

# CIVIL & ENVIRONMENTAL ENGINEERING GRADUATE DEGREE REQUIREMENTS – EFFECTIVE FALL 2012

## Residency Requirements

Master's Degree: You must be registered in residence for at least three quarters

Doctoral Degree: You must be registered in residence for at least six quarters

## Ph.D. Degree Requirements

### A. Course Requirements

1. Clear any deficiencies identified at the time of admission to the graduate program.
2. Select 1 or 2 minors and prepare Preliminary Program of Study in consultation with Major Advisor and submit for review to GPC by end of 1 quarter of study.
3. Complete 1 unit of ECI-290.
4. Complete 54 units of approved coursework beyond undergraduate degree.
5. After passing the Qualifying Exam, be enrolled full time (12 units) every quarter and maintain an overall GPA of 3.25 or higher.

### B. Qualifying Examination

1. Select **five** members of Qualifying Exam committee in consultation with Major Advisor: *up to four* members from within the department and *at least 1 member* outside the department. Chair of Qualifying Exam cannot be the student's Major Professor.
2. Take and pass qualifying exam within two attempts.
3. Petition for advancement to candidacy for the degree of Doctor of Philosophy upon completion of Qualifying Exam.

### C. The Doctoral Dissertation

1. Complete and submit dissertation to members of PhD committee.
2. Upon approval by entire committee, submit dissertation to Grad Studies.
3. Deliver an exit seminar.

## Masters Degree Requirements

***(Complete Program Checklist in consultation with your Group Adviser. Submit Preliminary Checklist before 10<sup>th</sup> day of instruction in your first quarter of study)***

### A. Course Requirements

1. Clear any deficiencies identified at the time of admission to the graduate program.
2. Complete 1 unit of ECI-290.
3. Complete approved coursework beyond undergraduate degree as follows:
  - MS – Plan I: 27 units (of which 23 or more units are graduate level engineering courses).
  - MS – Plan II: 32 units (of which 28 or more units are graduate level engineering courses). --Students (Plan I&II) may count only one upper division undergraduate course excluding the prerequisite courses for students without an engineering degree. Exceptions to this policy will be permitted only by the approval of the student's Major Professor.
4. Maintain an overall GPA of 3.0 or higher.

### B. The MS Thesis or Project

1. MS – Plan I students will submit a written thesis which must be approved by all **three** members of the thesis committee
2. MS – Plan II students will complete a supervised independent project which must be presented to an examination committee of **three** faculty members

**Note: It is the student's responsibility to read and adhere to the CEE Guidance Manual for Graduate Students and their Advisors available at:**

<http://cee.engr.ucdavis.edu/students/Graduate/ResourcesForGrads.htm>

## OTHER RELEVANT INFORMATION

### 1. Pre-requisite courses for students without an Engineering degree

Students without a BS in Engineering who are admitted to the CEE graduate program are required to complete the following courses or equivalents.

Select four courses from the following six categories:

- Elementary Fluid Mechanics: ENG 103
- Mechanics of Materials : ENG 104
- Thermodynamics: ENG 105 or Chem 110C or Chem 107A or Chem 107B
- Engineering Hydraulics: ECI 141 and ECI 141L
- Numerical Methods: EAD 115
- Probabilistic Systems Analysis: ECI 114

*Including at least two of the following three classes:*

- Elementary Fluid Mechanics: ENG 103
- Mechanics of Materials : ENG 104
- Thermodynamics: ENG 105 (*Note: Chem 107A, 107B & 110C will not count towards this requirement*)

Select at least an additional 6 upper division engineering course units (minimum of 2 courses) approved by the student's *Major Professor* or Graduate Advisor.

### 2. Transferring Courses from another Institution or Program

**Master's Degree:** The normal limit for transfer credit is six units from another institution, or 12 concurrent units, or up to half of the unit requirement if the courses were taken at another UC campus in graduate status, providing the units were not used to satisfy requirements for another degree.

**Doctoral Degree:** No formal petition is required to transfer graduate courses. In consultation with their major professor, students will list appropriate course work on the Program of Study (available from the CEE department webpage) for GPC approval.

### 3. Changes to Graduate Program Requirements

You are responsible for fulfilling the requirements of your degree program as they are when you enter the program. Changes in program requirements normally should not affect students already in the program. You should be able to complete a degree under conditions in effect at the time of your admission or reentry.

### 4. Standards of Scholarship

Only courses in which A, B, C, or Satisfactory are earned may be counted in satisfaction of degree or credential requirements. A course in which you receive a D+ grade or lower does not count towards meeting the unit requirement for the master's degree, but does count in computing the grade point average. Lower division courses are excluded in arriving at the graduate GPA.

### 5. Required Forms to File

All relevant forms are listed in the CEE Guidance Manual for Graduate Students and their Advisers and are available on the department website:

<http://cee.engr.ucdavis.edu/students/Graduate/ResourcesForGrads.htm>

Submit all completed forms to the Graduate Coordinator and she will obtain the Graduate Adviser's signature for you before submitting to the appropriate campus parties for approval. Do not take forms directly to the Graduate Adviser to ask for signatures.

NAME: \_\_\_\_\_ AREA: \_\_\_\_\_

[ ] Preliminary [ ] Final

**PROGRAM CHECKLIST: MS DEGREE**

<b>1. RESIDENCY REQUIREMENT (minimum 3 quarters)</b>				
Enter Quarter & Year				
<b>2. PRE-REQUISITE COURSES</b>				
These are courses identified after admission to the graduate program. Please see your group advisor to identify these courses.	Course No. & Title		Qtr. & year	Grade
<b>3. COURSES TAKEN TOWARDS DEGREE REQUIREMENT</b>				
MS – Plan I: 27 units of coursework (at least 23 units must be graduate engineering courses)	Graduate Courses		Undergraduate courses*	
	Course No.	Units	Course No.	Units
MS – Plan II: 32 units of coursework (at least 28 units must be graduate engineering courses)				
	TOTAL UNITS		TOTAL UNITS	
* Pre-requisite courses (listed in Section 2) and the following undergraduate or equivalent courses cannot be counted towards the graduate degree: Structural Concrete Design; Engineering Hydraulics; Soil Mechanics; Water Quality Management				
<b>4. Graduate Seminar (ECI 290) – 1 unit</b>				
		Enter quarter & year →		
<b>5. Thesis (MS-Plan I) <input type="checkbox"/> or Project <input type="checkbox"/> (MS-Plan II)</b>				
Required units: MS-Plan I: >= 8 units MS-Plan II: >= 2 units	ECI 290C/299 (Qtr & Year)		UNITS	
		Total Units:		

**STUDENT'S SIGNATURE:** \_\_\_\_\_

**FACULTY ADVISER'S SIGNATURE:** \_\_\_\_\_