

## Applied Computer Programming Electives

### Fall Semester

Course No.	Name	Prerequisites
CS 4173	Video Game Development	CS 2133 and CS 2433 and MATH 2144
CS/ECEN 4283	Computer Networks	CS 2133 and (CS 3443 or ECEN 3213), and UNIX knowledge
CS/MATH 4513	Numerical Mathematics: Analysis	MATH 2233 and 3013, knowledge of programming or consent of instructor
CS 4743	Extended Reality – face-to-face	CS 2133 and CS 3653 and (CS 2433 or instructor's permission)
CS 4783	Machine Learning	(CS 3353 or CS 4343) and MATH 3013
CS 4983	Senior Capstone Project (not Fall '23)	CS 3353 and CS 3363 and CS 3443

### Spring Semester

Course No.	Name	Prerequisites
CS 4523	Cloud Computing and Distributed Systems	CS 3443 and CS 3353
CS 4570	Quantum Computing Basics (Sp 2023)	CS 2133, MATH 3013
CS 4623	Modeling of Cyber Physical Systems	CS 2133
CS 4743	Extended Reality – online	CS 2133 and CS 3653 and (CS 2433 or instructor's permission)
CS 4793	Artificial Intelligence	CS 3353
CS 4983	Senior Capstone Project	CS 3353 and CS 3363 and CS 3443

### Fall and Spring

Course Number	Name	Prerequisites
CS 2351	Unix Programming	CS 1113 or EET 2303
CS 3570	Special Problems in Computer Science	Junior standing and consent of instructor.

### Fall, Spring, and Summer

Course Number	Name	Prerequisites
CS 3030	Industrial Practice in Computer Science	CS 3443 and MATH 2144 and permission from Department Head
CS 4570	Special Topics in Computing	Honors Program participation, junior standing.