Information Systems, MS-IS

For additional information about graduate programs within the College of Business, please contact the Director of Graduate Programs, Jennifer Pettitt, at GradBiz@uah.edu (gradbiz@uah.edu). Information about the application process may be found in the Admissions section of the Graduate catalog.

Purpose

The purpose of the MS-IS degree program is to prepare students to enter the information technology (IT) profession in a wide variety of positions. While the curriculum emphasizes both managerial and technical aspects of IT, its overall structure is designed to prepare students for a career leading to managerial- and/or executive-level positions related to IT and Business Information Systems. Students will learn to design, implement, and operate information systems with the purpose of providing organizational decision-makers with the information needed to manage effectively and efficiently. In addition, students will learn to obtain new business insights by using various business analytics and data management tools.

Program prerequisites are kept to a minimum and the program is designed to meet the needs of students with a wide variety of educational backgrounds.

Program Prerequisites

Program prerequisites include a bachelor’s degree in any field and demonstration of competency in each of the following three areas:

1. **Computer Applications Competency.** Students must demonstrate this competency by passing an on-line computer applications competency exam or by successful completion of the IS 146 or its equivalent. IS 146 or its equivalent will not count towards the requirements of the MS-IS degree.

2. **Computer Programming Competency.** Students must demonstrate this competency by passing an on-line computer programming exam or by successful completion of IS 210 or its equivalent. IS 210 or its equivalent will not count towards the requirements of the MS-IS degree.

3. **Information Systems Competency.** Students must demonstrate this competency by passing an on-line IS competency exam or by successful completion of IS 600 - Information Systems Management, or its equivalent. IS 600 or its equivalent will not count towards the requirements of the MS-IS degree.

Degree Requirements

The MS-IS program consists of 30 semester hours of graduate coursework. The coursework includes an 18 credit hour core that is required of all students, nine credit hours of directed electives, and three credit hours of business electives. The directed elective choices are designed to provide students a broader understanding of multiple business functions normally expected for executive-level positions in an organization.

IS 691, Information Systems Strategy and Applications, is the capstone course and should be taken toward the end of the student’s program. A student must earn a grade of B or better in IS 691.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Semester Hours</th>
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<tbody>
<tr>
<td>IS 512</td>
<td>MODERN SYSTM ANALYSIS &amp; DESIGN ¹</td>
<td>3</td>
</tr>
<tr>
<td>IS 560</td>
<td>TELECOMMUNICATIONS &amp; NETWRKG ¹</td>
<td>3</td>
</tr>
<tr>
<td>IS 571</td>
<td>BUSINESS INTELLIGENCE &amp; ANALYT ¹</td>
<td>3</td>
</tr>
<tr>
<td>IS 640</td>
<td>DATA MGT AND DATA MINING</td>
<td>3</td>
</tr>
<tr>
<td>IS 680</td>
<td>ENTERPRISE RESOURCE PLNG SYS</td>
<td>3</td>
</tr>
<tr>
<td>IS 691</td>
<td>INFORMATION SYS STRATEGY &amp; APP</td>
<td>3</td>
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**Directed Electives (9 credit hours), choose 3 courses with no more than one in any of the following groupings:** ²

**Information Systems/Cyber Security Electives:**

- IS 660  CYBERSECURITY MANAGEMENT
- IS 522  SUPPLY CHAIN MANAGEMENT SYS
- IS 577  NETWORK DEFENSE & OPERATING SY
- IS 663  COMPUTER FORENSICS

**Economics Electives:**

- ECN 511  ECONOMICS OF INFORMATION TECH
- ECN 545  GAMES & NETWORKS
- ECN 600  FOUNDATIONS OF ECONOMICS
- ECN 626  MANAGERIAL ECON & TECH

**Management/Marketing Electives:**
<table>
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<tr>
<th>Course</th>
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<tr>
<td>MGT 600</td>
<td>ORGAN THRY, BEHAV &amp; ENVIRONMEN</td>
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<td>MGT 631</td>
<td>HRM &amp; ORGANIZATIONAL BEHAVIOR</td>
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<td>MGT 640</td>
<td>PRIN OF PROJECT MGMT</td>
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<tr>
<td>MKT 600</td>
<td>SURVEY OF MARKETING MGMT</td>
</tr>
<tr>
<td>MKT 604</td>
<td>NEW PRODUCT DEVELOPMENT</td>
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**Accounting/Finance Electives:**
- ACC 600  FOUNDATIONS ACC MANAGERS & ENG
- ACC 602  MANAGERIAL ACCOUNTING
- FIN 601  FIN DECIS UNDER UNCERTAINTY

**Operations/Quant Methods/SCM Electives:**
- IS 522  SUPPLY CHAIN MANAGEMENT SYS
- MGT 611  SUPPLY CHAIN MANAGEMENT
- MSC 600  QUANTITATIVE METHODS
- MSC 605  OPERATIONS MANAGEMENT

**Business Elective, select one course from the five groupings above.**  

Total Semester Hours: 30

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1. MS-IS students whose previous studies include the undergraduate equivalents of IS 512, IS 560, and/or IS 571 must substitute a 3-credit-hour graduate-level IS course for each of the latter.

2. Students are required to satisfy the prerequisites for any elective they choose. Students who wish to substitute some other courses as directed electives may seek prior approval for such a substitution by contacting the Director of Graduate Programs.

**Additional Information**

**Thesis Option**

A thesis option is available. Students interested in this option should contact both the faculty member who the student wants to serve as the thesis advisor and the Director of Graduate Programs in the College of Business before completing 12 hours of graduate study. If selected, the student will register for the IS 699 Masters Thesis course for 6 credit hours in lieu of 6 credit hours of directed and business electives.

**Transfer Credit**

Up to 12 semester hours of graduate credit taken at other universities may be transferred to meet MS-IS degree requirement. Inquiries about the transferability of specific courses should be directed to the Director of Graduate Programs, who will consult with the IS faculty to determine whether the content of the class will be accepted for transfer credit.