

Bachelor of Science
Major: Computer and Information Science
Individualized Specialization Option

The Individualized Option provides students the opportunity to select a combination of technical electives that may not fit with one of the other options. Students are expected to consult with an advisor to determine appropriate courses. Students in this major will complete a minimum of 124 credit hours as outlined below

General Education Requirements		
Requirement	Course Options	Hours
GE Launch Seminar	AcadAff 1201	1
Foundations: Writing and Information Literacy ^a	Student Choice	3
Foundations: Mathematical & Quantitative Reasoning/Data Analysis	Math 1151	Overlap w/ Major requirement
Foundations: Literary, Visual and Performing Arts	Student Choice	3
Foundations: Historical & Cultural Studies	Student Choice	3
Foundations: Natural Science	Physics 1250	Overlap w/ Major requirement
Foundations: Social & Behavioral Sciences	Student Choice	3
Foundations: Race, Ethnic and Gender Diversity	Student Choice	3
Theme: Citizenship for a Diverse & Just World	Student Choice	4
Theme: Student Choice	Student Choice	4
GE Reflection	Capstone	Embedded into Major Core Capstone
General Education Credit Hours:		24

College/Degree Requirements		
Requirement	Course Options	Hours
Math 1151 (Math & Quantitative Reasoning / Data Analysis)		5
Physics 1250 (Natural Science)		5
ASC 1100		1
Foreign Language		12
Credit Hours:		23

General Education Requirements	24
College/Degree Requirements	23
Major Core	42
Required Non-Major Courses	19
Required Technical/Directed/Targeted Electives	16
Minimum Total Credit Hours	124

Course	Title	Hours
Major Core		
CSE 2221 and 2231	Software 1 and 2	8 (4+4)
CSE 2321 and 2331	Foundations 1 and 2	6 (3+3)
CSE 2421 and 2431	Systems 1 and 2	7 (4+3)
CSE 3341	Principles of Programming Languages	3
CSE 2501 or PHILOS 2338	Social, Ethical, and Professional Issues in Computing or Computing Ethics for a Just and Diverse World	1 or 4
CSE 3901 or 3902 or 3903	Project: Design, Development, and Documentation (Web Applications or Interactive Systems or Systems Software)	4
CSE 3231 or 3241	Introduction to Software Engineering or Introduction to Databases	3
CSE 3421 or 3461	Computer Architecture or Introduction to Networking	3
CSE 3521 or 3541	Introduction to Artificial Intelligence or Introduction to Computer Graphics	3
CSE 5911 or 5912 or 5913 or 5914 or 5915 or 5916	Capstone Experience (Software Applications or Game Design and Development or Computer Animation or Knowledge-Based Systems or Information Systems or Research-Focused Projects)	4
Total Major Core		42-45
Required Non-Major Courses		
Math 1152	Calculus II	5
Math 3345	Foundations of Higher Math	3
Stat 3470	Statistics for Engineers	3
Science	Elective	5
ECE 2060	Introduction to Digital Logic	3
Total Required Non-Major Courses		19
Required Technical / Directed / Targeted Electives; Career Courses		
CSE courses 3000-level or higher*		>= 9
Approved non-CSE courses 2000-level or higher*		<= 7
Total Required Technical Electives		16
Total Required Major and Non-Major Credit Hours:		77

Additional information:

*Technical electives:

- At most 2 hours of CSE 4251-4256 may be counted toward technical electives
- At most 2 hours of CSE 4193, 3 hours of CSE 4998, or 6 hours of CSE 4999, with no more than 6 hours total of CSE 4193, 4998, and 4999 combined, may be counted toward technical electives
- Non-CSE technical electives may be satisfied by completing an approved minor or through select courses (see list). Minors or courses not listed may be petitioned. More information is available at <https://cse.osu.edu/current-students/bachelor-science-computer-information-science-bs-cis>

**Application to the major:

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

***Graduation application:

- A Major Program Form from the CSE Advising Office must be filed with ASC Advising to begin the graduation application process. Students are encouraged to obtain and submit it one semester prior to the graduation term to gain graduating-senior scheduling priority for the graduation term.

	Autumn		Spring	
Year 1	ASC 1100	1	CSE 2221 (need <i>C</i> or better)	4
	Math 1151	5	Math 1152	5
	Physics 1250	5	GE-Writing	3
	CSE 1223	3	Science	5
	GE Launch Seminar	1		
		15		17
Year 2	CSE 2231	4	CSE 2331	3
	CSE 2321	3	CSE 2421	4
	Stat 3470	3	Math 3345	3
	Foreign Language 1	4	Foreign Language 2	4
			GE-Diversity	3
		14		17
Year 3	CSE 2431	3	CSE 32X1	3
	CSE 390X	4	CSE 34X1	3
	ECE 2060	3	CSE 35X1	3
	Foreign Language 3	4	GE-SBS	3
	GE-History	3	CSE 2501 or PHILOS 2338	1 or 4
		17		16-17
Year 4	CSE 3341	3	CSE 591X (includes bookend)	4
	Technical Elective	3	Technical Elective	3
	Technical Elective	3	Technical Elective	3
	Technical Elective	3	Technical Elective	1
	GE-Lit/VPA	3	GE-Theme	4
		15		15