University of the Incarnate Word®
Bachelor of Science in Computer Information Systems Cyber Security Track

School of Mathematics, Science and Engineering

PROGRAM OVERVIEW

The Bachelor of Science (B.S.) in Computer Information Systems (CIS) at the University of the Incarnate Word is a 120-hour degree program designed to prepare students with the technical, interpersonal, ethical and industry knowledge they need to become information systems professionals. The CIS course curriculum incorporates the best guidance from professional organizations, regional businesses and national-level recommendations for technical curriculum development. This enables our curriculum to reflect current and leading-edge knowledge and skills. The CIS program also continues to incorporate emerging technologies and practices of the global environment in which we live. Students pursuing the Cyber Security concentration specialize in securing the networks and information that users and organizations rely on using such methods as cryptography, digital forensics, intrusion detection/prevention systems, network penetration testing and more.

QUICK FACTS

Opportunities in computer information systems are growing at a much more rapid pace than in other professions in the U.S., according to the U.S. Bureau of Labor Statistics. Not only do several CIS jobs report a high median wage, but the outlook is extremely promising, with some CIS-related occupations showing a projected growth rate of up to 30 percent in the next 10 years. The extensive career preparation that students receive as part of the CIS program helps ready them for management positions because, in addition to learning the technical aspects of computer information systems, they will have learned teamwork, problem-solving, visual modeling, applied project management and business processes.

PREREQUISITES AND COURSES

The requirements for admission to the B.S. in Computer Information Systems program with a Cyber Security Track are the same as the requirements for admission to the University of the Incarnate Word.

CONTACT

UIW Admissions
(210) 829-6005
admission@uiwtx.edu

YOUR JOURNEY OUR MISSION

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B.S. in **Computer Information Systems - Cyber Security**

FRESHMAN YEAR

Fall

CIS 1100: Orientation to CIS (1 hour)
CIS 1301: Computer Information Systems (3 hours)
CIS 2328: Hardware and Systems Software (3 hours)
CIS 1333: Scripting Languages (3 hours)
FYES 1211: First Year Experience Seminar (2 hours)
ENGL 1311: Composition I (3 hours)
Total Hours: 15

Spring

CIS 2340: Intro to Operating Systems (3 hours)
CIS 2330: Programming Languages I (3 hours)
CIS 2335: Computer Networks (3 hours)
ENGL 1312: Composition II (3 hours)
MATH 2303: Probability and Statistics (3 hours)
Total Hours: 15

SOPHOMORE YEAR

Fall

CIS 2350: Linux Operating System (3 hours)
CIS 2368: Website Development I (3 hours)
CIS 3367: Networks and Telecommunications (3 hours)
PHIL 1381: Introduction to Philosophy (3 hours)
Modern Language I (3 hours)
Total Hours: 15

Spring

CIS 3340: Windows Client-Server Network
   (3 hours)
CIS 3325: Linux Networking (3 hours)
CIS 3362: Systems Analysis and Design (3 hours)
PHIL 3312: Logic (3 hours)
Modern Language II (3 hours)
CIS 2190: Seminar in CIS & CSEC (1 hour)
Total Hours: 16

JUNIOR YEAR

Fall

CIS 3353: Computer Systems Security (3 hours)
CIS 3310: Database Management Systems (3 hours)
ECON 2301: Macroeconomics (3 hours)
Science Course with Lab (4 hours)
Elective Course (3000+) (3 hours)
Total Hours: 16

Spring

CIS 4355: Cloud Computing (3 hours)
CIS 3335: Cryptography (3 hours)
CIS 3319: Internship in Computer Information
   Systems (3 hours)
ENGL 2310: World Literature Studies (3 hours)
Elective Course (3000+) (3 hours)
Total Hours: 15

SENIOR YEAR

Fall

CIS 3345: Digital Forensics (3 hours)
CIS 3370: Intrusion Detection System (3 hours)
*1st Additional CIS Specialization Course (3 hours)
Fine Arts (3 hours)
RELS Religious Studies (3 hours)
Total Hours: 15

Spring

CIS 4390: CIS Capstone (3 hours)
CIS 4370: Network Penetration Testing (3 hours)
*2nd Additional CIS Specialization Course (3 hours)
HIST 1311, 1312, 1321 or 1322 (3 hours)
PEHP Physical Fitness Course (1 hour)
Total Hours: 13

*Note 1: Specialization options include CIS 3330, CIS 3360, CIS 3365, CIS 3380, CIS 4330, CIS 4375 and CIS 4380.

120 hours needed to complete the B.S. in Computer Information Systems with a Cyber Security track.