# **Applied Information Technology Program Requirements (69 credits)**

#### **Applied Information Technology Core (39 credits)**

- Computer Programming I (COSC 151)
- Internet Technologies: Mastering the Basics (COSC 155)
- Computer Hardware/Software Support (COSC 210)
- Introduction to Linux (COSC 212)
- Computer Programming II (COSC 251)
- Fundamentals of Computer Networks (COSC 310)
- Designing for Humans (COSC 324)
- Fundamentals of Computer Security (COSC 332)
- Object-Oriented Programming (COSC 351)
- Database Systems (COSC 356)
- The TCP/IP Protocol Suite (COSC 401)
- IT Project Management (COSC 461)

#### and one of the following:

- Administering and Supporting a Network Operating System (COSC 312)
- Unix/Linux Administration (COSC 412)

#### Capstone (3 credits)

Practicum in Information Technology (COSC 490)

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#### Math Requirements (9 credits)

- Calculus I (MATH 201)
- Applied Probability and Statistics (MATH 303)
- Mathematical Structure for Information Technology (MATH 321)

#### Tracks (18 credits)

Choose one of the following two tracks: APPLICATION DEVELOPMENT AND PROGRAMMING

- Web and Database Security (COSC 434)
- Object-Oriented Analysis and Design (COSC 451)
- Advanced Web Development (COSC 453)
- Advanced Database Systems (COSC 456)
- Mobile Applications Programming (COSC 457)

#### and one of the following:

- Information Assurance and Security (COSC 432)
- Network Security (COSC 433)
- Digital Forensics (COSC 435)

#### INFORMATION SECURITY AND ASSURANCE

#### 2015 – 2016 ACADEMIC YEAR PROGRAM REQUIREMENTS

- Legal Issues in High Technology Crime (COSC 430)
- Information Assurance (COSC 432)
- Network Security (COSC 433)
- Web and Database Security (COSC 434)
- Digital Forensics (COSC 435)
- Legal Issues in High Technology Crime (COSC 430/FSCS 601)

#### and one of the following:

- Advanced Web Development (COSC 453)
- Advanced Database Systems (COSC 456)
- Mobile Applications Programming (COSC 457)

### **General Electives**

Complete as many courses as necessary from any discipline to fulfill your 120-credit requirement to graduate.

## **Information Literacy Requirement**

Meet the UB Information Literacy graduation requirement by successfully completing one of the following:

- Introduction to Information Literacy (INFO 110)
- Designing for Humans (COSC 324)