

College of Engineering
Graduate Student Success Center
(GSSC), VEC 128A

Graduate Orientation
MSEE
Fall 2017

People & Contacts

Graduate Student Success Center (GSSC)

Coordinator: Dr. Antonella Sciortino
antonella.scortino@csulb.edu

562.985.5119

Faculty Advisor: Dr. Mohammad
Mozumdar

mohammad.mozumdar@csulb.edu

Electrical Engineering Department

Chair: Dr. Henry Yeh
henry.yeh@csulb.edu

562.985.4899

Department Office: ECS-561

Administrative Support Coordinator:
Clarice Ross

clarice.ross@csulb.edu 562.985.8050

Items & Responsibilities

GSSC

- Graduate Admission
- Concentrations & Requirements
- Graduation Writing Assessment Requirement (GWAR)
- Advancement to Candidacy
- CPT & OPT

EE Department

- Culminating Experiences
Signing up for Culminating Experience (Comprehensive Exam, Thesis)
- File to Graduate

COE Resources

Writing and Communication Resource Center, VEC 128B

Program Director: Dr. Maryam Qudrat
maryam.qudrat@csulb.edu

562.985.7818

Hours: M-F 9 a.m.-5 p.m.

*Must make an appointment to
review your report.

Library Information & Support EN2-109

COE Librarian: Ms. Hema Ramachandran
hema.ramachandran@csulb.edu

562.985.5749 (Main Library)

562.985.2304 (Dudley Library, EN2-109)

Dudley Hours: M-F 9.a.m.-5 p.m.

Concentrations

- **Power, Control Systems Faculty:**
Chassiakos, Hamano, Nazari, Shahian, Yang
- **Electronics, Digital Systems Faculty:**
Khoo, Mozumdar, Teng, Wagdy, F. Wang, R. Wang
- **Biomedical Engineering Faculty:**
Ary, Druzgalski, Khoo, Mozumdar
- **Communications, Networking, Digital Signal Processing Faculty:**
Ahmed, Chang, Kwon, Sodagari, Tsang, Yeh

Power, Control Systems

Comprehensive Exam Alternative Plan

General Program Requirements (6 units)	Core Discipline Requirements (12 units)	Specialty Elective Courses (12 units)
EE 508, Probability Theory & Random Process (3) EE 511, Linear Systems Analysis (3)	EE 505 Adv Engineering Mathematics for EE (3) EE 550 Power Electronc & Applications (3) EE 556 Solar Power (3) EE 575 Nonlinear Control Systems (3)	4 courses (12 units) to be selected among the following: EE 551, EE 552, EE 553, EE 574, EE 576, EE 583, EE 591, EE 694

Additional Requirements: Students are required to take and pass the comprehensive exam.

Thesis Alternative Plan

General Program Requirements (12 units)	Core Discipline Requirements (12 units)	Specialty Elective Courses (6 units)
EE 508, Probability Theory & Random Process (3) EE 511, Linear Systems Analysis (3) EE 698, Thesis or Industrial Project (6)	EE 505 Adv Engineering Mathematics for EE (3) EE 550, Power Electronc & Applicatns (3) EE 556, Solar Power (3) EE 575, Nonlinear Control Systems (3)	2 courses (6 units) to be selected among the following: EE 551, EE 552, EE 553, EE 574, EE 576, EE 583, EE 591

Additional Requirements: Students are required to complete and defend a thesis under faculty supervision and support of a thesis committee and to submit an acceptable manuscript to the University Library.

Electronics, Digital Systems

Comprehensive Exam Alternative Plan

General Program Requirements (6 units)	Core Discipline Requirements (12 units)	Specialty Elective Courses (12 units)
EE 508, Probability Theory & Random Process (3) EE 511, Linear Systems Analysis (3)	EE 526, High Speed Communications Circuits (3) EE 534, Mixed-Signal IC Design (3) EE 535, VLSI Design(3) EE 546, Adv Microproc & Embedded Cntrl II (3)	4 courses (12 units) to be selected among the following: EE 551, EE 531, EE 532, EE 535A, EE 540, EE 545, EE 566, EE 587, EE 591, EE 694

Additional Requirements: Students are required to take and pass the comprehensive exam.

Thesis Alternative Plan

General Program Requirements (12 units)	Core Discipline Requirements (12 units)	Specialty Elective Courses (6 units)
EE 508, Probability Theory & Random Process (3) EE 511, Linear Systems Analysis (3) EE 698, Thesis or Industrial Project (6)	EE 526, High Speed Communications Circuits (3) EE 534, Mixed-Signal IC Design (3) EE 535, VLSI Design(3) EE 546, Adv Microproc & Embedded Cntrl II (3)	2 courses (6 units) to be selected among the following: EE 551, EE 531, EE 532, EE 535A, EE 540, EE 545, EE 566, EE 587, EE 591

Additional Requirements: Students are required to complete and defend a thesis under faculty supervision and support of a thesis committee and to submit an acceptable manuscript to the University Library.

Biomedical Engineering

Comprehensive Exam Alternative Plan

General Program Requirements (6 units)	Core Discipline Requirements (12 units)	Specialty Elective Courses (12 units)
EE 508, Probability Theory & Random Process (3) EE 511, Linear Systems Analysis (3)	EE 506, Thry & Prac Biomedical Instrmntn (3) EE 507, Adv Biomedical Systems (3) EE 576, Neural Nets Fuzzy Logic (3) EE 583, Digital Image Processing (3)	4 courses (12 units) to be selected among the following: EE 527, EE 528, EE 574, EE 585, EE 694

Additional Requirements: Students are required to take and pass the comprehensive exam.

Thesis Alternative Plan

General Program Requirements (12 units)	Core Discipline Requirements (12 units)	Specialty Elective Courses (6 units)
EE 508, Probability Theory & Random Process (3) EE 511, Linear Systems Analysis (3) EE 698, Thesis or Industrial Project (6)	EE 506, Thry & Prac Biomedical Instrmntn (3) EE 507, Adv Biomedical Systems (3) EE 576, Neural Nets Fuzzy Logic (3) EE 583, Digital Image Processing (3)	2 courses (6 units) to be selected among the following: EE 527, EE 528, EE 574, EE 585

Additional Requirements: Students are required to complete and defend a thesis under faculty supervision and support of a thesis committee and to submit an acceptable manuscript to the University Library.

Communications, Networking, Digital Signal Processing

Comprehensive Exam Alternative Plan

General Program Requirements (6 units)	Core Discipline Requirements (9 units)	Specialty Elective Courses (15 units)
EE 508, Probability Theory & Random Process (3) EE 511, Linear Systems Analysis (3)	EE 545, Computer Comm Networks (3) EE 580, Statistical Communication Theory (3) EE 585, Adv Digital Signal Processing (3)	5 Mandatory courses in the area of concentration to be selected from the following: EE 527, EE 528, EE 547, EE 548, EE 581, EE 582, EE 583, EE 586, EE 587, EE 588, EE 591, EE 694

Additional Requirements: Students are required to take and pass the comprehensive exam.

Thesis Alternative Plan

General Program Requirements (12 units)	Core Discipline Requirements (9 units)	Specialty Elective Courses (9 units)
EE 508, Probability Theory & Random Process (3) EE 511, Linear Systems Analysis (3) EE 698, Thesis or Industrial Project (6)	EE 506, Thry & Prac Biomedical Instrmntn (3) EE 507, Adv Biomedical Systems (3) EE 576, Neural Nets Fuzzy Logic (3) EE 583, Digital Image Processing (3)	3 Mandatory courses in the area of concentration to be selected from the following: EE 527, EE 528, EE 547, EE 548, EE 581, EE 582, EE 583, EE 586, EE 587, EE 588, EE 591

Additional Requirements: Students are required to complete and defend a thesis under faculty supervision and support of a thesis committee and to submit an acceptable manuscript to the University Library.

Graduation Writing Assessment Requirement (GWAR)

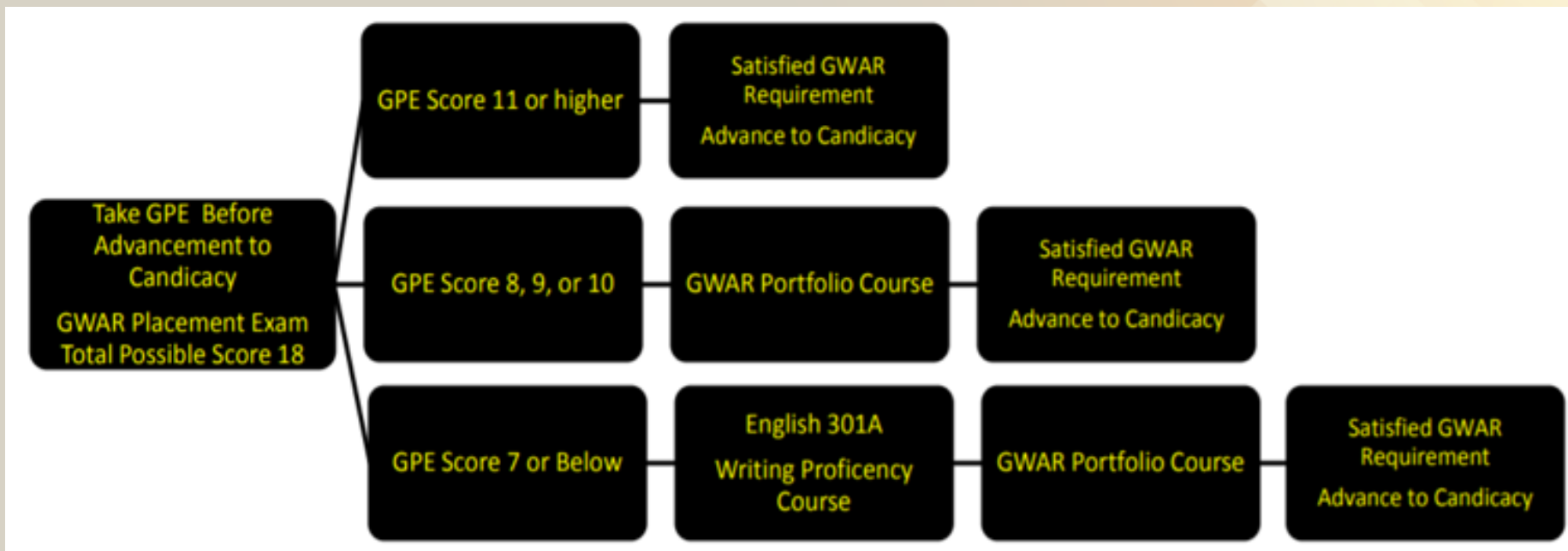
<http://web.csulb.edu/divisions/aa/gwar/>

- Passing of the Writing Proficiency Exam (WPE) with a score of 11 or higher. You need to take WPE in Fall 2017 semester, otherwise you will not be able to register for Spring 2018 semester.
- Students unsuccessful in their first WPE attempt must enroll in a GWAR course and submit a passing portfolio to fulfill the requirement. Students should meet with a GWAR Advisor if they need help selecting an appropriate GWAR course.

Graduation Writing Assessment Requirement (GWAR)

- Graduate students must complete the **GWAR requirement before Advancement to Candidacy**.
- All graduate students (M.A., M.S., M.B.A) who have earned an undergraduate degree from an accredited U.S. university or college, or earned an undergraduate degree from an accredited university from an English speaking country (see GWAR FAQ page for the List of Approved Countries), have satisfied the GWAR at CSULB and do not have to take the GPE.
- Graduate students who scored a 4 or higher on the GRE or GMAT have satisfied the GWAR at CSULB and do not have to take the GPE.
- Graduate students can self-place into a GWAR Portfolio Course (e.g., ENGL 301B, FMD 450, or a portfolio course offered in their major). If they self-place into a GWAR Portfolio Course, they do not have to take the GPE. To self-place, contact a GWAR Advisor by email at GWAR-Advisor@csulb.edu.
- If the student chooses to take the GPE, then self-placement into a GWAR Portfolio Course is no longer an option. Students must follow the pathway where they place once they receive a GPE score.
- GWAR Portfolio Course: Students who receive a score of 8, 9 or 10 must successfully complete one GWAR portfolio course with a “C” or better, and submit a passing portfolio to satisfy the GWAR.
- English 301A Writing Proficiency Course: Students who receive 7 or lower on the GPE must complete ENGL 301A with a grade of “C” or better before enrolling in a portfolio course and submitting a passing portfolio to satisfy the GWAR.
- GPE can be taken only once.

GWAR Placement Exam (GPE) Score Course Pathway



Advancement to Candidacy

- Completion of any deficiency requirement identifies with admission with 3.0 GPA
- Have met the GVAR requirement
- Completion of at least 18 units of graduate requirement within a concentration with GPA of 3.0 or higher
- Selection of culminating experience (comprehensive exam or thesis)

Curricular Practical Training (CPT)

CPT program provides international graduate students in the College of Engineering an opportunity to gain practical experience in their fields of study. To qualify for CPT, the student must have:

- at least one academic year of enrollment in valid F-1 status
- at least 18 units of the required graduate classes
- been Advanced to Candidacy, and
- be in good academic standing.

CPT Cont'd

- Once student is offered a CPT internship opportunity, and upon approval by the office of International Student Services, he/she must complete an independent study agreement and register for [Engr. 691](#) (1 unit) through CCPE with a full-time COE professor who agrees to supervise him/her and meet with the student regularly per an agreed schedule throughout the semester.
- At the end of the semester, a complete technical report, including an overview of the technical areas and activities engaged in, the problems encountered and the solutions provided, must be submitted to supervising professor and must earn a passing grade.
- This class can be repeated up to three times.

True or False?

- A student takes courses arbitrarily and then comes to the advisor saying that he/she wants to graduate that semester.

FALSE

- Every course must be pre-approved and every step must be completed before approaching the advisor, requesting graduation.

TRUE

Important Note

- EE 490 (Special Problems) and
- EE 405 (Special Topics)

Are **NOT ACCEPTED** in the graduate program.

Roadmap to MS Degree

- ❖ At least 18 units of graduate courses completed @CSULB
 - ❖ GPA at least 3.0 (100 and 200 do not count)
 - ❖ GVAR



Advancement to candidacy



**Pass other 12 units (according to your concentration)
No more than 2 grade "C" during your MS studies**

Important Note

- A graduate student should always maintain **GPA of at least 3.0** in **each semester**
- Otherwise → Probation

Comprehensive Exam Schedules

Fall

First Friday of Oct

Spring

First Friday of March