Introduction

International programs and opportunities for engineering students at the University of Virginia present a picture of evolution. New programs are being created by Engineering School faculty and new ideas for partnerships with institutions abroad emerge perennially. Ideas and initiative for new opportunities come not only from faculty, but often from students. This manual is an attempt to provide students who wish to go abroad as part of their engineering education some guidance in identifying the right program, in navigating the process of application and securing approval to transfer credit for courses taken abroad. This manual is also intended to serve faculty who advise students concerning education abroad, as well as faculty interested in developing new international programs.
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Definitions

• International Program — For the purposes of this manual, an ‘international program’ is one of a number of possible arrangements by which students in the University of Virginia School of Engineering & Applied Science complete part of their degree program and/or professional preparation through educational activities outside the United States. Such activities include -- but are not limited to -- classroom study, research, intern- or externships, and service learning.

• Faculty-Led International Program — Faculty-led international programs are ones for which program participants are accompanied by a faculty person. The role of the faculty program director is to organize and manage the experience for participating students and to assess learning outcomes. While emphasis is often on guided experiential learning, traditional classroom instruction, provided by the faculty program director and/or invited speakers, also forms a typical course component. Faculty-led programs are typically offered as J-term courses, or during the summer, where programs might range from as little as two weeks to six weeks, or more, depending on program and number of credit hours offered.

• Transfer Credit — Transfer Credit refers to comparable learning (courses, experiential or examinations) conducted at or through an institution other than the University of Virginia. This situation applies to most partner institutions abroad with which UVA has established exchange agreements, and all institutions for which no agreement exists. UVA allows students planning to study abroad to petition for transfer credit prior to going abroad. Credit is then awarded following successful completion of the course of study abroad. Grades for courses taken as transfer credit courses do not count towards the student’s GPA.

• Direct Credit — Direct Credit refers to credit for courses taken abroad which have been reviewed and approved as UVA courses. The course may be one taught by a UVA faculty person at a university abroad (with UVA students), or one taught by non-UVA faculty at a university abroad, but which uses the same approach, syllabus, assignments, exams, textbook, etc. and which is taught to UVA students. Grades for courses taken as Direct Credit do appear on the student’s transcript and count towards the student’s GPA.

• Departmental Study Abroad Advisor — a faculty person within a given department of the School of Engineering who is available to advise students in the major (or other degree programs offered by that department) regarding education abroad. SA Advisors are sources of information and recommendations concerning international programs most compatible with the curricula, policies and other requirements of that department/degree program.
I. **Student Resources**

A. **Engineering Students Planning to Engage in a UVA Education Abroad Program**

All undergraduate and graduate students in the School of Engineering & Applied Science are encouraged to conduct part of their study program, research or professional experience abroad. This section discusses eligibility requirements, as well as the procedure for planning and implementing an international program.

1. **Eligibility (GPA, Passport/Visa)**

   University policy requires that all students meet the *minimum cumulative GPA requirement of 2.500* to engage in a University-affiliated, education abroad program. Specific programs, e.g. UVA-affiliated, outside providers, may impose higher GPA requirements. Additionally, applicants for education abroad must meet the following criteria:
   - be enrolled as a full-time, degree-seeking student
   - have completed at least one semester at UVA (one year is recommended)
   - be in good academic standing (no academic warning)
   - be in good disciplinary standing

   University requirements may be reviewed at [http://educationabroad.virginia.edu/things-to-consider](http://educationabroad.virginia.edu/things-to-consider).

   Students going abroad must have a valid passport (should be valid for six months beyond your expected date of return). Some locations also require a visa (go to [https://travel.state.gov/content/passports/en/country.html](https://travel.state.gov/content/passports/en/country.html) to check on country-specific requirements).

2. **Required Steps / Procedure**

   SEAS students planning to engage in an education abroad program will need to consider the following required steps. These are followed by several recommended actions.

   a. **Education Abroad Workshop**

      Application for any UVA education abroad program requires completion of the online Education Abroad Workshop, accessed at [http://educationabroad.virginia.edu/education-abroad-workshop](http://educationabroad.virginia.edu/education-abroad-workshop).

   b. **ISO Registration Requirements**

      The ISO (International Studies Office, 208 Minor Hall) is a central, university-wide resource providing information and advising, a searchable database of all UVA education abroad programs, and access to program applications. While all requirements for education abroad are reviewed here, you can find additional information by visiting the ISO’s
'Getting Started' section on the website at http://educationabroad.virginia.edu/getting-started-checklist.

c. Transfer Credit Application and Approval (see Section I.C.)
Students taking courses abroad, e.g. during a semester-length, study abroad program, will need to obtain approval to transfer academic credit back to their degree program. Exceptions to this are when the course(s) is a UVA course, e.g. a UVA faculty-led program or Direct Credit (see 'Definitions' for explanation of these terms). The transfer credit approval process is explained below (sect. I.C.).

d. Pre-departure Orientation
All UVA students engaging in an education abroad program are required to attend a Pre-departure Orientation meeting. Students should consult their post-acceptance instructions in their application for details on when and where the meeting will take place.

3. Recommended Additional Steps
Students considering study, work or service learning abroad should be well informed as to the available options, the degree of alignment of the proposed program with personal and professional goals and aspirations, and the academic and logistical considerations associated with a given program option. The following resources are available to assist students in getting the information and advising they need:

a. Study Abroad Fairs
Study Abroad Fairs are held at the University- and School-levels. University SA Fairs take place typically during the first week, or two, of the Fall and Spring semester. Representatives are available to discuss a wide range of programs, from international internships and J-term options, to semester-length programs. The School of Engineering & Applied Science hosts its own SA Fair in late September/early October, with a focus on education abroad programs of interest to engineering students. Check the Engineering International Programs website (https://engineering.virginia.edu/about/offices/international-programs) or email for study abroad fair scheduling information.

b. Consult with EIP and ISO
Engineering International Programs (EIP), located in Thornton Hall B103, is available to advise and assist SEAS students interested in education abroad. EIP can help you identify programs which best suit your interests and requirements and can assist in matters such as the transfer credit approval process. Contact information is available on the EIP website at https://engineering.virginia.edu/about/offices/international-programs.

The International Studies Office (ISO), located on the second floor of Minor Hall, also offers advising and maintains a library of materials related to education abroad. To arrange an appointment to speak with
an ISO advisor, visit their webpage at http://educationabroad.virginia.edu/make-advising-appointment.

c. Attend CORE Seminars
CORE stands for Cultural Orientation Reflection and Engagement; it is a program designed to help you prepare for and get the most out of cross-cultural experience and engagement. CORE wraps around your international program, not only preparing your before, but guiding you through reflection after you return to UVA. More information on the CORE program is available at http://core.iso.virginia.edu.

d. University ISO Website, EIP Website
The University ISO website (http://educationabroad.virginia.edu) is the central resource for information and access to applications for all UVA education abroad programs.

The Engineering International Programs website (https://engineering.virginia.edu/about/offices/international-programs) offers information of interest to engineering students, including program options, resources and upcoming events.

B. Research and Professional Internships Abroad
Students engaging in research internships abroad generally do not take courses, but may be awarded academic credit. Guidelines for establishing academic credit for research abroad as well as evaluation of student performance are given below. Professional (industry) internships abroad may provide academic credit, depending on the program.

1. Establishing academic credit for international internships
Students participating in a SEAS international research internship program, such as Shibaura (Tokyo) or DGIST (S Korea), may request their academic advisor, or other faculty person whose research is related to that to be performed abroad, to establish an independent study at the appropriate level and credit amount. Students should follow the procedure established by their department for creation and evaluation of independent study courses.

2. Assessment of student performance
While evaluation of student performance is ultimately determined by the faculty instructor of record for the independent study, the central assessed deliverable is usually in the form of a detailed research report. In any event, performance requirements and assessment criteria should be clear and agreed upon by student and instructor prior to the start of the international research internship.

3. Determining how credit for internships may be used
Students should discuss how the research or professional internship credit may be applied to their degree program with their academic advisor, prior to establishment of the independent study. Established departmental
guidelines for the application of independent study/advanced projects courses should be followed.

C. Transfer Credit Process
Students may apply for approval of transfer credit for courses taken while abroad prior to departure. The transfer credit approval process typically occurs as part of the application to study abroad. This section describes the process of applying for transfer credit, how these credits may be used and how they affect your GPA.

1. Transfer credit pre-approval process
   Complete the transfer credit application form. The form may be accessed as part of the online (ISO website) application to study abroad. The form requires approval (signature) of the student, the Departmental Study Abroad Advisor and the Deans Office (Associate Dean for Undergraduate Education, Prof. Lloyd Harriott, or his designee). Once the form has been approved by the Deans Office, the paper copy of the form is carried over and delivered to the International Studies Office in 208 Minor Hall.

   The form requires the student to list the courses to be taken while abroad, to include course mnemonic, course number and title, and the number of credits (as indicated by the foreign institution). The student may suggest UVA courses for which the student would like to obtain credit, however it is the Departmental Study Abroad Advisor’s responsibility to determine course equivalencies, based on precedent, departmental guidelines, etc. The Departmental Study Abroad Advisor also has the responsibility to determine the appropriate number of UVA credit hours to be awarded (see part 5 below for details on credit conversion). Study Abroad Advisors should consult the list of previously approved courses abroad available on the Engineering International Programs website (http://uvaengstg.prod.acquia-sites.com/about/offices/international-programs). If a course is on the list, i.e. has been approved previously, the Study Abroad Advisor normally approves, except in the case of a change in policy at the departmental level.

   The Transfer Credit Approval Form also provides a box to indicate how each course may be used to meet degree requirements, e.g. a required course for the major or a minor, technical elective, STS course, etc. The student may suggest how courses are to be used, however it is the Study Abroad Advisor’s responsibility to review and approve, or suggest, how credit may be applied. Departmental SA Advisor approval is required for all courses offered by the department, as well as any technical and engineering electives. Other courses, including APMA, STS and courses used to meet minor requirements, such as the Engineering Business Minor, must be reviewed and approved by the director or other representative for that program. HSS course substitutions require Deans Office approval only.
The form also provides a box indicating if post-approval is required. The Departmental Study Abroad Advisor may require post approval in situations where, depending on the level of investment by the student or on the quality of certain outcomes, the course level or number of credits awarded may need to be adjusted. If post approval is required by the SA Advisor, this should be discussed with the student before approval is given.

2. Guarantee of academic credit if pre-approved
   The purpose of the Transfer Credit Approval Form is manifold; first, it serves to guide planning of study abroad to meet academic program goals and requirements. Secondly, the form ensures communication and the engagement of academic advisors. The form also provides a written record of course approvals for students in a given major or other academic program. Finally, the form provides a written guarantee that, if the student attends the partner university abroad and successfully passes the courses in question, he or she will receive UVA credit and that this credit may be used in the manner indicated.

3. Guidelines for determining if an abroad course is acceptable for transfer credit
   As mentioned above, it is the Departmental Study Abroad Advisor’s responsibility to determine if and how a course taken abroad may be used to fulfill UVA course requirements. Generally, if a proposed course abroad and its UVA equivalent have been approved previously (determined by consulting the list of courses previously approved at the Engineering International Programs website [https://engineering.virginia.edu/about/offices/international-programs]), the current request will be approved. In cases where no precedent exists, the SA Advisor makes a determination based on course information (title, description, course level and number of credit hours etc.). In some cases, it may be reasonable to request that the student provide additional information about the course, such as a current syllabus. It is the student’s responsibility to obtain this information from the partner institution abroad. The EIP office is available to assist students in making requests for additional information.

4. Course grades and GPA
   Grades for courses taken abroad as transfer credit do not transfer, i.e. the student receives academic credit for the course, but no grade is assigned. Courses taken as transfer credit do not affect the student’s GPA. No more than 60 credits may be used as transfer credit counting toward the student’s degree.

5. Foreign credits to UVA credit hours conversion
Most universities in the EU have adopted the ECTS (European Credit Transfer System). Two ECTS credits are considered equivalent to one UVA credit hour (i.e. multiply ECTS by 0.5 to determine the number of UVA credit hours). Most of UVA’s partner universities in China and Korea will use the same credit hour value as UVA, i.e. 1 foreign credit hour = 1 UVA CR HR. If in doubt, SA Advisors are encouraged to contact the EIP office (Maya Drake, mel2j@virginia.edu).

D. Direct Credit Courses Abroad

1. Description of Direct Credit
Direct Credit (DC) refers to courses taken at an institution other than UVA, but which have been approved as UVA courses without requiring transfer credit. Students completing DC courses receive UVA credit and course grades, which do count toward the student’s GPA. Since DC courses are considered to be UVA courses, they are expected to meet all standards for rigor and assessment that would apply to the same or similar courses taught on grounds.

2. Direct Credit Approval Process
The approval process for DC courses is similar to that for transfer credit, except that the process for approval of direct credit courses is initiated by a faculty person rather than a student. The level of attention and scrutiny given to evaluation of courses proposed for direct credit and standards for rigor and assessment are higher than for transfer credit courses. SEAS courses for which direct credit is proposed must be evaluated and approved by an individual or committee designated by the department for this purpose. Approvals at the departmental and Deans Office levels must be documented (a statement to this effect by email is sufficient). Steps in the approval process are as follows:

A request to have a course taught at an institution abroad as direct credit is initiated by an individual faculty, committee or department (referred to henceforth as the ‘Owner’ of the DC course). The request should include detailed course information (title, mnemonic, description, syllabus, learning goals and outcomes, learning assessment), rationale for the establishment of the course as direct credit, and detailed information regarding the instructor and partner institution where the DC course is to be taught (name and location of institution abroad, contact information, name, title and department of the instructor proposed to teach the course, as well as a current CV). The written request should be reviewed by the Owner’s department chair or designee.

The written proposal is then submitted to the Engineering International Programs office for review and feedback (not formal approval). Once the EIP
review is complete, the proposal is then submitted to the Associate Dean for Undergraduate Education (if the proposed course is at the undergraduate level) or the Associate Dean for Graduate Education, as appropriate. Once final approval has been given, the course may be offered as direct credit for a period of three years, and subject to annual review, as detailed below.

3. Review/Renewal of Direct Credit Courses
Courses approved for direct credit must be reviewed annually. Initiation of the review is the responsibility of the Owner, i.e. the unit or individual who made the request to create the DC course. If the DC course abroad is an equivalent (replica) of a course on grounds, the Owner is responsible for contacting the appropriate department (individual or committee) and inquiring if any changes have been made to the UVA course. If so, the DC course should be updated to include these changes. The Owner shall maintain a record of annual reviews, including any requested changes and their implementation.

Renewal is required after three years, which requires departmental and Deans-level approvals. Following expiration (of the three-year period), direct credit cannot be offered. Affected students must apply for transfer credit instead, unless renewed.

4. Requirements for students to receive direct credit
Students participating in a UVA program abroad will receive direct credit for any courses designated as DC which they have taken. Students may not opt to change direct credit to transfer credit (or vice versa).

5. Direct Credit Courses and ABET Evaluation
The Owner of any DC course shall be responsible for obtaining and submitting any materials required for ABET evaluation.

II. Faculty Resources
A. Establishing Partnerships with Institutions Abroad for the Purpose of Creating International Programs
Faculty may seek to establish partnerships with institutions abroad for the purpose of establishing an international program. [See definition of 'International Program'.] If the relationship is limited to research collaboration and involves primarily visits of faculty and graduate student researchers, the formal establishment of an International Program is likely unnecessary. However, programs involving participation of undergraduate students, particularly if the engagement is to be a sustained, reciprocal exchange, should be formally established. Faculty interested in exploring the creation of such
relationships should contact the Engineering International Programs office for further information and advising.

B. Requirements for SEAS Faculty-Led Programs

Engineering faculty may create and direct international programs. Such programs are typically offered during the summer or J-term and involve the engagement of the UVA faculty director on-site. Models for such programs include those in which the faculty program director works with participants in a field-setting involving hands-on practice and research, possibly in combination with classroom learning. Alternatively, the faculty program director might teach his/her (UVA) course in a classroom at a partner university, to both UVA program participants and students of the partner university. Engineering School examples of such programs include SYS 2054/3054 Systems Case Studies (Mendoza, Argentina) and Global Technology Practice (Stuttgart, Germany).

1. Creating a new faculty-led program

Faculty interested in creating a new faculty-led program should contact the Engineering International Programs office. EIP can provide helpful information on the proposal and review process for new international programs, logistics, marketing to students and recruitment, program costs, etc. The next step is to submit a proposal to the International Studies Office. Proposal guidelines can be found at http://educationabroad.virginia.edu/program-development. The ISO, working with the Faculty Advisory Committee for Education Abroad (FACEA), reviews and makes recommendations for all proposed programs. It is worth noting that the number of J-term international programs which can be approved (for logistical reasons) is much more limited than for the summer.

2. Conducting a faculty-led program

Implementation of faculty-directed international programs may be viewed as comprising a marketing/recruiting period, application review and participant selection, pre-departure orientation, execution of the study abroad program itself, and post-program. The EIP office is available to advise faculty on any/all of these activities. The ISO is also available to assist faculty by setting up the student application on the ISO website, determining program cost, providing student advising, assisting with pre-departure orientation, and providing emergency assistance at any time during a program.

Typically, a course website is created, e.g. using UVACollab, to provide a centrally accessible resource for guidelines, program policy, course materials, etc. Program directors are responsible for all assigned work and evaluation of learning outcomes. Information regarding learning outcomes and assessment specifically related to study abroad are available at https://educationabroad.virginia.edu/sites/educationabroad.virginia.edu/files/UVAEdAbroadLearningOutcomes.web.pdf.