

# Course Selection & Student Advising Guide

**Updated November 2017** 

**B.S.E.** Civil Engineering

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# What is in this Document?

This document is a roadmap to guide you, the undergraduate student in Civil Engineering (CE), through the complex process of selecting and registering for courses to earn your degree as efficiently and quickly as you want. It is organized according to common questions and issues you will face during your time at UConn.

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<u>This document does not substitute for the course catalog</u>. Complete information about CE degree requirements can be found at the following web addresses:

- Undergraduate Catalog: <u>http://www.catalog.uconn.edu/</u>
- Academic Calendar: <u>http://registrar.uconn.edu/academic-calendar</u>
- Gen Ed Course Lists: <u>http://www.geoc.uconn.edu/approved-gen-ed-courses/</u>
- CE Curriculum: <u>http://undergrad.engr.uconn.edu/advising/curriculum-outlines/civil-engineering/</u> and in the Appendix.
- CE Plans of Study: <u>http://studentadmin.uconn.edu</u>
- Forms (schedule revision i.e. add/drop, catalog year change, excess credit, additional degree, etc.): <u>http://registrar.uconn.edu/forms</u>

# What Does That Abbreviation or Acronym Mean?

Large organizations (including UConn) are notorious for using abbreviations and acronyms liberally in descriptions of offices and procedures. These abbreviations and acronyms are helpful for streamlining text, but only when everyone knows what they mean. Following is a list of abbreviations and acronyms that are used in this document and that you might see elsewhere as you navigate through UConn.

ASCE	American Society of Civil Engineers
CAST	Castleman Building (home of the CEE Department)
CE	Civil Engineering (the undergraduate or graduate program)
CE&M	Construction Engineering & Management (the minor)
CEE	Civil & Environmental Engineering (the Department)
EII	Engineering II Building (home of the SoE Undergraduate Dean)
EIT	Engineer in Training
ENVE	Environmental Engineering (the undergraduate or graduate program)
FE	Fundamentals of Engineering examination
Gen Ed	General Education courses (required of all UConn undergraduates)
GPA	Grade Point Average
P&P	Principles and Practice examination
PE	Professional Engineer
PEO	Program Educational Objectives
POS	Plan of Study
PR	Professional Requirements (senior level electives)
SoE	School of Engineering

# What Is Civil Engineering?

Civil and Environmental Engineers seek to sustainably plan, design, construct and maintain infrastructure systems that meet the evolving needs of humanity while maintaining and protecting the natural environment. We work in the natural and constructed environments and must account for the forces of nature in our designs, seeking to minimize any adverse effects of our designs on the environment and society. We design and construct the physical infrastructure needed by society to insure a high quality of life. This includes the buildings where we live and work, the highways where we travel, the water that we drink, as well as a multitude of other projects necessary for the well-being of life on planet earth.

Civil & Environmental Engineers address some of the most important challenges that face our world today, including:

- Restoration and protection of the environment
- Sustainable energy and the environment
- Global warming and climate change
- Global water supply and flood and drought management
- Planning and design of sustainable transportation systems
- Safe, efficient and secure transportation for people and goods
- Structural monitoring and rehabilitation of aging infrastructure
- Infrastructure protection and natural hazards mitigation
- Design and construction of new infrastructure

**The mission of the Civil and Environmental Engineering Department** is to educate students who will become leaders in the profession; to advance the profession through cutting edge research and scholarship; to provide lifelong learning opportunities; and to serve as an intellectual resource to the state, national and international communities. Our academic programs emphasize fundamental scientific concepts, state-of-the-art planning and design, critical thinking and communication skills, interdisciplinary teamwork, strong facultystudent interaction and professional development. We strive to provide a uniquely challenging and invigorating learning environment for our students.

# What is Accreditation and Why Is It Important?

Accreditation is a process to assure you that the Civil Engineering degree you earn at UConn (or any other accredited engineering school) can be trusted to prepare you for your career objectives, including gaining employment as an engineer after graduating and eventually becoming licensed as a Professional Engineer (PE) (see section "What is Professional Licensure?").

Engineering and technology programs in the US, including your CE degree from UConn, are accredited by an organization called ABET. One aspect of accreditation is announcing to our constituents – prospective students and potential employers – what our program prepares graduates for. This is known as our **Program Educational Objectives**, or PEO's, and they describe what we prepare our students to be doing 5-10 years after they graduate.

### The UConn Civil Engineering undergraduate program educational

**objectives** are to prepare our alumni/ae with the knowledge and skills needed to:

- actively contribute to the practice and profession of civil engineering in the public or private sectors in the technical areas of environmental, geotechnical, structural, transportation, and water resources engineering;
- follow a path that can lead to licensure as professional engineers who design and construct solutions to civil engineering problems in the natural and built environments; and
- practice life-long learning through post-graduate and professional education.

In addition to publishing these PEO's, we also assess whether or not we achieve them. One of the ways we do this is to periodically ask our graduates questions about their career progress. After you earn your degree at UConn, we may contact you at some time to do this. It is very important to maintain accreditation of your degree to help us out by answering these questions. These questions are also helpful to support our goal of continuously looking for ways to improve our program. We thank you in advance for your cooperation.

# What Else Does Accreditation Involve?

**STUDENT OUTCOMES** are what students are expected to know and be able to do by the time of graduation, and include the following:

- a.) an ability to apply knowledge of mathematics, science, and engineering
- b.) an ability to design and conduct experiments, as well as to analyze and interpret data
- c.) an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
- d.) an ability to function on multi-disciplinary teams
- e.) an ability to identify, formulate, and solve engineering problems
- f.) an understanding of professional and ethical responsibility
- g.) an ability to communicate effectively
- h.) the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
- i.) a recognition of the need for, and an ability to engage in life-long learning
- j.) a knowledge of contemporary issues
- k.) an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

In addition there are special **CE PROGRAM CRITERIA** defined by the American Society of Civil Engineers (ASCE), the professional society for civil engineers in the US. These criteria say that any accredited civil engineering program must prepare graduates to "apply knowledge of mathematics through differential equations, calculus-based physics, chemistry, and at least one additional area of basic science, consistent with the program educational objectives; apply knowledge of four technical areas appropriate to civil engineering; conduct civil engineering experiments and analyze and interpret the resulting data; design a system, component, or process in more than one civil engineering context; explain basic concepts in management, business, public policy, and leadership; and explain the importance of professional licensure."

The undergraduate course program you take in CE is designed so that by graduation you will have taken courses to learn how to do all of the above.

# What is Professional Licensure?

Engineers are required to be licensed when their work directly affects public health, safety and welfare. Licensure ensures that engineers have met minimum qualifications, including competence, ability, experience and character. The licensing process involves an initial exam, called the *Fundamentals of Engineering Examination (FE Exam)*, professional experience, and a second exam, called the *Principles and Practice of Engineering (P&P Exam)*. Once an individual has passed the FE Exam, s/he is certified as an *Engineer-in-Training (EIT)*. After some professional experience and passing the P&P Exam, the individual becomes a *Professional Engineer (PE)*, and is said to be "licensed". The exams are developed and administered by the *National Council of Examiners for Engineering and Surveying* (NCEES).

The first exam, the *FE Exam*, can be taken just before graduation from a four-year accredited engineering program, like UConn's. The exam stresses subject material in a typical undergraduate program, including chemistry, physics, mathematics, statistics, dynamics, mechanics of materials, fluid mechanics, electrical engineering, thermodynamics and engineering economics.

The CE Faculty strongly encourages all CE students **to take this exam in the last semester of their undergraduate program** when the subject matter is still fresh in your mind. Waiting to take this exam after graduation often requires significant additional preparation.

Connecticut has chosen the automatic model for approval, which is that examinees will be allowed to register directly with NCEES without prior approval by the Board. FE who would like to be certified in Connecticut may register with NCEES at <u>www.ncees.org</u>. Candidates will pay NCEES the examination fee and will schedule their examination in their NCEES account. Candidates will then take their examination at a Pearson VUE testing location. Candidates will be required to read the NCEES Examinee Guide at <u>http://ncees.org/exams/cbt/examinee-guide/.</u> Reference materials and practice exams are also available on the NCEES website.

Upon receipt of a passing examination status you may apply with the Connecticut Board by obtaining an application at (<u>www.ct.gov/dcp</u>) if you want to become certified as an engineer-in-training or surveyor-in-training.

Following are some hints for completing the application:

- Sign up as Class 9S.
- You only need to list faculty names; you do <u>not</u> need their signatures.
- Leave the part about listing experience blank.
- The UConn COOP has a notary.
- The Registrar's Office at the Wilbur Cross building can process the "Certificate of Education".
- You do <u>not</u> need to fill in the "Verification of Registration" form.

# Who Do I Need To See For ...?

### Signatures

If a form asks for the signature of	you should see:
the Dean	the Associate Dean for undergraduate education or the
	Director of Advising, SoE
the Department Head	the Associate Head of CEE
your advisor	your advisor, listed in Student Administration

# People in the Registration Process and What They Do

	-	
Associate Dean, SoE,	SoE Dean's designee for undergraduate academic issues;	
Undergraduate Programs	supervises the Director of Advising, SoE;	
Director of Advising, SoE	Reviews and approves POS's for all engineering students;	
	approves substitutions for SoE requirements, such as Math,	
	Sciences, Gen Eds	
Associate Head, CEE	Department Head's designee for academic issues; approves	
	substitutions for CE courses and program requirements	
Professional Advisor, CEE	Main contact for advising in the CEE department; helps	
	underclassmen in planning their program and selecting	
	courses; reviews and approves POS's for CEE students; assigns	
	upperclassmen students to faculty advisors	
Your faculty advisor	A member of the CEE Faculty who will help upperclassmen in	
	planning their program of study and selecting courses	

# So ... Who Are these People?\*

Title	Name, Office, Phone, Email
Associate Dean, SoE,	Daniel Burkey, EII 304A, 860-486-2167
Undergraduate Programs	daniel.burkey@uconn.edu
Director of Advising, SoE	Whitney Losapio, EII 304C, 860-486-0512
	whitney.losapio@uconn.edu
Associate Head, CEE	Prof. Nicholas Lownes, CAST 301, 860-486-2717
	Nicholas.lownes@uconn.edu
Professional Advisor, CEE	Althea Lozefski, contact TBD, <u>althea.lozefski@uconn.edu</u>
Your faculty advisor	You can find out who your advisor is by looking at your
	Student Center in Student Administration.

\*correct as of May 3, 2017

# How Do I Register for Classes?

- 1. **Complete the Pre-Advising Assignments on HuskyCT**: Instructions to prepare for advising are announced in late September and February each semester for registration for the following semester. Follow these instructions carefully. Once you have done the indicated tasks, you may proceed to Step 2. If you have not completed these tasks in Step 1, your advisor will not meet with you until you have completed them.
- 2. **Make an appointment to see your advisor.** Each advisor uses a different procedure for doing this: some make appointments by email; others post a sign-up sheet on the office door. Remember that due to conference or research travel, your faculty advisor may occasionally be off campus for several days at a time and unavailable for appointments. It is a good idea to contact him/her for an appointment <u>two weeks or more prior to your registration time window</u>. (Your enrollment appointment is available in your Student Center in Student Administration.)
- 3. Meet with your advisor. Several things will happen in your meeting:
  - a. You will discuss your schedule. Tell your advisor about your career plans, including graduate school or studying abroad or taking a semester off on coop. This will help him/her to give you advice about which classes to take, including a list of courses you will sign up for next semester.
  - b. You will review your preliminary Plan of Study (POS), if applicable. This must be submitted for approval two (2) semesters before you expect to graduate.
  - c. **Your faculty advisor will fill out and sign a registration/bar removal form.** This form must be filled out completely.
- 4. Take the registration/bar removal form to the CEE Department Office, located in Castleman, room 302. Give the form to one of the full-time staff members. She will log into Student Administration and remove your advising bar so you can register. You cannot register in Student Administration until you get your advising bar removed. Note that the office staff have other responsibilities, and they might not be able to remove your bar right away. Generally, they will do it by the end of the day (5:00 PM) that you turn in your form. If you need it removed sooner, let them know what you need and they will tell you if they are able to accommodate your request.
- 5. **Login to Student Administration** during your enrollment appointment window and sign up for your courses. Be sure to sign up for the courses your advisor directed you to take. <u>If you need to deviate from the schedule you and your advisor</u> <u>discussed, contact your advisor immediately</u> to make sure this will not have repercussions on your course program and planned graduation date.

# What are Preliminary and Final Plans of Study?

A **preliminary POS** is filed after a student has reached junior credit standing (54 credits or more) and outlines the student's plan for the remainder of their coursework until graduation. Submitting an approved preliminary plan of study is **required** in the School of Engineering.

The preliminary Plan of Study (POS) allows students to map out the entirety of their degree coursework to assist them in conversations with their advisor about meeting all degree requirements prior to graduation.

A **final POS** is filed after you have registered for your final semester of coursework. The final POS must demonstrate that the student meets all requirements to graduate. The final POS is a UConn graduation requirement.

# Who fills out the POS?

It is the student's responsibility to fill out and file both the preliminary and final POS. However, students should do so with the guidance of their Academic Advisor. It is ideal to start this process at least one semester ahead of time, that is, in the spring of your sophomore year.

### How do I submit a preliminary POS?

First, you must access you academic planner in Student Administration.

### SA Self Service > Student Center > Academic Planner

Then you can select "Plan by Requirements" to review your remaining unsatisfied requirements for your degree. You may also add courses to your planner using the "Browse Course Catalog" component.

Once you understand which courses you still need to take, review what semester those courses are offered and enter them into your Academic Planner accordingly. When you have completed this, you can select "Submit Plan of Study" and the document will be sent electronically to your faculty advisor for their review.

Ultimately, if the preliminary POS is **denied**, you must fix whatever errors are indicated and submit a new, correct POS that satisfies all degree requirements. If the POS is **approved**, you now have a complete and accurate plan to reach graduation. If you decide to deviate from this plan, it is your responsibility to discuss the changes with your academic advisor and ensure that you are still completing all degree requirements.

If you need further assistance, please access this video tutorial or contact your Academic Advisor: <u>https://www.youtube.com/watch?v=bXChknVu1yM</u>

# How do I submit a final POS?

First, you must apply for graduation via Student Administration.

SA Self Service > Student Center > My Academics > Apply for Graduation

Next, submit your final plan of study. You can do this by navigating the following path:

SA Self Service > Student Center > Academic Requirements (under the drop down menu at the left) > "Submit Final Plan of Study" button

All of your requirements must show as satisfied in student admin to have your final plan of study approved.

### When should I submit my preliminary and final POS?

Students should submit the preliminary POS after earning 54 credits, which is when a student has reached junior credit standing. Once a student reaches 54 credits, they must submit an approved preliminary POS prior to registering for courses for the following semester, or the student will be prevented from registering.

The final POS must be submitted as soon as possible after registering for your final semester of coursework. The latest a final POS can be submitted is by the end of the fourth week of the semester in which a student plans to graduate.

### What are some common mistakes on the preliminary POS in CEE?

Following are the most common mistakes that students make when filling out the POS. Doing any of these will guarantee that your POS will NOT be approved and your graduation may end up being delayed.

- 1. Failing to supply a course for every requirement.
- 2. Failing to assign courses to the proper semester.
- 3. Presenting a POS with fewer than 128 total credits.
- 4. Submitting a POS with unsatisfied requirements without indicating transfer credit or a substitution, which must be approved by either the Professional Advisor or Associate Head of the Department (for a CEE requirement), or the Director of Advising, SoE (for School of Engineering or University requirements).
- 5. Counting the credits for your double-dipped Gen Ed twice. You may use the same course to meet two requirements, but you may only count the credits once.

# How Do I Satisfy the General Education Requirements?

The University requires all baccalaureate degree students to satisfy a common core of course work known as the General Education Requirements. Course work in the Arts, Humanities and Social Sciences is also an integral part of the engineering program. Courses must be taken and distributed to cover the Four Content Areas and the Five Competencies listed below. Please see the University of Connecticut General Catalog for more detailed information.

For a full list of General Education classes, go to <u>http://www.geoc.uconn.edu/approved-gen-ed-courses/</u> or search by Content Area in the Student Admin Search function.

#### The Four Content Areas

The courses taken to satisfy the General Education Content Areas One, Two, and Three must be selected from six different departments.

#### **1. Arts and Humanities**

Two courses from two different departments in this content area are required. These courses emphasize artistic, cultural, and historical topics. (PHIL 1104), required of all engineering students, meets a Content Area One course requirement.)

#### 2. Social Sciences

Two courses from two different departments in this content area are required. These courses emphasize the ways in which people and institutions interact.

#### 3. Science and Technology

Two courses from two different departments in this content area are required. These courses provide background in the sciences, including laboratory work. (CHEM 1127Q and PHYS 1501Q, required of all engineering students, meet the Content Area Three requirement.)

#### 4. Diversity and Multiculturalism

Two courses in this content area are required. These courses provide background on the global community and other cultures with which engineers will interact over the course of their careers. At least one of these courses must be classified as international. One course (only) may be used to meet both this requirement and a course requirement in Content Areas One or Two.

#### The Five Competencies

#### 1. Second Language Competency

The minimum requirement is met by three years of a single foreign language in high school or equivalent, or completion of a two-semester course sequence in any foreign language at the University.

#### 2. Writing (W) Competency

All students must take either ENGL 1010 Seminar in Academic Writing or ENGL 1011 Seminar in Writing through Literature or the honors equivalent, if applicable. In addition, students must take two "W" courses, with at least one within their major. This requirement is fulfilled for Civil Engineers by the two-part senior design sequence (CE 4900W & CE 4920W).

#### 3. Quantitative (Q) Competency

All students must take two Quantitative (Q) courses. The math and science courses for the CE major meet this requirement.

#### 4. Computer Technology Competency

By graduation, CE students are expected to understand computer logic and basic structure and to have the ability to develop algorithms. These competencies are achieved by completing CSE 1010— Introduction to Computing, or equivalent course.

#### **5. Information Literacy Competency**

In addition to the basic competency achieved in ENGL 1010/1011 or equivalent, all Engineering students will receive instructions in ENGR 1000 or equivalent on how to conduct effective information searches, both in the library and on the web.

# Which PR Courses Should I Take for a Particular Area of CE?

You may choose your professional requirements to suit your interests. Following are suggestions for courses to choose if you wish to focus on one of these areas of CE. These are merely suggestions to suit a particular area of interest, but these concentrations have no formal standing, with the exception of Construction, for which there is a formal Minor in Construction Engineering & Management.

#### **Construction Engineering**

CE 3220 (F) CE 4210 (S) CE 4220 (S) CE 4510 (S) or 3630 or 3640 CE 4720 (S odd) or 4750 (F even)

#### **Environmental Engineering\***

CE 4210 (S) CE 4410 (S) ENVE 4310 (S) ENVE 4810 (F) ENVE 3230 (S)

#### **Geotechnical Engineering**

CE 3630 (S) or 3640 (F) CE 4210 (S) CE 4410 (S) CE 4510 (S odd) CE 4541 (S even) or 3530 (F even)

#### **Pavement Engineering**

CE 4210 (S) CE 4410 (S) CE 4570 (F odd) CE 4720 (S odd) CE 4750 (F even)

#### **Site Engineering**

CE 4210 (S) CE 4410 (S) CE 4510 (S odd) or 4541 (S even) CE 4710 (F) CE 4720 (S odd)

#### **Structural Engineering**

CE 3630 (S) or 3640 (F) CE 4210 (S) CE 4410 (S) CE 4510 (S odd) or 4541 (S even) CE 4610 (F)

#### **Transportation Engineering**

CE 4210 (S) CE 4410 (S) CE 4510 (S odd) or 3630 or 3640 CE 4710 (F) or 4720 (S odd) CE 4730 (F odd) or 4740 (F even)

#### Water Resources Engineering

CE 4210 (S) CE 4410 (S) ENVE 3220 (S) or ENVE 4310 (S) ENVE 4810 (F) ENVE 4820 (S)

\*to focus in environmental engineering, be sure to choose ENVE 3220 and ENVE 3200 for the lab and analysis requirements.

# How Do I Choose Free Electives?

# How many free elective credits do I need?

The number of free elective credits varies for each student, depending on many factors. To find out how many free elective credits you need, fill out your Preliminary POS to meet all of the Gen Ed and CE requirements, and then see if there are any remaining credits needed for your credit total. Any remaining credits needed to obtain the 128 you need to graduate can be free elective credits.

# What can I take for free electives?

You may take any course, either at UConn or transferred from another college or university, subject to the following restrictions:

### University Course Restrictions (listed in the Undergraduate Catalog):

- No credit for MATH 1010
- Not more than 12 credits of biology (MCB or EEB) at the 1000-level
- Not more than 3 credits of EKIN 1160
- Not more than 6 credits from PHIL 1101 through 1107 (note that PHIL 1104 is required for students in Engineering)
- Not both STAT 1000 and 1100

No credit for a course prerequisite to a second course in the same department may be counted for credit toward graduation after the student has passed the second course (see "FAQ's about Course Registration Issues", page 29)

### Additional SoE Restrictions (these may <u>not</u> be used on the POS):

- MATH 1110Q or 1112Q or courses numbered below 1100
- PHYS 1010Q and 1030Q
- CSE 1000
- No course taken on a Pass/Fail basis may be counted for credit toward graduation or used to meet any course requirement of the School of Engineering (other than CE 2010)
- No more than 8 credits of 1000-level PHYS or CHEM

# What about Transfer Courses and Course Substitutions?

### How do I get credit for courses I took somewhere else?

Courses from other institutions with a grade of C or better can be transferred and can count as credit towards graduation, subject to the credit restrictions noted on page 16. Note also that not every course will help you meet course requirements in CE. If you are planning to take a course elsewhere to meet a graduation requirement, check with your advisor or the Assistant Department Head to make sure the course will satisfy a graduation requirement <u>before</u> you sign up for and take the course. You should also fill out the **Prior Course Approval form** via Student Administration.

The following website gives information about how to transfer in credit for courses taken at other colleges and universities: <a href="http://admissions.uconn.edu/content/transfer/transfer-credit">http://admissions.uconn.edu/content/transfer/transfer-credit</a>

You can also search for courses offered at colleges and universities in Connecticut that transfer as UConn courses at the following webpage: <u>http://transfer.uconn.edu/search.php</u>.

### Can I substitute another course for one that is required?

Following is a list of automatic course substitutions that do not require special approval.

Other substitutions may be granted under special circumstances. You may petition the Associate Head of CEE and the Director of Advising for SoE for any other course substitutions <u>before taking the substituted course</u>.

Instead of taking	you may substitute
ENGL 1010 or 1011	ENGL 91002 and ENGL 91003 (transferred courses) with
	approved waiver documentation from English Department
ENGR 1166	The equivalent credits in any 2000-level engineering courses
MATH 1131Q	(MATH 1125Q and 1126Q*) <b>or</b> MATH 1151Q
MATH 1132Q	MATH 1152Q
MATH 2110Q	MATH 2130Q
MATH 2410Q	MATH 2420Q
MATH 1131Q, 1132Q, 2110Q & 2410Q	MATH 2141Q and 2142Q and 2143Q and 2144Q
CHEM 1127Q	CHEM 1124Q and 1125Q*
CHEM 1127Q and CHEM 1128Q	CHEM 1124Q and 1125Q and 1126*
CHEM 1127Q and CHEM 1128Q	(CHEM 1137Q and 1138Q) <b>or</b> (CHEM 1147Q and 1148Q)
PHYS 1501Q and PHYS 1502Q	PHYS 1201Q and 1202Q and (1230 or 1530)*
PHYS 1501Q and PHYS 1502Q	(PHYS 1401Q and 1402Q) <b>or</b> (PHYS 1601Q and 1602Q)
ME 2233	CHEG 2111

\*the credits for MATH 1125Q, CHEM 1124Q and 3 credits of the PHYS may <u>not</u> be counted toward graduation.

# Can I Get a Minor in Another Subject?

Yes! Review <u>http://catalog.uconn.edu</u> for a full list of Minors offered at UConn. Contact the department or office listed in the Catalog for the minor program in which you are interested to find the courses required. Share this information with your Advisor, and together you can select courses to meet the requirements for both your major and the minor. Major and minor requirements can overlap to use one course to fulfill requirements for both.

# Minor in Construction Engineering & Management

Here is how to fulfill the requirements for the CE&M Minor within the CE degree requirements using only one free elective and no extra courses:

Course	On CE POS	On CE&M Minor POS
CE 3220 Principles of Construction I	Required Course	Required course
CE 4220 Principles of Construction II	Choose as elective in last	Elective course
	semester.	
MEM 2221 or OPIM 3801 or BADM 3730 or	Choose as Professional	Elective course
BADM 3761	Requirement	
CE 4210 Operations Research for CEE	Choose as Professional	Elective course
	Requirement	
MEM 2221 or OPIM 3801 or BADM 3730 or	Choose as Professional	Elective course
BADM 3761	Requirement	

# Minor in Environmental Engineering

Here is how to fulfill the requirements for the ENVE Minor within the CE degree requirements without having to use any free electives or extra courses:

Course	On CE POS	On ENVE Minor POS
CE 2410 Geomatics & Spatial Measurement	Required course	Elective course
ENVE 2310 Environmental Engineering	Required course	Required course
Fundamentals		
ENVE 3220 Water Quality Engineering	Choose instead of CE 3610	Required course
CE 3510 Soil Mechanics	Required course	Elective course
ENVE 4310 Environmental Modeling	ENVE proficiency in	Required course
	Professional Requirements	
ENVE 3230 Introduction to Air Pollution	Choose as 5 <sup>th</sup> Professional	Required course
	Requirement course	

### Some other popular minors for CE students are:

- Minor in Engineering Management (School of Business)
- Minor in Mathematics (College of Liberal Arts and Sciences)
- Electronics & Systems Minor (School of Engineering)
- Materials Science and Engineering (MSE) Minor (School of Engineering)
- Nanomaterials Minor (School of Engineering)

# What if I Want to Do an Internship/COOP or Study Abroad?

# Internships and COOPS

Most of our students are able to find employment during the summer break at local engineering firms or government offices. The ASCE student chapter and the School of Engineering schedule Career Fairs once each semester at which dozens of companies come to campus looking for students to fill both permanent and temporary positions. Watch your engineering email address for announcements about these career fairs. Many employers contact faculty directly about job opportunities as well. These opportunities will also be posted on bulletin boards on the third floor of the Castleman Building and to the student engineering email list. You can learn more about coop and internship opportunities at this link: <a href="http://career.uconn.edu/internships-and-coops/">http://career.uconn.edu/internships-and-coops/</a>

UConn's Center for Career Development (CCD), located in the Wilbur Cross building, is a great place to get started. They provide help with resumes, interview skills, and internship & job-searching.

There is a Career Consultant that works exclusively with Engineering students. You can schedule an appointment online at <u>www.advapp.uconn.edu</u>. You can find the Engineering Career Consultant under ENGR (Undergraduate Programs Office). Please find additional contact information below.\*

Title	Name, Phone, Email
Career Consultant, School of	John Bau, 860-486-3013
Engineering	john.bau@uconn.edu

\*correct as of February 11. 2015

# Study Abroad

UConn participates in a number of study abroad programs. The EuroTech Program is one that is administered by the School of Engineering and the German Language and Culture Program. You can learn more about EuroTech at this link: <a href="http://eurotech.engr.uconn.edu">http://eurotech.engr.uconn.edu</a>

You can learn more about the Study Abroad programs available to UConn students at this link: <a href="http://abroad.uconn.edu/">http://abroad.uconn.edu/</a>

Note that when taking a semester away from UConn, if you want to still graduate in four years it is critical to discuss your plans with your advisor as soon as possible to make sure you can meet all course requirements. Studying abroad takes research and careful planning, but it is a truly unique and enriching experience!

# FAQs about the POS and Major Course of Study

### How do I revise my POS?

Once your POS is approved, you will be unable to make revisions to it on your own. Thus, you will need to make the changes when you go to submit your final POS. Hold all of your revisions until the <u>beginning of your final semester</u>, and then do the following:

- 1. Discuss the changes with your advisor.
- 2. Make the corrections in the "Academic Planner".
- 3. Submit your "Final Plan of Study" with the accurate, updated information.

### How do I change my major?

As you take more and more courses, you may find that your declared major is not a good match for you and your educational or career objectives. After thinking about it and researching your new major of choice, see your Advisor for an additional point of view. Following is a suggested course of action:

- 1. Contact the department offering the major you are considering changing to. Find out what the course sequence and admission requirements for that major are.
- 2. Consider taking courses for one semester that will advance you towards either major, taking one or more courses in the new major to try it out. Do this by consulting with your advisor and with an advisor for the new major. This way if you find the new major does not suit you, you have not fallen behind in your current major.
- 3. If you decide to change majors within the School of Engineering, please request the change on-line at <u>www.ppc.engr.uconn.edu</u>. This change will be processed through the Undergraduate Dean's office.

### How do I add a second major or degree?

A second **degree** (outside of SoE e.g. B.A. in German for EuroTech) requires an additional 30 credits of 2000-level or higher courses beyond the CE degree, for a minimum of 158 credits. You must fill out an Additional Degree Petition Form with the Registrar's Office in order to declare a second degree.

A second **major** (within SOE) only requires you to meet all of the requirements for both degrees. You can declare a double major by filling out a form in the Undergraduate Programs Office, EII room 304.

If you are not automatically assigned a second advisor for your new major or degree, contact the department offering that major or the Director of Advising in the SoE (for majors in SoE), to get assigned an advisor in that program.

# FAQs about Registration and Grading

# What If I decide I want to take a different course after seeing my advisor?

Contact your advisor before signing up for a different course schedule than what you agreed upon in your advising session. Making a change in your schedule without talking to your advisor could result in missing a critical graduation requirement and postponing your graduation by a semester or even a year.

### How many credits may I take per semester?

Engineering students may take up to 19 credits in one semester. To enroll in 20 or more credits you must get an overload approval form from the Registrar's website signed by your advisor (or the Associate Head of CEE) and the Associate Dean of Engineering (in the Undergraduate Programs Office). This form must be returned to the Registrar.

### What if I get lower than a "C-" in a required course?

The CE program requirements in the catalogs of 2011-12 and later state "A minimum grade of C- is required in each of the following courses: ENVE 2310, CE 2110, 2211, 2251, 2410, 2710, 3110, 3120, 3510, 4900W and 4920W". If you receive a grade lower than "C-" in any of these courses, you must retake it and earn a grade of at least "C-".

### May I take graduate courses as an undergraduate student?

Yes! You will need to get a permission number from the instructor teaching the course. He/she will ask if you have the necessary preparation or pre-requisites that would be expected of graduate students taking the course. Most CE seniors have the preparation necessary to take entry-level graduate courses in the Department. In general, if you have a GPA of at least 3.0, and have the necessary preparation courses, you should be able to successfully complete a graduate course as an undergraduate. There are two ways you might apply a graduate course to your academic record:

- 1. As a regular course on your CE undergraduate POS. You may use it either as a Professional Requirement course or as a free elective. If you choose this option you may reduce the credit requirements for a MS degree in CE at UConn up to a total of 6 credits if you earn at least a B+ in the same number of graduate credits used on an undergraduate POS.
- 2. If you don't need it for your undergraduate POS, then you can take it as an extra course and save it to use for a graduate degree at UConn or another institution.

# **APPENDICES**

- A. CE Curriculum Catalog of 2012-2013
- B. CE Curriculum Catalog of 2013-2014
- C. CE Curriculum Catalog of 2014-2015
- D. CE Curriculum Catalog of 2015-2016
- E. CE Curriculum Catalog of 2016-2017
- F. CE Curriculum Catalog of 2017-2018