

CpE Program Curriculum Pattern

Effective Fall 2013

Freshman First Semester

CSc 15	Prog. Concepts & Methodology I (CSc 10A or Experience)	3
Math 30	Calculus I (Pre-Calculus, Math 29)	4
ENVS 10	Environmental Science	3
Engr 1 or 96A	Intro. to Engineering (Algebra & Trigonometry)	1
GE	General Education Courses	6
Total Units		17

Freshman Second Semester

CSc 20	Prog. Concepts & Methodology II (CSc 15)	3
Math 31	Calculus II (Math 30 or AP Credit)	4
Phys 11A	Mechanics (Math 30, Math 31*)	4
CSc 35	Microcomputers and Assembly Language (CSc 15)	3
GE	General Education Course	3
Total Units		17

Sophomore First Semester

CpE 64	Introduction to Logic Design (CSc 15 or CSc 25)	4
Math 45	Differential Equations (Math 31)	3
Phys 11C	Electricity & Magnetism (Math 31, Phys 11A)	4
CSc 60	Intro. to Systems Programming (CSc 20, CSc 35)	3
GE	General Education Course	3
Total Units		17

Sophomore Second Semester

CSc 28	Discrete Structures (Math 29, CSc 20*)	3
Econ 1B	Intro to Microeconomic Analysis	3
Engl 20	Expository Writing (Engl 1A or Engl 2)	3
Engr 17	Intro. Circuit Analysis (Phys 11C**, Math 45**)	3
GE	General Education Course	3
Total Units		15

Junior First Semester

CpE 166	Advanced Logic Design (CpE 64, ENGR 17)	4
CpE 185	Computer Interfacing (CpE 64, CSc 35, CSc 60)	4
CSc 130	Data Struct. & Algorithm Develop. (CSc 20, CSc 28*)	3
EEE 117	Network Analy. (CpE 64*, Engr 17, Co-Req EEE 117L)	3
EEE 117L	Network Analysis Lab (Co-Req EEE 117)	1
Total Units		15

Junior Second Semester

CpE 142	Adv. Computer Org. (CpE 166 & CpE 185)	3
EEE 108	Electronics 1 (EEE 117, Co-Req EEE 108L)	3
EEE 108L	Electronics I Lab (EEE 117, EEE 117L, Co-Req EEE 108)	1
EEE 180	Signals and Systems (EEE 117*)	3
CpE 186	Computer Hardware Design (CpE 185)	3
GE	General Education Course	3
Total Units		16

Senior First Semester

CpE 151	CMOS & VLSI (CpE 64, EEE 108)	3
CSc 139	Operating System Principals (CSc 60, Csc 130, CpE 185)	3
CpE 190	Senior Project Design (CpE 142, CpE 166, CpE 186, CpE 187, EEE 108)	2
Engr 120	Probability and Random Signals (EEE 180*)	3
GE	General Education Course	3
Total Units		14

Senior Second Semester

CpE 159	Operating Sys Pragmatics (CSc 139)	3
CpE 138	Computer Networks and Internets (CSc 35, CSc 60, CSc 130)	3
CpE 191	Senior Design Project II (CpE 190)	2
Elective	CpE Technical Elective	3
GE	General Education Course	3
Total Units		14

Degree Unit Requirements

125

Courses in parentheses are prerequisites

* = May be taken concurrently ** = One course may be taken concurrently, but not both

CpE Technical Elective Courses: CpE 153, CSc 131, CSc 133(CSc 131), CSc 134, CSc 151, CSc 152(ENGR 120), CSc 153(CSc 138), CSc 154(CSc 155(CSc133), EEE 120, EEE 122, EEE 181, EEE 187, CpE 187 [+1 CpE199])

Courses offered are subject to change. For the most accurate course planning guides, refer to the website at:

<http://www.ecs.csus.edu/wcm/cpe/undergraduate%20program/4%20year%20curriculum%20pattern.html>