

Name:	Student ID Number:
Qrt/Year Expected to Advance to Candidacy:	Email Address:
Qrt/Year Expected to Graduate:	GPA:
Thesis or Non-Thesis Option:	Thesis Advisor:

					NON-THESIS OPTION 48 UNITS TOTAL	THESIS OPTION 48 UNITS TOTAL
COURSE AREA	COURSE Number	UNITS	GRADE	QTR/YR	<u>Core Courses</u> 12 out of 48 units	<u>Core Courses</u> 12 out of 48 units
ADVANCED MATH		4			One course required. <i>see page 2</i>	One course required. <i>see page 2</i>
WATER		4			One course required. <i>see page 2</i>	One course required. <i>see page 2</i>
ENERGY, AIR QUALITY & CLIMATE		4			One course required. <i>see page 2</i>	One course required. <i>see page 2</i>
TOTAL UNITS FOR THIS SECTION:						
COURSE TITLE	COURSE Number	UNITS	GRADE	QTR/YR	<u>Electives</u> 28 out of 48 units	<u>Electives</u> 16 out of 48 units
					Students must fulfill a minimum of 28 elective units from graduate courses listed on attached list. <i>see page 2</i>	Students must fulfill a minimum of 16 elective units from graduate courses listed on attached list. <i>see page 2</i>
TOTAL UNITS FOR THIS SECTION:						
COURSE TITLE	COURSE Number	UNITS	GRADE	QTR/YR	<u>Seminars/Other</u> 8 out of 48 units	<u>Seminars/Other</u> 10 out of 48 units
					Required: 3 units of <u>CEE 295: Seminars in CEE</u> . Max. of 3 units apply to degree requirements. Options for the remaining 5 units: <ul style="list-style-type: none"> • Approved graduate-level courses • <u>CEE 299 Individual Research</u> • Approved upper-division undergraduate units. 10 units max 	Required: 3 units of <u>CEE 295: Seminars in CEE</u> . Max. of 3 units apply to degree requirements. Options for the remaining 7 units: <ul style="list-style-type: none"> • Approved graduate-level courses • <u>CEE 299 Individual Research</u> • Approved upper-division undergraduate units. 10 units max
TOTAL UNITS FOR THIS SECTION:						
TOTAL UNITS FOR ALL SECTIONS:						

<u>SIGNATURES:</u>		<u>MS THESIS COMMITTEE MEMBERS:</u>
STUDENT: _____	DATE: _____	CHAIR: _____
ENVIRONMENT & ENERGY FOCUS AREA ADVISOR: _____	DATE: _____	MEMBER: _____
CEE GRADUATE ADVISOR: _____	DATE: _____	MEMBER: _____

This form must be submitted to the Grad. Coordinator by the end of the **FIRST** quarter of enrollment. Changes to this form **MUST** be approved by the Environment & Energy Focus Area Advisor, Professor Russell Detwiler: detwiler@uci.edu

Core Requirements (12 Units):

Students entering the program without a M.S. degree must complete the following core requirements before petitioning to Advance to Candidacy for the M.S. Degree:

Area:	Requirements:	Courses:
Advanced Mathematics	One of the five options (4 units):	ENGRCEE 283 Math. Methods in Eng. Analysis (F) ENGRMAE 200A Engineering Analysis I (F) ENGRMAE 200B Engineering Analysis II (W) CBE 200 Applied Engineering Mathematics I (F) PHYSICS 229A Computational Methods (F)
Areas of Emphasis	One course from each of the two primary Areas of Emphasis: <ul style="list-style-type: none"> • Water (4 units) • Energy, Air Quality & Climate (4 units) 	<i>See below under:</i> 'Core Courses by Areas of Emphasis'

Elective Courses: Additional course requirements can be fulfilled by using any of the courses below. Other courses can be included with the prior approval of the Environment & Energy Focus Area Advisor, Professor Russell Detwiler: detwiler@uci.edu

For non-CEE courses, please check individual Department schedules to confirm course offerings.

Core Courses by Areas of Emphasis (the following courses can all be used as electives as well)

Water:	Energy, Air Quality & Climate:
ENGRCEE 260 Desalination (*) ENGRCEE 262 Environmental Chemistry (*) ENGRCEE 263 Adv. Biological Treatment Processes (*) ENGRCEE 265 Physical-Chemical Treatment Processes (W) ENGRCEE 268 Intro to Env. Fluid Mechanics & Turbulence (W) ENGRCEE 269 Beach Dynamics (*) ENGRCEE 270 Flood Risk & Modeling (W) ENGRCEE 271 Flow in Unsaturated Porous Media (*) ENGRCEE 272 Groundwater Hydrology (F) ENGRCEE 273 Watershed Modeling (W) ENGRCEE 275 Stochastic Methods in Hydrology (W) ENGRCEE 276 Hydrology (F) ENGRCEE 277 Hydrologic Transport Fundamentals (*) ENGRCEE 279 Environmental Transport Modeling (W) ENGRCEE 289 Analysis of Hydrologic Systems (S) ENGRCEE 290A Machine, Model, and Statistical Learning I (S) ENGRCEE 290B Machine, Model, and Statistical Learning II(F) ENGRCEE 291 Hydrologic Remote Sensing (*) ENGRCEE 292 Wavelets in Hydrology, Eng. & Geoscience (*)	ENGRCEE 264 Carbon & Energy Footprint Analysis (S) ENGRCEE 274 Climate Data Analysis (W) ENGRCEE 298 Wildfires Science & Engineering (W) EARTHSS 240 Atmospheric Chemistry and Physics EARTHSS 242 Advanced Atmospheric Chemistry ENGRMAE 210 Combustion ENGRMAE 214A Fuel Cell Fundamentals & Tech. ENGRMAE 215 Advanced Combustion Technology ENGRMAE 218 Sustainable Energy Systems ENGRMAE 260 Current Issues Related to Tropospheric and Stratospheric Processes Key: (F) Fall Quarter; (W): Winter Quarter; (S): Spring Quarter; (*): Not offered in 2024/2025. Other Approved Elective Courses: ENGRCEE 214 GIS for CEE (F)

The following can **ONLY** be included with the **prior** approval of the Environment & Energy Focus Area Advisor, Professor Russell Detwiler: detwiler@uci.edu

- Upper-division undergraduate courses and/or non-CEE graduate courses (outside of those listed above). Include a description of the course in your email request to Professor Russell Detwiler.
- MS Thesis Research units can be extended to 16 units. Email your request to Professor Russell Detwiler.