prerequisites: Consent of Program Director. This two-unit finance course addresses contemporary issues in corporate finance, investment, financial institutions and financial markets. Extensive reviews of the literature in different finance fields are conducted. Modigliani-Miller theorem, agency theory, capital asset pricing theory, and option pricing theory are discussed and applied in research analysis.

**BUS AD 7600 Managing Talent for Strategic Advantage:** 2 semester hours
Prerequisites: Consent of Program Director. This course provides insight into research on topics that explore how organizational behavior and human resource management practices contribute to developing and sustaining effective and satisfying workplaces. Topics such as conflict management, change management, motivation, cultural intelligence, compensation strategies, selection and promotion decisions, performance management and legal issues in employment decision making, will be discussed.

**BUS AD 7700 Contemporary Marketing Intelligence and Decision Making:** 2 semester hours
Prerequisites: Consent of Program Director. This course examines how firms generate valuable marketing intelligence for critical decisions in pursuit of marketing objectives. Marketing strategies and consumer behavior are studied through literature reviews and examination of case studies. Students challenge assumptions, frameworks, and findings and they discuss how marketing strategy is adapted in practice for various products and services. They also learn how data mining techniques are used in the development and execution of marketing strategies.
**BUS AD 7800 Management of Sustaining and Disruptive Information Technologies: 2 semester hours**
Prerequisites: Consent of Program Director. This course provides insights into contemporary sustaining and disruptive information technologies and their strategic and supporting roles in organizations and society. This course provides the student with an understanding of the processes through which information systems are adopted and used by organizations, including their sourcing, design, development, implementation, and strategic management. The course will also examine best practices for managing new information technologies, such as social media, business intelligence, and the Internet of Things. Strategic opportunities, threats and processes for achieving cyber security will be considered as students discuss the impacts such technologies have on organizations, individuals, and society.

**Finance Courses**

**FINANCE 1590 Personal Finance for Nonbusiness Majors: 3 semester hours**
For future professionals who want to learn more about personal finance and how to better manage their resources. The topics include purchasing/leasing cars, home acquisitions, investing in stocks and bonds, mutual funds, retirement planning and health and life insurance. Special emphasis will be on the nontechnical aspects of these issues. Cannot be used for credit in BSBA program.

**FINANCE 3500 Financial Management: 3 semester hours**
Prerequisites: ECON 1002, MATH 1105, ACCTNG 2400, INFSYS 2800, and a minimum overall GPA of 2.0. The study of a firm’s need for funds; the institutions, instruments and markets concerned with raising funds; and the techniques of analysis used to determine how effectively these funds, once raised, are invested within the firm.

**FINANCE 3501 Financial Policies: 3 semester hours**
Prerequisites: FINANCE 3500 and a 2.0 overall GPA. The intensification and application of the concepts developed in FINANCE 3500. Special emphasis is given to the development of top management policies and their application toward complex problems of finance. Techniques for identifying and dealing with these problems before they become acute will be investigated. Cases will be integrated with appropriate outside reading.

**FINANCE 3502 Treasury Management: 3 semester hours**
Prerequisites: FINANCE 3500 and a 2.0 campus GPA. The focus of this course is on the role cash management plays in corporate finance. Topics include cash collection and payment systems, forecasting cash flows, electronic fund transfers, check processing, international cash management and managing bank relationships. Students passing the course with a grade of A or B are permitted to take the qualifying exam to become a Certified Cash Manager (CCM) under a special arrangement with the Treasury Management Association. Along with other finance courses, this class prepares students for careers in the Treasury Departments of major companies or with service providers like banks.

**FINANCE 3503 Computer Applications in Finance: 3 semester hours**
Prerequisite: INFSYS 1800. FINANCE 3500, one 3000-level finance course and a 2.0 overall GPA. Financial problem solving and applications on the micro-computer. A project oriented course with an emphasis on micro based finance projects: Present value/IRR analysis, duration, immunization, portfolio optimization, leasing, capital budgeting, financial forecasting, options and futures.

**FINANCE 3520 Investments: 3 semester hours**
Prerequisite: FINANCE 3500 and a 2.0 overall GPA. Financial analysis of debt and equity instruments available on organized exchanges and in less tangible "over the counter" markets. Techniques of such analysis being presented in context with economic and management circumstances within the company, industry and economy.

**FINANCE 3521 Financial Engineering: Applying Derivatives: 3 semester hours**
Prerequisites: FINANCE 3500. Students engage in a comprehensive investigation of advanced risk management techniques. Futures, forwards, options and synthetic securities are explored to determine their effectiveness in generating the desired risk exposure. A comprehensive study of speculative market conditions and characteristics are assessed in conjunction with a variety of financial innovations. Valuation techniques and hedging theories are combined with mathematical models to determine their effectiveness in practical situations. Special topics are introduced as market conditions dictate. It is recommended that students take Investments (FINANCE 3520) prior to enrolling in FINANCE 3521.

**FINANCE 3523 Fixed Income Analysis: 3 semester hours**
Prerequisites: FINANCE 3500. This course explores key issues in fixed income securities. The topics include pricing of bonds, measuring bond yields, bond price volatility, factors affecting yields and the term structure of interest rates, treasury securities, corporate debt instruments, residential mortgage loans, collateralized mortgage/debt obligation, and analysis of bonds with embedded options. The course prepares students for the CFA exams of Level 1 in the area of fixed income analysis.

**FINANCE 3525 Practicum in Investments: 1 semester hour**
Prerequisites: FINANCE 3500 and a 2.0 campus GPA. Students will apply their knowledge of stocks and bonds by managing a real dollar portfolio of securities. This course requires that students perform technical and fundamental analysis, prepare research reports, present proposals and participate in group investment decisions. The University's Student Investment Trust provides the money for students to invest. Course may be repeated for credit up to a maximum of 3 credit hours.

**FINANCE 3540 Introduction to Financial Institutions and Financial Markets: 3 semester hours**
Prerequisite: FINANCE 3500 and a 2.0 overall GPA. The course surveys financial institutions and financial markets and addresses the interplay between institutions and markets. State and federal regulation of institutions and markets is explored. A portion of the course addresses current events, managerial policy issues, and regulatory issues in financial services and markets. Focus is primarily U.S. institutions and markets, but the evolving impact of globalization and importance of the Foreign Exchange Market on U.S. financial institutions are developed.

**FINANCE 3541 Commercial Bank Management: 3 semester hours**
Prerequisites: ECON 1002, FINANCE 3500 and a 2.0 overall GPA. Corporate finance and microeconomics are applied to matters of importance to commercial bankers. Among the subjects treated are bank-asset portfolio construction, lending policies, liabilities management, bank capital structure, short-run cash management, financial market rates and flows, and quantitative models for bank management. Commercial bank management is analyzed from an internal viewpoint in terms of what bank managers should look for in asset management and why; what market conditions they should be aware of; and what techniques they can use to meet changing economic and financial conditions.
**FINANCE 3542 Principles of Real Estate: 3 semester hours**
Prerequisites: FINANCE 3500 and a 2.0 campus GPA. As an introduction to the real estate industry, the course broadly explores all phases of acquisition, development and disposal of real property. Topics include legal requirements of contracts, property rights, valuation and appraisal techniques, marketing, brokerage operations and practices, mortgage financing, leasing and property management.

**FINANCE 3560 Practice of Personal Financial Planning: 3 semester hours**
Prerequisites: A minimum campus GPA of 2.0; FINANCE 3500 or consent of instructor and Area Coordinator. Professional financial planning requires broad knowledge of investments, insurance, income taxation, retirement planning, and estate planning, as well as certification requirements and legal/ethical issues. This course introduces students to the field of financial planning, and provides an integrated overview of the topics listed above. Students interested in the Financial Planning track are encouraged to complete this course prior to taking other courses in the track.

**FINANCE 3561 Principles of Insurance: 3 semester hours**
Prerequisites: FINANCE 3500 and a 2.0 campus GPA. This is a survey course intended to introduce students to the basic concepts of insurance. Topics include the nature of risks, types of insurance carriers and markets, insurance contracts and policies, property and casualty coverages, life and health insurance, and government regulations. The functions of underwriting, setting premiums, risk analysis, loss prevention, and financial administration of carriers are emphasized.

**FINANCE 3562 Life Insurance and Employee Benefits: 3 semester hours**
Prerequisites: FINANCE 3500 or equivalent and a minimum campus GPA of 2.0. This course explores the life insurance business from the perspective of both the consumer and provider. Coverage will include an analysis of the various types of life insurance products, aspects of life insurance evaluation, reinsurance, underwriting, and uses of life insurance in financial planning. Also included is an examination of the tax, legal, and ethical requirements.

**FINANCE 3563 Retirement Planning and Employee Benefits: 3 semester hours**
Prerequisites: A minimum campus GPA of 2.0; FINANCE 3500 or consent of instructor and Area Coordinator. The course is designed to give students an understanding of the retirement planning process. Students will gain an appreciation of the usefulness (and shortcomings) of employee benefits and develop an ability to counsel others on important retirement and employee benefit decisions. Corporate pension and profit sharing plans, self-employed Keough plans, IRA’s, annuities, health insurance, and social security will be discussed.

**FINANCE 3564 Estate Planning and Trusts: 3 semester hours**
Prerequisites: A minimum campus GPA of 2.0; FINANCE 3500 or consent of instructor and Area Coordinator. This course will focus on the responsibility of a financial planner in the formulation and implementation of an estate plan. Topics include wills, lifetime transfers, trusts, gifts, estate reduction techniques, tax implications in estate planning, business and inter-family transfers, dealing with incompetency, postmortem techniques, and the role of fiduciaries. Lectures, cases, and guest speakers will be used to stimulate analysis and discussion.

**FINANCE 3565 Seminar in Financial Planning: 3 semester hours**
Prerequisites: ACCTNG 3441, FINANCE 3520, FINANCE 3560, FINANCE 3561, FINANCE 3563, and FINANCE 3564; a minimum campus GPA of 2.0; or permission of instructor. This course serves as the capstone in the registered Financial Planning curriculum. Students will prepare and present comprehensive, professional-level personal financial plans. This course is required by the Certified Financial Planner Board of Standards for those who wish to sit for the Certified Financial Planner examination.

**FINANCE 3580 International Corporate Finance: 3 semester hours**
Same as INTL BUS 3580. Prerequisites: FINANCE 3500 and a 2.0 campus GPA. This course explores corporate finance in the context of a global environment. Financial managers for an international firm must deal with all the normal problems faced by domestic corporations plus additional foreign exchange and political risks. Class discussions will focus on applying financial techniques to decision making in foreign operations. Students are required to work in a group to undertake a project related to international finance.

**FINANCE 3582 International Investments: 3 semester hours**
Same as INTL BUS 3582. Prerequisites: FINANCE 3500. This course explores the concepts of investing and hedging risk management, portfolio diversification, currency risk, asset pricing, and alternative portfolio strategies. Techniques for using derivatives are discussed in the context of hedging exchange rate risk. Reading foreign exchange quotes and understanding the functioning of global markets is central to the course. A prior course in investments is recommended but not required.

**FINANCE 3590 Internship in Finance: 1-3 semester hours**
Prerequisite: a minimum campus GPA of 2.0; one must have completed and/or be currently enrolled in at least 6 credit hours of finance electives and have consent of supervising instructor and Area Coordinator. A Business College GPA of at least 2.5 is also required. Students are employed in the field of finance where they apply the knowledge and skills learned in the classroom. Professional development and obtaining specialized work experience in a Track area are the primary goals. The student's program will be monitored by a finance faculty member with the student providing a formal written report at the end of the project. FINANCE 3590 may not be counted toward the minimum 15 credit hours of finance electives for a finance emphasis.

**FINANCE 3595 Special Administration Problems - Finance: 1-10 semester hours**
Prerequisite: To be determined each time the course is offered and to include a minimum 2.0 overall GPA. Study of selected special problems in business and administration. May be repeated for credit with different topics.

**FINANCE 3598 Seminar in Finance: 1-3 semester hours**
Prerequisite: To be determined each time the course is offered and to include a minimum 2.0 overall GPA. This course is a selected special topic in the field of finance. May be repeated for credit with different topics.

**FINANCE 3599 Independent Study in Finance: 1-3 semester hours**
Prerequisites: Minimum campus GPA of 2.0 and approval by the supervising professor and the Area Coordinator. Special individual study in finance under the supervision of a full-time finance faculty member.

**FINANCE 5599 Individual Research in Finance: 1-3 semester hours**
Prerequisites: Consent of instructor and graduate director. Special individual research topics in Finance under the guidance of a specific professor.
FINANCE 6500 Financial Management: 3 semester hours
Prerequisites: ACCTNG 5400 or ACCTNG 2400, SCMA 5300 or SCMA 3300, and BUS AD 5000 or ECON 1001 and ECON 1002. This course provides an in-depth analysis of corporate finance including asset pricing, risk and return, short- and long-term investment decisions, capital structure choices, dividend policy, derivatives, mergers and acquisitions, and a host of other current topics. The material is taught through lectures and problem solving.

FINANCE 6501 Advanced Financial Management: 3 semester hours
Prerequisite: FINANCE 6500 and SCMA 5300. Exposure to recent financial management theory through selected readings. Financial management problems are considered by the use of cases and simulation models. An original research project under the supervision of instructor is required.

FINANCE 6520 Security Analysis: 3 semester hours
Prerequisite: FINANCE 6500 and SCMA 5300. An in-depth study of techniques used in evaluating various financial assets as investment opportunities. Financial assets studied include common stock, preferred stock, and fixed income securities. Other related topics such as sources of investment information and current market trends are discussed.

FINANCE 6521 Financial Forensics: The Science of Derivatives: 3 semester hours
Prerequisites: FINANCE 6500. Students engage in a comprehensive investigation of advanced risk management techniques. Futures forwards, options and synthetic securities are explored to determine their effectiveness in generating the desired risk exposure. A comprehensive study of speculative market conditions and characteristics are assessed in conjunction with a variety of financial innovations. Valuation techniques and hedging theories are combined with mathematical models to determine their effectiveness in practical situations. Special topics are introduced as market conditions dictate. It is recommended that students take Investments (FINANCE 6520) prior to enrolling in FINANCE 6521.

FINANCE 6540 Financial Institutions and Financial Markets: 3 semester hours
Prerequisite: Graduate Status and FINANCE 6500. By lecture and casework, the course surveys markets (Money Market, Capital Markets, Foreign Exchange) and various forms of financial institutions. Historical and evolving business models of financial institutions are explored in the context of regulation, economics, and competition. Interplay between institutions and markets is addressed. Structure and purpose of regulation is examined. A portion of the course involves current events and managerial policy issues in financial services. A major U.S. financial institution is selected and case analyzed by the class. Focus is U.S. institutions and markets, but impact of globalization is discussed.

FINANCE 6541 Commercial Bank Management: 3 semester hours
Prerequisite: FINANCE 6500. This course explores the various bank management techniques required to manage a modern commercial bank in a rapidly changing environment. Topics include asset and liability management, capital adequacy, bank holding companies, profitability, and bank market structure and regulation.

FINANCE 6542 Real Estate: 3 semester hours
Prerequisite: FINANCE 6500 This course provides a broad introduction to real estate with a focus on legal issues, market analysis, valuation, financing, leasing and investment decisions. Classes are conducted in a in a standard lecture format with discussion on current topics. No prior knowledge of the industry is required.

FINANCE 6580 International Financial Management: 3 semester hours
Same as INTL BUS 6581. Prerequisite: FINANCE 6500. The objective of this course is to introduce students to financial issues for multinational firms. Besides covering basic tools and techniques, the class stresses the role of the financial manager in analysis and decision-making. Topics include the impact of international accounting and tax issues, capital budgeting in a foreign environment, transfer pricing, and global funding. Conceptual skills for lifelong learning experiences are emphasized. This course employs a lecture and case format with group discussions.

FINANCE 6581 Seminar in International Investments: 3 semester hours
Same as INTL BUS 6581. Prerequisite: FINANCE 6500 This course covers topics related to the determination of exchange rates, international parity relations and portfolio diversification. In addition, methods for using foreign exchange derivatives are explored in their use for hedging exchange rate risk. Learning to read foreign exchange quotes and understanding the functioning of global markets is an integral part of the course material. Each student is assigned a foreign country to study throughout the semester with the comprehensive project report. A prior investments course is recommended but not required.

FINANCE 6582 International Bank Management: 3 semester hours
Prerequisites: FINANCE 6500. The objective of this course is to introduce students to many challenging issues in international bank management. This is a specialized finance course dealing explicitly with global bank decision-makings of a multinational bank that uses a variety of financial tools and skills. The course will discuss the rapidly blurring distinctions between commercial and investment bankers. Conceptual skills for lifelong learning (evolving) experiences relevant to the global banking sector are emphasized.

FINANCE 6590 Seminar in Finance: 3 semester hours
Prerequisites: FINANCE 6500. This course incorporates a wide range of advanced topics in finance including, but not limited to, an evaluation of various financial assets as investment opportunities, trends in capital markets, derivatives and management of financial and non-financial firms.

FINANCE 6591 Finance Internship: 1-3 semester hours
Prerequisites: Students must have completed and/or be enrolled in at least 6 credit hours of finance electives and have consent of supervising faculty member and Area Coordinator. Students work in the field of finance where they apply the knowledge and skills learned in the classroom. Professional development and obtaining specialized work experience are the primary goals. The student's program will be monitored by a finance faculty member with the student providing a formal written report at the end of the project.

Information Systems Courses

INFSYS 1800 Computers and Information Systems: 3 semester hours
This course develops skills in technology awareness, computer fluency, computing devices, ethical use of the Internet, and business applications for problem solving, communicating, and making informed decisions, including word processors, presentation software, electronic spreadsheets, and database management systems. Students will gain skills in developing business applications and web pages. Credit cannot be granted for both CMP SCI 1010 and INFSYS 1800.
INFSYS 2800 Information Systems Concepts and Applications: 3 semester hours
Prerequisites: INFSYS 1800 or satisfactory performance on proficiency exam. This course provides an overview of the field of information systems including concepts of systems analysis and design, ethics in information systems usage, electronic business, database management, enterprise systems, information security, and JavaScript programming concepts. Business cases will be utilized to illustrate how information systems improve decision-making. Students will also gain valuable strategies for career development and networking.

INFSYS 3806 Managerial Applications of Object-Oriented Programming I: 3 semester hours
Prerequisites: INFSYS 2800 or CMP SCI 1250, and a minimum campus GPA of 2.0. This course provides an introduction to object-oriented programming. Topics include object-oriented design principles and choices, encapsulation, inheritance, and event-driven programming. Hands-on labs during class sessions and assignments help students develop applied programming skills.

INFSYS 3807 Legacy Systems: 3 semester hours
Prerequisites: A minimum campus GPA of 2.0. This course covers structured programming techniques for legacy business. Students will learn COBOL syntax, structure, design and best programming practices to create, maintain, debug, compile and execute COBOL programs.

INFSYS 3810 Information Systems Analysis: 3 semester hours
Prerequisites: A minimum campus GPA of 2.0 and INFSYS 3806 or permission of instructor. In this course, students will learn how to identify, evaluate, and document business systems using traditional and agile methodologies. This includes how to study systems' ability to meet the business needs and information requirements of an organization, and defend alternatives that better meet needs. Students will conduct a systems analysis of an actual organization in project teams, including the identification of and defense of alternatives.

INFSYS 3815 Object-Oriented Applications in Business: 3 semester hours
Prerequisites: INFSYS 3806 and a minimum campus GPA of 2.0. This course provides a study of web application development using Java and JavaScript. Students will learn about Java Collections Framework, Spring, Hibernate, design patterns, software testing, and front-end web technologies.

INFSYS 3816 Managerial Application of Object-Oriented Programming II: 3 semester hours
Prerequisites: INFSYS 3806 and a minimum campus GPA of 2.0. This course builds on skills learned in INFSYS 3806 and focuses on contemporary client-server development environments and tools. Topics include database integration, web applications, and web services. Students will be provided hands-on application development experiences during class and in assignments.

INFSYS 3841 Enterprise Information Systems: 3 semester hours
Prerequisites: INFSYS 2800 and a minimum campus GPA of 2.0. This course provides students the skills and knowledge needed for roles as ERP business analysts, ERP configuration specialists, and consultants. Students will be introduced to integrated business processes through the application of SAP modules supporting Sales and Distribution (SD), Materials Management (MM), Financial Accounting (FI), Production Planning (PP), and Controlling (CO) as components of the SAP integrated business solution. Students will complete exercises to construct a functioning company operating in an integrated SAP R/3 environment.

INFSYS 3842 Data Networks and Security: 3 semester hours
Prerequisites: INFSYS 2800 and a minimum campus GPA of 2.0; or consent of instructor. This is a foundational course in data networking and network security. It covers the fundamentals of networking and security implications of data networks with hands-on exercises. Topics include networking layers and standardization of functionality across layers, wired and wireless Local Area Networks (LANs) along with switching and physical layer technologies, Internetworking, supporting and supervisory protocols; application layer protocols such as HTTP, and fundamentals of network security. Students will also learn about network protocol analyzers such as Wireshark, virtualization, and networking in virtual environments. Credit cannot be granted for both INFSYS 3842 and INFSYS 6836.

INFSYS 3843 Decision Support Systems for Business Intelligence: 3 semester hours
Prerequisites: SCMA 3300 and a minimum campus GPA of 2.0. This class examines the applications of data and analytics (models) to support the needs of decision makers. Descriptive, predictive and prescriptive analytics tools are coupled with Big Data and well-designed user interfaces to provide the necessary tools. Topics such as how to construct the data warehouse, how to clean and store data in the appropriate form, how to construct and implement a useful visualization of data, and how to construct and support decision makers are included. DSS component design in response to decision making and business intelligence needs are discussed.

INFSYS 3844 Developing Business Applications in .NET: 3 semester hours
Prerequisites: INFSYS 2800 and a minimum campus GPA of 2.0. This course will enable students to design, implement, and debug object-oriented and data driven business applications in C#.NET. Students will learn application design choices, object-oriented design principles, event-driven programming, user interface programming, user interface controls, data binding and database access, exception handling, debugging and effective ways of working with C#.NET.

INFSYS 3845 Database Management Systems: 3 semester hours
Prerequisites: INFSYS 2800, INFSYS 3816, ACCTNG 2400, and a minimum campus GPA of 2.0. This course provides an introduction to the design and use of databases in meeting business information needs. Topics include database planning, conceptual design, and data administration. The concepts are studied with projects involving the use of a current database management system.

INFSYS 3847 Web Design: 3 semester hours
Prerequisites: INFSYS 2800 and a minimum campus GPA of 2.0. This course focuses on website planning, design, and construction. Topics include site structure, navigation, content management, markup languages, CSS, scripting languages, and important tools, libraries and frameworks.

INFSYS 3848 Introduction to Information Security: 3 semester hours
Prerequisites: INFSYS 2800 or consent of instructor and a minimum campus GPA of 2.0. This course provides an introductory survey of the vast field of Information Security (InfoSec). It intersects both management and technical aspects of security as relevant to organizations, governments, individuals, and society. Topics include fundamental principles of InfoSec and cyber defense, the threat environment, management of InfoSec in organizations, technologies and tools in InfoSec, crypology/cryptography, web application security, and current issues. Hands-on labs expose students to basics of penetration testing, applications of cryptography, and vulnerability management. Course is open to all majors. Credit cannot be granted for both INFSYS 3848 and INFSYS 6828.
INFSYS 3858 Advanced Security and Information Systems: 3 semester hours
Prerequisites: INFSYS 3848 or Permission of Department Chair. This course builds upon the principles of information security. It covers topics ranging from networking, penetration testing, formal verification of systems, formal models of information flow and protection, distributed system authentication, protocol design and attack, computer viruses and malware, as well as intrusion and anomaly detection models. Students are exposed to virtualization, defensive security, offensive security, and other forms of cybersecurity. Credit cannot be granted for both INFSYS 3858 and INFSYS 6858.

INFSYS 3868 Secure Software Development: 3 semester hours
Prerequisites: A first course in programming such as INFSYS 3806 or consent of instructor. This course covers the concepts of software assurance and the fundamentals of the secure software lifecycle as it relates to software development. Students will experience the secure software lifecycle process by developing concrete artifacts and practicing in a lab environment. Credit cannot be granted for both INFSYS 3868 and INFSYS 6868.

INFSYS 3878 Information Security Risk Management and Business Continuity: 3 semester hours
Prerequisites: INFSYS 3848 or Consent of Instructor. This course provides students the tools and concepts necessary to plan for, prevent, and when needed successfully respond to disruptions in business operations. Topics covered include security policies, frameworks, information and materials management, risk management, and regulatory compliance. Credit cannot be granted for both INFSYS 3878 and INFSYS 6878.

INFSYS 3890 Internship in Information Systems: 1-3 semester hours
Prerequisites: Minimum business GPA of 2.5, minimum campus GPA of 2.0, completed and/or currently enrolled in at least 6 credit hours of information systems electives at the 3000 level or above, consent of supervising instructor, and consent of department chair. Students are employed in the field of information systems where they apply the knowledge and skills learned in the classroom. Professional development obtaining specialized work experience are primary goals. An information systems faculty member will monitor the student's program with the student providing a formal written report at the end of the project.

INFSYS 3898 Seminar in Information Systems: 1-3 semester hours
Prerequisites: To be determined each time course is offered and to include a minimum 2.0 overall GPA. This course is a selected special topic in the field of information systems. May be repeated for credit with different topics.

INFSYS 3899 Independent Study in Information Systems: 1-3 semester hours
Prerequisites: Minimum campus GPA of 2.0 and approval by the supervising professor and the Area Coordinator. Special individual study in information systems under the supervision of a full-time information systems faculty member.

INFSYS 4850 Information Systems Design: 3 semester hours
Prerequisites: INFSYS 3810, INFSYS 3816, INFSYS 3845 and a minimum campus GPA of 2.0. This course builds on the skills learned in INFSYS 3810. System design, implementation, and methods of systems installation and operation are presented. A system development project is required.

INFSYS 5800 Management Information Systems: 3 semester hours
Same as P P ADM 6800. This course provides an overview of the established and contemporary issues related to information systems within organizations. Topics include the practices and tools associated with topics such as the management of IS-based investment projects, the design and implementation of IS, the alignment of IS strategy with organizational strategy, information security and privacy, and gaining a competitive advantage through IS.

INFSYS 5890 Graduate Internship in Information Systems: 1-6 semester hours
Prerequisites: INFSYS 6840 or permission of instructor. The internship will be a supervised field experience in a US-based business/organization or a US-based international business/organization. Students will be employed off-campus for a 10-16 week period on projects directed by host organization supervisors in consultation with a UM-St. Louis faculty member. The project requires students to apply IS concepts to a real-world problem. The project does not duplicate, but builds upon material in the IS curriculum. A professional written report will be required.

INFSYS 5899 Individual Research in Information Systems: 1-3 semester hours
Prerequisites: Consent of instructor and graduate director. Special individual research topics in Information Systems under the guidance of a specific professor.

INFSYS 6805 Applications of Programming for Business Solutions: 3 semester hours
Prerequisite: Graduate standing. This course will enable students to design, implement, and debug object-oriented and data driven business applications in C#.NET. Students will learn application design choices, object-oriented design principles, event-driven programming, user interface programming, user interface controls, data binding and database access, exception handling, debugging and effective ways of working with C#.NET.

INFSYS 6806 Managerial Applications of Object-Oriented Technologies: 3 semester hours
Prerequisite: Graduate Standing. This course provides an introduction to object-oriented programming. Topics include object-oriented design principles and choices, encapsulation, inheritance, and event-driven programming. Hands-on labs during class sessions and assignments help students develop applied programming skills.

INFSYS 6807 Business Programming and File Systems: 3 semester hours
Prerequisites: Graduate standing. This course covers structured programming techniques for legacy business applications. Students will learn COBOL syntax, structure, design and best programming practices to create, maintain, debug, compile and execute COBOL programs.

INFSYS 6808 Advanced Object-Oriented Programming for Business: 3 semester hours
Prerequisite: INFSYS 6806. This course builds on skills learned in INFSYS 6806 and focuses on contemporary client-server development environments and tools. Topics include database integration, web applications, and web services. Students will be provided hands-on application development experiences during class and in assignments.
**INFSYS 6828 Principles of Information Security: 3 semester hours**
Prerequisites: Consent of Instructor. This course is a survey of the vast field of Information Security (InfoSec). It integrates both management and technical aspects of security as relevant to organizations, governments, individuals, and society. Topics covered include fundamental principles of InfoSec and cyber defense, the threat environment, management of InfoSec in organizations, technologies and tools in InfoSec, cryptography, web application security, vulnerability management, and current issues. Hands-on labs expose students to basics of penetration testing, applications of cryptography, and vulnerability management. A graduate research paper is required. This course is open to all majors. Credit cannot be granted for both INFSYS 6828 and INFSYS 3848.

**INFSYS 6832 Information Systems Strategy: 3 semester hours**
Prerequisites: Graduate Standing. This course presents the management of computer-based information resources in the context of business organizations. Issues may include: management strategies and policies for improving organizational productivity, measurement, evaluation and acquisition of management information services, office automation, end-user computing, computer use in international environments, social and organizational perspectives and ethical implications. The course will be taught using cases.

**INFSYS 6833 Decision Support Systems for Business Intelligence: 3 semester hours**
Prerequisite: SCMA 5300. This class examines the applications of data and analytics (models) to support the needs of decision makers. Descriptive, predictive and prescriptive analytics tools are coupled with Big Data and well-designed user interfaces to provide the necessary tools. Topics such as how to construct the data warehouse, how to clean and store data in the appropriate form, how to construct and implement a useful visualization of data, and how to construct and support decision makers are included. DSS component design in response to decision making and business intelligence needs are discussed.

**INFSYS 6836 Management of Data Networks and Security: 3 semester hours**
Prerequisites: INFSYS 5800 (may be taken concurrently) or Consent of Instructor. This course focuses on the big-picture implications and challenges of data networking and network security within contemporary Information Technology environments. It covers fundamentals of networking and security implications of data networks with hands-on exercises. Topics include networking layers and standardization of functionality across layers, wired and wireless Local Area Networks (LANs) along with switching and physical layer technologies, Internetworking, supporting and supervisory protocols, application layer protocols, network design and management, and fundamentals of network security. Students will also learn about network protocol analyzers such as Wireshark, virtualization, networking in virtual environments, and how some common networked applications operate by utilizing the networking infrastructure. Credit cannot be granted for both INFSYS 6836 and INFSYS 3842.

**INFSYS 6838 Business Processes: Design, Management and Integration: 3 semester hours**
Prerequisite: INFSYS 5800. Business design methodologies are used to create new, or improve existing processes. Examples of business processes include: call centers, order-flow processing in financial services, manufacturing, hospital emergency services, and more. Special attention is paid to the role of information technology during the design process. Specific business process design methods we will cover are: SIPOC (supplier-input-process-output-customer), Process Flow Mapping, Simulation Modeling, Performance Scorecards, Quality Functional Deployment, Failure Mode and Effects Analysis, and Theory of Constraints. Case studies are used to illustrate the concepts and guest speakers will discuss their applications of the latest business process design methods and software.

**INFSYS 6840 Information Systems Analysis: 3 semester hours**
Prerequisite: INFSYS 6805 or INFSYS 6806. In this course, students will learn how to identify, evaluate, and document business systems using traditional and agile methodologies. This includes how to study systems' ability to meet the business needs and information requirements of an organization, and defend alternatives that better meet needs. Students will conduct a systems analysis of an actual organization in project teams, including the identification of and defense of alternatives.

**INFSYS 6845 Database Management Systems: 3 semester hours**
Prerequisites: INFSYS 5800 and either INFSYS 6805 or INFSYS 6806. This course provides an introduction to the design and use of databases in meeting business information needs. Topics include database architecture, design, administration, and implementation. The concepts are studied with projects involving the use of a current database management system.

**INFSYS 6846 Global Sourcing and Automation of Business Services: 3 semester hours**
Same as INTL BUS 6846. Prerequisite: INFSYS 5800. Largely fostered by globalization, the Internet, processing standards, and software innovations, organizations aim to provide business services anytime, anywhere, and on any device. This course covers sourcing and automation topics to help managers deliver business services better, faster, cheaper and with good social impacts. Students will investigate sourcing options such as outsourcing, offshoring, shared services, captive centers, cloud sourcing, impact sourcing, prison sourcing, crowd sourcing, and rural sourcing. Students will investigate automation innovations such as robotic process automation, cognitive automation, and Blockchain. The course covers all types of business services, including information technology services, financial and accounting services, human resource services, call centers, procurement, real estate services, and legal services.

**INFSYS 6847 Project Management: 3 semester hours**
Prerequisite: INFSYS 5800. Effective project management ensures that a project is completed on time, within budget, and has high quality. The purpose of this class is to examine the task of project resource management with a focus on IT and services. It will cover conventional aspects of project management, such as the project evaluation, planning, roles, responsibilities, scheduling, and tracking. In addition, this class will examine risk management, change management, critical chain management, build vs. buy analysis, package vs. custom solutions, vendor qualification and selection, and the roles of certification in the process. The class will also cover the management of programs or a portfolio of IT projects.
INFSYS 6848 Knowledge Management and Business Intelligence: 3 semester hours
Prerequisite: INFSYS 5800 Knowledge management (KM) is the process of creating, and drawing value from, an organization’s intellectual assets. It deals with how to best leverage the organization’s knowledge internally as well as externally. The emphasis on knowledge management within business organizations has risen dramatically in the last few years, to some extent as a result of the rapid progress in information technology capabilities. The course covers the following topics: KM tools, technologies, and systems, including knowledge repositories, knowledge portals, and expert seeker systems, creating and sustaining a knowledge sharing culture, managing and measuring intellectual capital, managing knowledge in networked organizations, including interorganizational alliances and supply chains, aligning knowledge with business strategy, risks of knowledge loss and knowledge leakage, business intelligence, and social aspects of knowledge management.

INFSYS 6849 Data Warehouse Design and Implementation: 3 semester hours
Prerequisites: INFSYS 6845 or consent of instructor. Course will cover different design configurations for structuring and organizing data in a data warehouse. Formal methodologies for the development of data warehouses will also be discussed and implemented.

INFSYS 6850 Information Systems Design: 3 semester hours
Prerequisites: INFSYS 6840 and INFSYS 6845 This course builds upon the analysis techniques presented in INFSYS 6840. It requires the student, usually working in a group to design and implement a system in a real-world environment. Advanced design concepts are presented to support the students in their project work.

INFSYS 6851 Practicum in Business Intelligence: 3 semester hours
Prerequisites: INFSYS 6833, INFSYS 6849, and SCMA 6345. This course will provide the context for students to integrate, synthesize and apply their Business Intelligence skills in an actual business organization. Project work will be jointly supervised and coordinated by a faculty member and a supervisor in the relevant business organization.

INFSYS 6858 Advanced Cybersecurity Concepts: 3 semester hours
Prerequisites: INFSYS 6828. This course provides an in-depth examination of advanced principles of cybersecurity. A broad range of topics are covered, including penetration testing, formal verification of systems, formal models of information flow and protection, distributed system authentication, protocol design and attack, computer viruses and malware, as well as intrusion and anomaly detection models. Multi-level security architecture, active defenses, investigation and forensics, network firewalls, virtualization, anonymity and identity, mobile security, and database security models and mechanisms are also studied. The course content is largely influenced by the latest research in the field. Credit cannot be granted for both INFSYS 6858 and INFSYS 3858.

INFSYS 6860 Data Integration: 3 semester hours
Prerequisite: Consent of Instructor. This course discusses the theories and techniques for blending unstructured and structured data including Big Data and social media streams with relational databases, data warehouses, spreadsheets, and other sources of data. Using mini-cases and assignments, it provides hands-on experience in integrating data from diverse sources, screening and cleaning it, and producing descriptive and visual summaries in tables, graphs, maps, and text for business intelligence. Students will be introduced to tools that integrate data from different sources and provide input to dashboards for rich visualization and advanced analytics.

INFSYS 6868 Software Assurance: 3 semester hours
Prerequisites: INFSYS 6805 or INFSYS 6806 or Consent of Instructor. This course provides an overview of the vast field of software assurance. The goal is to make students aware of the fundamentals of the secure software lifecycle enabling them to apply principles of secure software development and management. The course also provides practical applications that allow the learners to experience the secure software lifecycle process by developing concrete artifacts. Credit cannot be granted for both INFSYS 6868 and INFSYS 3868.

INFSYS 6878 Management of Information Security: 3 semester hours
Prerequisites: INFSYS 6828. This course provides students the necessary background knowledge and skills to develop and run a systematic information security management program that is in line with organizational strategy, structure, processes, and culture. Specifically, the course introduces governance, strategy, policies, implementation, operation, evaluation, and improvement of an organization’s information security to achieve business objectives and be resilient to information security threats. Credit cannot be granted for both INFSYS 6878 and INFSYS 3878.

INFSYS 6881 Management of Transnational Information Systems: 3 semester hours
Same as INTL BUS 6881. Prerequisites: INFSYS 5800, INFSYS 6825 (may be taken concurrently). The course presents concepts of managing global information technology. Issues covered include: global information technology, systems development, electronic data interchange, cross-border data flows, and national and international information structures. Further topics may include information technology enabled economic development, global outsourcing of information systems services, and social, organizational and ethical implications.

INFSYS 6891 Seminar in Information Systems: 3 semester hours
Prerequisites: INFSYS 5800. Topics of current interest in management information systems. Topics may include international information systems, electronic commerce, decision support systems, information systems strategy, telecommunications, and information systems management.

International Business Courses

INTL BUS 3280 The Law of International Business Transactions: 3 semester hours
Prerequisites: BUS AD 2900 or consent of the instructor. A study of the role and function of International Law and national laws in the regulation of international business transactions. The impact of various legal regimes on import/export transactions, foreign investments, and the operations of multinational enterprises will be included. The role of national governments, supra-national governmental organizations, and non-governmental organizations in forming and administering the international legal environment will be studied.

INTL BUS 3281 Business in China: 3 semester hours
Prerequisites: A minimum campus GPA of 2.0; and junior standing. This course introduces students to the practices of doing business in China. Students will be introduced to the Chinese economic and business environment. Issues related to trade and foreign direct investment in China will be discussed. The course adopts an innovative approach, utilizing lectures, case analysis, projects, and student presentations.
**INTL BUS 3282 Managing The Global Workforce: 3 semester hours**
Prerequisite: A minimum of 2.0 campus GPA. In addition, MGMT 3600 and at least one of the following: MGMT 3611 or MGMT 3621 or enrollment in Honors College or consent of instructor. A study of the international dimensions of organizational behavior and human resource management. The course provides an overview of the tools and skills that are necessary to understand and manage people in global organizations. Topics include motivation, leadership, communication, hiring, training, and compensation.

**INTL BUS 3283 International Business and Society: 3 semester hours**
Encompasses the readings, lectures, company and government agency visits, and cultural visits that comprise annual Country Study Tours. (e.g., Austria, Japan, Thailand, etc.). The program includes 45 contact hours or more of classroom lectures covering aspects of the chosen country's business and society, in-depth pre-departure cross-cultural orientation and training supplemented by briefings on the country's economy and on U.S. market penetration by the Commercial Service, U.S. Embassy; a briefing by the in-country State of Missouri representative; briefings by host country agencies; company visits and factory tours; and tours of cultural sites. Student evaluation will be based on active participation and on a research paper based on readings, lectures, interviews and field observations.

**INTL BUS 3284 The Japanese Management System: 3 semester hours**
Prerequisites: MGMT 3600 This course provides an introduction to various aspects of the contemporary Japanese business system. The emphasis is on interpretation of issues from a managerial perspective. Topics include an overview of Japan's economic growth, government policies, industrial and financial structure of Japanese business, labor-management relations, internal management practices, international competitive strategies, managing U.S. subsidiaries in Japan, penetrating the Japanese market, Japanese investment in the U.S.A., and current issues in U.S.-Japan economic relations.

**INTL BUS 3285 Role of the Global Corporation: 3 semester hours**
Prerequisites: A minimum 2.0 campus GPA and MGMT 3600 or permission of the instructor. The purpose of this course is to create awareness of controversial issues about international business. Students will gain a better understanding of resistance to and criticism of international business and will become better prepared for dealing with these issues and problems.

**INTL BUS 3286 International Business Ethics: 3 semester hours**
Same as PHIL 3286. This course will deal with moral issues that are raised by the increasing globalization of business. Apart from the general issue of whether this globalization is itself a good thing, we will discuss such issues as child labor, working conditions, safety standards, environmental policies, bribery and other "corrupt" practices, respect for intellectual property, etc. Frequent short papers will be assigned.

**INTL BUS 3289 Practicum In International Business: 3 semester hours**
Prerequisites: At least one international business course, 2.0 campus GPA and completion of an approval form. Students will apply both their language skills and knowledge of international business by working for a three month period in an organization located outside the student's country of origin. This course requires students to prepare a research report summarizing the global experience and how it relates to the international business program.

**INTL BUS 3290 Internship in International Business: 3-6 semester hours**
Prerequisites: ECON 1001 and ECON 1002, ACCTNG 2400 and ACCTNG 2410, an additional 12 hours in Business Administration, concurrent enrollment in a UM overseas program; also a minimum overall gpa of 2.0. The internship will be a supervised field experience in a business/ international organization at a foreign site. Students will work for 10 weeks on projects directed by host-organization supervisors in consultation with a UM-St. Louis faculty member. Prior to the field experience students will receive training that includes familiarization with the language and practices of the country's business, the background of the host firm, and international information sources. The student will complete a written report of his/her project. Course may not be repeated for more than 6 hours credit.

**INTL BUS 3299 Independent Study in International Business: 1-3 semester hours**
Prerequisites: Minimum campus GPA of 2.0 and approval by the supervising professor and the Area Coordinator of the specific discipline. Special individual study in international business under the supervision of an approved faculty member.

**INTL BUS 3580 International Corporate Finance: 3 semester hours**
Same as FINANCE 3580. Prerequisites: FINANCE 3500 and a 2.0 campus GPA. This course explores corporate finance in the context of a global environment. Financial managers for an international firm must deal with all the normal problems faced by domestic corporations plus additional foreign exchange and political risks. Class discussions will focus on applying financial techniques to decision making in foreign operations. Students are required to work in a group to undertake a project related to international finance.

**INTL BUS 3582 International Investments: 3 semester hours**
Same as FINANCE 3582. Prerequisites: FINANCE 3500. This course explores the concepts of investing and hedging risk management, portfolio diversification, currency risk, asset pricing, and alternative portfolio strategies. Techniques for using derivatives are discussed in the context of hedging exchange rate risk. Reading foreign exchange quotes and understanding the functioning of global markets is central to the course. A prior course in investments is recommended but not required.

**INTL BUS 3680 International Management: 3 semester hours**
Same as MGMT 3680. Prerequisites: A minimum 2.0 campus GPA. In addition, ECON 1002 and MGMT 3600; or consent of the instructor. A study of international business and management practices. Topics covered include an introduction to international management and the multinational enterprise, the cultural environment of international management, planning in an international setting, organizing for international operations, directing international operations, international staffing, preparing employees for international assignments, and the control process in an international context.

**INTL BUS 3780 International Marketing: 3 semester hours**
Same as MKTG 3780. Prerequisites: MKTG 3700 and a 2.0 overall GPA. Marketing management problems, techniques and strategies needed to apply the marketing concept to the world marketplace. Understanding a country's cultural and environmental impact on the marketing plan is emphasized, as well as competing in markets of various cultures. Worldwide consumerism, economic and social development, the spread of multinational corporations, business ethics, and current economic and marketing issues are examined.
INTL BUS 3787 Marketing in the European Union: 3 semester hours
Same as MKTG 3787. Prerequisites: MKTG 3780 or instructor's permission. The European Union (EU) is both a major customer and major competitor of the United States. The inclusion of many of the Eastern European countries into the EU has added another challenge to our ability to trade in this area. The better we understand the people, institutions and policies of the EU, the better positioned we will be to conduct business effectively. This course will emphasize understanding the institutional structure that unites the European Union as well as the cultural and political diversity of its members, and provide insights into how business activity functions in the European Environment.

INTL BUS 4280 International Business Experience: 0 semester hours
Students with an International Business emphasis must complete one of the following international experience requirements: (a) study abroad for three or more credit hours, (b) complete a minimum of one year international experience (e.g., Peace Corps, volunteer work, missionary work, an international posting by an organization) within 5 years of entering the program, or (c) complete an international internship approved by the International Business Institute. May be taken on a satisfactory/unsatisfactory basis only.

INTL BUS 4281 Entrepreneurship in the Global Environment: 3 semester hours
Prerequisites: ECON 1002; ACCTNG 2410; MKTG 3700. This course explores changes in the planet's physical environment and ways of reversing, retarding or coping with those changes. Students will be required to develop proposals for new business ventures that have as a goal preservation or restoration of the natural environment.

INTL BUS 4289 International Strategic Management: 3 semester hours
Prerequisites: A minimum 2.0 campus GPA and INTL BUS 3282, MKTG 3780 and FINANCE 3580 or consent of instructor. A study of the international dimensions of strategic management. Provides an introduction to the key concepts and tools necessary for international competitive analysis. Topics include the international dimensions of strategy formulation and implementation, diversification, strategic alliances, and divestment.

INTL BUS 4381 Global Supply Chain Management: 3 semester hours
Same as SCMA 4381. Prerequisites: SCMA 3301 and a minimum campus GPA of 2.0. This course covers business logistics and supply chain strategies involving shipments across national boundaries. Topics may include the effects of international agreements and regional trading blocks on supply chain strategies, the design of global logistics networks, managerial processes and systems for international production and distribution, and risk management for international logistics.

INTL BUS 5289 International Business Strategies: 3 semester hours
Prerequisites: BUS AD 5000 and ACCTNG 5400. This course focuses on those managerial issues which follow from the definition and implementation of corporate strategy for worldwide operations, as distinguished from purely domestic firms or those only marginally involved in international activities. It aims to develop an appreciation for the unique competitive, sociocultural and political environments in which international business takes place and the skills required to deal with these changes.

INTL BUS 5290 Internship In International Business: 3 semester hours
Prerequisites: Consent of IMBA Director. Students will apply both their language skills and knowledge of international business by working in an organization located outside the student's country of origin. This course requires students to submit regular evaluations and prepare a research report summarizing their global experience and how it relates to the international business program.

INTL BUS 5381 International Logistics and Operations Management: 3 semester hours
Same As SCMA 5381. Prerequisites: SCMA 5320. A study of international logistics and operations management strategy, planning and operations. Topics may include multinational logistics and supply chain strategies, global network design and sourcing, international transportation, distribution and operations, import-export, risk management, etc.

INTL BUS 5780 Seminar in International Marketing: 3 semester hours
Same as MKTG 5780. Prerequisite: MKTG 5700. An advanced seminar on topics in international or global marketing. Possible topics include the globalization of trade, export marketing, international market opportunity analysis, and negotiation for international marketers. Students who take one version of this course (e.g., globalization of trade) can take a second version of the course (e.g., negotiation for international marketers) with prior permission.

INTL BUS 6580 International Financial Management: 3 semester hours
Same as FINANCE 6580. Prerequisite: FINANCE 6500. The objective of this course is to introduce students to financial issues for multinational firms. Besides covering basic tools and techniques, the class stresses the role of the financial manager in analysis and decision-making. Topics include the impact of international accounting and tax issues, capital budgeting in a foreign environment, transfer pricing, and global funding. Conceptual skills for lifelong learning experiences are emphasized. This course employs a lecture and case format with group discussions.

INTL BUS 6581 Seminar in International Investments: 3 semester hours
Same as FINANCE 6581. Prerequisite: FINANCE 6500. This course covers topics related to the determination of exchange rates, international parity relations and portfolio diversification. In addition, methods for using foreign exchange derivatives are explored in their use for hedging exchange rate risk. Learning to read foreign exchange quotes and understanding the functioning of global markets is an integral part of the course material. Each student is assigned a foreign country to study throughout the semester with the comprehensive project report. A prior investments course is recommended but not required.

INTL BUS 6846 Global Sourcing and Automation of Business Services: 3 semester hours
Same as INFSYS 6846. Prerequisite: INFSYS 5800. Largely fostered by globalization, the Internet, processing standards, and software innovations, organizations aim to provide business services anytime, anywhere, and on any device. This course covers sourcing and automation topics to help managers deliver business services better, faster, cheaper and with good social impacts. Students will investigate sourcing options such as outsourcing, offshoring, shared services, captive centers, cloud sourcing, impact sourcing, prison sourcing, crowd sourcing, and rural sourcing. Students will investigate automation innovations such as robotic process automation, cognitive automation, and Blockchain. The course covers all types of business services, including information technology services, financial and accounting services, human resource services, call centers, procurement, real estate services, and legal services.
INTL BUS 6881 Management of Transnational Information Systems: 3 semester hours
Same as INFSYS 6881. Prerequisites: INFSYS 5800, INFSYS 6825 (may be taken concurrently). The course presents concepts of managing global information technology. Issues covered include: global information technology, systems development, electronic data interchange, cross-border data flows, and national and international information structures. Further topics may include information technology enabled economic development, global outsourcing of information systems services, and social, organizational and ethical implications.

INTL BUS 7000 intl bus test: 1 semester hour

Management Courses

MGMT 3600 Management and Organizational Behavior: 3 semester hours
Same as SOC 3600. Prerequisites: Junior standing and a 2.0 overall GPA. This course involves the study of the behavior of individuals and groups in an organizational setting. Specific topics examined include: motivation, leadership, organizational design, and conflict resolution, as well as basic coverage of management principles. In covering these topics, both “classic” and current perspectives are provided.

MGMT 3611 Advanced Management and Organizational Behavior: 3 semester hours
Prerequisites: MGMT 3600 and a 2.0 overall GPA. Building upon MGMT 3600, this course provides a more detailed examination of motivation, leadership, group process, decision making, job design, and organizational development. In addition to providing more detail in terms of content, this course provides the student with considerable practical experience through the use of class exercises, case studies, and small group discussions.

MGMT 3612 Professional Skills Development: 3 semester hours
Prerequisite: A minimum 2.0 campus GPA and Junior standing. This course focuses on career management. Topics include job search, interviews, resumes and cover letters, presentation skills, business etiquette, entry strategies, and career alternatives.

MGMT 3621 Human Resource Management: 3 semester hours
Prerequisites: MGMT 3600 and a 2.0 overall GPA. In-depth examination of selected human resource management issues from a contemporary manager's viewpoint. Topics examined include: employee selection, performance appraisal, training and development, compensation, legal issues, and labor relations.

MGMT 3622 Industrial and Labor Relations: 3 semester hours
Prerequisite: MGMT 3600 and a 2.0 overall GPA. Emphasis is on the dynamic relationship between management, employees, unions, and government as determinants in the efficient and effective use of human resources. Current issues and case material are used to supplement text and lecture.

MGMT 3623 Industrial and Organizational Psychology: 3 semester hours
Same as PSYCH 3318. Prerequisite: PSYCH 2201 or MATH 1105, MGMT 3600. This course introduces the student to psychological research and theories pertaining to human behavior in the work setting. Topics covered include: selection, performance appraisal, training, leadership, motivation, job satisfaction, and organizational design.

MGMT 3624 Employee Training and Development: 3 semester hours
Prerequisites: A minimum overall GPA of 2.0. In addition, MGMT 3600 or permission of instructor. An intensive study of training in organizations, including needs analysis, learning theory, management development, and development of training objectives and programs. Projects and exercises are used to supplement the readings.

MGMT 3625 Leadership in Organization: 3 semester hours
Prerequisites: MGMT 3600 and a minimum 2.0 campus GPA. This course introduces classic and contemporary theories of leadership. The emphasis is on building a sound grasp of good practice and on developing the student's ability to apply such knowledge as he/she enters today's global workforce. The course covers key theories and models of effective leadership in organizations.

MGMT 3680 International Management: 3 semester hours
Same as INTL BUS 3680. Prerequisites: A minimum 2.0 campus GPA. In addition, ECON 1002 and MGMT 3600; or consent of the instructor. A study of international business and management practices. Topics covered include an introduction to international management and the multinational enterprise, the cultural environment of international management, planning in an international setting, organizing for international operations, directing international operations, international staffing, preparing employees for international assignments, and the control process in an international context.

MGMT 3690 Internship in Management: 1-3 semester hours
Prerequisites: A minimum campus GPA of 2.0; one must have completed and/or be currently enrolled in at least 6 credit hours of Management electives and have consent of supervising instructor and Area Coordinator. A Business College GPA of 2.5 is also required. Students are employed in the field of Management where they apply the knowledge and skills learned in the classroom. Professional development and obtaining specialized work experience are primary goals. A Management faculty member will monitor the student's program with the student providing a formal written report at the end of the project. MGMT 3690 may not be counted toward the minimum 12 credit hours of management electives required for a MOB emphasis.

MGMT 3695 Special Admin Problems - Management & Organization Behavior: 1-10 semester hours
Prerequisite: To be determined each time the course is offered and to include a minimum 2.0 overall GPA. Study of selected special problems in business and administration. May be repeated for credit with different topics.

MGMT 3698 Seminar in Management: 1-3 semester hours
Prerequisite: To be determined each time the course is offered and to include a minimum 2.0 overall GPA. This course is a selected special topic in the field of management. May be repeated for credit with different topics.

MGMT 3699 Independent Study in Management: 1-3 semester hours
Prerequisites: Minimum campus GPA of 2.0 and approval by the supervising professor and the Area Coordinator. Special individual study in management under the supervision of a full-time management faculty member.
**MGMT 4219 Strategic Management:** 3 semester hours
Prerequisites: Senior standing and FINANCE 3500, MKTG 3700, MGMT 3600; a minimum overall GPA of 2.0.; and concurrent enrollment MGMT 4220. This is a capstone course drawing on the subject matter covered in prerequisite courses. Emphasis is on the formulation and implementation of corporate, business and functional strategies designed to achieve organizational objectives. Topics include the role of top management, globalization of business and ethical perspectives. Case studies and research reports may be used extensively. (It is preferred that this course be taken during the student's final semester.

**MGMT 4220 Business Assessment Testing:** 0 semester hours
Prerequisite: Concurrent enrollment in MGMT 4219. Strategic Management. A one-time lab during which a major field exam in business is administered. Course graded on a satisfactory/unsatisfactory basis. Satisfactory grade required for graduation.

**MGMT 4614 Entrepreneurship/Small Business Management:** 3 semester hours
Prerequisite: BUS AD 2900, FINANCE 3500, MKTG 3700, MGMT 3600, and a 2.0 overall GPA. This integrative general management course is designed to communicate the academic principles of business management applicable to solving problems of small and medium-size businesses and assist in their development. This course will provide a background in the forms of business, the development of business plans and systems integration, venture capital, accounting, procurement, promotion, financing, distribution and negotiations for initial organization, and operation and expansion of the firm.

**MGMT 5600 Managing People in Organizations:** 3 semester hours
Same as P P ADM 6600. Prerequisites: Graduate standing or consent of instructor. The theoretical and research contribution of the behavioral sciences to management and administration are examined and applied to selected organizational situations. Areas to be considered from the standpoint of both individual and organizational performance are communication, motivation, conflict, decision-making, goal setting, leadership, organizational design, climate, development and control. Utilizing a systems perspective, the course attempts to develop in each student an ability to analyze and solve organizational problems.

**MGMT 5611 Advanced Organizational Behavior and Administrative Processes:** 3 semester hours
Prerequisite: MGMT 5600. An in-depth examination of selected organizational and individual theories affecting behavior and operating performance. Organizational structure and design, formal and informal organization, decision making, communications and motivation are analyzed for their organizational impact. The course seeks to develop further the ability to analyze and evaluate organizational processes and individual behavior.

**MGMT 5621 Managing Human Resources:** 3 semester hours
Prerequisite: MGMT 5600. In-depth examination of selected human resource management issues from a contemporary manager’s viewpoint. Topics examined include: personnel planning; employee selection; performance appraisal, training, and development; compensation; legal issues; discipline; and labor relations. The course examines these topics as they relate primarily to operational activities in organizations.

**MGMT 5622 Union-Management Relations and Collective Bargaining:** 3 semester hours
Prerequisite: MGMT 5600 and BUS AD 5900. Primary concern is with the setting and the dynamics of contract negotiation and administration. Emphasis is on the development of insight and understanding of the forces affecting the decisions of the parties to a labor contract within the context of the social, political and economic environment of the organization. A dynamic approach is taken to examine difficulties that arise in attempting to administer a collectively established relationship between employer and employee.

**MGMT 5625 Selected Topics in Human Resource Management:** 3 semester hours
Prerequisites: MGMT 5621 and SCMA 5300. This course provides an advanced treatment of selected human resource management topics. Primary focus is on topics such as job analysis, pre-employment screening devices, test validation, and civil rights laws. Other topics, such as performance appraisal, recruitment, promotions, and terminations may be covered. Various class projects may be assigned to supplement readings, lectures, and discussion.

**MGMT 5690 Management Internship:** 1-3 semester hours
Prerequisites: Students must have completed and/or be enrolled in at least 6 credit hours of management electives and have consent of a supervising faculty member and the Department Chair. The student works in the field of management where he/she applies the knowledge and skills learned in the classroom. Professional development and obtaining specialized work experience are the primary goals. The student's program will be monitored by the management faculty member supervising the internship with the student providing a formal written report at the end of the project.

**MGMT 5695 Seminar in Management:** 3 semester hours
Prerequisites: MGMT 5600. Topics of current interest in management. Possible topics include: human resource management, international management, and entrepreneurship.

**MGMT 5699 Individual Research in Management:** 1-3 semester hours
Prerequisites: Consent of instructor and graduate director. Special individual research topics in Management under the guidance of a specific professor.

**Marketing Courses**

**MKTG 3700 Basic Marketing:** 3 semester hours
Prerequisites: ECON 1001, Junior standing and a 2.0 overall GPA. An examination of the character and importance of the marketing process, its essential functions and the institutions performing them. Attention is focused on the major policies (such as distribution, product, price, and promotion) which underlie the multifarious activities of marketing institutions and the managerial, economic, societal implications of such policies.

**MKTG 3710 Consumer Behavior:** 3 semester hours
Prerequisites: MKTG 3700, and a minimum overall GPA of 2.0. A study of such consumer functions as decision-making, attitude formation and change, cognition, perception, and learning. The marketing concepts of product positioning, segmentation, brand loyalty, shopping preference and diffusion of innovations are considered in context with the environmental, ethical, multicultural and social influences on an increasingly diverse American consumer.
MKTG 3720 Management of Promotion: 3 semester hours
Prerequisite: MKTG 3700 and a 2.0 overall GPA. A study of the design, organization and implementation of the marketing "communications mix". Various methods such as advertising, personal selling, and publicity are analyzed as alternatives for use alone, or in combination to stimulate demand, reseller support, and buyer preference. Particular topics considered include: media selection, sales promotions, packaging, selling strategy and their relationships in the promotion process.

MKTG 3721 Introduction to Digital Marketing Strategies: 3 semester hours
Prerequisites: MKTG 3700 and a minimum campus GPA of 2.0. This course explores the world of digital media marketing and how it impacts and is integrated along with our traditional marketing channels. We will explore how the balance of power has shifted between brands and consumers. Consumers are more active in the marketing process and in influencing how brands communicate with them than ever before. In particular we will explore: The latest digital marketing trends, how to build a strong website from an organic perspective, search strategies for success, website intelligence and tracking using Google Analytics, retaining customers via Email marketing, online Display advertising, social media strategy, affiliate marketing, mobile marketing trends and developing an integrated marketing plan.

MKTG 3722 Introduction to Social Media Marketing: 3 semester hours
Prerequisites: MKTG 3721. Social networks are becoming an integral part of the marketing mix. In these platforms, brands can engage with prospects and consumers on many levels. In this course you will learn how to create a brand presence on these social networks, understand the differences between earned and paid media, be introduced to the various tools (free and paid) used to listen and engage with consumers, discuss how brands manage healthy communities, learn techniques used by social media managers to identify influencers, and study the various ways engagement is measured including calculating social media return on investment. Social networks to be discussed throughout the semester will include Facebook, Twitter, Tumblr, Instagram, LinkedIn, etc. Students will also be introduced to the various social measurement tools including Netbase (our partner), HootSuite, tweetdeck, Sprinklr, Technorati, etc. Real life case examples will be used throughout the semester.

MKTG 3731 Digital and Social Media Marketing Lab (Internship): 3 semester hours
Prerequisites: MKTG 3700, MKTG 3720, MKTG 3721 and MKTG 3722. In this capstone practicum course, students will be teamed up with various St. Louis based organizations. Students will assist these companies with their digital and social media strategies and plans. Students will conduct specific digital and social media project tasks including, among others, managing social media content and pushes, creating a social media presence, creation of a social media playbook, search engine marketing, paid search, web analytics and dashboard creation, landing page design, assisting in the build of a WordPress blog.

MKTG 3738 Advertising Technique: 3 semester hours
Same as MEDIA ST 3338. Prerequisites: MEDIA ST 1100 or MKTG 3700 or consent of instructor. Techniques for creating advertising messages and campaigns to reach target audiences. Focus on the process of persuasion, importance of advertising in modern economics, rationale for company advertisement, evaluation of advertising effectiveness, and assessment of advertising myths and truths. Practical application of messages and campaigns will be stressed.

MKTG 3740 Marketing Analysis: 3 semester hours
Prerequisites: INF SYS 1800, MKTG 3700, SCMA 3300, and a 2.0 Overall GPA. An investigation of the acquisition, presentation, and application of marketing information for management. Particular problems considered are defining information requirements, evaluating research findings, and utilizing information. Statistical methods, models, and/or cases are employed to illustrate approaches to marketing intelligence problems, such as sales forecasts, market delineation, buyer motives, store location, and performance of marketing functions.

MKTG 3750 Sales Management: 3 semester hours
Prerequisites: MKTG 3700 and MGMT 3600. (MGMT 3600 may be taken concurrently). Also a minimum campus GPA of 2.0. the aim of this course is to provide an understanding of how selling is critical to the success of marketing. The course will promote critical thinking skills as well as practical selling skills needed in a competitive marketplace. Course topics include, among others, selling principles & techniques, understanding of the tasks and roles of the sales manager, the management of sales professionals within an organization, developing and applying effective persuasive communications, creating a vision, developing and implementing a sales-team strategy, structuring sales-force, designing and assigning territories, recruiting, training, motivation and evaluating salespeople, methods of compensation, and forecasting sales. The emphasis will be on ways the sales-force can be molded to build long-lasting relationships with customers through the systematic analysis and solution of customer’s problems.

MKTG 3760 Business to Business Marketing: 3 semester hours
Prerequisites: Senior standing, MATH 1105, MKTG 3700 and a 2.0 overall GPA. A study of the nature of the business-to-business (organizational) marketplace, concentrating on those aspects that differentiate it from consumer markets. The major focus of the course is marketing strategy, starting with analysis of the market wants and segments, concepts of pricing, the distribution arrangements, and buyer/seller relations. In this last area, consideration will be given to service, personal selling, sales promotion, and advertising, as found in the organizational marketplace. At all times emphasis is given to relating business-to-business marketing strategy to basic concepts in underlying business disciplines. Lectures and case discussions are used heavily in the course.

MKTG 3770 Introduction to Transportation: 3 semester hours
Prerequisite: A minimum campus GPA of 2.0; also Junior standing or instructor consent. This course provides an overview of the transportation sector, including history, providers, users, and government regulation. The importance and significance of transportation, the operational aspects of transportation modes of rail, water, motor, air and pipeline; the demand and supply of transportation, and the managerial aspects of these modes of transport will be covered in the course.

MKTG 3771 Traffic and Transportation Management: 3 semester hours
Prerequisites: A minimum campus GPA of 2.0 and a minimum campus GPA of 2.0. This course focuses on the purchase of transportation and warehouse services and/or the operation of transportation services as a firm activity. This course is also designed to provide the student with an exposure to the managerial aspects of transportation management as a function of the firm's logistical strategy. In addition, it includes an introduction to the management of firms with the various transportation modes of rail, motor, air, water, and pipelines. This course is designed to provide the student with a basic understanding of the issues and work performed by traffic managers and the management of modern transportation firms.
**MKTG 3776 Transportation Security, Safety and Disaster Preparedness: 3 semester hours**
Prerequisites: Junior standing or instructor's consent. This course emphasizes security issues related to the nation's highway, aviation, pipeline, inland waterway, transit, and rail networks, as well as port facilities. This course provides an overview of transportation safety issues including passenger and employee safety and hazardous materials. Strategies to prepare for transportation-related disasters in addition to the transport of people and goods after terrorism events or natural disasters are also addressed.

**MKTG 3777 Aviation Business: 3 semester hours**
Prerequisites: Junior standing or instructor's consent. This course addresses the development of aviation from the early 20th century through today, including significant aviation events, individuals, companies and aircraft. This course focuses on the administrative aspects of airline operations and management, aviation regulation and deregulation, commercial organizations and firms, as well as current industry trends. This course is not offered for graduate credit.

**MKTG 3780 International Marketing: 3 semester hours**
Same as INTL BUS 3780. Prerequisites: MKTG 3700 and a 2.0 overall GPA. Marketing management problems, techniques and strategies needed to apply the marketing concept to the world marketplace. Understanding a country's cultural and environmental impact on the marketing plan is emphasized, as well as competing in markets of various cultures. Worldwide consumerism, economic and social development, the spread of multinational corporations, business ethics, and current economic and marketing issues are examined.

**MKTG 3785 Women in International Entrepreneurship: 3 semester hours**
Prerequisites: MKTG 3700; MKTG 3780 or INTL BUS 3780; and Junior standing. This course is an integration of international business and entrepreneurship, with a focus on women entrepreneurs. It is designed to help students learn how entrepreneurs create and grow their ventures internationally. We will examine how entrepreneurs search, evaluate, and exploit opportunities across national boundaries to market goods and services effectively. We will explore the unique circumstances faced by women entrepreneurs and the appropriate strategies developed in order to sustain international growth.

**MKTG 3787 Marketing in the European Union: 3 semester hours**
Same as INTL BUS 3787. Prerequisites: MKTG 3780 or instructor's permission. The European Union (EU) is both a major customer and major competitor of the United States. The inclusion of many of the Eastern European countries into the EU has added another challenge to our ability to trade in this area. The better we understand the people, institutions and policies of the EU, the better positioned we will be to conduct business effectively. This course will emphasize understanding the institutional structure that unites the European Union as well as the cultural and political diversity of its members, and provide insights into how business activity functions in the European Environment.

**MKTG 3790 Internship in Marketing: 1-3 semester hours**
Prerequisites: A minimum campus GPA of 2.0; one must have completed and/or be currently enrolled in at least 6 credit hours of Marketing electives and have consent of supervising marketing instructor and Area Coordinator. A Business College GPA of 2.5 is also required. Students are employed in the field of Marketing where they apply the knowledge and skills learned in the classroom. Professional development and obtaining specialized work experience are primary goals. A Marketing faculty member will monitor the student's program with the student providing a formal written report at the end of the project. MKTG 3790 may be counted toward the minimum credit hours of marketing electives required for a marketing emphasis.

**MKTG 3795 Special Administration Problems - Marketing: 1-10 semester hours**
Prerequisite: To be determined each time the course is offered and to include a minimum 2.0 overall GPA. Study of selected special problems in business and administration. May be repeated for credit with different topics.

**MKTG 3798 Seminar in Marketing: 1-3 semester hours**
Prerequisite: To be determined each time the course is offered and to include a minimum 2.0 overall GPA. This course is a selected special topic in the field of marketing. May be repeated for credit with different topics.

**MKTG 3799 Independent Study in Marketing: 1-3 semester hours**
Prerequisites: Minimum campus GPA of 2.0 and approval by the supervising professor and the area coordinator. Special individual study in marketing under the supervision of a full-time marketing faculty member.

**MKTG 4700 Marketing Management: 3 semester hours**
Prerequisites: MATH 1105, MKTG 3700, three other marketing elective courses, senior standing, and a 2.0 campus GPA. An intensive analysis of major marketing decisions facing the firm, such as level, mix, allocation, and strategy of marketing efforts. Specific decision areas investigated include market determination, pricing, physical distribution, product policy, promotion, channel management, and buyer behavior. Competitive, political, legal, and social factors that may affect such areas of decisions are discussed. Cases, models, and problems are used heavily.

**MKTG 5700 Contemporary Marketing Concepts: 3 semester hours**
Prerequisites: To be determined each time the course is offered and to include a minimum 2.0 overall GPA. A study of selected special problems in business and administration. May be repeated for credit with different topics.

**MKTG 5701 Marketing Planning and Strategy: 3 semester hours**
Prerequisite: MKTG 5700. Emphasizes the development of a total marketing program through an analytical study of the marketing-mix, the diagnosis of the business situation, along with the influence of exogenous variables and the development of an effective overall marketing strategy. Stresses importance of an integrated marketing plan and utilizes modern decision-making tools. Supplementary readings, journal articles, and current periodicals are used to place the theoretical framework of the course into the contemporary environment of the market place.
**MKTG 5710 Consumer Motivation and Behavior: 3 semester hours**  
Prerequisite: MKTG 5700. An analysis of the socio-psychological foundations of consumer behavior including personality differences, needs and wants, status symbols, social change and mobility, fads and fashions. Consumer spending and saving habits, product preferences, leisure-time patterns, shopping behavior and motivation research also are examined for their impact on advertising, selling and marketing management.

**MKTG 5720 Marketing Communications: 3 semester hours**  
Prerequisite: MKTG 5700. Deals with managerial decision making by placing particular emphasis on assimilating and integrating all forms of marketing communication in the development of promotional policies, plans and procedures. Course approach is analytical rather than descriptive in investigating the areas of advertising, public relations, sales management, packaging and other forms of demand stimulation.

**MKTG 5721 Digital Marketing Strategies and Measurement: 3 semester hours**  
Prerequisites: MKTG 5700. Most every business today needs a digital marketing strategy to engage with current customers and attract new. Consumers are changing the way they communicate with and research brands. Brands are changing the way they promote and engage with consumers. We are embracing digital technologies to communicate in ways that were inconceivable just a few short years ago. We have shifted our attention from traditional media marketing to internet, wireless devices, and other digital platforms. In this course you will assess the various marketing channels; the importance of establishing a social media strategy; understand the digital trends that are shaping the future; experiment with today’s cutting edge digital marketing tools (licensed and free) including Adobe SiteCatalyst, Radian6, Lithium, Alexa, and Hootsuite to name a few; learn how to develop a digital marketing plan; how we define key performance indicators (KPI’s); techniques used to measure the ROI of your digital campaigns; marketing mix and campaign attribution.

**MKTG 5722 Social Media Marketing Strategy: 3 semester hours**  
Prerequisite: MKTG 5721. Social networks are becoming an integral part of the marketing mix. In these platforms, brands can engage with prospects and consumers on many levels. In this course you will learn how to create a brand presence on these social networks, understand the differences between earned and paid media, the various tools (free and paid) used to listen and engage with consumers, how we manage healthy communities, techniques used to identify influencers, crisis management, rules of engagement for high profile individuals and corporations, the importance of transparency, the various ways engagement is measured, the value of a Facebook like, and calculating return on investment. Social networks to be discussed will include Facebook, Twitter, Tumblr, Instagram, LinkedIn, Wordpress, etc. Tools to be used will include Netbase (our partner), HootSuite, tweetdeck, Sprinklr, Technorati, etc. Various real life case projects and exercises will be assigned throughout the semester under the instructor’s supervision.

**MKTG 5730 Clinical Study in Digital and Social Media Marketing: 3 semester hours**  
Prerequisites: MKTG 5721 or MKTG 5722 or consent of instructor if prior digital/social media experience. This course, in partnership with Capital Innovators, provides students the opportunity for experiential learning by directly applying classroom topics to the real world. Students will be paired up with a new startup business in their current class and, over the course of the semester, contribute to their digital and social media marketing strategies by assisting in specific project tasks. Other mutually agreed upon areas of responsibility may be assigned as necessary. This is not an internship but rather a project support based clinical course providing very valuable learning in the very vibrant entrepreneurial startup world. It will be instructor led with weekly class meetings.

**MKTG 5731 Special Seminars in Digital and Social Media Marketing: 3 semester hours**  
Prerequisites: MKTG 5721 or MKTG 5722 or consent of instructor if prior digital/social media experience. In this course, the students will be attending three special 2- or 3-day seminars discussing focused topics in Digital and Social Media Marketing. Seminar topics include Mobile Strategy, Email Marketing, Blogs to Buzz, Online Display Advertising, and Strategic Search Engine Marketing. This course may be offered on a weekend schedule.

**MKTG 5740 Marketing and Business Analytics: 3 semester hours**  
Prerequisites: MKTG 5700 and SCMA 5300. A broad approach to marketing research as a model for acquiring, retrieving, and analyzing decision-making information. Includes market measurement, evaluation of sales and cost effectiveness, sales forecasting and primary marketing research studies aimed at solving specific problems. Emphasis is placed also on building a theoretical and analytical framework to provide flexibility in the design of marketing experiments and in judging recent research innovations.

**MKTG 5761 Business to Business Marketing: 3 semester hours**  
The course provides graduate students with an understanding of the role of business to business marketing as it pertains to business, government, and institutional customers. The course places a heavy emphasis on buyer-seller interaction embodying business to business marketing. In addition to discussing the standard theories and covering the subject domain of business marketing, the course focuses on the finer aspects of business to business marketing negotiations using exercises and readings. Student groups enact complex industrial buyer-seller negotiations striving to achieve their respective organizational goals.

**MKTG 5770 Supply Chain Management Strategy: 3 semester hours**  
Prerequisite: Consent of instructor. Course addresses supply chain management and its implications, with a focus on what firms can do to maintain competitiveness in the quickly changing business landscape. Topics may include, but are not limited to, value chain analyses, marketing business-to-business, supply chain analytics, procurement, production, logistics, and inventory management within supply chains.

**MKTG 5775 Domestic Transportation: 3 semester hours**  
Domestic Transportation is the study of North American transportation modes, their management and operating characteristics. This graduate course is part of the Mid-West Transportation Consortium where UMSL, along with 5 other Universities, provides guest lectures that comment on aspects of transportation. UMSL students concentrate on the business aspects of transportation.

**MKTG 5780 Seminar in International Marketing: 3 semester hours**  
Same as INTL BUS 5780. Prerequisite: MKTG 5700. An advanced seminar on topics in international or global marketing. Possible topics include the globalization of trade, export marketing, international market opportunity analysis, and negotiation for international marketers. Students who take one version of this course (e.g., globalization of trade) can take a second version of the course (e.g., negotiation for international marketers) with prior permission.

**MKTG 5790 Internship in Marketing: 3 semester hours**  
Prerequisites: Students must have completed and/or be enrolled in at least 6 credit hours of marketing electives and have consent of supervising faculty member and Area Coordinator. Students work in the field of Marketing where they apply the knowledge and skills learned in the classroom. Professional development and obtaining specialized work experience are the primary goals. The student's program will be monitored by a Marketing faculty member with the student providing a formal report at the end of the project.
MKTG 5795 Seminar in Marketing: 3 semester hours
Prerequisites: MKTG 5700. This course addresses advanced problems in contemporary marketing. Topics may include, but are not limited to, marketing strategy, marketing communications and advertising, product management, consumer behavior, channels of distribution, international marketing, and marketing research.

MKTG 5799 Individual Research in Marketing: 1-3 semester hours
Prerequisites: Consent of instructor and graduate director. Special individual research topics in marketing under the guidance of a specific professor.

Quantitative Management Science Courses

SCMA 3300 Business Analytics and Statistics: 3 semester hours
Prerequisites: MATH 1105, INFSYS 1800 and a 2.0 campus GPA. This course covers basic statistical analysis (descriptive and predictive analytics) for business management. Tools include matched sample tests, chi-square tests, rank sum tests, simple linear regression and correlation, multiple linear regression, and extrapolative techniques such as moving averages and exponential smoothing. Emphasis is placed on problem definition, construction of statistical models, analysis of data, and interpretation of results.

SCMA 3301 Introduction to Supply Chain Management: 3 semester hours
Prerequisites: A minimum campus GPA of 2.0. This course provides an understanding of fundamental concepts of supply chain management. All functional areas of supply chain management are explored in an integrated view of procurement, manufacturing and operations management, transportation and logistics, inventory and warehousing, demand planning, scheduling, network design, collaboration and performance measurement. Topics also cover supply chain financial metrics, strategy and change management for demand driven value networks.

SCMA 3320 Advanced Supply Chain and Operations Management: 3 semester hours
Prerequisites: A 2.0 campus GPA and either SCMA 3301 or MATH 1320. This course covers supply chain management with special focus on understanding manufacturing and service operations. Emphasis is on the application of quantitative methods to the solution of strategic, tactical and operational problems. Topics include demand planning, capacity, new product design and launch, process selection, facility layout, production planning, scheduling, inventory, process control, waiting lines, lean production, etc.

SCMA 3321 Procurement: 3 semester hours
Prerequisites: SCMA 3301 and a 2.0 campus GPA. This course covers procurement processes and supplier management, with emphasis on managing a supplier base for both products and services. Topics include the strategic role of procurement in supply chains, sourcing options, identification and evaluation of requirements, the role of product design, make-versus-buy decisions, and supplier selection and evaluation.

SCMA 3345 Predictive Analytics and Data Mining: 3 semester hours
Prerequisites: SCMA 3300 and a minimum campus GPA of 2.0. This course focuses on predictive analytics in business settings. Topics may include applications of multivariate analyses to problems in marketing, finance, transportation and logistics. The course covers use of decision trees, regression and logistic regression to explain phenomena and predict future outcomes. Students acquire experience in the use of modern tools for data mining.

SCMA 3390 Internship in Supply Chain and Analytics: 1-3 semester hours
Prerequisites: Minimum business GPA of 2.5, minimum campus GPA of 2.0, completed and/or currently enrolled in at least 6 credit hours of departmental electives, consent of supervising instructor, and consent of department chair. Students are employed in the field where they apply the knowledge and skills learned in the classroom. Professional development and obtaining specialized work experience are the primary goals. A departmental faculty member will monitor the student’s program with the student providing a formal written report at the end of the project. Students cannot receive credit towards the emphasis for both SCMA 3390 and SCMA 4389. Repeatable for a maximum of 9 credit hours.

SCMA 3398 Seminar in Supply Chain Management and Analytics: 1-3 semester hours
Prerequisites: To be determined each time the course is offered and to include a minimum 2.0 campus GPA. This course is a selected special topic in the fields of supply chain management and analytics. May be repeated for credit with different topics.

SCMA 3399 Independent Study in Supply Chain and Analytics: 1-3 semester hours
Prerequisites: Minimum campus GPA of 2.0 and approval by the supervising professor and the department chair. Special individual study in supply chain and analytics under the supervision of a full-time faculty member of the department.

SCMA 4312 Business Forecasting: 3 semester hours
Prerequisites: Minimum campus GPA of 2.0 or graduate standing; also either SCMA 3320 or (MATH 3000 and MATH 1320) Further study of statistical tools for forecasting in a decision-making context. Topics include explanatory models (multiple regression), classical time series decomposition, and extrapolative techniques (exponential smoothing and Box-Jenkins procedures). In addition, methods for considering problems of intervention effects, seasonality, and collinearity will be discussed. Students will perform extensive analyses of time series data using computer packages.

SCMA 4322 Lean Production in Manufacturing and Service Operations: 3 semester hours
Prerequisites: A minimum campus GPA of 2.0 or graduate standing; also SCMA 3320. Study of Lean Production philosophy and techniques in manufacturing and service operations. Topics include process analysis and continuous improvement techniques, quick set-ups, total productive maintenance, kanban scheduling, cellular production, team organization of workers, supplier relations, quality management, and the environmental aspects of production.
SCMA 4325 Environmental Sustainability in Business Operations: 3 semester hours
Prerequisites: SCMA 3301 or permission of instructor. This course studies the environmental impacts of business operations, and it focuses especially on the principles and methods of "lean and green" operations, i.e., ways in which organizations can reduce their costs and increase profits, while reducing their environmental impacts. Specific topics include energy efficiency, resource reduction, waste reduction, design for the environment, externalities and internal pricing mechanisms, environmental technologies, life-cycle assessment, recycling, re-use, and re-manufacturing, as well as national and global environmental issues.

SCMA 4330 Business Logistics: 3 semester hours
Prerequisites: SCMA 3320 and a minimum campus GPA of 2.0. This course addresses the analysis of business logistics systems, their design, and operation in light of cost and service tradeoffs. Topics include performance measures and management, logistics and supply chain network design, facility location, transportation, vehicle routing, storage and handling, capacity planning, inventory management, customer service and the role of technology.

SCMA 4331 Applied Supply Chain Modeling: 3 semester hours
Prerequisites: SCMA 3320 and a 2.0 minimum campus GPA. This course introduces applied models and technology for supply chain management through hands-on experience using state-of-the-art software and tools for the design and operation of supply chains. The course covers the economic tradeoffs involved in such decisions, data requirements, operating parameters, application of software packages and performance management and analytics.

SCMA 4347 Introduction to Project Management: 3 semester hours
Prerequisites: SCMA 3301 and a minimum campus GPA of 2.0. This course introduces the concepts and practices of Project Management with a focus on supply chain and analytics related projects. It covers conventional aspects of project management, such as the project evaluation, planning, roles, responsibilities, scheduling, and tracking. In addition, this class introduces agile project management as applicable to projects where there is not the specificity of goals or solutions to be applicable to traditional project management.

SCMA 4350 Prescriptive Analytics and Optimization: 3 semester hours
Prerequisites: MATH 1105 and a minimum campus GPA of 2.0. This course covers the construction and application of prescriptive analytical models for optimizing business decisions in a wide range of areas such as manufacturing, service, supply chains, logistics and finance. Topics include performance metrics, linear programming, integer programming, network optimization, simulation, and implementation using Excel.

SCMA 4381 Global Supply Chain Management: 3 semester hours
Same as INTL BUS 4381. Prerequisites: SCMA 3301 and a minimum campus GPA of 2.0. This course covers business logistics and supply chain strategies involving shipments across national boundaries. Topics may include the effects of international agreements and regional trading blocks on supply chain strategies, the design of global logistics networks, managerial processes and systems for international production and distribution, and risk management for international logistics.

SCMA 4389 Supply Chain Management Practicum: 3 semester hours
Prerequisites: SCMA 3320. This course engages students with local organizations to provide practical experience in critical thinking, analysis, and communication in a supply chain context. This allows students to integrate, synthesize and apply supply chain management knowledge and skills in a real business/organization through projects jointly supervised by a faculty member and a supervisor from the organization. Students cannot receive credit towards the emphasis for both SCMA 3390 and SCMA 4389.

SCMA 4398 Advanced Topics in Supply Chain and Analytics: 1-3 semester hours
Prerequisites: SCMA 3301 or permission of the instructor and a minimum 2.0 campus GPA. An intensive study of a specific aspect, problem or technique in the areas of supply chain management, analytics, logistics, or operations management. Different topics may be offered under this course number, so the course (with different topics) can be repeated for credit.

SCMA 5300 Statistical Analysis for Management Decisions: 3 semester hours
Prerequisites: MATH 1030 and spreadsheet modeling or equivalent competency. Probability and probability distributions are studied as a basis of statistical inference. An introduction to multivariate analysis is provided, which includes analysis of variance and regression methods.

SCMA 5312 Advanced Statistical Methods for Management Decisions: 3 semester hours
Prerequisites: SCMA 5300. The application of statistical methods to managerial problems, forecasting and business research. Topics include the blending of multiple regression and analysis of variance into a general linear model, logistic models, techniques for projecting seasonal time series, and forecasting techniques (ARIMA models) which deal with serially correlated data. Through class presentations, assigned exercises and a major project, students gain experience in constructing explanatory and predictive models for problems in marketing, finance, etc. Students use commercial software (e.g. the Statistical Analysis System) for analyzing data, constructing models and producing reports.

SCMA 5320 Production and Operations Management: 3 semester hours
Prerequisites: SCMA 5300. This course discusses issues related to the creation and delivery of goods and services. Topics include the design of production processes, the layout and location of facilities, forecasting, scheduling, inventory control, queuing, materials planning, and quality control. Analytical techniques such as linear programming are used in studying these problems.

SCMA 5322 Lean Production: 3 semester hours
Prerequisites: SCMA 5320. Study of Lean Production philosophy and techniques in manufacturing and service operations. Topics include process analysis and continuous improvement, set-up reduction, total productive maintenance, kanban scheduling, cellular production, work teams, supplier relations, quality management, and the environmental aspects of production. Cases and a course project will be used to integrate and apply the course material.

SCMA 5324 Service Operations Management: 3 semester hours
Prerequisites: SCMA 5320. An examination of methods for designing and operating service delivery systems, such as in the health care, financial, transportation, hospitality, and governmental services industries. Topics include process and facility design, facility layout and location, queuing, demand forecasting and management, service quality, staffing, and personnel scheduling.
SCMA 5325 Environmental Analysis and Sustainability in Business Operations: 3 semester hours
Prerequisites: SCMA 5320 or permission of instructor. This course studies the environmental impacts of business operations, and it focuses especially on the principles and methods of "lean and green" operations, i.e., ways in which organizations can reduce their costs and increase profits, while reducing their environmental impacts. Specific topics include energy efficiency, resource reduction, waste reduction, design for the environment, externalities and internal pricing mechanisms, environmental technologies, life-cycle assessment, recycling, re-use, and re-manufacturing, as well as national and global environmental issues.

SCMA 5326 Quality Management: 3 semester hours
Prerequisites: SCMA 5300 or MATH 4200 or permission of instructor. An applied course on total quality management. Quality improvement approaches are presented and the managerial implications and responsibilities in implementing these approaches are discussed. Topical coverage includes the construction and interpretation of control charts, graphical methods, quality function deployment, robust experiments for product design and improvement, mistake-proofing (poke yoke), the Deming approach, Baldridge award criteria, quality cost audits, worker empowerment and reward systems. Cases involving both business processes and physical processes are used to illustrate successful quality improvement efforts.

SCMA 5334 Internship in Logistics and Supply Chain Management: 1 semester hour
Prerequisite: Consent of Instructor. Students receive practical experience in the area of logistics or supply chain management. The internship is supervised by a professional in the host organization in consultation with a faculty member.

SCMA 5340 Transportation Economics for Business Managers: 3 semester hours
Prerequisites: ECON 3001 or BUS AD 5000 or permission of the instructor. This course makes use of a range of economic concepts to examine the nature of markets in which transport services are provided. This course is designed for future transportation professionals who wish to explore the fundamentals of economics in their field. Basic concepts covered include the theory of transportation demand, transportation costs and investment planning, and current topics in transportation economics such as regulation-deregulation and social cost pricing.

SCMA 5349 Project Consulting and Execution: 3 semester hours
Prerequisites: SCMA 5300 or equivalent; SCMA 5320 or equivalent (may be taken concurrently). Provides real world experience in planning and executing projects. The class will have teams of students work on projects sponsored by companies and not for profit organizations for 2 to 6 weeks at a time. It will provide students practice in critical thinking, analysis, communication, and other critical skills identified as necessary for employees to function at a high level in their jobs. A student may NOT count SCMA 5349 and an internship toward the SCMA emphasis. Only one of the two would count.

SCMA 5354 Simulation for Managerial Decision Making: 3 semester hours
Prerequisites: SCMA 5320. Introduction to simulation as a managerial decision-making aid. Application of simulation to a number of management science-oriented problems. This course introduces and requires use of a simulation language.

SCMA 5381 International Logistics and Operations Management: 3 semester hours
Same as INTL BUS 5381. Prerequisites: SCMA 5320. A study of international logistics and operations management strategy, planning and operations. Topics may include multinational logistics and supply chain strategies, global network design and sourcing, international transportation, distribution and operations, import-export, risk management, etc.

SCMA 5399 Individual Research in Logistics and Operations Management: 1-3 semester hours
Prerequisites: Consent of instructor and graduate director. Special individual research topics in Logistics and Operations Management under the guidance of a specific professor.

SCMA 6330 Business Logistics Systems: 3 semester hours
Prerequisites: SCMA 5320 (may be taken concurrently). Analysis of business logistics systems and their role in supply chain management. Covers both design and operation of logistics systems and their components. Topics may include network design, facility location, transportation, vehicle routing, inventory management, customer service, reverse logistics and logistics information systems.

SCMA 6331 Logistics and Supply Chain Operational Modeling: 3 semester hours
Prerequisites: SCMA 5320 and SCMA 6330. A study of the application of leading software packages to modeling problems and issues arising in the operational management of logistics and supply chains. This course covers the economic tradeoffs involved in such decisions, data requirements, operating parameters, and application of software packages to problems such as vehicle routing and scheduling, freight shipments consolidation, cross-docking, and other operational and tactical strategies. This "hands on" course is designed to prepare students for higher-level supply chain analyses and consulting work.

SCMA 6332 Logistics and Supply Chain Strategic Modeling: 3 semester hours
Prerequisites: SCMA 5320 and SCMA 6330. A study of the application of leading software packages to modeling problems and issues arising in the planning and strategic management of logistics networks and supply chains. The course identifies and explores the economic and customer service tradeoffs involved in such networks. Issues such as location of facilities assignment of production and distribution missions to facilities, identification of sourcing relationships amongst facilities, and identification of cost and customer service consequences of alternative supply chain designs are addressed by the application of commercial software packages to support decision making. This "hands on" course is designed to prepare students for high-level supply chain analyses and consulting work.
SCMA 6338 Business Processes: Design, Management & Integration: 3 semester hours
Prerequisites: SCMA 5320. This course presents the concepts and state of the art / state of the practice of business process design and business process management for improving business performance, effectiveness, quality, customer service and satisfaction. Issues related to characteristics, goals, benefits and costs of enterprise-wide design, and the role of information technology during the design process will be discussed. Specific topics will include: the history and development of process focused businesses and the impacts on processes caused by just-in-time and total quality management philosophies, organizational learning, strategy mapping, et al. We will also discuss the exploitation of core competencies and changing business scenarios such as globalization and electronic-commerce. We will draw from the literature to explore the notion of moving from business strategies to business processes. We will review current writings relative to the subject, and then will apply our knowledge to actual process design, documentation, analysis and simulation. We will introduce computer-based modeling tools for process design and simulation, and use those tools in both in-class and individual work.

SCMA 6345 Business Analytics and Data Mining: 3 semester hours
Prerequisites: SCMA 5300 and INFSYS 5800. This course concentrates on methods for converting data into business intelligence. It provides knowledge of the principles and techniques for business analytics and data mining. Topics include clustering, pattern recognition, visualization of relationships, predictive modeling, optimization techniques and simulation.

SCMA 6347 LOM Project Management: 3 semester hours
Prerequisites: SCMA 5320. This course addresses the concepts and processes of project management as applicable to Logistics and Operations Management. Students study organizational design, project specification, integrated project planning, risk management and project control; students will come to understand how globalization, environmental and sustainability issues, quality control (including industry standard initiatives such as the Continuing Integration Improvement Model and the International Standards Organization model), and cultural factors drive project management. NOTE: Credit may not be earned for both SCMA 6347 and INFSYS 6847.

SCMA 6350 Management Science Methods: 3 semester hours
Prerequisites: SCMA 5320. This course provides a working knowledge of management science techniques. It emphasizes analytical approaches to solving business problems, construction of mathematical models, and manipulation of model variables for managerial decision-making. Topics include mathematical programming, including integer and network models, heuristics, and simulation models.

SCMA 6395 Seminar in Logistics and Operations Management: 3 semester hours
Prerequisite: SCMA 5320. Topics of current interest in logistics and operations management. Topics may include just-in-time and lean production, quality management, manufacturing and service systems, transportation and logistics, quantitative management tools, etc.

SCMA 7381 International Supply Chain Management: 3 semester hours
Prerequisites: SCMA 5320. Admittance into the Ph.D. Program. A comprehensive examination of international logistics and supply chain management strategies, planning and operations from the firm's perspective. Topics may include multinational logistics and supply chain issues and management strategies, multinational sourcing and network design, transportation issues in international supply chains, multinational distribution and operations, legal and financial issues in import and export, risk identification and management in international supply chains, and the relationship of supply chain management to other activities of international firms.

SCMA 7390 Research Seminar in LSCM: 3 semester hours
Prerequisites: SCMA 6330. Admittance into the Ph.D. Program. Analysis of research approaches, and findings in Logistics and Supply Chain Management. May be repeated for credit when the subject matter is different.

SCMA 7393 Special Topics in LSCM: 3 semester hours
Prerequisites: Consent of Instructor. Admittance into the Ph.D. Program. In-depth analysis of special topics in Logistics and Supply Chain Management research. May be repeated for credit when the subject matter is different.