

## ENGINEERING

### ELECTRICAL ENGINEERING

(68 units engineering; 129 units total)

FIRST SEMESTER		Units	SECOND SEMESTER		Units
Math 75	Mathematical Analysis I	4	Math 76	Mathematical Analysis II	4
*Chem 1A	General Chem & Qualitative Analysis	5	Phys 5A	Principles of Physics I	5
E E 1	Intro to Electrical Engineering	1	*Chem 8	Elementary Organic Chemistry	3
Engr 70	FORTRAN IV Programming	2	Engr 26	Engineering Graphics	3
Engl 1	Composition	3			15
		15			
THIRD SEMESTER			FOURTH SEMESTER		
Math 77	Mathematical Analysis III	4	Math 81	Applied Analysis	4
Phys 5B	Principles of Physics II	5	Engr 31	Engineering Materials	3
E E 85	Logic Design and Microprocessors	3	Engr 90, L	Principles of Electrical Circuits	4
Engr 20	Engineering Mechanics: Statics	3	Engr 112	Engineering Mechanics: Dynamics	3
Humanities	See <sup>3</sup>	3	Government <sup>1</sup>		3
		18			17
FIFTH SEMESTER			SIXTH SEMESTER		
Mathematics Elective <sup>5</sup>		3	E E 121	Electromech Sys & Energy Conversion	3
E E 126	Electromagnetic Theory & Appl I	3	E E 124	Electrical Circuit Analysis	3
E E 128, L	Electronics I	4	E E 136, L	Electromagnetic Theory & Appl II	4
Engr 136	Thermodynamics	3	E E 138, L	Electronics II	4
Humanities <sup>3</sup>		3	Hist	See <sup>1</sup>	3
		16			17
SEVENTH SEMESTER			EIGHTH SEMESTER		
EE 114	Physical Electronics	3	E E 155	Control Systems	3
E E 121L	Electromech Sys & Energy Conv Lab	1	E E 180	Senior Project	1
Engr 160	Engineering Economy	2	Engr 116	Fluid Mechanics	3
Approved Electives <sup>6</sup>		4	Engr 182W	Engineering Writing	2
General Elective <sup>4</sup>		3	Approved Elective <sup>6</sup>		3
Social Sciences <sup>2</sup>		3	Social Sciences <sup>2</sup>		3
		16			15

<sup>1</sup> See Special Course Requirements under Degrees and Credentials.

<sup>2</sup> Social Sciences: Select from Anth 2, 3, 4; As Am 15; B1 S 38, 135; Crim 1, 132; Econ 1A-B, 101; Geog 3, 4; Hist 4, 5; La R 3, 5; NAS 103; P1 Si 1; Psych 134; Soc 1, 2; W S 10.

<sup>3</sup> Humanities: Select from Art 1; Art H 10, 20; B1 S 25; Drama 1, 62; Engl 30, 76; Hist 1, 2; La R 7, 9; Music 73, 74, 75; Phil 1; RTV 127, 128; W S 145, 168.

<sup>4</sup> General Electives: May be approved electives but at least 1 unit must be from any area of General Education.

<sup>5</sup> Mathematics Electives: Select from Math 107, 121, 124, 128, 181, or 182.

<sup>6</sup> Approved Electives: Select from the following courses with at least 4 units from the underlined course numbers and to include at least one laboratory course from EE 183A, B, C, D:

- (a) Electronics and communications: EE 134, 140, 161, 166, 171, 176, 183A, 183C.
- (b) Computer sciences and digital systems: EE 106, 107, 133, 175, 183B, Engr 173.
- (c) Power systems and energy conversion: E E 151, 183D.

\* or Chem 1B.