BS CSE Requirements

General College of Engineering Requirements		Hours
Engr 1100	Introduction to Ohio State and Computer Science and Engineering	1
Engr 1181 and Engr 1182	Fundamentals of Engineering I and II	4
Math 1151 and Math 1172	Calculus I and Engineering Mathematics A	10
Physics 1250	Mechanics, Thermal Physics, Waves	5
Computer Science Core		
CSE 2221 and CSE 2231	Software I: Software Components and Software II: Software Development and Design	8
CSE 2321 and CSE 2331	Foundations I: Discrete Structures and Foundations II: Data Structures and Algorithms	6
CSE 2421 and CSE 2431	Systems I: Introduction to Low-Level Programming and Computer Organization and Systems II: Introduction to Operating Systems	7
CSE 3341	Principles of Programming Languages	3
Choose one of the following:		
CSE 2501	Social, Ethical, and Professional Issues in Computing	1
Philos 1338	Ethics in the Professions: Introduction to Computing Ethics and Effective Presentation	4
Non-Computer Science Core		
ECE 2020 and ECE 2060	Introduction to Analog Systems and Circuits and Introduction to Digital Logic	6
Math 2568 and Math 3345	Linear Algebra and Foundations of Higher Mathematics	6
Stat 3470	Introduction to Probability and Statistics for Engineers	3
Computer Science Core Choices (requirements for specialization option may dictate core choices)		
CSE 3231 or CSE 3241	Software Engineering Techniques or Introduction to Database Systems	3
CSE 3421 or CSE 3461	Introduction to Computer Architecture or Computer Networking and Internet Technologies	3
CSE 3521 or CSE 3541	Survey of Artificial Intelligence I: Basic Techniques or Computer Game and Animation Techniques	3
Choose one of the following:		
CSE 3901	Project: Design, Development, and Documentation of Web Applications	4
CSE 3902	Project: Design, Development, and Documentation of Interactive Systems	4
CSE 3903	Project: Design, Development, and Documentation of System Software	4
Choose one of the following:		
CSE 5911	Capstone Design: Software Applications	4
CSE 5912	Capstone Design: Game Design and Development	4
CSE 5913	Capstone Design: Computer Animation	4
CSE 5914	Capstone Design: Knowledge-Based Systems	4
CSE 5915	Capstone Design: Information Systems	4
CSE Math and Science Electives (choose at least 8 hours)		
Math 2153	Calculus III	4
Math 2255 or Math 2415	Differential Equations and Their Applications or Ordinary and Partial Differential Equations	3
Stat 4201	Introduction to Mathematical Statistics I	4
Stat 5301	Intermediate Data Analysis I	4
Anthrop 2200	Introduction to Physical Anthropology	4
Biology 1113	Biological Sciences: Energy Transfer and Development	4
Biology 1114	Biological Sciences: Form, Function, Diversity, and Ecology	4
Chem 1210	General Chemistry I	5
Chem 1250	General Chemistry for Engineers	4
EarthSc 1121	The Dynamic Earth	4
EarthSc 1122	Earth Through Time	4
ENR 2100	Introduction to Environmental Science	3
ENR 3000 and ENR 3001	Soil Science and Soil Science Laboratory	4
FdScTe 2200	The Science of Food	3
HCS 2201	Ecology of Managed Plant Systems	4
HCS 2202	Form and Function in Cultivated Plants	4
Physics 1251	E&M, Optics, Modern Physics	5
CSE Technical Electives (choose at least 17 hours that meet the following criteria)		
Any CSE course 3000-level or above not already used to fulfill another requirement		
Requirements for specialization option may dictate technical elective choices		
At most 2 hours of CSE 4251-4256		
At most 2 hours of CSE 4193(H), 3 hours of 4998(H), or 6 hours of 4999(H) AND no more than 6 hours total of 4193/4998/4999 combined		
At most 8 hours of non-CSE courses at the 2000-level and above approved by the academic advisor		
General Education (choose at least 24 hours)		
For detailed GE curriculum requirements and course lists visit advising.engineering.osu.edu		

BS CSE Sample Schedule

	Autumn		Spring	
	Engr 1100	1	CSE 2221	4
	Engr 1181	2	Engr 1182	2
	Math 1151	5	Math 1172	5
Year 1	Physics 1250	5	English 1110	3
	CSE 1223	3	GE	3
		16		17
	CSE 2231	4	CSE 2331	3
	CSE 2321	3	CSE 2421	4
	Stat 3470	3	ECE 2060	3
Year 2	Math or Science Elective	3-5	Math 3345	3
	GE	3	GE	3
		16-18		16
	CSE 2431	3	CSE 32X1	3
	CSE 390X	4	CSE 34X1	3
	ECE 2020	3	CSE 35X1	3
Year 3	Math 2568	3	CSE 2501	1
	GE	3	Math or Science Elective	3-5
			GE	3
		17		16-18
	CSE 3341	3	CSE 591X	4
	Technical Elective	3	Technical Elective	3
	Technical Elective	3	Technical Elective	3
Year 4	Technical Elective	3	Technical Elective	2
	GE	3	GE	3
		15		15

- An application to the major must be submitted online at https://advising.engineering.osu.edu/currentstudents/applying-your-major during the term in which admission requirements are being completed

Note: Majors must select a specialization option. Requirements for the specialization options generally dictate core and technical elective choices.