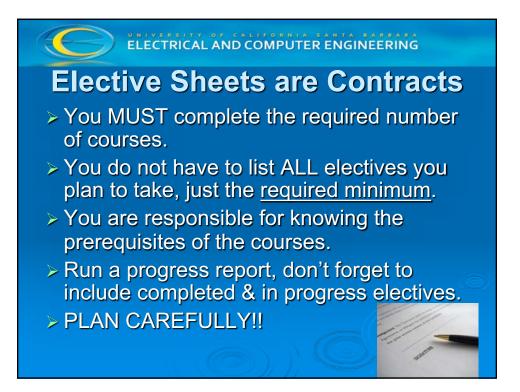


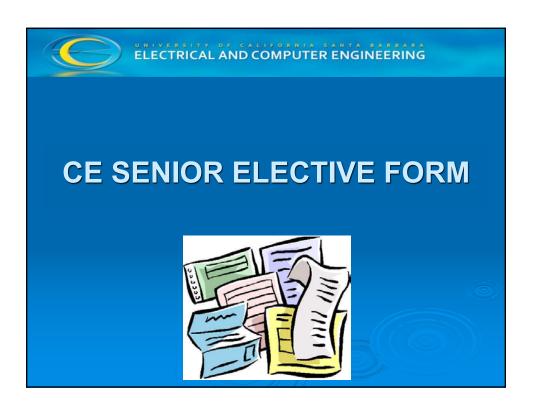
Senior Elective Requirements 12 Courses and 48 units minimum Capstone Project (CS version or ECE version) 2 Dept Approved Sequences Cannot "double dip" CMPSC 176A and CMPSC 171 or CMPSC 176A and CMPSC 176B, cannot use a course twice. 6 Approved Elective Courses of your choosing

Approval Process

- Discuss your senior elective plans with your <u>faculty advisor</u> and get course recommendations.
- Faculty Advisor must sign and approve your senior elective plans
- >Bring/email the signed form to ECE Student Office for final approval



2021-2022 Computer Engineering Faculty Advisor Assignments										
Last Name	Faculty Advisor	Faculty Email								
A-C	TBA									
D – F										
G–H										
I – K										
L–O										
P – S										
T – U										
V – Z										



Θ				
LAST NAME, FIRST NAME	Parmit			
NECESSARY PREREQUI THE MOST UP-TO-DAT	THOME RESPONSIBLE FOR DETERMINING ISITES FOR THE CLASSES LISTED BELOO INFORMATION, CHECK WITH THE CC ES AND THE ECE STUDENT OFFICE FOR E	W AS THEY DO CHANGE, FO OMPUTER SCIENCE STUDEN	R	
COURSE - Includ	e all completed electives	UNITS		
"Capstone" Project (F	ECE189A/B/C or CS 189A/B)			
Sequence 1 (2 courses	min.)			
			-	
Sequence 2 (2 courses	min.)			
Other Electives				
MIN. REQUIRED		48		
TOTAL UNITS:				
Total Units: A minimum total o Include all completed CE se	of at least twelve courses (48 units) including two seq unior electives.	uences plus a Capitone Project.		
Include an extended of the				
Student's Signature		Date		
	ature	Date		

Here	Sequence Topics	\$	enior	Elective Sequences (choose 2)	
	Computer Networks	AND CMPSC 176A (Intro CMPSC 1768 (Netw		o Communication Networks) revoling)	
	Computer Systems Design	AND		A (Hardware/Software Interface) oheral Interface Design)	
	Distributed Systems	CMPSC 171 Distribut AND ONE OR BOTH OF THE CMPSC 176A Intro	ID Com	OWING COURSES:	
	Multimedia	CMPSC 1768: Netw Choose TWO OR MORE of 1 ECE 178 (Fundamer ECE 181 OR CMPS ECE 181 OR CMPS ECE 160 (Multimedia	tals of C 181 0	wing courses: Computer Image Processing) Introduction to Computer Vision)	
	Programming Languages	 *CMPSC 160 (Trans 	lation o	rmp; (Programming Languages) (Languages) course, is the prerequisite for both CMPSC 160 & 162)	
	Real-Time Computing & Control	("Note: ECE 147A pr	ere-puls	ol Systems - Theory and Design, 5 units) its is ECE 130AB - Junior year) ystems - Theory and Design, 5 units)	
	Very Large Scale Integration (VLSI)	ECE 122A (VLSI Pri ECE 122B (VLSI Arc		<u>OR</u> ECE 123 (High-Performance Digital CircuitDesign) e and Design)	
	Robotice	ECE 1790 (Introduct ECE 179P (Introduct)	ion to R	obolics: Dynamics and Control) obolics: Planning and Kinematics)	
3	Signals & Systems	ECE 130A (Signal A ECE 130B (Signal A			
	Design & Test Automation			ig in Design and Test Automation) ence in Design and Test Automation)	-
	Machine Learning	CMPSC 165A (Artific CMPSC 1658 (Mach	ial Inte	Bgence) ming)	
	Systems Software Architecture	CMPSC 170 (Operative CMPSC 171 (Dishtb) CMPSC 171 (Dishtb)			
		Required Senior "Capst	one" (Computer Systems Project	
12 Units	("Note: ECE 1538, B	course, 4 units/ptr., 12 units) ensor & Peripheral Interface eite for ECE 189A/B/C)	OR	CMPSC 188A/B (2 (9: course, 4 units)(9:, 8 units) Chote: CMPSC 156. Advanced Applications Programming, is a prerequisits course CMPSC189A/B	S Units
		Acceptable	Addit	ional Courses	
CMPSC	1308 (Data Structures an	d Algorithms II)	4	ECE 130C (Signal Analysis and Processing)	4
	C 138 (Automata and Form		4	ECE 147A (Feedback Control Sys-Theory & Design)	8
	2 160 (Translation of Progr 2 162 (Programming Lange			ECE 1478 (Digital Control-Theory & Design) ECE 149 (Game Theory)	8
CMPSC	C 165A (Artificial Intelligenc	a)	1	ECE 149 (Game Theory) ECE 150 (Mobile Embedded Systems)	1
	1658 (Machine Learning)		4	ECE 153A/CMPSC 153A (Hardware/Software Interface)	4
	170 (Operating Systems)		4	ECE 1538 (Sensor and Peripheral Interface Design)	4
	171 (Distributed Systems	1	4	ECE 1548 (Advanced Computer Architecture)	4
CMPSC	174A (Fundamentals of D	latabase Systems)	4	ECE 157A (Machine Learning in Design & Test Automation)	4
	C 176A (Intro to Comp Con		4	ECE 157B (A.). In Design & Test Automation)	- 4
	C 1768 (Network Computin		4	ECE 160 (Multimedia Computing)	4
	C 176C (Advanced Topics i	n Internet Computing)	- 4	ECE 178 (Fund. of Computer Image Processing)	4
CMPSC	C 177 (Computer Security)		4	ECE 179D (Intro to Robotics: Dynamics & Control)	4
	178 (Introduction to Crypt	ography)	4	ECE 179P (Intro to Robotics: Planning & Kinematics)	4
	2A (VLSI Principles) 28 (VLSI Architecture and	(Desiles)	4	ECE 180 (Introduction to Deep Learning) ECE 181/CMPSC 181 (Introduction to Computer Vision)	4
	25 (VLSI Architecture and 3 (High-Performance Digit		4	ECE 181/CMPSC 181 (Introduction to Computer Vision) ECE 194AA-19422 (except ECE 194R) (Special Topics in ECE)	
	CA (Signal Analysis and P		4	ELLE TRANSPORTATION (MARKED COL THER) (Special Topics IN ECC)	
ECE 15					1
	IOB (Signal Analysis and P	[onlession]		CMPSC 158 (Advanced Applications Programming)	4

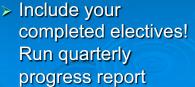
Capstone Prerequisite Courses – Important, Take Note!

If you are interested in CS189, <u>complete</u> <u>both</u> <u>capstone</u> prerequisites. Why? CS189 has a limited number of spaces. Without <u>both</u> prerequisites completed an additional year could be required to graduate if only CS 156 is completed and you are unable to obtain a spot in CS 189.

- ECE 189A- CE Capstone prerequisite: ECE 153B (Sensor & Peripheral Interface Design) –
 Winter 2022 (prereq. is ECE 152A w/min. grade of C-). Enroll pass 1 for Winter 2022.
- CS 189A CS Capstone prerequisite: CS 156 (Advanced Applications Programming) – W22,
 S22 (prereqs. – CS 24 & CS 32 with grade of C or better)



mportant



Elective Course Scheduling Resources ECE course scheduling, go to <u>ece.ucsb.edu</u>

Department of Electric & Computer Engineeri





In the Junior year, students select sequence topics to satisfy ECE Electives to be taken in the Sr. year

Year Course Plan
College of Engineering's course grid to help ECE
students complete the required units

Degree Requirements

receive a Electrical Engineering degree from UCSB, students must satisfy the following requirements:

- MAJOR Electrical Engineering (EE) Degree
- GENERAL EDUCATION College of Engineering (CoE) & UC, Santa Barbara
- EE Bachelor of Science Degree Overview (2021-22 GEAR pgs 36-37)

Degree requirements listed below are for the academic year of 2021-22

MAJOR - Electrical Engineering Degree Requirements
 Major requirements are administered by the Electrical and Computer Engineering Department

ece.ucsb.edu/undergrad/curriculum

Pubs & Courses

ECE 188 Senior Capstone Projects In the Senior year, all ECE majors are required to take the ECE 188 Senior EE Project courses

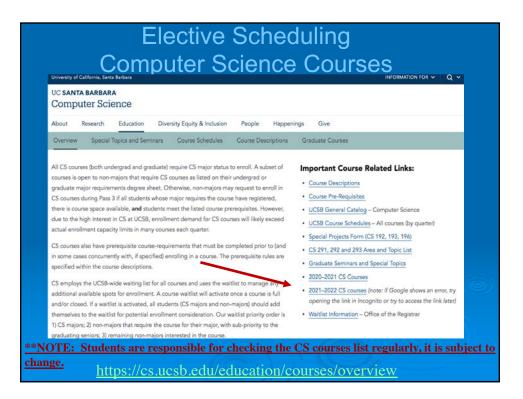
News Events People Giv

GLAR (General Engineering Academic Requirements): ECE, COE, and UCSB requirements): ECE, COE, and UCSB requirements, overviews & more - from most current year: back to 2012-13 UCSB General Catalog: major & mino requirements, course descriptions,

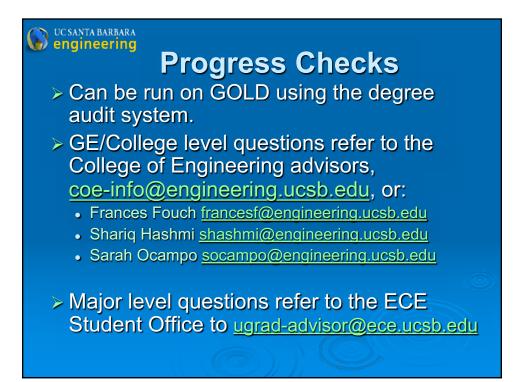
UCSB Schedule of Classes: all under and grad course schedules listed by U ECE Undergrad Courses (2021-22): tal

Elective Course Scheduling Resources

& Comp	nent of Electrical suter Engineering	About	Research	Graduate	Undergraduate	News	Events	People	Giving
Undergra	aduate Courses								
Courses Offer	red: X = ECE Instructor XD = External Dept Instructor								
Number	Undergraduate Course			F202	1 W2022	520	022	M2022	••
1A.	Computer Engineering Seminar				x				
1B	Ten Puzzling Problems in Computer Engineering					×			
3	Introduction to Electrical Engineering			×					
5	Introduction to Electrical and Computer Engineering				×				
10A/10AL	Foundations of Analog and Digital Circuits & Systems			×	x				
10B/10BL	Foundations of Analog and Digital Circuits & Systems				×	x			
10C/10CL	Foundations of Analog and Digital Circuits & Systems			x		х			
15A	Fundamentals of Logic Design				×				
94R	Sensors and Sensing Technology								
120A	Integrated Circuit Design & Fabrication				×				
120B	Integrated Circuit Design & Fabrication					×			
122A	VLSI Principles			×					
122B	VLSI Architecture and Design				×				
130A	Signal Analysis & Processing			×	x				
130B	Signal Analysis & Processing				×	х			
130C	Signal Analysis & Processing					x			
132	Intro to Solid State Electronic Devices			×					
134	Introduction to Fields & Waves			x					







CE Computer Engineering

BS/MS Programs

BS/MS options available for Computer Engineering undergraduates:

BS in CE and MS in ECE: email

Val de Veyra, val@ece.ucsb.edu

- > BS in CE and MS in Computer Science: see the Computer Science website: <u>cs.ucsb.edu/education/undergrad/special-programs</u>
- Applications for the BS/MS in ECE are usually due at the end of the spring quarter of the junior year. As this is an accelerated program, it is expected that all of the required courses for the CE major are completed including all of the junior required courses. GRE exams are not required to apply.



Maddie W. Foster

Career Counselor/Peer & Practicum Supervisor Engineering + Technology Undocumented Student Liaison



Career Peer Advising is available Monday-Friday from 9am-4pm in person and via Zoom for 15-minute sessions. More information at <u>https://career.ucsb.edu/students#career-advising</u>

Have your resume and cover letter reviewed via our Document Review system.

See https://career.ucsb/edu/students#document-review

Practice your interviewing skills at

https://career.ucsb.edu/students#interview-skills For Engineering + Technology career guidance, see https://career.ucsb.edu/career-paths/engineering-technology or contact Maddie Foster directly at Maddie.Foster@sa.ucsb.edu

Maddie.Foster@sa.ucsb.edu

career.ucsb.edu

