

## M.S. / Ph.D. Degree Planner: Computer Engineering (EC79)

### COURSE REQUIREMENTS

*Minimum of 12 units (Plan I) or 16 units (Plan II) must be ECE courses*

**PLEASE NOTE:** Computer Engineering is impacted, this major can only be selected at the time of application/admission to UCSD

#### Core Coursework (Four units)

ECE 260B                      VLSI Integrated Circuits and Systems Design

Core Course	
	ECE 260B
<b>Total: 4 Units</b>	

#### Twenty additional units selected from the following

ECE 250	Random Processes
ECE 251 A	Digital Signal Processing I
ECE 252 A	Speech Compression
ECE 253	Fundamentals of Digital Image Processing
ECE 254	Detection Theory
ECE 257 A-B	Multiuser Communication Systems, Principles of Wireless Networks
ECE 258 A-B	Digital Communication
ECE 260 A, C	VLSI Digital System Algorithms and Architectures, VLSI Advanced Topics
ECE 265 A	Communication Circuit Design I
ECE 267	Wireless Embedded and Networked Systems
CSE 202	Algorithm Design and Analysis
CSE 221	Operating Systems
CSE 222B	Internet Algorithmics
CSE 237A	Introduction to Embedded Computing
CSE 240A	Principles of Computer Architecture
CSE 243A	Introduction to Synthesis Methodologies in VLSI CAD
CSE 245	Computer Aided Circuit Simulation and Verification

Additional Courses	
<b>Total: 20 Units</b>	

#### Technical Electives (twenty-four units)

- With the exception of research units, all courses counted towards the degree must be taken for a letter grade.
- Any 4 unit, 200+ course from ECE, CSE, MAE, BENG, CENG, NANO, SE, MATS MATH or PHYS taken for a letter grade may be counted. Exceptions to this list require departmental approval.
- Up to 3, 4-unit courses of undergraduate ECE/CSE coursework (ECE 111+ only/CSE 100+ only; NOT INCLUDING CSE 123A, CSE 140, CSE 140L or CSE 143) may be counted
- M.S. Students (Plan II) are allowed no more than 4 units of 299 as technical electives. Ph.D. and M.S. Students (Plan I) are allowed no more than 8 units of 299 as technical electives.

Technical Electives	
<b>Total: 24 Units</b>	

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<b>Advisor's Signature</b>	<b>Date</b>
<b>Student Name</b>	Revised: 2018-19 Academic Year
	<b>PID</b>