



To satisfy degree requirements the student may select from any of these listed courses to satisfy the electives for selected concentration area. **Any computer science courses offered which is not specified as a required course for either concentration can also be used . For more detail concerning electives contact your advisor.**

### Information Systems

CMPS 250	Business Applications with COBOL	CMPS 365	Computers, Information and Society
CMPS 285	System Administration and Maintenance	CMPS 388	Human-Computer Interaction
CMPS 315	Information Systems	CMPS 415	Systems Analysis and Design
CMPS 350	Web Based Programming	CMPS 433	Telecommunications

### Cybersecurity

CMPS 355	Cyber Forensics	CMPS 485	Disaster Recovery
CMPS 372	Cloud Computing	CMPS 493	Foundations of Cryptography
CMPS 375	Information Security	CMPS 494	Cyptographic Protocols
CMPS 385	Legal Issues in Information Technology	CMPS 495	Enterprise Security Management
CMPS 426	Network Security	CMPS 496	Internet Security Protocols

### Data Analytic & Sciences

CMPS 307	Numerical Analysis	CMPS 425	Robotics
CMPS 335	Wireless Sensor Networks	CMPS 434	Networks and Graph Theory
CMPS 360	Scientific Programming	CMPS 435	Introduction to Neural Networks
CMPS 386	Modeling & Simulation	CMPS 436	Parallel Computing and Application
CMPS 402	Computer Architecture	CMPS 470	Computer Graphics
CMPS 407	Numerical Methods	CMPS 480	Artificial Intelligence
CMPS 412	Theory of Computing		

### Mobile Application Electives

CMPS 305	Social Networking	CMPS 375	Information Security
CMPS 310	Game Programming	CMPS 387	Object Oriented Design Patterns
CMPS 318	Computer Animation	CMPS 415	Systems Analysis and Design

### Common Electives

CMPS 240	Practical Experience I	CMPS 440	Practical Experience III
CMPS 340	Practical Experience II	CMPS 455	Special Projects
CMPS 371	Advanced Object-Oriented Programming		

**Note:**

Some computer science courses are designed primarily for non-majors and cannot be used as electives (CMPS 105, CMPS 270, and CMPS 290).