



**Energy Science
Technology & Policy**
Carnegie Mellon University
College of Engineering

Energy Science, Technology and Policy Master's Program

Graduate Student Handbook

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Energy Science, Technology and Policy Master's Program
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EST&P GRADUATE STUDENT HANDBOOK

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D) Welcome and Introduction

The Faculty and Staff of the Energy Science, Technology and Policy (EST&P) program welcome you to Carnegie Mellon University (CMU). EST&P is an interdisciplinary Master of Science degree program in the College of Engineering and is an educational initiative of the CMU Scott Institute for Energy Innovation. The two EST&P degrees proudly build upon the significant accomplishments in energy by CMU faculty, researchers, students, and graduates.

Why EST&P:

Effective solutions to energy problems will come from engineers and technical managers who understand the interdisciplinary challenges of energy, and who are well informed on the broad issues of energy supply, demand, storage, utilization, policy, economics, sustainability, and the environment. EST&P addresses this need with distinctive Master of Science degrees based in engineering, aligned with new discoveries in science, attuned to sustainability and the environment, and informed by a broader perspective in economics and public policy.

As a professional master's degree program, EST&P is oriented towards professional career preparation and the two MS degrees are awarded for successful completion of all required coursework. All EST&P graduates share core knowledge from four required courses: Energy Conversion & Supply, Energy Transport & Storage, Energy Demand & Utilization, and Energy Policy & Economics (24 units). Engineering depth is assured through a disciplinary concentration that sets the template for approximately a third of the degree coursework (36 units). Customization and individualization is done through breadth electives (36 units). For the Applied Studies degree, further customization and application of knowledge to real world problems occurs in the independent project work or project intensive coursework (24 units).

EST&P graduates pursue diverse careers where they can lead in the development of new technologies and policies for the production, transport, and efficient use of energy. The curriculum is designed to prepare you for a position of responsibility in energy sectors including: traditional energy utilities and suppliers, alternative and renewable energy, power generation and distribution, energy intensive manufacturing, energy efficiency and sustainability practices, consulting companies, government labs, non-profits, and academic institutions.

Graduate Student Handbook:

This handbook will guide and inform your opportunities and choices in the EST&P program. It contains detailed information about EST&P degree requirements, policies, and procedures, and it supplements the [College of Engineering graduate policies](#) and the [University policies](#). As you join us in this ninth year of CMU's Energy master's program, we hope you have a productive and rewarding academic year, and that you will not hesitate to contact us with any questions.

II) EST&P Degree Options and Requirements

A) Overview of EST&P Degree Options

The College of Engineering EST&P program offers two coursework based professional master's degrees in energy:

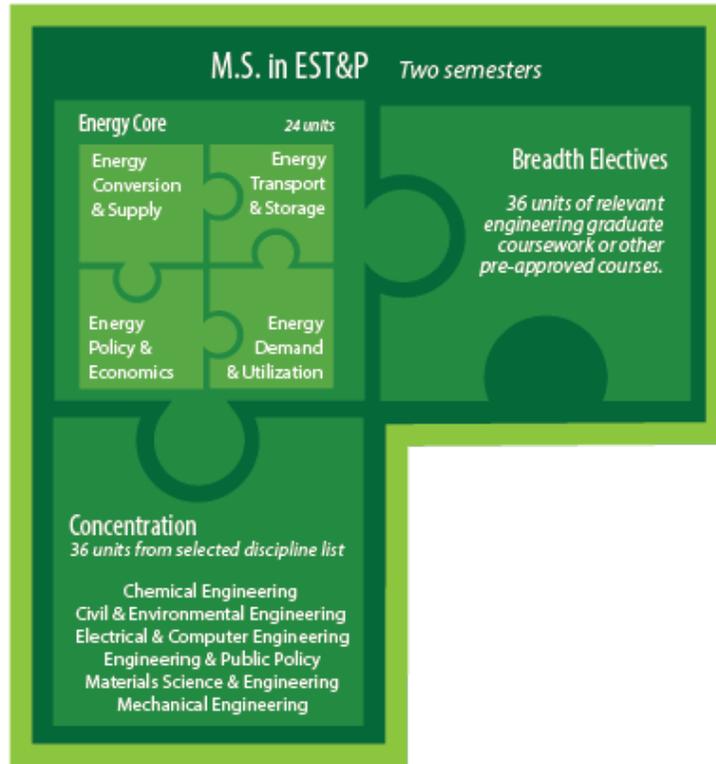
- The **M.S. in Energy Science, Technology and Policy (EST&P)** is a degree that requires 96 units of coursework and is completed in two semesters of full-time study.
- The **M.S. in Energy Science, Technology and Policy - Applied Studies (EST&P-AS)** is a degree requires 120 units of coursework (including 24-units of project) and is completed in three semesters of full-time study.

Prospective students apply to and receive admission offers for one of two the EST&P degrees and one of the six disciplinary concentrations within the EST&P program. Prospective students apply to and receive admission offers directly from the College of Engineering's EST&P program, not one of the affiliated engineering departments.

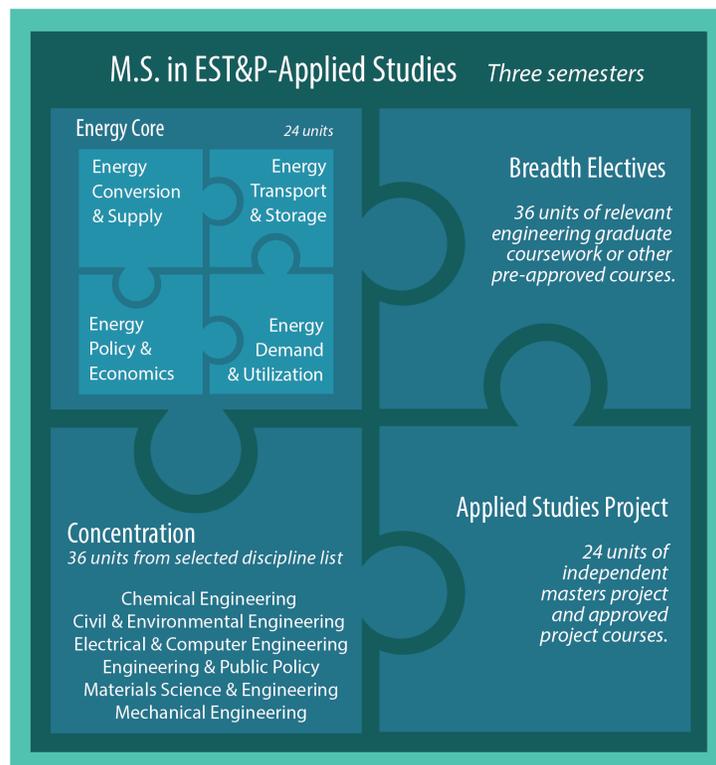
Both EST&P degrees require a minimum of 96-units of coursework in the three categories of: Energy Core, Disciplinary Concentration, and Breadth Electives. Additionally, the EST&P-AS degree requires a minimum of 24 additional units of project work. The two degrees are compared in the following table. The figures on the following page graphically illustrate the basic requirements for the two degrees. Further details are given on the pages that follow the figures.

Energy Science, Technology & Policy (EST&P)	Energy Science, Technology & Policy – Applied Studies (EST&P-AS)
Master of Science (M.S.) degree	Master of Science (M.S.) degree
Two semesters of full-time study	Three semesters of full-time study
<p>96 total units: 96 coursework:</p> <ul style="list-style-type: none"> -24 units of energy core: four required mini-courses -36 units of disciplinary concentration: approved courses set by each department (CHE, CEE, ME, MSE, EPP, ECE) -36 units of breadth electives*: graduate level engineering courses and limited pre-approved non-engineering graduate classes <i>(A maximum of 18 units can be taken in Tepper, Heinz, CS, MCS & Architecture for courses related to energy)</i> <i>(Up to 12 units of Master's Project / Independent Study coursework may count as breadth electives)</i> 	<p>120 total units: 96 coursework + 24 master's project:</p> <ul style="list-style-type: none"> -24 units of energy core: four required mini-courses -36 units of disciplinary concentration: approved courses set by each department (CHE, CEE, ME, MSE, EPP, ECE) -36 units of breadth electives: graduate level engineering courses and limited pre-approved non-engineering graduate classes <i>(A maximum of 18 units can be taken in Tepper, Heinz, CS, MCS & Architecture for courses related to energy)</i> <i>(Up to 12 units of Master's Project / Independent Study coursework may count as breadth electives)</i> -24 units of master's project work: may include independent study, internship, and pre-approved project courses

EST&P Master of Science Degree



EST&P-Applied Studies Master of Science Degree



B) EST&P Course Categories and Policies

EST&P Core Energy Category (24 total units of required coursework):

EST&P and EST&P-AS students must take the following four core courses.

1. 39-610 Energy Conversion and Supply (6 units, mini 1)
2. 39-613 Energy Transport and Storage (6 units, mini 2)
3. 39-611 Energy Demand and Utilization (6 units, mini 3)
4. 39-612 Energy Policy and Economics (6 units, mini 4)

Disciplinary Concentration Category (36 units):

EST&P and EST&P-AS students select one of six disciplinary concentrations when applying for admission. The disciplinary concentration sets the template for depth coursework. Note that the concentration is not listed in the degree title and it does not appear on diplomas or transcripts.

Each participating engineering department has identified the courses that are allowed to fulfill their concentration requirement. ONLY the listed courses will count towards meeting the disciplinary concentration degree requirement. Concentrations may include both required and elective courses, and vary in structure from department to department. For complete details please refer to Appendix A of this Handbook and/or pages on the EST&P Website:

(www.cmu.edu/engineering/estp/degree-programs)

Links for the individual concentrations are given here:

- [Disciplinary concentration in Chemical Engineering](#)
- [Disciplinary concentration in Civil and Environmental Engineering](#)
- [Disciplinary concentration in Electrical and Computer Engineering](#)
- [Disciplinary concentration in Engineering and Public Policy](#)
- [Disciplinary concentration in Materials Science and Engineering](#)
- [Disciplinary concentration in Mechanical Engineering](#)

The EST&P program works with concentration departments to maintain these lists. If courses become available that are not listed in the disciplinary concentrations, please consult Academic Advisor to discuss the potential inclusion of new courses.

For students that have concerns regarding their disciplinary concentration, it is their responsibility to consult with their Academic Advisor.

Breadth Elective Category (36 units):

EST&P and EST&P-AS students must take an additional 36 units of graduate level College of Engineering classes, or approved alternatives discussed below, as [breadth electives](#). Students are encouraged to take breadth electives from outside the department associated with their disciplinary concentration. These breadth electives allow for significant customization of the degree toward the specific interests of individual students, and standard policies are listed below. Up to 12 units of advisor-approved upper-level undergraduate coursework (400 or 500 level) can be applied toward the breadth elective requirement, when the course is needed as preparation for a graduate class. Classes at the 300 level and below do not count towards the EST&P degree.

Advanced written advisor approval is required.

Breadth Elective Category (36 units)- continued

Up to 18 units of pre-approved graduate level classes at Carnegie Mellon, outside the College of Engineering, can be applied toward the breadth elective requirement. **Advanced written advisor approval is required.** Additionally, students are **limited** to 18 units of breadth electives from outside the college, and **limited** to one SCS course per semester.

A maximum of 12 units of advisor-approved directed research / independent study / master's project can be applied toward the 36-unit breadth elective requirement. This is usually taken as 39-660, or equivalent master's project courses in affiliated disciplinary concentrations. To count towards the breadth elective requirement, a factorable letter grade must be assigned for the course. **Advanced written advisor approval is required.** Additionally, **advanced written approval by the supervising faculty member is required.**

A master's project approval request form is available on Canvas. It must be submitted to the EST&P Academic Advisor by the fifth day of classes, and written (email) response will be provided within four business days. (The typical add deadline is the tenth business day of the semester, allowing the project course to be added appropriately.) This form requires a 1-page plan of study describing the project topic, expected outcomes, deliverables and the method of evaluation. This form must be signed by both the student and the supervising College of Engineering faculty member. The completed form will then allow the student to be registered for the appropriate number of units of EST&P master's project course number 39-660. Where a similar process or course number exists in the supervising faculty member's home department, that procedure may optionally be followed. However, copies of the completed departmental form must be submitted to the EST&P office to be included in a student's permanent records.

Applied Studies Project Category (24 units):

EST&P-AS students must take an additional 24-units of applied studies project work. These units must be pre-approved and may include (but are not limited to): project-intensive engineering courses, EST&P master's project 39-660 (or similar master's project units in affiliated departments), or appropriately supervised internships. Details and examples are given below.

For any independent study project units to count towards the degree requirements, a factorable letter grade must be assigned to a pre-approved specific course. In all cases, **advanced written advisor approval is required.** For independent projects, **advanced written approval by the supervising faculty member is required.** For independent projects, this is done by filling out the **EST&P master's project approval form**, which must be **signed first by the supervising faculty member and then approved by an EST&P advisor.**

Examples and policies for meeting the EST&P-AS project work requirement are given on the following page.

Project-Intensive Engineering Courses:

With advance approval from an EST&P advisor, regularly scheduled project-intensive engineering classes may count towards meeting the EST&P-AS project 24-unit requirement. An up-to-date list is available on Canvas, and examples include:

- 24-722 Energy System Modeling
- 24-618 Computational Analysis of Transport Phenomena
- 12-761 Sensing & Data Mining in Smart Structures and Systems
- 12-718 Environmental Engineering, Sustainability and Science Project
- 12-745 Advanced Infrastructure Systems Project
- 39-605 / 39-606 Engineering Design Projects
- 18-500 ECE Design Experience, 12 units (counting also as the 12 allowed undergraduate units)

Independent Master's Project Work:

A maximum of 24 units of advisor-approved directed research / independent study / master's project can be applied toward the 24-unit EST&P-AS project requirement. This is usually taken as 39-660, or as the equivalent master's project courses in affiliated departments. To count towards the EST&P-AS project requirement, a factorable letter grade must be assigned for the course. **Advanced written advisor approval is required.** Additionally, **advanced written approval by the supervising faculty member is required.**

Carnegie Mellon faculty are engaged in a wide range of energy related research, in which undergraduate, master's, and doctoral students participate. EST&P students interested in independent project work are encouraged to explore research areas and opportunities on campus by reading the web-pages of EST&P affiliated departments, institutes, and faculty, discussing with EST&P advisors and students, and discussing with individual faculty. Independent project opportunities can be found through agreement with individual College of Engineering faculty members. Once identified and approved by the student, supervising faculty, and EST&P advisor, students will then sign up for 39-660 EST&P Master's Project units, or an equivalent Master's Project or Independent Study course in the supervising faculty member's department.

Approval is obtained by filling out the **EST&P master's project approval form**, available on Canvas. This form must be **signed first by the student and the supervising faculty member, and then approved by an EST&P advisor.** It must be submitted to the EST&P Academic Advisor by the fifth day of classes, and written (email) response will be provided within four business days. (The typical add deadline is the tenth business day of the semester, allowing the project course to be added appropriately.) This form requires a 1-page plan of study describing the project topic, expected outcomes, deliverables and the method of evaluation. The completed form will then allow the student to be registered for the appropriate number of units of EST&P master's project course number 39-660. Where a similar process or course number exists in the supervising faculty member's home department, that procedure may optionally be followed. However, copies of the completed departmental form must be submitted to the EST&P office to be included in a student's permanent records.

Internships:

With advanced advisor and supervising faculty approval, students on summer internship may register and pay for three or more units of 39-660 EST&P Master's Project or equivalent. These units may count towards the Applied Studies project requirement. To count towards the degree requirements, project / course supervision must be provided by an EST&P advisor or affiliated faculty member, a final report must be submitted, and a factorable letter grade must be assigned. All policies described above for project Independent Project Work apply.

C) Course Registration, Full/Part-Time Status, & Practical Training

Course registration:

Course registration is accomplished through CMU's Student Information Online (SIO) system, accessible through the HUB website. Students are responsible for enrolling in required core courses, pre-approved disciplinary concentration courses, pre-approved breadth electives, and appropriate project work. Students are encouraged to register as early as possible to reduce the chances of being wait-listed in a desired course. Students should refer to the University calendar for official registration dates (mid-November for Spring registration; mid-April for Fall registration - www.cmu.edu/hub/calendar.html).

Before beginning online registration, please carefully review the degree and course requirements summarized in Sections III, IV, and VII (Appendix A) of this handbook. The EST&P degrees have been incorporated into the developing Stellic system; students' degrees and concentrations can be planned, tracked, and audited within Stellic, once fully developed. Pay attention to required courses in your disciplinary concentration. Be aware that most graduate courses are taught only once per academic year. The EST&P Interim Director and Associate Director serve as academic advisors for the program. Academic advisors are available to help students choose courses that meet both stated degree requirements and their personal / professional objectives.

Add / Drop Policies / Deadlines:

Students can modify their registered schedule by adding / dropping courses up until the add/drop deadline. As a courtesy to others, students should drop a course as soon as they decide not to take it. This may allow a waitlisted student to be enrolled and will limit the disruption to any team-based projects.

Add / drop deadlines are usually at the end of the first week of classes, for mini courses, or at the end of the first 10 days of classes, for semester long courses. Add /drop deadlines for engineering courses follow the university wide academic calendar, and specific deadline dates can be found here: <http://www.cmu.edu/hub/calendar.html>. Courses in the Heinz School (policy), Tepper School (business), and School of Computer Science often have their own unique academic calendars (including for add, drop, audit, and pass/fail deadlines), which is often different from the university academic calendar. In addition, doctoral (PhD) level courses may have different add/drop deadlines: such courses are department identified in SIO. EST&P students must adhere to all course-specific deadlines.

A Late Drop Voucher system also exists: the Late Drop Voucher system permits students one later drop voucher during their degree. A late drop voucher allows a student to drop a course after the drop deadline, a so-called "late drop", without a W (for withdrawal) showing on their transcript.

Students should always consult their academic advisor for details and to check the impact that specific add/drop events have on progress towards graduation and student status.

Full-time student status:

EST&P is a full-time degree program in which students complete their degree in two full-time semesters of 48 units per semester. Students in the EST&P Applied Studies degree complete their degree in three semesters of full-time study with a typical course load of 42 units per semester. Unless admitted as a part-time degree-seeking student, all EST&P students are required to register as a full-time student each semester. Full-time CMU students must register for a minimum of 36 units. Details on minimum and maximum units are given in Section III(D).

Part-time student status:

Part-time MS EST&P enrollment is an option available for students who have applied and received admission to a part-time degree program of study. This option is made available for students who would like to pursue either MS EST&P degree while maintaining external employment. Note that immigration regulations do not allow Carnegie Mellon University to issue F1 visa documents to a part-time MS degree-seeking student.

Practical Training:

International students in good standing after two full-time semesters in the EST&P-AS degree program may be eligible for a Curricular Practical Training (CPT) summer internship. During a CPT internship, the student must register for a minimum of three units of Master's Project / Internship coursework. These units will count towards your degree. Tuition must be paid for these units, and they will be billed at the part-time per-unit graduate tuition rate. International students who enter EST&P in the Spring semester are not eligible (a US student visa regulation) for a CPT in the summer, as they will have only completed one full-time semester by summer.

Pre-completion OPT (Optional Practical Training) is available to international students for US off-campus summer internships, as an alternative to CPT. Students must apply early in spring semester to receive timely OPT approval. Summer course registration is not necessary for OPT.

In either case, international students must consult with the Office of International Education (OIE) for eligibility before seeking an internship or signing an offer contract.

D) Program, Student Status, and Financial Policies

Typical Completion Timelines:

Students typically begin the program in the Fall Semester and graduate either at the end of Spring semester (EST&P degree, 2 semesters) or the following Fall semester (EST&P-AS degree, 3 semesters). However, either degree program can also be completed entering in the Spring semester, with completion timelines shifting appropriately.

Deferred Admission Policy:

At the time of the admission offer, EST&P applicants may petition to defer admission for one semester or one academic year. A petition form submitted to EST&P and a written (email) decision will be returned to the applicant within 14 days. After the deadline to accept or defer admission has passed, applicants wishing to be reconsidered must reapply for admission. In such cases, EST&P sponsors the application fee, and will re-use any official tests scores, transcripts, and other documentation sent in support of the original application, if the applicant chooses.

Switching Degree Programs:

Admitted students that have already accepted admission but wish to change between the two EST&P degrees must follow the procedures to transfer to another CMU degree program. The student must apply to the new degree by the posted admission deadline (EST&P sponsors the application fee, and will re-use any official tests scores, transcripts, and other documentation sent in support of the original application). The student's application will be reviewed by the appropriate admissions committee. If admission is granted to the new degree, then the necessary degree change paperwork is submitted to the registrar and OIE, as appropriate.

Minimum and Maximum Units per Semester:

Full-time CMU student status requires registering for a minimum of 36 units per semester. However, the minimum course load for full-time students enrolled in the EST&P degree is 48-units of degree satisfying courses per semester, thereby enabling the completion of the 96-unit degree requirement in the allotted two semesters. The minimum course load for full-time students enrolled in the EST&P-AS degree is 42-units of degree satisfying courses per semester, thereby enabling the completion of the 120-unit degree requirement in the allotted three semesters. Deviations from the minimum unit requirement must be approved by an EST&P academic advisor.

As required by F1 visa rules, international students must maintain full-time student status (i.e., registering for at least 36 units) in all semesters, including their last semester, and must make normal progress toward degree completion each semester. Therefore, international students are advised that a semester course load below 48 units towards the EST&P degree or 42 units towards the EST&P-AS degree can affect student visa status, because such students may be deemed as not making normal progress towards degree completion. Therefore, deviations from the minimum unit requirement must be approved by an EST&P academic advisor, after student consultation with the Office of International Education (OIE).

An EST&P student's schedule is over-loaded when it exceeds 48 units per semester. Official audit or pass/fail units count toward full-time or overload status (but not towards degree requirements). To be eligible for an overload (exceeding 48 units per semester), students must petition their academic advisor for advance approval. An academic advisor will require a minimum Quality Point Average (QPA) of 3.6 or above, as of the prior CMU/EST&P semester.

Courses without Factorable Letter Grades:

Courses taken as "Audit" or "Pass-Fail" will not count toward EST&P degree requirements. Officially auditing a course means being present and participating in a class without receiving academic credit or a letter grade. To audit a course, one must first register for the course and then file a request for audit that requires program and instructor approval. The units of audited courses count toward the maximum course load units, but do not count toward degree requirements. A successfully completed audit course will appear on a transcript with an 'O' audit designation, which is not a factorable letter grade (it does not get factored into the QPA). The scope and extent of a student's participation must be arranged and approved by the course instructor in advance. Auditors are expected to attend class as though they are regular class member. Some faculty may require an auditor to submit homework and to participate in team project work. Students who do not attend the class regularly, or prepare themselves for class, or meet other instructor audit requirements will receive a blank grade.

Under **limited circumstances**, a student may be permitted to convert a course registration to Pass-Fail or Audit with appropriate advisor and instructor approval. To receive EST&P advisor approval, a student must submit a completed petition form that explains why they were taking coursework that does not count towards the degree. Please note that EST&P policy is to DECLINE advisor approval of Course Audit and Pass/Fail forms for any student registered for an overload schedule of more than 48 units. If a student decides they cannot complete a class for letter grade, they must drop the class in SIO prior to the "drop" deadline.

Master's Thesis:

Energy Science, Technology and Policy is a coursework-based professional master's program, and a Master's Thesis option is not available.

Graduate Transfer Credits:

Up to 12 units of graduate work completed at other universities may be considered for transfer credit, provided that the course work is part of a graduate program leading to the degree sought and that the grade in each course is 3.0 or greater. Transfer credit is not granted prior to admission to EST&P and are only approved after the student has satisfactorily completed at least 36 units of graduate courses at Carnegie Mellon. Transfer credit requests will be handled on a case by case basis, with special consideration to whether the transfer credits can be applied toward the EST&P degree requirements. Approval of transfer credits to CMU is not a guarantee that courses count towards the EST&P degree unit requirements. Transfer credits will not substitute for EST&P's core classes.

CMU's policy on transfer credit evaluation can be found here:

<https://www.cmu.edu/policies/student-and-student-life/transfer-credit-evaluation-and-assignment.html>

Cross-Registration/PCHE:

All full-time Carnegie Mellon graduate students have the option of taking one course at any of the ten PCHE intuitions. EST&P students should discuss with their academic advisor any potential PCHE cross-registered courses for relevance / impact on the EST&P degree.

CMU's policy on cross-registration can be found here:

<https://www.cmu.edu/hub/registrar/registration/cross/>

CMU Canvas System:

Most instructors use the CMU Canvas web service to manage course communications, assignments, and reference materials. Carnegie Mellon's Canvas homepage is: <https://cmu.instructure.com/>. Login credentials are the CMU single sign in credentials (Andrew ID credentials). Students are expected to check Canvas weekly and respond to requests for Canvas submissions appropriately. Students will also use Canvas to submit onboarding forms required by the program, to access the course syllabi repository, and to submit their resume if they wish to be included in the EST&P Resume Book.

EST&P uses Canvas for program and professional communications in a "course" entitled **EST&P Professional Resources ('18-'19)**. Students are automatically enrolled in the EST&P Professional Resources ('18-'19) "course". Please check this Canvas "course" frequently as it contains important program forms, program and course information, and career related postings. EST&P Professional Resources ('18-'19) will be updated throughout the academic year with announcements, calendar of events, professional resources about jobs and internships, program news and updates, energy links, and a discussion board.

Tuition and Cost of Attendance:

EST&P tuition is charged at the standard College of Engineering master's student rate. Students are billed each semester for one-half of the academic year graduate tuition. The current College of Engineering's graduate tuition and fees are posted on the HUB website's [Graduate Tuition & Fees page](#). An EST&P degree student will complete the program in two semesters of full-time study and must pay full-time tuition for two semesters (one academic year). An EST&P-AS degree student will complete the program in three semesters of full-time study and will pay for three semesters of full-time tuition (most likely with a modest increased rate for the 3rd semester tuition). The overall cost of attendance is estimated for the College of Engineering on the Hub website [Itemized College of Engineering Cost of Attendance](#) page; costs include activity & technology fees, transportation, off-campus housing, health insurance, etc..

Financial Aid:

Students in the EST&P program are self-funded, are funded by their employer, or are funded by external scholarships, fellowships, and educational loans. General information on [financial assistance for engineering graduate students](#) is available on the College of Engineering site, as is additional information about [graduate student fellowships and assistantships](#). Graduate students should consult the graduate student financial aid information found on the HUB website: <https://www.cmu.edu/sfs/financial-aid/graduate/index.html>. Students will find the Graduate Financial Aid Guide, information about funding options, and how to apply for financial aid, as well as other helpful links. Those who find themselves in need of immediate funds for emergency situations should contact the Office of the Dean of Student Affairs (see also Appendix A) www.cmu.edu/student-affairs/index.html

Emergency Loans:

The [Office of the Dean of Student Affairs](#) offers short-term emergency loans for supplies, medication, food, or other unexpected circumstances. The loans are interest-free and for short periods of time (not longer than a month).

Taxes:

The deadline for local, state, and federal taxes is April 15. Questions about your tax status should be addressed to the [IRS](#) or the [Pennsylvania Department of Revenue](#). Although subject to federal taxes, student stipends are generally not assessed local or state taxes.

III) Academic Standards and Graduation Requirements

A) Course and Minimum QPA

For the 96-unit EST&P degree or the 120-unit EST&P-AS degree, all courses that are counted towards the degree requirements must be taken for credit with a factorable letter grade assigned (e.g. A, B, C, D, R). All courses taken as audit or with pass/fail grading DO NOT COUNT towards the 96 or 120-unit degree requirement. For each course taken, the policies and procedures of the instructor, the department, and the college in which the course is offered must be followed by EST&P students. The grade assigned by the course professor / instructor is final and cannot be changed. The decision to use plus or minus grading is at the discretion of each course instructor. Mid-semester grades are optional, and Final Grades are posted online to SIO at the end of each semester.

Carnegie Mellon graduate students are graded on a letter grade scale, which can optionally include plus or minus designations at the discretion of the course instructor. The factorable letter grades (and numerical equivalent factor) should be interpreted as:

- A (4.0)-- Excellent; student work exceeds expectations
- B (3.0)-- Good; work is acceptable for an EST&P student
- C (2.0)-- Marginal; student work is not up to EST&P program standards
- D (1.0)-- Unacceptable work for an EST&P student, does not count towards the degree
- R (0.0)-- Unacceptable work for an EST&P student, does not count towards the degree

EST&P students, in either degree program, must maintain a minimum overall QPA of 3.0 (B) or above (in all courses that count towards the EST&P degree) and must maintain a minimum QPA over all of their required courses (39-610, 39-611, 39-612, 39-613, plus any additional courses required for the student's selected disciplinary concentration) of 3.0 (B) or above to remain in good academic standing and satisfy the requirements of the Master's Degree. Students with cumulative QPAs, or current semester QPAs, lower than 3.0 at the end of a semester are placed on academic probation. If a student obtains a grade below a C+ (2.3) in any required course, or the a student has below a 3.0 QPA in their core courses, they will be immediately placed on academic probation. Students on academic probation are notified by an EST&P Program Advisor. Students on academic probation must increase their cumulative, current semester, or required course QPA to 3.0 or better during their next full-time academic semester.

No course with a grade lower than C (2.0) may be counted toward the Master's Degree requirements, and no required course with a grade lower than C+ (2.3) may be counted toward the Master's Degree requirements. When calculating the QPA to meet EST&P (EST&P-AS) graduation requirements, the average grade of the 96 (120) course units that meet the Core + Concentration + Breadth (Core + Concentration + Breadth + Project) degree requirements shall be at least B — 3.0. If a student has taken more than 96 (120) total units within these categories, then the student may choose any 96 (120) units of the first 120 (144) units attempted to compute the grade average, providing the courses selected meet all degree requirements. Students must also maintain a minimum QPA of 3.0 (B) or above over all of their required courses. Required courses are the four EST&P Core classes (39-610, 39-611, 39-612, 39-613), plus any additional courses required for the student's selected disciplinary concentration.

B) Academic Probation

At the end of each semester, after grades have been posted, the academic performance of each student is reviewed. Courses that negatively affect the QPA cannot be removed from the requirement unless another completed course can replace the course with the lower grade, and the student has not reached the maximum number of total units. The QPA for academic review is computed based on the guidelines for graduation requirements.

Any student with a Required Course QPA of less than 3.0, with a Cumulative QPA of less than 3.0, or with a QPA of less than 3.0 in the most recent full semester completed, is immediately placed on academic probation. Additionally, if a student obtains a grade below a C+ (2.3) in any required course, they will be immediately placed on academic probation. The student will receive an electronic notification (email) of their academic probation status, including a description of the specific terms of their probation and the timeframe and requirements to remove probation. All students on probation are subject to the following sanctions:

- The student cannot receive an alumni or director scholarship or program support;
- The student cannot be selected to receive awards, travel / conference funding, etc.;
- The student may not formally represent EST&P as an officer or other positions in a student club or campus organization;

In most cases, a student on academic probation will automatically be removed from probationary status at the end of the subsequent enrolled semester if they qualify to do so. If an EST&P student has a Required Course or Cumulative QPA lower than 3.0 during an initial and subsequent semester, the student may be permanently dropped from the EST&P program and may not graduate. If this occurs, the student will have an opportunity to appeal to the Provost. Unless the decision is overturned, the student is not entitled to a refund of tuition or student fees.

C) Degree Planning and Tracking

It is the responsibility of each student to ensure that she or he are enrolled in courses to remain in good standing with the degree program and to complete all the necessary coursework for graduation according to the degree timelines. Each student is assigned an academic advisor, who is communicated to you via email and is listed in the HUB Student Information Online (SIO).

Stellic:

For the academic 2018-2019 year, the EST&P program will begin using a degree planning and tracking (auditing) interface called Stellic. Stellic is a student-driven, collaborative academic planning tool that employs the university's undergraduate catalog and degree requirements to assist students with schedule planning and in meeting their degree requirements. The EST&P and EST&P-AS degrees have been incorporated into the Stellic system and all students' degrees and concentrations can be planned and tracked within Stellic, including auditing the courses taken / planned with respect to degree requirements. If you have questions concerning your degree planning or audit, please discuss with your academic advisor. Note that this system is under development, and students should ensure degree audits are accurate with their academic advisor.

D) Graduation Requirements and Statute of Limitations

It is the responsibility of each student to ensure that she or he has completed all the necessary coursework for graduation. The EST&P Interim Director and Associate Director are available to advise students during the semester, but only the student can be held responsible for failure to meet graduation requirements. Note that the EST&P curriculum and graduation requirements may be revised from time to time. However, the requirements in effect at the time of a student's matriculation will dictate the graduation requirements that he or she must follow.

All units required for a master's degree in the College of Engineering, whether earned in residence or transferred from another institution, must be recorded on the transcript within six years of the date the student enrolled in the program. This statutory period can be extended by the College of Engineering's Associate Dean for Graduate and Faculty Affairs for special circumstances that do not make it possible for the student to complete the requirements within the statutory period. Any request for a waiver of the statute of limitations for master's degree studies must be approved by the EST&P Interim Director and by the College of Engineering's Associate Dean for Graduate and Faculty Affairs. The waiver request must explain the exceptional circumstances that warrant an extension. For cases in which a waiver is granted, the waiver will cover specific courses and will specify a time period for completion of the program.

For more details on the University's Statute of Limitations policy, visit here:

<https://www.cmu.edu/policies/student-and-student-life/masters-students-statute-of-limitations.html>

E) Leave of Absence, Withdrawals & Enrollment Verification

Students in the EST&P program are expected to attend all classes and participate in program activities. This excludes any defined academic break periods, and official University holidays. For the most up-to-date University calendar please see www.cmu.edu/hub/calendar.html.

Leave of absence:

A student may need to take a temporary leave of absence for many reasons. This is done by filing a Leave of Absence form with the HUB after securing the appropriate signature approvals. The leave will take effect on the date that the form is signed by the Dean of Engineering. Return from a voluntary leave of absence requires program approval through a Request for Return from Leave of Absence form. Students in good standing in all courses, and with no current or pending academic action when taking a Leave of Absence, will be reinstated with the same standing as prior to the leave. Students in poor standing, on academic probation, or with an academic integrity violation at the time of their Leave of Absence, must submit a written request for reinstatement. This request will be evaluated by the EST&P admissions committee, who will respond in writing to the request within two weeks. Requests for reinstatement must be submitted within the time limit imposed by the 6-year statute of limitations.

Withdrawal:

A student who decides to leave the university with no intentions of returning is required to file a Withdrawal form with the HUB. A student cannot return from a Withdrawal. For more information visit the University's [Student Leave](#) and [Student Return](#) policies.

Withdrawal of Degree:

The university reserves the right to withdraw a degree even though it has been granted should there be discovery that the work upon which it was based or the academic records in support of it had been falsified. In such a case, the degree will be withdrawn promptly upon discovery of the falsification. The complete reference to this university policy is available at:

<https://www.cmu.edu/policies/student-and-student-life/withdrawal-of-a-degree.html>.

Enrollment Verification:

Enrollment Services is the only University office that can provide an official letter of enrollment, an official transcript, or an enrollment verification. Enrollment verification can be requested online through [The HUB](#).

A student can request the EST&P program to provide a letter certifying their disciplinary concentration, as this information is not specified on either the diploma or transcript.

IV) Student Responsibilities, Resources

A) Degree and Program Requirement Knowledge

Students are responsible for successfully completing the program, being aware of the rules and policies, and swiftly resolving any issues. When questions arise, students should first consult this student handbook, the official CMU website, the EST&P Canvas pages, the HUB, SIO and Stellic, and other appropriate official references. If further clarification is needed, students should consult with EST&P staff, including the student's academic advisor. Students must always verify informal and unofficial sources of information, such as word of mouth from fellow classmates, through the official sources listed above, including verifying with their academic advisor.

Changing Academic Requirements and Policies:

The EST&P program changes requirements sometimes, to continually improve the program. EST&P uses a "grandfather" policy with regard to these changes; that is, every student has the right to graduate (a) under the policies in effect at the time of entry into the graduate program or (b) under the policy in force at the time of receiving the degree.

Student Handbook:

It is the responsibility of each student to read and understand the contents of this handbook. This handbook is not exhaustive and is subject to change, clarification, and revision at any time.

B) Academic Advisor

The role of the Academic Advisor is complex and can vary from student to student. At least three primary roles can be identified: evaluator, permissions grantor, and mentor. The Academic Advisor is responsible for evaluating the student's progress toward degree completion, for granting written approval for specific degree requirements / exceptions, and for providing guidance to assist individuals achieve successful degree and career outcomes. As such, students should meet with their advisors to obtain specific information on course options and degree progress, discuss or obtain written approval required for courses or degree exceptions, or to get career and professional advice. Advisors do his/her best to provide information and point students to relevant resources.

Keep in mind:

- The EST&P Advisor is a cooperative partner, along with other CMU resource partners, helping each student stay on track towards academic and professional career success.
Students are ultimately responsible for their own success.
- Conversations with your advisor do not count as "written approval". Written approval is defined as: a signed form, notes in the official student file, a letter, or an email.
When required, permission is granted only by written approval.
- An Advisor may provide broad context and specific positive and negative aspects related to a particular decision path: an Advisor does not "make a decision for students".
Decisions are made exclusively by the student.

Change of Advisor:

The Interim Director and the Associate Director serve as academic advisors for all EST&P students. It is the responsibility of both the Advisor and Student to seek accommodations of differences in good faith. If a student wishes to change their academic advisor, this can be done via an email request to the Program Coordinator, who will make the update to the student's file.

C) Academic Calendar, Registration, Pre-Requisites, Degree Planning

EST&P and the [College of Engineering](#) adhere to the official [CMU academic calendar](#). Note that BS/MS courses and PhD courses may have different specific calendars (especially add/drop deadlines). The [Heinz College](#) and the [Tepper School of Business](#) follow their own calendars, with dates that differ from the university's calendar for add, drop, audit, and pass/fail deadlines. EST&P students must adhere to these deadlines if they are taking courses from those colleges.

Registration for courses begins in April (November) for the Fall (Spring) semester. **CMU students are not permitted to register for two courses that conflict in time.** It is not uncommon to be waitlisted from some classes at the time of registration up until the tenth day of class. This is common practice across the university to ensure that students within their home department have priority to register for courses. Individual departments and instructors control and manage waitlists. As a courtesy to others, students should drop a course as soon as they decide not to take it. This may allow a waitlisted student to be enrolled and will limit the disruption to any team-based projects.

Courses at CMU generally have specified pre-requisites, which limit the ability of students without pre-requisites to register for such courses. As a graduate student, SIO may allow you to register for courses without having the published prerequisite. It is each student's responsibility to ensure they have adequate background knowledge to be successful in the courses they take.

Students are responsible to track their progress towards completion of EST&P degree requirements by monitoring course registration and degree progress in Student Information On-Line (SIO) and Stellic. If further clarification is needed, students should consult with their academic advisor.

D) Semester Timeframes and Attendance Requirements

All EST&P students must be physically present and attend classes from the beginning to the end of each semester. All EST&P students must attend final exams as scheduled by the university and individual course instructors. Neither the EST&P program nor course instructors have control over the university exam schedule. Students should keep this in mind when arranging travel at the end of a semester. Having purchased airline tickets is not an acceptable excuse for missing a final exam.

Proper registration for appropriate courses, attending courses and exams throughout the semester and finals, and maintaining an appropriate QPA (discussed elsewhere herein) are necessary conditions to stay in good standing with the program. Delays caused by failing or dropping a class, or academic probation due to poor grades, are not allowable reasons for extending a program of study.

E) Petitions for Exceptions and General Requests

General Petition Form:

If an EST&P student wants to petition an exception to a degree requirement rule or policy, the student must first set a meeting with their academic advisor to discuss which rule is being petitioned and their unique curricular circumstances. After this meeting, a petition form will be released for the student to submit for review by either the curriculum committee and/or appropriate department representative, as appropriate. The academic advisor will do this on the student's behalf. Students will be notified promptly concerning the decision on their petition.

Petition to Change Disciplinary Concentration:

EST&P students are admitted into a degree program with a disciplinary concentration as requested at the time of application. To petition for a change in disciplinary concentration, the following rules must be followed. EST&P students must complete their first semester under their admitted concentration before petitioning to change concentrations. EST&P students must first meet with their academic advisor to discuss the feasibility of a disciplinary concentration change, and then the student will be given the petition to change disciplinary concentration form with required attachment(s). After this meeting, the petition form will be released for the student to submit for review by either the curriculum committee and/or appropriate department representative(s), as appropriate. The academic advisor will do this on the student's behalf. The form must be submitted before the end of the first week of class in the semester the student will graduate. Also note that, if approved, this petition may result in changes to your transcript for cross-listed courses and cannot be reversed. Students will be notified promptly concerning the decision on their petition.

F) Miscellaneous Responsibilities

Change of Address:

Students are responsible for notifying EST&P and the HUB of all address changes in a timely manner. Students will be held responsible for any failure to receive official college notices due to having an incorrect address on file; F-1 students may jeopardize their status if address information is not kept current. Students can change their address using SIO, which is available via the HUB website: <http://www.cmu.edu/hub/index.html>.

Timing for Requests and Replies:

Please allow a minimum of 24 hours (one business day) to process a required form or to respond to an email request. EST&P Staff may occasionally accommodate a "last minute" request, but cannot guarantee availability or appropriate processing.

Suggestions for Success:

A few general guidelines / expectations for students to have a successful tenure within the EST&P program are that students:

- participate in the EST&P program, energy activities, and CMU community.
- take responsibility for their learning, decision-making, actions, and well-being.
- be respectful of fellow students, professors, and EST&P staff members and their time.

G) Professional Development and Other Resources and Opportunities

Carnegie Mellon University and the EST&P program offer a number of professional development opportunities and benefits, such as: on-campus career fairs, professional networking opportunities, workshops, career counseling, conference registration and travel funds, professional development support, service scholarships, and Graduate Student Assembly (GSA) representation. The following list identifies opportunities and application procedures.

The Carnegie Mellon Career and Professional Development Center (CPDC):

The Carnegie Mellon [Career and Professional Development Center](#) (CPDC) provides numerous career preparation and job search resources. These include guidance in preparation of resumes and cover letters, interviewing skills, offer negotiation and career networking, and career fair opportunities.

CPDC staff hold a weekly office hour in the EST&P study lounge and teach a 3-unit course entitled “Career & Professional Development for Engineering Master’s Students” (39-699).

CPDC sponsors an Energy Career Fair in association with Energy Week, sponsored by the Scott Institute of Energy Innovation. Information about the Energy Career Fair and Energy week will be communicated during the year.

Be sure to sign up for [Handshake](#) for full access to CPDC resources.

The CMU Graduate Education Office:

The CMU Graduate Education office provides numerous programs, workshops, and services of value to EST&P professional master’s students. Check their [Professional Development page](#) for up-to-date listing of events.

EST&P Professional Development Allocation:

EST&P students may apply to receive up to \$50 per semester in professional development expense reimbursement, during each semester of full-time enrollment in the EST&P program. Expenses MUST be pre-approved and allocated by the EST&P directors. Expenses must meet CMU guidelines for allowable non-employee expense reimbursement. Typical allowed expenses include: student-registration fee for an energy conference, professional certification exams, poster printing, and the like.

EST&P Conference Travel Supplemental Reimbursement:

There are opportunities throughout the academic year to attend energy related conferences, present posters or papers, and represent the EST&P program. If you wish to attend and participate in a professional meeting or conference, and to represent EST&P, you may request partial support for your travel by submitting a Conference Travel Application to EST&P requesting financial support. This form must be **submitted for review at least three weeks in advance of the travel date.**

Awards are contingent on availability of program funds, and priority is given for those making a paper or poster presentation, and for those making cost efficient travel plans. Your professional development allocation will be used as part of any awarded conference funding, and preference is given to supplement GSA conference funding awards. Only one supplemental request for travel support per student will be considered. Submission and approval of a Conference Travel Application is separate from but related to the travel reimbursement process.

You are responsible for reading and abiding by the University's Business and Travel Expense Policy. Receipts and justifications must be submitted within one week of purchase date or return from travel. Failure to follow University policy can lead to disciplinary action and/or non-payment of travel. For both professional development and travel reimbursement process, please contact the EST&P program coordinator for further detail and instructions.

EST&P Alumni & Director Scholarships:

A limited number of alumni and director scholarships are offered to incoming EST&P students having exceptional qualifications. Alumni and director scholarship offers are made by the admissions committee at the time that admission is offered; recipients currently receive ~17-50% reduction in their semester tuition. Alumni and director scholarship recipients must be full-time EST&P students. Scholarships may be extended for an additional semester if funding is available and if the student is in good academic standing (as judged by QPA and collaboration with faculty). Alumni and director scholarships are not offered at any time other than admission.

EST&P Intern Opportunities:

Several intern opportunities with the EST&P program are available throughout the year. Opportunities are announced during the academic year. These may include requests for a Course Assistant for an EST&P related class or for a Student Ambassador to support EST&P development and marketing, etc. When available, EST&P will advertise these opportunities to all eligible students and provide details on the application process.

EST&P Business Cards:

EST&P students have the option to request CMU business cards, during a select period of time that will be announced. The EST&P program sponsors the first 100 cards. Business cards can be requested online [here](#).

Graduate Student Assembly (GSA):

The GSA is a University-wide branch of student government that represents all graduate students at Carnegie Mellon. EST&P students elect their own representative to GSA, who serves as their contact regarding GSA issues and events.

GSA returns a portion of EST&P students' fees to the EST&P student group, if there is an EST&P representative. These funds can be used to support social and educational events, as decided by the EST&P students (and following CMU spending policies).

EST&P GSA representatives may be elected by students or appointed by the EST&P program office. Current representatives often assist to find their successor(s). Note that EST&P asks each GSA representative to sign a responsibilities agreement.

Responsibilities of the EST&P GSA representative include: attending GSA meetings, organizing at least one social event per semester (i.e., rock climbing, bowling, ice skating, etc.), sitting on the funding award committee, acting as a liaison between EST&P program staff and students, and helping with EST&P events.

Graduate Student Conference Funding:

[Graduate Student Conference Funding](#) is available through the Graduate Student Assembly and the Provost's Office, and is managed by the Office of the Assistant Vice Provost for Graduate Education. Award amounts are up to \$500 per student or up to \$1,000 per group. Preference is given to students making presentations. The open application periods and deadlines are listed on the [graduate education website](#). To obtain funding, students must read and follow all directions and ensure they meet all criteria for acceptance, including required post-conference activities of reporting and publicity participation.

H) Safeguarding Educational Equity

CMU Policy Against Sexual Harassment and Sexual Assault:

Sexual harassment and sexual assault are prohibited by CMU, as is retaliation for having brought forward a concern or allegation in good faith. The policy can be viewed in its entirety at: www.cmu.edu/policies/documents/SA_SH.htm. If you believe you have been the victim of sexual harassment or sexual assault, you are encouraged to make contact with any of the following resources:

- Sexual Harassment Advisors, found in appendix A of the Policy Against Sexual Harassment and Sexual Assault;
- Survivor Support Network, found in appendix B of the Policy Against Sexual Harassment and Sexual Assault;
- Sexual Harassment Process and Title IX Coordinators, found in section II of the Policy Against Sexual Harassment and Sexual Assault;
- University Police, 412-268-2323
- University Health Services, 412-268-2157
- Counseling & Psychological Services, 412-268-2922

Maternity Accommodation Protocol:

Students whose anticipated delivery date is during the course of the semester may consider taking time away from their coursework and/or research responsibilities. All female students who give birth to a child while engaged in coursework or research are eligible to take either a short-term absence or formal leave of absence. Students in course work should consider either working with their course instructor to receive incomplete grades, or elect to drop to part-time status or to take a semester leave of absence. Students engaged in research must work with their faculty to develop plans for the research for the time they are away. Students are encouraged to consult with relevant university faculty and staff as soon as possible, as they begin making plans regarding time away. Students must contact the Office of the Dean of Student Affairs to register for Maternity Accommodations. Students will complete an information form and meet with a member of the Dean's Office staff to determine resources and procedures appropriate for the individual student. Planning for the student's discussion with her academic contact(s) (advisor, associate dean, etc.) will be reviewed during this meeting. For additional information, please visit the [Student Maternity Accommodation Protocol](#) webpage.

I) Problems, Graduate & University Ombudsperson, Grievance Resolution

Graduate students are expected to discuss any concerns or grievances with members of their academic program, including the Interim Director, Associate Director, Academic Advisor, and/or Program Ombudsperson, as appropriate. If a student wishes, the Associate Dean for Graduate and Faculty Affairs of the College of Engineering is also available for consultation. All such discussions will be considered confidential provided no laws are broken and unless otherwise told by the graduate student.

EST&P Ombudsperson:

Within the EST&P program, students are encouraged to work with the Interim Director and Associate Director when problems arise. However, situations may occur where students need advice on some aspect of their activities or interactions with others in the EST&P program, yet may not feel it is appropriate to speak with their advisor or another member of the EST&P staff or faculty. While close friends and family are important resources in such situations, it is also true that their scope of experience might not include working toward a Master's degree in Engineering at CMU. For this reason, EST&P relies on a Graduate Ombudsperson from our administrative home department.

The Materials Science and Engineering Ombudsperson is Neetha Khan and EST&P students may contact her at neetha@andrew.cmu.edu. She is available to consult with students about any situation that affects their work and, where appropriate, offer advice or attempt to resolve a problem. Conversations with the Ombudsperson are confidential (provided no laws are broken and unless otherwise told by the graduate student) and the Ombudsperson will not communicate information to the EST&P program office, Interim Director, or Associate Director, Engineering Department Heads, or other faculty/staff members without the student's consent.

University Ombudsperson:

The Assistant Vice Provost for Graduate Education, Suzie Laurich-McIntyre, is the university Ombudsperson for graduate students. EST&P students may contact her at 412-268-7307 or suzannel@andrew.cmu.edu. The Ombudsperson's role is to provide support for graduate students under complete confidentiality (provided no laws are broken and unless otherwise told by the graduate student). The Ombudsperson will assist and support graduate students to help clarify issues and suggest possible solutions to problems, as well as direct students to the appropriate departmental and college processes and resources for handling conflicts.

Grievance Resolution:

If resolution of an academic grievance or concern cannot be obtained within their academic departments, graduate students may file a formal appeal of academic actions to the Associate Dean for Graduate and Faculty Affairs of the college. If a resolution cannot be reached by this process, an appeal may be made to the Provost at the request of either the student or the college.

A summary of the graduate student appeal and grievance procedures is available at the following link: www.cmu.edu/graduate/policies/appeal-grievance-procedures.html

V) EST&P Administrative Information

The EST&P administrative offices and study lounge are located on the 5th floor of Scott Hall. [Maps of campus](#) are available on the CMU website. **Directions:** From “the mall” between Baker Hall and Doherty Hall, walk past Wean Hall until you see the Sherman and Joyce Bowie Scott Hall on your right- this is an all glass building. Go through the main doors of Scott Hall and continue walking straight down the hallway in front of you. The EST&P offices are located on your right. The EST&P study lounge (5101) is the first room on the right, office 5103 (Nora/Justin) is in the middle, and 5105 (Prof. Salvador) is at the end of the hall. The 5th floor of Scott Hall is also home to the Scott Institute for Energy Innovation.

A) EST&P Affiliated Faculty and Staff Contact Information

Last, First Name	Office	Phone	email
Khan, Neetha - Ombudsperson	A309 Doherty Hall	412-268-2332	neetha@andrew.cmu.edu
Koval, Bryan - Student Life Coordinator	Morewood Grdn.	412-268-2142	bkoval@andrew.cmu.edu
Puglisi, Justin - Program Coordinator	5103 Scott Hall	412-268-2947	jpuglisi@andrew.cmu.edu
Muller, Nicholas – EPP Professor (39-612)	254C Posner Hall	412-268-8121	nzm@andrew.cmu.edu
Ohodnicki, Paul - MSE Professor (39-613)	N/A	412-268-7200	pohodnic@andrew.cmu.edu
Salvador, Paul - Interim Director (39-610)	5105 Scott Hall	412-268-7672	paulsalvador@cmu.edu
Samaras, Costa - CEE Professor (39-611)	103 Porter Hall	412-268-1658	csamaras@cmu.edu
Siewiorek, Nora - Assoc. Director	5103 Scott Hall	412-268-6072	norann@andrew.cmu.edu
Tsupros, Shaina - Career Consultant	252 West Wing	412-268-2064	stsupros@andrew.cmu.edu

For the extended list of EST&P-associated faculty from the College of Engineering departments, please see the [EST&P About Us: Affiliated Faculty](#) page.

College of Engineering Department Locations and Department Head Contacts

College of Engineering	110 Scaife Hall		www.engineering.cmu.edu
Garrett, James H.	412-268-5090		
Dean of Engineering & Thomas Lord Professor of Civil and Environmental Engineering			
Chemical Engineering	1107 Doherty Hall	412-268-2230	www.cmu.edu/cheme
Biegler, Lorenz	1111 Doherty Hall	412-268-2232	
CHE Department Head & Bayer Professor of Chemical Engineering			
Civil & Environmental Engineering	119 Porter Hall	412-268-2940	www.cmu.edu/cee
Dzombak, David	119D Porter Hall	412-268-2946	
CEE Department Head & Hamerschlag University Professor of Civil & Environmental Engineering			
Electrical & Computer Engineering	Hamerschlag Hall	412-268-7400	www.ece.cmu.edu
Hoe, James	1106 Hamerschlag	412-268-3299	
ECE Interim Department Head & Professor of Electrical & Computer Engineering			
Engr. & Public Policy	129 Baker	412-268-2670	www.cmu.edu/epp
Sicker, Doug	129 Baker Hall	412-268-2838	
EPP Department Head			
Materials Science & Engr.	3325 Wean Hall	412-268-2700	www.cmu.edu/engineering/materials
Rohrer, Gregory	3327 Wean Hall	412-268-2696	
MSE Department Head & W.W. Mullins Professor of Material Science & Engineering			
Mechanical Engineering	4th Floor Scaife	412-268-2500	www.cmu.edu/me
Robinson, Allen	401 Scaife Hall	412-268-3657	
MEG Department Head & Raymond J. Lane Distinguished Professor of Mechanical Engineering			

C) EST&P Study Lounge Information

The Scott Hall 5101 door to the EST&P student study lounge can be accessed by swiping your CMU Student ID. This door must remain closed at all times: it should never be propped open. The kitchen area in the EST&P study lounge is available for student use, so long as everyone works together to maintain a clean and safe area. CMU custodial services will only empty trash and occasionally vacuum the floor. EST&P's professional staff do not provide custodial services. Each student is responsible to leave the lounge in reasonable order upon departing. Unrestricted access to the study lounge requires responsible adult behavior by each and every EST&P student. If the room is not kept in good condition and becomes a health and safety hazard, access to the study lounge will be restricted, such as: access only during business hours or only when EST&P staff are present. Examples of health and safety hazards include: cups, dirty dishes, or other items in the sink; unclean surfaces or furniture; food containers or other trash, or any personal items, left in the study lounge. Any items left in the lounge will be discarded. Students will be notified by email of any change to the access policies to the Study Lounge.

Mailboxes are not available for EST&P students, neither for academic nor personal use. If a student plans to have something shipped to themselves at EST&P, please notify the staff in advance and use the following address:

Your Name, c/o EST&P Program
Carnegie Mellon University
5000 Forbes Ave, Scott Hall 5103
Pittsburgh, PA 15213-3890

Printing:

As a CMU graduate student you have an assigned Andrew printing quota of \$40 per semester. Please see <https://www.cmu.edu/computing/services/endpoint/printing/quota.html> for printing information. A laser printer is currently available in the EST&P study lounge for limited black and white printing. This printer is a HP LaserJet Pro 400 model M401dne, and you can print by connecting your laptop to the printer's USB cable, or from the on-campus network using the printer's static IP address [172.22.51.11]. Low cost poster printing service is available through the Sorrells Engineering and Science Library in 4400 Wean Hall. Contact the library or see the reference instructions on the [Canvas](#) site- EST&P Professional Resources.

Computing:

Each student is assigned a single-sign-on account (Andrew account) that is used to access campus-wide and EST&P computing resources. Andrew accounts can be managed by visiting the Computing Services website at www.cmu.edu/computing/accounts. Students may contact the Computing Services Help Center if you have any IT issues (i.e., computers, phones, printers, etc.) at 412-268-4357 or it-help@cmu.edu.

VI) Academic Integrity

Carnegie Mellon maintains the highest ethical standards and makes continuous efforts to identify and create the kind of academic environment that its members wish to enjoy. As a CMU graduate student, you are an important participant in our University partnership that includes all faculty, staff, administrators, undergraduates, and graduate students. Thus, you are responsible for academic integrity, honesty, and fairness, as are all university community members.

The [CMU Office of Research Integrity and Compliance website](#) describes the university's position on ethical research, and this applies to research and project work that EST&P students conduct as part of their degree coursework.

“Carnegie Mellon University is responsible for the integrity of research conducted at the university. As a community of scholars, in which truth and integrity are fundamental, the university must establish procedures for the investigation of allegations of misconduct of research with due care to protect the rights of those accused, those making the allegations, and Carnegie Mellon University. Furthermore, federal regulations require the university to have explicit procedures for addressing incidents in which there are allegations of misconduct in research. Research misconduct is defined as fabrication, falsification, or plagiarism in proposing, performing, or reviewing research, or in reporting research results...”

In support of the university's position, EST&P encourages EVERY incoming student take the CMU/CIT recommended training offered by the Collaborative Institutional Training Initiative (CITI). Furthermore, **ALL students in the EST&P-AS degree, and EST&P degree students taking Independent Study or Master's Project course work, are REQUIRED to complete the training by the end of their first semester— December 7, 2018—** and to submit their certificate of successful completion to the EST&P Program Coordinator.

The CIT Graduate Student Policy provides the following instructions. “For CIT graduate students, the CITI physical science module package is recommended, rather than the module package for engineers, although both are acceptable. The courses are available at CITI's website: www.citiprogram.org/ . Select Carnegie Mellon University as your participating institution when you create your account. This topic is described fully in the CIT Graduate Student Policy page under [Responsible Conduct of Research \(RCR\)](#).”

REQUIRED Plagiarism Quiz:

The University of Indiana has an exceptional website that provides examples and a quiz to determine if you understand the difference between proper and improper attribution of text. **All EST&P students are required** to complete this quiz before the end of the first week of classes, and print and submit the certification provided when the quiz is passed. Certifications will be submitted via the EST&P Canvas site and collected by the EST&P Admissions and Program Coordinator. Submitting this certification indicates that you have learned and understand the approved processes for text attribution. You will be held responsible for this information if a conflict arises in the academic year. Please complete the plagiarism quiz using the following link: www.indiana.edu/~istd/plagiarism_test.html

Academic Integrity violations:

Academic Integrity violations may arise when a student misinterprets course syllabus instructions prohibiting group collaboration on graded homework, or from blatant falsification of submitted work. Both situations result in disciplinary action, so please review carefully the policy on academic integrity at <https://www.cmu.edu/policies/student-and-student-life/academic-integrity.html>. While you should view the threat of disciplinary action as a serious one, it is equally important that you take up the ideal of Academic Integrity as foundational to your educational experience at CMU. We encourage you to embrace this part of the intellectual thread that binds you with the University community. Accordingly, the complete CMU Statement on Academic Integrity is quoted here.

Policy on Academic Integrity - DATE OF ISSUANCE: This policy was approved by President's Council on April 11, 2013 and replaces the University's Policy on Cheating and Plagiarism, which was originally issued to campus on June 16, 1980 as Organization Announcement #297, and then revised in 1990.

“ABSTRACT:

Academic credit awarded to an individual should represent the work of that individual. Therefore, students at Carnegie Mellon are expected to produce their own original academic work. Collaboration or assistance on academic work to be graded is not permitted unless explicitly authorized by the course instructor(s). The citation of all sources is required. When collaboration or assistance is permitted by the course instructor(s), the acknowledgement of any collaboration or source of assistance is likewise required. Failure to do so is dishonest and is the basis for a charge of cheating, plagiarism, or unauthorized assistance. Such charges are subject to disciplinary action.

Students at Carnegie Mellon are engaged in intellectual activity consistent with the highest standards of the academy. The relationship between students and instructors and their shared commitment to overarching standards of respect, honor, and transparency determine the integrity of our community of scholars. The actions of our students, faculty, and staff are a representation of our university community and of the professional and personal communities that we lead. Therefore, a deep and abiding commitment to academic integrity is fundamental to a Carnegie Mellon education. Honesty and good faith, clarity in the communication of core values, professional conduct of work, mutual trust and respect, and fairness and exemplary behavior represent the expectations for ethical behavior for all members of the Carnegie Mellon community.

A) University Policy Statement

In any manner of presentation, it is the responsibility of each student to produce her/his own original academic work. Collaboration or assistance on academic work to be graded is not permitted unless explicitly authorized by the course instructor(s). Students may utilize the assistance provided by Academic Development, the Global Communication Center, and the Academic Resource Center (CMU-Q) unless specifically prohibited by the course instructor(s). Any other sources of collaboration or assistance must be specifically authorized by the course instructor(s).

In all academic work to be graded, the citation of all sources is required. When collaboration or assistance is permitted by the course instructor(s) or when a student utilizes the services provided by Academic Development, the Global Communication Center, and the Academic Resource Center (CMU-Q), the acknowledgement of any collaboration or assistance is likewise required.

This citation and acknowledgement must be incorporated into the work submitted and not separately or at a later point in time. Failure to do so is dishonest and is subject to disciplinary action.

Instructors have a duty to communicate their expectations including those specific to collaboration, assistance, citation and acknowledgement within each course. Students likewise have a duty to ensure that they understand and abide by the standards that apply in any course or academic activity. In the absence of such understanding, it is the student's responsibility to seek additional information and clarification.

B) University Policy Violations

Cheating occurs when a student avails her/himself of an unfair or disallowed advantage that includes but is not limited to:

1. Theft of or unauthorized access to an exam, answer key, or other graded work from previous course offerings.
2. Use of an alternate, stand-in, or proxy during an examination.
3. Copying from the examination or work of another person or source.
4. Submission or use of falsified data.
5. Using false statements to obtain additional time or other accommodation.
6. Falsification of academic credentials.

Plagiarism is defined as the use of work or concepts contributed by other individuals without proper attribution or citation. Unique ideas or materials taken from another source for either written or oral use must be fully acknowledged in academic work to be graded. Examples of sources expected to be referenced include but are not limited to:

1. Text, either written or spoken, quoted directly or paraphrased.
2. Graphic elements.
3. Passages of music, existing either as sound or as notation.
4. Mathematical proofs.
5. Scientific data.
6. Concepts or material derived from the work, published or unpublished, of another person.

Unauthorized assistance refers to the use of sources of support that have not been specifically authorized in this policy statement or by the course instructor(s) in the completion of academic work to be graded. Such sources of support may include but are not limited to advice or help provided by another individual, published or unpublished written sources, and electronic sources. Examples of unauthorized assistance include but are not limited to:

1. Collaboration on any assignment beyond the standards authorized by this policy statement and the course instructor(s).
2. Submission of work completed or edited in whole or in part by another person.
3. Supplying or communicating unauthorized information or materials, including graded work and answer keys from previous course offerings, in any way to another student.
4. Use of unauthorized information or materials, including graded work and answer keys from previous course offerings.
5. Use of unauthorized devices.
6. Submission for credit of previously completed graded work in a second course without first obtaining permission from the instructor(s) of the second course. In the case of concurrent courses, permission to submit the same work for credit in two courses must be obtained from the instructors of both courses.”

C) Penalties for Academic Integrity & Community Standards Violations

Violations will be handled on a case by case basis. In addition to the course-level action imposed by the instructor, students with academic integrity & community standards violations will be subject to the same sanctions as with academic probation:

- Students cannot receive an alumni or director scholarship or program support;
- Students cannot be selected to receive awards, travel/conference funding, etc.;
- Students may not formally represent EST&P as an officer or other positions in a student club or campus organization;

In addition, sanctions for academic integrity & community standards violations will include:

- Any awards provided by EST&P will be rescinded immediately, including retroactive rescinding of awards received in previous semesters.

In accordance with university policy, a student who violates the academic integrity and community standards policy will not be permitted to drop the course in which the offense occurred to avoid the penalty. If the student attempts to drop the course, he/she will be re-enrolled. If the student retakes the course or an equivalent course to fulfill the program requirement or prerequisite, he/she will be charged additional tuition. Students who want to appeal an academic integrity action must state in writing to the Provost their intention to do so, within one week of the penalty date in questions, and then must submit their written appeal to the Provost no later than two weeks after said penalty date. Appeals must be in writing, with appropriate documentation.

In extreme cases where the first violation is particularly deplorable, as determined by the EST&P Interim Director and Associate Director, a student may be permanently dropped from the EST&P program. Upon a second academic integrity violation, the student will immediately be dropped from the EST&P program.

University-wide Academic Disciplinary Protocol:

Procedures for dealing with allegations of these policy violations are detailed in the university's Academic Disciplinary Action Procedures for Graduate Students: <https://www.cmu.edu/student-affairs/ocsi/academic-integrity/documents/academic-disciplinary-actions-overview-for-graduate-students.2013.pdf> which is published as part of The WORD student handbook.

Periodic review of these procedures will be overseen by the Dean of Student Affairs, or her/his designee, in consultation with Faculty Senate and the relevant student governing bodies. Any amendments to these procedures are subject to the approval of Faculty Senate. Additional guidelines and procedures for graduate students may exist at the college/department/program level, in which case they are communicated in the college/department/program graduate student handbook.

VII) Miscellaneous Items and University Policies

A) Acknowledgements

This handbook was prepared with the help and support of our partner engineering departments: Chemical Engineering, Civil & Environmental Engineering, Electrical & Computer Engineering, Engineering & Public Policy, Materials Science & Engineering, and Mechanical Engineering. Portions of the text herein are copied with permission from some of their graduate student handbooks. Every attempt is made for EST&P program policies to conform with [The Word](#) and [College of Engineering graduate policies](#). These include policies on intellectual property, freedom of expression, student privacy, academic disciplinary actions, and academic integrity.

B) Consumer Information

Students in the EST&P program are self- or family-funded, funded by their employer, or by external scholarships, fellowships, and educational loans. Students are permitted to enroll in project-based classes, as well as independent study and master's project research courses, but only EST&P-Applied Studies degree students are required to do so. The [CMU HUB website consumer information page](#) provides access to information that current and prospective students of the University may need in order to be informed consumers. The CMU website also provides student consumer information linked on their [Middle States Accreditation](#) pages.

C) Carnegie Mellon University Statement of Assurance

Carnegie Mellon University does not discriminate in admission, employment, or administration of its programs or activities on the basis of race, color, national origin, sex, handicap or disability, age, sexual orientation, gender identity, religion, creed, ancestry, belief, veteran status, or genetic information. Furthermore, Carnegie Mellon University does not discriminate and is required not to discriminate in violation of federal, state, or local laws or executive orders. Inquiries concerning the application of and compliance with this statement should be directed to the vice president for campus affairs, Carnegie Mellon University, 5000 Forbes Avenue, Pittsburgh, PA 15213, telephone 412-268-1018. Persons may obtain general information about Carnegie Mellon University by calling 412-268-2000. This Statement of Assurance can also be found at: www.cmu.edu/policies/administrative-and-governance/statement-of-assurance.html.

D) Assistance for Individuals with Disabilities

The Office of Disability Resources at Carnegie Mellon University (<http://www.cmu.edu/education-office/disability-resources/>) has a continued mission to provide physical and programmatic campus access to all events and information within the Carnegie Mellon community. They work to ensure that qualified individuals receive reasonable accommodations as guaranteed by the Americans with Disabilities Act (ADA) and Sections 503 and 504 of the Rehabilitation Act of 1973. Students who would like to receive accommodations can begin the process through [Disability Resources secure online portal](#) or email access@andrew.cmu.edu to begin the interactive accommodation process.

For more information, please see <http://www.cmu.edu/education-office/disability-resources/>. Students with disabilities are encouraged to self-identify with the Office of Disability Resources by contacting Catherine Getchell, 412-268-6121, getchell@cmu.edu to access the services available at the university and initiate a request for accommodations.

E) University Policies & Expectations

It is the responsibility of each member of the Carnegie Mellon community to be familiar with university policies and guidelines. In addition to this EST&P graduate student handbook, the following resources are available to assist you in understanding community expectations:

- The Word/Student Handbook: www.cmu.edu/student-affairs/theword
- Academic Integrity Website: <https://www.cmu.edu/student-affairs/ocsi/academic-integrity/index.html>
- University Policies Website: www.cmu.edu/policies
- College of Engineering Graduate Student Policy website: <https://engineering.cmu.edu/education/academic-policies/graduate-policies/index.html>
- Graduate Education Website: www.cmu.edu/graduate/policies
- Computing Services Website: www.cmu.edu/computing/guideline
- Carnegie Mellon's policy on alcohol and drugs.
All students should be aware of university policies:
https://www.cmu.edu/student-affairs/theword/comm_standards/alcohol_drugs.html

International Students must register and attend the mandatory Office of International Education (OIE) international student orientation. If you are unable to attend orientation, you may make an appointment to meet with an advisor in the Office of International Education in Warner Hall 3rd floor. You must check in with OIE **by the 10th day of classes** or face administrative withdrawal.

F) The Carnegie Mellon Code

Students at Carnegie Mellon, because they are members of an academic community dedicated to the achievement of excellence, are expected to meet the highest standards of personal, ethical and moral conduct possible.

These standards require personal integrity, a commitment to honesty without compromise, as well as truth without equivocation and a willingness to place the good of the community above the good of the self. Obligations once undertaken must be met, commitments kept.

As members of the Carnegie Mellon community, individuals are expected to uphold the standards of the community in addition to holding others accountable for said standards. It is rare that the life of a student in an academic community can be so private that it will not affect the community as a whole or that the above standards do not apply.

The discovery, advancement, and communication of knowledge are not possible without a commitment to these standards. Creativity cannot exist without acknowledgment of the creativity of others. New knowledge cannot be developed without credit for prior knowledge. Without the ability to trust that these principles will be observed, an academic community cannot exist.

The commitment of its faculty, staff, and students to these standards contributes to the high respect in which the Carnegie Mellon degree is held. Students must not destroy that respect by their failure to meet these standards. Students who cannot meet them should voluntarily withdraw from the university.

The Carnegie Mellon Code can also be found on-line at:
<http://www.cmu.edu/student-affairs/theword/code.html>.

G) University Health Requirements

As a full-time student, you must have medical insurance and required immunizations that meet the university's minimum requirements. Please see 2018-2019 student health insurance criteria at www.cmu.edu/health-services/student-insurance.

All full-time students must meet the university's immunization requirements posted at www.cmu.edu/health-services/immunization. Students must complete an online immunization form and/or waiver **by June 29, 2018** documenting that you have either had the required vaccines or have had blood tests proving immunity to certain diseases. Students can complete the immunization form in HealthConnect, accessible at www.cmu.edu/health-services. Failure to submit the online immunization form or meet the requirements before the start of classes will result in disenrollment from classes and removal from university housing.

Students must also confirm enrollment in the required health insurance plan, or certify compliance with mandatory health insurance coverage at Student Health Services: **by September 10, 2018.**

VIII) APPENDICES

A) University Resources

i) Key Offices for Graduate Student Support:

Office of the Assistant Vice Provost for Graduate Education

www.cmu.edu/graduate; grad-ed@cmu.edu

The Office of the Assistant Vice Provost for Graduate Education, AVPGE, directed by Suzie Laurich-McIntyre, Ph.D., Assistant Vice Provost for Graduate Education, provides central support for graduate students in a number of roles. These include being an ombudsperson and resource person for graduate students as an informal advisor; resolving formal and informal graduate student appeals; informing and assisting in forming policy and procedures relevant to graduate students; and working with departments on issues related to graduate students and implementation of programs in support of graduate student development.

The Office of the AVPGE often collaborates with the division of Student Affairs to assist graduate students with their Carnegie Mellon experience. Senior members of the student affairs staff are assigned to each college (college liaisons) and are often consulted by the Assistant Vice Provost for Graduate Education and departments on an individual basis to respond to graduate student needs.

The Office of the Assistant Vice Provost for Graduate Education (AVPGE) offers a robust schedule of professional development opportunities. Some are geared towards a specific population (master's students, PhD students at the beginning of their program, graduate students seeking tenure track positions, etc.) and others are open to all graduate students (time management, balancing, staying healthy). A full schedule of programs is at <http://www.cmu.edu/graduate/>.

The Office of the AVPGE also coordinates several funding programs, and academically focused seminars and workshops that advise, empower and help retain all graduate students. The fundamental goals of our programs have been constant: first, to support, advise and guide individual graduate students as they work to complete their degrees; second, to contribute to the greatest degree possible to the diversification of the academy. Visit the Graduate Education website for information about:

- Conference Funding Grants
- Graduate Small Project Help (GuSH) Research Funding
- Graduate Student Professional Development: seminars, workshops and resources

Office of the Dean of Student Affairs:

www.cmu.edu/student-affairs/index.html

The Office of the Dean provides central leadership of the metacurricular experience at Carnegie Mellon. The offices that fall under the division of Student Affairs led by Vice President and Dean of Student Affairs Gina Casalegno, include (not an exhaustive list):

- Athletics
- Career and Professional Development Center
- Cohon University Center
- Counseling & Psychological Services (CaPS)
- Dining Services
- Housing Services
- Office of Community Standards and Integrity
- Office of Student Leadership, Involvement, and Civic Engagement
- University Health Services
- Wellness Initiatives

Graduate students will find the enrollment information for **Domestic Partner Registration** and **Maternity Accommodations** in the Office of the Dean of Student Affairs and on the website. The Office of the Dean of Student Affairs also manages the **Emergency Student Loan (ESLs)** process. The Emergency Student Loan service is available through generous gifts of alumni and friends of the university. The Emergency Student Loan is an interest-free, emergency-based loan repayable within 30 days. Loans are available to enrolled students for academic supplies, medication, food or other expenses not able to be met due to unforeseeable circumstances.

The Office of Integrity and Community Standards also provides consultation, support, resources and follow-up on questions and issues of Academic Integrity: www.cmu.edu/academic-integrity.

Center for Student Diversity & Inclusion:

<https://www.cmu.edu/student-diversity/>

Diversity and inclusion have a singular place among the values of Carnegie Mellon University. The Center for Student Diversity & Inclusion actively cultivates a strong, diverse and inclusive community capable of living out these values and advancing research, creativity, learning and development that changes the world.

The Center offers resources to enhance an inclusive and transformative student experience in dimensions such as access, success, campus climate and intergroup dialogue. Additionally, the Center supports and connects historically underrepresented students and those who are first in their family to attend college in a setting where students' differences and talents are appreciated and reinforced, both at the graduate and undergraduate level. Initiatives coordinated by the Center include, but are not limited to:

- First generation/first in family to attend college programs
- LGBTQ+ Initiatives
- Race and ethnically-focused programs, including Inter-University Graduate Students of Color Series (SOC) and PhD SOC Network
- Women's empowerment programs, including Graduate Women's Gatherings (GWGs)
- Transgender and non-binary student programs

Assistance for Individuals with Disabilities:

<http://www.cmu.edu/education-office/disability-resources/>

The Office of Disability Resources at Carnegie Mellon University has a continued mission to provide physical and programmatic campus access to all events and information within the Carnegie Mellon community. We work to ensure that qualified individuals receive reasonable accommodations as guaranteed by the Americans with Disabilities Act (ADA) and Sections 503 and 504 of the Rehabilitation Act of 1973. Students who would like to receive accommodations can begin the process through [Disability Resources secure online portal](#) or email access@andrew.cmu.edu to begin the interactive accommodation process.

Students with disabilities are encouraged to self-identify with the Office of Disability Resources by contacting Catherine Getchell, 412-268-6121, getchell@cmu.edu to access the services available at the university and initiate a request for accommodations.

Eberly Center for Teaching Excellence & Educational Innovation:

www.cmu.edu/teaching

Support for graduate students who are or will be teaching is provided in many departments and centrally by the Eberly Center for Teaching Excellence & Educational Innovation. The Eberly Center offers activities for current and prospective teaching assistants as well as any graduate students who wish to prepare for the teaching component of an academic career. The Center also assists departments in creating and conducting programs to meet the specific needs of students in their programs. Specific information about Eberly Center support for graduate students is found at www.cmu.edu/teaching/graduatestudentsupport/index.html.

Carnegie Mellon Ethics Hotline:

The health, safety and well-being of the university community are top priorities at Carnegie Mellon University. CMU provides a hotline that all members of the university community should use to confidentially report suspected unethical activity relating to financial matters, academic and student life, human relations, health and campus safety or research.

Students, faculty and staff can anonymously file a report by calling 877-700-7050 or visiting www.reportit.net (user name: tartans; password: plaid). All submissions are reported to appropriate university personnel.

The hotline is NOT an emergency service. For emergencies, call University Police at 412-268-2323.

Graduate Student Assembly:

www.cmu.edu/stugov/gsa/index.html

The Carnegie Mellon Student Government consists of an Executive Branch and a Legislative Branch. This is the core of traditional student government, as governed by the Student Body Constitution. The Executive Branch serves the entire student body, graduate and undergraduate, and consists of one president and four vice-presidents. The Legislative Branch for graduate students, The Graduate Student Assembly (GSA) passes legislation, allocates student activities funding, advocates for legislative action locally and in Washington D.C. on behalf of graduate student issues and needs, and otherwise acts on behalf of all graduate student interests. GSA also contributes a significant amount of funding for conferences and research, available to graduate students through application processes managed by the Office of the Assistant Vice Provost for Graduate Education. GSA also plans various social opportunities for graduate students and maintains a website of graduate student resources on and off-campus, <http://www.cmu.edu/stugov/gsa/resources/index.html>. Each department has representation on GSA and receives funding directly from GSA's use of the student activities fee for departmental activities for graduate students. The department rep(s) is the main avenue of graduate student representation of and information back to the graduate students in the department.

Intercultural Communication Center (ICC):

www.cmu.edu/icc/

The Intercultural Communication Center (ICC) is a support service offering both credit and non-credit classes, workshops, and individual appointments designed to equip nonnative English speakers (international students as well as international students who attended high school and/or undergraduate programs in the U.S.) with the skills needed to succeed in academic programs at Carnegie Mellon. In addition to developing academic literacy skills such as speaking, reading and writing, students can learn more about the culture and customs of the U.S. classroom. The ICC also helps international teaching assistants (ITAs) who are non-native English speakers develop fluency and cultural understanding to teach successfully at Carnegie Mellon and provides ITA testing, required testing indicating a nonnative speaking student has a language proficiency required before being allowed to work with undergraduates in classes, labs or individual meetings.

Office of International Education (OIE):

<http://www.cmu.edu/oie/>

Carnegie Mellon hosts international graduate and undergraduate students who come from more than 90 countries. Office of International Education (OIE) is the liaison to the University for all non-immigrant students and scholars. OIE provides many services including: advising on personal, immigration, academic, social and acculturation issues; presenting programs of interest such as international career workshops, tax workshops, and cross-cultural and immigration workshops; maintaining a resource library that includes information on cultural adjustment, international education and statistics on international students in the United States; posting pertinent information to students through email and the OIE website, and conducting orientation programs.

Veterans and Military Community:

<http://www.cmu.edu/veterans/>

Military veterans are a vital part of the Carnegie Mellon University community. Graduate students can find information on applying veteran education benefits, campus services, veteran's groups at CMU, non-educational resources and international military service information through the Veterans and Military Community website. There are also links and connections to veteran resource in the Pittsburgh community. The ROTC and Veteran Affairs Coordinator can be reached at uro-vaedbenefts@andrew.cmu.edu or 412-268-8747.

ii) Key Offices for Academic & Research Support

Computing and Information Resources:

www.cmu.edu/computing

Computing Services provides a comprehensive computing environment at Carnegie Mellon. Graduate students should seek Computing Services for information and assistance with your Andrew account, network access, computing off-campus, campus licensed software, email, calendar, mobile devices, computer security, cluster services and printing. Computing Services can be reached at it-help@cmu.edu.

The Carnegie Mellon Computing Policy establishes guidelines and expectations for the use of computing, telephone and information resources on campus. The policy is supported by a number of guidelines graduate students should know. The policy and guidelines are available at: <https://www.cmu.edu/policies/information-technology/computing.html>.

Research at CMU:

www.cmu.edu/research/index.shtml

The primary purpose of research at the university is the advancement of knowledge in all fields in which the university is active. Research is regarded as one of the university's major contributions to society and as an essential element in education, particularly at the graduate level and in faculty development. Research activities are governed by several university policies. Guidance and additional general information can be found by visiting the Research at Carnegie Mellon website.

Office of Research Integrity & Compliance:

www.cmu.edu/research-compliance/index.html

The Office of Research Integrity & Compliance (ORIC) is designed to support research at Carnegie Mellon University. The staff work with researchers to ensure research is conducted with integrity and in accordance with federal and Pennsylvania regulation. ORIC assists researchers with human subject research, conflicts of interest, responsible conduct of research, export controls, intellectual property rights and regulations, and institutional animal care & use. ORIC also consults on, advises about and handles allegations of research misconduct.

iii) Key Offices for Health, Wellness & Safety

Counseling & Psychological Services:

<https://www.cmu.edu/counseling/>

Counseling & Psychological Services (CaPS) affords the opportunity for students to talk privately about issues that are significant for them in a safe, confidential setting. Students sometimes feel confused about why they are feeling upset and perhaps confused about how to deal with it. An initial consultation with a CaPS therapist will clarify options and provide a recommendation to the appropriate mental health resource at Carnegie Mellon or the larger Pittsburgh community. CaPS services are provided at no cost. Appointments can be made in person or by telephone, 412-268-2922.

Health Services:

www.cmu.edu/HealthServices/

University Health Services (UHS) is staffed by physicians, advanced practice clinicians and registered nurses who provide general medical care, allergy injections, first aid, gynecological care and contraception as well as on-site pharmaceuticals. The CMU student insurance plan covers most visit fees to see the physicians and advanced practice clinicians & nurse visits. Fees for prescription medications, laboratory tests, diagnostic procedures and referral to the emergency room or specialists are the student's responsibility and students should review the UHS website and their insurance plan for detailed information about the university health insurance requirement and fees.

UHS also has a registered dietician and health promotion specialists on staff to assist students in addressing nutrition, drug and alcohol and other healthy lifestyle issues. In addition to providing direct health care, UHS administers the Student Health Insurance Program. The Student Health Insurance plan offers a high level of coverage in a wide network of health care providers and hospitals. Graduate students should contact UHS to discuss options for health insurance for spouses, domestic partners and dependents. Appointments can be made by visiting UHS's website or by telephone, 412-268-2157.

Campus Wellness:

<https://www.cmu.edu/wellness/>

At the university, we believe our individual and collective well-being is rooted in healthy connections to each other and to campus resources. The university provides a wide variety of wellness, mindfulness and connectedness initiatives and resources designed to help students thrive inside and outside the classroom. The BeWell@CMU e-newsletter seeks to be a comprehensive resource for CMU regarding all wellness-inspired events, announcements and professional and personal development opportunities. To sign up for the e-newsletter, text BEWELLATCMU to 22828 and share your preferred email address.

University Police

<http://www.cmu.edu/police/>

412-268-2323 (emergency only), 412-268-6232 (non-emergency)

The University Police Department is located at 300 South Craig Street, Room 199 (entrance is on Filmore Street). The department's services include police patrols and call response, criminal investigations, shuttle and escort services, fixed officer and foot officer patrols, event security, and crime prevention and education programming. Visit the department's website for additional information about the staff, escort and shuttle, emergency phone locations, crime prevention, lost and found, finger print services, and annual statistic reports.

Shuttle and Escort Services

University Police coordinates the Shuttle Service and Escort Service provided for CMU students, faculty, and community. University Police [Shuttle & Escort website](#) has full information about these services, stops, routes, tracking and schedules.

Carnegie Mellon University publishes an annual campus security and fire safety report describing the university's security, alcohol and drug, sexual assault, and fire safety policies and containing statistics about the number and type of crimes committed on the campus and the number and cause of fires in campus residence facilities during the preceding three years.

Graduate students can obtain a copy by contacting the University Police Department at 412-268-6232. The annual security and fire safety report is also available online at

<https://www.cmu.edu/police/Fire%20and%20Safety%20Reports.html>.

iv) The WORD

<http://www.cmu.edu/student-affairs/theword//>

The WORD is Carnegie Mellon University's student on-line handbook and is considered a supplement to the department (and sometimes college) handbook. The WORD contains campus resources and opportunities, academic policy information and resources, community standards information and resources. It is designed to provide all students with the tools, guidance, and insights to help you achieve your full potential as a member of the Carnegie Mellon community. Information about the following is included in The WORD (not an exhaustive list) and graduate students are encouraged to bookmark this site and refer to it often. University policies can also be found in full text at: <http://www.cmu.edu/policies/>.

Carnegie Mellon Vision, Mission

Carnegie Code

Academic Standards, Policies and Procedures

Educational Goals

Academic and Individual Freedom

Statement on Academic Integrity

Standards for Academic & Creative Life

Assistance for Individuals with Disabilities

Master's Student Statute of Limitations

Conduct of Classes

Copyright Policy

Cross-college & University Registration

Doctoral Student Status Policy

Evaluation & Certification of English Fluency for Instructors

- Final Exams for Graduate Courses
- Grading Policies
- Intellectual Property Policy
- Privacy Rights of Students
- Research
 - Human Subjects in Research
 - Office of Research Integrity & Compliance
 - Office of Sponsored Programs
 - Policy for Handling Alleged Misconduct of Research
 - Policy on Restricted Research
- Student's Rights
- Tax Status of Graduate Student Awards

Campus Resources & Opportunities

- Alumni Relations
- Assistance for Individuals with Disabilities
- Athletics, Physical Fitness & Recreation
- Carnegie Mellon ID Cards and Services
- Cohon University Center
- Copying, Printing & Mailing
- Division of Student Affairs
- Domestic Partner Registration
- Emergency Student Loan Program
- Gender Programs & Resources
- Health Services
- Dining Services
- The HUB Student Services Center
- ID Card Services
- Leonard Gelfand Center
- LGBTQ Resources
- Multicultural and Diversity Initiatives
- Opportunities for Involvement
- Parking and Transportation Services
- Shuttle and Escort Services
- Spiritual Development
- University Police
- Student Activities
- University Stores

Community Standards, Policies and Procedures

- Alcohol and Drugs Policy
- AIDS Policy
- Bicycle/Wheeled Transportation Policy
- Damage to Carnegie Mellon Property
- Deadly Weapons
- Discriminatory Harassment
- Disorderly Conduct
- Equal Opportunity/Affirmative Action Policy
- Freedom of Expression Policy
- Health Insurance Policy

Immunization Policy
Missing Student Protocol
Non-Discrimination Policy
On-Campus Emergencies
Pets
Political Activities
Recycling Policy
Riotous and Disorderly Behavior
Safety Hazards
Scheduling and Use of University Facilities
Sexual Harassment and Sexual Assault Policy
Smoking Policy
Student Accounts Receivable and Collection Policy and Procedures
Student Activities Fee
Student Enterprises
Workplace Threats and Violence Policy

Statement of Assurance

Last updated: May 31, 2018

Carnegie Mellon's Guide to an Ethical Job Search

GUIDELINES & POLICIES

The mission of the Carnegie Mellon Career & Professional Development Center (CPDC) is to maximize the career and life potential of our students. One of the ways we accomplish this is by creating opportunities for our students that connect them to employers with whom we have developed relationships. It is important for the development of each student that they conduct themselves in an ethical manner. Not honoring agreements with recruiters reflects poorly on the university and impacts the organization's actions regarding future recruiting activities at Carnegie Mellon.

It is for these reasons that we hope that you represent CMU in a positive manner when conducting your job search. In order to make use of our services, we at the CPDC expect all of our students/job seekers to adhere to the following ethical standards. All students are expected to read and familiarize themselves with these guidelines, in addition to the [consequences for violating these guidelines](#). For any additional questions regarding our policy, please contact your Career Consultant

Students are expected to:

1. Attend all scheduled campus interviews:

Missing or canceling less than 24 hours prior to an interview or 12 hours before an appointment uses/blocks a time slot that could have been filled by another student.

Interview Cancellation and No-Show Policy: If you need to cancel an on-campus interview, you can do so in Handshake before the cancellation end date listed for that interview, as found in the job description. Students who fail to cancel their interview before the interview cancellation date found in Handshake will be subject to the offense policy.

If an emergency occurs and you must cancel after Handshake's cancellation end date, please do so by calling Gerry Marnell in the Career Center at 412-268-1646. Students who do not show up for interviews will be subject to the offense policy. In addition, the student will be required to send a letter of apology to the recruiter. The letter must be approved by the student's career consultant.

2. Be on time for campus interviews:

Please arrive in the Career Center, 10-15 minutes before your interview. Being late reflects poorly on a candidate and disrupts the appointment times of other candidates on the schedule.

3. Present qualifications in a truthful manner:

This expectation applies to information on Handshake, application materials and responses in interviews including, but not limited to, listing accurate GPA (not rounding up), major, degree level and experiences information on a resume and online profiles, as well as being truthful in all interview responses.

4. Honor all agreements made with recruiters regarding site visits:

Accepting an on-site interview with a company sets into motion a series of events: travel arrangements, scheduling, hotel reservations and a host of other details. If that student subsequently fails to follow through with the site visit without giving the company enough advance notice, it costs the company a considerable amount of wasted time and money, as well as denies another student the opportunity to interview.

5. Understand employers' hiring and offer policy

The CPDC works with employers to provide students with sufficient time to consider offers of employment. For more information, view the [Employer Hiring & Offer Policy](#).

6. Accept job/internships in an ethical manner:

When a student accepts a full-time or internship position, that student is expected to stop all recruiting activities, including applying and interviewing for employment opportunity. Students are expected to notify all other employers with whom they have scheduled or pending interviews of their need to be removed from consideration for those opportunities.

Reneging:

Accepting an employment offer after you previously accepted an offer with another employer is defined as 'reneging' and is considered dishonest and unethical and carries serious implications. Reneging reflects poorly on the candidate and potentially damages Carnegie Mellon's reputation and relationships with employers. Instances of reneging that are reported by an employer will be investigated by the CPDC and may result in loss of recruiting privileges for the student.

Offense Policy:

- **First Offense:** Removal of job search and interviewing access on Handshake for six months.
- **Second Offense:** Removal of job search and interviewing access on Handshake for one year.
- **Third Offense:** Removal of job search and interviewing access on Handshake for five years.

Note: Depending on the severity of the offense, the CPDC reserves the right to refer the student's case to the Office of the Dean of Student Affairs for further review and judicial proceedings.

Appeal Process:

Any student wishing to appeal his or her revocation of Handshake privileges is entitled to utilize our formal appeal process. To request an appeal contact your career consultant at the CPDC.

C) Approved Disciplinary Concentration Courses

Disciplinary concentration in Chemical Engineering (CHE):

The CHE disciplinary concentration is defined as 36 units of approved CHE graduate-level courses (other than independent study or graduate project courses).

Disciplinary Required Course:

06-665 Process Systems Modeling Spring 12 units

Disciplinary Electives:

Any combination of course from this list 24 units

<i>M.S. level courses recommended as CHE disciplinary concentration</i>		
06-623	Mathematical Modeling of Chemical Engineering Processes	FA: 12 units
06-625	Chemical and Reactive Systems	FA: 12 units
06-663	Analysis and Modeling of Transport Phenomena	SP: 12 units
<i>PhD courses permitted as CHE disciplinary concentration</i>		
06-702	Advanced Reaction Kinetics	SP: 12 units
06-703	Advanced Fluid Dynamics	FA: 12 units
06-704	Advanced Heat and Mass Transfer	SP: 12 units
06-705	Advanced Chemical Engineering Thermodynamics	FA: 12 units
06-713	Mathematical Techniques in Chemical Engineering	FA: 12 units
06-720	Advanced Process Systems Engineering	SP: 12 units

Disciplinary concentration in Civil and Environmental Engineering (CEE):

The CEE disciplinary concentration is defined as 36 units of approved CEE graduate-level courses (other than independent study or graduate project courses).

Approved courses are available in sustainability, water quality, air quality, advanced infrastructure systems, mechanics, and other areas.

Disciplinary Electives:

Any combination of course from this list 36 units

12-704	Probability and Estimation Methods for Engineering Systems	FA: 12 units
12-706	Civil Systems Investment Planning and Pricing	FA: 12 units
12-712	Introduction to Sustainable Engineering	FA: 12 units
12-714	Environmental Life Cycle Assessment	SP: 12 units
12-740	Data Acquisition, Sensing, and Instrumentation	FA-A1: 6 units
12-741	Data Management and Analysis	FA-A2: 6 units
12-745	AIS Systems Project Course	SP: 12 units
12-747	Sustainable Buildings	FA-A1: 6 units
12-749	S. T.: Climate Change Adaptation	SP: 6 units
12-750	Infrastructure Systems	SP: 12 units
12-751 / 651	Air Quality Engineering	SP: 12 / 9 units
12-752	S.T. Data-Driven Building Energy Management	FA-A2: 6 units
12-761	S.T. Sensing and Data Mining for Smart Structures and Systems	SP: 12 units
12-766	S.T. Climate Change, Science and Adaption	SP: 12 units

Disciplinary concentration in Electrical and Computer Engineering (ECE):

The ECE disciplinary concentration is defined as 36 units of approved ECE graduate-level courses (other than independent study or graduate project courses).

Disciplinary Electives:

Any combination of course from this list

36 units

18-418	Electric Energy Processing: Fundamentals and Applications (counts as undergrad course)	SP: 12 units
18-618	Smart Grids & Future Electric Energy Systems	FA: 12 units
18-631	Introduction to Information Security	FA: 12 units
18-649	Distributed Embedded Systems (occasional)	FA: 12 units
18-730	Introduction to Computer Security	FA: 12 units
18-731	Network Security	SP: 12 units
18-743	Energy Aware Computing	FA: 12 units
18-771	Linear Systems	FA: 12 units
18-777	Complex Large-Scale Dynamic Systems (occasional)	12 units
18-875	Economics and Engineering of Electric Energy Systems	SP: 12 units
18-879M	S.T. in Systems & Controls: Optimization in Energy Networks	SP: 12 units
18-879S	S.T. in Systems & Controls: Networked Control Systems (occasional)	12 units
18-882	S.T. in Energy Systems: Power Electronics	FA: 12 units

Disciplinary concentration in Engineering and Public Policy (EPP):

The EPP disciplinary concentration is defined as 36 units of approved EPP graduate-level courses (other than independent study or graduate project courses).

Disciplinary Electives:

Any combination of course from this list

36 units

19-424 (cross-listed/c.l. MEG 24-424)	Energy and the Environment (<i>undergrad course; grad.enroll-ment limited; counts as 9 of the allowed 12 undergrad units</i>)	FA: 9 units
19-472 (c.l. ECE 18-372)	Fundamentals of Electric Power Systems (<i>undergrad course; counts as allowed 12 undergrad units towards EST&P degree</i>)	12 units
19-617 (CEE 12-750)	Infrastructure Management	
19-624	S.T. Emerging Energy Policies	FA: 12 units
19-625	Sustainable Energy for the Developing World	SP: 12 units
19-626 (occasional)	Climate Science and Policy	12 units
19-638	Smart Grids & Future Electric Energy Systems	FA: 12 units
19-653 (MEG 24-640)	S.T. Climate Change Mitigation	SP: 12 units
19-655A	S.T. Climate Change, Impacts and Adaptation	FA: 12 units
19-655C	S.T. Design, Innovation and Strategy	FA: 12 units
19-656	S.T. CO2 Capture and Sequestration	SP: 6 units
19-683	S.T. Science, Technology & Innovation Policy	FA: 6 units
19-688 (occasional)	Innovation for Energy and the Environment	12 units
19-696	S.T. Sustainable Development & Innovation	FA: 9 units
19-714 (CEE 12-714)	Environmental Life Cycle Assessment	SP: 12 units
19-717 (CEE 12-712)	Introduction to Sustainable Engineering	FA: 12 units
19-724 (MSE 27-724)	Materials for Energy Storage	6 units

19-736 (MSE 27-726)	Energy and Materials in Policy Making	6 units
19-739 (ECE18-875)	Engineering & Economics of Electric Energy Systems	SP: 12 units
19-740 (MEG 24-740)	Combustion & Air Pollution Ctrl	SP: 12 units
19-751 (CEE 12-751)	Air Quality Engineering	SP: 12 units
19-881 / 19-882	1. Electric Market Restructuring 2.Low Carbon Electric Pwr	FA/SP: 6

Disciplinary concentration in Materials Science and Engineering (MSE):

The MSE disciplinary concentration is defined as 36 units of approved MSE graduate-level courses (other than independent study or graduate project courses).

Disciplinary Required Courses:

27-798	Thermodynamics I	Fall-A1	6 units
27-799	Thermodynamics II	Fall-A2:	6 units

Disciplinary Electives:

Any combination of course from this list 24 units

27-705	Nanostructured Materials	SP: 12 units
27-718	Soft Materials	FA: 12 units
27-721	Processing Design	FA: 12 units
27-724	Materials for Energy Storage	SP-A4: 6 units
27-725	Materials in Nuclear Systems	6 units
27-727	Mechanical Behavior in Extreme Environments	SP: 6 units
27-728	Materials for Future Energy Systems	6 units
27-729	Solid State Devices for Energy Conversion	FA: 6 units
27-730	Energy Consumption and Minimization in Metals Production	FA: 6 units
27-750	Advanced Characterization and Microstructural Analysis	SP: 12 units
27-752	Foundations of Semiconductor Nanostructures	12 units
27-765	Special Topics: Materials and Society	
27-766	Diffusion in Materials	FA: 6 units
27-770	Electronic, Magnetic, and Optical Properties	SP: 12 units
27-771	Special Topics: Materials and Devices for Energy Efficiency Applications	SP: 12 units
27-788	Defects in Materials	FA: 6 units
27-794	Chemical Stability of Materials in Extreme Environments	6 units
27-796	Structure of Materials	FA: 6 units
27-797	Bonding of Materials	FA: 6 units

Disciplinary concentration in Mechanical Engineering (MEG or MechE)

The MEG disciplinary concentration is defined as 36 units of approved MEG graduate-level courses (other than independent study or graduate project courses).

Disciplinary Required Course:

24-722 Energy System Modeling Fall 12 units

Disciplinary Electives:

Any combination of course from this list 24 units

24-616	Tribology - Friction, Lubrication & Wear	12 units
24-618	Computational Transport Phenomena	SP: 12 units
24-628	Special Topics: Energy Trans & Conv. at Nano Scale	SP: 12 units
24-629	Special Topics: Direct Solar & Thermal Energy Conversion	FA: 12 units
24-640	Special Topics: Climate Change Mitigation	SP: 12 units
24-644	Special Topics: Advanced Power Plant Design	SP: 12 units
24-711	Fluid Mechanics	12 units
24-718	Computational Fluid Dynamics	SP: 12 units
24-721	Advanced Thermodynamics	FA: 12 units
24-730	Advanced Heat Transfer	FA: 12 units
24-731	Conductive Heat Transfer	6 units
24-732	Convective Heat Transfer	6 units
24-733	Radiative Heat Transfer	6 units
24-736	Two-Phase Flow & Heat Transfer	
24-642	Fuel Cell Systems	FA: 12 units
24-740	Combustion and Air Pollution Ctrl	SP: 12 units

D) EST&P or EST&P-AS Degree Audit

Note that this audit can now be done in Stellic, using CMU login credentials:
<https://academicaudit.andrew.cmu.edu/>

Academic Year 2018-2019

NAME: _____ **Andrew ID:** _____
Degree (EST&P or EST&P-AS): _____ **Disciplinary Concentration** _____

CORE COURSES: EST&P and EST&P-AS— 24 units of required Energy Core

Semester	Year	Grade	Course #	Units	Title
FALL			39-610	6	Energy Conversion & Supply
FALL			39-613	6	Energy Transport & Storage
SPRING			39-611	6	Energy Demand & Utilization
SPRING			39-612	6	Energy Policy & Economics

TOTAL = 24 units

DISCIPLINARY CONCENTRATION: EST&P and EST&P-AS— 36 units required:
 Must be from approved concentration course list given in Appendices (and in Stellic)

Semester	Year	Grade	Course #	Units	Title

TOTAL ≥ 36 units

BREADTH ELECTIVES: EST&P and EST&P-AS— 36 units required:
 College of Engineering graduate courses and/or pre-approved CMU graduate courses (see exceptions in Handbook / Stellic)

Semester	Year	Grade	Course #	Units	Title

TOTAL ≥ 36 units

PROJECT COURSES: EST&P-AS Degree ONLY— 24 units required:

Semester	Year	Grade	Course #	Units	Title

TOTAL ≥ 24 units

E) EST&P Handbook Acknowledgement Form



**Energy Science
Technology & Policy**
Carnegie Mellon University
College of Engineering

The Energy Science, Technology and Policy (EST&P) program Graduate Student Handbook has been prepared to inform you about program policies, philosophies and practices. Please read the entire handbook carefully, giving special attention to the section on academic integrity.

To maintain your status as a master's student seeking an EST&P degree, you must complete your review of this handbook during the first week of classes and then sign a copy of this acknowledgement (using the online jotform given below).

By signing, you affirm that you have read a copy of the 2018-2019 EST&P Graduate Student Handbook, that you understand the information contained therein, and that you agree to comply with the policies and procedures contained in the handbook. The handbook should be followed as your general guide to the goals, policies, practices, and expectations of the Energy Science, Technology and Policy Master's Program. Note that this handbook is not intended to cover every situation that may arise during your course of study and is that the handbook is not a contract between you and the EST&P program.

Sign Handbook Acknowledgement form, here: <https://form.jotform.com/81696111706154>

F) Fall 2018 Checklist for EST&P Students

Submit these items by the due date.

Should you have any issues, please contact Justin Puglisi, Admissions and Program Coordinator,
at jpuglisi@andrew.cmu.edu

Item:	Due Date:
EST&P Student Handbook Acknowledgement Form – Review/Sign/Submit	9/7/18 (Jotform)
Media Consent Form – Review/Sign/Submit	Orientation or 9/7/18 (Jotform)
Plagiarism Quiz – Complete/Submit More info: Plagiarism Quiz 2018.pdf	9/7/18 (submit certification to Justin via e-mail)
CMU Business Cards- Request online	9/7/18 (Jotform)
Resume for the EST&P Fall Resume Book – Complete/Submit	9/14/18 (Handshake)
Professional Photo Day (one time only)	Time & Location - TBA
CITI's Responsible Conduct of Research (EST&P-AS students or those taking master's project/ independent study course)- Complete/Submit More info: RCR Training 2018.pdf	Before registering for project/independent study courses OR by 12/7/18 (submit certification to Justin via email)
Sexual Assault Prevention for Graduate Students	9/7/18 (submit screenshot of “Course Progress” to Justin via e-mail)