Program of Study: Computer Engineering 2022-2023
Math 1148 Placement

General Education		
For detailed GE curriculum requirements and course lists click here		
*Philosophy 1332 is required of all ECE students. This course will fit into the "Historical and Cultural Studies" category		
The most efficient path to complete the GE theme requirement is to take two 4-hour courses		
Correlate Courses		Hours
Engr 1100.15	Introduction to Ohio State and Electrical and Computer Engineering	1
Engr 1181	Fundamentals of Engineering I	2
Engr 1182	Fundamentals of Engineering II	2
Math 1148	College Algebra	4
Math 1149	Trigonometry	3
Math 1151	Calculus I	5
Math 1172	Engineering Mathematics A	5
Physics 1250	Mechanics, Thermal Physics, Waves	5
Physics 1251	Electricity and Magnetism, Optics, Modern Physic	5
Chem 1250	General Chemistry for Engineers (will accept Chem 1210)	4
CSE 1222	Introduction to Computer Programming in C++ for Engineers and Scientists	3
Math 2568	Linear Algebra	3
Math 2415	Ordinary and Partial Differential Equations	3
Stat 3470	Introduction to Probability and Statistics for Engineers	3
ISE 2040	Engineering Economics	2
Total		**50 hrs**
Major Core Courses		
ECE 2060	Introduction to Digital Logic	3
ECE 2020	Introduction to Analog Systems and Circuits	3
ECE 2050	Introduction to Discrete Time Signals & Systems	3
ECE 2560	Introduction to Microcontroller-Based Systems	2
ECE 3020	Introduction to Electronics	3
ECE 3027	Electronics laboratory	1
ECE 3561	Advanced Digital Design	3
ECE 3567	Microcontroller Lab	1
ECE 5362	Computer Architecture and Design	3
ECE 3906	Capstone Design I	4
ECE 4905	Capstone Design II	3
CSE 2221	Software I: Software Components	4
CSE 2321	Foundations I: Discrete Structures	3
CSE 2231	Software II: Software Development and Design	4
CSE 2451	Advanced C Programming	2
CSE 2431	Systems II: Introduction to Operating Systems	3
Total		**45**

Engineering Electives (16 hours)

Major Technical Electives (choose at least 9 hrs)

• *Must select at least one 5000 level from the ECE or CSE technical elective list below*
• *Students must waitlist CSE courses on this list and will only be admitted if space permits.*
Humans & Justice: ECE 5570, 5050, 5550
VLSI & Computer Aided Design: ECE 5020, ECE 5560
Cyber Security: ECE 5555, ECE 5561, ECE 5567.01, ECE 5567.02
Microprocessor Based Systems: ECE 5465, ECE 5466
Digital Design and Computer Architecture: ECE 5462
Computer Networks: ECE 5101, CSE 3461, ECE 4567 (counts as 5000 level)
Signals & Systems: ECE 3050
Robotics and Control Automation: ECE 3551, ECE 5463,
Digital Signal/Image Processing, Machine Learning: ECE 5200, ECE 5206, ECE 5460, ECE 5307 or CSE 5523
Database/Algorithms: CSE 3241, CSE 5242
High Performance Computing: CSE 5441

Non-Major Electives (choose at most 7 hours)

At most 7 hours of non-ECE courses approved by the ECE department see link here: https://ece.osu.edu/students/program-highlights/worksheets-curricula-information
At most 7 hours of physical or biological science courses below the 2000-level

Other details:

- Minimum 135 hours required for degree
- At least 30 hours of ECE courses must be completed at Ohio State
- Must complete 30 hours of Basic Math and Science Courses
- Need both Major and Cumulative GPA to be a 2.0 or higher to graduate
- Philosophy 1332 is required of all ECE students. This course fulfills Historical and Cultural Studies Foundations GE
- The most efficient path to complete the GE Theme requirement is to take two 4-hour courses

Computer Engineering Sample Schedule (135 hrs)

	Autumn		Spring	
Year 1	Engr 1100	1	Math 1149	3
	Math 1148	4	Chem 1250	4
	GE Foundation	3	Engineering Elective	3
	GE Foundation	3	GE Foundation (Philos 1332)	3
	GE Foundation	3	GE Foundation	3
	GE Launch Seminar	1		
		15		16
Year 2	MATH 1151	5	Math 1172	5
	PHYSICS 1250	5	ENGR 1182	2
	ENGR 1181	2	Physics 1251	5
	CSE 1222	3	CSE 2221	4
	Engineering Elective	3		
		18		16
Year 3	ECE 2060	3	ECE 2050	3
	ECE 2020	3	ECE 2560	2
	Math 2568	3	ECE 3020	3
	CSE 2321	3	Math 2415	3
	CSE 2231	4	ECE 3561	3
	CSE 2451	2	GE Theme	4
		18		18
Year 4	ECE 3906	4	ECE 4905	3
	ECE 3027	1	CSE 2431	3
	ECE 3567	1	Engineering Elective	3
	Stat 3470	3	Engineering Elective	1
	ECE 5362	3	GE Theme	4
	Engineering Elective	3	ISE 2040	2
	Engineering Elective	3		
		18		16