Recommended Courses for BSENVE Seniors

The following pages provide recommended coursework for BSENVE seniors.

This page provides general recommendations for BSENVE seniors, whose major areas of engineering emphasis include Engineering Systems and processes, Natural Systems and Processes, and Hydrology and Hydrodynamics.

Consider these recommended courses as general guidelines. You should attend Faculty Mentoring sessions in April of your junior year to plan your senior year coursework. Your actual senior year plan should take into account your personal interests, post-graduation goals, and graduation requirements.

Students can start taking 400-level CEE course as early as their junior year when they are eligible by having completed necessary prerequisites and/or upon consultation with faculty. BSENVE majors are also invited to take courses for the BSCE degree as appropriate.

Use the CEE *Projected Course Offering* list (www.ce.washington.edu/current/curriculum) to identify when courses are scheduled to be offered and layout a tentative academic plan in your MyPlan.

Required Courses:

CEE 440 Professional Practice Studio (2)
CEE 4xx Capstone design course (5) - CEE 444 Hydrology/Hydrodynamics or CEE 445 Environmental Engr

Technical Core Courses (by sub area):

Engineered Systems and Processes

CEE 482 Wastewater Reuse and Resource Rec (3)
CEE 483 Drinking Water Treatment (3)
CEE 488 Hazardous Waste Eng. (3)
CEE 490 Air Pollution Control (3)
CEE 497 Water in an Arid Land (5)

Natural Systems and Processes

CEE 462 Limnology (3)
CEE 480 Air Quality Modeling (3)
CEE 496 Chemical Fate and Transport (3)
CEE 498 Topic: Micro of Earth and Human Sys (3)
CEE 498 Topic: Environmental Analyses (4)
CEE 498 Topic: Advanced Remote Sensing (4)

Hydrology and Hydrodynamics

CEE 473 Coastal Engineering (3)
CEE 474 Hydraulics of Sed. Transport (3)
CEE 475 Groundwater Flow (3)
CEE 476 Physical Hydrology (3)
CEE 477 Open Channel Flow (3)
CEE 481 Hydraulic Design for Env Eng (3)

Recommended Coursework for BSENVE Seniors

Environmental Engineering

If you choose to concentrate in environmental engineering you may wish to emphasize water or air-related courses. The courses below are intended to prepare you for employment with consulting firms, public agencies, and industries, and also to provide background for graduate study. Employment is available in many related fields of pollution control, public works, environmental engineering, solid waste and hazardous wastes engineering, and water and air quality management.

This is a general guide. Please consult your faculty mentor for more information.

Required:

CEE 440 Professional Practice Studio (2)
CEE 444 Hydrology/Hydrodynamics Capstone Design Project (5) - *Plan for prerequisites.*
or CEE 445 Environmental Engineering Capstone Design Project (5) - *Plan for prerequisites.*

Strongly Recommended:

CEE 462 Applied Limnology and Pollutant Effects on Freshwater (3) - *(Engineered Systems and Processes)*
CEE 476 Physical Hydrology (3) - *(Hydrology and Hydrodynamics)*
CEE 481 Hydraulic Design for Environmental Engineering (3) - *Hydrology and Hydrodynamics*
CEE 482 Wastewater Treatment and Reuse (3) - (Engineered Systems and Processes)
CEE 483 Drinking Water Treatment (3) - *(Engineered Systems and Processes)*
CEE 490 Air Pollution Control (4) - *(Engineered Systems and Processes)*
CEE 496 Fate and Transport of Chemicals in the Environment (3) - *(Natural Systems and Processes)*

Recommended Courses:

CEE 473 Coastal Engineering (3) - *(Hydrology and Hydrodynamics)*
CEE 474 Hydraulics of Sediment Transport (3) - *(Hydrology and Hydrodynamics)*
CEE 475 Analysis Technology for Groundwater Flow (3) - *(Hydrology and Hydrodynamics)*
CEE 477 Open-Channel Engineering (3) - *(Hydrology and Hydrodynamics)*
CEE 480 Air Quality Modeling (3) - *(Natural Systems and Processes)*
CEE 488 Hazardous Waste Eng. (3) - *(Engineered Systems and Processes)*
CEE 497 Water in an Arid Land (5) - *(Engineered Systems and Processes)*
CEE 498 Topic: Microbiology of Earth and Human Systems (3) - *(Natural Systems and Processes)*
CEE 498 Topic: Environmental Analyses (4) - *(Natural Systems and Processes)*
CEE 498 Topic: Advanced Remote Sensing (4) - *(Natural Systems and Processes)*

UW student clubs and chapters of professional associations

- American Public Works Association (APWA)
- American Water Resources Association (AWRA)
- American Water Works Association and Water Environmental Federation (AWWA-WEF)

For other clubs and organizations, see https://www.ce.washington.edu/current/organizations.

Course Scheduling Resources

Here are some helpful resources and notes:

- **Degree Audit** —Run your degree audit to check on your progress and plan for required courses. Available via MyUW.

- **MyUW** — Enter your academic plan on MyPlan. This helps us to see you plan in real time and advise better. Use MyPlan course search to look for classes (e.g., VLPA, Diversity, etc.)

- **CEE Curriculum & Course Planning Page:** www.ce.washington.edu/current/curriculum
  - Projected Course Offerings — CEE Working document that shows which courses are planned to be offered a given year, by quarter and instructor.
  - Preliminary CEE Time Schedules — CEE planning document for future quarterly time schedules.
  - U**W Time Schedule:** Actual UW published Time Schedule.

- **Online Course Descriptions. Check for required course prerequisites. —** You can read course descriptions by clicking on the course title on MyPlan or going directly to www.washington.edu/students/crscat/cee.html.

- **List of approved outside department courses to satisfy Upper-Division Engineering & Science Elective Requirement:** You can find the list of pre-approved outside department courses online at the CEE Website BSENVE Degree requirements: www.ce.washington.edu/students/ugAcademics.html

- **CEE forms and resources:** Looking for BSCE forms, such as CEE 499 Request, Graduation Petition, etc? Go to the CEE Undergraduate Student Resources Page at www.ce.washington.edu/current/undergrad

- **CEE Add code request form:** http://tinyurl.com/ceeaddcoderequest

- **Grade Requirements:** A minimum grade of 2.0 is required for all CEE prerequisite courses, Technical Elective Core courses, and the Capstone course. Courses used to satisfy BSCE degree graduation requirements (such as IND E 315, ENGR 231, and 300-level CEE courses) must be completed with a minimum grade of 1.0. A minimum 2.0 cumulative GPA is required. Courses must be taken with a numerical grade or the Credit/No Credit (CR/NC) grading option to apply toward major, minor, or general education requirements. "S" credits earned under the Satisfactory/Non Satisfactory (S/NS) grading option may be used *only* for University general electives. For complete information on grading, see http://www.washington.edu/students/gencat/front/Grading_Sys.html

Considering a minor? Plan ahead.

- Student may select to do a minor; many do not. A minor may be in any topic of your choice. Minors typically consist of about 25 credits, some of which may be allowed to also count toward your general education or major requirements. For more information on minors, see:
- General Catalog www.washington.edu/students/gencat
- Minors Website www.washington.edu/uaa/gateway/advising/majors/minor.php

Plan ahead for graduate education...

- If you are interested in pursuing an advanced degree, such as a master's or Ph.D., start planning and consulting with faculty mentors and advisors as early as your junior year. Employers may prefer a master's degree for certain positions.

For more information:

- Attend a "Preparing for Graduate School Session" in spring quarter (of junior year).
- Visit CEE Graduate Programs Website: http://www.ce.washington.edu/prospective/grads/index.html
- Plan to take the Graduate Record Examination (GRE) up to a year in advance of your graduate school application deadlines. (UW CEE deadline is December 15 for the following autumn admission.) GRE scores are valid for 5 years.