

**CARNEGIE
MELLON
UNIVERSITY**

**Department of
Engineering and Public Policy
Graduate Student Handbook**

August 2016

Preface

To our new students, we are delighted that you have chosen to pursue graduate studies in the Department of Engineering and Public Policy. We want to help make your stay here as enjoyable and productive as we can.

To our returning students, welcome back to the start of a new semester. Please take the time to read the handbook as some of the policies and procedures have changed since last year.

This handbook is designed to help guide you through some of the ins and outs of doctoral studies in EPP and at Carnegie Mellon. While it is specific to your academic experience in the department, there are several other resources and offices doctoral students are encouraged to consult during their tenure at Carnegie Mellon University. Information about The Word (Carnegie Mellon's online student handbook), the Office of the Assistant Vice Provost for Graduate Education, the Office of the Dean of Student Affairs, and others are included in Appendix 5 of this handbook.

As EPP has grown, we've had to develop more policies and procedures. While college and university policies and protocols are binding, we try to be as flexible as possible with EPP policies and procedures while striving to be fair and equitable among students. Thus, if you encounter a problem that just doesn't seem to fit a particular situation you find yourself in, please come see one of us. We may be able to help you find a solution. If an EPP policy changes from the time of your matriculation, where possible we will allow you the option of being governed by the older policy.

Vicki Finney, Graduate Program Administrator
Scott Matthews, Associate Department Head
Doug Sicker, Department Head
Peter Luetkehans, Business Manager

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 412-268-2056. Obtain general information about Carnegie Mellon University by calling 412-268-2000.

The Statement of Assurance can also be found on-line at: <http://www.cmu.edu/policies/documents/SoA.html>

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 be found on-line at: www.cmu.edu/student-affairs/theword/code.html

Further discussion of the implications of the Carnegie Mellon Code for the professional behavior of EPP graduate students, resources to help achieve the standards in the Code, and policies for preventing or responding to violations of community standards in domains such as sexual harassment/assault is found in Section 8 of this Handbook.

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 departmental 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//index.html
- Academic Integrity Website: www.cmu.edu/academic-integrity
- University Policies Website: www.cmu.edu/policies/
- Graduate Education Website: www.cmu.edu/graduate/policies/index.html

Please see Appendix 5 for additional information about The Word and University resources

Table of Contents

1. Introduction	7
1.1. EPP Washington Office	8
2. Academic Affairs	9
2.1. Grandfather Policy	9
2.2. Getting Started	9
2.3. Meeting the Faculty, Academic Advisors, and Research Advisor	9
2.4. Graduate Education Committee.....	10
2.5. Course Work.....	10
2.5.1. Core Course Requirements	11
<i>Teaching Practicum</i>	13
2.5.2. Type A Requirements	14
2.5.3. Type B Requirements	14
2.5.4. Notes on Elective Courses.....	15
2.6. Academic Integrity: avoiding plagiarism, proper attribution, and research ethics.....	15
2.7. Keeping Track of Progress	16
2.8. A General Progress Schedule for most EPP Students	17
2.9. The Qualifying Examinations	19
2.9.1. Part A.....	19
2.9.2. Part B.....	20
2.9.3. Outcomes and Timing of Qualifying Examinations	20
2.10. Thesis Proposal and PhD Committee.....	21
2.10.1. Student Status Statutes of Limitation.....	22
2.11. PhD Research and Dissertation.....	23
2.11.1. Publishing Student Work	24
2.11.2. Intellectual Property Policy and Relevant Websites	24
2.12. Dissertation Defense	25
2.13. Binding and Copying.....	25
2.13.1. Copyrighting the Dissertation.....	26
2.14. Career and Professional Development Center	27
2.15. Degree Convocation and Commencement Events	27
2.16. Enrollment Verification	27
3. Registration, Enrollment, and Student Status.....	27
3.1. Registration.....	27
3.1.1. Summer Registration, Tuition, and Curricular Practical Training	28
3.1.2. Cross-Registration and Transfer Credits	29
3.1.3. Auditing a Course	29
3.1.4. Grades and Grading	30
3.1.5. Policy on Pass/Fail Courses.....	30
3.2. Student Status.....	30
3.2.1. Full-time and All But Dissertation In Residence Status (ABD)	30
3.2.2. All But Dissertation In Absentia Status (ABS)	31

3.2.3. Final Semester Tuition.....	31
3.2.4. Inadequate Progress and Probation.....	32
3.2.5. Summary of Graduate Student Appeal and Grievance	33
3.2.6. Leave of Absence Process.....	33
3.3. International Students.....	34
3.3.1. Office of Internation Education (OIE).....	34
3.3.2. Intercultural Communication Center (ICC).....	34
3.3.3. Postgraduate Work in the U.S.	35
4. Funding.....	35
4.1. Graduate Research Assistantship (Stipends), Tuition and CMUWorks.....	35
4.1.1. Direct Deposit.....	36
4.1.2. Updating Address and CMUWorks	36
4.1.3. Summer Support	36
4.1.4. Restrictions on Graduate Research Assistantships (semi-monthly stipends).....	37
4.1.5. Payment of Health Insurance and Student Fees.....	37
4.1.6. Time off.....	38
4.2 Financial Aid.....	38
4.3. Research Funding.....	38
4.4. Student Conference Funding	39
4.5. Employment Beyond Doctoral Research.....	39
5. Facilities and General Office Procedures	41
5.1. General Office Procedures.....	41
5.2. Office Space & Lounge	41
5.2.1. Graduate Offices	41
5.2.2. Student Lounge (Hamburg Hall).....	42
5.2.3. Wean Hall Kitchenette	42
5.3. Telephone Calls.....	43
5.4. Copying	43
5.5. Mail.....	43
5.6. Miscellaneous Office Equipment.....	44
5.7. Computing: Andrew Network, EPP Computer Cluster, and Department Printers	44
5.7.1. Free Software	45
5.7.2. Not-free Software.....	45
5.8. Purchasing and Travel Reimbursement Policies and Procedures	45
5.9. Hygiene.....	47
5.10. EPP Graduate Student Advisory Committee (SAC)	47
5.11. Departmental Green Practices and the Green Team EPP	48
5.12. Business Cards.....	48
5.13. Personal Webpage	48
5.14. Doctoral Student Blackboard Site.....	48
6. University Health Services and Student Health Insurance	49
7. University Police	49
8. Professional Behavior as an EPP Graduate Student	50

9. Student Housing.....	52
10. Graduate Student Transition and Emergency Loans.....	53
11. CMU Counseling and Psychological Services	53
12. Eberly Center for Teaching Excellence	53
13. Assistance for Individuals with Disabilities	53
14. Maternity Accommodation Protocol.....	54
15. University Libraries.....	54
16. Graduate Student Assembly	55
17. Office of the Assistant Vice Provost for Graduate Education	55
Appendices	56
Appendix 1: EPP Faculty Affiliation Record & University and Department Contacts	
Appendix 2: Proper Attribution (Memo from Granger Morgan & Doug Sicker)	
Appendix 3: Curriculum Progress Sheets	
Appendix 4: Graduate Student Office Regulations	
Appendix 5: Highlighted University Resources for Graduate Students	

1. Introduction

Engineering and Public Policy (EPP) is a unique department in the College of Engineering (COE) at Carnegie Mellon University. It was established in 1976 and is concerned with problems in the field of technology and public policy. EPP is different from most other university programs in this field because it is strongly engineering based. Its research focuses exclusively on that set of public policy problems in which a detailed treatment of the technical issues is central to producing a satisfactory policy solution.

EPP offers exciting opportunities for growth and continued educational innovation. At the same time, because of the unconventional interdisciplinary nature of the EPP Program, aside from a set of core requirements, each student fashions his or her path through the program. Along with the freedom of choice, this approach sometimes brings a feeling of insecurity and uncertainty. The EPP Faculty are very approachable and helpful in dealing with questions as they arise. You should feel free to approach Doug Sicker, the Department Head; Scott Matthews, the Associate Department Head; your academic advisors; or any of the EPP faculty to seek assistance and advice.

This booklet is a compilation of facts, policies, guidance, and organizational details useful to a doctoral student in the Department of Engineering and Public Policy. The first part deals with academic affairs, and the second with general administrative and policy matters. Support and administrative policy matters are handled primarily by Vicki Finney, the Graduate Program Administrator; and Peter Luetkehans, the Business Manager. We hope you will pay careful attention to the details here, but feel free to discuss problems with the faculty and staff at EPP. Copies of this handbook will be available upon request. It is also available on the EPP doctoral studies Blackboard site (described in section 5.15).

At the undergraduate level, the primary degree offering is a joint BS in EPP with the five engineering departments as well as a joint BS in Science, Technology and Public Policy with other science and humanities departments. Between 6-8% of all undergraduate engineers at CMU participate in these double-major programs. The undergraduate program is over 30 years old. The department also offers a minor in Technology & Policy.

At the graduate level, the primary offering is a research-oriented PhD. Joint PhD degrees with all of the traditional engineering departments and several other departments across campus are available. Students wishing to pursue a joint degree will in most cases need to complete the qualifying exams and teaching requirements of both departments. Typically one defense committee is formed that satisfies the requirements of both departments. Students should refer to the COE policy on joint degrees with EPP for more information (engineering.cmu.edu/current_students/graduates/policies.html). The PhD program is over 35 years old. As of May 2016, we have produced 303 PhDs, 43 terminal MS graduates, and 3 fifth-year MS graduates. As of September 2016 there are 84 PhD students currently enrolled.

EPP is also home to the Engineering & Technology Innovation Management (E&TIM) MS program. E&TIM is a one-year interdisciplinary professional program offered by the College of Engineering. As of May 2016, E&TIM has graduated 165 MS students, including a two-year dual degree program with students from Biomedical Engineering, Chemical Engineering, Civil & Environmental Engineering, Electrical & Computer Engineering, Materials Science Engineering, and Mechanical Engineering. More information on the E&TIM program can be found at engineering.cmu.edu/etim/overview.php.

In the fall semester Adam Loucks will send an electronic copy of the EPP Directory that will provide you with a list of EPP graduate students, PhD alumni, faculty, and staff.

Major areas of graduate research in the department include energy and environmental systems, information and communication technology policy, risk analysis and communication, and technology policy and management (including technological innovation and R&D policy). Across these four focal areas, the department also addresses issues in engineered systems and domestic security, issues in technology and organizations, and issues in technology and economic development. We frequently undertake the development of new software tools for the support of policy analysis and research.

The faculty in EPP have either engineering or social science backgrounds. There are currently 53 faculty (including 20 research-track, teaching-track, part-time, visiting, or other special faculty members), 12 are affiliated faculty, 5 have full-time appointments in EPP, and 18 have joint appointments. Affiliated faculty supervise doctoral students, vote in faculty meetings, etc., but EPP does not pay any of their academic salary. Of the regular academic faculty, 25 are tenured. CMU offers a unique environment in which interdisciplinary research is encouraged and joint appointments work.

EPP PhD graduates go into consulting, academic and corporate positions, and also government offices, such as the U.S. Environmental Protection Agency, U.S. Government Accountability Office, Congressional Research Service, and National Labs. The academic jobs available to EPP graduates vary according to the individual research area. Graduates specializing in areas such as environmental systems and problems in industrial automation generally find a fit with traditional academic jobs in engineering-based departments. Graduates in areas such as telecommunication policy or risk assessment and communication have sought academic options in professional schools, business schools, and sometimes schools of public policy or public health. A growing number of academic programs are beginning to seek students with such broad interdisciplinary background. Demand for our graduates has always been strong among government, corporations, and consultants who recognize the unique capabilities of the EPP PhD.

1.1. EPP Washington Office

The EPP Washington Office offers students and faculty easy access to executive branch offices, Congress, analysis groups, and others in the Washington DC area. Students can gain exposure to national policy processes, receive input to help shape their research, and have the opportunity to communicate work results to the Washington community. The office serves as a base for the Tom Johnson Fellowship program, sponsors Washington-based seminars via videoconference, and coordinates an annual Washington D.C. study tour, along with other activities to provide students a link between campus and our nation's capital.

For more information or if you are planning a trip to DC and would like to visit the office, contact Korin Sharp, DC Office Director; phone: 202/326-6238, email: ksharp@andrew.cmu.edu.

2. Academic Affairs

This section describes the general academic framework of the program and facilities and your orientation to them. The official procedures regarding registration and enrollment are discussed later in Section 3.

The rules and procedures put forth in this booklet are applicable to students at the time they enter the program.

The point of a PhD is to learn to structure and to conduct research. Hence, the doctoral program in EPP is heavily research-oriented and students are encouraged to seek, identify, and begin to work on a research problem as soon as possible. The time for the completion of a PhD depends upon the rate of progress in research. The average length is between four and five years, independent of whether the student enters with a BS or MS degree. Students maintaining good progress in coursework and research are generally supported financially from research grants, so long as the funds are available in the student's area of research. After they have identified a research area and advisor, students are expected to work with the advisor in generating continuing or new proposals for funding as appropriate. We encourage students to apply for fellowships and provide information on availability, application deadlines, etc., on the doctoral studies Blackboard site. Another resource to find information on available fellowships is at the CMU Fellowships and Scholarships Office in Warner Hall. Their website is: www.cmu.edu/fso.

2.1. Grandfather Policy

As noted in the Preface, while college and university policies and protocols are binding, we try to be as flexible as possible with EPP rules and procedures while striving to be fair and equitable among students. Thus, if an EPP policy changes from the time of your matriculation, where possible we will allow you the option of being governed by the older policy.

2.2. Getting Started

Students in EPP are expected to take an active role in the selection of their courses and research areas right from the start. The student helps shape his or her interdisciplinary research problem with the advice of suitable faculty members from EPP and other departments. Because a research paper is required for the Qualifying Examinations after the third semester, it is up to the student to start meeting with faculty members early in the first semester. The student then has the time to discuss possible research areas and problems with individual faculty members and to begin to explore his or her interests in those contexts. It is expected that the student begin focused research toward the qualifier paper -- which would ideally be the starting point for the PhD dissertation research -- by the middle of the second semester, at the latest.

2.3. Meeting the Faculty, Academic Advisors, and Research Advisor

Upon arrival, you should contact your assigned primary advisor. You are also expected to initiate contacts with other faculty members, which also may have been listed for you. Appendix 1 provides a list of EPP faculty and relevant department and university contacts.

Upon entering the program, the primary academic advisor assigned to each student are primarily responsible for assisting students with course selection and other academic affairs in the early part of their stay in EPP. As research progresses, students may find it beneficial to have a different primary academic advisor. It is likely that this research advisor will also be your thesis advisor and the chairperson of your thesis committee. Once you have passed the thesis proposal, your thesis advisor is

responsible for providing general advice. The thesis advisor and committee are expected to provide guidance relevant to research and progress towards completion of the dissertation. It is common for PhD students in EPP to have multiple primary research advisors. Any student who feels that they need a new advisor should make a request to the Department Head or Associate Department Head and the issue will be discussed with the student.

Seminars are one vehicle by which students obtain information about the various research areas, but individual discussion with faculty members is also encouraged.

2.4. Graduate Education Committee

EPP has a Graduate Education Committee composed of faculty members from the department. Headed by the Associate Department Head, the Committee and various subcommittees meet several times a year to review departmental graduate matters, make decisions on admissions, and review petitions and requests made by students.

2.5. Course Work

The course requirements for a PhD are designed to provide students with a common core of knowledge and techniques useful in policy problems, as well as to give each student a mastery of a body of knowledge in the disciplines relevant to his or her individual area of research. Three categories of courses are included in the curriculum: Core courses; Type A courses in engineering, science, mathematics, and statistics; and Type B courses in social sciences and policy analysis. The following chart outlines the courses¹. Students in our other degree programs may have somewhat different requirements. The CASOS requirements as well as the requirements for SETChange, the EPP/Statistics joint degree, the EPP/Chemistry joint degree, and the Portugal Program dual degree are shown on the relevant Curriculum Progress Sheets available on the doctoral studies Blackboard site.

An overall 3.0 grade-point average is expected throughout the course of your studies. No more than two courses with a grade of C can be used towards meeting course requirements. Any student 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, or with a research course grade less than B in the most recent full semester completed, is automatically and immediately placed on academic probation. See Section 3.2.4 for more information on inadequate progress and probation.

CORE (Courses on policy research and problem-solving skills)	
- 19-701 Intro to the Theory and Practice of Policy Analysis	12 units
- 19-702 Quantitative Methods for Policy Analysis	12 units
- 19-704 Applied Data Analysis or other approved elective in social science/survey statistics	6 units
- 19-705 Workshop in Applied Policy Analysis (Prep for Part B Qualifier)	6 units (optional)
- EPP Teaching Practicum (19-752 or 19-753)	12 units
TYPE A (Courses in engineering, science, applied math and statistics)	
- 12-704 Probability & Estimation Methods for Engineering Systems	12 units

¹Carnegie Mellon University course credits are counted in terms of units. Three units are equivalent to one semester hour. Most undergraduate courses are 9 units. Graduate courses are 12 units or 6 units (mini-courses running for half a semester). Full-time student status requires registration for a minimum of 36 units. EPP graduate students generally take a course load between 42 and 48 units.

- 19-785 Engineering Optimization (Recommended, 12 units) 6-12 units
or another suitable course incorporating optimization (such as
36-725 Optimization, 21-690 Methods of Optimization, or
45-751 Optimization)
- Technical courses in area of focus 36 units

TYPE B (Courses in social science and social analysis)

- 90-908 PhD Microeconomics (This is the recommended course.) 12 units
Students with no previous courses in economics may request to first take
19-681 Managerial & Engineering Economics, but are encouraged to take
90-908 after as a Type B elective.
- 24 units of courses in social science and social analysis in area of 24 units
focus, with at least 6 of the units in the area of political science,
regulation or law.

Overall, students are expected to take at least 132 units beyond the BS degree to fulfill the requirements for a PhD in Engineering and Public Policy:

- A minimum of 42 units in core courses (includes teaching practicum)
- A minimum of 54 units in Type A courses (includes a course in optimization)
- A minimum of 36 units in Type B courses (includes 6 units in the area of political science, regulation or law)

In order to develop the skills needed to complete their PhD, students typically take more than the minimum numbers of courses required.

Candidates for the MS degree must complete a minimum of 102 units:

- A minimum of 42 units in core courses (includes Teaching Practicum)
- A minimum of 27 units in Type A courses (12-704 plus two technical courses)
- A minimum of 24 units in Type B courses (Microeconomics course plus one social science/social analysis course)
- A minimum of nine units in independent research

In addition, the student must pass the Qualifying Exams, at least at the MS level and have their completed MS paper approved by their advisor or the Department Head. They must also fulfill the general requirements of the College of Engineering (COE) as noted on the COE graduate policies website (engineering.cmu.edu/current_students/graduates/policies.html).

2.5.1 Core Course Requirements

The principal component of the EPP core curriculum is a sequence of courses on perspectives and tools for policy analysis: 19-701, 19-702, and a course in social science/survey statistics (19-704 recommended). Our core courses have been arranged to allow completion of the core sequence by the time students take their qualifying exams in the beginning of their fourth semester.

“Introduction to the Theory and Practice of Applied Policy Analysis” (19-701) is a lecture and discussion course that reviews and critically examines a set of problems, assumptions, and analytical

techniques that are common to research and policy analysis in technology and public policy. The objective is to look critically at the strengths, limitations, and underlying assumptions of key policy research and analysis tools and problem framing, and to sensitize students to some of the critical issues of professional responsibility, ethics, and values that are associated with policy analysis and research.

“Quantitative Methods for Policy Analysis” (19-702) is a course that provides a broad introduction to analytical and computational methods commonly used to address technical policy issues. Particular emphasis is placed on methods for decision analysis and simulation.

An additional, optional course offered in the policy sequence is “Workshop in Applied Policy Analysis” (19-705). This course is designed to provide experience in setting up, analyzing, and writing about policy problems of the type that are used in the Part B qualifying exam (described below). Over the course of the semester, the class works through six or seven policy case problems. Much of the work is done in small groups. The principal focus is on integrating the qualitative and quantitative aspects of the problems and on identifying and practicing general problem solving strategies.

Students are also required to take graduate courses in probabilistic and statistical analysis, microeconomics, and optimization. Two courses, 12-704 "Probability and Estimation Methods for Engineering Systems," and 90-908 “PhD Microeconomics” are recommended to fulfill the requirements in statistical methods and economics.

While specific courses are listed, alternative CMU courses or prior graduate level coursework may be acceptable substitutes. To fulfill the microeconomics requirement, students should discuss their economics background with their faculty advisor.

- Students with previous graduate courses in calculus-based microeconomics may petition the Graduate Education Committee for a waiver.
- Students with previous economics coursework should take 90-908 "PhD Microeconomics." This is the preferred course.
- Students with little to no economics coursework may request to take 19-681 "Managerial and Engineering Economics."

The remaining course work required is determined by the student and a faculty advisor. The determination is made based on the student's background and preparation, the requirement for a firm grounding in the tools and techniques of policy analysis, and looking at the student's technical area of focus.

In their first semester, students will take 19-701 “Introduction to the Theory & Practice of Policy Analysis,” and usually either a Microeconomics course, and/or a Statistics course, and/or an elective suggested by your advisor. Students should also register for 6 units of research (19-700). Course selection for the first semester is made in consultation with your assigned advisors and other faculty members as appropriate. In selecting courses, the student and advisor(s) should keep in mind that it is advisable to select courses that would define a core area of specialization for the student. Examples of such areas could be operations research for engineering management, environmental engineering, telecommunications and network analysis, manufacturing and quality control, weapons proliferation and control, etc.

Students who have already identified a research problem and an advisor take Project Research (course 19-750). 19-700 is expected to be a circumscribed research effort on a topic, while 19-750 is seen as a continuing research project over a number of semesters. Students who have passed the Qualifiers register for research under PhD Thesis Research (course 19-799).

Students will take 19-702 in their second semester (spring). In their 3rd semester, students take 19-705 (though 19-705 remains optional, virtually all of our students take it to prepare for the qualifying exams). Students should also take a social science/survey statistics course in their second or third semester, from a list of approved options (the preferred option for this requirement is the 6-unit mini course 19-704 “Applied Data Analysis,” offered in the 2nd half of the spring semester). Following these guidelines, students should be finished with core courses by the time they take their qualifying exams in the beginning of their 4th semester.

Teaching Practicum

Students are expected to complete their teaching practicum requirement in their third year. Second-year students may make a request to the Graduate Program Administrator to complete their practicum requirement early, but third-year students will be given priority. Students fulfill practicum in one of two ways, either by serving as a Project Manager for the EPP undergraduate group project course, or serving as a Teaching Assistant for an approved EPP undergraduate or graduate course.

Prior to their third academic year students will receive an email indicating they are due to complete practicum. The email will ask if they have a preference on assignment, but will also note that the final decision on assignment will be based on several factors such as faculty preference, course and instructor needs, and ITA test scoring (applicable for international students). Students are encouraged to discuss assignment choices with their advisors to see what could be useful for future career and current research demands. Once the assignment has been made, the student will receive an email confirmation. The student will be registered by the department for the appropriate practicum course, either 19-752 “EPP Project Management,” or 19-753 “EPP Teaching Practicum.”

Information on these assignments follows:

Students who have been assigned to Project Management (PM) will serve as a project manager for one of the EPP Project Courses, the capstone course for the undergraduate major. The course has been described as 20-30 undergraduates completing the equivalent of an MS thesis in four months, where they have a relatively unstructured problem that they need to frame, research, analyze, and write up and present. Project Managers work with two faculty instructors to manage the students. Project topics are developed in summer for Fall, and in late fall for Spring. Project Managers sometimes get to weigh in on topics.

Students who have been assigned to serve as a Teaching Assistant (TA), will do so for an approved EPP or E&TIM course. These courses include the undergraduate “Introduction to EPP” course, E&TIM cores courses, and other EPP graduate and undergraduate core courses with large enrollments. TAs are expected to do more than just grade papers. They also work with students one-on-one, create and evaluate assignments prior to giving to students, may conduct recitations, or teach a class or two, and be available outside of class to assist students and answer questions. This is a great option for students who might be planning a faculty career someday.

Both PM and TA positions are equally time consuming. Both are expected to attend the class during its assigned time. Non-native English speakers will need to take the ITA test and score at an acceptable level. It is therefore important that students with weak English skills begin working with the Intercultural Communication Center (ICC) as soon as their first semester. Students should refer to Section 3.3.2 for information on the ICC.

Please let the Associate Department Head know if your assignment differs in scope.

In mid-August students will be expected to attend a TA/PM training session taught by the Associate Department Head to help prepare them for their upcoming assignment. Students should also consider using the resources available from the Eberly Center for Teaching Excellence (referenced in Section 12).

2.5.2 Type A Requirements

Type A courses are technical in nature, in areas such as engineering, science, applied mathematics, and statistics. All students are required to complete a first-year graduate course in applied probability and statistics. Currently, the recommended course to meet this requirement is 12-704 "Probability and Estimation Materials for Engineering Systems." Other course options are available on the Blackboard site.

A course in optimization is also required. The recommended course is 19-785 "Engineering Optimization" (12 units), other course options are available on the doctoral studies Blackboard site.

To meet the remaining Type A units required, students confer with their advisors to choose other graduate technical courses in engineering, science, applied mathematics, and statistics. There are two motivations for this requirement. First, before one can extend the perspectives and tools of engineering, one must develop a firm notion of what these perspectives and tools are. Second, the technical dimensions of the policy problems that are addressed by students pursuing graduate studies in EPP cannot be treated as a "black box," where there is no appreciation of how the system works. EPP graduate students must develop the skills to deal with the technical aspects of these problems. It is intended that students develop a level of mastery in their technical area of focus similar to that obtained in a traditional program of graduate study in that area.

2.5.3 Type B Requirements

Type B courses are non-technical in nature, in areas such as social science or social analysis. All students must take a graduate-level course in applied microeconomics (currently 90-908 "PhD Microeconomics," or with approval 19-681 "Managerial or Engineering Economics"). A minimum of 24 additional elective units are required. Several courses in quantitative research methods in the social sciences are available. Courses in political science and social processes are also encouraged, and it is intended that students will develop a healthy sense of cultural relativism, a notion of the way in which values and social organizations shape our thinking, and an understanding of the way in which these factors have changed and can change with time. Such notions are difficult to characterize in quantitative terms, but are fundamental to a proper understanding of many of the problems that EPP graduate students address.

At least 6 Type B units must be in the area of political science, regulation, or law.

2.5.4 Notes on Elective Courses

Note that units for certain courses spanning technical, policy, and social aspects may be split and counted partially for Type A and B course requirements (e.g., count half the units in each category). Similar flexibility may apply to other courses as well, for example certain courses in econometrics may be categorized as either Type A or B courses. If you have questions about such practices, check with your advisor or the Associate Department Head before registering.

Our students commonly take courses in the Heinz College, the Department of Social and Decision Sciences, the Department of Statistics, and the Tepper School of Business. Courses can be viewed each semester on the Hub's website -- www.cmu.edu/hub. Students may also cross-register to take one free course per semester at a participating local university. Details on cross-registration are discussed in Section 3.1.2.

As noted above, students may petition to count similar courses taken at other institutions in place of core, Type A or Type B courses in the curriculum. Such courses must be at the graduate level and with high overlap in the content of the listed courses. In these cases, students "waive" expectations of taking the courses again at CMU and are deemed to have completed the requirement. In such cases the unit requirements do not need to be met from replacement coursework.

Overall, students are generally restricted from counting more than 24 units of graduate coursework from another graduate degree in their EPP curriculum.

As noted at the beginning of this section, an overall 3.0 grade-point average is expected throughout the course of your studies. No more than two courses with a grade of C can be used towards meeting course requirements. Courses receiving pass/fail grades cannot be counted towards degree requirements, with the exception of 19-705.

2.6. Academic Integrity: avoiding plagiarism, proper attribution, and research ethics

To plagiarize as defined by Webster's Dictionary is: "To steal and pass off as one's own (the ideas or writings of another): use (a created production) without crediting source...: to commit literary theft: present as new and original an idea or product derived from an existing source."²

Plagiarism is a very serious offense and will not be tolerated by the Department. It can result in immediate loss of support, a failing course grade, and potential removal from the degree program. The department may also recommend expulsion from the University to the Provost. If you are unsure of how to cite a source or not sure if you need to cite a source – ask your advisors, the Department Head, or Associate Department Head for guidance. Appendix 2 is a memo from Granger Morgan and Doug Sicker regarding proper attribution. Please review it carefully.

The Intercultural Communication Center (ICC) offers three short (≤ 10 minute) training videos on plagiarism and proper citation. International students are encouraged to watch these videos prior to the start of classes. More information on the ICC is discussed later in the handbook.

² Source: Webster's Third New International Dictionary of the English Language Unabridged, Merriam-Webster, Inc. Publishers, Springfield, MA 2002.

In addition to the above, all students are expected to review the University's expectations at: www.cmu.edu/academic-integrity/index.html.

In order to keep this process just, students have the right to appeal to the Provost's office. Further information on a student's right to appeal can be found in section 3.2.5.

We require that all students in EPP complete both the Responsible Conduct of Research (RCR) education training as well as an online plagiarism session.

The RCR training is web-based and offered by the Collaborative Institutional Training Initiative (CITI). Students only need to complete the 'Physical Sciences' module³. This training session will take a few hours to complete, but students will be able to log in and out over a period of time to complete the training. The first step is to visit the CRC website and create an account: www.citiprogram.org/Default.asp.

The online plagiarism session is offered by the University of Indiana and can be found at: www.indiana.edu/~tedfrick/plagiarism/.

Both of these training sessions will offer a confirmation certificate at the end that you will need to print out and submit to the EPP Graduate Program Administrator. Note that the research ethics session will indicate that you can send the confirmation certificate directly to CMU electronically, but unfortunately this does not work. You must download the certificate and submit it in paper form. The deadline for completion of both sessions is September 30.

Information on the University's principles and standards for conducting research are found on the Office of Research Integrity and Compliance website, www.cmu.edu/research-compliance/responsible-conduct/.

2.7. Keeping Track of Course and Research Progress

A record of the student's progress is kept in the form of the Curriculum Progress Sheet. Appendix 3 shows the 3-page Curriculum Progress Sheet to be completed by the student each semester with the help of his or her primary advisor to ensure that course requirements are being met and to enable the student to document progress in his or her program. Students will receive an email reminder from Enrollment Services when it is time for the next semester's registration. The student should meet with their advisor prior to the next semester's registration week, update their Curriculum Progress Sheet, have their advisor sign Page 2, and give a copy to the Graduate Program Administrator to update in the online student audit system discussed below. Page 3 is for information they wish to keep track of.

While you should always be discussing your progress with your advisors, you must meet with the Associate Department Head several times during your graduate studies. These meetings should take place as follows (and only if changes have occurred since the previous meeting):

³ If you have completed a different Responsible Conduct of Research Training module, inform the graduate program staff. Most likely what you have done will be acceptable and you will not have to complete the physical science module.

1. When you believe you have completed all required coursework (i.e., core courses, type A, and type B) as outlined on your Curriculum Progress Sheet. You will need to meet with the Graduate Program Administrator prior to this to verify the courses and grades on your Curriculum Progress Sheet and enter them in student audit system.
2. About a month before your thesis proposal, to ensure all courses are updated on the curriculum progress sheet for the thesis proposal committee to consider.

A formal review of a student's progress in the program should take place as part of the student's PhD thesis proposal. The review certifies that the EPP PhD course requirements have been met by the student. If, as part of the PhD thesis proposal, the student's thesis committee believes that additional coursework is needed for the student to achieve an acceptable level of mastery of their area of research, then up to two additional courses (beyond the standard EPP PhD course requirements) may be specified and required by the thesis committee, with approval of the EPP Department Head.

After each of these meetings, you will need to obtain the Associate Department Head's signature in Section IV of the Curriculum Progress Sheet. Please note that while these three meetings are required, you should feel free to contact the Associate Department Head at any time to discuss any concerns you might have regarding graduate matters.

Note: The Curriculum Progress Sheet for students in the SET Change, CASOS, and the EPP/Statistics and EPP/Chemistry joint degree programs are also attached in Appendix 3.

In addition to Curriculum Progress Sheets, EPP also uses a web-based student data system (gsaudit.cs.cmu.edu) that can track course and research progress. Students write self-assessments of their academic and research progress near the end of each semester, and advisors provide feedback. These interactions factor into grading for research units and help to assess whether students are making sufficient progress. They are also intended to facilitate dialogue with advisors on areas for improvement.

2.8. A General Progress Schedule for most EPP Students (students in joint and special degree programs should refer to their specific curriculum progress sheet)

A typical student in a typical semester will take 48 units composed of 12-36 units of coursework and the remaining units for research. Generally students take more coursework in the first two years and more research credits thereafter. The next page provides a sample progress schedule.

Sample Progress Schedule for Graduate Studies in EPP

- | | | | |
|-----------------|---|-----------|---|
| Semester 1: | <ul style="list-style-type: none"> •19-701 "Theory & Practice of Policy Analysis" •12-704 "Probability & Estimation for Engineering Systems" or equivalent statistics. •PhD Microeconomics (90-908 recommended or with approval 19-681) •19-700 "Directed Study" (EPP) – minimum of 6 units •An optional technical (A) course | | |
| | <ul style="list-style-type: none"> •Approach faculty members, begin to focus on research area. •Document initial research and study plan on Curriculum Progress Sheets. | | |
| Semester 2: | <ul style="list-style-type: none"> •19-704 or other approved course in Social Science/Survey Statistics •19-702 "Quantitative Methods for Policy Analysis" •Type A/B Courses •19-750 "Project Research," aimed at starting work on qualifier problem •Identify and pursue funding for research if necessary | | |
| Summer: | <ul style="list-style-type: none"> •Continue research in preparation for Part A •Preliminary Abstract for Part A due in late June •Receive initial faculty feedback on abstracts | | |
| Semester 3: | <table border="0" style="width: 100%;"> <tr> <td style="vertical-align: top; padding-right: 10px;">Optional:</td> <td> <ul style="list-style-type: none"> •19-705 "Workshop in Applied Policy Analysis" (Serves to help prepare for Part B of PhD Qualifying Exam) •Type A/B Courses •19-785 or alternative optimization course (should be taken by end of second year) •Write Qualifier Paper -- Preliminary oral presentation in early October for faculty feedback •Teaching Practicum (students are expected to complete this in their 3rd year) </td> </tr> </table> | Optional: | <ul style="list-style-type: none"> •19-705 "Workshop in Applied Policy Analysis" (Serves to help prepare for Part B of PhD Qualifying Exam) •Type A/B Courses •19-785 or alternative optimization course (should be taken by end of second year) •Write Qualifier Paper -- Preliminary oral presentation in early October for faculty feedback •Teaching Practicum (students are expected to complete this in their 3rd year) |
| Optional: | <ul style="list-style-type: none"> •19-705 "Workshop in Applied Policy Analysis" (Serves to help prepare for Part B of PhD Qualifying Exam) •Type A/B Courses •19-785 or alternative optimization course (should be taken by end of second year) •Write Qualifier Paper -- Preliminary oral presentation in early October for faculty feedback •Teaching Practicum (students are expected to complete this in their 3rd year) | | |
| Semester 4: | <ul style="list-style-type: none"> •Qualifying Examinations: January/February •Completion of course work (check w/Assoc. Dept. Head for verification of completion of coursework) •Start preparation of thesis research proposal •Teaching Practicum (if not already completed) | | |
| Semester 5: | <ul style="list-style-type: none"> •Thesis proposal (if not completed already). •Concerted effort towards thesis work. •Teaching Practicum (if not already completed) | | |
| Semester 6 & on | <ul style="list-style-type: none"> •Continue and complete PhD thesis work •Teaching Practicum (if not already completed) | | |

2.9. The Qualifying Examinations

The Qualifying Examinations are conducted once a year, and must be taken by the time students have been in the program for three semesters. Only students registered for 6 or more units in the current semester can take qualifying exams. The objective is to assess the student's ability to do interdisciplinary research based on sound knowledge of technical and social processes, good analytical methods, and the ability to structure and analyze problems in engineering and policy in a way that appropriately integrates the required knowledge, methods, and judgment. The levels of synthesis and evaluation to be demonstrated in these examinations go beyond those expected in most courses, although the core sequence (19-701 through 19-705) are aimed at developing and exercising this level of problem solving.

The Qualifiers consist of two parts discussed below: a research paper (Part A) and an extended take-home examination on an applied problem in policy analysis (Part B). All students will be expected to submit both Part A and B of the exam at the regular time (January) unless they have successfully petitioned the Graduate Education Committee for an exception by the end of the first month of their third semester. Students in the SETChange and joint EPP/Statistics degree program have the option of taking 19-705 for a letter grade or participating in the Part B exam. If the latter is chosen, then 19-705 remains optional. If the former is chosen, then 19-705 is required. The student is expected to communicate their choice with Adam Loucks.

2.9.1 Part A

For the EPP Part A Qualifier, the student must prepare an original research paper that addresses a problem in technology and policy in which the issues of technology play a central role. This paper is expected to demonstrate the student's ability to structure and perform research on problems in engineering and policy, including the ability to apply formal analytical tools in such research. The typical paper requires approximately one year of preparation, in parallel with regular course work. In preparing this paper, students are expected to seek the assistance and supervision of their faculty advisor and other members of the faculty. Considerable student initiative is expected in this process. The paper may be based on a joint project prepared under the supervision of faculty members from EPP and other departments.

The assessment rubric used by the faculty for Part A qualifier papers reads:

“The paper is expected to demonstrate the student's ability to structure and perform research on problems in engineering and policy, including the ability to apply formal analytical tools in such research. The typical paper requires approximately one year of preparation, in parallel with regular course work. In preparing this paper, students are expected to seek the assistance and supervision of their faculty advisor and other members of the faculty. Considerable student initiative is expected in this process. To pass at the PhD level, a student must demonstrate the ability to write a first-authored technology policy paper in the appropriate scientific style. Generally, this will be a Part A paper that, with some additional work, will soon be ready to submit for peer-reviewed publication.”

Students who have prepared such a piece of work prior to joining EPP may elect to use this work with the approval of the Graduate Education Committee. However, the student must demonstrate that the work is his or hers and not the product of a group effort in which he or she played primarily a supervisory role and that the work was done after he or she had obtained an undergraduate degree.

Students must have the topic of their paper and draft abstract approved by the faculty in the summer, at the end of their second semester, and give a preliminary oral presentation of their paper to the faculty in early fall. The final paper must be less than 5,000 words in length and must be submitted to the department for distribution to the faculty on a prescribed date in January, a few weeks prior to the oral examination date. At the examination, the student makes an oral presentation of the paper and is then questioned by the faculty. Faculty questions may relate to the specifics of the paper, as well as to related but more fundamental material that forms the basis of the paper topic or the methods used. Student performance is assessed based on the written paper, the presentation, and the responses to questions by a subcommittee of the faculty.

2.9.2 Part B

Part B of the Qualifying Examinations occurs soon after the Part A paper is submitted in early January. The objective of Part B is to examine a student's ability to structure an unstructured policy problem on their own and to select and apply appropriate problem-solving techniques. Students are presented with a problem in technology and policy, an extensive set of reference materials in English, and given five days to prepare a 10-page written synthesis. Examination problems are carefully constructed so as not to give a significant topic area advantage to any particular student. Student performance is assessed by a subcommittee of faculty based on the quality of the written paper in terms of how it structures and answers the questions presented.

2.9.3 Outcomes and Timing of Qualifying Examinations

Several outcomes of the Qualifying Examinations are possible. These are:

1. The student passes both parts of the examinations at the PhD level.
2. The student passes one or both parts at the MS level, but not at the PhD level. In this case the student is eligible to leave the program with an MS degree. However, the option is also open to retake the examination(s) one more time. Students receive individual guidance on whether they should plan to retake the examination or graduate with an MS. Students leaving with an MS degree must have a final version of the Part A examination paper approved by their advisor or the department head.
3. The student fails one or both parts. Such students are almost always advised to withdraw from graduate studies in EPP. They may, however, elect to retake the failed examination(s) one more time when next offered.

Since qualifying examinations are broadly offered in January of each year, students will typically retake exams in that timeframe. However, Part A examinations for students that initially pass at the MS level can be retaken as soon as the advisor and student feel that the research has sufficiently progressed for a re-evaluation. An ad hoc review committee will be constituted comprising faculty involved with the initial evaluation. All other expectations and requirements will be the same in terms of word count, etc. There is no early retake policy for Part B exams.

As timelines for the qualifying examinations are known months in advance, extensions on due dates are provided only in exceptional circumstances. Similarly, time extensions in accommodation memos (e.g., applicable to students with learning disabilities) are generally not applicable.

Students who retake the Qualifiers must do so within a year after the first attempt. Students who have failed one or more parts of the Qualifying Examination normally do not receive graduate assistantship support while working to retake the examination.

While it is expected that students take both qualifying exams at the end of their third semester, no student will be permitted to take either of the qualifying examinations for the first time later than the end of their fifth semester. Waiting beyond this time creates too long of a timeline before a student receives acknowledgment of their progress in the program.

Students who wish to postpone or defer a qualifying exam (either or both parts) must first discuss this with their advisor. If the advisor agrees, they must then write a petition to the department head and associate department head. Approval is not guaranteed. If approved, the department may count a deferment as their first attempt, e.g., if they are already well into their studies and deferring would otherwise lengthen the time until a first decision or create the possibility of a second attempt at a time too late in the program.

Failure to submit a paper or appear for qualifiers at the scheduled time will be considered a forfeit and will count as a failed attempt.

2.10. Thesis Proposal and PhD Committee

Once the Qualifiers and course work are completed, students spend full time on their thesis research. The proposal for the PhD thesis and a tentative schedule for the completion of the dissertation are to be presented to the student's PhD Committee.

Within six months of passing the qualifying examinations at the PhD level, the student should begin to formulate a written thesis proposal that includes a summary of any preliminary results available. The written proposal must be given to the student's PhD Committee at least one week before the oral presentation of the proposal. Once the proposal date has been finalized, the student must email the graduate program staff with the following details: date, time, and location of the proposal; the names of the thesis committee, noting the visitor's affiliation, and noting who is chair. This information is needed for official record keeping.

The PhD Committee is appointed jointly by the student's thesis advisor and the Department Head with the advice and consent of the student. The committee must have a minimum of four members, at least two of whom must be EPP faculty members and at least one of whom does not have any appointment with EPP (this precludes affiliated faculty). The function of the PhD Committee is both evaluative and supportive, but primarily the latter. The committee should be made up of individuals who have the necessary knowledge, and who will be able to provide timely advice, feedback, and support. The EPP members of the thesis committee are also responsible for certifying that departmental course requirements have been met, including the selection of courses to fulfill the student's particular core area of mastery. The student should look at the different facets and disciplines involved in their work and choose the committee members to represent that cross-section. If circumstances require it (i.e., a committee member requests to be removed or can no longer serve or the student and their advisor(s) no longer believe that a committee member is making a constructive contribution to the thesis committee), then the student and their advisor(s) may submit a request to the EPP Department Head to replace the committee member with a new (appropriately qualified) member.

The written thesis proposal is a document that describes in detail the thesis problem statement and proposed plan and method of research, as well as a brief review of the background of the topic. The proposal should include a tentative schedule for the completion of the development phases of the work.

The proposal presentation to the PhD committee serves also as an occasion for a detailed discussion of the proposed research between the student and their committee. Ideally, the student should consult with all the committee members on a regular basis throughout the development of the thesis in order to benefit from the varying backgrounds of the committee members. Thesis proposal copies are submitted to the Graduate Program Administrator on a voluntary basis by the students. You are encouraged to ask colleagues for copies of previous thesis proposals as a guide.

The length of the thesis proposal presentation can vary. A rough rule of thumb is that the presentation be no more than 40 minutes long. When the proposal is accepted by the PhD Committee a yellow card signed by the committee members is sent to the Associate Dean by the Graduate Program Administrator to signify the completion of the qualifying process for acceptance to PhD candidacy.

EPP Thesis proposals are open to members of the CMU community unless a closed proposal is specifically requested by the candidate or their thesis advisor. Unlike the thesis defense, the department does not formally announce when a thesis proposal will take place. Students will be informed of the results of their thesis proposal examination within two days of the oral proposal. Possible results include: i) pass, in which case the student becomes a PhD candidate; ii) potential pass, in which case the student must redo the thesis proposal within one year, and the “yellow card” is held until the second proposal examination; or iii) fail, in which case the student will be asked to leave the program at the end of the semester in which the failed thesis proposal took place.

2.10.1 Student Status Statutes of Limitation

As outlined in the university doctoral student status policy (excerpted in part below), there is a time limit to degree completion as follows:

Students will complete all requirements for the PhD degree within a maximum of ten years from original matriculation as a doctoral student, or less if required by a more restrictive department or college policy. Once this time-to-degree limit has lapsed, the person may resume work towards a doctoral degree only if newly admitted to a currently offered doctoral degree program under criteria determined by that program.

Under extraordinary circumstances, such as leave of absence, military or public service, family or parental leave, or temporary disability, a school or college may, upon the relevant department's recommendation and with the written approval of the dean, defer the lapse of All But Dissertation status for a period commensurate with the duration of that interruption. Students, who are pursuing the PhD degree as part-time students for all semesters of their program, as approved by their program, may also appeal to their program or department for extension of the time to degree limit.

In COE students have 6 years from completion of the qualifying exams (in EPP this includes thesis proposal) to complete all formalities for the PhD, including final thesis submission to the department. COE policy states: “If, at the end of this six-year period, the PhD has not been awarded, the student must reapply for admission to the graduate program and will be judged competitively with other students applying at the same time.” These statutes of limitation are designed to make sure that the student's knowledge in the field is current when he or she receives the degree.

More information on degree statutes of limitations can be found on the COE policy website: engineering.cmu.edu/current_students/graduates/phd_policies.html, as well as the university's doctoral student status policy: www.cmu.edu/policies/student-and-student-life/doctoral-student-status.html

2.11. PhD Research and Dissertation

PhD thesis research is expected to be professional research of the highest caliber and must contribute to advancing the body of knowledge in the field. It is the student's responsibility at all times to ensure they are communicating with their advisors and making decisions that allow them to make academic and research progress. If a student is not making satisfactory progress in their research, and/or is not regularly meeting with their research advisor, and/or is not identifying or meeting agreed upon goals, their advisor should be communicating their view of the student's under-performance through feedback and research grades, and also has the right to terminate their funding.

The PhD dissertation, which describes the research and results in detail, must be a scholarly work in the substantial content as well as in the presentation. The contribution of the thesis must be considered significant and original by the research community in the field, represented by the student's thesis committee.

The University's regulations governing research including human subject research, conflict of interest, export controls, and research misconduct are found on the Office of Research Integrity's website: www.cmu.edu/research-compliance/.

The dissertation document must contain, in addition to details of the main work, the context and placement of this work in the general field of study. The document should be a coherent presentation consistent with standards and documentation requirements (such as references) expected of scholarly work.

The student's advisor and thesis committee are the final judges of the quality and quantity of research and writing required to complete the dissertation. They judge the quality of contribution including the analysis and originality of the work to the field. The work is usually equivalent to that which would result in three or four publishable papers. In certain cases, when the student's research has led to the publication of a number of significant peer-reviewed journal articles (e.g., 3 to 4), the manuscripts for these papers (either published or accepted for publication) may be directly submitted as the major text for the thesis along with brief introductory and concluding chapters describing the overall theme and context of the papers. Approval by the student's thesis committee is required for this type of dissertation.

The dissertation must be complete in all details when submitted to the committee. The changes requested or recommended by the committee should be made and a final PDF version must be submitted to the thesis advisor along with four signature sheets. It is very important to acknowledge all of the financial support you have received during your graduate studies on your acknowledgements page.

Instructions on completing your dissertation requirements, including templates and formatting guidelines, are found on the doctoral studies Blackboard site. Students should refer to these guidelines as they begin to produce their dissertation and should meet with the Graduate Program Administrator.

The deadlines posted on our college website for thesis submission are outlined below. Again, students should refer to the guidelines on Blackboard for the most current information.

Submission of Dissertation to the Department—by the following due dates: May graduates, 10 days before the Final Grades for Graduating Students Due date; August graduates, two days before the Final Grades Due date; December graduates, two days before the Final Grades Due date.

2.11.1 Publishing Student Work

An emerging trend in publishing scholarly work is to provide “open access” at no cost to potential readers. To enable this, authors are typically required to pay an upfront fee at the time of acceptance of a paper to offset costs. Such costs are not generally funded by the Department. However, various possible sources of funding include:

1. The CMU Libraries offers funding to help students publish open access articles, see: library.cmu.edu/datapub/sc/oa/apc/funding
2. Faculty research grants
3. Faculty discretionary funds
4. If the sources above have provided most but not all of the funding needed, then students may petition the department to pay for the remainder.

Students should inquire about funding availability from the first three sources before submitting to journals that will charge such fees, so as to manage expectations on available funds and to avoid surprises.

2.11.2 Intellectual Property Policy and Relevant Websites

Students involved in projects could in some cases be involved in the development of intellectual property with commercial value. In such cases, the student should refer to the University policy governing intellectual property that can be found at:

www.cmu.edu/student-affairs/theword/acad_standards/creative/intellectual.html

Other policy websites that should be noted are:

- University Policies: www.cmu.edu/policies/StudentPolicy.html
- COE Graduate Student Policies: engineering.cmu.edu/current_students/graduates/phd_policies.html
- CMU Graduate Education Policies: www.cmu.edu/graduate/policies/
- Office of Research Integrity and Compliance: www.cmu.edu/research-compliance/
- Academic Integrity Website: www.cmu.edu/student-affairs/theword/acad_standards/integrity.html
- The Word/CMU Student handbook: www.cmu.edu/student-affairs/theword/index.html

2.12. Dissertation Defense

The completed dissertation must be handed in to your PhD Committee at least one month prior to the defense date. The student should schedule the date and time of defense suitable to his or her committee members, reserve the room and any necessary equipment.

You will need to work with your committee to schedule your defense. Schedule your defense so that you have enough time to make the necessary changes to be able to submit your thesis by the deadline. If available, use one of the EPP Conference Rooms (Baker Hall 129 or Wean Hall 3701).

The length of your presentation (defense) should be about 40 to 45 minutes. It is best to concentrate on your research and not on a big introduction.

College rules dictate that a public oral defense notice be sent to the Dean's Office and all COE Departments at least two weeks prior to the date of your defense. Accordingly, students will need to complete a defense announcement template and submit it to the graduate program staff for dissemination. The template as well as completion instructions are found on the doctoral studies Blackboard site.

Students will be informed of the results of their thesis defense within two days of the oral presentation (in most cases feedback is provided immediately following a brief deliberation by the thesis committee at the conclusion of the defense). As part of the feedback to the student, the committee specifies any changes that must be made prior to submission of the final written dissertation. Possible results of the dissertation defense include: i) pass (usually contingent on completion of any final changes to the written thesis specified by the committee); ii) potential pass, in which case the student must redo the thesis defense within one year; or iii) fail, in which case the student will be asked to leave the program at the end of the semester in which the failed thesis defense took place.

2.13 Thesis Binding and Copying

In addition to the required documents discussed in the previous section, we request that you provide three double-sided copies to the department for binding, plus any additional copies that you wish to have bound for personal use. The three copies will be used by the department as follows, one will be sent to you, one will be given to the department head, and one will be kept in the EPP library. You may choose to have the copies produced here on campus by FedEx Office or at one of the Copy Centers. In that case, the graduate staff will give you an EPP account number to use for the FedEx Office so that the copies will be direct billed to the department. Or, you may use the department printers and copy machine for the three copies. The staff will take care of the thesis binding procedure. The cost for binding is \$22 per book. You will not be charged for three of the books. Please meet and discuss the procedure and payment details with the Graduate Program Administrator once you have completed your thesis defense.

2.13.1 Copyrighting the Dissertation

Except in unusual circumstances, you will automatically hold a U.S. copyright in your thesis. You may also choose to register your copyright with the U.S. Copyright Office.

Ownership of the copyright in your thesis is determined by several factors including U.S. copyright law, Carnegie Mellon's Intellectual Property Policy, and the publication agreements with journals with which you have published any part of your thesis. Carnegie Mellon's policy is

that students retain copyright in books and articles except in certain situations, such as when the books or articles are the result of internally or externally sponsored work or a work created as an employee of the university. Most students will therefore hold copyright in their theses, but whether you hold the copyright in your thesis will depend on the particular facts of your situation.

If you do hold the copyright in your thesis, your copyright exists automatically. You do not have to register a U.S. copyright for your thesis, but registration offers several benefits, including the ability to enforce your copyright and to collect certain types of damages.

ProQuest UMI Dissertation Publishing Information Service offers a copyright registration service. When you register through ProQuest you retain the copyright; ProQuest is just the broker. If you are interested in using ProQuest, you will need to complete the ProQuest form found on the COE website, include a check or money order for \$55, and submit it to the Graduate Program Administrator. More information on ProQuest is available on the COE website and also from the Graduate Program Administrator.

If you have submitted parts of your thesis for publication in a journal, or plan to do so, this is more involved. If you have already submitted parts of your thesis for publication to a journal, prior to sending it to ProQuest for copyright, you must get permission from that journal if the publication agreement with that journal assigned the copyright for that article to the journal. If you are planning to submit your thesis (or part of it) to a journal and have not done so before submitting it to ProQuest, you can register the copyright for your entire thesis with ProQuest and still send it to the journal. In this case you will be the one to hold the copyright unless the publication agreement with the journal assigns any part of the copyright. Before publishing your thesis or attempting to register copyright in your thesis, you should contact any journals in which you have published or plan to publish part of your thesis to discuss their copyright policies and ensure either that you have the copyright in that part of your thesis or that you have permission to publish it as part of your thesis.

Some students have chosen to use a Creative Commons license. A Creative Commons license is, strictly speaking, not an alternative to copyright but a way to determine how your copyrighted material may be copied, distributed, and otherwise used. More information about the Creative Commons license is available at www.creativecommons.org.

If you hold the copyright in your thesis, whether registered or not, a separate page should have the copyright information on it, including the © symbol, the year of publication, the author's name, and the statement “All rights reserved” (for example: “© 2001, John Q. Student. All rights reserved.”).

Carnegie Mellon University Libraries provides helpful guidance and answers to questions on copyrighting your thesis (such as determining copyright ownership, copyright permissions, registering copyright). See www.library.cmu.edu/datapub/sc/dissertation/decisions for more information.

2.14. Career and Professional Development Center (CPDC)

The Career and Professional Development Center (CPDC) at Carnegie Mellon University provides career and professional guidance and resources to doctoral students. A career consultant can assist you with your resume, cover letter, job search, job fair preparation, interviewing strategies, and many other career-related topics. Contact the CPDC to schedule an appointment by calling 412.268.2064, or by visiting the CPDC in person on the ground floor of the University Center. You can also visit the CPDC's website for more information: www.cmu.edu/career.

2.15. Degree Convocation and Commencement Events

The University confers degrees three times a year – in May, August and December. However, there is only one University-wide Commencement event that is held in May. Students who have graduated during the prior August or December and those graduating in May are invited to participate in this event. Commencement is typically held the third Sunday in May. For the doctoral students, the University also holds a special Doctoral Hooding Ceremony the day before Commencement. Participation in all of these events is voluntary. The graduate program staff will disseminate information prior to the events.

In the past, students who just missed the May graduation deadline have asked if they could still participate in the May Commencement events. University protocol is that you will be allowed to attend the main ceremony, but you will not be permitted to participate in the Doctoral Hooding Ceremony. Only students who have been officially certified for graduation in the previous August, December, or that current May are eligible to participate in the Hooding. In order to participate in the EPP Commencement Breakfast, your defense should be successfully completed before Commencement and a reasonable target date set for final changes in response to the defense. All of this should be included in a memo from the student and his or her advisor to the EPP Graduate Education Committee three weeks before Commencement asking to be included, pending a successful oral defense. The Graduate Committee will approve these requests routinely, and the Graduate Program Administrator will follow up to check whether the defense was in fact successful and whether a target date before June 15 was set for completion of final thesis corrections.

2.16. Enrollment Verification

Periodically, students will need official enrollment or degree verification letters to send to prospective employers, loan agencies, scholarship committees, or for visa purposes. Enrollment Services is the only University office that can provide an official letter of enrollment, official transcript and enrollment verification. Enrollment verification can be requested online through The HUB at: www.cmu.edu/hub/records/verifications/index.html

3. Registration, Enrollment, and Student Status

3.1. Registration

Each semester, students must go through the process of enrolling (registering for courses) for the next semester. CMU has streamlined the process of enrollment by creating The Hub, located in the lower level of Warner Hall. The Hub includes the Registrar's Office, Cash Operations, and the Student ID Center. The Hub's webpage contains pertinent information on a variety of issues such as cross-registration, grading policies, financial aid, etc. Their website is www.cmu.edu/hub, phone x8-8186. If you encounter trouble with enrollment or have difficulty in dealing with the Hub, please see the

Graduate Program Administrator. The COE liaison in the Hub is Melissa Skasik (skasik@andrew.cmu.edu).

To Register for Courses: Each semester Enrollment Services will send an email indicating when it is time to register for the upcoming semester (in April for the fall semester; and in November for the spring semester). All graduate students intending to continue in the following semester SHOULD register at their scheduled time courses fill quickly. Registration is handled online via at the Hub's website. If you are not enrolled by the tenth day of class in a given semester, you will be administratively withdrawn and will not be able to register.

To register online, simply go to the Hub's website www.cmu.edu/hub, click SIO Registration, and go from there. If you have any problems, see the Graduate Program Administrator. Please NOTE: All full-time students must be registered for a minimum of 36 units.

EPP students may take courses in any of CMU's departments or schools. If there are courses you may want to take but are unsure, we recommend that you register for all of them, attend the courses and make a decision on which you want drop before the course drop deadline. Course add and drop deadlines can be found on the Hub's website. However, please be sure you do not drop below full-time status (36 units).

3.1.1 Summer Registration, Tuition, and Curricular Practical Training

There is no tuition charge for the summer **if** you register for a designated EPP reading & research course. These courses use Section R, or for students in the Portugal program Section PP. All of this information will be outlined in a memo that will be sent to you in April by the Graduate Program Administrator. Please note that if you take summer courses other than an EPP reading and research course, there will be a tuition charge that the Department will **NOT** pay. You should first check with the Hub to see if there will be a tuition charge for the particular course you wish to take. If so, and the course is related to your research, check with your advisor to see if they are willing to pay the tuition.

For international students, the Department offer a curricular practical training course 19-770 "EPP Research Practicum." This course was developed so that an international student may legally be registered for the semester while working outside of CMU. The benefit of CPT is that you are able to work without losing any of your Practicum training time. Students must consult with the Office of International Education (OIE) for eligibility before seeking an internship/co-op or signing an offer contract. It is important to note that in order to qualify for CPT, the job you are applying for must be directly related to your research and approved by your advisor. Since this is considered part of your research/course work, a grade will be required from your advisor. You will need to make your advisor aware that they will need to provide a research grade to the department at the end of the semester. Your advisor will need to sign your CPT form. If you have any questions on this procedure, see the Graduate Program Administrator. There will be an additional charge for CPT units that will not be paid by the Department. Students should check with the Graduate Program Administrator if considering an internship or if they have questions on procedure.

Important: When enrollment is complete, and at midterm, check to make sure you are registered for the correct courses and correct number of units. Because EPP students take courses from different departments and may do several course add/drops, mistakes can occur. If you do encounter an error, please see the Graduate Program Administrator. It is extremely important for all students registered full

time to make sure they are carrying 36 units or more. Failure to carry a minimum of 36 units for an International Student can result in termination of your student visa status by the Department of Homeland Security. Students receiving a stipend must be registered full time. Failure to register for full time units may result in loss of stipend and cause taxation issues.

3.1.2 Cross-Registration and Transfer Credits

CMU offers students the opportunity to take courses for credit through a cross-registration program (offered by the Pittsburgh Council on Higher Education (PCHE) and the cross-registration link below). By the process of cross-registration, students may take a course for credit at another participating university that is not offered at CMU, but is relevant to their research. The cross-registration procedure and list of participating universities is outlined on the Hub's website: www.cmu.edu/hub/registration/graduates/cross.html

It should be noted that students must be registered at CMU for full time units before they can cross-register. Thus, the cross-registered course cannot be counted towards a student's full time enrollment. If a student is cross-registered for a course and drops below full time at any point during the semester, the cross-registered course will automatically be dropped from the student's record, even if a grade has been recorded.

If applicable, 24 units of graduate coursework transferred from another university may be counted towards your PhD degree requirements if those credits were not used for other degree requirements. Transferring credits is not automatic and must be relevant to your area of study, approved by your advisor, and approved by the department head or associate department head. Pass/fail courses and courses with a grade below "B" may not be transferred. The department follows the College of Engineering's policy on transfer credits. Students should refer to the COE website for additional information www.engineering.cmu.edu/current_students/graduates/policies.html#transfer.

3.1.3 Auditing a Course

To audit a course is to attend the lectures, but not submit homework assignments or sit for the exams. It is not the same as periodically attending lecture. It is an official process that must be run through Enrollment Services. You will receive a grade of "O" on your transcript. To audit you must first register for the course online, then submit a Course Audit Approval form to the Hub. The deadline to choose to audit a course is the same as the course add deadline (currently the 10th day of class of each semester). The audit form is available on the Hub's website under the Forms & Guides link. Very important: If you submit the audit form to the Hub and are not registered for that course, the Hub will not process your form, but will instead mail it back to you through campus mail. In most cases, by the time you receive the 'unprocessed' form from the Hub the audit deadline will have passed.

Courses that are audited do not count towards PhD degree requirements.

3.1.4 Grades and Grading

EPP follows the grading policy used by COE, www.engineering.cmu.edu/current_students/graduates/policies.html. COE follows the University's grading policy: www.cmu.edu/policies/documents/Grades.html, and adds that

coursework or graduate project units with a grade of C- or lower are not acceptable toward graduate degree requirements.

In addition, as noted earlier, students in EPP are expected to carry an overall 3.0 grade-point average throughout the course of their studies. The department does not allow credit for more than two courses with a grade of C.

All of our research courses are given letter grades.

3.1.5 Policy on Pass/Fail courses

As noted earlier in the handbook, the department does not give credit for courses receiving pass/fail grades. The exception to this rule is course 19-705, which, while optional, most students will take in preparation for the qualifying Part B exam. This is the only pass/fail course that is listed on the curriculum progress sheet for which students will receive 6 units of credit.

3.2. Student Status

As mentioned earlier, a student must complete all formalities for the PhD Degree and submit the final copy of the thesis to the Department within six years after thesis proposal or within ten years of matriculation, whichever comes first. This statute of limitations is designed to make sure that student's knowledge in the field is current when he or she receives the degree and is discussed in more detail in the university's official Doctoral Student Status policy:

www.cmu.edu/policies/student-and-student-life/doctoral-student-status.html

3.2.1 Full-time and All But Dissertation In Residence Status (ABD)

Upon completion of their thesis proposal and required coursework students are to be regarded as ABD and will need to complete an All But Dissertation Status Agreement to change their student status from 'doctoral' (DOC) to 'all but dissertation' (ABD or one of the Portugal equivalents).

ABD students are expected to be enrolled full time (no less than 36 units), with full tuition being paid to the university. Under exceptional circumstances, and ONLY if they are one or two semesters from defending, ABD students who are self-supported and can demonstrate financial hardship may petition the college dean through their department for permission to register for 5 units of research. If approved, they may only remain as ABD for 5 units for two consecutive semesters, with summer counting as a semester. After that, they must either register for 36 units or change status to All But Dissertation In Absentia (ABS). ABS is discussed in the next section.

Students may remain on campus with ABD 5-unit status and will be considered a full-time student, but they may not receive a stipend, compensation, or any form of tuition payments from the department or CMU. They are considered self-supporting students and must pay the reduced tuition amount from their own funds.

3.2.2 All But Dissertation In Absentia Status (ABS)

All But Dissertation In Absentia (ABS) is a status for students who choose to leave the university with the intent of completing their dissertation but are not actively engaging with the

university and do not require substantial use of university resources as outlined in the CMU doctoral student status policy. The six-year time limit will continue to pertain to students registering In Absentia. Students In Absentia should also be mindful of the Student Statute of Limitations, discussed in Section 2.10.1 above. It has been our experience that students who choose to complete their dissertations In Absentia will often take years to finish. So while this may be an option for ABD students, it is not the recommended option.

To be eligible for ABS students must meet the following criteria:

1. Have completed all degree requirements except for the dissertation.
2. Have been enrolled full-time for two years (including summers).
3. Do not require substantial use of university resources.
4. Do not receive any financial support that is paid or administered by the university.

ABS is not a legal status for international students holding F1 or J1 visas. If a student chooses to become ABS they will not be billed for tuition until the final semester in which degree requirements are completed. In that semester, they will need to register and pay for 5 units of tuition. They will be assessed health insurance unless they complete the waiver form found on the University Health Services website. As with ABD status, these units must be paid by the student. They cannot be paid by the department or by a research grant. The Graduate Program Administrator will help with this final semester registration. Note that while on ABS status, the technology fee will be assessed to the student's account for each academic semester. This fee will allow the student to keep their CMU email account and also allow access to university licensed software until the time of official graduation or lapse of doctoral candidacy, whichever comes first.

Students on ABS status will not be permitted to retain a desk in EPP. When a defense date has been set, they must contact the Graduate Program Administrator who will help with final semester registration.

For additional information and rules on ABS status, students should refer to the official university Doctoral Student Status Policy: www.cmu.edu/policies/student-and-student-life/doctoral-student-status.html

3.2.3 Final Semester Tuition

The doctoral student status policy indicates that ABD students in residence who are registered full time (36 units or more), receiving financial support tied to their doctoral program that is paid or administered by the university, and submit their completed thesis and required documentation to the department in September may qualify to have their tuition readjusted to zero. They will be considered a December graduate and will need to pay all of the corresponding fall student fees. Currently in EPP, the date in September for this final thesis submission is September 26. Likewise, ABD students in residence who are registered full time (36 units or more), receiving financial support tied to their doctoral program that is paid or administered by the university, submit their completed thesis and required documentation to the department in February, and are officially certified for graduation by the department may have their tuition readjusted to zero. They will be considered a May graduate and will need to pay all of the corresponding spring student fees. Currently in EPP, the date in February for this final thesis submission is February 24. In each of these cases, paperwork will need to be completed both by the student and the Graduate Program Administrator. The final thesis submission dates will vary

from year to year, so students should refer to the doctoral studies Blackboard site for the most current thesis submission deadlines. Students should also check with the Graduate Program Administrator when they are ready to defend.

There is no tuition adjustment for students who carry reduced tuition, part-time tuition, or those who those who carry ABS status.

More information regarding ABD in residence and in absentia, is found in the official university Doctoral Student Status Policy: www.cmu.edu/policies/student-and-student-life/doctoral-student-status.html

3.2.4 Inadequate Progress and Probation

Due to poor performance in courses or inadequate progress on research, the faculty and administration of the department will in all cases work with the student to try and overcome these difficulties and try to help the student improve their performance. If, however, inadequate performance and progress continues to the point where the improvements needed for successful completion of the degree program appear highly unlikely, students will be asked to leave the program.

If the student feels that they might be “in trouble” either with their coursework or research progress, they should alert their advisor right away and should also talk with either the Associate Department Head or the Department Head. They should not wait until the problem becomes insurmountable.

At the end of each semester, after final grades have been posted, the academic performance of each student is reviewed. Any student 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, or with a research course grade less than B in the most recent full semester completed, is automatically and immediately placed on academic probation, which includes the following additional conditions:

- Students on academic probation may have any scholarships and/or financial awards rescinded;
- Students on academic probation cannot be selected to receive awards;

A student on academic probation will automatically be removed from probation during the next academic review if the student's semester and cumulative QPAs, and research grade, at that time, are 3.0 or better.

Coursework or graduate project units with a grade of C- or lower are not acceptable toward graduate degree requirements.

If an EPP student has a core or cumulative QPA lower than 3.0 at the end of two consecutive full semesters, the student will be dismissed from the EPP program. The student may appeal the decision by sending a formal letter stating the basis for appeal to the EPP Department Head within 10 days from the end of the semester. The student will have an opportunity to appeal a removal decision by the EPP Head to the Associate Dean for Faculty and Graduate Affairs of College of Engineering. If the dismissal decision is not overturned, the student is not entitled to a refund of tuition or student fees incurred during the semester in which the appeal was being considered.

The judgment as to when poor course performance or inadequate progress on research is sufficient to stop funding will be made by the Department Head following input from the student's advisor(s).

3.2.5 Summary of Graduate Student Appeal and Grievance

Graduate students will find the Summary of Graduate Student Appeal and Grievance Procedures on the Graduate Education Resource webpage, www.cmu.edu/graduate/policies/appeal-grievance-procedures.html. This document summarizes processes available to graduate students who seek review of academic and non-academic issues. Generally, graduate students are expected to seek informal resolution of all concerns within the applicable department, unit or program before invoking formal processes. When an informal resolution cannot be reached, however, a graduate student who seeks further review of the matter is to follow the formal procedures outlined here. These appeal and grievance procedures shall apply to students in all graduate programs of the University. Students should refer to the department specific information in this handbook for department and college information about the administration and academic policies of the program. Additionally, students may confer with the graduate student ombudsman, Suzie Laurich-McIntyre, slaurichmcintyre@cmu.edu, on issues of process or other concerns as they navigate conflicts.

3.2.6 Leave of Absence Process

For a PhD student, making progress in courses and research is a critical step in completing qualifying exams, proposals, and dissertations. If a student feels that they need to take time off from graduate studies, they should first consult with their advisor, and then with either the Department Head or Associate Department Head. Leaves of absence may be requested by students during periods of financial, personal, or academic problems in order to ensure a successful return to campus (policy www.cmu.edu/hub/registration/leave.html).

Students desiring to request a leave of absence will need to complete a Leave of Absence form found on the Hub's website and submit it to the department's graduate program administrator. It is important to note that a tuition refund may be in order depending on when the student began the leave process. The date on the form indicating when the "student began the leave procedure" is the date the Enrollment Services will use to determine whether a refund is due. The earlier the procedure begins, the greater chance of a refund. Beginning the leave procedure date is not necessarily the date that the form was signed. It can be when the student first seriously considered taking a leave and/or when they discussed it with their advisor.

Students taking a leave may not leave behind any personal belongings. The department will not store personal belongings, including books, and will take no responsibility for them. Therefore students should make arrangements to remove all of their items from the EPP office they occupied, and return department keys to the Graduate Program Administrator before they leave.

To return from leave, the student should contact their advisor and let them know they intend on returning. This discussion should involve completion of milestones, funding status, and research opportunities. To begin the return from leave process paperwork they will need to contact the department's graduate program administrator and complete the Return from Leave form also found on the Hub's website.

More information on the University's Leave of Absence Policy and associated forms can be found on the Hub's website: www.cmu.edu/hub/registration/docs/loa.pdf.

3.3. International Students

3.3.1 Office of International Education (OIE)

Carnegie Mellon hosts international graduate and undergraduate students who come from more than 90 countries. 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; supporting international and cultural student groups such as the International Student Union and the International Spouses and Partners Organization; 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.

OIE is located on the 2nd Floor of Warner Hall, x8-5231, www.cmu.edu/oie. Our college's foreign student advisor is Lindsay Pelz, email: lindsay@cmu.edu.

If you are enrolled at CMU and are planning to leave the country, you must check with OIE to make sure you complete the necessary documentation for exiting and re-entry into the U.S.

International students receiving a stipend, **must** ensure that their work authorization form (usually the I-20 or DS-2019) is up-to-date at the CMUWorks Service Center. Students cannot receive a stipend payment from Carnegie Mellon University with an expired work authorization. It is the student's responsibility to ensure that the Service Center always has the most current document on file. In addition, the student must present the updated document to the Service Center in person, they are not permitted to have a friend or staff member do so on their behalf. Students are informed by OIE and will receive notice ahead of time that their documents are going to expire. Please do not ignore these emails.

3.3.2 Intercultural Communication Center (ICC)

The Intercultural Communication Center (ICC) is a support service offering both credit and non-credit classes, workshops, and individual appointments designed to equip non-native English speakers (international students as well as students who attended high school 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. ICC offers a number of short (10-minute) video sessions on their website on topics such as plagiarism and participating in U.S. classrooms.

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. Graduate students are required to have a certain level of fluency in English before they can instruct in Pennsylvania, as required by the English Fluency in Higher Education Act of 1990. Through this Act, all institutions of higher education in the state are required to evaluate and certify the English fluency of all instructional personnel, including teaching assistants and interns.

As discussed earlier, students are expected to fulfill their teaching practicum by the end of their third semester. This means that international students should be working with the ICC as early as possible, as soon as their first or second semesters to ensure the best chance of success in passing the ITA test. ICC is located in Warner Hall, Room 418, phone 412/268-4979, www.cmu.edu/icc. Students are expected to take advantage of this excellent university resource.

Students are required to attend a 'language support check-in' meeting with the ICC soon after initial arrival at CMU. These check-ins are just a brief meeting with an ICC instructor. Students will need to bring a copy of their TOEFL report with them for the language check-in, and can sign up for a check-in on the ICC website once they arrive in the U.S.

3.3.3 Postgraduate Work in the U.S.

The Department of Homeland Security (DHS) has very strict guidelines that must be adhered to for non-U.S. students who wish to work in the United States after graduation. Work includes all university postdoctoral positions (even those at CMU). If it is your plan to work in the U.S. you will need to make an appointment to talk with an OIE counselor at least one full semester (4 months) in advance of completing your thesis. You will not be able to hold postdoctoral status or collect a pay until your new visa is issued, and you have met the department guidelines for graduation. Unfortunately, there is no flexibility in this matter and if you do not plan for this well in advance, there is nothing the department can do to expedite the process. To begin the process, you must secure a position, have the offer letter in hand from your perspective employer, and make an appointment to talk to an OIE advisor. They will explain the options that are available to you and will have the paperwork necessary to begin the process. Once DHS receives the paperwork it can take up to 3 months for a visa to be issued. Optional Practical Training (OPT) is also an option for non-U.S. students who wish to work in the U.S. after graduation. Again, you would need to meet with an OIE advisor to begin the paperwork. It can take up to 4 months for the OPT paperwork to clear DHS. For more information on this, visit OIE's website: www.cmu.edu/oie.

4. Funding

4.1. Graduate Research Assistantship (Stipends), Tuition and CMUWorks

The majority of EPP doctoral students are supported by research funding for their studies. These awards are generally paid via the department office, but do not use departmental funding sources. Departmental funds are typically only used as a funding source of last resort.

Graduate Research Assistantships are semi-monthly awards for support of full-time graduate study. They are not a salary, and carry no employee benefits. A Graduate Research Assistantship is a taxable stipend that can only be awarded to FULL-TIME students and is subject to federal tax withholding. A student receiving a stipend may NOT work for other remuneration either on or off campus.

Tuition payments are set up on a nine-month payroll deduction plan August to May. The exception to this are students in the dual degree Portugal program, their tuition is paid via scholarship posting handled through the department. Students on payroll deduction will see semi-monthly credits applied to their account beginning in August for the nine months of the academic year until the total tuition has been fully paid in May. Should you receive any amount of pay greater than your usual

stipend, an error has occurred and the overpayment must be returned to the department immediately. Likewise if an underpayment occurred, students need to report this as quickly as possible to the department's Business Manager or Graduate Program Administrator. Please note that it is your responsibility to verify that you have received the correct amount of stipend each month.

Students may be eligible contribute to the CMU employee retirement plan through Workday. For information on eligibility and steps to follow, contact the CMUWorks Service Center at 412-268-4600 or online at:

www.cmu.edu/cmuworks/students/students-semi-monthly.html

4.1.1 Direct Deposit

Graduate Students receiving stipend payments will receive semi-monthly direct deposits. You must set up a direct deposit account. Forms are available online from the CMU Works Service Center (www.cmu.edu/my-workday-toolkit/students.html). Expense reimbursements will also be paid via direct deposit. You must complete a separate direct deposit form specifically for expense reimbursements.

Thesis proposal increases are made three times a year as follows: in January for students who pass thesis proposal during the period September 1-December 31; in June for students who pass thesis proposal during the period January 1-May 31; and in September for students who pass thesis proposal during the period June 1-August 31. Students will need to inform the graduate program administrator that they have passed this milestone and are due to receive the payment increase.

4.1.2 Updating Address and CMUWorks

The CMUWorks Service Center is the central source for Onboarding, Human Resources (HR), Benefits, Payroll, Time Tracking, Workday, and Financial Systems questions and transactions. It is important that students update and keep current their local mailing address in the Student Information Online (SIO) system. CMUWorks pulls student information from SIO, such as mailing addresses that are used by the university when mailing W-2 IRS Wage and Tax Statements.

4.1.3 Summer Support

While summer support is not guaranteed, in many cases students who are receiving Graduate Research Assistantships (stipends) during the academic year are able to continue receiving this support through the summer if they plan to remain in the department and work on their research. This summer support depends on advisor approval and availability of funds. To this end, students should be meeting with their advisors to discuss their summer plans and whether their current support can continue through the summer. Students should not assume availability of summer support without first having discussed this with their advisors. A good time for students to check with their advisor about summer support will be in April when students receive a memo from the Graduate Program Administrator explaining summer support, and requesting information on funding for the summer and upcoming Academic Year. College rules dictate that students receiving a stipend (regardless of semester), must be officially registered for full-time (36 or more).

4.1.4 Restrictions on Graduate Research Assistantships (semi-monthly stipends)

There are restrictions attached to students with Graduate Research Assistantships. Namely, research assistants are not permitted to work outside of the Department, except in very special

circumstances and with the prior written permission of the Department Head (e.g., you may be permitted if it is work directly related to your research and you have the approval of your advisors).

As noted in a previous section, international students receiving a stipend, **must** be sure that their work authorization form (usually the I-20 or DS-2019) is up-to-date at the CMUWorks Service Center. Students cannot receive a stipend payment from Carnegie Mellon University with an expired work authorization. It is the responsibility of the student to ensure that the CMUWorks Service Center has the most current document on file. Additionally, the student must present the updated document to the Service Center in person, they are not permitted to have a friend or staff member do so on their behalf. Students are informed by OIE and will receive notice ahead of time that their documents are going to expire. Do not ignore these emails, and do not leave the country without ensuring documents are updated with the Service Center.

4.1.5 Payment of Health Insurance and Student Fees

Students are responsible for paying health insurance, the student activities fee, and the transportation fee each semester by the due date noted in their SIO account. Students may enroll in the TMS payment plan offered by the university to pay these fees on a monthly bases versus lump sum before the posted due date. See Section 6 for more information on paying health insurance and TMS.

The University's technology fee will be paid for students who are receiving tuition and/or stipend support (whether full or partial) that is paid from EPP department funds or EPP research grant funding. Technology fee payments will appear as semi-monthly credits on your student account throughout the fall and spring semesters. Students in the Portugal program will see a lump sum scholarship posted to cover the full amount of the technology fee each semester.

Students who are not eligible for the technology fee payment are students who are self-supporting, receive full external funding, are part-time, or are on reduced tuition (such as ABD 5 or 18 units, or In Absentia). These students must pay the technology fee in addition to the fees noted above.

Students who receive scholarships that cover fees (such as the NSF or EPA Star) will have their fees paid in a lump sum by scholarship posting each semester. They are responsible for paying their health insurance.

Students in the Portugal program are responsible for paying the student activities fee and transportation fee when they are officially located at CMU. When they are officially located in Portugal, they should not be assessed the student activities fee or the transportation fee.

4.1.6 Time off

All students who are currently enrolled are expected to read and respond to email in a timely matter. They should not just disappear or be unresponsive.

Students not supported on U.S. Government Funds

Students are encouraged to remain on campus during holiday breaks and spring break, with the exception of official University closings. Winter and spring breaks are excellent times to make progress on research. A student who wishes to take a short break must receive prior approval from their research (funding) advisor. If they are not working on research during this time, they should check with their research (funding) advisor as to whether it is appropriate to suspend their stipend for the time away. If

so, the student is expected to communicate this information to the graduate program administrator so that payment may be suspended during that time.

During the summer, students receiving stipend payments are expected to remain on campus unless they have received prior approval from their research (funding) advisor to do otherwise. If they wish to schedule an extended leave, they must get the approval of their research (funding) advisor and notify the department. International students will also need to check with OIE before leaving the country.

Students supported on U.S. Government Funds

Federal regulations governing graduate student support do not allow for paid time off for personal business and vacations. If you need to take time off, you must make prior arrangements with your research (funding) advisor to make up the time. If you need to take a more extended amount of time off, you should make prior arrangements with your research (funding) advisor and with the Graduate Program Administrator to suspend your support for that period. International students will also need to check with OIE before leaving the country.

4.2 Financial Aid

Financial Aid may be available to students who qualify. Students who wish to apply for financial should visit the Student Financial Aid Office located in the Hub or online at www.cmu.edu/finaid/.

4.3. Research Funding

As noted in Section 4.1, the majority of EPP doctoral students are supported by research funding for their studies. During admissions, the department attempts to match available faculty funding with the student's research area of interest. It is the responsibility of the faculty and the students to explore funding sources for both tuition and stipends and for any additional operating expenses. As mentioned previously, there are two sources where students can locate pertinent information on available fellowships. One is on our doctoral studies Blackboard site, under Fellowships Announcements, and the other is on the CMU Fellowship and Scholarship website: www.cmu.edu/fso. We strongly encourage all of our students to bookmark and visit these sites often and apply for any fellowship for which they qualify. If the department can help with the application process, such as writing letters of recommendation, etc., please don't hesitate to get in touch with us.

Research grants and contracts are the most common funding sources, and are usually applied for by a faculty member who serves as the Principal Investigator. If their research would be applicable to the graduate student's interest area, the students may be funded in this manner. These research projects can run from one to four years, but it remains the student's responsibility to be informed of the duration of the funding and to look into new funding sources before the grant or contract has ended. Foundations can provide another source of funding through fellowships that are applied for either by the individual student or by the Department as mentioned above.

It is the responsibility of the graduate student to take the lead in knowing the status of their available funding sources by communication with their advisors, and in pursuing alternative funding opportunities. Refer to the Business Manager for assistance with administrative matters about proposals, and the Graduate Program Administrator for fellowship applications.

4.4. Student Conference Funding

If a student has a paper/talk accepted to a competitive conference, then that student should first request funds from the conference organizers and/or from their advisor(s). It is also expected that the student will seek funding using campus resources such as the CMU Fellowships and Scholarships Office prior to submitting a request to the department.

The department request should include details about the travel including organization, dates, location, a budget, funding that will be provided by other sources and information about funding applications submitted. The student's advisor must review and approve the request before it is submitted to the department. EPP may be willing to commit partial support in circumstances where an advisor is unable to cover the expenses. The department will only cover half of the expenses and not exceed \$500. A student may only make one request to the department per year and submit the request to the Graduate Program Administrator. The student will be expected to submit original receipts to the department for determining reimbursement.

Funding sources:

- 1) Conference organizers
- 2) Advisor
- 3) Campus
 - CMU Fellowships and Scholarships Office (FSO) www.cmu.edu/fso/
 - Fellowship holders (such as NSF GRFP, EPA, etc.) should check to see if they may apply for additional funds to cover conference travel
- 4) Netra and Rahul Walawalkar Student Travel Fund (see doctoral studies Blackboard for information and guidelines)
- 5) EPP Department and CMU GSA and Graduate Programs Office (GUSH conference travel grants) www.cmu.edu/graduate/professional-development/conference-funding/index.html.

4.5. Employment Beyond Doctoral Research

It is expected that PhD students are focused on completing the course and dissertation research components of the program.

As stipulated by the College of Engineering,

“Full time graduate students within the College of Engineering are ordinarily expected to devote their full attention and energies to their educational and research endeavors. Classwork and research assignments are planned to completely occupy full time students, thus effectively precluding outside employment and consulting. All full time students are generally advised to decline such work and concentrate on their graduate studies. In exceptional cases, there may be opportunities for outside consulting or employment which would provide helpful experience in addition to financial remuneration. Before assuming such commitments, all full time graduate students are urged to consult their academic advisors and/or department heads about such opportunities. Students receiving financial aid in the form of research or teaching assistants or fellowships are required to obtain consent from both their academic advisor and department head for any such outside employment or consulting.”⁴

It is thus the policy that in EPP that while paid work beyond your research is discouraged, in exceptional circumstances it may be permitted for a full-time EPP student in good standing. Such a student must obtain permission from their advisor to take on any additional paid work that

⁴ http://engineering.cmu.edu/current_students/graduates/policies.html#consulting

would be in addition to their stipend; the intention of a stipend, when paid, is that it is a full support commitment from the department in support of living expenses during the program.

Students should avoid any such additional work in the first two years of their PhD.

For paid work that is from another internal University source (such as teaching a course or supporting another faculty member's research project), the student must obtain approval from both their advisor and from the EPP department head.

Students should realize that approval may be based on whether this additional work will occur during a semester or during the summer, and whether the additional work can be viewed as having positive effect on their academic progress (e.g., teaching experience that is relevant to a future academic career or an internship experience that is directly related to their research).

Students receiving partial or full funding from CMU internal departmental or institutional funds, such as a Dean's or President's Fellowship, may not personally receive additional financial remuneration from additional work, as any additional funds earned will be first used to offset such support (sponsored external research projects are not internal sources). Students receiving such institutional funds must receive the approval of both their advisor and the department head for all instances of additional work during their studies.

International students must first check with OIE to see if they are eligible to receive additional remuneration.

This policy is not intended to supersede constraints from funding sources like external fellowships (which may preclude additional work).

5. Facilities and General Office Procedures

While general office procedures may seem trivial in comparison with the major traumas of graduate studies, following a schedule on these procedures enables the Department and University to serve you properly and leave you free to worry about those major traumas. The Business Manager and the Graduate Program Administrator are your contacts for financial matters. In addition, see the Graduate Program Administrator for most other graduate procedures and issues. Appendix 1 is a list of relevant departmental contacts.

5.1. General Office Procedures

Upon arrival at EPP you will be given department keys. All students will receive a key that will open the door to the EPP 129 suite. This key will also open the door to the fax and mail room, and the Baker Hall conference room. Additionally, all students will have swipe card access (via their student ID card) to the EPP graduate student lounge meeting rooms located in Hamburg Hall A204. Students seated in Wean Hall will receive an additional set of keys -- one to their assigned office in Wean Hall, one to the room where the printer is located, and one to the conference room (Wean 3701) where the refrigerator and microwave are located. Please do not lose the keys because the security of the EPP offices would be compromised. If keys are lost, there is a \$10 per key replacement cost. Check with the

department staff regarding department keys. The front door and the Baker Hall conference room door should be locked after normal working hours (8 A.M. to 5 P.M.) and also ALL weekend. It is the responsibility of the LAST person in the office to close and lock all doors and to turn off the lights.

Upon graduation, all keys must be returned or a \$10 per key charge will be assessed.

The Baker Hall sink/kitchen area has a microwave oven, toaster oven, a refrigerator, and an ice machine for the use of EPP faculty, staff and graduate students. It is the responsibility of **all** EPP members to keep this area neat and clean. Please do not keep food in the refrigerator longer than 5 days and place your name on the food container. Do not cook food with a strong odor, especially during normal work hours. Do not keep food in the ice machine. When cooking, please cover food to prevent splattering. Wipe up any splatters or spills immediately. The office staff are not “wait staff.” Unlabeled food and dirty dishes left in the sink will be thrown away. So please be sure to wash and put away your cup and utensils.

Do not leave food in or around your desk area. Do not dispose of food waste in office trash, as they are only emptied once a week. Unfortunately we are susceptible to visits from furry little friends (such as field mice) and bugs. This has become an increasing problem for the campus.

If you are in an office with a door that locks (Baker Hall, Porter Hall, Wean Hall), you must be sure to close and lock the door each time you leave the office. Unlocked doors in unoccupied offices leave the area vulnerable to theft. While Carnegie Mellon campus is relatively safe, we have had office thefts over the years. Please be diligent!

5.2. Office Space & Lounge

5.2.1 Graduate Offices

The graduate offices are in Baker Hall 128C; Porter Hall 126B; Wean Hall 3705, 3706, 3707, and 3708; and Hamburg Hall A204. Each student will have a desk or desk module with several drawers, chair and half of a bookcase or equivalent. No other furniture is permitted in the offices. Only students enrolled full time and officially located in Pittsburgh will be permitted to have a desk in the EPP student offices. You will be expected to keep the office areas clean and in good condition. Graduate Student Offices are to be kept quiet at all times so that students can pursue their studies and research work. Talking and disruptions should be kept to a minimum. If you wish to work on homework together, do not do so in the offices -- please feel free to reserve our conference rooms for that purpose. The regulations for the graduate student office space are found in Appendix 4.

Bicycles are not permitted in graduate student offices. No exceptions.

All new students will be assigned a desk in Hamburg Hall A204 during the EPP new student orientation session. For all others we adhere to a 'seniority system' for office selection, which is, as spots become available an email will be sent to all students giving them a chance to bid on those spots. The senior students who bid will be allowed to select first, then next in seniority will select, and so on. Seniority is determined first by date of entry (beginning with first academic semester attended), then proposal date, then a lottery by class for those equal in seniority. Part-time and special student seniority will be determined by level of program completion and availability of space.

Students who are officially located in Portugal, but who need to visit campus for short duration during the semester may request a temporary space in one of our Wean Hall offices. In these cases, students should send an email to the Graduate Program Administrator requesting space.

5.2.2 Student Lounge (Hamburg Hall)

There are two meeting rooms located in Hamburg A204 available to all EPP doctoral students. EPP students also have access to the Heinz student lounge areas located on the A-level and first floor of Hamburg Hall. There is a refrigerator in the West Wing, Room A110, specifically designated for EPP student use (A204 residents only), and there are microwaves and a shared sink in that area. The refrigerator is cleaned every Saturday night by an outside contractor, and all food left in the refrigerator after 10PM on Saturday will be thrown away.

5.2.3 Wean Hall Kitchenette

The Wean 3701 Conference Room has a refrigerator, sink, microwave, and cleaning supplies available. Students housed in our Wean Hall graduate offices will receive a key to the conference room. Students housed elsewhere may request a key from Adam Loucks. It is the responsibility of everyone who uses the lounge and appliances to clean up after themselves. If you spill something, please clean it immediately. Students using the Wean kitchen are responsible for keeping the area clean.

Do not keep food in a refrigerator longer than 5 days, and place your name on the food container. Do not cook food with strong odors, especially during normal work hours. When cooking, please cover food to prevent splattering. Wipe up splatters and spills immediately. Unlabeled food and dirty dishes left in the sink will be thrown away. Please be sure to wash and put away your cup and utensils.

Please be sure to close and lock the door when you are finished.

5.3. Telephone Calls

You must dial 9 to get an outside line. Each graduate student office has a telephone. The phone numbers are as follows: Hamburg Hall A204 (student desk space): 412/268-7948; Hamburg Hall Meeting Rooms A204B 412/268-3376 and A204C 412/268-77353; Wean Hall 3705: 412/268-7757; Wean Hall 3706: 412/268-7767; Wean Hall 3707: 412/268-7766; Wean Hall 3708: 412/268-7769; Baker Hall 128C: 412/ 268-9919. These phones are to be used primarily for research-related calls.

The department has one fax machine in the Baker Hall copy/mailroom, the number is 412/268-3757.

5.4. Copying

Please use the copy codes that are posted on the copy machine. Scanned copies can be made on the main (Baker Hall 129) office copier, as well as Funk and Plaid in Wean 3710. Please see EPP office staff for directions on scanning documents.

Occasionally the copier will jam or have a problem. If you are unable to correct the problem, please DO NOT force it. See the office staff regarding the machine in Baker Hall or send an email to aloucks@andrew.cmu.edu if there is a problem elsewhere.

5.5. Mail

The front desk handles the incoming and outgoing mail. Incoming mail is processed and sorted in the Baker Hall 129 mail/copy room. Graduate student mail is filed alphabetically by last name. Packages may be shipped to the EPP main office. For further information see the office staff. Outgoing campus and U.S mail is picked up daily from the EPP main office. All mail should either have a research number on it or already be stamped. If you have a research number, write it in the upper right hand corner. No mail will go out without a number written on it. Mail must be in the basket by 8:00 A.M. to be picked up by the post office. Any mail that goes in the basket during the day is not guaranteed to go out until 8:00 A.M. the following day. Campus mail can be placed in the box behind the front desk or mailed in any of the campus mail boxes.

A full service branch of the U.S. Postal service is located in the lower level of the Cohon University Center. Additionally outgoing stamped mail can be placed in the U.S. Postal mailboxes located on Frew Street and Forbes Avenue.

Students studying in Portugal should make arrangements to have all mail forwarded to your new address. Non-first class mail and journals received will be thrown out. First class and other mail may be forwarded at the department's discretion. If you have questions or concerns, please contact the office staff.

Upon graduation, please make arrangements to have all mail forwarded to your new address. Non-first class mail and journals received will be thrown out. First class and other mail may be forwarded up to 6 months following graduation at the Department's discretion.

5.6. Miscellaneous Office Equipment

EPP has equipment that may be used by students. A data projector is kept in the Baker Hall conference and is available for student use also in A204. A speakerphone is kept in the Baker Hall conference room. In addition, both of our conference rooms (Wean Hall 3701 and Baker Hall 129) are equipped with video conference units that include built-in speaker phones. iPads, tablets, projectors, microphones, recorders and other equipment are available for borrowing from the University Libraries tech lending group (<http://www.library.cmu.edu/using/techlending>).

5.7. Computing: Andrew Network, EPP Computer Cluster, and Department Printers

Connecting to CMU's Andrew Network

By the time you arrive, you will have received your new computing user ID that will allow you access to the Andrew Network System. If you have any questions on computing or getting your computer set up on the Andrew Network you should email Carnegie Mellon Computing Services at help@cmu.edu or call x8-HELP (412/268-4357).

Computer/network registration information can be found here for wired and wireless connections:

<http://www.cmu.edu/computing/network/index.html>

Department Printers

The following machines in EPP may be used for printing:

Peggy – (ip: 128.2.64.235) Color printer. Location: EPP main office, left hallway

Legend – (ip: 128.2.66.240) Black & White printer, scanner, and copy machine. Location: EPP Baker Hall 129 copy/mailroom

Inscription – (ip: 128.2.67.98) Laser printer. Location: back of the EPP main office

Plaid – (ip: 128.2.113.165) Black & White printer, scanner, copy machine. Location: Wean Hall 3710

Funk – (ip: 172.21.17.64) Black & White printer, scanner, copy machine. Location: Hamburg Hall A204

Setting Up Printing

The Department of Electrical and Computer Engineering (ECE) has developed a utility to assist users in adding printers to their machines. This utility works best with HP printers, but does also streamline the process for non-HP printers, as well.

Installing the Printer Utility

- Go to <http://userguide.ece.cmu.edu/>
- Click on the Carnegie Mellon University logo.
- Login with your Andrew ID.
- On the following page, click on the Services menu, and then click Printing / Imaging.
- On the next page, select the (utility install) option for the appropriate operating system.
- You may now need to click on the Carnegie Mellon University logo once again.
- On the following page, you will find instructions on how to download and install the utility. However, as instructed, especially if you're adding a non-HP printer, make sure that you have the appropriate driver for the machine downloaded before installing and running the utility.
- This link shows how to find and install printers and printer drivers on a Windows system:
<http://www.tomshardware.com/faq/id-2737935/add-printer-windows.html>
- This link shows how to find and install printers and printer drivers on a Mac system:
<https://support.apple.com/en-us/HT201465>
- Run the utility, select your printer and click on OK.
- In rare instances, you may need to change the printer driver assigned to the printer that was added through the utility. In those instances, please contact me for assistance.

- **If, for whatever reason, you experience difficulty in using the Printer Utility, you can add printers manually by following these instructions:**

- WINDOWS
<http://www.technipages.com/windows-install-printer-via-ip-address>

- MAC
<http://support.apple.com/en-us/HT202167>

- Please note that we've found that Peggy and Legend haven't typically responded well to generic print drivers, so we'd recommend that you download the specific print drivers prior to recreating each printer. Then select the print driver for each printer to be added. The pages for each print driver follow:

- Legend:
http://www.usa.canon.com/cusa/support/office/b_w_imagerunner_copiers/imagerunner_7086_7095_7095p_7105/imagerunner_7095
- Peggy: <http://h20564.www2.hp.com/hpsc/swd/public/readIndex?sp4ts.oid=5043094>

Printing to Legend and Inscription:

Since both Legend and Inscription are located in the EPP main office suite, and are used by the administrative staff, the following printing procedures are to be adhered to:

1. Large printing jobs (25 + pages) should not be done between 9:00 a.m. and 5:00 p.m. Large jobs tie-up the laser writer and makes it difficult for the rest of the people who have printing jobs.
2. Before printing a large job, make sure you check on the paper load in the printer before you start. If the paper runs out, there may be a long gap before it is noticed and other jobs get backed up.

5.7.1 Free Software

More than 170 Microsoft software packages are available at **no charge** for all CMU engineering students and faculty. Microsoft calls this the DreamSpark program and entry to the DreamSpark site is available from this user guide: <https://userguide.ece.cmu.edu/services/software/dreamspark-software/>. Students and faculty may access this site using their Web ISO (andrew ID and password).

5.7.2 Not-Free Software

We can't provide students with Microsoft OS, Microsoft Office, Mac OS, or Office for Mac software for free. Please contact the Computer Store for these items, which are available at a deep discount versus their regular commercial prices. If you require other software, please contact Steve Gradeck at (412) 268-6657 or sgradeck@andrew.cmu.edu to discuss.

5.8. Purchasing and Travel Reimbursement Policies and Procedures

Purchasing Procedure

All purchases of goods, services, and equipment using University funds, including restricted accounts and research grants and contracts, must receive **PRIOR** approval from Peter Luetkehans, Business Manager, or, in the case of research grants and contracts, the faculty principal investigator. Please complete all requested information on the attached form (including appropriate signatures) to ensure prompt and accurate purchases. If you are not sure, please ask before buying. Only authorized department staff are able to confirm an order with an outside vendor. Please plan ahead. Rush orders for pick-up or delivery and orders of over \$1,000 are difficult to accommodate.

If you use your own funds to make a purchase, it may not be possible to reimburse you for the expenditure. Since the University is a tax-exempt institution, under many circumstances sales tax will not be reimbursed. All purchases must have prior approval of the principal investigator when charging to external funding.

Original itemized receipts and packing slips for all purchases are to be promptly given to the department's Financial Assistant for reconciliation and purchase documentation.

Reimbursement Policy

Business Expenses

Legitimate business expenses can be reimbursed by the department provided you have the following:

- Original itemized receipt indicating item purchased and proof of payment
- Business purpose for purchasing item
- Approved account to be charged for reimbursement
- Approval (by faculty) and subsequent signature for reimbursement
- Signed expense report

Travel Expenses

Legitimate travel expenses can be processed and reimbursed by the department once you provide the following:

- The department reimbursement form available from the department's Financial Assistant is to be completed and submitted for any business expense, domestic or international travel.
- Itemized receipts showing items or services purchased, vendor name, purchase date, and proof of purchase.
- The proper signature prior to submitting expenses charged to a grant require the signature of the PI (principal investigator).
- The grant number or name.

Note: All expenses submitted over 90 days from the date charged are taxable to the traveler.

Reminders of the ER processing requirements

- list the dates and business purpose for the submittal;
- submit *original itemized* receipts;
- reimbursement for any expenses when attending a workshop or conference must include a copy of the agenda;
- restaurant receipts submitted must be the detailed itemized receipt **AND** the credit card charge receipt or paid receipt;
- restaurant receipts for 5 people or less **must** list full names of attendees, when over 5 people, supply the total number of people included on the receipt;
- receipts must show your name, that they are paid with a copy of the itemized receipt, or credit card statement showing your name with the charge is acceptable;
- when renting a vehicle only the cost for a compact economy car is reimbursable, do not accept the additional insurance. You are covered by the CMU policy while traveling for business;
GPS costs will not be reimbursed;
- Alcohol will not be reimbursed on grant funding;
- Personal car mileage is calculated at the government rate; mileage covers gas, but not tolls. A MapQuest printout with a start point of 5000 Forbes Avenue and the end destination point is to be included;
- Federal requirement (the Fly America Act) states that domestic grantees must use U.S. flag carriers to the maximum extent possible when commercial air transportation is the means of travel between the United States and a foreign country or between foreign countries. This requirement shall not be influenced by factors of cost, convenience or personal travel.
- When booking your flights, if you are traveling outside of the dates of the conference or to/from cities other than Pittsburgh or the conference location for personal travel, you **MUST** also print out a copy of what the flights would have cost for just the dates of business travel the same day that you book your ticket. This is called a "constructive cost" and must be included with your reimbursement. If the constructive cost is higher than the actual ticket price, you will be reimbursed the value of the actual ticket purchased. If the constructive cost is lower than the amount of the actual ticket, you will

only be reimbursed the amount of the constructive cost.

Full university travel policy: www.cmu.edu/finance/controller/bte/index.html

Conditions

All receipts must have proof of purchase indicated. To avoid paying tax, see if a staff member can purchase the item for you.

5.9. Hygiene

Practicing good hygiene matters not only to your office mates but also to prospective employers. First impressions go a long way in the interview process, and poor body odor and bad breath can be very strong deterrents. Poor hygiene gives an impression of being sloppy – not taking the time to keep oneself clean. While you may not think anyone notices, people do. So please, make it a habit to shower regularly and practice overall good hygiene.

5.10. EPP Graduate Student Advisory Committee (SAC)

The EPP Graduate Student Advisory Committee (SAC) serves as a relay between EPP administration and doctoral students on matters of program policy, curriculum, and administration. It also helps to convene discussion among the doctoral students on any issues affecting student life that may arise. In its inaugural year, the SAC:

- Identified doctoral students interested in sharing their story about why they chose EPP for the program's website overhaul
- Gathered feedback on construction impacts affecting students in Hamburg Hall to discuss options for mitigation with EPP administration
- Helped select activities for the applicant visit days
- Organized a "town hall" meeting for the doctoral students in conjunction with the EPP GSA representatives

The SAC currently includes one lower-year representative and one upper-year representative. If you are interested in getting involved with the SAC, please contact the Associate Department Head or the Graduate Program Administrator.

5.11. Departmental Green Practices

EPP is committed to becoming a green department. In an effort to reduce our carbon footprint we use compostable plates, bowls, and flatware. We use 100% recycled copy paper, provide recycle bins, compost in the Baker Hall kitchen, and collect items for TerraCycle. Composting is provided for most seminars and we request that attendees bring their personal reusable cup, plate, and flatware.

See CMU's Green Practices Committee Website for more information about initiatives for Campus energy, recycling, green history, and events: www.cmu.edu/greenpractices. If you have questions or suggestions for EPP Green Practices, please contact Adam Loucks (aloucks@andrew.cmu.edu or x8-1090).

Remember to recycle! On campus recycling includes: Paper and Cardboard – in all hallways & rooms; Plastic/Glass/Metal – in all hallways & rooms; Computers – through Facilities Management

Services; Batteries and fluorescent light bulbs -- in Baker Hall 129; Other Materials – (like scrap metal from furniture & equipment + more) through Facilities Management Services.

Visit the EPP Copy Room to see the terracycle collection. Products such as chip bags and energy bar wrappers are upcycled to create new products.

5.12. Business Cards

Business cards can be ordered through Adam Loucks. The department provides \$14 toward the total cost. The current rate for business cards is \$28 for 100 cards and \$2 for each addition 50 cards. Please allow 2 weeks for delivery.

5.13. Personal Webpage

If you have a website or profile information you want to add to the EPP department website, contact the department's media coordinator at clf2@andrew.cmu.edu or 412-268-5570. As a CMU affiliate, you receive free space for a personal website. You can visit Computing Services for support publishing your site with the Andrew Publishing System at the following sites:

www.cmu.edu/computing/web/webpublishing/personal/index.html
www.andrew.cmu.edu/server/publish.html

5.14. Doctoral Student Blackboard Site

We have a Blackboard site for EPP doctoral students. Information such as university contacts, fellowship and seminar announcements, job postings, dissertation guidelines, curriculum progress sheets, and other relevant forms and templates are located on this site. In addition, a copy of this handbook will be made available sometime during the fall semester. The link to the site is: <https://blackboard.andrew.cmu.edu/webapps/portal/frameset.jsp>

6. University Health Services and Student Health Insurance

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. There is a small visit fee to see the physicians and advanced practice clinicians; nurse visits are free of charge. Fees for prescription medications, laboratory tests, diagnostic procedures, and referral to the emergency room or specialists are the student's responsibility. UHS also has a registered dietician and health promotion specialist 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. It also covers most of the fees for care at Student Health Services. 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.

University Health Services provides the information on student health insurance. On their website you will find the current rates and plans available. Carnegie Mellon adheres to a "hard waiver" policy. This means that all students will automatically be charged for basic health insurance coverage at the beginning of each academic year. In order to opt out of this basic coverage, the student must

download a waiver form from the University Health Website and provide proof that they have other health insurance coverage. This must be no later than September 5th and the charge will be removed. Details on this process can be found on the University Health Website: www.cmu.edu/HealthServices/ under the “Student Insurance” Link.

Students are responsible for paying their health insurance by the due date noted on their electronic invoice in SIO. Students may either pay their health insurance in one lump sum by the due date or in monthly installments. If the latter, they will need to sign up for the payment plan offered through Tuition Management Services (TMS) by the due date. To sign up with TMS, visit their website <http://www.afford.com>, call 1-800-722-4867. You can also find information on TMS on the University Health Services website as well as the Hub’s website.

Currently health insurance plans for the academic year begin August 1 and run through July 31. For students planning an August graduation and wish to purchase CMU health insurance for the month of August they will need to contact University Health Services well in advance of August 1 and follow their procedures.

Students graduating in December who do not wish to retain CMU health insurance in the spring will need to contact University Health Services before the end of December for appropriate forms and details.

Additional questions should be directed to University Health Services at x8-2157 (off campus dial 412/268-2157), or emailed to health@andrew.cmu.edu, www.cmu.edu/HealthServices/.

7. University 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 at www.cmu.edu/police.

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. Students can obtain a copy by contacting the University Police Department. The annual security and fire safety report is also available online at www.cmu.edu/police/annualreports.

8. Professional Behavior as an EPP Graduate Student

Graduate students in EPP have the opportunity to be part of the diverse and vibrant community that is Carnegie Mellon University, and in particular, the close-knit EPP community of fellow graduate

students, faculty, and staff. Maintaining this productive, broad-minded, collegial, and exciting community is a responsibility of all its members. As stated in “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...

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.⁵

Graduate school provides unique challenges when it comes to upholding the high standards we set for ourselves. Many will find new friends within this new community, friends who are also colleagues. It is important to remember that in the workplace, we must model workplace-appropriate behavior; what might be appropriate while among friends off-campus may not always be appropriate in the workplace. We must all strive to maintain an atmosphere that is safe and inclusive, and keep in mind the diversity of our workplace in all of our interactions. The President’s Diversity Advisory Council has written:

The campus culture that we aim to shape will welcome, value, and support faculty and students of various ethnicities, religions, languages, colors and perspectives, and create an environment in which men and women can freely pursue their talents and callings in a climate that nurtures their full potential. This culture of diversity will not only celebrate the freedom and vitality to be found in a great American research university, but will allow us to demonstrate leadership both within our own nation and in the international arena. Only a diverse campus community can offer our students a model of the workplaces and politics in which we expect them to exercise leadership in the years after graduation. We need to prepare them for such environments by making Carnegie Mellon itself a model of inclusion and respect for differing perspectives and diverse ways of living, learning, and flourishing. Furthermore, we expect our students to carry this model of inclusion forward to improve their own workplaces and life experiences.⁶

Creating a culture of “inclusion and respect” is something that takes work and is not always easy. We must work together and support each other in order to uphold these high standards, so that we can all enjoy “living, learning and flourishing” in EPP and at CMU.

Resources

Maintaining our community standards takes effort from all of us. As we strive to achieve this goal, we have the opportunity to learn from and support each other. Carnegie Mellon provides students, faculty, and staff with many resources to help us uphold CMU’s (and EPP’s) community standards. These include:

⁵ See www.cmu.edu/student-affairs/theword/comm_standards/standards.html.

⁶ See *The Benefits of Diversity for Education at Carnegie Mellon*, at <https://www.cmu.edu/diversity-guide/pdfs/benefitsofdiversity.pdf>.

- *The WORD*⁷, published and maintained by the Division of Student Affairs, is the official student handbook covering the rights and the responsibilities of all members of CMU, in particular its students.
- *The Diversity Resource Guide*⁸ provides many resources about community and diversity at Carnegie Mellon. In particular, the documents *Benefits of Diversity at Carnegie Mellon University* and *A Guiding Principle for University Culture* provide important information about the history of diversity at CMU, and the University's vision for the role of diversity in our community.
- The Office of the Dean of Student Affairs⁹ is an important resource for all students, and has staff available to EPP PhD students to confidentially discuss questions and concerns about community standards. Their website contains important information about diversity and diversity-related activities on-campus¹⁰, as well as links to non-CMU resources.¹¹
- The Student Life Office¹² is another resource for information concerning community standards, student safety, and personal development. In particular, Jess Klein¹³ is available to discuss individual and community issues around the themes of gender and diversity.

Violations of Community Standards

Sometimes, students might believe that their right to work and learn in a safe, inclusive environment has been threatened. CMU and EPP take such matters very seriously. If an EPP graduate student would like to discuss concerns around a potential violation of community standards by faculty, staff, students, or others at CMU, there are a number of contacts that they can reach out to in complete confidentiality: these include the contacts listed in the previous section, the University Campus Police (412-268-6232), as well as an online, confidential ethics reporting tool.¹⁴

Safeguarding Educational Equity: Policy Against Sexual Harassment/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:

- Office of Title IX Initiatives, www.cmu.edu/title-ix/, 412-268-7125
- Sexual Harassment Advisors, found in Appendix 5 of the Policy Against Sexual Harassment and Sexual Assault
- Survivor Support Network, found in Appendix 5 of the Policy Against Sexual Harassment and Sexual Assault

⁷ <http://www.cmu.edu/student-affairs/theword/index.html>

⁸ <http://www.cmu.edu/diversity-guide/helpful-resources/index.html>

⁹ See <http://www.studentaffairs.cmu.edu/dean/>. The Office of the Dean of Student Affairs is located in Warner Hall 301, and their phone number is (412) 268-2075.

¹⁰ <http://www.studentaffairs.cmu.edu/dean/multicultural/dialogue/index.html> and <http://www.studentaffairs.cmu.edu/dean/multicultural/training/index.html>

¹¹ <http://www.studentaffairs.cmu.edu/dean/multicultural/training/webresources.html>

¹² <http://www.studentaffairs.cmu.edu/student-life/>

¹³ Email: jeklein@andrew.cmu.edu

¹⁴ Accessed via www.reportit.net, with the login "tartans" and password "plaid."

- 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

Students should feel free to reach out to any of the above resources if they feel that community standards have been violated and/or their safety has been threatened. These resources and contacts exist to be used, and students should consult them whenever they need to or want to. In order to create and maintain a collegial, safe, and intellectually stimulating community of faculty, staff, and students, we all have to play our part; these resources are there for those of us who witness or are the victims of violations of our community standards, or who simply wish to discuss difficulties of any kind that they might be having. EPP, and CMU at-large, want to support our graduate students to ensure we are all learning and working in a respectful, fulfilling, and safe environment, and CMU provides these resources as one way to assist us in achieving that essential goal.

9. Student Housing

Carnegie Mellon does not provide campus housing for Graduate Students. The Housing Office does, however, provide an extensive list of apartment and house rentals for students looking for housing. Students are welcome to visit the housing office located in Morewood Gardens E-101, or their website: www.housing.cmu.edu. Also available at the Housing Office are detailed maps of Pittsburgh streets, day care facilities and schools, campus furniture sales, and several booklets on the city of Pittsburgh.

10. Graduate Student Transition and Emergency Loans

The Graduate Student Transition Loan is a no-interest Semester loan available to first semester Carnegie Mellon graduate students receiving monthly stipend payments. The loan is made available to assist with transition cost and may not exceed 75% of the student's monthly gross stipend (exclusive of tuition). The loan must be requested prior to September 15 for the fall semester, and prior to January 15 for the spring semester. Loan repayment will occur in equal semi-monthly installments each semester through payroll deduction.

The form is available from the Hub's website and should be completed and submitted to the Graduate Program Administrator.

www.cmu.edu/hub/billing/docs/transition-loan.pdf

Emergency Student Loans are available from the Carnegie Mellon Office of the Dean of Student Affairs. These loans are available to any enrolled student who may need help with academic supplies, food, medicine, or other unexpected needs. Students will need to apply directly with Student Affairs, located in Warner Hall 301, phone x8-2075 (off-campus phone 412/268-2075).

11. CMU Counseling and Psychological Services

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.

12. Eberly Center for Teaching Excellence

Support for graduate students who are or will be teaching is provided in many departments and centrally by the Eberly Center for Teaching Excellence. The Eberly Center offers activities for current and prospective teaching assistants as well as any graduate students who wish to pre-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 can be found at: www.cmu.edu/teaching/graduatestudentsupport/index.html.

13. Assistance for Individuals with Disabilities

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 must submit a Voluntary Disclosure of Disability Form to access@andrew.cmu.edu to begin the interactive accommodation process.

For more information please see www.cmu.edu/hr/eos/disability/index.html. Students with disabilities are encouraged to self-identify with Equal Opportunity Services by contacting Larry Powell, 412-268-2013, lpowell@andrew.cmu.edu to access the services available at the university and initiate a request for accommodations.

14. 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 more information, see:

www.cmu.edu/studentaffairs/theword/acad_standards/creative/studentmaternityprotocol.html

15. University Libraries

The University Libraries has created an EPP research guide website with information and services relevant for EPP students. The link to this site is: <http://guides.library.cmu.edu/epp>. Librarians Lynn Berard and Sue Collins are the main contacts for EPP students and are happy to help provide information and guidance.

There are several services offered by the University Libraries that are relevant for graduate students, as follows:

- Interlibrary Loan service. This service allows you to borrow materials not available at the CMU libraries. Our library will conduct a search to find a library that has the material you need and they will put through a request for the material. Receipt of the material is usually 7-10 days. You may visit the Hunt Library and complete an Interlibrary Loan form or complete the form on line at: <https://illiad.library.cmu.edu/illiad/illiad.dll?Action=10&Form=22>.
- CMU doctoral dissertations. Dissertations can be borrowed from Hunt Library with a CMU ID card.
- Poster printing services. The E&S Library offers full-color poster printing services (up to 42 inches) at break-even cost. Details are available on their website: <https://posterprinter.library.cmu.edu/public/>

More information on these and other services they offer can be found on their website: search.library.cmu.edu/.

16. Graduate Student Assembly (GSA)

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 in 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. GSA also plans various social opportunities for graduate students and maintains a website of graduate student resources on and off-campus, www.cmu.edu/stugov/gsa/. 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.

17. Office of the Assistant Vice Provost for Graduate Education

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 partners 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 can be found at: 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, particularly graduate students of color and women in the science and technical fields. 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, Graduate Women Gatherings (GWG), Inter-university Graduate Students of Color Series (SOC)

Appendix 1: EPP Faculty Affiliation Record & University and Department Contacts

EPP Faculty Affiliation Record

Faculty Member*	Affiliation with Other Departments
Peter Adams DH 2112, x8-5624	Civil and Environmental Engineering
Jay Apt (A) Posner 254B, x8-3003	Tepper School of Business
Daniel Armanios PH 126B, x8-7039	
V. S. Arunachalam (O) Located in India, vsa@cmu.edu	Materials Science and Engineering The Robotics Institute
Inés Azevedo BH 129F, x8-3754	
Michel Bezy (O) bezy@andrew.cmu.edu	Carnegie Mellon in Rwanda
Travis Breaux (A) WeH 5103, x8-7334	School of Computer Science – Institute for Software Research
Timothy Brown (O) timxb@cmu.edu	Electrical and Computer Engineering Carnegie Mellon in Rwanda
Wändi Bruine de Bruin (O) wandi@cmu.edu	
Kathleen Carley (A) WeH 5130, x8-6016	Computer Science; Social and Decision Sciences; Heinz College; and Tepper School of Business
Elizabeth Casman (O) BH 131B, x8-3756	
John Chapin (O) BH 129A, x8-2191 <i>(Visiting Professor from April – September 2016)</i>	
Nicolas Christin (O) CIC 2108, x8-4432	Electrical and Computer Engineering CyLab School of Computer Science Information Networking Institute
Jared Cohon Scot 5127A, x8-1765	Civil and Environmental Engineering Scott Institute for Energy Innovation President Emeritus, Carnegie Mellon
Lorrie Faith Cranor CIC 2207, x8-7534	School of Computer Science – Institute for Software Research
Alex Davis PH 126B; x8-7026	
Neil Donahue (A) DH 2116, x8-4415	Chemical Engineering Chemistry
Pedro Ferreira HbH 3042, x8-5526	H. John Heinz III College
Paul Fischbeck PH 208F, x8-3240	Social and Decision Sciences
Baruch Fischhoff PH 219E, x8-3246	Social and Decision Sciences
Erica Fuchs BH 131C, x8-1877	

* (A) - indicates Affiliated Faculty; (O) - indicates Research, Teaching, Part-time, or Other Special Faculty.

Faculty Member*	Affiliation with Other Departments
Richard Green (<i>O</i>) BH 129A, x8-2191 (Visiting Professor September – November 2016)	
Michael Griffin (<i>O</i>) BH 129D, x8-2299	
Alex Hills (<i>O</i>) Located in Alaska; ahills@cmu.edu	Electrical and Computer Engineering
David Hounshell (<i>A</i>) PH 219G, x8-3753	Social and Decision Sciences
Gabriela Hug (<i>O</i>) Located in Zurich; ghug@ece.cmu.edu	
Marija Ilic (<i>A</i>) PH B25, x8-9520	Electrical and Computer Engineering
Paulina Jaramillo paulina@cmu.edu	Spending 2016-17 AY at Carnegie Mellon in Rwanda
Tamar Krishnamurti (<i>O</i>) tamark@andrew.cmu.edu	
Ramayya Krishnan (<i>A</i>) HbH 1505A, x8-2159	H. John Heinz III College
Deanna Matthews (<i>O</i>) PH 126C x8-7889	
Scott Matthews PH 123A, x8-6218	Civil and Environmental Engineering
Meagan Mauter PH 118H, x8-5688	Civil and Environmental Engineering
Jeremy Michalek SH 323, x8-3765	Mechanical Engineering
Granger Morgan BH 131A, x8-2672	Electrical and Computer Engineering H. John Heinz III College
Spyros Pandis (<i>A</i>), (<i>O</i>) DH B203, x8-3531	Chemical Engineering
Jon Peha BH 129B, x8-7126	Electrical and Computer Engineering
Allen Robinson (<i>A</i>) SH 401, x8-3657	Mechanical Engineering
Ed Rubin BH 128A, x8-5897	Mechanical Engineering
Douglas Sicker BH 129H, x8-2838	School of Computer Science
Jeffrey Sirola (<i>O</i>) DH A207E, x8-4531	Chemical Engineering
Marvin Sirbu BH 129K, x8-3436	Electrical and Computer Engineering Tepper School of Business Information Networking Institute
Mitchell Small PH 123D, x8-8782	Civil and Environmental Engineering

* (*A*) - indicates Affiliated Faculty; (*O*) - indicates Research, Teaching, Part-time, or Other Special Faculty.

Faculty Member*	Affiliation with Other Departments
Deborah Stine (<i>O</i>) Scot 5119, x8-4640	
Eswaran Subrahmanian (<i>O</i>) sub@cmu.edu	Engineering Research Accelerator
Subra Suresh (<i>A</i>) WH 600, x8-2200	President, Carnegie Mellon University Materials Science and Engineering
Joel Tarr (<i>A</i>) BH 236C, x8-2609	H. John Heinz III College History
Jeanne VanBriesen (<i>A</i>) PH 123G, x8-4603	Civil and Environmental Engineering
Jay Whitacre WeH 4323, x8-5548	Materials Science and Engineering
Katie Whitefoot SH 322, x8-6771	Mechanical Engineering
Jimmy Williams (<i>O</i>) HbH A206E, x8-8370	
Gabrielle Wong-Parodi (<i>O</i>) Located in California: gwongpar@cmu.edu	
Haibo Zhai (<i>O</i>) BH 128B, x8-1088	

*(*A*) - indicates Affiliated Faculty; (*O*) - indicates Research, Teaching, Part-time, or Other Special Faculty.

EPP Emerti Faculty: Tung Au (Civil Engineering); Al Blumstein (H. John Heinz III College); James Goodby; Chris Hendrickson (Civil and Environmental Engineering); Francis McMichael (Civil and Environmental Engineering); Benoît Morel; Indira Nair; Henry Piehler (Materials Science and Engineering); Sarosh Talukdar (Electrical and Computer Engineering); Bob White (Electrical and Computer Engineering)

*(*A*) - indicates Affiliated Faculty; (*O*) - indicates Research, Teaching, Part-time, or Other Special Faculty.

Department Contacts:

Elisabeth Bass Udyawar, Faculty Support Administrator. Location: Baker Hall 129, 412/268-5929, ebass@cmu.edu. Elisabeth provides administrative support to Professors Inês Azevedo, Erica Fuchs, and Paulina Jaramillo. She is also the center administrator for the Center for Climate and Energy Decision Making.

Vicki Finney, Graduate Program Administrator. Location: Baker Hall 129G, 412/268-1462, vicki@cmu.edu. See Vicki for all issues that pertain to the graduate program, including matters of EPP & CIT student policies, stipend and tuition issues, degree completion, and fellowship information.

Karen Fleischman, Assistant Executive Director, Engineering & Technology Innovation Management (E&TIM) master's program. Location: Hamburg Hall A206, 412/268-5626, karenk@andrew.cmu.edu.

Courtney Francis, Media Coordinator. As the media coordinator for the department, Courtney manages the EPP website, rEPPort newsletter, and relationships on campus that help promote research and department news to the EPP community and beyond. Send her your updates about published papers, presentations, and events you attend so they can be shared. Location: Baker Hall 126B, clf2@andrew.cmu.edu.

Steve Gradeck, IT Assistant. Steve is your contact for first level support for computing issues (including HW and SW on desktops, laptops and servers). Please contact him in advance before dropping by, so he can do necessary research to help in the most effective way possible). Steve can also assist with printer setup. Location: Baker Hall 129G, 412/268-6657, sgradeck@andrew.cmu.edu.

Deborah Kuntz, Program Coordinator. Location: Baker Hall 126C, 412/268-3303, deborahk@andrew.cmu.edu. Debbie provides administrative support to the Associate Department Head for Undergraduate Affairs and the Graduate Program Administrator. Debbie maintains the doctoral studies blackboard site, coordinates the graduate admissions process, and helps to coordinate graduate student office moves.

Adam Loucks, Front Desk and Support Staff. Location: Baker Hall 129, 412/268-1090, aloucks@andrew.cmu.edu. Adam will be the one you want to contact for issues pertaining to basic office maintenance (such as if the lights go out in your office, the air conditioning stops working, etc.); incoming & outgoing mail; he handles distribution of office keys, reservations for the EPP Baker and Wean conference rooms and equipment, and administrative details for the PhD qualifying exams.

Peter Luetkehans, Department Administrator and Business Financial Manager. Location: Baker Hall 129L, 412/268-5486, pluetkeh@andrew.cmu.edu.

Deanna Matthews, Assistant Teaching Professor and Associate Department Head for Undergraduate Affairs. Location: Baker Hall 126C, 412/268-7889, dhm@cmu.edu.

Scott Matthews, Professor /Associate Department Head / Head of Graduate Education Committee. Location: Porter Hall 123A, x8-6218, hsm@cmu.edu.

Kimberly Martin, Financial Assistant. Kim processes expense reimbursements and supports the Business Financial Manager. Location: Baker Hall 129G, 412/268-1987, kamartin@andrew.cmu.edu.

Julie Mull, Administrative Support, Engineering & Technology Innovation Management (E&TIM) master's program. Location: Hamburg Hall A206, 412/268-1420, jmull@andrew.cmu.edu.

Deb Scappatura, Administrative Assistant. Location: Baker Hall 129, 412/268-2532, debbie@ece.cmu.edu. Deb provides administrative support for Granger Morgan, Ed Rubin, Meagan Mauter, Jeremy Michalek, Katie Whitefoot, and Patti Steranchak. Deb also assists with processing expense reimbursements.

Korin Sharp, EPP Washington DC Office Director. Location: AAAS Building, Washington, DC, 202/326-6238/6239, ksharp@andrew.cmu.edu.

Douglas Sicker, Professor and Department Head. Location: Baker Hall 129H, 412/268-2838, sicker@cmu.edu.

Patti Steranchak, Assistant to Doug Sicker and Granger Morgan. Location: Baker Hall 129G, 412/268-1085, patti@cmu.edu.

Jimmy Williams, Director, Engineering and Technology Innovation Management (E&TIM) master's program. Location: Hamburg Hall A206E, 412/268-8370, jimmyw@andrew.cmu.edu.

University Contacts:

Vijayakumar Bhagavatula, Associate Dean for Graduate Affairs, COE. Location: Scaife Hall 110, 412/268-2478, vk16@andrew.cmu.edu.

James Garrett, Dean, CIT Location: Scaife Hall 110, 412/268-5090, garrett@cmu.edu. (Assistant: Sue Haslett, 412/268-6196, sh2s@cit.cmu.edu).

Holly Hippensteel, Assistant Dean of Student Affairs. Location: Warner Hall 325, 412/268-2075, hbh@andrew.cmu.edu.

Suzanne Laurich-MacIntyre, Assistant Vice Provost for Graduate Education and Ombudsman. Location: Warner Hall 553, 412/268-7307, suzannel@andrew.cmu.edu.

Lindsay Pelz, Foreign Student Advisor for COE, Office of International Education. Location: Warner Hall 301, 412/268-5231, lindsay@cmu.edu.

John Papinchak, University Registrar. Location: Warner Hall 220, 412/268-7404.

Melissa Skasik, COE Hub Liaison, 412/268-8186, skasik@andrew.cmu.edu.

Relevant Resources:

University Police. Location: 300 South Craig Street, Suite 199 (Filmore Street Entrance),
Emergency number: x8-2323, Non-emergency: x8-6232. Web address: www.cmu.edu/police.

The Hub. Location: Warner Hall 19, x8-8186. Web address: www.cmu.edu/hub

CMUWorks Service Center. Location: 4516 Henry Street, Oakland (in the UTDC Building),
412/268-4600. Web address: www.cmu.edu/cmuworks/

Intercultural Communications Center. Location: University Center, x8-4979,
eslhelp@andrew.cmu.edu. Web address: www.cmu.edu/icc

Office of the Dean of Student Affairs. Location: Warner Hall 301, x8-2075.

Office of International Education. Location: Warner Hall 321, x8-5231. Web address:
www.studentaffairs.cmu.edu/oie/

University Health Services. Location: Morewood Gardens E-Tower, x8-2157. Web address:
www.studentaffairs.cmu.edu/HealthServices

Counseling and Psychological Services. Location: Morewood Gardens, E-Tower, 2nd Floor,
412/268-2922. Phone answers 24 hours a day, for more information see www.cmu.edu/counseling.

The Word (CMU's online student handbook) www.cmu.edu/student-affairs/theword.

Academic Integrity Website: www.cmu.edu/academic-integrity

University Policies Website: www.cmu.edu/policies/

Graduate Education Website: www.cmu.edu/graduate/policies/

Appendix 2: Memo on Proper Attribution

Memorandum

TO: EPP Students
FROM: Granger and Doug
DATE: 2016 August
SUBJECT: Proper attribution of the work of others

In your time here in EPP, and your subsequent professional career, you will have frequent occasion to draw upon the work of others. While that is clearly necessary and appropriate, it is also critically important that when you do this you include proper citations. Copying other peoples' text or figures, or only slightly modifying it, without identifying the source is called plagiarism and is a breach of professional ethics.

Here are the basic rules:

If you use any text written by someone else in any of your work, you must place it in quotation marks and provide a citation for the source. Thus, for example, you may say:

It has now been demonstrated that: "Large-scale use of wind power can alter local and global climate by extracting kinetic energy and altering turbulent transport in the atmospheric boundary layer." (Keith et al., 2004)

but you may not say:

It has now been demonstrated that large-scale use of wind power can alter local and global climate by extracting kinetic energy and altering turbulent transport in the atmospheric boundary layer.

You can, of course, also use numbered footnotes or endnotes. If you use the (Author, date) form of citation, then these should be paired with full references, sufficient for a reader to find the source, as at the end of this memo. If the reference is a web source, include the web address.

Under the "fair use" terms of U.S. copyright law, it is perfectly fine to quote, with proper attribution, short excerpts from copyrighted works. If you start using very large portions of copyrighted text, you may need to obtain permission from the holder of the copyright (typically the journal, not the author) if you are going to publish the piece or distribute it widely. Obtaining such permission is generally not required for government documents.

If you use someone else's ideas or arguments but place them in your own words, then you must cite the original source. For example you may say:

Because wind turbines efficiently extract kinetic energy from the boundary layer and alter turbulent transport, large-scale use of wind power can alter local and global climate. (Keith et al., 2004)

but you may not say:

Because wind turbines efficiently extract kinetic energy from the boundary layer and alter turbulent transport, large-scale use of wind power can alter local and global climate.

Facts or ideas which are not general knowledge also need to be referenced. For example:

Foreign student enrollments at LaRoche College in the Pittsburgh area dropped by 23.7% between 2002-3 and 2003-4. (Schackner, 2004)

The same goes for figures taken from other sources, including off the Internet. All such figures must carry a citation. For example:

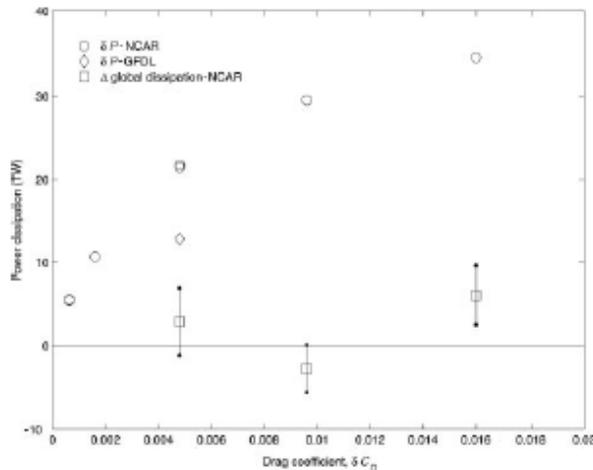


Figure from Keith et al., (2004).

Additionally, if you are actually publishing the figure or placing it in a document that will be widely circulated, you will likely need to obtain reprint permission from the holder of the copyright. For use in papers internal to EPP reprint permission is not necessary, though all other rules regarding attribution and plagiarism do apply to all Carnegie Mellon homework assignments, papers, and examinations.

Similarly, if you redraw a figure you should indicate the original sources. For example:

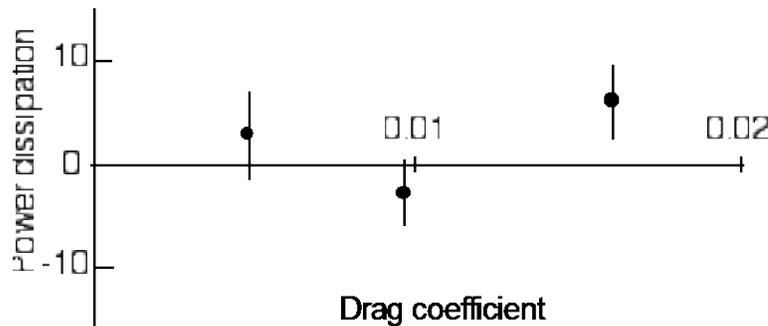


Figure modified from Keith et al., (2004).

The one exception is publicly available clip art used in things like power-point presentations.

The University rules on cheating and plagiarism can be found on the Carnegie Mellon Academic Integrity website: www.cmu.edu/academic-integrity/index.html.

There are many different style guides for references. Different professional journals have different rules, which you can usually find at their web sites. The program "EndNote" can handle most of them.

Bottom line: We, and all of the scientific and technical community, take these issues very seriously. Failure to follow proper procedures for attributing the words, illustrations or ideas of others is a very serious violation of the norms of good professional practice. Such activities will not be tolerated in the Department of Engineering and Public Policy and will result in stiff penalties that could include immediate loss of support and/or a request that you leave the graduate program (appeal options are spelled out in the student handbook). These rules apply to all homework assignments, papers, and examinations produced while you are a student at Carnegie Mellon, and of course provide a basis for your subsequent professional practice.

The University of Indiana has an excellent website that provides examples and then gives you a chance to complete a quiz to see if you understand the difference between proper and improper attribution (of text, they don't cover figures). Please take a look and work thru this. It can be found at: <https://www.indiana.edu/~tedfrick/plagiarism/>

References:

David W. Keith, Joseph F. DeCarolis, David C. Denkenberger, Donald H. Lenschow, Sergey L. Malyshev, Stephen Pacala, and Philip J. Rasch, "The influence of large-scale wind power on global climate," *Proceedings of the National Academy of Sciences*, 101(46), pp. 16115-16120, 2004. Available online <http://www.pnas.org/cgi/reprint/101/46/16115>.

Bill Schackern, "Visas, other problems cut foreign student enrollment," *Pittsburgh Post-Gazette*, November 10, 2004.

Appendix 3: General EPP Curriculum Progress Sheet (students in joint and special degree programs should refer to the EPP doctoral studies Blackboard for degree-specific curriculum progress sheets)

EPP Graduate Curriculum Progress Sheet

	Graduate Credit Units	Semester	Grade
I. Core Courses (42 units required, 6 units elective[†]):			
1. 19-701 "Theory & Practice of Policy Analysis"	12	_____	_____
2. 19-702 "Quantitative Methods for Policy Analysis"	12	_____	_____
3. 19-704 or other approved course in Social Science/ Survey Statistics	6	_____	_____
4. 19-705 [†] "Workshop in Applied Policy Analysis" (Optional, though serves to help prepare students for Part B qualifier)	6	_____	_____
5. EPP Teaching Practicum*	12	_____	_____
Total	_____		

*Students are expected to fulfill requirement by the end of their 3rd year. To fulfill this requirement students can either serve as Project Manager for undergrad EPP Project course, or serve as TA in assigned department course.

II. Engineering and Science Courses - Type A (min. = 54 units):

1. 12-704 "Probability & Estimation for Eng. Sys" or Equivalent	12	_____	_____
2. 19-785 "Engineering Optimization" (Recommended), or another suitable course incorporating optimization**	6 or 12	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
Total	_____		

**See Doctoral Studies Blackboard site for recent lists of acceptable alternatives.

III. Social Science Courses – Type B (min. = 36 units):

1. 90-908 "Applied Microeconomics," 19-681 "Managerial & Engineering Economics," or equivalent	_____	_____	_____
2. Approved units in law, political science, regulation (min 6)	_____	_____	_____
3. _____	_____	_____	_____
4. _____	_____	_____	_____
5. _____	_____	_____	_____
Total	_____		

IV. Advisor Reviews

	Name/Date	Name/Date	Faculty Comments (Progress, suggestions, etc.)
Semester 1			
Semester 2			
Semester 3			
Semester 4			
Semester 5			
Semester 6			
Semester 7			
Semester 8			
Semester 9			

V. Required Meetings with Associate Department Head (date and signature required below):

Post Qualifier Review (meet in 4th semester during registration week): _____

Department Coursework Completed: _____

Final Review (meet when scheduling defense): _____

VI. Milestones

	Semester	
Part A Completed	_____	
Part B Completed	_____	
Thesis Proposal Completed	_____	
Thesis Committee Members	_____	Thesis Advisor

Additional Courses Suggested by Thesis Committee:

Semester Progress Report (Optional)

Name: _____

Semester: _____

Date: _____

(Discuss courses taken, projects undertaken and progress on research, including projected milestones.)

Appendix 4: Graduate Student Office Regulations

Comments and suggestions are welcome. You may send them to the Graduate Program Administrator.

With most of our graduate student offices filled to capacity the following are a set of general office rules and regulations that we have adopted to ensure a proper, productive, and pleasant working environment.

1. Offices are to be used for work, not meetings. It is important, therefore, that the noise level be kept to a minimum. To meet with others, work on homework assignments in a group (group = 2 or more), or chat on cell phones or computers please find somewhere other than at your desk to these things. There are two student meeting rooms available for use in Hamburg A204, as well as the EPP conference rooms in Wean Hall and Baker Hall. In addition, you may use any of the lounge areas in the Heinz College.
2. Offices, all equipment, and lounge/meeting areas are provided for the use of EPP graduate students only. At no time should any desk, table, computer or printer be occupied or used by non-EPP personnel.
3. No bicycles or extra furniture are permitted in the offices. Bicycles in offices create an unsafe environment in cases of emergency or fire and, therefore, are not permitted in the offices. It is important that we have everyone's cooperation on this, without exception. There are bicycle racks located throughout campus, as well as a covered bicycle rack located in the parking garage.
4. No pets.
5. All students are expected to keep kitchen areas clean, clean any spills or food remains that they are responsible for making. Cleaning products are available in the kitchen areas. If they run out, contact Adam Loucks to reorder.
6. Policing of the rules. The staff are not able to monitor the student areas to ensure the noise level is kept to a minimum, the lounge and refrigerator are kept clean, and so on. We ask that you monitor the areas yourself. If you are not able to resolve a situation that arises, you may call on the Graduate Program Administrator for assistance.

Thank you again for your cooperation and please direct any suggestions you have for the office regulation list to the Graduate Program Administrator.

Appendix 5: Highlighted University Resources for Graduate Students and The WORD, Student Handbook; 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 partners 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 can be found 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, particularly graduate students of color and women in the science and technical fields. 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
- Graduate Women Gatherings (GWG)
- Inter-university Graduate Students of Color Series (SOC)
-

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):

- Career and Professional Development Center
- Cohon University Center
- Counseling & Psychological Services (CAPS)
- Dining Services
- Housing Services
- Office of Integrity and Community Standards
- Office of International Education (OIE)
- Student Activities
- University Health Services

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 made available through the 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.

Assistance for Individuals with Disabilities

www.cmu.edu/hr/eos/disability/

Students with disabilities are encouraged to self-identify with Equal Opportunity Services by contacting Larry Powell, 412-268-2013, lpowell@andrew.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 can be 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 will be 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, www.cmu.edu/stugov/gsa/Resources. 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)

www.studentaffairs.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; supporting international and cultural student groups such as the International Student Union and the International Spouses and Partners Organization; 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 Naval ROTC and Veteran Affairs Offices are located at 4615 Forbes Avenue, vro-vaedbenefits@andrew.cmu.edu, 412-268-8747.

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:

www.cmu.edu/computing/guideline/index.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 more general information is 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.

Key Offices for Health, Wellness & Safety

Counseling & Psychological Services

www.studentaffairs.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.

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. Full information about these services, stops, routes, tracking and schedules can be found online at: <http://www.cmu.edu/police/shuttleandescort/>

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 www.cmu.edu/police/annualreports.

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
- SafeWalk
- Survivor Support Network
- 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: June 14, 2016

