

Dear CEE Students,

Welcome to the Charles E. Via, Jr. Department of Civil and Environmental Engineering! You have embarked on what we sincerely hope will be a rewarding and fulfilling academic experience. But don't think of it only as a 3, or perhaps 4, year experience, but rather as the preparation for what you'll be doing the rest of your professional life!

Please review this guide carefully. It's important for you to realize that you, the student, are ultimately responsible for planning your program of study such that you meet the stated graduation requirements for a Bachelor of Science in Civil Engineering. Fortunately, there are several resources available to you to help you execute this responsibility.

This guide has been compiled as a primary resource for making the task of planning your program of study as easy as possible. Read the information about coursework (e.g. course pre-requisites, minimum grade requirements, transfer credit, etc.) and it will provide you with the basic "rules" for ensuring you meet your graduation requirements.

Make good use of the checksheet to track your progress towards graduation -- I encourage you to print and complete your checksheet using a pencil so that it becomes a "living document" that you can update each semester. Bring it with you each time you seek out the assistance of your advisor - it will serve you both as an excellent reference for your discussions.

Every student in the CEE department should have an assigned advisor. Your assigned advisor should be shown on the "Student Information" page of Hokie Spa. If, after checking this page, you don't know who your advisor is, contact the Advising Center in 211 Patton Hall immediately. I believe that your time as a student in the CEE Department will truly be enhanced with the right academic planning. So, please take charge of your future today by taking a few minutes to acquaint yourself with the information in this guide.

Sincerely,



Mark A. Widdowson, Ph.D., P.E.  
Professor of Civil & Environmental Engineering  
Department Head

# CEE UNDERGRADUATE ADVISING GUIDE 2023

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# **GETTING AROUND**

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(540) 231- 6635**

**Front Desk:  
Sidney Hollandsworth**

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<b>Dr. Peter Vikesland (GR)</b> 415 Durham Hall	<b>pvikes@vt.edu</b> 231-3568
<b><u>Director of Advising:</u></b>	
<b>Ms. Kara Lattimer</b> 211C Patton Hall	<b>karalatt@vt.edu</b> 231-7148

All Blacksburg Faculty are listed below by program area.  
CEE Faculty offices are in Patton, Durham, and Bishop-Favrao (BFH) Halls.

<b>Construction Engineering and Management</b>			
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\* Indicates Program Coordinator

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Lindy Cranwell lindycra@vt.edu	International Programs Director	Patton 200 231-7296

Sarah Martin shmartin@vt.edu	Graduate Coordinator	Patton 211D 231-6069
Christy Cumbia ccumbia@vt.edu	Advising and Student Support Assistant	Patton 211B 231-9962

### **ADVISORS FOR SPECIAL GROUPS**

Entering Transfer Students: Kara Lattimer Patton 211C

ASCE Student Chapter Advisor: Dr. Paolo Scardina Patton 221B

Chi Epsilon Advisor: Dr. Russell Green Patton 120B

The Alliance of Transportation Engineering Students:  
Dr. Gerardo Flintsch Patton 301K  
Dr. Toni Trani Patton 301P

Construction Management Association of America (CMAA):  
Dr. Mike Garvin Patton 117A

North American Alliance for Trenchless Technology:  
Dr. Sunil Sinha Patton 113C

Sustainable Land Development Club: Kevin Young Patton 221C

## **CEE Undergraduate Facilities**

Main Office for Department of Civil & Environmental Engineering: Patton 200

Student Lounge: Patton 210

This lounge is available for use by all CEE students. This is a good place to study or meet if you have a few minutes between classes or other activities. Magazines relevant to the field and profession are available for your reference. Please take time to look through articles that will help you stay in touch with practices in your chosen profession. Information and applications regarding the Fundamentals of Engineering (F.E.) exam are available in the student lounge.

CEE Faculty Offices: Faculty offices are in Patton, Durham, and Bishop Favrao (BFH) Halls. Be sure to refer to faculty list (also on CEE website) for faculty office locations.

### **The CEE Google Group**

All CEE undergraduates will be subscribed to the CEE undergrads Google Group. This is the official way that academic and other announcements are made to all CEE students. CEE students will be automatically subscribed at the beginning of each semester. Should you determine for whatever reason that you do not have access, contact [ceeadvising@vt.edu](mailto:ceeadvising@vt.edu). All students in the CEE Department must remain on the CEE Google Group while pursuing their undergraduate degree.

### **The CEE Website**

This Academic guide, as well as other useful information, is available to you online through the CEE homepage. The homepage is located at: <http://www.cee.vt.edu>.

## **Advising**

All CEE students are assigned a CEE undergraduate advisor upon entering the department. This individual will be your CEE undergraduate advisor for the duration of your undergraduate study. [Note: occasionally, some changes will need to be made in the event your assigned faculty advisor is unavailable for any given semester. You will be notified should a change in your assigned advisor be necessary.] Your assigned advisor should be listed on the “General Student Information” page of Hokie Spa. You can read more about your advisor on the CEE webpage under Advising.

We encourage you to make good use of your undergraduate student advisor while pursuing your studies. Students and faculty both have many responsibilities; thus, it is extremely important that students plan ahead to meet with their advisors. Be aware of upcoming activities (i.e. course request) and deadlines (i.e. course withdrawal deadline) and coordinate with your advisor accordingly.

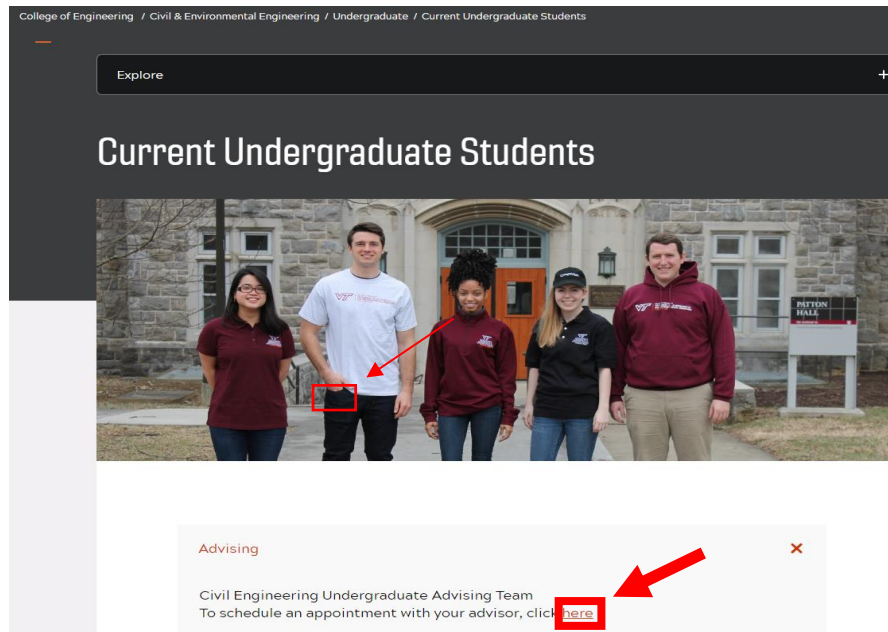
Students should see their assigned advisors for any advising need. If you need to meet with your advisor as the result of an emergency (i.e. death in the family or other traumatic event for which you need immediate assistance) and your advisor is not available, go to the CEE Academic Center in 211 Patton Hall and request emergency advisor assistance.

Make good use of your advisors. But please do not rely on them for the most basic of information that you can easily find by reading this guide. (i.e.: you can look up course pre-requisites on the CEE web page - that's not something you should have to ask an advisor.)

Requests for changes in advisors will only be considered in extenuating circumstances. If you feel it necessary to request a change to your assigned undergraduate advisor, contact the advising staff in the CEE Academic center in 211 Patton.

## **How to make an appointment**

1. Navigate to [https://cee.vt.edu/Undergraduate-menu/current\\_UG\\_students.html](https://cee.vt.edu/Undergraduate-menu/current_UG_students.html) and click ADVISING
2. Click on “Here” as shown below



3. It should take you to Navigate and the system should be fairly intuitive after this. You can click the “Schedule an Appointment” button and then walk through

More information is available on the Registrar’s website:

[https://www.registrar.vt.edu/content/dam/registrar\\_vt\\_edu/documents/SSC-Schedule-Appointment.pdf](https://www.registrar.vt.edu/content/dam/registrar_vt_edu/documents/SSC-Schedule-Appointment.pdf)

Virginia Tech Advising Policy (www.advising.vt.edu):

1. Definition of Advising:

Advising at Virginia Tech is a collaborative process between student and advisor leading to the exchange of information that encourages the individual student to make responsible academic and career decisions.

2. Statement of Advisor Responsibility:

The advisor shares the responsibility for developing an advising partnership with undergraduate students. This is achieved through the advisor:

- Communicating with students and delivering individualized and accurate information in professional sincere manner;
- Being informed of, and providing accurate information about current academic policies and procedures;
- Keeping appointments and being available for assistance;
- Providing appropriate referrals, contacts, and information;
- Doing appropriate follow-up with students; and
- Seeking out and taking advantage of opportunities for professional development.

### 3. Student's Responsibilities:

The student shares the responsibility for developing an advising partnership with the advisor. Over time, the partnership results in increased responsibility for the student. The student will:

- Communicate goals, needs, wants, and concerns to the advisor in a respectful and sincere manner;
- Keep abreast of their own academic progress and requirements related to their academic program;
- Make, keep, and be prepared for appointments with advisor;
- Inform the advisor of changes in plans and/or circumstances that might impact academic performance;
- Know departmental procedures for changing advisors; and
- Bring concerns regarding quality of advising to the attention of the advisor

# CURRICULUM & COURSEWORK

## The Curriculum

The Bachelor of Science in Civil Engineering (BSCE) degree consists of a specific number of credits, as shown on the individual checksheet. Areas of interest include Construction Engineering & Management, Environmental, Water Resources, Geotechnical, Materials, Structures, Transportation, and Land Development. The different courses exist to provide you the flexibility to direct your studies towards the areas within civil engineering that interest you. This will ensure that all students receive a strong, fundamental civil engineering education. All students will earn the same degree - a Bachelor of Science in Civil Engineering.

The first two years of the curriculum are common for all students. Junior and Senior year coursework depend on student interest.

The CEE Curriculum provides broad exposure to the individual specialty areas within the civil engineering profession through the requirement for selection of fundamental courses in six of eight areas of subject matter. This breadth of coverage provides an educational basis for flexibility in choice of professional positions and ability to work on a diversity of projects during an engineering career. The curriculum also recognizes the importance of depth in selected specialty areas through the requirement of advanced courses in three specialty areas and a fourth advanced course in one of those three areas.

True specialization in an area requires a graduate degree and is not the goal of the BSCE degree. The choice between greater breadth and specialization is a personal one depending on such factors as the degree of certainty about future career path.



## How to Select Your Specific Academic Plan:

### The Degree

It is important to note that all undergraduate students will earn a **Bachelor of Science in Civil Engineering** degree.

### The Checksheet

The checksheet contains the requirements for you to graduate with a BSCE degree. Your checksheet should be a “living document” that you use to plan and track your program of study. You are encouraged to work with this document in pencil or use excel, so that you can easily make updates to it. Also, be sure to bring your checksheet along to any meeting you have with your advisor. The checksheet is the best way to communicate your progress towards your degree to your advisor!

The CEE website contains the checksheet for students who entered VT in the 2023-2024 academic year; this includes Summer 2023, Fall 2023 or Spring 2024. Announcements about curriculum changes will be made on the Google Group. It is your responsibility to be sure you read the CEE Undergraduate Google Group updates and remain well informed about your degree requirements.

Your checksheet is based upon the date you entered VT.

If you first started your undergraduate studies at Virginia Tech in 1996 or earlier, schedule an appointment with Kara Lattimer in the 211 Patton (karalatt@vt.edu) to review the General Education requirements that will apply to you. General Education at Virginia Tech is called “Pathways to General Education”. More information about Pathways can be found here: <https://www.pathways.prov.vt.edu/>

Course Listings for Pathways to General Education can be found here:

<https://www.pathways.prov.vt.edu/students-and-advisors/pathways-guides.html>

The BSCE degree for students entering in 2023/2024 requires 128 credits – in all of the correct categories. The total number of required credits, in each of their respective categories, is shown on the first page of these checksheets. "Elective" requirements

reflected on the first page are further delineated in detail on the second page. Thus, the requirements you see on the second page of the checksheet are not in addition to what is shown on the first page - they are simply a further explanation of the different categories of electives.

### **Planning Your Program of Study**

The checksheet, as presented, represents one acceptable 8 semester plan for completing a BSCE degree. It is possible to deviate from the order seen on this checksheet and still be successful. If you find it necessary to deviate, be sure to do the following:

- Follow the general flow of the checksheet (take the courses listed in the freshman year prior to taking the courses listed in the sophomore year prior to taking the courses listed in the junior year, etc.).
- Always be sure to check pre-requisites for each and every course you plan to take.
- Plan at least two semesters out from the current semester.

*Note that 3000 level CEE classes are typically offered both semesters.*

*Also note that most 4000 level CEE classes are typically offered only one semester per year. Use the information under the course listing on the CEE webpage ([https://cee.vt.edu/Undergraduate-menu/current\\_UG\\_students/course\\_listing.html](https://cee.vt.edu/Undergraduate-menu/current_UG_students/course_listing.html)) to determine which semesters courses are offered.*

## **Future Class Schedules**

The CEE Department prepares academic schedules almost one year in advance of course offerings. Once the CEE Department has class schedules tentatively arranged, the schedule will be posted on the CEE Webpage under the link for “Tentative Future Class Schedule” at: <http://www.cee.vt.edu> >Undergraduate Programs >Current Undergraduate Students >Information and Forms>Tentative Future Class Schedule. This tool can be used to assist in planning courses for future semesters based upon the teaching schedule within the CEE Department.

## **Lab Courses**

Students are encouraged to take no more than two lab courses at any one time. The following CEE courses have lab components:

<b>Course</b>
CEE 2814 ~ CEE Measurements (required)
CEE 3304 ~ Fluid Mechanics (required)
CEE 3314 ~ Water Resources Engineering
CEE 3514 ~ Intro to Geotechnical Engineering
CEE 3684 ~ CEE Materials

## **Course Prerequisites (see also minimum grade requirements below)**

You are responsible for meeting any stated course prerequisites. Prerequisites are part of the course descriptions in the University Catalog. A “Prerequisites” summary sheet can be found on the CEE website at: <http://www.cee.vt.edu> > Undergraduate Programs>Current Undergraduate Students > Information and Forms > Prerequisite Undergraduate. The most up-to-date version of CEE course descriptions and prerequisites may also be found on the CEE homepage: <http://www.cee.vt.edu> >Undergraduate Programs>Current Undergraduate Students >Information and Forms>Course Listing. The most up-to-date version of non-CEE course descriptions

should be available on the webpage for the department that owns the course, or in the Undergraduate Catalog.

It is important to note that many of the CEE courses on the checksheets may be taken in a semester other than when they are shown on the checksheet. If you are paying attention to course prerequisites, you should be able to determine which courses may be taken earlier or later than the semester in which they appear on your checksheet. If you still have questions after studying course prerequisites, see your advisor.

### **Minimum Grades Requirements**

The CEE Department strictly enforces the prerequisite policy. A minimum grade of C- is required in any course you take that is a prerequisite for any CEE course that you will be taking. You will automatically be removed from courses in which you do not satisfy the pre-requisite.

For example: ESM 2104: Statics is a prerequisite for CEE 3304: Fluid Mechanics for CEE. Thus, you will need to earn at least a C- in ESM 2104 prior to taking CEE 3304. On the other hand, for example: If you choose to take CEE 3404: Introduction to Structures, it and CEE 3684: Materials are pre-requisites for CEE 3424: Concrete and CEE 3434: Steel. If you never take CEE 3424 or 3434, then you would not need a C- in CEE 3404. You simply need to pass it and to maintain the overall and in-major GPA requirements necessary for staying in CEE and graduating.

If you have any questions about this policy, please check with your advisor.

### **Grading Options (A-F, Pass/Fail)**

The following categories of classes on the BSCE checksheets MUST be taken for a letter grade:

- Named & numbered classes on the front side of the checksheets.
- Pathways to General Education Electives
- Program Electives
- Technical Electives
- Restricted Electives

## **Progress Towards Degree**

To maintain continued enrollment, students must adhere to university policy. The continued enrollment policy (Policy #91) reads, “upon having attempted 96 semester credits (including transfer, advanced placement, advanced standing and credit by examination), students must have an in-major GPA of 2.0000 or above.” (see referenced policy at <https://policies.vt.edu/assets/91-eligibility-for-continued-enrollment.pdf>).

Specific expectations for satisfactory progress for CEE majors are described on departmental checksheets and reviewed in CEE 2804, Introduction to Civil Engineering, and include the following requirements:

- Each student must meet the minimum University-wide criteria as described in Policy 91 and summarized in the Undergraduate Catalog (<https://www.undergradcatalog.registrar.vt.edu>).
- A 2.0 overall GPA and a 2.0 in-major GPA must be maintained for continued enrollment in CEE. The in-major GPA consists of all courses taken with a CEE designator.
- Upon completion of 64 GPA hours, a student must have satisfactorily completed CEE 2804, CEE 2814, and CEE 2834.
- Be enrolled in at least one 3-credit CEE course each fall and spring semester.

The Director of Advising will verify GPA's of all students in the CEE Department at the end of each semester. Students will be notified via e-mail if not in compliance with these requirements with specific deadlines to regain enrollment eligibility.

## **125 Percent Rule for In-State Tuition**

The Code of Virginia establishes rules for eligibility for in-state tuition for all students enrolled at public institutions in the Commonwealth of Virginia. Section 23-7.4: F of the Code of Virginia further requires undergraduate students to maintain progress toward the degree to comply with continued eligibility for in-state tuition. Students with entry dates Fall 2006 and after may not exceed **attempted hours** that total 125% of the minimum credit hours needed for a specific degree program and retain in-state tuition eligibility. Students exceeding 125% will be assessed a surcharge for each semester of

continued enrollment after exceeding the credit hour threshold. For the purpose of this state law, all credits *attempted* (Virginia Tech and Transfer) are used in the calculation of the percentage. The requirement does allow the subtraction of credits awarded for Advanced Placement, Advanced Standing, International Baccalaureate, and Credit by Exam from the attempted totals. Important resources to assist you so as to avoid the credit hour surcharge are:

- Undergraduate Degree Hours and 125% Information:

<https://www.registrar.vt.edu/registration-enrollment/in-state-status.html>

*For CEE students, after you have earned 160 credit hours you will be charged additional fees.*

- Credit Hour Surcharge Costs, Virginia Tech Bursar

(<http://www.bursar.vt.edu/tuition>)

Please note that the Excess Credit Hour Tuition surcharge is per credit hour. To calculate the total surcharge for a term, multiply the surcharge amount per credit hour by the number of credit hours enrolled (up to 12 credit hours per semester; 5 credit hours per summer term). ***For 2023-2024, the surcharge rate is estimated at \$273.00 per credit hour!***

- State Code of Virginia, Section 23.1-509:

<https://law.lis.virginia.gov/vacode/title23.1/chapter5/section23.1-509/>

### **Filing Appeals:**

Students may file an appeal of the credit hour surcharge based on one or more of the following reasons: 1). Medical documentation of illness, 2). medical documentation of a disability, or 3). documentation of active services in the armed services military. Documentation and letter of appeal may be forwarded to: University Registrar, 250 Student Services Building, Virginia Tech, Blacksburg, VA 24061-0134

## **Minimum GPA Requirements**

In order to complete your Bachelor of Science in Civil Engineering Degree, you must maintain both an overall Grade Point Average (GPA) of 2.0 or higher AND an in-major GPA of 2.0 or higher. Your overall GPA includes all the coursework you have completed at Virginia Tech. Your in-major GPA is calculated based only on courses you have completed that have a CEE designator.

Please note that GPAs are calculated to the third decimal place for the purposes of determining minimum requirements. Thus, a GPA of 1.999 IS NOT rounded to a 2.0 and, therefore, it DOES NOT meet the minimum requirement for graduation.

Your Overall GPA is available on your "Unofficial Transcript" in Hokie Spa and on your DARS (Degree Audit Report). Your In-Major GPA is only available on your DARS, which is available through Hokie Spa (see "Getting Ready to Graduate" section).

## **Credit Hour Loads & Credit Overload Permission**

You must maintain a minimum of 12 credit hours to be legally considered as a full-time student. Students desiring to take more than 19 credit hours during Fall and Spring and more than 9 credit hours for each summer session must obtain "Overload Permission" from the Associate Dean for Academic Affairs for the College of Engineering. All forms are submitted electronically and are available on-line at: <http://www.eng.vt.edu/forms/>

The University does not require you to be a full-time student. The number of credits you take each semester (up to the stated maximum) is your decision. It is important, however, for you to determine if there are other considerations, such as insurance, federal financial aid, or on-campus housing that require you to be a full-time student. Any questions regarding financial aid should be addressed to your financial aid advisor. The Financial Aid Office is on the second floor of the Student Services Building on Washington Street.

## **Dropping a Course**

**Last Day to Drop:** The last day to drop a course so that it does not show up on your transcript at all and with no grade penalty is typically the end of the 6<sup>th</sup> week of classes during Fall and Spring semesters. The specific day for each semester is listed on the University Academic Calendar (see the summer session academic calendars for each summer session). You may drop these courses using Drop/Add in Hokie Spa.

Dropping courses in this manner will reduce the number of total credits you are enrolled in for the semester; thus, you should consider the following question when considering whether or not to drop a course: Will dropping this course result in me having less than 12 credits for the semester? If so, you will no longer be a full-time student. While the University does not require you to be a full-time student, it is important for you to determine if there are other considerations such as:

- On-campus housing: students who drop below full-time status must complete the “Part-Time Academic Status Approval Request” form in STARREZ portal under online forms.
- Financial Aid: if you have any awards that require full-time status, you may need to evaluate the decision to drop a course. Any questions regarding financial aid should be directed to your Financial Aid advisor or sent via e-mail to [finaid@vt.edu](mailto:finaid@vt.edu).
- Insurance: health insurance and auto insurance often require verification of enrollment status.

Also, be sure to determine what effect dropping a course in the current semester may have on the courses you had planned to take the following semester and make adjustments to your plan of study accordingly. **BE SURE TO CHECK PREREQUISITES!**



## **Course Withdrawal “W Grade Policy”**

Students will be allowed to apply a **W** grade to no more than three (3) courses during their academic career. Courses processed as a W grade will remain on the student’s transcript with a grade of **W**. A ‘**W**’ grade may not be applied after the last scheduled regular class in the term. This policy cannot be applied to courses with penalties applied by the University Honor System. Application of this policy is irrevocable and cannot be appealed. Hours marked as ‘W’ will continue to assess in hours enrolled for purposes of financial aid and tuition assessment.

Students requesting Course Withdrawal must complete the request form on-line at: <http://www.eng.vt.edu/forms/> . There is no signature or approval needed. If you have not used all of your W’s (3 of them) your request will be granted as long as there is no Honor System issue connected with your class.

## **Repeating Course Enrollment Policy:**

*Resolution 2013-14. L*

Students shall be limited to three attempts at any course. An attempt at a course shall be defined as enrollment on the census day each semester (generally the tenth classroom day in fall and spring semesters; fifth day of summer terms). Students who enroll for a fourth attempt *will be dropped from the course*. **Courses attempted at Virginia Tech three times may not be transferred from other institutions for degree credit.** Exceptions to this policy include courses designated as repeatable credits (to the limit allowed).

## **Pathways to General Education**

Be sure to check the Pathways to General Education guide every time you select a Pathways 2, 3, 6 or 7 course – **do not rely on word of mouth or generalizations**. For example, some History courses are approved for Pathway 2 and some for Pathway 3, so one cannot safely assume that all history classes meet the requirement for one specific Pathway Concept.

Some of your Pathways requirements are filled by CEE required coursework noted on the checklist. Pathways 1, 4, 5, 6D are met through classes in English, CEE, Math, Physics and ENGE. So, you will still need to complete 6 credit hours of courses that meet Pathways 2; 6 credit hours to meet Pathways 3; 3 credit hours to meet Pathways 6 and 3 credit hours to meet Pathways 7 unless already met through an appropriate Pathways 1-6 course. You can go to <https://www.pathways.prov.vt.edu/students-and-advisors/pathways-guides.html> to find courses to satisfy your Pathways requirements and more about the Concepts that you need to complete go to: <https://www.pathways.prov.vt.edu/structure-concepts-learning-outcomes.html>

## **Design Project Courses**

Every CEE student must complete at least one designated "design project course." Each civil engineering design project course is one semester long and offers the student a culminating design experience. As such, these courses require that you work in teams and coordinate your time accordingly. There are eight designated "design project" courses:

- CEE 3434 ~ Design of Steel Structures I
- CEE 4014 ~ Estimating, Production, & Cost Engineering
- CEE 4104 ~ Water & Wastewater Treatment Design
- CEE 4274 ~ Land Development Design
- CEE 4334 ~ Hydraulic Structures
- CEE 4544 ~ Design of Earth Structures
- CEE 4654 ~ Geometric Design of Highways

*Design project courses will not transfer from other universities. You must complete these courses within the CEE Department as part of your undergraduate degree.*

### **Civil Engineering Undergraduate Design Project Experience at Virginia Tech**

*Engineering design is a process of devising a system, component, or process to meet desired needs and specifications within constraints. It is an iterative, creative, decision-making process in which the basic sciences, mathematics, and engineering sciences are applied to convert resources into solutions. Engineering design involves identifying opportunities, developing requirements, performing analysis and synthesis, generating multiple solutions, evaluating solutions against requirements, considering risks, and making trade-offs, for the purpose of obtaining a high-quality solution under the given circumstances. (ABET, EAC Criteria 2022-23).*

The Virginia Tech civil engineering curriculum provides progressive student involvement in design that concludes with a culminating design experience. The projects addressed in these "design-project courses" are open-ended problems that incorporate appropriate engineering standards, and require the application of knowledge from earlier courses in the curriculum. Projects include application of technical knowledge to design appropriate physical facilities and/or processes, but also include consideration of non-technical constraints and broader impacts that confront real-world projects. The following criteria must be met by design-project courses:

- a. Projects must be completed by teams composed of at least three persons.
- b. Projects must represent a major design experience based on knowledge that applies and extends skills acquired in earlier coursework, appropriate engineering standards, and multiple realistic constraints.
- c. Projects must be open ended and provide the students with substantial freedom and decision-making requirements in the development of an appropriate solution to the problem/situation being addressed.
- d. Project must clearly demonstrate and document decision making through selection of an optimal design alternative from a set of competing design alternatives. The criteria used to select the best or optimal design concept must also be described.
- e. Instructors of design project courses must be either licensed as a Professional Engineer or have relevant education and design experience.
- f. Projects must include consideration of public health, safety, and welfare, as well as global, cultural, social, environmental, economic, and other factors, as appropriate to the project and course.
- g. Project teams must make oral presentations of their final design recommendations.

- h. Project teams are required to prepare at least five pages of written documents, appropriate to the project. All members of the student design team must participate in preparing the written document(s). The project must include a statement (subject to Honor Court jurisdiction) that all team members participated in a substantial way in the writing of the project's written documents. Examples of documents include memos that describe the team's overall approach to the project and preliminary findings, progress reports, interim design reports, and final reports.
- i. Each student must earn a passing grade on the project to earn a passing grade in the course.
- j. Each student will complete a confidential assessment of team member performance in regard to how well a team member provided leadership, created a collaborative and inclusive environment, established goals, planned tasks, and met objectives.
- k. Each student will document at least one example of knowledge obtained by self-study, including the learning strategies used, and how the knowledge was applied in the course.

Proposals for new senior design courses must be approved by the CEE Curriculum Committee. This committee requires documentation of how the above requirements will be met.

### **ROTC Courses**

ROTC courses are accepted as Liberal Education Electives (Area or Pathways 2 and/or 3) ONLY if already included on approved Liberal Education (Core) lists. These courses may be used in the "Additional Electives" category.

### **Graduate Courses**

#### **Graduate courses as part of the undergraduate degree:**

Graduate level CEE courses may be taken to satisfy undergraduate CEE electives if you meet the following criteria:

1. You have a 3.00 overall GPA or higher
2. You receive permission from the course instructor and Ms. Lattimer.
3. You complete the force/add request form at [www.cee.vt.edu/forceadd](http://www.cee.vt.edu/forceadd)

When a graduate level course is used to satisfy an undergraduate degree requirement and the student has not been accepted in the Accelerated UG/G program, that course cannot be used again later to satisfy a graduate degree requirement.

### **Options for enrolling in an Accelerated Graduate Program at VT CEE**

**Deadlines for applications for both types of Graduate Programs for the CEE Department are:**  
**Fall Admission---June 15**  
**Spring Admission---November 15**

#### **1. Dual Student Status**

Seniors who will be entering their last semester of undergraduate studies and have a 3.0 or higher GPA, may apply to the Dual Program. The Dual Program allows students to take one or more courses to satisfy advance degree requirements at undergraduate tuition rates. Classes used for graduate credit must be designated at the time of registration. “Dual Students” are considered as “undergraduates” for the purposes of tuition, fees, scholarships/fellowships and financial aid.

Students who have flexibility in their undergraduate schedule (only for their LAST semester) may be able to take additional graduate level courses. A maximum of 9 additional “dual enrollment” hours for these courses may be allowed if pre-approved by the department. These classes should be listed on the Graduate School Accelerated form that is turned in with the Graduate School Application. These extra classes will not be on both transcripts; they will only appear on a graduate level transcript and must be taken for a letter grade.

Interested students must apply and be admitted to the Graduate School prior to taking the coursework (application information is available on the VT Graduate School

website at <https://graduateschool.vt.edu/>). If interested, you should plan to submit all materials prior to the beginning of your last semester as an undergraduate student.

Materials needed for application include:

- Two recommendation letters
- Online Application available via: <https://graduateschool.vt.edu/>
- Accelerated Undergraduate/Graduate Degree and Course Designation form available at [graduateschool.vt.edu/academics/what-you-need-to-graduate/forms](https://graduateschool.vt.edu/academics/what-you-need-to-graduate/forms)

## **2. The Accelerated Undergraduate/Graduate Degree (UG/G) Program**

**You are eligible if:**

- You have a cumulative VT GPA of 3.5 or better OR
- You have a cumulative VT GPA of 3.3 or better and have maintained a VT GPA of 3.5 or better in your last 60 hours of coursework.
- You will be finishing your degree in 2 academic semesters (or a 12-month period)
- You have done the paperwork to be accepted into this program prior to the beginning of the semester that you want to take classes in this program

**Participate because:**

You will be able to get an early start on a graduate level degree by using up to 9 credit hours to satisfy both your undergraduate and graduate requirements (exact classes to be determined with the help of advisors). Two classes can be 4000 level classes and one class must be a 5000-level course.

**How to Apply for UG/G Program:**

- 1) Meet with the Coordinator of the Graduate Program Area where you wish to pursue your M.S. degree.
- 2) Meet with the graduate program area coordinator AND your undergraduate advisor to choose the classes to be counted for both degrees. These classes may be 4000 or 5000 level.

- 3) Go to <https://graduateschool.vt.edu/> and apply online for THE SEMESTER WHEN YOU WILL ENTER THE REGULAR M.S. PROGRAM (this is usually the academic semester following your undergraduate graduation).
- 4) Ask two (2) professors or professionals to write letters of recommendation for you (Please use the online application to request these letters).
- 5) Create a memo (a sample is available online and in this guide) outlining the chosen classes and obtain the signatures of the graduate program area coordinator AND the Advising Director. Address this memo to the Department Head of CEE.
- 6) Fill out the Graduate School office Accelerated Program form.
- 7) Turn in memo and Accelerated Course Designation form to the CEE Graduate Student Coordinator in Patton 211D
- 8) *Once in the program, you MUST make a "B" or better for the classes that are to be double counted*

**Student Status:**

While officially enrolled as a UG/G student, your undergraduate student status will take precedence for the purpose of establishing tuition rates, qualifying for scholarships/fellowships, and qualifying for financial aid.

Once you have completed all your undergraduate requirements, you will become a regular master's student. At that time, you will become eligible for graduate tuition, graduate scholarships/fellowships and financial aid based on graduate student status. You will still go through undergraduate graduation and receive the B.S. degree before officially moving into the regular master's program.

**\*\*Memo Example on next page\*\***

**Memo Example (text in red should all be edited):**

Date            **put date here**  
TO:            Dr. Mark Widdowson  
                  Head, Civil and Environmental Engineering Department  
FROM:         **(your name)**  
                  **(your VT Student Number)**  
RE:            Application for the Accelerated UG/G Degree Program

Attached please find my completed application for graduate studies in the Department's Master of Science in Civil Engineering (**indicate ENE if different from CE**) program. I am specifically applying to the Accelerated UG/G Degree Program in which I am eligible to receive up to six credits for courses that would count as part of both my B.S. and M.S. degrees. I have met with both my Ms. Lattimer and the **Contact of the \_\_\_\_\_ Program** where I intend to focus my graduate studies. Both have agreed that the following two courses will appropriately satisfy requirements in my B.S. and M.S. degree programs:

**(list the CE course number and title here for both courses that you wish to "double count")**

Approval Signatures: \_\_\_\_\_  
   Ms. Kara Lattimer, Director of Advising  
   \_\_\_\_\_  
   **Dr. Hokie Bird (your M.S. Program Coordinator)**



## **Questions?**

Further questions about this program should be directed to Kara Lattimer ([karalatt@vt.edu](mailto:karalatt@vt.edu)) or Sarah Martin ([shmartin@vt.edu](mailto:shmartin@vt.edu)) in 211 Patton Hall.

## **Graduate Program Contacts:**

### Environmental and Water Resources:

Dr. Jennifer Irish

Dr. Gabriel Isaacman-VanWertz

Dr. John Little

Dr. Hosein Foroutan

Dr. Siddharth Saksena

### Geotechnical Engineering:

Dr. Russell Green

### Structural Engineering and Materials:

Dr. Carin Roberts-Wollmann

Dr. Eric Jacques (MS)

Dr. Ioannis Koutromanos (PHD)

### Transportation Infrastructure & Systems Engineering:

Dr. Kathleen Hancock

Dr. Antonio Trani

### Construction Engineering & Management:

Dr. Mike Garvin

Dr. Farrokh Jazizadeh

### Sustainable Land Development:

Dr. Tripp Shealy

**Interdisciplinary Programs:**

Civil Infrastructure Engineering

Dr. Mike Garvin

Dr. Farrokh Jazizadeh

### **Transcripts and Course History (Unofficial Transcript)**

The Registrar's Office, 250 Student Services Bldg., is the only office on campus able to issue an official transcript. There is a \$15 fee per copy charged for official transcripts. Should you require a copy of your official transcript, you will need to go to the Registrar's Office, with your HOKIE PASSPORT, to make your request. If you will be paying by credit card, your request can be done on-line via Hokie Spa. Go to the "Transcripts and Certifications" menu in Hokie Spa for more information. You will need to allow at least five business days for processing the request, with the exception of peak periods (beginning and end of semester, commencement, and registration) that may require additional processing time.

Students are able to access and print a copy of all completed coursework, with grades earned, through HOKIE SPA – Unofficial Transcript. This printout may be considered as an unofficial transcript and can be useful for many purposes.

### **Course Substitutions**

Substitutions may be made for a course that meets the educational objectives of another course. They are most often used for students who transferred into the department from another program. See your advisor if you would like to request a substitution. Please note that you must submit your request in person as there are usually additional questions that must be addressed before the substitution may be completed. Students should not take any course they plan to use towards the 128 credits of the BSCE degree, unless it is specifically listed on the checksheet as being acceptable, or you have received pre-approval for a substitution.

### **Transfer Students**

Students transferring into the department from any other department, curriculum, or school are expected to complete all departmental requirements. All students transferring into the CEE Department from a department other than General Engineering should meet with the CEE Advising Director, Kara Lattimer. During this meeting, all

credits earned prior to entering CEE will be reviewed and an assessment made on how these credits might best be used towards the civil engineering degree.

### **Transfer Credit from Community Colleges and Other Universities**

Credit for work completed at other schools is received into Virginia Tech through a transcript evaluation conducted by the Registrar's Office in coordination with the Office of the Associate Dean for Academic Affairs for the College of Engineering. Only work that earned a C or better is accepted. No more than 64 semester hours are allowed from a Community or Junior College. Transfer credit is evaluated at the Registrar's office. In Hokie Spa, students can review the equivalents for each transferred course in the "Transfer Credit" screen. Where the equivalent course is not apparent, only the academic level, such as 2XXX, and the course title will be specified. In this case, you must consult with the CEE Advising Director, Kara Lattimer, to determine if the designated course is, in fact, sufficient to meet a civil engineering requirement.

Only credit is awarded for transfer courses. The grades for transfer courses are not reflected on your Virginia Tech transcript, nor are they counted in your Virginia Tech overall or in-major GPAs.

### **Summer School Elsewhere**

If you desire to take coursework during the summer from a school other than Virginia Tech and then have this credit transferred back to meet your graduation requirements, you must obtain **pre-approval** from the Office of the Dean of Academic Affairs of the College of Engineering. The transfer credit pre-approval form is available at: <http://www.eng.vt.edu/forms/>. This is a digital form that you will complete online.

The Virginia Tech Transfer Equivalency Database is a cross-reference between other schools' courses (to include VA Community Colleges, other VA schools, and out-of-state schools) and Virginia Tech courses. This database can be a useful tool for identifying possible courses you may be interested in taking at another school and transferring back to Virginia Tech. However, this resource serves only as guide and does not negate the requirement for gaining pre-approval for any transfer credit a Virginia Tech College of Engineering Student wants to bring back to Virginia Tech.

A copy of this Transfer Guide is available on-line at:

<https://www.transferguide.registrar.vt.edu/>.

**\*\*You must earn a letter grade of “C” or higher to receive credit at Virginia Tech for a transferred course\*\***

# Approaching Graduation

## **Graduation Requirements & Graduation Dates**

According to University policy, your Liberal Education requirements are based upon the year you enter the university\*\*, but all other **GRADUATION REQUIREMENTS ARE BASED UPON THE DATE YOU ENTER VIRGINIA TECH.** Thus, if you entered VT in Fall 2023, you would use the “Catalog Year 2023-2024” checksheet.

**Note:** If you first started your undergraduate studies at Virginia Tech in 1996 or earlier, schedule an appointment with the departmental CEE Director of Advising – Kara Lattimer - to review the General Education requirements that will apply to you.

## **Application for Degree**

You should complete an "Application for Degree" on-line through Hokie Spa now.

## **How to Apply for a Degree**

1. Log onto Hokie SPA
2. Click on "Degree Menu"
3. Click on "Undergraduate Degree Menu" or "Associate Degree Menu"
4. Click on "Application for Degree"
5. Select your appropriate level and click "Submit"
6. Click on the "Apply" button next to the appropriate major
7. Review your name as it will appear on your diploma
8. Indicate your expected term of completion (graduation term)
9. Select "which degree is this"
10. Indicate your hometown information
11. Indicate which ceremony you will be attending (please note that choosing "I will not be attending" will excuse you from the departmental ceremony\* in the Spring).
12. Click "Submit"
13. If prompted, enter an address for your diploma, click "Submit"

This application declares your planned graduation date with the Registrar and generates your official degree-tracking document - the DARS Report (see more about the DARS below). DARS is an acronym for Degree Audit and Reporting System. You may update your expected graduation date at any time by returning to the "Application for Degree" screen in Hokie Spa and submitting a new form.

### **Your DARS Report**

The DARS report is the official computer-programmed version of your approved BSCE checksheet. You may view your DARS report on-line through Hokie SPA.

### **Request a DARS Report**

Before requesting a DARS Report you must first submit an Application for Degree through your [Hokie SPA](#) account.

1. To request a DARS report
2. Log onto Hokie SPA
3. Click on "Degree Menu"
4. Click on "Undergraduate Degree Menu" or "Associate Degree Menu"
5. Click on "Degree Audit Report Menu"
6. Click on "Request a Degree Audit"
7. Select the appropriate degree program from the drop-down menu
8. Click "Run Audit"
9. Click "View Submitted Audits"
10. If your audit does not appear click "Refresh the list" until it appears.
11. Click on the link to the DARS



**Important Note:** Use the approved copy of the BSCE check sheet for the date you entered Virginia Tech.

## **Organization of a DARS Report**

**\*\*\*\* Confirm that you are not using “PLANNED” courses if you are trying to determine what you have remaining to complete your BSCE degree. \*\*\*\***

- **Heading-** Located at the top of the report; includes your name, student ID number, prepared date, and your graduation date. The degree, major, and option (if applicable) used in producing the report are also included in the heading.
- Under the graphs and bar charts, there is a section that states it is the student's responsibility for verification of information on a DARS report. Below that will be a line that will say one of the following:
  - At Least One Requirement Has Not Been Satisfied
  - All Requirements Completed-In Progress Courses Used
  - All Requirements Identified Below Have Been Met
- **Requirements --** The DARS takes each of the requirements for the program (Core, College, and Major) and divides them into requirement sets. Each block indicates a requirement set and contains a status indicator (RED box with X -- at least one requirement is not complete, BLUE box with three dots -- requirements completed with in-progress courses, or GREEN box with checkmark -- all requirements met). The requirement will indicate what courses have been used to complete the requirements and what course(s) (if any) need to be taken to complete the requirement.
- **Free electives --** At the end of the report after all the requirements are listed is a block called free electives. Any additional courses that were not used to fulfill a specific requirement in the other areas on the DARS in this category.

Use the checksheet to assist you in reading and checking your DARS. Do not try to use the DARS to plan and track your program study as the DARS can be confusing to read on its own.

In order for the Registrar to confirm that you have met all your degree requirements so that your degree may be conferred at graduation, your DARS report must reflect that all requirements have been completed. Thus, it is extremely important that you review



your DARS report carefully to ensure it properly reflects your progress to your degree. This review is sometimes challenging because the DARS does not "look" like your checksheet.

The first thing to check when reviewing your DARS is the date at the top of your report. The top of your DARS report will look the following:

<i>Bird, Hokie</i>					
<i>Civil Engineering</i>					
<b>Prepared On</b>	07/05/2023 10:45 AM	<b>Program Code</b>	BSCE CE	<b>Catalog Year</b>	Summer Session 2021
<b>Student ID</b>	1234567890	<b>Graduation Date</b>	08/11/23	<b>Job ID</b>	aslkdfjkljrwejsalfkl

The best way to review your DARS report is to use your approved copy of your checksheet as your guide and then review the DARS, trying to match the categories you will see described on the DARS report to the listings on your checksheet. If you have questions about your DARS, consult with your advisor. Be sure to bring along a copy of both the checksheet you are using to plan and track your program of study and a copy of your DARS.

Note: Typically, DARS automatically puts most CEE X984 courses in the "Free Electives" category, which is usually incorrect. CEE X984 courses have to be manually entered into the correct category in DARS. If you took a CEE X984 course that is not being put in the correct location in DARS, please contact Christy Cumbia – ccumbia@vt.edu - in the CEE Advising Center – 211B Patton – and this will get corrected.

## **Ensuring Your Graduation Requirements Have Been Completed**

Once you have your class schedule fixed for the semester in which you plan to graduate, check your DARS to see that it has the following comment on the first page: "ALL REQUIREMENTS COMPLETE USING IN-PROGRESS COURSES."

If your DARS does not have this comment, but says instead **"AT LEAST ONE REQUIREMENT NOT YET COMPLETED,"** you need to immediately determine which requirement has not been met and take the appropriate corrective action.

If you believe that you have satisfied all of the requirements and that the DARS Report is not correctly reflecting this fact, consult with your advisor to review the situation.

## **Fundamentals of Engineering (FE) Exam [known previously as the EIT Exam]**

All CEE students are strongly encouraged to take the FE Exam before they graduate - you will never be better prepared to pass this exam!! Engineering students may take the exam if they are within one calendar year of graduation. Exams are available to take all year-round.

Information about the FE Exam can be found on the CEE website. You must get a reference letter from a Professional Engineer. You may read more information about scheduling the exam at [www.ncees.org](http://www.ncees.org).

The ESM department offers a review course for this exam every year but ONLY in the Spring Semester. The ESM 4404 ~ Fundamentals of Professional Engineering course is designed as a review for the exam. The CEE Department has added sections to this review class for students to prepare for the civil engineering portion of the exam.



**Important Note:** the ESM 4404 credits may not be used to meet any of the 128 credits specified for the BSCE degree because it is a review course only.

The credits for this course are used in the total number of credits you are taking in the semester for the purpose of establishing full-time student status (12 or more

credits/semester). Seniors who want to take this course but who will exceed a total of 19 credits for the semester must request Overload Permission from the Dean's Office (see Credit Hour Loads in the "Curriculum" section of this manual). The Overload Request Form is available on the Dean's Office "Forms" webpage: [www.eng.vt.edu/forms](http://www.eng.vt.edu/forms) .

You may find out more about the specific content of the FE exam by visiting the website for the National Council of Examiners for Engineering and Surveying (NCEES) – [www.ncees.org](http://www.ncees.org).

**FE Exam and EIT Documents required**

<b>What</b>	<b>When</b>	<b>Where</b>
Take the Exam		Register NCEES.org
EIT Designation Application		Download from DPOR Website. Send \$30 fee and application form to DPOR.
Complete Degree Verification Form	ASAP	Download from the DPOR website. Submit to the university registrar (student services building). Registrar mails to DPOR.
EIT Reference Form	After you pass the exam	Download form from DPOR Website. This must be completed by a P.E. who has known you at least one year. Then send to DPOR with E.I.T. Designation application.

NOTE: 1. Students CANNOT put E.I.T. on their resume until they have graduated.

2. Once degree verification has been submitted to the registrar's office, students must follow up to ensure that VT sent it and it was received by DPOR.

## **Commencement (Graduation Ceremony) - Yes, It Will Happen For You!!**

Information regarding commencement exercises will be posted on the University website each semester.

Once you have applied for graduation through Hokie Spa, you will automatically be notified of the specific information regarding the graduation ceremony about mid-semester via your VT.EDU email address.

Graduation caps and gowns are purchased through the University Bookstores. Dates of purchase will be published in the aforementioned announcements.

Towards the end of the semester, the College typically sends out an instruction email to all College of Engineering graduating seniors.

## **Summer Graduates**

Students completing their graduation requirements during the summer are allowed to participate ('walk') in the May ceremony. Your name will be called and you will be handed an envelope like all the other graduates participating in the ceremony. It is important to note, however, that your name will not appear in the bulletin, nor will you actually receive your diploma until all of your requirements have been met! Your diploma will be mailed to you.

If you are a summer graduate and would like to participate in the May ceremony, you need to let someone in the advising center know that this is what you want to do.

## **Photos from Commencement Ceremony**

The College of Engineering provides student contact information to the photographer after commencement ceremonies. If you have marked your information as "CONFIDENTIAL" at any point, your information will not be provided to the photographer. This means you will not receive information on how to purchase commencement photos. If you are interested in receiving this information, you can remove any "confidential" tags you have marked on your record via Hokie Spa.

# OTHER OPPORTUNITIES IN THE DEPARTMENT

## SPECIAL COURSES:

### CEE X984 - Special Study Courses

The department often offers new or experimental courses under the generic course number CEE 2984, or 4984. Every CEE X984 course is considered a special study course; however, the different X984 courses will have different titles. It is important to pay attention to course titles for these classes when making course selections for any given semester. Typically, announcements are made through the Undergraduate Google Group informing you of any X984 course to be offered during course request periods. Also, these different X984 courses are listed on the CEE Homepage – [www.cee.vt.edu](http://www.cee.vt.edu) > Undergraduate Programs > Current Undergraduate Students> Information and Forms> Course Listing. If after checking the CEE "Courses" page you are unsure of where a specific CEE X984 course will count on your checksheet, consult with your advisor. Note CEE X984 courses are typically individually corrected in the DARS document (see the Approaching Graduation section for more about DARS). If you encounter a CEE X984 course not being reflected in the correct category on your DARS and you are graduating within 2 semesters, contact Christy Cumbia, ccumbia@vt.edu – in 211 Patton Hall.

***NOTE: Undergraduate Independent Study and Undergraduate Research credits will be counted as hours in different categories on different checksheets. Please review your checksheet to see how the credits can be applied to your BSCE curriculum.***

### Undergraduate Independent Study - CEE 4974

CEE 4974 is the course number associated with Undergraduate Independent Study. Students pursuing independent study work one-on-one with a professor to study a topic not covered in normal course offerings. To qualify for independent study, you

must have an overall GPA of at least a 2.0 and an in-major GPA of at least a 2.0. **It is up to you to arrange an independent study with a professor.**

Once the professor agrees to an independent study, you must complete a College of Engineering Undergraduate Research /Independent Study Authorization form. This is a digital form that is available online. This is completed in two parts - the faculty member completes Part 1 and the student completes Part 2 and then “matches” with the information the professor completed. Digital forms are available on the Dean's Office forms website: **<http://www.eng.vt.edu/forms/>** .

This form must be completed **no later than the end of the first week of classes** for the semester in which the study is to be completed. The complete instructions for filling out this form are contained on the website.

**\*\*\* NOTE: No more than 6 credits of CEE 4974, CEE 4994, or CEE 4974 and CEE 4994 combined may be taken to meet graduation requirements, unless prior approval is granted by the Department Head.**

### **Undergraduate Research - CEE 4994**

CEE 4994 is the course number associated with undergraduate research. Students pursuing undergraduate research will work one-on-one with a professor in support of that professor's research efforts. To qualify for undergraduate research, you must have an overall GPA of at least a 2.0 and an in-major GPA of at least a 2.0. It is up to you to identify a professor that is working in an area that interests you and arrange for undergraduate research with that professor. Good ways to identify professors with undergraduate research opportunities are (1) talking with professors in the same area of interest who are currently teaching one of your classes, and/or (2) reviewing professors' websites to determine what types of projects they work on and making appointments to talk with them regarding possible undergraduate research opportunities.

Once the professor agrees to take you on for undergraduate research, you must complete a College of Engineering Undergraduate Research /Independent Study Authorization form. The digital form is available from the Dean's Office forms website: **<http://www.eng.vt.edu/forms/>** .

This form must be completed **no later than the first week of classes** for the semester in which the research is to be completed. The complete instructions for filling out this form are contained on the website. you must complete a College of Engineering Undergraduate Research /Independent Study Authorization form. This is a digital form that is available online. This is completed in two parts - the faculty member completes Part 1 and the student completes Part 2 and then “matches” with the information the professor completed.

**\*\*\* NOTE: No more than 6 credits of CEE 4974, CEE 4994, or CEE 4974 and CEE 4994 combined may be taken to meet graduation requirements, unless prior approval is granted by the Department Head.**

### **Scholarships**

All scholarship opportunities that pertain to CEE students that the CEE Department is made aware of are posted on the CEE Scholarships webpage: [www.cee.vt.edu](http://www.cee.vt.edu) – Undergraduate Programs> Current Undergraduate Students> Information and Forms> Scholarships and Financial Aid.

The College of Engineering and the CEE Department offer numerous upper-class merit scholarships in amounts varying from \$500 to \$5000. Most of the CEE scholarship awards are made based on applications you submit to the College of Engineering scholarship program. **All eligible CEE students should submit applications to the College of Engineering each Spring Semester (applications are typically due on/about March 1<sup>st</sup>).** Eligibility is based on the overall GPA at the end of the previous fall semester. A 3.0 GPA is required to apply. The scholarship applications will be available in early spring on-line. An announcement will be made through the Undergrad Google Group informing you when applications will be available and the deadline for submission. You may also check [www.eng.vt.edu](http://www.eng.vt.edu) for more information.

There are several other scholarships available through the department that are not awarded through the joint College/Department scholarship process described above. These opportunities also occur during the Spring Semester and will be announced through the Undergrad Google Group and posted on the "CEE Scholarships" website.

Information regarding non-Virginia Tech based scholarships for Civil Engineers are also posted on the CEE website.

### **Civil Engineering Internships and Cooperative Education (CO-OP)**

Civil Engineering employers generally consider four major factors when hiring entry-level engineers:

- (1) Sound academic performance;
- (2) Good communication skills;
- (3) Participation in extra-curricular activities; and
- (4) Civil engineering related work experience.

Related work experience is chiefly acquired through summer jobs or participation in programs through Career Services. While many good summer jobs exist in the civil engineering profession, more and more firms are looking to the work programs as the way to incorporate students into their firms. Students who participate in Career Service programs agree to work for one to three terms, which are defined as one academic semester or one entire summer. Any additional time added to an academic program is, in reality, not extra time in school, but a time of opportunity. At the end of the program, the typical student who participated will have acquired an enhanced understanding of the civil engineering profession, earned a respectable income, and obtained verifiable experience for their resume. Virginia Tech has a strong base of employers actively seeking CEE students - opportunities abound!! Career Services is the Official University Coordinator for this program. For more information on how to participate in this program, check out the Career Services Web Page: [www.career.vt.edu](http://www.career.vt.edu).



## **Finding Job Opportunities & Employer Information**

- Watch the CEE Undergrad Google Group announcements relating to Employer Visits and Career Fairs.
- Job Opportunities of all kinds (Intern/CO-OP, full-time entry level, part-time local, etc.) will be made available to undergraduates. Students will be notified via the Monday Message from the UG Google Group.
- Students interested in Intern/CO-OP and full-time entry-level work should also plan to attend the following Career Fairs each semester: Engineering Expo in the Fall; CEE Career Fair in the Fall & Spring; Construction Career Fair in the Fall & Spring; CAMEO CareerFest in the Spring; and, Connections in the Spring (for Intern/CO-OP only).
- Visit the **HANDSHAKE** portion of the Career Services website:  
[www.career.vt.edu](http://www.career.vt.edu) .
- Another good source of information for identifying firms in a specific location is to visit the American Council of Engineering Companies website and search their member database. Go to <http://www.acec.org/> and click on the 'Membership' link in the upper right side of the page. This link is also available from the CEE Webpage: [www.cee.vt.edu](http://www.cee.vt.edu) > Undergraduate Programs > Current Undergraduate Students > Career Resources> Identify Engineering Firms.
- General information on resume formatting, cover letters, interviewing tips etc. is available in the VT Career Planning Guide published by Career Services. The guide is available online at [www.career.vt.edu](http://www.career.vt.edu).

## **Study Abroad**

The department encourages students to consider studying abroad. The experiential knowledge and skills gained while studying in another country can often be the most rewarding experiences of a students' academic career. To study abroad in the Civil Engineering program will require a good bit of organization, planning, and dedication to ensure a smooth process.

While studying abroad may sometimes affect your date of graduation, if you plan your program early on in your academic career, you may be able to graduate on time or with only one additional semester. If you are interested in studying abroad, please follow the steps below to select a program and evaluate if the program will meet your specific goals.

### **How to Explore Study Abroad Options:**

1. Start your inquiries by contacting Dr. Lindy Cranwell (lindycra@vt.edu), the CEE department's Director of International Education. Her office is within the CEE main office suite in 200 Patton Hall. Dr. Cranwell will be able to give you a broad overview of international programs offered within CEE, within the VT College of Engineering, and other, outside programs.
2. Contact the College of Engineering's International Programs office at [engabroad@vt.edu](mailto:engabroad@vt.edu) and visit <https://eng.vt.edu/academics/international-programs.html> for more information. After you have talked with the COE Study Abroad Advisor, you may wish to visit VT's Study Abroad Office website <https://www.globaleducation.vt.edu/> or their office located on Prices Fork Road for additional information.
3. Choose the program that you are interested in and visit their website to make a list of the courses you wish to take. Make an appointment to talk with Ms. Lattimer in 211C Patton regarding the courses you wish to take.
4. Contact the College of Engineering's Assistant Director for Educational Services, Ryan Wagoner, at [enr-aa@vt.edu](mailto:enr-aa@vt.edu). You must complete a transfer credit request

form, on which you list the courses you want to take abroad, and how you request they transfer to VT. You will be required to submit a detailed syllabus for those courses which have not previously been evaluated. Faculty members will evaluate the syllabi, and you will be informed if the course will transfer as you requested. Do this early, as this process takes time!

Credit hours for approved courses transfer; grades do not. However, students must make at least a C for the credits to transfer.

5. Apply for the program you're interested in. Application instructions can be found on the Education Abroad website.
6. Make sure you've completed all required forms about health insurance, liability, emergency contacts, and other important matters and that you've turned them in to the Education Abroad office prior to your departure.

### **CEE Student Organizations**

The Department is home to several active student groups and societies. They participate in a variety of activities ranging from public service to competitions with other schools. They can provide many wonderful memories and challenges as well as strengthening friendships with other students. All CEE students are welcome at any of the student group activities - to find out who to contact about these organizations, refer back to page 5 in the "Getting Around" section of the manual.

### **American Society Civil Engineers (ASCE)**

<http://www.asce.cee.vt.edu/>

The Department boasts a robust and successful student chapter of the American Society of Civil Engineers (ASCE). Membership in the student chapter is open to all interested CEE students regardless of your academic level. Both Graduate and Undergraduate students are welcome!

Benefits of membership include:

1. Obtaining technical and interesting information through meetings and publications of the parent society.
2. Participating in meetings of general interest to Civil and Environmental Engineering students.
3. Making contacts with practicing civil engineers and other leaders of engineering projects.
4. Participating in student chapter functions such as regional and national conferences and competitions.
5. Developing your professional attitude and status.

**\*\*\*Membership forms may be found on the door to the ASCE Office on the 1<sup>st</sup> Floor of Patton Hall\*\*\***

### **Alliance of Transportation Engineering Students (ATES)**

<http://www.tise.cee.vt.edu/ates.html>

The Virginia Tech Alliance of Transportation Engineering Students (ATES) is the umbrella under which two student chapters (ITE & ARTBA) perform. The major goal of the alliance is to promote the dissemination of knowledge and information related to transportation infrastructure and systems issues, problems and solutions. To achieve this goal, VTSTA will schedule a program of annual activities including technical meetings, field trips, and social functions.

The Alliance consists of the VT Institute of Transportation Engineers (ITE) Student Chapter and the Student Chapter of the American Road and Transportation Builders Association (ARTBA). ITE is a national organization that is transportation systems and operations oriented, while the national ARTBA organization tends to place more emphasis on the design and construction of physical transportation infrastructure and facilities.

An underlying aim of having two transportation Student Chapters at VT with diverse interests and emphases is to ensure that all TISE students are served in a comprehensive, interdisciplinary manner and that Alliance activities strike an appropriate balance for the TISE systems students and the TISE infrastructure students. As a result, VTSTA believe that this allows the infrastructure and systems students to develop more

effective networking mechanisms for job opportunities with the transportation construction industry as well as with transportation planning, management and operating organizations.

### **Chi Epsilon**

<http://www.chiep.cee.vt.edu/>

Chi Epsilon is the Civil Engineering Honor Society. It recognizes the outstanding achievement of the individual student and promotes development of those characteristics necessary to the pursuit of a successful engineering career. The Virginia Tech Chapter is part of a network of more than 60 chapters formed since the organization was founded at the University of Illinois in 1922. Membership in Chi Epsilon conveys both an honor and an obligation since activities include service projects for the CEE department. Consideration for membership in Chi Epsilon requires completion of at least one-half of the work toward the bachelor's degree and an academic ranking within the upper one-third of the student's class. Prospective members are notified by invitation each semester.

### **Construction Management Association of America**

<https://gobblerconnect.vt.edu/organization/cmaaatvirginiatech>

The mission of the student chapter is to provide students interested in Construction Management as a profession a sense of the roles and responsibilities of a Construction Manager. The chapter will work to abide and encourage the mission of CMAA which is "to promote professionalism and excellence in the management of the construction process." Specific objectives include:

- Create identity for Construction Management Students at Virginia Tech;
- Expose students to professional aspects of Construction Management by interfacing with local CMAA chapters (i.e. field trips, speakers, seminars, discussion panels);
- Engage in outreach activities in the community;
- Help develop leadership skills in CMAA student members

CMAA is leading the growth and acceptance of Construction Management as a professional discipline that can add significant value to the entire construction process-- from conception to ongoing operation. Membership in CMAA includes more than 3,000 firms and individuals; owners, engineers, architects, contractors, educators, students-- everyone with a stake in the construction industry's success.

### **Sustainable Land Development Club (SLDC)**

<https://gobblerconnect.vt.edu/organization/slhc>

The purpose of this club is to bring together students with common academic interests and professional goals related to sustainable land development. Since its inception, the SLDC has assembled for numerous social outings, volunteered for a local charity organization, attended field trips to land development projects, and has worked closely with LDDI's corporate sponsors to hold "Land Development Information Nights" prior to job recruitment fairs. To become involved in the club, contact Kevin Young at [keyoung@vt.edu](mailto:keyoung@vt.edu).

### **American Railway Engineering and Maintenance-of-Way Association (AREMA)**

<https://gobblerconnect.vt.edu/organization/AREMA>

The chapter's mission is to introduce VT students to the engineering opportunities in the railway industry, as well as teach members the basics of railroading. These goals are accomplished through a combination of presentations and field trips involving professionals in the railroad industry.

### **American Water Works Association (AWWA)**

<https://www.vaawwa.org/page/student-activities>

The purpose of this organization is similar to that of EWRI/COPRI in that sharing ideas, networking, and socializing within the EWR department at VT is a primary goal. The group encourages and facilitates connecting with outside engineers and water professionals across VA and the US, when possible. A goal is to increase awareness of critical issues related to environmental, water, wastewater, and public health for students and the public as well.

# CEE SPECIALTY AREA GUIDE

**The following information is to be used as a guide for coursework in the specialty areas. Note that pre-requisites and restrictions should be checked thoroughly as these are ideas if you are interested in a particular specialty area.**

## **Construction**

The specialty area of construction offers opportunities through course work and faculty research interests, for students to acquire expertise in all phases of a constructed facility's life cycle. Leading industry trends, cutting-edge management techniques and technological innovations are hallmarks of this internationally prominent program.

All options provided for courses listed in the curriculum in the Science and Engineering Science category are sufficient for a student interested in the specialty area of construction. The advanced course in estimating, CEE 4014, is the most important for a student interested in this specialty area. Students should also consider taking CEE 4024 and/or 4074 to strengthen their knowledge in this specialty area. Advanced courses in other specialty areas within civil engineering that are relevant to a student whose interest is in construction are: CEE 3424, CEE 3434, and CEE 4544.

## **Environmental**

Environmental engineering focuses on designing infrastructure and processes that benefit society and the environment through providing clear air and water, plus effective management of wastes and wastewater. Environmental engineering draws heavily upon the applied sciences of biology for biological treatment processes, chemistry for chemical treatment and contaminant fate and transport, and physics for air pollution. Computer programming is a useful skill in many advanced courses, especially for students considering advanced degrees.

Students interested in environmental engineering as a specialty area should consider taking one of the following courses as a science elective: BIOL 1005 & 1006, CHEM 1036, EnSC 3604 and either BSE 3154, CHE 2114, or CS 1044 as an engineering science elective. The advanced courses in environmental engineering emphasize pollution

treatment in a variety of media, in addition to linking pollution to public health impacts. Because environmental engineering overlaps with water resources, students should plan to take at least one advanced course in this area (CEE 4304, 4314, 4324, 4334, or 4384) and should also consider 4274, 4254, 4264 or 4554. Courses outside civil engineering that would be particularly relevant to a student interested in environmental engineering may include Biological Systems Engineering (BSE), Crop & Soil Environmental Sciences (CSES), Environmental Sciences (ENSC), Forest Resources and Environmental Conservation (FOR) and other possibilities within the College of Natural Resources and Environment (CNRE).

### **Geotechnical**

Geotechnical engineering is the sub-discipline of civil engineering that deals with soil and rock behavior from an engineering perspective. Examples of projects where geotechnical engineering principles are applied include foundation systems, earth slopes, earth dams, earth retention structures, embankments, tunnels, levees, wharves, landfills, land development, energy exploration and resource recovery. Geotechnical engineering is vital for the assessment and mitigation of risk from natural hazards such as earthquakes, liquefaction, sinkholes, rock falls, landslides, scour, and erosion.

Students interested in the geotechnical specialty begin by completing CEE 3514-Introduction to Geotechnical Engineering, one of the eight CEE Fundamental courses and one of three Fundamental courses with a lab component. The geotechnical Advanced Technical Electives include 4534-Earth pressures and Foundation Structures, 4544-Design of Earth Structures (design project), 4554-Natural Disasters, and 4564-Introduction to Coastal and Marine Geotechnics. One or more CEE Additional Electives could also be used to complete Geotechnical advanced courses not completed as Advanced Technical Electives.

Advanced courses in other specialty areas that are relevant to geotechnical engineering include CEE 3424, 4074, 4174, 4264, 4274, 4304, 4334, 4384, and 4664.



## **Land Development**

Land development design continues to emerge as a discipline of critical importance in civil engineering education. While LDD does include traditional CEE subject matter, it also encompasses a number of unique topics, many of which have not typically been addressed in the traditional undergraduate curriculum. These topics include feasibility analysis, planning and policy, finance and yield analysis, conceptual design, site engineering, and others.

The four advanced courses listed provide a breadth of knowledge in Land Development Design and would be ideal for any student interested in a focus in this area. Advanced courses in other areas within civil engineering that are related to land development include CEE 4304, 4334, and 4654. Students may want to consider completing some of the following courses to benefit their knowledge in Land Development: BC 3124, UAP 4374, UAP 4754, MKTG 4734, FIN 4154, or BSE 4324 to enhance their academic focus of land development design. A minor or a double major in Real Estate is also a viable option to those students with a more entrepreneurial interest and/or an interest in becoming a land developer.

## **Materials**

Materials engineering focuses on the natural and manufactured substances used to construct human infrastructure. Although engineers employ a wide range of materials, those of primary significance to civil engineering are steel, concrete, and asphalt pavements.

Students interested in materials should consider completing ESM 3054 and ESM 3064, which is the lab, as an engineering science. This course is particularly relevant and will provide students with an excellent knowledge base for a future in structures or materials engineering. The three advanced courses in the materials specialty area provide valuable information for a student interested in this specialty area. Materials engineering is closely related to structural engineering, thus many of the same elective courses will likely be of

interest. Courses in the Materials Science and Engineering (MSE) Department may be of interest.

### **Structures**

Structural engineering concerns the analysis and design of buildings, bridges and other components of the structural environment employed in all aspects of human social development.

ESM 3054 is recommended for students interested in structures since knowledge of materials is important for future study in structural engineering. Computer programming is also useful since computers are used extensively in structural analysis and design. CEE 3424 and CEE 3434 are the two advanced courses that are essential to structural engineering practice. Students interested in gaining further depth in this specialty area should consider taking other advanced courses such as: CEE 4404 and 4454.

Other specialty areas within civil engineering that compliment structures are materials, geotechnical, and construction. Students should consider completing at least one course from each of these specialty areas. The following courses are particularly relevant: CEE 3684, CEE 4534, CEE 4014, and CEE 4024.

### **Transportation**

Transportation course content provides students with the ability to recognize the primary role that civil engineers play in ensuring the continuing adequacy of the transportation infrastructure to meet human needs. Courses include all areas of systems engineering, assessment of transportation system operations, optimization of transportation systems, infrastructure engineering including assessment of existing conditions and performance, planning and design of transportation systems.

Any of the options provided in the science and engineering science elective category are sufficient for a student interested in the transportation specialty area. The five advanced courses in transportation provide a breadth of knowledge and information, therefore each course is relevant for a student interested in this area. Advanced courses in other specialty areas within civil engineering which are particularly relevant for a student whose

interest is in transportation include CEE 3684 and CEE 4664. Courses outside the department and the college that would be beneficial to a student interested in this specialty area include STAT 3704, ISE 3414, ISE 3614, ME 4204. ISE 3614 is relevant to a student who may be interested in pursuing graduate work in transportation systems and infrastructure. ME 4204 is relevant for a student who may be interested in pursuing graduate work in transportation systems.

### **Water Resources**

Water resources engineers design, plan and manage infrastructure systems for water supply, storm water management, mitigation of damage against floods including coastal erosion, and the rehabilitation of natural aquatic environments. Water resources engineering includes mathematical modeling of water flow and pollutant transport in engineered systems and the natural environments, integration of the hydrologic cycle into solutions for complex societal water demands, and sustainable water infrastructure including reservoirs, storm water control and water distribution systems.

Students interested in water resources engineering as a specialty area are strongly encouraged to take GEOG 2084. Recommended Electives include CS 1044, CS 1114, or ChE 2114. Advanced courses provide a breadth of knowledge in engineering hydrology, groundwater resources, surface water systems, coastal engineering, and the planning and design of water resources projects. Courses in other areas that are applicable to a focus in water resources engineering include environmental engineering courses CEE 4104, 4114, and 4134 and land development courses CEE 4254 and 4274.

## Frequently Asked Questions (FAQ's)

### 1. **Do I have to have a C in every CEE course in order to get credit for it?**

A minimum grade of C- is required in any course you take that is a prerequisite for any CEE course that you either need or choose to take. Additionally, in order to complete your Bachelor of Science in Civil Engineering Degree, you must maintain both an overall GPA of 2.0 or higher AND an in-major GPA of 2.0 or higher. A GPA of 2.0 is required to maintain enrollment in the department.

Your overall GPA includes all the coursework you have completed at Virginia Tech. Your in-major GPA is calculated based only on courses you have completed that have a CEE course number.

Note: It is possible to earn below a C- in a CEE class (but you do have to pass it!) and still use that class to meet a checksheet requirement as long as the course is not a pre-requisite for any other CEE course you plan to take. (Of course, both the overall and in-major GPAs must be at least a 2.0 in order to graduate!)

### 2. **Everyone keeps talking about DARS. What is a DARS and why do I need it?**

The DARS report is the official computer-programmed version of your approved BSCE checksheet. This acronym stands for Degree Audit Reporting System. You may view your DARS report on-line through Hokie SPA.

In order for the Registrar to confirm that you have met all your degree requirements so that your degree may be conferred at graduation, your DARS report must reflect that all requirements have been completed. Thus, it is extremely important that you review your DARS report carefully to ensure it properly reflects your progress to your degree. This review is sometimes challenging because the DARS does not "look" like your checksheet.

The first thing to check when reviewing your DARS is that it correctly reflects your desired BSCE major. The top of your DARS report will look the following:

<i>Bird, Hokie</i>			
<i>Civil Engineering</i>			
<b>Prepared On</b>	07/05/2023 10:45 AM	<b>Program Code</b>	BSCE CE
<b>Student ID</b>	1234567890	<b>Graduation Date</b>	08/11/23
		<b>Catalog Year</b>	Summer Session 2021
		<b>Job ID</b>	aslkdfklajrwejksalfkl

The best way to review your DARS report is to use your approved paper copy of your checksheet as your guide and then review the DARS, trying to match the categories you will see described on the DARS report to the listings on your checksheet. If you have questions about your DARS, consult with your advisor. Be sure to bring along a copy of both the checksheet you are using to plan and track your program of study and a copy of your DARS.

Once you have your class schedule fixed for the semester in which you plan to graduate, check your DARS to see that it has the following comment on the first page:

"ALL REQUIREMENTS COMPLETE USING IN-PROGRESS COURSES."

If your DARS does not have this comment, but says instead:

"AT LEAST ONE REQUIREMENT NOT YET COMPLETED,"

you need to immediately determine which requirement has not been met and take the appropriate corrective action. If you believe that you have satisfied all of the requirements and that the DARS Report is not correctly reflecting this fact, consult with your advisor to review the situation.

### 3. Does CEE XXXX have a prerequisite?

Prerequisites are part of the official course description. The latest CEE course descriptions and prerequisites are found on the CEE homepage under either the course listings or the pre-requisite chart. Course listings can be found at:

<http://www.cee.vt.edu>. The Pre-requisites chart can be found on the same Information and Forms webpage. For all non-CEE courses, refer to the homepage for the department which offers the course or the University Undergraduate Catalog.

#### **4. How does a “design project” course differ from other courses?**

There are 8 designated “design project” courses on the CEE Electives list, to include one in each of the 8 different Specialty Areas within CEE. Every CEE student must complete at least one of these courses; each course is one semester long. Whichever design project course you take is determined by you. These 8 courses offer a culminating design experience. As such, these courses require that you work in teams and coordinate your time accordingly. The following is the official departmental description for design project courses.

#### **Civil Engineering Undergraduate Design Project Experience at Virginia Tech**

*Engineering design is the process of devising a system, component, or process to meet desired needs. It is a decision-making process (often iterative), in which the basic sciences, mathematics, and the engineering sciences are applied to convert resources optimally to meet these stated needs (ASCE Commentary, v3.4, May 2007).*

The Virginia Tech civil engineering curriculum provides progressive student involvement in design that concludes with a culminating design experience. The projects assigned in the design-project courses are open-ended, incorporate appropriate engineering standards, and require the application of knowledge from several earlier courses in the curriculum. Projects include application of technical knowledge to design appropriate physical facilities, but also include consideration of non-technical constraints that confront real-world projects. These additional considerations include such interdisciplinary issues as economics, environmental impact, and sustainability.

The following criteria must be met by design-project courses:

- a. Projects must be completed by teams composed of at least three persons.

- b. Projects must represent a major design experience based on knowledge that applies and extends skills acquired in earlier coursework, appropriate engineering standards, and multiple realistic constraints.
- c. Projects must be open ended and provide the students with substantial freedom and decision-making requirements in the development of an appropriate solution to the problem/situation being addressed.
- d. Project must clearly demonstrate and document decision making through selection of the optimal design alternative from a set of competing design alternatives. The criteria used to select the best or optimal design concept must also be described.
- e. The course must have “external professional involvement,” which means one or more individuals with appropriate professional experience gained in consulting firms, governmental agencies, or other organizations, must interact with the students as a part of the overall design project course experience.
- f. Projects must include consideration of economic issues, environmental impact issues, sustainable development issues, and professional practice issues, as appropriate to the project and course.

In addition to the items listed above, the design project courses must include writing and speaking components. Specifically,

- g. Project teams must make oral presentations of their final design recommendations.
- h. Project teams will be required to prepare at least five pages of written documents, appropriate to the project. Each student in the team must participate in some portion of the document writing. The project must include a statement (subject to Honor Court jurisdiction) that all team members participated in a substantial way in the writing of the project’s written documents. Examples of these written documents include memos that describe the team’s overall approach to the project and preliminary findings; bi-weekly progress reports; and final written reports.

**5. Where do I find information on civil and environmental engineering companies, job opportunities, resumes, interviewing and the like?**

Watch the Google Group for announcements of firms coming to campus.

Job Opportunities of all kinds (Intern/CO-OP, full-time entry level, part-time local, etc.) will be posted to the [www.cee.vt.edu](http://www.cee.vt.edu) > Undergraduate > Current Undergraduate Students > Career Resources > CEE Job Opportunities.

Students interested in Intern/CO-OP and full-time entry-level work should also plan to attend the following Career Fairs each semester: Engineering Expo in the Fall; CEE Career Fairs in the Fall & Spring; Construction Career Fairs in the Fall & Spring; CAMEO CareerFest in the Spring; and, Connections in the Spring (for Intern/CO-OP only).

Visit the HANDSHAKE portion of the Career Services website: [www.career.vt.edu](http://www.career.vt.edu)

Another good source of information for identifying firms in a specific location is to visit the American Council of Engineering Companies website and search their member database. Go to <http://www.acec.org/> and click on the 'Membership' link in the upper left side of the page.

General information on resume formatting, cover letters, interviewing tips etc. is available at Career & Professional Development: [www.career.vt.edu](http://www.career.vt.edu).

**6. I want to take a course at another school and transfer it back to Virginia Tech – how do I go about knowing if the class will be accepted?**

If you desire to take coursework during the summer from a school other than Virginia Tech and then have this credit transferred back to meet your graduation requirements, you must obtain pre-approval from the Office of the Dean of Academic Affairs of the College of Engineering (212 Hancock).

The transfer credit pre-approval form is available on the Dean's website: <http://www.eng.vt.edu/forms/> . You must download this form from the website; hard copies are not provided.



The Virginia Tech Transfer Equivalency Database is a cross-reference between other schools' courses (to include VA Community Colleges, other VA schools, and out-of-state schools) and Virginia Tech courses. This database can be a useful tool for identifying possible courses you may be interested in taking at another school and transferring back to Virginia Tech. However, this resource serves only as a guide and does not negate the requirement for gaining pre-approval for any transfer credit a Virginia Tech College of Engineering Student wants to bring back to Virginia Tech. A copy of this Transfer Guide is available on-line at: <http://www.transferguide.registrar.vt.edu/>.