

M.Eng. Degree Planner
Erik Grindheim

Major code: EC84 (M.Eng)
Electrical & Computer Engineer
Graduate Division, ECE

	FA 06	WI 07	SP 07	FA 07	WI 08
	166	123		164	
	254	251AN	251BN	251CN	258A
	—	265A	265B	251DN	264A
Focus					
Breadth					
Prof. EL.					
Tech. EL.					

ECE 166 Microwave Circuits & Systems
 ECE 164 Analog integrated Circuit Design
 ECE 123 Antenna Systems Engineering

} Prof. Electives

Spring 2007 Courses:

- 107 - Electromagnetism
- 153 - Probability & Random Processes for Engineers
- 156 - Sensor Networks
- 163 - Electronic Circuits & Systems
- 171A - Linear Control System Theory

Master of Engineering (M.Eng.) Degree Planner**Focus Requirement (at least 20 units)**

- Five closely related graduate courses in ECE/CSE
- Must be selected from one of the focus groups listed below

ECE 251AN
ECE 251BN
ECE 251CN
ECE 251DN
ECE 254

Breadth Requirement (at least 8 units)

- Graduate courses in ECE/CSE that are distinctly different from one of the other focus groups

ECE 265A
ECE 265B

Technical Electives (8 units)

- Any graduate courses in ECE, CSE, Math, or Physics
- Four units may be either ECE 298 (Independent Study), or ECE 299 (Research)
- Other technical courses may be selected with the approval of the faculty advisor and the ECE Graduate Affairs Committee

ECE 258A
ECE 264A

Professional Electives (12 units)

- See possible choices below
- *(see below)

ECE 123
ECE 166
ECE 164

Focus 1: Applied Physics

(Applied Optics and Photonics; Electronic Devices and Materials)

Curriculum Advisor: S. Radic radic@ece.ucsd.edu EBUI 3404
Curriculum Advisor: V. Lomakin vitality@ece.ucsd.edu EBUI 4606

Applied Electromagnetic Theory *ECE 222A-B-C*
Solid State Electronics *ECE 230A-B-C*
Semiconductors *ECE 236A-B-C-D*
Materials Science *ECE 238A-B*
Materials Science *MS 201A-B-C*
Optics *ECE 240A-B-C*
Optics *ECE 241A-B-C*

Focus 2: Communications and Signal Analysis

(Communications Theory and Systems; Signal and Image Processing)

Curriculum Advisor (CTS): R. Lugannani lug@ece.ucsd.edu EBUI 4801
Curriculum Advisor (SIP): P. Cosman pcosman@ece.ucsd.edu EBUI 6407

Random Processes *ECE 250*
Digital Signal Processing *ECE 251AN-BN-CN-DN*
Speech Compression and Recognition *ECE 252A-B*
Digital Images Analysis *ECE 253A-B*
Detection Theory *ECE 254*
Information Theory *ECE 255AN*
Source Coding I and II *ECE 255BN-CN*
Time Series Analysis and Applications *ECE 256A-B*
Wireless Communications *ECE 257A-B*
Digital Communications *ECE 258A-B*
Channel Coding *ECE 259AN-BN-CN*
Parameter Estimation *ECE 275A-B*
Special Topics in Robotics and Control Systems (offerings vary annually) *ECE 285*

Focus 3: Electronic Circuits and Systems

(Computer Engineering; Electronic Circuits and Systems)

Curriculum Advisor (ECS): L. Larson larsen@ece.ucsd.edu EBUI 5607
Curriculum Advisor (ECS): I. Galton galton@ece.ucsd.edu EBUI 5606
Curriculum Advisor (CE): C. Schurgers curts@ece.ucsd.edu EBUI 4405
Curriculum Advisor (CE): K. Yun kyy@ece.ucsd.edu EBUI 4402

Applied Electromagnetic Theory *ECE 222A-B-C*
Solid State Electronics *ECE 230A-B-C*
Semiconductor Heterostructure Materials *ECE 236A-B-C*
Random Processes *ECE 250*
Digital Signal Processing I and II, Filter Banks & Wavelets, Array Processing *ECE 251 AN-BN-CN-DN*
VLSI Circuits *ECE 260A-B-C*
Analog IC Design *ECE 264A-B-C-D*
Communication Circuit Design *ECE 265A-B*
Computer Architecture *CSE 240A, 240B*
Computer Aided Design *CSE 242A, 243A*

Professional Electives (possible choices):

- Managerial Economics (IR/PS) *IRCO 401*
Accounting (IR/PS) *IRCO 420*
Finance (IR/PS) *IRCO 421*
- Any ECE/CSE upper division undergraduate courses in preparation for further graduate level work. * (see below)
 - Any ECE/CSE graduate courses to provide additional breadth or depth in one or more areas.
 - Courses outside of ECE or CSE must be approved by a faculty advisor

***IMPORTANT NOTE: Only a maximum total of 12 units from upper division undergraduate courses can be used towards the degree.**

This form is to help you design your degree plan. You should consult with your advisor or curriculum advisor or another ECE faculty member at least once per quarter and have this approved before finalizing any course of action.

Upon approval, this form must be submitted to the ECE Graduate Student Affairs office in EBUI, Second Floor

Advisor's Signature

Date

*ERIK GRINDHEIM**January 11/2007*

Student Name

PID

MASTER OF ENGINEERING

Salient features of the Master of Engineering (M. Eng.) program include the following:

- ✓ it can be completed in four quarters at full-time or eight quarters at half time;
- ✓ it does not require a thesis, a research project, or a comprehensive exam; and
- ✓ it has an option of three courses in business, management, and finance.

Course Requirements:

- The Focus Requirement: The course selection must include at least twenty (20) units / five (5) quarter courses from within one of the focus areas. In some cases it may be appropriate to select five closely related courses from two of the focus areas. Such cases must be approved by a faculty adviser and the ECE Graduate Affairs Committee.
- The Breadth Requirement: The minimum breadth requirement is eight (8) units / two (2) quarter courses of ECE/CSE graduate courses selected from among the courses within the focus areas, in an area distinctly different from that of the focus requirement.
- Technical Electives: Two (2) technical electives may be any graduate courses in ECE, CSE, Physics, or Mathematics. Other technical courses may be selected with the approval of the faculty adviser and the ECE Graduate Affairs Committee. Technical electives may include a maximum of four units of ECE 298 (Independent Study), or ECE 299 (Research).
- Professional Electives: The three (3) professional electives may be used in several ways:
NOTE: Use of other courses to satisfy the Professional Elective requirement must be approved by the faculty adviser.
 - i. for the IP/Core 401, 420, 421 series in business, management, and finance;
 - ii. for upper-division undergraduate technical courses specified as prerequisites for graduate-level focus, breadth, or technical elective courses taken to satisfy the M. Eng. degree requirements; or
 - iii. for additional graduate technical electives.

Other Requirements:

- The forty-eight (48) units of required course work must be taken for a letter grade (A-F), except for ECE 298 or 299, for which only S/U grades are allowed. Courses for which a D or F is received may not be counted.
- You must have a GPA equivalent to 3.0 or above in upper division and graduate course work, with a total of no more than eight units of "F" and/or "U" grades.
- The minimum residence requirement is three (3) quarters.