

## Information Systems - Information Security Management Emphasis, B.S.

### Requirements

Managing the security of information systems is extremely important for all types of organizations to protect the systems from data breaches. The BS in Information Systems program prepares students to be Information Systems professionals. Graduates develop and deploy enterprise-level systems to meet organizational needs. The Information Security Management (ISM) emphasis prepares students for information technology management and information security analyst positions.

#### Total Program Credits: 123

|   |  |  |   |
|---|--|--|---|
| General Education Requirements:                       |  | 36 Credits   |   |
|   | ENGL 1010  | Introduction to Writing (3.0)                          | 3 |
|   | ENGL 2010  | Intermediate Writing--Humanities/Social Sciences (3.0) | 3 |
| or  | ENGL 2020  | Intermediate Writing--Science and Technology (3.0)     |   |
|   | MATH 1050  | College Algebra (4.0)                                  | 4 |
| or  | MATH 1055  | College Algebra with Preliminaries (5.0)               |   |
| American Institutions: Complete one of the following: |  | 3  |   |
|   | HIST 2700  | US History to 1877 (3.0)                               |   |
| and   | HIST 2710  | US History since 1877 (3.0)                            |   |
|   | HIST 1700  | American Civilization (3.0)                            |   |
|   | HIST 1740  | US Economic History (3.0)                              |   |
|   | POLS 1000  | American Heritage (3.0)                                |   |
|   | POLS 1100  | American National Government (3.0)                     |   |
| Complete the following:                               |  |  |   |
|   | PHIL 2050  | Ethics and Values (3.0)                                | 3 |
|   | HLTH 1100  | Personal Health and Wellness (2.0)                     | 2 |
| or  | PES 1097   | Fitness for Life (2.0)                                 |   |
| Distribution Courses:                                 |  |  |   |
|   | Biology Distribution   |  | 3 |
|   | Physical Science Distribution                                  |  | 3 |
|   | An Additional Biology or Physical Science Distribution Course  |  | 3 |
|   | Fine Arts Distribution   |  | 3 |
|   | Humanities Distribution  |  | 3 |
|   | Social/Behavioral Science Distribution (ECON 2020 recommended) |  | 3 |
| Discipline Core Requirements:                         |  | 63 Credits   |   |
| Math Requirement:                                     |  | 3  |   |
|   | MGMT 2340  | Business Statistics I (3.0)                            |   |
| IS Core Requirements:                                 |  |  |   |
|   | INFO 1120  | Information Systems and Technology Fundamentals        | 3 |
|   | INFO 1200  | Computer Programming I for IS/IT                       | 3 |
| or  | CS 1400  | Fundamentals of Programming (3.0)                      |   |
|   | INFO 2200  | Computer Programming II for IS/IT                      | 3 |
|   | INFO 2410  | Database Fundamentals                                  | 3 |
|   | INFO 2420  | Web Application Design                                 | 3 |
|   | IM 2600  | Spreadsheet Applications                               | 3 |

|   |   |            |
|---|---|------------|
| IT 2600   | Data Communication Fundamentals                                       | 3          |
| IT 2700   | Information Security Fundamentals                                     | 3          |
| INFO 3130   | Introduction to Applied Data Analytics                                | 3          |
| INFO 3410   | Database Systems and Warehousing                                      | 3          |
| INFO 3420   | Web Systems Development   | 3          |
| INFO 3430   | Systems Analysis and Design   | 3          |
| INFO 3700   | Health Informatics Fundamentals                                       | 3          |
| INFO 405G   | Global Ethical and Professional Perspectives in IS and IT             | 3          |
| INFO 4430   | Systems Design and Implementation                                     | 3          |
| IS Environment/Business Foundation Requirements:                          |   |            |
| ACC 2010  | Financial Accounting  | 3          |
| ACC 2020  | Managerial Accounting   | 3          |
| MKTG 2200   | Business Communication  | 3          |
| MGMT 3000   | Organizational Behavior   | 3          |
| MKTG 3600   | Principles of Marketing   | 3          |
| Emphasis Requirements:  |   | 15 Credits |
| INFO 4410   | Database Administration   | 3          |
| INFO 4135   | Data Security Analytics   | 3          |
| INFO 4415   | Database Security and Auditing  | 3          |
| INFO 4425   | Web Application Security  | 3          |
| IT 4700   | Enterprise Information Security Management                            | 3          |
| Emphasis Elective Requirements:   |   | 9 Credits  |
| Choose 9 credit hours from the following advanced upper-division courses: |   | 9          |
| IT 3350   | Intellectual Property and Cyber Law (3.0)                             |            |
| IT 4750   | Network Security and Operations Capstone (strongly recommended) (3.0) |            |
| INFO 3426   | Web Content Management Systems Site Development (3.0)                 |            |
| INFO 4440   | Enterprise Computing Environments (3.0)                               |            |
| INFO 4700   | Healthcare Information Systems Management (3.0)                       |            |
| INFO 481R   | Internship (3.0)  |            |
| Other approved upper-division Information Systems courses                 |   |            |

### Graduation Requirements:

1. Completion of at least 123 semester credits required in the BS degree; at least 40 credit hours must be upper-division courses.
2. Overall grade point average 2.0 or above with a minimum of 2.5 GPA in all discipline core, specialty core, and elective courses with no grade lower than a "C-."
3. Residency hours: Minimum of 30 credit hours through course attendance at UVU, with at least 10 hours earned in the last 45 hours.
4. Completion of GE and specified departmental requirements. Students are responsible for completing all prerequisite courses.
5. Successful completion of at least one Global/Intercultural course.

# Information Systems - Information Security Management Emphasis, B.S.

## Information Systems - Information Security Management Emphasis, B.S. Graduation Plan

This graduation plan is a sample plan and is intended to be a guide. Your specific plan may differ based on your Math and English placement and/or transfer credits applied. You are encouraged to meet with an advisor and set up an individualized graduation plan in [Wolverine Track](#).

Milestone courses (pre-requisites for a course in one of the subsequent semesters) are marked in red and Italicized.

| Semester 1   | Course Title   | Credit Hours |
|--|--|--------------|
| <i>ENGL 1010</i>   | Introduction to Writing  | 3            |
| <i>MATH 1050 or MATH 1055</i>  | College Algebra or College Algebra with Preliminaries            | 4            |
| HLTH 1100 or PES 1097  | Personal Health and Wellness or Fitness for life                 | 2            |
| Fine Arts Distribution   |  | 3            |
| <i>INFO 1120</i>   | Information Systems and Technology Fundamentals                  | 3            |
| Semester total:  |  | 15           |
| Notes: Take INFO 1120 first or second semester.  |  |              |
| Semester 2   | Course Title   | Credit Hours |
| <i>ENGL 2010 or ENGL 2020</i>  | Intermediate Writing   | 3            |
| Biology Distribution   |  | 3            |
| <i>INFO 1200</i>   | Computer Programming I for IS/IT                                 | 3            |
| <i>INFO 2420</i>   | Web Application Design   | 3            |
| <i>IM 2600</i>   | Spreadsheet Applications   | 3            |
| <i>ACC 2010</i>  | Financial Accounting   | 3            |
| Semester total:  |  | 18           |
| Notes: (1) Must take INFO 1200 before taking INFO 2200 next semester. (2) Must take ACC 2010 before taking ACC 2020 next semester or the following semester.           |  |              |
| Semester 3   | Course Title   | Credit Hours |
| MGMT 2340  | Business Statistics I  | 3            |
| INFO 2200  | Computer Programming II for IS/IT                                | 3            |
| <i>INFO 2410</i>   | Database Fundamentals  | 3            |
| <i>IT 2600</i>   | Data Communication Fundamentals                                  | 3            |
| <i>MKTG 2200</i>   | Written Business Communication                                   | 3            |
| Semester total:  |  | 15           |
| Notes: (1) Must take IT 2600 before taking IT 2700 next semester. (2) Must take MGMT 2340 before taking INFO 3130 next semester. (3) Must take MKTG 2200 before taking |  |              |
| Semester 4   | Course Title   | Credit Hours |
| ECON 2020  | Microeconomics (fulfills Social/Behavioral Science Distribution) | 3            |
| <i>IT 2700</i>   | Information Security Fundamentals                                | 3            |
| INFO 3130  | Intro to Applied Data Analytics                                  | 3            |
| ACC 2020   | Managerial Accounting  | 3            |
| MGMT 3000  | Organizational Behavior  | 3            |

| Semester total:   |   | 15           |
|---|---|--------------|
| Notes: (1) Must take IT 2700 before taking INFO 4135 next semester. (2) Recommended to take INFO 3130 before taking INFO 4135 next semester.  |   |              |
| Semester 5  | Course Title  | Credit Hours |
| PHIL 2050   | Ethics and Values   | 3            |
| Physical Science Distribution   |   | 3            |
| <i>INFO 3420</i>  | Web Systems Development                                   | 3            |
| INFO 3700   | Health Informatics Fundamentals                           | 3            |
| <i>INFO 4135</i>  | Data Security Analytics                                   | 3            |
| Semester total:   |   | 15           |
| Notes: (1) Must take INFO 3420 this semester or concurrently with INFO 4425 next semester. (2) INFO 4135 is offered Fall semesters only.  |   |              |
| Semester 6  | Course Title  | Credit Hours |
| Additional Biology or Physical Science Distribution   |   | 3            |
| Humanities Distribution   |   | 3            |
| <i>INFO 3410</i>  | Database Systems & Warehousing                            | 3            |
| INFO 4425   | Web Application Security                                  | 3            |
| MKTG 3600   | Principles of Marketing                                   | 3            |
| Semester total:   |   | 15           |
| Notes: INFO 4425 is offered Spring semesters only.  |   |              |
| Semester 7  | Course Title  | Credit Hours |
| <i>INFO 3430</i>  | Systems Analysis and Design                               | 3            |
| INFO 4410   | Database Administration                                   | 3            |
| IT 4700   | Enterprise Information Security Management                | 3            |
| Elective  |   | 3            |
| Elective  |   | 3            |
| Semester total:   |   | 15           |
| Notes: (1) INFO 4410 is offered Fall and Spring semesters as long as sufficient demand exists; otherwise it will be offered Fall semester only. (2) Take INFO 3430 this semester to be able to take INFO 4430 next semester. (3) INFO 3430 and INFO 4430 should be taken in two consecutive semesters. (4) Take IT 4700 this semester to be able to take elective IT 4750 next semester. (5) Elective IT 3350 is offered Fall and Summer semesters only. (6) Elective INFO 4700 is offered Fall semesters only. |   |              |
| Semester 8  | Course Title  | Credit Hours |
| American Institutions   |   | 3            |
| INFO 405G   | Global Ethical and Professional Perspectives in IS and IT | 3            |
| INFO 4430   | Systems Design and Implementation                         | 3            |
| INFO 4415   | Database Security and Auditing                            | 3            |
| Elective  | Recommended IT 4750                                       | 3            |
| Semester total:   |   | 15           |
| Notes: (1) INFO 4430 should be taken semester immediately after taking INFO 3430. (2) INFO 4415 is offered Spring semesters only. (3) Elective INFO 3426 is offered Spring semesters only. (4) Elective IT 4750 is offered Fall and Spring semesters.   |   |              |
| Degree total:   |   | 123          |