

**Computer Science Curriculum  
(for students entering in or After September 2008)**

<b>Freshman Year/Fall Semester</b>		<b>Cr.</b>	<b>Freshman Year/Spring Semester</b>		<b>Cr.</b>
__42.101	College Writing I	3	__42.102	College Writing II	3
__91.101	Computing I	4	__91.102	Computing II	4
__92.131	Calculus I	4	__92.132	Calculus II	4
___.	Gen. Ed. <sup>1</sup>	<u>3</u>	___.	Gen. Ed. <sup>1</sup>	<u>3</u>
		<b>14</b>			<b>14</b>
<b>Sophomore Year/Fall Semester</b>		<b>Cr.</b>	<b>Sophomore Year/Spring Semester</b>		<b>Cr.</b>
__91.201	Computing III	4	__42.220	Oral & Written Comm. for CS (Gen Ed.)	3
__91.203	Comp. Org. & Assembly Lang.	4	__91.204	Computing IV	3
__92.321	Discrete Structures I	3	__92.322	Discrete Structures II	3
__16.265	Logic Design	3	__92.386	Probability & Statistics I	3
___.	Natural Science <sup>2</sup>	<u>3</u>	___.	Natural Science with lab <sup>2</sup>	<u>4</u>
		<b>17</b>			<b>16</b>
<b>Junior Year/Fall Semester</b>		<b>Cr.</b>	<b>Junior Year/Spring Semester</b>		<b>Cr.</b>
__91.304	Foundations of Comp. Science	3	__91.301	Organization of Prog. Lang.	3
__91.305	Computer Architecture	3	__91.308	Intro. to Operating Systems	3
___.	Natural Science <sup>2</sup>	3	___.	Natural Science <sup>2</sup>	3
___.	CS Ethics <sup>1</sup>	3	___.	Gen. Ed. with Diversity <sup>1</sup>	3
___.	Free Elective	<u>3</u>	___.	Free Elective	<u>3</u>
		<b>15</b>			<b>15</b>
<b>Senior Year/Fall Semester</b>		<b>Cr.</b>	<b>Senior Year/Spring Semester</b>		<b>Cr.</b>
__91.404	Analysis of Algorithms	3	__91.____	Project Course (part 2) <sup>3</sup>	3
__91.____	Project Course (part 1) <sup>3</sup>	3	__91.____	Computer Science Elective	3
___.	Gen. Ed. <sup>1</sup>	3	___.	Free Elective	3
___.	Technical Elective <sup>4</sup>	3	___.	Technical Elective	3
___.	Free Elective (non-technical)	<u>3</u>	___.	Free Elective	<u>3</u>
		<b>15</b>			<b>15</b>

## Minimum Total Credits = 120

### Definitions and Notes

#### *Gen Ed Courses*

- CS students must complete six courses (18 credits) of courses that satisfy the [University General Education Requirements](#).
- Three of these must be approved as Arts and Humanities (AH) courses and three must be approved as Social Sciences (SS) courses.
- 42.220 Oral & Written Communication for Computer Science is required and counts as one of the three required AH Gen Eds.
- One of these must satisfy the [CS Ethics Requirement](#).
- One must satisfy the [University Diversity Requirement](#).
- Specific courses may be recommended for different CS Tracks.
- See the [University General Education Program](#) website for more detailed information.

#### *Natural Science Electives*

- CS students must complete 12 credits of natural science courses.
- These are courses offered by one of the four natural science departments in the College of Arts & Sciences:
  - Biological Sciences
  - Chemistry
  - Environmental, Earth, and Atmospheric Sciences
  - Physics and Applied Physics
- Courses that fulfill this requirement must be classified as required or elective courses for the majors in those departments.
- This requirement may be satisfied by completing three 3-credit courses that do *not* include labs plus one 4-credit course that *does* include a lab (totaling 13 credits), or three 4-credit courses that *do* include labs (totaling 12 credits).
  - Thus, at least one natural science course must include a lab.
- An additional constraint is that the total number of credits applied to this requirement plus the number of credits earned in Math (92.xxx) courses must total at least 30.
- Specific courses may be recommended for different CS Tracks.
- See the [CS Dept. Policy on Natural Science Electives](#) for more detailed information.

#### *Technical Electives*

- CS students must complete 6 credits of technical electives.
- These are courses offered by the College of Arts & Sciences (Sciences Division) or the College of Engineering.
- Courses that fulfill this requirement must be classified as required or elective courses for the majors in those departments.
- Specific courses may be recommended for different CS Tracks.

*Non-Technical Elective*

- CS students must complete 3 credits of a non-technical elective.
- These are courses offered by the College of Arts & Sciences (Fine Arts, Humanities & Social Sciences Division), Graduate School of Education, School of Health & Environment, or College of Management that have a specific non-technical focus.
- Specific courses may be recommended for different CS Tracks.

*General (Free) Elective*

- CS students must complete 9 credits of almost any course offered by the University.
- Courses taken to fulfill this requirement must not be below the level of any required course.
- Specific courses may be recommended for different CS Tracks.
- See the [CS Dept. Policy on General Electives](#) for more detailed information.

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- Courses listed in “\*\*\*\*” may generally be taken in any order, within the confines of specified course prerequisites.
- Some CS Tracks may put constraints on the ordering of these electives.
- Faculty advisors recommend that two-course sequences (such as Chemistry I and II) be taken in successive semesters rather than taking part 1 and then waiting one or more semesters to take part 2.