COMPUTER SCIENCE, BACHELOR OF SCIENCE WITH A CONCENTRATION IN INTERACTIVE MULTIMEDIA (B.S.)

Program Objectives

The mission of the Bachelor of Science in Computer Science program is to provide students with an education that will prepare them to develop a career in the fields of computer science or computer forensics.

Program Requirements

CIP Code: 11.0101

Summary Checklist for General Education

Code	Title	Hours
Element 1		
A: Written Communication (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/)		3
B: Written Communication (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/)		3
C: Oral Communication (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-1/)		3
Element 2		
Quantitative Reasoning (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-2/)		3
Element 3		
A: Arts (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-3/)		3
B: Humanities (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-3/)		3
Element 4		
Natural Sciences (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-4/)		6
Element 5		
A: Historical Science (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-5/)		3
B: Social Behavioral Science (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-5/)		3
Element 6		
Diversity of Perspectives Experiences (http://catalogs.eku.edu/undergraduate/general-academic-information/general-education-requirements/element-6/)		6
Total Hours		**36**

Students are expected to complete Elements 1 and 2 within their first 60 hours of college credit.

Major

Code	Title	Hours
University Graduation Requirements		
General Education		36
Student Success Seminar		
SCO 100	Student Success Seminar	1
Writing Intensive Course (Hrs. incorporated into Major/Supporting/Gen Ed/Free Electives category)		
Upper division courses (42 hrs. distributed throughout Major/Supporting/Gen Ed/Free Electives categories)		
ACCT - Computer Science majors will fulfill ACCT with the following. (Credit hours may be incorporated into Major or Supporting requirements)		
Choose from one of the following:		
CSC 349	Applied Learning in Computer Science	
CSC 440	Applied Software Engineering	
CSC 491	Game Design Capstone	
CSC 549	Computer Forensics Capstone	
CSC 495	Independent Work (with a program-approved topic)	
Major Requirements		
Core Courses		
CSC 185	Discrete Structures I [1]	3
CSC 190	Object- Oriented Programming I [1]	3
CSC 191	Object-Oriented Programming II	3
CSC 195	Discrete Structures II	3
CSC 308	Mobile App Development for Apple iOS	3
CSC 310	Data Structures	3
CSC 313	Database Systems	3
CSC 338	Fundamentals of Cybersecurity	3
CSC 340	Ethics & Software Engineering	3
CSC 499	CS Career Preparation	1
Concentrations		
Students must select one of the following Concentrations:		
Computer Science (General)		
Computer Technology		
Interactive Multimedia		47
Artificial Intelligence in Data Science		
Supporting Course Requirements		
Choose from 16-34 hours of supporting courses		
16-18 hours of Computer Science (General)		
24-25 hours of Computer Technology		
25-28 hours of Interactive Multimedia		
30-34 hours of Artificial Intelligence in Data Science		
Free Electives		
Choose from 14 hours of free electives		14
Total Hours		**120**

[1]

Students without a 25 ACT or 590 SAT will be advised to take CSC 170 Intro to Game Programming as preparation for CSC 185 Discrete Structures I and CSC 190 Object- Oriented Programming I.

Concentration

Code	Title	Hours
Concentration Courses		
CSC 140	Introduction to Computer Game Design	3
CSC 315	3D Modeling	3
CSC 316	3D Game Engine Design	3
CSC 550	Graphics Programming	3
CSC 520	Multimedia System and Forensics	3
or CSC 555	Topics in Multimedia:___	
CSC 491	Game Design Capstone	6
One CSC course at 300-level or above [1]		3
Choose from one hour of the following:		1
CSC 494	Innovative Problem Solving	
CSC 495	Independent Work	
CSC 496	Senior Seminar	
Supporting Course Requirements		
BEM 200	Mass Media and Society (Element 5B) [G]	
EET 252	Digital Electronics	3
INF 123	Exploring Virtual Worlds	3
INF 391	Game Level Design for ____	3
MAT 234	Calculus I (Element 2) [G]	
MAT 239	Linear Algebra and Matrices	3
MAT 244	Calculus II	4
MUS 290	Film Scoring	2
PHY 201	University Physics I (Element 4) [G]	
STA 270	Applied Statistics	4
ART 100	Drawing I (Element 3A) [G]	
or ART 200	Art Appreciation: Orientation	
Total Hours		**47**

[1]

Except CSC 349 Applied Learning in Computer Science

[G]
Course also satisfies a General Education element. Hours are included within the 36 hr. General Education requirement above.