

# Bachelor of Science in Computer Science Online



## PROGRAM OVERVIEW

The Bachelor of Science (B.S.) degree in Computer Science is designed so that students will have a foundation in a wide range of disciplines in the Computer Science and Emerging Technologies (CSET) fields. Students take CSET core courses intermixed with courses specific to their concentration. CSET offers three concentrations to choose from in the B.S. Computer Science degree. These concentrations help narrow down a desired career path while still leaving room for other opportunities.

**Software Development:** prepares students for entry-level positions as software developers/engineers or to earn a graduate degree in Computer Science/Information Systems.

**Software Entrepreneurship:** prepares students for graduate studies and entry-level positions in information management, information technology, system analysis or data security.

**Network & Data Communications:** prepares students to enter Information Technology (I.T.) professions. Specifically concentrating on network and data systems, this program will provide learners with advanced concepts of data communications, packet switched networking, and interlaced with aspects of cybersecurity.

## POSSIBLE CAREERS

Computer programmer, Computer systems analyst, Database administrator, Mobile applications developer, Network architect, Sales engineer, Software architect, Software engineer, Software tester, Web developer



For more  
information,  
contact your local  
ONU+ Site Director.

*Founded in 1907, Olivet Nazarene University is a Christian liberal arts university accredited by the Higher Learning Commission and affiliated with the Church of the Nazarene. Olivet exists to provide a university-level liberal arts "Education with a Christian Purpose." With a main campus in Bourbonnais, Illinois, just 45 miles from Chicago, Olivet serves about 3,500 students on campus and online.*

## COURSE WORK

### Computer Science Major Courses

COMP 120	Introduction to Programming
COMP 125	Cloud Foundations
COMP 150	Programming: Control Structures
COMP 227	System Administration
COMP 237	Network Technologies
COMP 246	Database Programming
COMP 247	Database Design & Administration
COMP 334	Digital Law & Ethics
COMP 337	Digital Systems Security
COMP 355	Agile Methodologies
COMP 360	Cryptography & Blockchain

### PLUS COMPLETION OF ONE CONCENTRATION:

#### Networking and Data Communications Concentration

- COMP 141 End User Systems I: Computer Hardware
- COMP 142 End User Systems II: Software
- COMP 230 ServerOps
- COMP 238 Packet Switching & Routing
- COMP 260 Shell Programming
- COMP 332 Linux System Administration
- COMP 333 Windows Server Management
- COMP 338 Wireless Technologies & RF
- COMP 345 Cloud Architecture
- COMP 348 Packet Analysis & Inspection
- COMP 420 Risk Mgmt. & Bsns. Continuity Planning

#### Software Development Concentration

- COMP 250 Programming: Data Structures
- COMP 340 Human Computer Interface
- COMP 350 Programming: Object Oriented
- COMP 381 Systems Programming
- COMP 445 Big Data
- COMP 475 Theory of Computation
- Choose 2 courses: COMP 322, 325, 330, or 347
- Required Supporting Courses:
  - MATH 137 Applied Calculus (or MATH 147)
  - MATH 311 Discrete Mathematics

#### Software Entrepreneurship Concentration

- COMP 250 Programming: Data Structures
- COMP 340 Human Computer Interface
- COMP 350 Programming: Object Oriented
- COMP 381 Systems Programming
- COMP 493 Software Research & Dev. Project
- Choose 2 courses: COMP 322, 325, 330, 347, 445, or 475
- Required Supporting Courses:
  - ACCT 110 Financial Accounting
  - BSNS 160 Principles of Management
  - BSNS 253 Principles of Marketing
  - Choose 1: MATH 117, 137, or 147

#### General Education Requirements

THEO 110, BLIT 210, CMIN 310, ENGL 109, ENGL 210, COMM 105, HIST 200, MATH 103 or higher, Approved Stewardship Course, Social Science Course, Humanities Courses, and International Culture Course