

BS IN COMPUTER SCIENCE AND ENGINEERING

Below is a sample plan of study. Consult your degree audit for your program requirements.

First Term		Hours
MATH 1850	Single Variable Calculus I	4
CHEM 1230	General Chemistry I	4
ENGL 1110	College Composition I	3
EECS 1030	Introduction to Computer Science and Engineering	3
PHIL 1010	Introduction To Logic	3
Hours		17
Second Term		Hours
MATH 1860	Single Variable Calculus II	4
PHYS 2130	Physics For Science And Engineering Majors I	5
EECS 2000	EECS Professional Development	1
EECS 1510	Introduction To Object Oriented Programming	4
ENGL 2950	Science And Technical Report Writing	3
Hours		17
Third Term		Hours
MATH 2850	Elementary Multivariable Calculus	4
PHYS 2140	Physics For Science And Engineering Majors II	5
EECS 1100	Digital Logic Design	4
EECS 2500	Linear Data Structures	4
Hours		17
Fourth Term		Hours
MATH 2860	Elementary Differential Equations	3
MATH 2890	Numerical Methods And Linear Algebra	3
EECS 2110	Computer Architecture and Organization	3
EECS 2300	Electric Circuits	4
EECS 2520	Discrete Structures	3
Hours		16
Fifth Term		Hours
EECS 3940	Co-Op Experience	1
Hours		1
Sixth Term		Hours
EECS 2510	Non-Linear Data Structures	4
EECS 3210	Signals and Systems	3
EECS 3400	Electronics I	4
Social Sciences Core		3
Hours		14
Seventh Term		Hours
EECS 3940	Co-Op Experience	1
Hours		1

Eighth Term		Hours
EECS 3100	Embedded Systems	4
EECS 3150	Data Communications	3
MIME 4000	Engineering Statistics I	3
ECON 1150 or ECON 1200	Principles Of Macroeconomics or Principles Of Microeconomics	3
Arts/Humanities Core/Diversity of US		3
Hours		16
Ninth Term		Hours
EECS 3940	Co-Op Experience	1
Hours		1
Tenth Term		Hours
EECS 3540	Systems And Systems Programming	3
EECS 3550	Software Engineering	3
EECS 4010	Senior Design Project I	1
EECS 4100	Theory of Computation	3
EECS 4560	Database Management Systems	3
Technical Elective		3
Hours		16
Eleventh Term		Hours
EECS 4020	Senior Design Project II	3
Technical Elective		3
Technical Elective		3
Non-US Diversity		3
EECS 4760	Computer Security	3
Hours		15
Total Hours		131

CAC Outcome #1: Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.

CAC Outcome #2: Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.

CAC Outcome #3: Communicate effectively in a variety of professional contexts.

CAC Outcome #4: Recognize professional responsibilities and make informed judgments in computing practice based on legal and ethical principles.

CAC Outcome #5: Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.

CAC Outcome #6: Apply computer science theory and software development fundamentals to produce computing-based solutions.

EAC Outcome #1: An ability to identify, formulate, and solve complex engineering problems by applying principles of engineering, science, and mathematics.

EAC Outcome #2: An ability to apply engineering design to produce solutions that meet specified needs with consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, and economic factors.

EAC Outcome #3: an ability to communicate effectively with a range of audiences.

EAC Outcome #4: An ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.

EAC Outcome #5: an ability to function effectively on a team whose members together provide leadership, create a collaborative and inclusive environment, establish goals, plan tasks, and meet objectives.

EAC Outcome #6: An ability to develop and conduct appropriate experimentation, analyze and interpret data, and use engineering judgment to draw conclusions.

EAC Outcome #7: An ability to acquire and apply new knowledge as needed, using appropriate learning strategies.