COMPUTER SCIENCE FOUNDATIONS OPTION (94–96 CREDITS)

STUDENT LEARNING OUTCOMES for the Bachelor of Arts in Computer Science, Foundations Option, may be found at www.ewu.edu/csslo

Note: two years of a single high school foreign language or one year of a single college level foreign language is required.

Required Computer Science Courses
CSCD 210 Programming Principles I (5)
CSCD 211 Programming Principles II (5)
CSCD 240 C and Unix Programming (5)
CSCD 300 Data Structures (5)
CSCD 320 Algorithms (4)
CSCD 327 Relational Database Systems (4)
CSCD 330 Computer Networks (4)
CSCD 350 Software Engineering (4)
CSCD 370 Graphical User Interface Programming (4)
CSCD 488 Senior Project (5)
CSCD 490 Senior Capstone (5)

Required Option Courses:
Additional electives: 20 hours of department approved coursework outside computer science.

Required Supporting Courses
Mathematics
MATH 301 Discrete Mathematics (5)

Philosophy
PHIL 212 Introduction to Ethics (5)

Electives: four additional elective courses.
CSCD 303 Computer & Information Security (4)
CSCD 305 C++ Programming (4)
CSCD 306 .NET Programming (4)
CSCD 316 Practical Problem Solving (2, 2) (Must take twice to count as elective)
CSCD 340 Operating Systems (5)
CSCD 378 Web Application Development (4)
CSCD 379 .NET Web Application Development (4)
CSCD 409 Scientific Programming (4)
CSCD 416 3D Modeling and Animation II (4) (Prereq CSCD 216)
CSCD 417 3D Modeling and Animation III (4)
CSCD 418 3D Modeling and Animation IV (4)
CSCD 420 Automata (4)
CSCD 427 Advanced Database Systems (4)
CSCD 429 Data Mining (4)
CSCD 433 Advanced Computer Networks (4)
CSCD 434 Network Security (4)
CSCD 435 Principles of Programming Languages (4)
CSCD 437 Secure Coding (4)
CSCD 440 Advanced Operating Systems (4)
CSCD 443 Distributed Multiprocessing Environments (4)
CSCD 454 Design Patterns (4)
CSCD 460 Advanced Architecture and Organization (4) (Prereq CSCD 260)
CSCD 461 Embedded Systems (4)
CSCD 470 3D Computer Graphics Principles (4)
CSCD 471 Advanced 3D Computer Graphics Programming (4)
CSCD 474 Computer Game Development (4)
CSCD 487 Human Computer Interface (4)
CSCD 495 Internship (two 4–5 credit internships are allowed)
CSCD 396, 398, 399, 3xx, 439, 496, 498, 499, 4xx (4–5) prior departmental approval of topic content is required.