CSC 108 Introduction to Web Computing  
Introduction to computer science through web sites, web pages, web page programming, HTML, XML, CSS and JavaScript. The history and social impact of computers, networks and the World Wide Web are included in the course.  
Corequisite: CSC 108L.  
Offered: fall & spring.  
1 Credit  
CSC 108L Introduction to Web Computing Laboratory  
Required lab for CSC 108.  
Corequisite: CSC 108.  
1 Credit  

CSC 109 Robotics Introduction to Computer Science  
Introduction to computer science through robotics, the basics of artificial intelligence and the fundamental ideas of logic, algorithms, computer systems and programming. Includes ethical issues in robotics.  
Corequisite: CSC 109L.  
Fulfills College Core: Ethics, Field 7 (Mathematical Sciences)  
Offered: fall.  
1 Credit  
CSC 109L Robotics Introduction to Computer Science Laboratory  
Required lab for CSC 109.  
Corequisite: CSC 109.  
Fulfills College Core: Ethics, Field 7 (Mathematical Sciences)  
Offered: fall.  
1 Credit  

CSC 111 Introduction to Programming  
Algorithms, programming, computers, and applications to problem solving in Python.  
Corequisite: CSC 111L.  
Fulfills College Core: Field 7 (Mathematical Sciences)  
Offered: fall.  
1 Credit  
CSC 111L Introduction to Programming Laboratory  
Required lab for CSC 111.  
Corequisite: CSC 111.  
1 Credit  

CSC 112 Data Structures  
Basic concepts of object-oriented programming, recursion, and data structures, including lists, stacks, queues, and trees using Python.  
Prerequisite: minimum grade of C- in CSC 111 & CSC 111L.  
Corequisite: CSC 112L.  
Offered: spring.  
1 Credit  
CSC 112L Data Structures Laboratory  
Required lab for CSC 112.  
Prerequisite: minimum grade of C- in CSC 111 & CSC 111L.  
Corequisite: CSC 112.  
1 Credit  

CSC 127 Introduction to Game Design  
Computer game development and underlying computer concepts necessary for game design. Game components related to the player, stories, characters, game play, graphics, the interface and audio.  
Corequisite: CSC 127L.  
Fulfills College Core: Field 7 (Mathematical Sciences), Oral Communication  
Offered: fall 2015.  
1 Credit  
CSC 127L Intro to Game Design Laboratory  
Required lab for CSC 127.  
Corequisite: CSC 127.  
1 Credit  

CSC 213 Large Scale Programming  
Introduction to the design, implementation, and testing of larger software systems. Intensive instruction in Java including graphics and object-oriented design.  
Prerequisite: minimum grade of C- in CSC 112 & CSC 112L.  
Corequisite: CSC 213L.  
Offered: once a year.  
3 Credits  
CSC 213L Large Scale Programming Laboratory  
Required lab for CSC 213.  
Prerequisite: minimum grade of C- in CSC 112 & CSC 112L.  
Corequisite: CSC 213.  
1 Credit  

CSC 253 Computer Hardware  
Introduction to digital logic, Boolean algebra, hardware and computer organization. Overview of current architectures.  
Prerequisite: minimum grade of C- in CSC 111 & CSC 111L.  
Corequisite: CSC 253L.  
Offered: once a year.  
3 Credits  
CSC 253L Computer Hardware Laboratory  
Required lab for CSC 253.  
Prerequisite: minimum grade of C- in CSC 111 and CSC 111L.  
Corequisite: CSC 253.  
1 Credit  

CSC 281 Automata and Algorithms  
Formal language theory including finite and pushdown automata, grammars, Turing Machines and the Halting Problem. Provides an introduction to the design and analysis of algorithms, including classes of problems and methods for analysis.  
Prerequisite: minimum grade of C in CSC 112 & CSC 112L.  
Offered: once a year.  
3 Credits  
CSC 281L Automata and Algorithms Lab  
Optional lab for CSC 281.  
Prerequisites: Minimum grade of C in CSC 112 and CSC 112L.  
Corequisite: CSC 281.  
1 Credit  

CSC 310 Information Organization and Processing  
Databases, high-level organization and processing of information, SQL, and modern NOSQL systems.  
Prerequisite: minimum grade of C in CSC 112 & CSC 112L.  
Corequisite: CSC 310L.  
Offered: 2017-2018.  
3 Credits  
CSC 310L Information Organization and Processing Laboratory  
Required lab for CSC 310.  
Prerequisites: minimum grade of C in CSC 112 and CSC 112L.  
Corequisite: CSC 310.  
1 Credit  

CSC 320 The Social Impact of Computing  
Examines the societal issues involved in computing such as accessibility, ethical issues, privacy, censorship, social media, and professional responsibilities. Includes applications of information literacy techniques to the major.  
Prerequisite: minimum grade of C in CSC 112 & CSC 112L.  
Corequisite: CSC 320L.  
Fulfills College Core: Core Capstone  
Offered: spring.  
3 Credits
CSC 330 Distributed Computing 3 Credits
The design of operating system software, distributed applications, client/server and other models, security issues, and parallel programming on a High Performance Computing Cluster.
Prerequisite: CSC 253, CSC 253L, & minimum grade of C in CSC 112 & CSC 112L. Corequisite: CSC 330L.
Offered: 2017-2018.

CSC 330L Distributed Computing Laboratory 1 Credit
Required lab for CSC 330.
Prerequisite: CSC 253, CSC 253L, & minimum grade of C in CSC 112 & CSC 112L. Corequisite: CSC 330L.

CSC 351 Comparative Programming Languages 3 Credits
A study of programming languages and their implementations. Programming in logical and functional programming languages is included.
Prerequisite: minimum grade of C in CSC 112 & CSC 112L. Corequisite: CSC 351L.
Offered: spring 2017.

CSC 351L Comparative Programming Languages Laboratory 1 Credit
Required lab for CSC 351 Comparative Programming Languages.
Prerequisites: minimum grade of C in CSC 112 and 112L. Corequisite: CSC 351.

CSC 360 Intelligent Systems 3 Credits
An introduction to intelligent systems including logic and rule-based systems, machine learning, and applications of AI.
Prerequisite: minimum grade of C in CSC 112 & CSC 112L. Corequisite: CSC 360L.
Offered: fall 2016.

CSC 360L Intelligent Systems Laboratory 1 Credit
Required lab for CSC 360.
Prerequisite: minimum grade of C in CSC 112 and 112L. Corequisite: CSC 360.

CSC 380 Web Development 3 Credits
Web design principles, programming and scripting (both client-side and server-side), client/server mechanisms, search engines, and security.
Prerequisite: minimum grade of C in CSC 111 & CSC 111L and junior or senior standing. Corequisite: CSC 380L.
Offered: fall 2016.

CSC 380L Web Development Laboratory 1 Credit
Required lab for CSC 380.
Prerequisite: minimum grade of C in CSC 111 and 111L. Corequisite: CSC 380.

CSC 391 Computer Science Junior Seminar 1 Credit
Topic-focused exploration involving students and faculty.
Prerequisite: permission of instructor.

CSC 400 Special Topics in Computing 3 Credits
Current topics of interest to faculty and students. Possible topics: cryptography, advanced scripting languages, networking, etc.
Prerequisite: minimum grade of C- in either CSC 112 & CSC 112L or in CSC 212 & CSC 212L and in either MAT 111 or MAT 191. Corequisite: CSC 400L.
Restrictions: must be junior or senior Computer Science or Bioinformatics major.
Offered: every spring.

CSC 400L Special Topics in Computing Laboratory 1 Credit
Required weekly lab for CSC 400.
Prerequisite: minimum grade of C- in either CSC 112 & CSC 112L or in CSC 212 & CSC 212L and in either MAT 111 or MAT 191. Corequisite: CSC 400L.
Restrictions: must be junior or senior Computer Science or Bioinformatics major.
Offered: every spring.

CSC 491 Computer Science Senior Seminar 1 Credit
Topic-focused exploration involving students and faculty.
Prerequisite: permission of instructor.

CSC 497 Internship 1-3 Credits
Special projects for local institutions/businesses. Must be related to a specific focused task and involve a significant learning component. Internships require an application and approval by the associate dean. Credit is not given simply for a part-time job. Approved project proposal and results documentation required. Does not count as a CSC elective.
Prerequisite: permission of chair & associate dean.

CSC 498 Independent Project 3 Credits
A directed project course that includes research, design, and implementation of a software system.
Prerequisite: permission of instructor.

CSC 499 Independent Study 1-4 Credits
An in-depth study of a specific computing topic. Independent studies require an application and approval by associate dean.
Prerequisite: junior or senior standing; & permission of instructor, chair, & associate dean.