

7. Coursework and Schedule Structure

7a. Non-CS Coursework

- Statistics (STAT 108, 4 units) (meets G. E. Area B, Math Concepts (B3))
- Calculus I (MATH 105 or MATH 109, 3-4 units)(meets G. E. Area B, Math Concepts (B3))
- Discrete Mathematics (MATH 253, 3 units)

7b. CS Coursework (4-unit courses)

- Computer Science Foundations 1
- Computer Science Foundations 2
- Data Structures
- Architecture
- Algorithms
- Operating Systems
- Database Design
- Telecommunications & Networks
- Web Apps Using Databases
- Computer Security
- Software Engineering
- Computational Models
- 2 approved CS elective courses (3-4 units each; can be upper- or lower-division)

7c. Semester Structure and Schedule for New Course Offerings

	2011-2012	2012-2013	2013-2014	2014-2015
Fall	<ul style="list-style-type: none"> • Foundations 1 • Calculus I 	<ul style="list-style-type: none"> • Data Structures • Architecture • Statistics* 	<ul style="list-style-type: none"> • Database Design • Telecommunications & Networks 	<ul style="list-style-type: none"> • Software Engineering • CS Elective I
Spring	<ul style="list-style-type: none"> • Foundations 2 • Discrete Mathematics • (also Calculus I if not taken in Fall) 	<ul style="list-style-type: none"> • Algorithms • Operating Systems 	<ul style="list-style-type: none"> • Web Apps Using Databases • Computer Security 	<ul style="list-style-type: none"> • Computational Models • CS Elective II

* Statistics may be completed in any of the first four semesters.

Notes:

- The proposed program requires 62-64 units. The current CIS program requires 60 units. The current CS program requires 73 units.
- A **CS minor** requires a minimum of 18 units:
 - Computer Science Foundations 1
 - Computer Science Foundations 2

Revised Computer Science Degree Proposal

- three additional CS courses, two of which must be upper division.
- (Some upper division courses have additional prerequisites).
- A grade of C- or better is required in all courses for the major.
- Approved CS electives will include popular offerings from both degrees, such as Introduction to Linux, Robotics, Bioinformatics Programming, Python Programming, Java Programming, and Embedded Systems.