LOWER DIVISION CORE COURSES

Introduction to Computer Science and Engineering I (CSE 30). . . 4 units
Introduction to Computer Science and Engineering II (CSE 31) . . 4 units

UPPER DIVISION CORE COURSES

Algorithm Design and Analysis (CSE 100) . . . . . 4 units
Database Systems (CSE 111) . . . . . 4 units
Software Engineering (CSE 120) . . . . . 4 units
Computer Architecture (CSE 140) . . . . . 4 units
Operating Systems (CSE 150) . . . . . 4 units
Computer Networks (CSE 160) . . . . . 4 units

TECHNICAL ELECTIVES

A total of 16 units of CSE technical electives are required. CSE technical electives are all upper division courses (CSE1xx). Upper division core courses taken in excess of the core requirements may be counted as technical electives. Other upper division courses outside your major area of study can be selected with approval

SAMPLE PLAN OF STUDY FOR COMPUTER SCIENCE & ENGINEERING DEGREE

SEMESTER 1

CORE 1	The World at Home	4
CSE 20	Introduction to Computing	2
ICP 1	Integrated Calculus and Physics (ICP 1A and ICP 1B) or Math 21 and Physics 8	8
ENGR 97 or CORE 90X	Service Learning: Engineering Projects in Community Service (or Freshman Seminar)	1
Semester Units		**15**

SEMESTER 2

CSE 21	Introduction to Computing 2	2
MATH 22	Calculus of a Single Variable II	4
BIO 1	Contemporary Biology	4
PHYS 9	Physics II	4
CORE 90X	Freshman Seminar	1
Semester Units		**15**

SEMESTER 3

CSE 30	Introduction to Computer Science And Engineering I	4
MATH 23	Multi-Variable Calculus	4
MATH 32	Probability and Statistics	3
CHEM 2	General Chemistry	4
ENGR 97	Service Learning: Engineering Projects in Community Service	1
Semester Units		**16**

SEMESTER 4

CSE 31	Introduction to Computer Science And Engineering II	4
MATH 24	Introduction to Linear Algebra and Differential Equations	4
WRI 10	College Reading and Composition	4
	Engineering Fundamentals	3
ENGR 97	Service Learning: Engineering Projects in Community Service	1
Semester Units		**16**

SEMESTER 5

CSE 100	Algorithm Design and Analysis	4
	Engineering Fundamentals	4
	Engineering Fundamentals	3
	General Education Elective (Arts/Humanities)	4
ENGR 197	Service Learning: Engineering Projects in Community Service	1
Semester Units		**16**

SEMESTER 6

CSE 150	Operating Systems	4
CORE 100	The World at Home	4
	Technical Elective	4
	Engineering Fundamentals	3
ENGR 197	Service Learning: Engineering Projects in Community Service	1
Semester Units		**16**

SEMESTER 7

CSE 160	Computer Networks	4
ENGR 155	Engineering Economics Analysis	3
	Technical Elective	4
	General Education Elective (Social/Cognitive Sciences)	4
ENGR 197	Service Learning: Engineering Projects in Community Service	1
Semester Units		**16**

SEMESTER 8

	Technical Elective	4
CSE 120	Software Engineering	4
	Technical Elective	4
	Free Elective	3
ENGR 191	Professional Seminar	1
Semester Units		**16**

Total Program Units 126

The four-year plans presented in this catalog demonstrate the recommended sequencing and timing of the required and elective components within each major. In many cases, a student's academic background will require variations in the timing of the coursework listed in the plan. All students are expected to work with their academic advisor to find their best pathway through the degree requirements of their chosen program.