2014 Program Electives
Computer Science

Three additional elective courses. Select two from Group A and one from Group B.

**Group A**
- CSCD 303 Computer & Information Security (4)
- CSCD 305 C++ Programming (4)
- CSCD 316 Practical Problem Solving (2, 2)\(^1\)
- CSCD 370 Graphical User Interface Programming (4)
- CSCD 371 .NET Programming (4)
- CSCD 372 Android Mobile Development (4)
- CSCD 373 iPhone Mobile Development (4)
- CSCD 378 Web Application Development (4)
- CSCD 379 .NET Web Application Development (4)
- CSCD 409 Scientific Programming (4)
- CSCD 416 3D Modeling & Animation II (4)\(^2\)
- CSCD 417 3D Modeling & Animation III (4)
- CSCD 418 3D Modeling & Animation IV (4)
- CSCD 420 Automata (4)
- CSCD 421 Automata & Languages (4)
- CSCD 422 Compiler Design (4)
- CSCD 427 Advanced Database Systems (4)
- CSCD 429 Data Mining (4)\(^2\)
- CSCD 433 Advanced Network Concepts (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 460 Advanced Architecture and Organization (4)
- CSCD 461 Embedded Systems (4)
- CSCD 462 Embedded Real-Time Control (4)
- CSCD 467 Concurrent Systems (4)
- CSCD 470 3D Computer Graphics Principles (4)
- CSCD 471 Advanced 3D Computer Graphics (4)\(^3\)
- CSCD 474 Computer Game Development (4)
- CSCD 480 Intelligent Systems (4)
- CSCD 487 Human Computer Interface (4)
- CSCD 495 Internship (two 2-4-credit internships are allowed)

CSCD 396, 398, 399, 3xx, 439, 496, 498, 499, 4xx (4 cr) prior departmental approval of topic content is required.

**Group B**
Must choose at least one course from the following list:
- Any General Education Natural Science Course
- BIOL 173 Biology III (4)
- CHEM 153 General Chemistry III (5)
- GEOL 122 Historical Geology (5)
- MATH 163 Calculus III (5)
- MATH 241 Calculus IV (5)
- MATH 370 Survey of Geometrics (5)
- MATH 401 Advanced Formal Logic (5)
- PHIL 301 Introduction to Formal Logic (5)
- PHYS 153 General Physics III (4)

**And one of the following not previously taken:**
- PHYS 161 Mechanics Laboratory (1)
- PHYS 162 Heat and Optics Laboratory (1)
- PHYS 163 Instrumentation Lab I (1)
- PHYS 164 Instrumentation Lab II (1)

Other course with prior approval of the department required.

**Notes:**
No course may be used to satisfy both an elective and an advanced coursework requirement
\(^1\) CSCD 316 must be taken twice for 4 credits to be counted as an elective
\(^2\) CSCD 216 prerequisite
\(^3\) CSCD 470 prerequisite
3/13/14