CEDARVILLE UNIVERSITY™

COMPUTER SCIENCE

Curriculum and Prerequisites for the B.S. Degree

FRESHMAN

FALL	SPRING
General Physics I 4 PHYS 2110	
Calculus I 5 MATH 1710	Calculus II 5 MATH 1720
Intro to Cybersecurity 3 CY 1000	
C++ Programing 2 CS 1210	Obj Oriented Design C++ 3 CS 1220
Digital Logic Design 3 EGCP 1010	

SOPHOMORE

FALL	SPRING
General Physics II or Intro to Biology 4 PHYS 2120 BIO 1110	
Cyber Defense 3 CY 3420	Discrete Math & Prob Principles 3 MATH 2520
Programming Lang Survey 3 CS 3210	Operating Systems or Data Structures 3 CS2210/3310
Data Structures or Operating Systems 3 CS2210/3310	Computer Architecture 3 EGCP 3210

JUNIOR

FALL	SPRING
Computer Networks 3 EGCP 4310	Computer Science 3 Elective
Computer Science 3 Elective	Web Applications 3 CS 3320
Algorithms 3 CS 3410	Database 3 CS 3610

SENIOR

FALL	SPRING
Computer Science 3 Elective	Compiler Theory 3 CS 3510
Software Engineer I 3 CS 4810	Software Engineer II 4 CS 4820
Senior Seminar 0 EGGN 4010	Professional Ethics 3 EGGN 3110

Prerequisite

Corequesite

Credit 3 hours

Cyber Operations Courses

Math and Science Courses

CS Electives
- 3320 Linux Sys Programming
- 4310 Cyber Operations
- 4320 Software Security
- 4410 Parallel Computing
- 4430 Machine Learning
- 4710 Computer Graphics
- 4730 VR Applications

EGCP Electives
- 3010 Adv Digital Logic Design
- 4210 Adv Comp Architecture

Bible Courses

The Bible and the Gospel	Old Testament Literature	New Testament Literature	Theology I	Theology II
3 BTGE 1725	3 BTGE 2730	3 BTGE 2740	3 BTGE 3755	3 BTGE 3765

From the Office of The Dean
School of Engineering and Computer Science

☐ Global Awareness requirement ☐ Assessment Exam ____/____/____

General Education Courses

Physical Activity and Healthy Living	Composition	Fund of Speech	Politics and American Culture	Intro to Humanities	Biology	History	Literature	Social Science
2 PEF 1990	3 ENG 1400	3 COM 1100	3 GSS 1100	3 HUM 1400	3.5 Elective	3 Elective	3 Elective	3 Elective