

Electrical & Computer Engineering (BESA Concentration)

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BESA Electrical & Computer Engineering Concentration

(120 units minimum)

Mathematics & Science Prerequisites

		Units
21-120	Differential and Integral Calculus -(Gen Ed; prerequisite: 21-090)	10
21-122	Integration and Approximation -(Gen Ed)	10
21-127	Concepts of Mathematics	12
15-112	Fundamentals of Programming and Computer Science -(Gen Ed)	12
15-122	Principles of Imperative Computation	12
33-141	Physics I for Engineering Students -(Gen Ed)	12
33-142	Physics II for Engineering and Physics Students	12

Electrical & Computer Engineering Courses (7 courses, 84 units)

18-100	Introduction to Electrical and Computer Engineering -First-year; co-req: 21-120	12
xx-xxx	2nd Introduction to Engineering course, student's choice	12
18-202	Mathematical Foundations of Electrical Engineering -Sophomore year; prereq: 21-122 *	12
18-213	Introduction to Computer Systems -Sophomore year and above; prereq: 15-122	12
18-220	Electronic Devices and Analog Circuits - Sophomore year and above; prereq: 18-100; co-req: 33-142	12
18-240	Structure and Design of Digital Systems - Sophomore year and above; prereq: 18-100	12
18-290	Signals and Systems -Sophomore year and above; prereq: 18-100	12

* This course can also be substituted by a combination of two of the following courses: 21-241, 21-242, 21-254, 21-259, 21-260, 21-266, 21-268.

Electives (3 courses, 36 units minimum)

Choose 3 elective courses 18-3xx and above. At least 2 courses should be Area Courses from 1 of the 5 Areas within ECE and 1 course may be an additional Area Course from a second Area, a Coverage Course or ENG with prerequisites in consultation with the concentration advisor.