



# Computer Engineering Schedule of Senior CE Electives

Computer Engineering Program · Eng. 1, 4<sup>th</sup> Floor, CAO Office · 805/893-5615 · UC, Santa Barbara

\_\_\_\_\_  
LAST NAME, FIRST NAME

\_\_\_\_\_  
MAILING ADDRESS

\_\_\_\_\_  
EMAIL

\_\_\_\_\_  
PHONE #

STUDENTS ARE RESPONSIBLE FOR DETERMINING AND TAKING THE NECESSARY PREREQUISITES FOR THE CLASSES LISTED BELOW AS THEY DO CHANGE. FOR THE MOST UP-TO-DATE INFORMATION, CHECK WITH THE COMPUTER SCIENCE STUDENT OFFICE FOR CS COURSES AND THE ECE STUDENT OFFICE FOR ECE COURSES.

COURSE	UNITS
<b>"Capstone" Project</b>	
<b>Sequence 1</b>	
<b>Sequence 2</b>	
<b>MIN. REQUIRED</b>	<b>32</b>
<b>TOTAL</b>	

A total of at least eight courses (32 units minimum) including two sequences plus the Capstone project.

\_\_\_\_\_  
Student's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Faculty Advisor's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
College of Engineering

\_\_\_\_\_  
Date

**\*\* PLEASE RETURN TO: College of Engineering Undergraduate Office, Rm. 1006, Engr. I \*\***

\* Choose two sequence topics:

Check Here	Sequence Topics	Senior Elective Sequences
	<b>Computer Networks</b>	Network Computing – <b>Choose EITHER:</b> ECE 155A & ECE 155B <b>OR</b> CMPSC 176A & CMPSC 176B
	<b>Computer Systems Design</b>	ECE 153A <b>OR</b> CMPSC 153A: Hardware/Software Interface ECE 153B: Sensor and Peripheral Interface Design
	<b>Computer-Aided Design (CAD) for Integrated Circuits</b>	ECE 156A: Digital Design with VHDL and Synthesis ECE 156B: Computer-Aided Design of VLSI Circuits
	<b>Distributed Systems</b>	ECE 151 <b>OR</b> CMPSC 171: Distributed Systems <b>and one or both of the following courses:</b> ECE 155A <b>OR</b> CMPSC 176A: Intro. to Computer Networks ECE 155B <b>OR</b> CMPSC 176B: Network Computing
	<b>Multimedia</b>	<b>choose two or more of the following courses:</b> ECE 178: Fundamentals of Computer Image Processing ECE 181B <b>OR</b> CMPSC 181B: Introduction to Computer Vision ECE 160 <b>OR</b> CMPSC 182: Multimedia Computing
	<b>Programming Languages</b>	CMPSC 160: Translation of Programming Languages (Note Prereq. CMPSC 138 (Jr. Yr.)) CMPSC 162: Programming Languages
	<b>Real-Time Computing &amp; Control</b>	ECE 147A: Feedback Control Systems - Theory and Design (Note Prereq. ECE 130A (Jr. Yr.), B (Jr. Yr.), and C (Jr. Yr.)) ECE 147B: Digital Control Systems - Theory and Design ECE 157: Real-Time Embedded Control Computing (Note ECE 157 Not Offered 2004-2005) (Note Prereq. ECE 153A and B)
	<b>Very Large Scale Integration (VLSI)</b>	ECE 124A: VLSI Principles (Note Pre-req. ECE 132 (may be taken concurrently)) ECE 124D: VLSI Architecture and Design

Check Here	Acceptable Additional Courses	Units
(Select a Senior Project from the Project List presented in class)	*Required Senior "Capstone" Computer Systems Project: CMPSC 189A/B or ECE 189A/B (Two Qtrs of instruction – 4 Units & 4 Units)	8
	CMPSC 130B: Data Structures and Algorithms II	4
	CMPSC 138: Automata and Formal Languages	4
	CMPSC 153A / ECE 153A : Hardware/Software Interface	4
	CMPSC 160: Translation of Programming Languages	4
	CMPSC 162: Programming Languages	4
	CMPSC 165A: Artificial Intelligence	4
	CMPSC 165B: Machine Learning	4
	CMPSC 171: Distributed Systems	4
	CMPSC 176A / ECE 155A : Intro. to Computer Communication Networks	4
	CMPSC 176B / ECE 155B : Network Computing	4
	CMPSC 176C: Advanced Topics in Internet Computing	4
	CMPSC 177: Computer Security	4
	CMPSC 178: Introduction to Cryptography	4
	CMPSC 182 / ECE 160 : Multimedia Computing	4
	ECE 124A: VLSI Principles	4
	ECE 124D: VLSI Architecture and Design	4
	ECE 147A: Feedback Control Systems – Theory and Design	5
	ECE 147B: Digital Control Systems – Theory and Design	5
	ECE 151: Distributed Systems	4
	ECE 153B: Sensor and Peripheral Interface Design	4
	ECE 156A: Digital Design with VHDL and Synthesis	4
	ECE 156B: Computer-Aided Design of VLSI Circuits	4
	ECE 157: Real-Time Embedded Control Computing	4
	ECE 178: Fundamentals of Computer Image Processing	4
	ECE 181A: Intro. to Robotics: Robot Mechanics	4
	ECE 181C: Intro. to Robotics: Robot Control	4

**Minimum CE Elective Units Required: 32\***

**\*\* PLEASE RETURN TO: College of Engineering Undergraduate Office, Rm. 1006, Engr. I \*\***