



BS in INFORMATION TECHNOLOGY (396526) MAP Sheet

School of Technology

For students entering the degree program during the 2016–2017 curricular year.

| UNIVERSITY CORE AND GRADUATION REQUIREMENTS | | | | PROGRAM REQUIREMENTS (77 total hours) | | |
|---|-----------------|--------------|------------------------------------|--|---------------------------------------|-----|
| UNIVERSITY CORE REQUIREMENTS | | | | Students must have a minimum of 124 total hours to graduate with this major. | | |
| <u>Requirements</u> | <u>#Classes</u> | <u>Hours</u> | <u>Classes</u> | Complete the following supporting courses: | | |
| Religion Cornerstones | | | | C S 142 | Intro to Computer Programming | 3.0 |
| Teachings and Doctrine, Book of Mormon | 1 | 2.0 | Rel A 275 | C S 235 | Data Structures and Algorithms | 3.0 |
| Jesus Christ & the Everlasting Gospel | 1 | 2.0 | Rel A 250 | C S 236 | Discrete Structures | 3.0 |
| Foundations of the Restoration | 1 | 2.0 | Rel C 225 | Econ 110* | Economic Principles and Problems | 3.0 |
| The Eternal Family | 1 | 2.0 | Rel C 200 | Engl 316* | Technical Communication | 3.0 |
| The Individual and Society | | | | Math 112* | Calculus 1 | 4.0 |
| Citizenship | | | | Phscs 121 | Principles of Physics 1 | 3.0 |
| American Heritage | 1–2 | 3–6.0 | from approved list | Phscs 123 | Principles of Physics 2 | 3.0 |
| Global & Cultural Awareness | 1 | 3.0 | Eng T 231* | Stat 201 | Statistics for Engineers & Scientists | 3.0 |
| Skills | | | | Tech 312 | Innovation | 1.0 |
| Effective Communication | | | | Complete the following: | | |
| First-Year Writing | 1 | 3.0 | from approved list | IT 101 | Cornerstone: Information Technology | 2.0 |
| Adv Written & Oral Communication | 1 | 3.0 | Engl 316* | IT 124 | Intro to Computer Systems | 3.0 |
| Quantitative Reasoning | 0–1 | 0–4.0 | Math 112* or ACT | IT 210A,B | Fundamentals of Web-Based IT | 4.0 |
| Languages of Learning (Math or Language) | 1 | 4.0 | Math 112* | IT 252 | Computer Architecture & Organization | 3.0 |
| Arts, Letters, and Sciences | | | | IT 327* | Digital Communications | 4.0 |
| Civilization 1 and 2 | 2 | 6.0 | from approved list | IT 344 | Operating Systems | 3.0 |
| Arts | 1 | 3.0 | ArtHC 202, or Tech 202 recommended | IT 347 | Computer Networks | 3.0 |
| Letters | 1 | 3.0 | from approved list | IT 350 | Database Principles and Applications | 3.0 |
| Scientific Principles & Reasoning | | | | IT 355 | Human-Computer Interaction | 3.0 |
| Biological Science | 1–2 | 3–5.0 | from approved list | IT 446 | Senior Project/Capstone 1 | 2.0 |
| Physical Science | 1 | 4.0 | IT 327* | IT 447 | Senior Projects/Capstone 2 | 3.0 |
| Social Science | 1 | 3.0 | Econ 110* or Eng T 231* | IT 466 | Information Assurance and Security | 3.0 |
| Core Enrichment: Electives | | | | Complete 1.5 hours of the following: | | |
| Religion Electives | 3 | 6.0 | from approved list | IT 391R | Junior/Senior Seminar (take 3 times) | 0.5 |
| Open Electives | Variable | Variable | personal choice | Complete the following: | | |
| GRADUATION REQUIREMENTS: | | | | Eng T 231* | Foundations of Global Leadership | 3.0 |
| Minimum residence hours required | | 30.0 | | | | |
| Minimum hours needed to graduate | | 120.0 | | | | |
| | | | | After consulting with an information technology advisor, complete 6 hours of upper-division information technology technical electives. | | |
| | | | | Please add the approved technical elective courses to your ABC with a substitution-waiver form. | | |
| | | | | Complete the following: | | |
| | | | | IT 491R Senior Seminar 0.5 | | |
| | | | | Complete department packet and exit interview. | | |

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2016–2017

Suggested Sequence of Courses:

FRESHMAN YEAR

| | |
|-----------------------------|-------------|
| <u>1st Semester</u> | |
| Wrtg 150 or A Htg 100* | 3.0 |
| IT 101 | 3.0 |
| C S 142 | 3.0 |
| Math 112 | 4.0 |
| Religion Cornerstone course | 2.0 |
| Total Hours | 15.0 |

| | |
|-----------------------------|-------------|
| <u>2nd Semester</u> | |
| Wrtg 150 or A Htg 100* | 3.0 |
| Phscs 121 | 3.0 |
| C S 235 | 3.0 |
| IT 124 | 3.0 |
| Religion Cornerstone course | 2.0 |
| Religion elective | 2.0 |
| Total Hours | 16.0 |

SOPHOMORE YEAR

| | |
|-----------------------------|-------------|
| <u>3rd Semester</u> | |
| Phscs 123 | 3.0 |
| IT 210A and 210B | 4.0 |
| Tech 321 | 1.0 |
| Religion Cornerstone course | 2.0 |
| Bio 100 | 3.0 |
| Elective | 3.0 |
| Total Hours | 16.0 |

| | |
|-----------------------------|-------------|
| <u>4th Semester</u> | |
| C S 236 | 3.0 |
| Stat 201 | 3.0 |
| IT 252 | 3.0 |
| IT 355 | 3.0 |
| Religion Cornerstone course | 2.0 |
| Elective | 2.0 |
| Total Hours | 16.0 |

JUNIOR YEAR

| | |
|---------------------|-------------|
| <u>5th Semester</u> | |
| IT 327 | 4.0 |
| IT 344 | 3.0 |
| IT 347 | 3.0 |
| IT 391R | 0.5 |
| Minor/Elective | 3.0 |
| Religion elective | 2.0 |
| Total Hours | 15.5 |

| | |
|---------------------|-------------|
| <u>6th Semester</u> | |
| IT 350 | 3.0 |
| IT 466 | 3.0 |
| Engl 316 | 3.0 |
| IT 491 | 0.5 |
| Religion elective | 2.0 |
| Minor/Elective | 5.0 |
| Total Hours | 16.5 |

SENIOR YEAR

| | |
|---------------------|-------------|
| <u>7th Semester</u> | |
| IT 391R | 0.5 |
| IT 446 | 2.0 |
| EngT 231 | 3.0 |
| IT elective | 3.0 |
| Civilization I | 3.0 |
| Minor/Elective | 3.0 |
| Minor/Elective | 1.0 |
| Total Hours | 15.5 |

| | |
|-----------------------------------|-------------|
| <u>8th Semester</u> | |
| Civilization II & Arts or Letters | 3.0 |
| IT 391R | 0.5 |
| IT 447 | 3.0 |
| IT elective | 3.0 |
| Econ 110 | 3.0 |
| Letters or Arts elective | 3.0 |
| Total Hours | 15.5 |

THE DISCIPLINE:

Information technology (IT), the technical discipline that solves problems using computing resources, will be taught through a combination of strong theoretical course work and practical application to ensure that all three aspects of the technological educational triumvirate (knowing, thinking, doing) are included. IT professionals from this discipline are competent to design computing systems with due consideration of the performance and compatibility aspects of hardware, software, and digital communication and networking. They can visualize, structure, and implement complex technical solutions.

Professionals in this discipline are also proficient in understanding user needs and communicating technical issues to the organizations and people affected by the computer system. They are "anxiously engaged" in lifelong learning to understand and wisely use new technologies as they become available. Broadly educated at the university level, these professionals have acquired balance in their lives and depth of understanding in technology and its relevance in the broader world context. Because of the influence and leadership roles we expect graduates to have, our students will be encouraged to develop high moral and ethical standards as well as being conversant with and compliant with professional performance standards.

CAREER OPPORTUNITIES:

Career opportunities are plentiful and rewarding in both large and small companies in technical fields. Graduates will find careers in computer networking, testing, embedded intelligence, digital communications, computer system development, and integration.

*Hist 220 or Pl Sc 110 combined with the required Econ 110 course can fill the American Heritage requirement.

Note: Students are encouraged to complete an average of 15 credit hours each semester or 30 credit hours each year, which could include spring and/or summer terms. Taking fewer credits substantially increases the cost and the number of semesters to graduate.

Information Technology
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