COMPUTER SCIENCE, B.S. - CONCENTRATION: INFORMATION SYSTEMS

120 Overall Credits Required

LIBERAL EDUCATION PROGRAM AND WRITING REQUIREMENTS

Liberal Education Program

Students must complete a comprehensive three-tiered Liberal Education Program (LEP). View all requirements of the tiers on the Liberal Education Program.

While the choice of courses that fulfill the requirements is generally left up to students, courses in the major and/or cognate may also satisfy LEP requirements. These shared courses are recommended below to fulfill both areas, although the course credits are only counted once towards the 120 credits required for graduation.

Tier 1 – Quantitative Reasoning (select one from):
MAT 120 – College Algebra
MAT 122 – Precalculus
MAT 124 – Finite Mathematics

Tier 3 – Capstone:
CSC 400 – Computer Science Project Seminar

Writing Requirements (“W-Courses”)

Three W-courses are required. These may not be taken until after a student has passed ENG 112 — Writing Arguments. W-courses may count toward LEP, major, or cognate requirements, as well as free electives. Course sections that meet this requirement are designated by section numbers ending in “W”.

Transfer students who enter with 60 to 89 credits are required to pass two W-courses, while transfer students who enter with 90 credits or more must pass one W-course.

MAJOR REQUIREMENTS

43 Credits Required

Computer Science Requirements
28 Credits Required
CSC 152 — CS1: Programming Fundamentals
CSC 207 — Computer Systems
CSC 212 — CS2: Data Structures
CSC 229 — Object-Oriented Programming
CSC 235 — Web and Database Development
CSC 265 — Computer Networking and Security I
CSC 324 — Computer Ethics
CSC 330 — Software Design and Development
CSC 400 — Computer Science Project Seminar

Information Systems Concentration
15 Credits Required

CSC 424 — System Administration

Select four courses from:

- CSC 310 — Multimedia Systems
- CSC 334 — Human Computer Interaction
- CSC 335 — Database System
- CSC 341 — Digital Imaging
- CSC 398 — Special Topics
- CSC 431 — Computer Graphics
- CSC 443 — Internet Programming
- CSC 451 — Fundamentals of Deep Learning
- CSC 453 — Information Security
- CSC 465 — Computer Networking and Security II
- CSC 476 — Fundamentals of Data Warehousing
- CSC 477 — Data Mining
- CSC 481 — Artificial Intelligence
- CSC 497 — Computer Science Internship

COGNATE REQUIREMENTS

25 Credits Required (minimum)

Requirements:

BIS 370
- Business Information Systems

MAT 139
— Short Course in Calculus

MAT 178
— Elementary Discrete Mathematics

MAT 221
— Intermediate Applied Statistics

Select 1 courses from (3-4 credits):
MAT 120  
– College Algebra

MAT 122  
– Precalculus

MAT 124  
– Finite Mathematics

Select 3 courses from (9-10 credits):

ACC 200  
- Principles of Financial Accounting

ACC 210  
- Managerial Accounting

BIS 365  
- Systems Thinking for BIS

BIS 371  
- Information System Analysis and Design Techniques

BIS 375  
- Decision Support Systems

BIS 400  
- Global Information Systems

BIS 430  
- Project Management

BIS 460  
- BIS Security Management

BIS 470  
- Management of Information Systems Design

ENG 304  
- Technical Writing and Communication

FREE ELECTIVES

Students must take remaining credits to reach Overall Credits Required (listed above).