

Computer Science Major Requirements (13.25 credits) [updated Spr21]

[prerequisites are shown in brackets]

<p>Core Courses (5.25 credits)</p> <p>CSCI 100: Scientific Computing or CSCI 102: Multimedia Computing CSCI 110: Imperative Problem Solving [CS100/102] CSCI 120: Data Structures and Algorithms & lab (1.25 credits) [CS110] MATH 110: Applied Differential Calculus^ [M105 or placement] MATH 120: Applied Integral Calculus ^ [M110] MATH 130: Mathematical Foundations of Computing [any CS course]</p>
<p>Elective Courses (5.0 credits)</p> <p>CSCI 210 [CS120] or CSCI 212 [CS120] CSCI 220 [CS120+M120+M130] or CSCI 222 [CS120] CSCI 230 (W) [CS120] or CSCI 232 [CS120] Two CSCI 3xx courses (prereqs: 300 & 310 [CS2xx+M120+M130], 320 & 330 [CS120])</p>
<p>Independent Study (3.0 credits)</p> <p>CSCI 200: Algorithm Analysis (Junior I.S.) [M120+M130] and [CS230 or CS120+W] CSCI 451: Senior I.S. (first semester) [CS200] CSCI 452: Senior I.S. (second semester) [CS451]</p>

^ 0.5 credits, half-semester

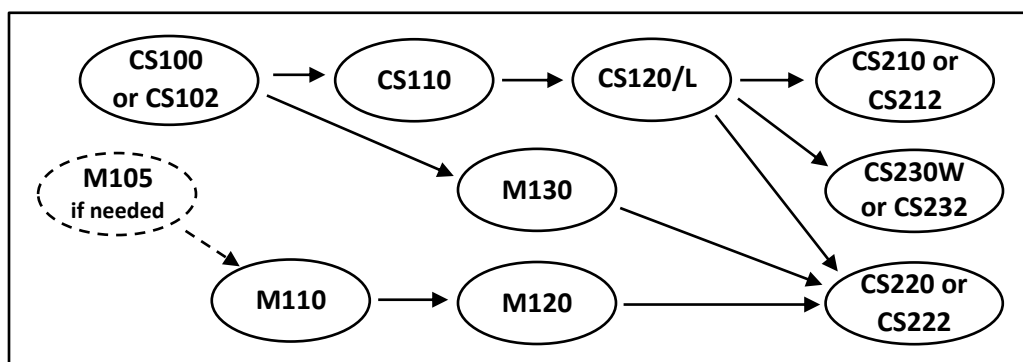
<p>Computer Science Minor (7.75 credits)</p> <p>CSCI 100 or 102; CSCI 110; CSCI 120; MATH 110; MATH 130; and three full-credit CSCI 2xx/3xx courses</p>

<p>Offered EVERY semester</p> <p>CSCI 100: Scientific Computing CSCI 110: Imperative Problem Solving CSCI 120: Data Structures and Algorithms MATH 110: Applied Differential Calculus MATH 120: Applied Integral Calculus</p>	
<p>FALL only</p> <p>CSCI 102: Multimedia Computing CSCI 210: Principles of Comp. Organization* CSCI 212: Operating Systems** CSCI 230: Software Engineering (W) CSCI 300: Computer Graphics* CSCI 320: User Interface Design**</p> <p>*Offered fall of odd years only (F21, F23) **Offered fall of even years only (F22, F24)</p>	<p>SPRING only</p> <p>MATH 130: Mathematical Foundations of Computing CSCI 200: Algorithm Analysis CSCI 220: Theory of Computation** CSCI 222: Programming Languages* CSCI 232: Software Engineering—Databases CSCI 310: Machine Intelligence* CSCI 330: Computer Networking and Communication**</p> <p>*Offered spring of odd years only (Spr23, Spr25) **Offered spring of even years only (Spr22, Spr24)</p>

- CS majors or minors may minor in SDS, but no other major/minor combinations between these two fields are allowed.
- Students may place out of required math courses via AP Calculus exam scores or Wooster’s calculus placement exam.
- Students with a score of 4 or 5 on the AP Computer Science A exam receive credit for CS 100 and placement into CS 110. If they also have a calculus placement of MATH 120 or higher, then they may also skip CS 110 and begin in CS 120.

CS major prerequisite structure

(first 4-5 semesters only)



Sample Course Timelines

Typical		Accelerated		Delayed Start	
<i>Fall</i>	<i>Spring</i>	<i>Fall</i>	<i>Spring</i>	<i>Fall</i>	<i>Spring</i>
<i>First Year</i>		<i>First Year</i>		<i>First Year</i>	
CS 100 or 102	CS 110	CS 110	CS 120		CS 100 or 102
M 110 & 120	M 130	M 110 & 120	M 130		[M 105, if needed]
<i>Sophomore Year</i>		<i>Sophomore Year</i>		<i>Sophomore Year</i>	
CS 120	CS 22x	CS 230 (W)	CS 22x	CS 110	CS 120
	[CS 330 [#] or 232*]	CS 21x	CS 232*	M 110 & 120	M 130
		[CS 320 [%]]	[CS 310 [#] or 330 [#]]		
<i>Junior Year</i>		<i>Junior Year</i>		<i>Junior Year</i>	
CS 230 (W)	CS 200	CS 300 [%] or 320 [%]	CS 200	CS 230 (W)	CS 200
CS 21x	CS 310 [#] or 330 [#]		CS 310 [#] or 330 [#]	CS 21x	CS 22x
[CS 300 [%] or 320 [%]]				[CS 320 [%]]	[CS 232*]
<i>Senior Year</i>		<i>Senior Year</i>		<i>Senior Year</i>	
CS 451	CS 452	CS 451	CS 452	CS 451	CS 452
CS 300 [%] or 320 [%]				CS 300 [%] or 320 [%]	CS 310 [#] or 330 [#]

[Courses shown in brackets are optional substitution opportunities, replacing a related course in a different semester]

% CSCI 300 is offered in fall of odd years only (F21, F23), while CSCI 320 is offered in fall of even years only (F22, F24)

CSCI 310 is offered in spring of odd years only (Spr23, Spr25), while CSCI 330 is offered in spring of even years only (Spr22, Spr24)

* CSCI 232 + any W course, will replace the CS 230W requirement