

### Computer Science Sample Curriculum

	WashU Course	Fall	Spring
<b>Home Institution (3-4 years)</b>			
Calculus II, III	Math 132, 233	3	3
Differential Equations	Math 217***	3	
General Physics I, II	Physics 117A, 118A	4	4
Computer Science I	CSE 131	3	
English Composition	CWP 100		3
Humanities and social science electives		9	9
Additional home institution degree requirements		varies	varies
90 units or more of transferable college credit	<b>Subtotal</b>	<b>90+ to transfer</b>	
<b>First Year of Dual Degree Curriculum at WashU</b>			
Computer Science II	CSE 132		3
Logic and Discrete Mathematics	CSE 240	3	
Algorithms and Data Structures	CSE 247	3	
Engineering Mathematics A or Matrix Algebra	ESE 318*** or Math 309	3	
Probability and Statistics for Engineering	ESE 326	3	
CSE Technical Elective units *		3	3
Object-Oriented Software Development Lab	CSE 332S		3
Technical Writing	ENGR 310		3
Analysis of Algorithms	CSE 347		3
	<b>Subtotal</b>	<b>15</b>	<b>15</b>
<b>Second Year of Dual Degree Curriculum at WashU</b>			
CSE Technical Elective units *		9	9
Engineering Professional Practice** or Free Elective	EN 4502	1	
Engineering Professional Practice** or Free Elective	EN 4501, 4503		2
Free elective		6	3
	<b>Subtotal</b>	<b>16</b>	<b>14</b>
60 units or more must be taken at Washington Univ.	<b>Total</b>	<b>60+ for WU degree</b>	

\*At least 24 technical units in computer science or computer science-related courses with an S, M, T or A suffix of which at least one must be a theory (T) course, at least one must be a systems (S) course, and at least one must be a machine (M) or application (A) course. Students may use up to 6 units of approved independent work (CSE 400E, CSE 497-CSE 499) as part of their computer science electives. Such independent work is not classified as S, M, T or A.

\*\*Engineering Professional Practice suggested to fulfill degree requirement if student did not complete a social science course at the 300-400 or junior/senior level at their home institution.

\*\*\*Differential Equations is required as a prerequisite if a student takes ESE 318-Engineering Math A. Differential Equations is not required as a prerequisite for Math 309-Matrix Algebra

Master's degree candidates should consult with their faculty advisor regarding graduate courses taken third year. Note some graduate courses may be necessary second year. 84 minimum WashU residency units are required for the Master's degree.