CSCI Core Curriculum 2014

Notes: Math prequisites are minimum requirements and may not be taken concurrently. CSCI 491, 492, 493 should be taken in your last three quarters as an undergraduate and require permission of the department to register. Please refer to the catalog for a full list of requirements for the BS in Computer Science. You must fulfill the requirements of the year in which you declared.

CSCI Electives (with prerequisites in parentheses)

A student must take 16 credits from the list of electives below with no more than 4 credits coming from independent study:

- CSCI 321 Game Programming (CSCI 241)
- CSCI 342 Web Scripting (CSCI 330)
- CSCI 351 Windows Software Development (CSCI 345)
- CSCI 372 Robotics: Applications of Artificial Intelligence (Permission of Instructor)
- CSCI 380 Numerical Computations (CSCI 241, MATH 204)
- CSCI 397 This course number is reserved for new topics. It will always have a single letter suffix such as 397C. (Prereqs TBA)
- CSCI 400 Independent Study (Permission of Instructor)
- CSCI 401 Automata and Formal Language Theory (CSCI 301)
- CSCI 402 Artificial Intelligence (CSCI 301)
- CSCI 404 Natural Language Processing (CSCI 301)
- CSCI 410 Programming Languages (CSCI 301)
- CSCI 412 Mobile Device Programming (CSCI 330, CSCI 367)
- CSCI 430 Database Theory (CSCI 301, CSCI 330)
- CSCI 442 Advanced Web Programming in Java (CSCI 342, CSCI 351 recommended)
- CSCI 450 Compilers (CSCI 301)
- CSCI 460 Operating Systems (CSCI 322, CSCI 352)
- CSCI 461 Computer Security (CSCI 301, CSCI 367 recommended)
- CSCI 462 OS Device Drivers (CSCI 460)
- CSCI 463 Cyber Defense (Permission of Instructor)
- CSCI 467 Computer Networks II (CSCI 367)
- CSCI 474 Bioinformatics (Permission of Instructor)
- CSCI 480 Computer Graphics (CSCI 241, MATH 204)
- CSCI 497 This course number is reserved for new topics. It will always have a single letter suffix such as 497D. (Prereqs TBA)
- M/CS 335 Linear Optimization (MATH 204, CSCI 141)
- M/CS 375 Numerical Computation (MATH 204, CSCI 141)
- M/CS 435 Nonlinear Optimization (MATH 204, 224, CSCI 141)
- M/CS 475 Numerical Analysis (MATH 224, M/CS 375)