

**CARNEGIE
MELLON
UNIVERSITY**

**Department of Engineering and Public Policy
College of Engineering
Academic Year 2023-2024
Graduate Student Handbook**

Doctorate in Engineering and Public Policy Program

August 2023

Welcome

To our new students, we are delighted that you have chosen to pursue graduate studies in the Department of Engineering and Public Policy (EPP). 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 graduate 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 graduate students are encouraged to consult during their tenure at Carnegie Mellon University. These include the College of Engineering's graduate policies website and graduate student handbook, The Word (Carnegie Mellon's online student handbook), the Office of Graduate and Post-Doctoral Affairs, the Office of the Dean of Student Affairs, and others. Information on these resources is included in the appendices of this handbook.

As EPP has grown, we have 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 does not 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.

Peter Adams, Department Head

Nick Muller, Associate Department Head for Graduate Affairs

Peter Luetkehans, Business Manager

Vicki Finney, Academic Program Advisor

Carnegie Mellon University Vision and Mission

Vision: Carnegie Mellon University will have a transformative impact on society through continual innovation in education, research, creativity, and entrepreneurship.

Mission: *To create a transformative educational experience* for students focused on deep disciplinary knowledge; problem solving; leadership, communication, and interpersonal skills; and personal health and well-being.

To cultivate a transformative university community committed to (a) attracting and retaining diverse, world-class talent; (b) creating a collaborative environment open to the free exchange of ideas, where research, creativity, innovation, and entrepreneurship can flourish; and (c) ensuring individuals can achieve their full potential.

To impact society in a transformative way — regionally, nationally, and globally — by engaging with partners outside the traditional borders of the university campus.

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 university ombudsperson, Carnegie Mellon University, 5000 Forbes Avenue, Pittsburgh, PA 15213, telephone 412-268-1018. Obtain general information about Carnegie Mellon University by calling 412-268-2000.

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. You can obtain a copy by contacting the Carnegie Mellon Police Department at 412-268-2323. The annual security and fire safety report also is available online at www.cmu.edu/police/annualreports.

Information regarding the applicable grievance procedures for alleged violations of the Statement of Assurance is available at www.cmu.edu/policies/forms-and-documents/soa-violations.pdf. The Office for Institutional Equity and Title IX may be reached at 412-268-7125 or institutionalequity@cmu.edu.

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/.

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 Policy: www.cmu.edu/policies/student-and-student-life/academic-integrity.html
- University Policies Website: www.cmu.edu/policies/
- Office of Graduate and Postdoc Affairs: www.cmu.edu/graduate/policies/index.html

Due to the changing nature of conditions and expectations surrounding public health and safety requirements please visit www.cmu.edu/coronavirus/ for the most up to date information.

See Appendix 5 for additional information about The Word and University resources. See Appendix 6 for information on harassment, discrimination, and microaggressions, as well as our once-per-semester survey on related topics, including mental health.

University Academic Calendar

The Academic Calendar can be found at www.cmu.edu/hub/calendar/index.html and provides information on all deadlines including registration dates, class start dates, add/drop deadlines, exam dates and more.

Table of Contents

1	Department of Engineering and Public Policy.....	9
1.1	Using the Graduate Student Handbook	9
1.2	General Office Procedures, Security and Safety	10
1.3	Departmental Green Practices	10
1.4	Copying, Printing, Scanning, Faxing, Mail, Package Delivery, etc.	10
1.5	Office Space & Lounge	11
1.6	Purchasing and Travel Reimbursement Policies and Procedures	12
1.7	Department Graduate Student Organizations	12
1.8	Department Approach to Press and Media Relations.....	13
2	Doctoral Degree Attainment	13
2.1	Degree Title	13
2.2	Joint Degrees.....	13
2.3	Statute of Limitations – Doctor of Philosophy	13
2.4	Registration	14
3	Doctoral Degree Requirements.....	15
3.1	Standard Degree Requirements	15
3.2	Coursework, Teaching Practicum, and Required Units for Degree Attainment	16
3.3	Courses Outside the Department or College and Undergraduate Courses.....	17
3.4	Drop/Add/Withdraw Procedures.....	18
3.5	Course Waiver Policy.....	18
3.6	Transfer Courses and Cross-Registration (PCHE)	18
3.7	Teaching Requirements.....	19
3.8	Research Requirements	20
3.9	Internship Opportunities.....	20
3.10	The Qualifying Examinations.....	21
3.11	Requirement for Advancement to Doctoral Candidacy (including thesis proposal)	26
3.12	PhD Research and Dissertation	29
3.13	Completing an EPP MS along the way.....	31
3.14	Certification of degree	32

3.15	Leave of Absence.....	32
3.16	Withdrawal of Degree.....	33
4	Advisors and Student-Professor Relationship.....	33
4.1	Advising Expectations Template.....	33
4.2	Advisor Changes.....	34
4.3	Resources for Exceptional or Challenging Situations.....	35
4.4	Summary of Graduate Student Appeal and Grievance Procedures.....	36
5	Grading/Evaluation.....	36
5.1	Grading scale, Minimum QPA Requirements.....	36
5.2	Policy on Pass/Fail and Audited Courses.....	36
5.3	Process for Appealing Final Grades.....	36
5.4	Satisfactory Academic Standing.....	37
5.5	Inadequate Progress and Probation.....	39
5.6	Academic Integrity Policy.....	39
6	Safeguarding Educational Equity.....	40
6.1	Professional Behavior as an EPP Graduate Student.....	40
6.2	Assistance for Individuals with Disabilities.....	41
6.3	Policy Against Sexual Harassment and Sexual Assault.....	41
6.4	Gestational and Parental Accommodations.....	41
6.5	Consensual Intimate Relationship Policy Regarding Undergraduate Students.....	43
7	Additional Policies and Protocols.....	43
7.1	Enrollment Verification.....	43
7.2	Change of Address.....	43
7.3	Computing Services and Accessing the CMU Andrew Network.....	43
7.4	New Policy Governance.....	43
7.5	EPP PhD Student Work Hours, Vacations, and Time Off Expectations.....	44
7.6	Employment Eligibility Verification.....	47
7.7	Evaluation and Certification of English Fluency for Instructors.....	47
7.8	Publishing Student Work.....	47
7.9	Intellectual Property Policy and Relevant Websites.....	48
8	Financial Support.....	48

8.1 Graduate Research Assistantship (Stipends) and Tuition Payments	49
8.2 Employment Beyond Doctoral Research	49
8.3 Student Health Services and Insurance.....	50
8.4 Student Fees.....	52
8.5 Student Conference Funding	52
8.6 Policy on External Scholarships	53
8.7 University Financial Aid, Emergency Funds, and GuSH.....	54
8.8 Purchasing and Travel Reimbursement Policies and Procedures (full description).....	54
Appendix 1: Department and University Contacts	57
Appendix 2: Qualifier Guidance Document	59
Appendix 3: Curriculum PhD Progress Sheets.....	63
Appendix 4: Memo on Proper Attribution.....	65
Appendix 5: 2023-2024 Highlighted University Resources for Graduate Students	68
Appendix 6: Reporting interpersonal and professional concerns	75

1 Department of Engineering and Public Policy

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.

Major areas of graduate research in the department include energy and environmental systems, information and communication technology policy, risk analysis and communication, and technology innovation policy. EPP 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, U.S. Department of Energy, and the National Labs.

At the undergraduate level, the department offers an additional major in EPP with the five departments in the College of Engineering and an additional major in Science, Technology and Public Policy with other science and humanities departments. The department also offers a minor in Technology & Policy. At the graduate level, we offer the Master of Science in Engineering and Public Policy and a research-oriented PhD. EPP is also home to the Engineering & Technology Innovation Management (E&TIM) master's degree program.

The department has 41 faculty including tenure-track, research-track, teaching-track and special faculty. Some faculty have full-time appointments in EPP, but the majority have either a joint, affiliated, or courtesy appointment. CMU offers a unique environment in which interdisciplinary research is encouraged and these types of appointments work. A list of the EPP faculty is found on the department website, www.cmu.edu/epp.

The EPP department main office is Wean Hall 5215 with faculty and staff offices also located on the Wean 5100 and 5200 corridors (access to the 5200 offices is via the 5100 corridor). The main office phone number is 412-268-2670.

1.1 Using the Graduate Student Handbook

This booklet is a compilation of policies and organizational details for students in the Department of Engineering and Public Policy. Students should be familiar with its contents and refer to it as situations or questions arise. Additional and up-to-date information to support the handbook materials is available on the EPP Graduate Student Canvas site.

Students with questions or concerns should contact the appropriate departmental staff or faculty member. While each individual's responsibilities are different, students are generally encouraged to reach out to the person they feel most comfortable with. Appendix 1 provides a list of relevant department and college contacts.

1.2 General Office Procedures, Security and Safety

EPP office spaces and common areas should be kept neat and clean, doors should be locked, and issues reported to appropriate department staff or University Police as needed.

Food with strong odors should not be cooked during normal work hours. Wipe up splatters and spills immediately. Wash and put away cups and utensils.

Do not leave food in or around desk areas. Office trash bins are only emptied once a week. Place all food waste in the hallway trash bins.

Return furniture to original locations, turn off equipment and lights and close and lock the doors when leaving an area.

Hamburg Hall residents must be sure to close and lock the door upon leaving their 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.

1.3 Departmental Green Practices

EPP is committed to becoming a greener department. In an effort to reduce our carbon footprint we use compostable plates, bowls, cups, napkins, and flatware. We use 100% recycled copy paper, provide recycle bins, compost in the Wean Hall main office and A204 lounge.

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/environment. Contact the front office coordinator with questions or suggestions for EPP Green Practices.

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 EPP main office; Other Materials – (like scrap metal from furniture & equipment + more) through Facilities Management Services.

1.4 Copying, Printing, Scanning, Faxing, Mail, Package Delivery, etc.

A large printer/copier/scanner and a fax machine is located in the EPP main office. Scanning is also available on the printer Funk in Hamburg A204. Please see the office staff for directions on scanning documents or if there is an equipment malfunction. Large printing and copying jobs should be done outside of business hours or in batches and refill paper when complete.

EPP has equipment that may be used by students. Data projectors are kept in the Wean Hall conference room and in Hamburg A204. iPads, headphones, chargers, calculators and other equipment are available for borrowing from the University Libraries tech lending group <https://www.library.cmu.edu/services/techlending>.

Students should not have personal mail sent to campus. Outgoing campus and U.S mail is picked up daily from the EPP main office. Mail must have proper postage and be at the front desk by 8:00 A.M. to be picked up by the post office.

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 on Forbes Avenue. UPS services are available at Tartan Ink located on the lower level of the Cohon University Center.

Students studying in Portugal should make arrangements to have all mail forwarded to their 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. Contact the office staff with questions or concerns.

1.5 Office Space & Lounge

The graduate offices are located in 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. Students are 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 work. Talking and disruptions should be kept to a minimum.

Bicycles are not permitted in graduate student offices.

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 request those spots. The senior students who make a request 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 by contacting the academic program advisor prior to their visit.

Hamburg Hall Student Lounge, Study Areas, Meeting Rooms, Wean Conference Room, ETIM Office

There are two meeting rooms and a lounge area located in Hamburg A204 available to all EPP doctoral students. In addition, EPP students 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. This 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. There are also mini refrigerators in A204 that are available for all students seated in that area to use. Students also have access to the ETIM Office sink and microwave located across the hall in A206. Please note that use of the ETIM Office facility is restricted to the sink and microwave. The refrigerator and meeting rooms in that area are for ETIM use only.

The graduate student lounge located in A204 is a good place for conversations at a non-disruptive volume (the lounge is not soundproofed). There are study areas available for student use in the University libraries. Students may also reserve small group study rooms. For more information or to reserve a study room visit their website www.library.cmu.edu/using/study.

The Wean 3701 Conference Room has a refrigerator, sink, microwave, ice maker, and cleaning supplies available. Students wishing to reserve the conference room for research group meetings or events should consult the online reservation calendar www.cmu.edu/epp/reservations/index.html to choose an available date and time and then contact the EPP front office coordinator to obtain a key. If the event includes food or beverage service, it is the responsibility of the reserving party or individual to clean the area (counter tops, sink, tables, appliances used) after the event. Dishes and cups used should be washed, dried and put away. Lights and equipment should be turned off, whiteboard erased, the door closed and locked, and the key returned to the front office coordinator when the event is over. If the event occurs or concludes after standard business hours, the key will need to be returned the next morning.

1.6 Purchasing and Travel Reimbursement Policies and Procedures

A full description of the purchasing, travel reimbursement, and computer and equipment purchasing policies is found in Section 8.8.

Computer and Equipment Purchases

Equipment such as computers, printers, servers, etc., purchased with CMU funds, which include grant and other sponsored research funds, are the property of CMU. Such equipment may be used by students for a period of time, but the equipment belongs to CMU and must be returned once the work has been completed and/or before the student leaves EPP.

Only authorized department staff are able to confirm an order with an outside vendor. Please plan ahead. Rush orders for pick-up or delivery are difficult to accommodate.

1.7 Department Graduate Student Organizations

Several organizations support graduate students within the department, college, and university. Within EPP these include:

The EPP Student Facilitation Board (SFB)
International Students in EPP (IS=EPP)

Graduate Organization of Womxn+ in EPP (GROW+)
EPP Student Alumni Committee

More information about these groups, representation and membership is available on the EPP Graduate Student Canvas site.

1.8 Department Approach to Press and Media Relations

Students with questions about press and media relations as it pertains to their research should consult with their faculty advisors first and then follow up the appropriate department staff. Additionally, the CIT marketing and communications representative is available to answer questions about promoting student work. Students can contact the EPP front office coordinator and the events and web content coordinator to advertise research, awards, etc., on EPP socials and the EPP newsletter. Refer to Appendix 1 for a list of department staff.

2 Doctoral Degree Attainment

2.1 Degree Title

The degree title awarded is Doctor of Philosophy in Engineering and Public Policy. For students pursuing dual degrees where EPP is their home department, the EPP degree will be listed first (e.g., Doctor of Philosophy in Engineering and Public Policy and [other degree program]).

2.2 Joint Degrees

Joint PhD degrees with departments in the College of Engineering (COE), the Department of Statistics, and the Department of Chemistry are possible. If an EPP student wishes to pursue a joint PhD in one of these departments, they must first receive the approval of their primary faculty advisor, then follow that department's application procedure. Students in one of these departments wishing to pursue a joint degree with EPP must apply to EPP within the first academic year of PhD study. They will need to complete the EPP online application and provide a new letter of recommendation, preferably from a faculty advisor in their home department. They will also need to provide necessary test scores and transcripts. Copies of these documents may be sent directly to the EPP admissions office from their home department.

Students pursuing joint degrees are expected to complete the qualifying examinations and teaching requirements in both departments unless otherwise documented and approved by College of Engineering College Council. Typically, one defense committee is formed that satisfies the requirements of both departments. As students near degree completion, they should follow their home department thesis submission rules and deadlines. Students may refer to the College of Engineering policy on joint degrees with EPP for more information, engineering.cmu.edu/education/academic-policies/graduate-policies/degrees.html.

2.3 Statute of Limitations – Doctor of Philosophy

As outlined in the Doctoral Student Status Policy www.cmu.edu/policies/student-and-student-life/doctoral-student-status.html students will complete all requirements for the Ph.D. 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 Ph.D. 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 the College of Engineering, students have 6 years from completion of the qualifying exams (in EPP this includes thesis proposal) to complete all requirements for the PhD, including final thesis submission to the department. The College of Engineering 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 College of Engineering policy website engineering.cmu.edu/education/academic-policies/graduate-policies/index.html and in the university's doctoral student status policy.

2.4 Registration

Each semester, students must go through the process of registering for classes for the next semester. CMU has streamlined the process of enrollment by creating The Hub located on the lower level of Warner Hall. The Hub includes the Registrar's Office, Cash Operations, and the Student ID Center. The Hub's website contains pertinent information on a variety of issues such as cross-registration, grading policies, financial aid, registration, and academic records. Students who encounter problems with the registration process should contact the department's academic program advisor for help. See Appendix 1 for a list of specific department and university personnel.

Students will receive an email from The Hub indicating when it is time to register for the upcoming semester. Registration occurs in April for the summer and fall semesters, and in November for the spring semester. All students intending to continue in the following semester should register at the scheduled time noted in the email as courses fill quickly. Students should meet with their faculty advisors prior to registration to review course selections.

CMU course credits are counted in terms of units, where one unit is equivalent to one hour of work per week. Three units of CMU coursework are equivalent to one semester hour of course credit at most other institutions. Graduate courses are most often 12 units for full-semester courses, or 6 units for mini-courses running for half a semester. To be considered full-time students must be registered for 36 or more units. For international students, anything less than full time registration is considered a violation of visa status. EPP doctoral graduate students generally take a course load between 42 and 48 units, some of which are research course units.

EPP students may take courses in any of CMU's departments or schools. Students should refer to the course description and course profile for more information about a particular course and whether it is suited for their background and academic interests. Students should consult with their faculty advisor regarding how a particular course would fulfill requirements for the degree. Students may also cross-register for courses at other local institutions of higher education (see PCHE cross-registration below).

For Summer semesters, doctoral students should register for a designated EPP reading & research course. Tuition will not be assessed for these courses. This information will be outlined in an email sent to students in April from the academic program advisor. Summer courses other than an EPP reading and research courses, will incur a tuition charge that the Department will not pay.

3 Doctoral Degree Requirements

This section of the handbook covers coursework and teaching practicum, research including qualifier exams, and the dissertation.

3.1 Standard Degree Requirements

Carnegie Mellon graduate students are expected to complete their degree requirements within the standard length of time for their program of study as outlined in the relevant Graduate Student Handbook. Standard program lengths for graduate students vary significantly – ranging from two semesters for some full-time master's programs to several or more years for doctoral programs. Upon completion of the graduate program degree requirements, the degree will be certified by the student's academic program in the semester in which the student completes the requirements.

Early Completion

Graduate students who consider the completion of all degree requirements in less than the standard length of time for their program of study may consult with their degree-granting program or department to determine if early degree certification is allowed and under what circumstances.

Extended or Longer-than-Standard Completion

Longer-than-standard degree completion may occur due to academic interruptions in making progress toward the degree as defined by the academic program, interruptions of full-time study or progress towards the degree due to serious, documented medical issues, or other unusual or unforeseen circumstances.

Doctoral students who require an extended period to complete their degree requirements must consult with their academic program, and are subject to the CMU Policy on Doctoral Student Status (www.cmu.edu/policies/student-and-student-life/doctoral-student-status.html), specifically the "Time to Degree" section.

3.2 Coursework, Teaching Practicum, and Required Units for Degree Attainment

Required Units for Degree Attainment

EPP doctoral students are required to complete 132 units. Of the 132 units, they are required to complete 96 units of coursework. In addition to courses taken at CMU, students can substitute graduate level coursework taken prior to entering the EPP PhD program subject to department approval. Refer to 3.4 below for additional information.

The coursework and teaching practicum requirements for a PhD are designed to provide students with a common core of knowledge and skills, 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. The total number of units for degree attainment is 132 units of coursework. Students will complete additional units of research work.

CORE COURSES

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 |
| - 19-703 Applied Data Analysis or 36-607 Modern Regression | 6 units or 9 units |
| - 19-705 Workshop in Applied Policy Analysis (Prep for Part B Qualifier) | 6 units (optional) |
| - | |

QUANTITATIVE METHODS -- 18 units

Courses on probability and statistics, optimization, machine learning, game theory, and other quantitative methods. It is strongly recommended that at least 6 units should be oriented to probability and statistics. Recommended courses include:

- Probability and statistics: 12-704, 19-704, 90-905, 36-749
- Machine learning: 05-834
- Optimization: 19-785, 36-725, 21-690, 45-751

ECONOMICS -- 12 units

Courses on microeconomics and application of economic analysis in markets. Recommended courses include:

- | | |
|---------------------------------|----------|
| - 19-706 Microeconomic Analysis | 6 units |
| - 90-908 PhD Microeconomics | 12 units |

Students completing 19-706 are required to complete an additional 6 units of economics coursework. 19-706 is appropriate for students seeking an applied treatment of graduate level microeconomics and is tailored to the analyses that EPP PhD students use in their research. 90-908 is calculus-based and provides a theoretical treatment of microeconomics.

TECHNICAL ELECTIVES -- 36 units

Courses in engineering, science, applied math and statistics

- Technical courses in area of focus

SOCIAL SCIENCE ELECTIVES -- 24 units

Courses in social science and social analysis

- Courses in social science and social analysis in area of focus, with at least 6 of the units in the area of political science, regulation or law.

TEACHING PRACTICUM

Students are required to twice serve as a Teaching Assistant or Project Manager for an approved EPP courses. Details on the practicum requirement are discussed in Section 3.6.

Selection of Coursework and Research Units

Other than the core courses listed above (19-701, 19-702, and 19-703), students work with their faculty advisor to select courses to fulfill the elective requirements and to determine if additional coursework should be completed. 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 the student's research area.

Note that units for certain courses spanning multiple areas may be split and counted partially for social science and technical 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 social science or technical courses. Students should discuss first with their faculty advisor and then seek the approval of the associate department head for graduate affairs. The majority of students complete the above required coursework by the end of their fourth semester.

Students also enroll in research units which are taken for a letter grade. During the first 3-4 semesters, students typically take 6-12 units of research each semester. As students take fewer courses they increase their research credits, registering for a minimum of 36 units of research each semester after they have completed their coursework.

19-700 Directed Study in EPP: Graduate – for entering students who are working on a circumscribed research effort during their initial semesters.

19-750 Project Research – for students who have identified a research area and continuing research over a number of semesters.

19-799 EPP Ph.D. Thesis Research – for students who have passed the qualifier exams and are completing their thesis research.

3.3 Courses Outside the Department or College and Undergraduate Courses

Students are permitted to take courses outside the department and outside the college to fulfill the coursework requirements. Our students commonly take courses in the Heinz College, the Institute for Politics and Strategy, the Department of Statistics, the School of Computer Science, and the Tepper School of Business. 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 3.5.

While students may take undergraduate courses, these courses may not be used to count

towards degree requirements without advisor and associate department head approval.

3.4 Drop/Add/Withdraw Procedures

Students taking courses must follow the procedures and deadlines for adding, dropping, or withdrawing from courses as identified on the academic calendar. Information can be found at <https://www.cmu.edu/hub/registrar/course-changes/index.html>. Please note that separate deadlines and calendars are in effect for doctoral level courses, and for the Heinz College and Tepper School of Business.

Students wishing to withdraw from a course after the drop deadline must obtain approval from their faculty advisor, and complete and submit a Course Withdrawal Request (pdf) form which must be signed by the faculty advisor. Students withdrawing from a course during the withdrawal period receive a “W” grade for that course. This “W” grade does not affect a student’s QPA. A graduate student can petition the department head to remove a W grade from their transcript if there are extenuating circumstances.

3.5 Course Waiver Policy

While specific courses are listed as course requirements, alternative CMU courses or graduate level coursework taken prior to entering the EPP PhD program may be acceptable substitutes. Generally, students will NOT be permitted to substitute prior coursework for the core courses unless they have taken required core courses at CMU prior to entering the EPP PhD program. Prior graduate-level coursework taken at CMU or elsewhere and receiving a grade of B or better may be used to waive non-core course requirements with approval of the student’s faculty advisor and the associate department head. In such cases the unit requirements do not need to be met from replacement coursework. A maximum of 48 units taken outside of CMU may be used to waive course requirements.

3.6 Transfer Courses and Cross-Registration (PCHE)

Carnegie Mellon University offers students the opportunity to take courses for credit through a cross-registration program (see Pittsburgh Council on Higher Education (PCHE) and Cross-registration below) and through the receipt of transfer credit from other accredited institutions. Students in EPP must receive approval from the associate department head for graduate affairs before counting on these credits. A similar course must not be offered at CMU. If approved, the CMU transcript will include information on such courses as follows:

Carnegie Mellon courses and courses taken through the university's cross-registration program will have grades recorded on the transcript and be factored into the QPA. All other courses will be recorded on this transcript indicating where the course was taken, but without grades. Such courses will not be taken into account for academic actions, honors or QPA calculations.

Suspended students may take courses elsewhere; however, they may only receive transfer credit if they received prior approval from the associate department head for graduate affairs.

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

3.7 Teaching Requirements

As part of their doctoral training, students are required to complete two teaching practicum assignments to provide classroom and/or project management training. Students will be assigned to a Teaching Assistant (TA) or Project Manager (PM) role for courses offered through the EPP department. Assignments are made by the associate department head for undergraduate affairs. Students are expected to complete the teaching practicum requirement by the end of their 8th semester. Ideally, students would serve once as a PM for a project course taught in the department and serve as a "traditional" TA for a course taught in the department. Within the structure established above, teaching practicum assignments will depend on several factors: faculty preferences, course enrollment, student background and experience, career interests, faculty advisor input, and where possible student preferences. Teaching practicum requirements for students pursuing a joint degree with another department where they also serve as TAs will be negotiated between departments on a case-by-case basis.

Students will be expected to attend a TA/PM training session taught by the associate department head for undergraduate affairs to help prepare them for their upcoming assignment. Students should also consider using the resources available from the Eberly Center for Teaching Excellence and attending the graduate student instructor seminars provided by the Eberly Center.

In the event that the department requires TA service beyond that which is provided by each student serving two times as a TA or PM, the department may require students who are financially supported by the department to provide additional TA or PM service.

Students will receive an email in late May outlining the process and timeline and include a list of courses being considered for practicum.

Project Management Assignment

Students will have the opportunity to serve as a PM for the EPP projects course and other relevant project courses offered in the department (like the Quantitative Entrepreneurship course). The PM requirement allows students to develop research and project management skills, team coordination skills, and personnel management. The PM experience involves considerable interaction with both students and outside experts who serve as consultants and reviewers for the project.

Teaching Assistant Assignment

Students will also serve as a TA in an assigned undergraduate or graduate EPP course. Teaching

assistantships afford graduate students the opportunity to learn about the art of teaching and develop skills that can support their professional careers. For example, teaching may offer an opportunity to gain deeper knowledge about a subject. Teaching can also improve communication skills, help graduate students learn how to lead group discussions, and learn how to evaluate the work of others. Students serving as TAs are not merely graders. TAs in EPP should be responsible for assisting the course instructor in preparing content prior to the start of the semester, administering the course website, handling course IT needs, preparing and grading homework and test questions, attending and perhaps giving lectures, meeting weekly with the course instructor to plan recitation sessions, conducting recitation sessions, assisting in assigning grades, and being available outside of class to assist students and answer questions.

3.8 Research Requirements

The PhD program does not have a minimum number of research units required. Students should enroll in research units as appropriate each semester they are enrolled, as determined through discussions with their faculty advisor. All research units are graded, and grades for research units factor into a student's QPA for the semester and the student's cumulative QPA.

As discussed in Section 5.1, any grade lower than a B for research units automatically results in academic probation.

All PhD students are required to complete the training on Responsible Conduct of Research (see the section on Academic Integrity, below). Students also need to be aware of other resources and regulations governing research at CMU and consult with their faculty advisor on research protocols.

- Office of Sponsored Programs, <https://www.cmu.edu/osp/>
- Office of Research Integrity and Compliance <https://www.cmu.edu/research-compliance/>
- Intellectual Property Policy <https://www.cmu.edu/policies/administrative-and-governance/intellectual-property.html>
- Policy on Restricted Research <https://www.cmu.edu/policies/research/restricted-research.html>
- Human Subjects in Research Policy <https://www.cmu.edu/policies/research/human-subjects-in-research.html>

3.9 Internship Opportunities

Students completing a doctoral degree typically do not pursue internship opportunities, however, a student may do so if deemed appropriate for their course of study.

International students are required to consult with Office of International Education for eligibility before seeking an internship/co-op or signing an offer contract (required addition to ensure the university is in compliance with immigration laws for F & J status students)

The department offers an internship course 19-995 "Internship in EPP" for PhD students who are working outside of CMU during the summer semester. Prior approval is required to register for this course. Students should discuss their plans with their faculty advisor, the associate department head, and inform the academic program advisor.

Tuition will not be assessed. Upon completion of the internship, students must submit a 2–3-page report with internship supervisor signature detailing the work experience and including how the internship was related to EPP. Since course registration is necessary, a grade will be required from the student’s faculty advisor. International students interested in this opportunity will need to follow the Curricular Practical Training procedure provided on the Office of International Education (OIE) website and completing an internship following this procedure will not use OPT time. Questions on this procedure should be directed to the academic program advisor.

3.10 The Qualifying Examinations

The Qualifying Examinations are conducted once per academic year and must be taken at the end of the student’s third semester. Students must be registered for 6 or more units to participate in the qualifying exams. The objectives are (1) to assess the student's ability to do interdisciplinary research based on sound knowledge of technical and social processes, application of rigorous 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; (2) to provide a learning opportunity to improve student preparedness for PhD work and ability to communicate PhD work orally and in writing and to think and respond in real time to critical discussion about the work and its implications; (3) to encourage interaction and exchange of ideas among EPP faculty and students; and (4) to recognize outstanding performance. The levels of synthesis and evaluation to be demonstrated in these examinations go beyond those expected in most courses, although the core course sequence (19-701 through 19-705) is aimed at developing and exercising this level of problem solving.

The Qualifiers consist of two parts discussed more fully below. Part A focuses on original research. Students are required to submit a research paper, to give an oral presentation, and are subject to a question/answer session following their oral presentation. Part B is an extended take-home exam consisting of an applied problem in technology and policy.

All students will be expected to submit materials and complete the presentation and Q&A for both Part A and B of the exam in late December through January of their second year in the program). Students completing joint degrees may have different timelines or requirements as detailed below. Students facing extenuating circumstances to delay completing the qualifying exams may petition the associate department head for an exception. Petitions should be received by the end of the first full month of their third semester.

Students in the 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. Students are expected to communicate their choice to front office coordinator. For students in the joint EPP/Chemistry degree program, the Part A exam is replaced with the Chemistry Research Progress Report. The Part B exam and thesis proposal together replace the Chemistry Original Research Proposal. For specifics students should refer to the EPP/Chemistry joint degree information.

Each year, a qualifier schedule will be sent at the beginning of the summer to students taking the qualifier that year.

Part A – Research Paper, Presentation and Question/Answer

For the EPP Part A Qualifier, the student must complete original research that addresses a problem in technology and policy in which the issues of technology play a central role. Students must prepare an original research paper and presentation, then orally present the work to and answer questions from the faculty. Student performance is assessed across all three elements (paper, presentation, Q&A).

The Part A 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 Part A process requires that the student demonstrates the ability to write a paper in the appropriate scientific style on which they are the first author, to present the paper to the faculty, and to field questions following the presentation.

The final research paper must be 20 pages or less and less than 5,000 words in length (excluding abstract, acknowledgements, references, footnotes, tables, figures, and appendices). Students should list all faculty who served as their advisors for the paper on the cover page (not just their primary advisor). Papers must be submitted to the department for distribution to the faculty on a prescribed date in December which is announced as part of the qualifier schedule.

Part A Qualifier Guidance Document is included as Appendix 2.

The presentation materials must be submitted to the department for distribution to the faculty on a prescribed date in January prior to the first scheduled oral presentation. This provides equal time for all participating students to prepare materials. This date is announced as part of the qualifier schedule.

Oral examinations are 80 minutes total. The student will make a 20-minute oral presentation of the paper and then be 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. Students are not permitted to attend other students' qualifier presentations. Oral examinations are scheduled during January.

Each faculty examiner involved in a Part A exam independently rates the paper, presentation, and response to questions and provides comments. These ratings and comments are compiled and presented to the faculty body in a qualifying exam meeting following the exam period. Each student's performance is discussed among the faculty at that meeting to reach a decision (typically by consensus, rarely by vote, when necessary), which is then communicated to the

student. Candidates for awards are identified based on receiving high scores or being nominated by faculty. Candidate papers are reviewed by a subcommittee of faculty to determine award recipients.

In addition to working closely with their faculty advisor for support, the department provides students with a structured process to prepare materials and receive feedback on their research, paper, presentation, and Q&A performance in the months leading up to the qualifying exam period.

Each student should submit a qualifier research plan in June. Research plans should be approximately 2 pages (single spaced, 12-point font), and should include the following elements: title, author, advisor(s), research question, background and motivation, methods, risks, hypotheses and/or anticipated results, preliminary results (if any), research and writing schedule. There will be a June deadline for research plans announced in advance.

All research plans will be distributed to all EPP faculty for review. Each student, with their faculty advisor, should select at least four faculty members, including the student's advisor(s), and ask them to provide a thorough review of the research plan. The names of the selected reviewers should be included at the end of the research plan. The selected reviewers and any other faculty who choose to review the research plan should send their comments to the department. (Faculty members are also welcome to share comments directly with the student and/or advisor, in addition to sending them to the department.) The associate department head and department head will review the comments, add their own, and send them back to each student and their advisor(s). They may ask some students to redo their research plan in response to this feedback and resubmit by the resubmission deadline.

By the Fall of their second year, we expect that the majority of students, guided by their faculty advisors, are making progress on their research and preparing a research paper of good quality. To receive feedback on this progress and to prepare for the oral examination, students are required to give pre-qualifier practice presentations in the fall. Presentations should be 30 minutes in total, 15-minutes for the actual presentation and 15-minutes for questions and answers. All faculty and research staff are invited to attend, and students may reach out to specific faculty requesting their attendance. In addition to the public presentation, students are encouraged to participate in student-run practice presentations. Presentation skills training from Global Communication Center will be arranged in 19-705 and students are encouraged to attend Global Communication Center presentation workshops and sign up for one-on-one communication tutoring and rehearsal video recording.

The purpose of the pre-qualifier practice presentations is to demonstrate the progress made, gain experience in presenting and Q&A, and get some immediate informal feedback. The pre-qualifiers are not evaluated in any other way and do not inform the faculty's assessment of students' final Part A qualifier paper and presentation.

Prior to submitting their final paper and presentation materials, students should seek additional

feedback from their advisor and other faculty. Prior to the oral examination, students are encouraged to practice their qualifier presentation.

Part B – Policy Analysis Problem

Part B of the Qualifying Examinations occurs in early January. The objective of Part B is to examine a student's ability to work through 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 20-page written synthesis. Examination problems are carefully constructed so as not to give a significant topic area advantage to any particular student.

Students can prepare for the policy analysis problem in several ways. Most students enroll in 19-705 Workshop on Policy Analysis (taken pass/fail). Students also prepare individually by reviewing past Part B problems and solutions and working through structuring solutions (including completing analyses and preparing written synthesis) on their own.

Student performance is assessed by a subcommittee of faculty based on the quality of the analysis completed and communicated through a written paper according to the following rubric:

- Recognition and coverage of key issues (responsive to charge)
- Problem formulation and approach (rigor, creativity)
- Analysis (did the right analysis, did the analysis correctly, provided substantive support for arguments)
- Written presentation (organization, language and grammar, graphics, and tables)

Faculty assessments and discussion about pass and award decisions occur before student identities are revealed.

Outcomes and Timing of Repeating Qualifying Examinations

Jointly, faculty assign one of three outcomes to each exam: pass, retake, fail. Within this structure, several outcomes of the Qualifying Examinations are possible. These are:

1. The student passes both parts of the examinations. Such students are considered qualified for doctoral studies and move on in their research to complete any remaining coursework, practicum, and their proposal.
2. The student earns a retake on one or both parts. In this case, the student may retake the examination(s) one more time. Alternatively, the student may be eligible to leave the program with an MS degree if they have met the EPP MS degree requirements. Students receive individual guidance on whether they should plan to retake the examination.
3. The student fails one or both parts. Such students are advised to withdraw from graduate studies in EPP.

Students who do not pass one or both parts of the examination will receive individual guidance on next steps. All students not passing but earning an opportunity to retake the exam(s) may elect to retake the failed examination(s) one additional time when next offered. However, students may choose to withdraw from the program. Students who have been struggling and not making adequate progress will be encouraged to withdraw temporarily or permanently from doctoral studies in EPP. Any student who decides to withdraw from the program may be eligible to receive an MS in EPP degree assuming all MS requirements have been completed (96 units of defined coursework, which after 3 semesters are likely to have been completed).

Since qualifying examinations are completed annually between December and January, students will typically retake exams in that timeframe. However, students who need to retake Part A can submit an updated paper and schedule an oral examination presentation any time up to the date when Part A papers are due in the next qualifier cycle. Oral presentations must be presented to a committee with at least 3 of the 4 members from the original committee plus 2 extra readers assigned by the department. The committee members, advisor, and any other faculty attending the presentation will confer with each other as soon as possible after the presentation to determine whether the student passed. Part B exams can only be retaken during the regularly scheduled time in January, not earlier.

Students who do not pass their second exam are automatically withdrawn from graduate studies in EPP at the end of the current semester.

Additional Policies for Qualifying Examinations

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. However, students who believe that extenuating circumstances are interfering with taking qualifying exams on the usual schedule are encouraged to discuss the matter with either their faculty advisor, the department head, or the associate department head for graduate affairs. Together, the advisor and the department head or associate department head will determine alternative arrangements, where appropriate. These arrangements are made on a case-by-case basis. Examples of extenuating circumstances include physical illness, mental illness, and family emergency.

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.

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 for graduate affairs. Approval is not guaranteed. If approved, the department may count a deferment as their first attempt. For example, 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.

3.11 Requirement for Advancement to Doctoral Candidacy (including thesis proposal)

Proposal and establishing a PhD Committee

Once the Qualifiers and coursework are completed, students work 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.

Typically, within six months of passing the qualifying examinations at the PhD level, the student should begin to formulate a written thesis proposal. 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 academic program advisor with the following details: date, time, and location of the proposal; the names of the thesis committee members and indicate the committee chair or chairs. The academic program advisor will produce a committee signature sheet and send it to the thesis chair/s prior to the proposal. It is the responsibility of thesis chair to indicate pass or fail on the form and obtain the signatures of the committee members. For the committee members participating remotely, the thesis chair will need to obtain their approval via email and forward it to the academic program advisor along with the signature sheet. When the proposal is accepted by the PhD Committee, the committee signature sheet is sent to the associate dean by the academic program advisor to signify the completion of the qualifying process for acceptance to PhD candidacy.

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, courtesy, and adjunct faculty). The committee composition must also meet the guidelines set forth by the College of Engineering, which additionally imposes that the two department-affiliated committee members must be full time CMU faculty members.

Summarizing the committee composition –

- Minimum 4 members
- Two must be EPP faculty members (this includes affiliated but not courtesy faculty) who are also full time CMU faculty
- One must not have any appointment in EPP (this precludes affiliated faculty, courtesy faculty, or adjunct faculty, even if the latter has a primary affiliation outside CMU)
- Adjunct and courtesy faculty can always serve as the fourth (or fifth) member of a committee.

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 thesis 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. Committee members who are external to EPP and hold no appointment in the department are an additional resource for the student. They are expected to read the proposal and thesis documents, attend the proposal presentation and thesis defense, and be available to meet with the student periodically to provide feedback.

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 to benefit from the varying backgrounds of the committee members. Thesis proposal copies are submitted to the academic program advisor on a voluntary basis by the students. Students are encouraged to ask colleagues for copies of previous thesis proposals as a guide.

EPP thesis proposal presentations may be open to members of the CMU community or closed having only the student and their committee in attendance. If the student and thesis advisor choose to have an open proposal, they should inform the academic program advisor that an announcement will need to be published. The length of the thesis proposal presentation can vary but is usually about 30 to 40 minutes long, followed by questions from the committee and other audience members. The student and any others not on the committee leave the room while the committee members confer and determine the results of the examination.

Students will be informed of the results of their thesis proposal examination immediately after 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 proposal date is changed to reflect the second proposal examination; or, iii) fail, in which case the student will be dropped from the program at the end of the semester in which the failed thesis proposal took place.

PhD Student Status After Proposal

Upon completion of their thesis proposal and required coursework students are to be regarded as All But Dissertation and will need to complete an All But Dissertation Status Agreement to change their student status to All But Dissertation. Students can either be “in residence” (code ABR) or “in absentia” (code ABS) as follows.

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

ABR 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, ABR 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 ABR for 5 units for two consecutive semesters. After that, they must either register for 36 units or change status to All But Dissertation In Absentia (ABS).

Students may remain on campus with ABR five-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.

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 3.10. 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. As with ABR status, these units must be paid by the student. They cannot be paid by the department or by a research grant. They will be assessed health insurance unless they complete the waiver form found on the University Health Services website. The academic program advisor will help with 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 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 academic program advisor 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.

Final Semester Tuition

The doctoral student status policy indicates that ABR students 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 corresponding fall student fees. Likewise, ABR students 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 corresponding spring student fees. In each case, paperwork will need to be completed both by the student and the academic program advisor. The final thesis submission dates will vary from year to year, so students should refer to EPP student resources tab on the EPP website for the most current thesis submission deadlines. Students should also check with the academic program advisor when they are ready to defend.

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

3.12 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 to ensure they are communicating with their faculty research 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 has the right to terminate their funding (although such termination is very rare).

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 Compliance 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, 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 submitted to the thesis advisor, the department, and the ProQuest repository as noted further on in this section. It is very important that students acknowledge the financial support received during their tenure in the acknowledgements page.

Instructions on completing dissertation requirements, including templates, formatting guidelines, and thesis submission deadlines are available on the EPP website student resources page and on the graduate studies canvas site. Students should refer to these guidelines as they begin to produce their dissertation and should meet with the academic program advisor.

The deadlines posted on the college website for thesis submission are outlined below:

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

Dissertation Defense

Students must successfully defend their research in a public oral defense. The completed dissertation must be sent the PhD Committee at least one month prior to the defense date. The student should schedule the date and time of defense suitable to their committee members, and with sufficient time to make any necessary changes requested by the committee prior to any submission deadlines for tuition adjustment or graduation. Students are responsible for necessary technology, room reservations or technical connections needed for the defense.

College rules dictate that a public oral defense notice be sent to the Dean's Office and all College of Engineering departments at least two weeks prior to the defense date. Accordingly, students will need to complete a defense announcement template and submit it to the graduate program staff for dissemination. The template is available on the graduate studies canvas site. The length of the presentation (defense) should be about 40 to 45 minutes.

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 dropped from the program at the end of the semester in which the failed thesis defense took place.

Final Dissertation Submission, Printed Copies and Copyright

After the defense and once the final dissertation has been approved by the thesis committee chair, a pdf of the dissertation will need to be submitted to the EPP academic program advisor and uploaded to the ProQuest/UMI website by the student. Degree completion and dissertation submission procedures are provided on the Student Resources page of the EPP website and on the graduate studies canvas site. Students should meet with the academic program advisor prior to, or soon after, the defense to review these procedures. www.cmu.edu/epp/current/index.html.

Once the dean's office has approved the final dissertation, the department will provide the student with a bound copy. The department will also provide a bound copy for the thesis chair/s upon request. Additional copies may be ordered and purchased by the student on the ProQuest/UMI website.

Except in unusual circumstances, students will automatically hold a U.S. copyright on the thesis. Students may also choose to register the copyright with the U.S. Copyright Office. For a fee ProQuest/UMI will register the copyright. Additionally, there are alternative free services available for copyright, such as Creative Commons licensing www.creativecommons.org. Carnegie Mellon University Libraries provides guidance and answers to questions on copyrighting the thesis (such as determining copyright ownership, copyright permissions, registering copyright). For more information see: www.library.cmu.edu/.

3.13 Completing an EPP MS along the way

Students enrolled in the PhD program can elect to receive an EPP MS degree along the path to PhD. They will need to complete the MS requirements outlined in the EPP MS Graduate Student Handbook and submit a curriculum progress sheet documenting their coursework to the academic program advisor.

3.14 Certification of degree

The academic program advisor along with the associate department head for graduate affairs certify the degree.

3.15 Leave of Absence

Leaves of absence (LOA) may be requested by students during periods of financial, personal, or academic problems. If a student feels that they need to take time off from graduate studies, they should first consult with their faculty advisor, and then with either the department head or associate department head. Students desiring to request a leave of absence will need to complete an LOA form found on the Hub's website www.cmu.edu/hub and submit it to the EPP academic program advisor.

While we endeavor to ensure that all PhD students have adequate financial support, students who go on leave should understand that sources of support that may have been available at the time of going on leave, may no longer be available when they choose to return. Further, normal faculty turnover or sabbaticals may mean the student's previous advisor also may no longer be available.

The length of LOAs may vary according to students' circumstances. Clear communication between the requesting student and their faculty advisor with respect to expected length of leave is important to ensure alignment between students' needs and advisor's expectations. If a student wishes to extend their leave beyond two years, they must notify the department one month before the end of the second year that they wish to remain on leave as opposed to being considered to have withdrawn at the end of two years. Should a student on leave longer than two years wish to return to the PhD program, they will have to be readmitted to the PhD program subject to space constraints and academic performance review.

There are also effective limits to the length of leaves of absence based on college and University policies for completion of the degree. College policies set a limit of six years to completion of the degree once the thesis proposal has been completed, and the University sets a limit of 10 years from first matriculation to completion of the degree.

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

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. The beginning date for the LOA procedure 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 faculty advisor.

Students taking a leave must remove all personal belongings from departmental space. The department is not able to store personal belongings, including books, or take responsibility for them. Therefore, students should make arrangements to remove all items from the EPP office they occupied and return department keys to the front office coordinator before they leave.

3.16 Withdrawal of Degree

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

www.cmu.edu/policies/student-and-student-life/withdrawal-of-a-degree.html.

4 Advisors and Student-Professor Relationship

Faculty advisors are responsible for assisting students with course selection, guiding research, and providing help with other academic matters. It is likely they will also be the student's thesis advisor and the chairperson of their thesis committee. The faculty advisor is expected to provide guidance relevant to research and progress towards completion of the dissertation. It is common for PhD students in EPP to have more than one research advisor.

4.1 Advising Expectations Template

Following is a list of suggested questions and topics that students should discuss with their advisors. These questions are intended to serve as guidelines for common concerns and norms that might come up when navigating the adviser/advisee relationship. Advisors may have different styles in what they adhere to, but students should feel encouraged to ask questions related to the categories described below. Additional resources for advising topics and questions can be found on the EPP Student Resources webpage

www.cmu.edu/epp/current/index.html.

- **PhD and Milestone Timelines:** What are your expectations for timeline for research milestones (e.g., first publication, time between quals and proposal, defense)? Am I on track?
 - How many publications do you expect from a Ph.D.?
 - What happens if I encounter difficulty publishing a specific paper?
- **Advising Team:** Do we feel like we have the appropriate number of advisors involved? How should I go about finding a co-advisor/committee members?
 - How do you view collaboration with other principal investigators (PI) or students? How should co-authorship on publications be addressed with collaborators? How should co-authorship be addressed with committee members?
- **Meeting Frequency:** Do we both feel like we are meeting frequently enough? What should I do if I feel like I need more time from you that you are unable to provide?

- How should I manage scheduling multiple advisors when there are not many times that are shared by all advisors? Is it ok to meet with advisors separately? How often should we all meet together?
- **Feedback Methods:** What is a mutually agreed-upon feedback mechanism for research progress?
 - Research grades: how do you decide what is “A”? “B”? What does it mean if I got a B?
 - What is the best way for me to get feedback from you about areas I can improve/areas I’m doing well in?
 - What do you see as my strengths/weaknesses?
- **Funding Sources:** Where is my funding coming from? How many years will it last?
 - Are there any restrictions or stipulations from the funding source?
 - If my funding source changes during my study, how might my research project(s) change?

Students and advisors are free to determine a meeting schedule that works well for them. This often changes during a student’s PhD study, e.g., as they become more independent. As a general benchmark, however, it’s common for students to meet with advisors for 1 hour every week or two to discuss their research.

4.2 Advisor Changes

The department is committed to ensuring that its graduate students have effective advising. Students are matched with faculty advisors with the expectation that students will do everything possible to make good progress on their research and that advisors will do everything possible to support students’ professional progress and personal wellbeing – within the constraints of available sources of funding.

Some differences of opinion and style are inevitable in any workplace relationship, including the advisor-student relationship. Students are strongly encouraged to discuss concerns with advisors before they become serious.

Additionally, the university has independent resources to help students navigate challenges, including relations with advisors. These services are confidential, except where reporting is legally required – in which case the service will make that clear to students prior to any disclosure. These services are managed by the assistant vice provost for graduate education and the college’s associate dean of student affairs. Students are strongly encouraged to seek their support and advice.

Sometimes, a PhD student will contemplate changing advisors though this is not necessarily an easy or a straightforward process. When that happens, the process for changing advisors as follows.

1. Whenever possible, students will discuss the situation with their current advisors, looking for ways to adjust topics and work practices to suit students’ needs, within advisors’ constraints (e.g., funding, expertise).
2. When that is not possible, students should initiate conversations with one of the following: EPP ombudsperson, associate department head for graduate affairs (ADH), department head (DH), academic program advisor. None of these individuals will discuss the situation with anyone not on this list without students’ permission.

3. The individuals listed in #2 will work with students either to improve the current advising relations or to create new relations that match students' interests with other faculty members' expertise, advising capacity, and funding.
4. Students should not engage other faculty in the possibility of working with them until encouraged by their current advisor, ADH, or DH.
5. The transition to a new advisor will consider (a) timing, (b) completion of current projects (including authorship and handoff), (c) funding and responsibilities for new project.
6. Once these terms have been determined, the student will submit a written petition to the department (see below for petition requirements).
7. The DH or ADH will approve or request changes. The DH or ADH is empowered to consult with the former advisor, new advisor, or student, as necessary. The expectation is that plans approved by the student, prior advisor, and new advisor will be routinely approved by the department.

This procedure is not needed when the normal course of advising leads to adding co-advisors or changing topics within constraints of research funding.

A formal petition to the department to change advisors should include the following information:

- Student name:
- Previous advisor(s) names:
- New advisor(s) names:
- Effective date:
- Student status on key milestones (qualifiers, thesis proposal):
- If the thesis proposal has been completed, does this change imply any significant changes to the scope of work? (In this case, has the thesis committee been apprised of the changes and have they approved?)
- Are there changes to the composition of the thesis committee that are required?
- Describe what work should be completed for prior advisor and appropriate timeframes:
- Describe how the student will be funded going forward, both before and after the advisor change (current and future sources? How long is funding in place from each? When should charging to this new source begin?).
- Supporting signatures of approval (this should indicate, of current student, prior advisor(s), and new advisor(s) who supports this change).

4.3 Resources for Exceptional or Challenging Situations

The EPP Department assigns a faculty member to serve as the Graduate Student Ombudsperson. The graduate ombudsperson for EPP is available as a resource to listen to concerns, to provide advice on potential remedies, and to bring concerns to the department's attention. To the extent possible, student interactions with the ombudsperson are confidential.

Additionally, students may confer with the university graduate ombudsman on issues of process or other concerns as they navigate conflicts. See the Appendices for other support

offices.

4.4 Summary of Graduate Student Appeal and Grievance Procedures

Graduate students will find the Summary of Graduate Student Appeal and Grievance Procedures on the Graduate Education Resource webpage. 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.

5 Grading/Evaluation

5.1 Grading scale, Minimum QPA Requirements

EPP follows the grading policy used by the College of Engineering engineering.cmu.edu/education/academic-policies/graduate-policies/registration-grading-credit.html.

An overall 3.0 or higher grade-point average is expected throughout the course of studies for doctoral students. No more than two courses with grades of C+ or C may be used towards meeting course requirements. Courses receiving a C- or lower may not be used. In addition, courses receiving pass/fail grades may not be counted towards degree 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 (3.0) in the most recent full semester completed, is automatically and immediately placed on academic probation. See Section 5.5 for more information on inadequate progress and probation.

Letter grades are given for research courses.

5.2 Policy on Pass/Fail and Audited Courses

All required coursework must be taken for a letter grade. Students cannot satisfy course requirements with pass/fail grades or by auditing a course. Courses taken in addition to the required coursework may be taken Pass/Fail or audited. Students should discuss with their faculty advisors whether coursework should be undertaken in these ways. Students should consult the HUB for necessary paperwork and semester deadlines to complete course as pass/fail or auditing.

5.3 Process for Appealing Final Grades

Final grades will be changed only in exceptional circumstances and only with the approval of the instructor and the department, unit, or program. Grading is a matter of sound discretion of the instructor and final grades are rarely changed without the consent of the instructor who

assigned the grade. The following circumstances are the unusual exceptions that may warrant a grade appeal: (a) the final grade assigned for a course is based on manifest error (e.g. a clear error such as arithmetic error in computing a grade or failure to grade one of the answers on an exam), or (b) the faculty or staff member who assigned the grade did so in violation of a University policy. www.cmu.edu/graduate/policies/appeal-grievance-procedures.html

5.4 Satisfactory Academic Standing

Doctoral students should be meeting regularly with their faculty advisors and be well aware of their academic standing and progress. Students are also evaluated at the time of qualifiers, proposal, and defense.

Keeping Track of Course and Research Progress

A record of the student's progress is kept in the form of the Curriculum Progress Sheet and the online graduate student audit system (discussed below). Appendix 3 shows the Curriculum Progress Sheet to be completed by the student each semester with the help of their faculty advisor to ensure that course requirements are being met and to enable the student to document progress in the program. Curriculum Progress Sheets for students in joint programs with special requirements are available from the academic program advisor and on the EPP graduate studies canvas site.

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 faculty advisor prior to registration week to review course selection and update their Curriculum Progress Sheet.

In May students will be asked to submit a copy of their curriculum progress sheet to the academic program advisor to be used to record the course information in the online gsaudit system.

While students should be discussing progress with their faculty advisors, they must consult with the associate department head for graduate affairs several times during their graduate studies. They may do so via email or arrange for a meeting. Consult with the associate department head about the following situations:

- If they have prior coursework they would like to count towards the EPP degree. They will need the approval of their faculty advisor first, then they may consult with the associate department head for final approval.
- If they are uncertain about whether courses they are planning to take will meet EPP coursework requirements.
- When they and their advisor feel all required coursework has been completed as outlined on the Curriculum Progress Sheet. The associate department head will make the final decision on whether a student has met the coursework requirement.

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.

In addition to Curriculum Progress Sheets, as noted, EPP also uses a web-based student data system (gsaudit.cs.cmu.edu) to 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.

A General Progress Schedule for Most Students

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. Students in joint and special degree programs should refer to their specific curriculum progress sheet. A sample schedule is shown below.

Semester 1	19-701 "Theory & Practice of Policy Analysis" 12-704 "Probability & Estimation for Engineering Systems" or equivalent statistics 19-700 "Directed Study" (EPP) – minimum of 6 units An optional technical elective 19-706 "Microeconomic Analysis"
Semester 2	19-702 "Quantitative Methods for Policy Analysis" 19-703 and 19-704 or other approved course in Social Science/Survey Statistics Elective courses 19-750 "Project Research," aimed at starting work on qualifier problem Identify and pursue funding for research if necessary
Summer	Continue research in preparation for Part A Research Plan for Part A due in late June Receive initial faculty feedback on research plan
Semester 3	19-705 "Workshop in Applied Policy Analysis" (Optional) Quantitative methods or social science courses Elective courses 19-750 "Project Research," Write Qualifier Paper Preliminary oral presentation in early October for faculty feedback
Semester 4	Qualifying Examinations: December/January/February Completion of course work Confirm coursework progress with ADH Start preparation of thesis research proposal Teaching Practicum possible
Semester 5	Thesis proposal (if not completed already). Concerted effort towards thesis work. Teaching Practicum
Semester 6 and beyond	Continue and complete PhD thesis work Teaching Practicum

5.5 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 dropped from 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 the associate department head for graduate affairs, the department head, or the EPP ombudsperson. 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 (3.0) 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.

If an EPP student has a cumulative QPA of less than 3.0 for two consecutive full semesters, the department head will decide about dismissal from the program. If a decision for dismissal from the program is made, the student will receive the decision in writing. The student may request reconsideration of the decision by sending a letter stating the basis for reconsideration to the EPP Department Head within 10 days from the end of the semester. When an informal resolution cannot be reached, a graduate student who seeks further review of the matter is to follow the formal procedures outlined in Section 4.4 above.

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 faculty advisor(s).

5.6 Academic Integrity Policy

Please review the University Policy on Academic Integrity www.cmu.edu/policies/student-and-student-life/academic-integrity.html. The policy includes the University expectations around academic integrity and provides definitions of cheating, plagiarism, and unauthorized assistance. A review of the University's Academic Disciplinary Actions procedures www.cmu.edu/student-

[affairs/theword/academic-discipline/index.html](http://affairs.theword.academic-discipline/index.html) is also recommended. These procedures outline the process for investigating, reporting, and adjudicating violations of the University Policy on Academic Integrity. The procedures also outline the appeal process.

Required Academic and Research Integrity Training

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. Students who are unsure of how to cite a source or whether to cite a source should ask their faculty advisors or other faculty for guidance. Appendix 4 is a memo from Peter Adams regarding proper attribution. Please review it carefully.

All students in EPP are required to complete an online session on understanding plagiarism offered by the University of Indiana tedfrick.sitehost.iu.edu/plagiarism/.

PhD students must also complete the Responsible Conduct of Research (RCR) education training. This web-based training is offered by the Collaborative Institutional Training Initiative (CITI). Students need to complete the 'Physical Sciences' module. The session will take a few hours to complete, and 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. Both sessions will offer a completion certificate at the end that will need to be submitted to the EPP academic program advisor. The deadline for completion of both sessions is September 30 for those entering in the fall semester, and February 28 for those entering in the spring semester.

6 Safeguarding Educational Equity

6.1 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.

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 our interactions.

6.2 Assistance for Individuals with Disabilities

The Office of Disability Resources at Carnegie Mellon University has a continued mission to provide physical, digital, and programmatic access to ensure that students with disabilities have equal access to their educational experience. We work to ensure that qualified individuals receive reasonable accommodations as guaranteed by the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act of 1973. Students who would like to receive accommodations can begin the process through Disability Resources' secure online portal: <https://rainier.accessiblelearning.com/cmuh/> or email access@andrew.cmu.edu to begin the interactive accommodation process.

Students with physical, sensory, cognitive, or emotional disabilities are encouraged to self-identify with the Office of Disability Resources and request needed accommodations. Any questions about the process can be directed to access@andrew.cmu.edu, or call (412) 268-6121. www.cmu.edu/education-office/disability-resources/

6.3 Policy Against Sexual Harassment and Sexual Assault

The University prohibits sex-based discrimination, sexual harassment, sexual assault, dating/ domestic violence, sexual exploitation, stalking, and violation of protective measures. The University also prohibits retaliation against individuals who bring forward such concerns or allegations in good faith. The University's Sexual Misconduct Policy is available at www.cmu.edu/policies/administrative-and-governance/sexual-misconduct/index.html. The University's Policy Against Retaliation is available at www.cmu.edu/policies/administrative-and-governance/whistleblower.html. Students who have been impacted by any of these issues, are encouraged to make contact with any of the following resources:

- Office for Institutional Equity and Title IX www.cmu.edu/title-ix/, 412-268-7125, institutionalequity@cmu.edu.
- University Police, 412-268-2323

Additional resources and information can be found at: www.cmu.edu/title-ix/resources-and-information/index.html.

6.4 Gestational and Parental Accommodations

Providing holistic student support is a top priority at Carnegie Mellon. The protocols on this page are designed to support the parental needs of students and their families.

Students seeking any of the Parental Accommodations described below must register with the Office of the Dean of Students by contacting the office for an appointment by calling 412-268-2075.

Students are encouraged to register with the Office of the Dean of Students ninety (90) days in advance of the anticipated arrival of the child as applicable in the individual circumstance. At the time of registering, students will have the opportunity to consult about resources, procedures, funding options and preparation for discussing academic accommodations with the student's academic

department. Students should also consult with their academic advisors either before or in conjunction with registering with the Office of the Dean of Students.

Accommodations for Gestational Parents

The birth of a child is a significant life event that may require time away from academic pursuits for delivery and recovery from delivery of a newly born child. Students whose anticipated delivery date is during the course of a semester may need to take time away from their academic responsibilities. Carnegie Mellon students seeking time away are afforded two options as possible accommodation:

- **Short-Term Accommodation for Gestational Parents** – A short term absence from academic responsibilities up to a maximum of six (6) weeks. Short-Term Accommodation may be extended by two (2) weeks, for a total of eight (8) weeks, where a longer absence is medically necessary. Prior to the absence students must work with relevant university faculty and staff to adjust their course work, research, teaching and other academic responsibilities during the period of absence. This may include extensions of time to complete assignments, incomplete grades, and/or dropping courses, shifting research responsibilities and adjusting TA assignments. Students who take a Short-Term Accommodation will remain enrolled.
- **Formal Leave of Absence** – A formal leave of absence under the Student Leave Policy. Generally, the Student Leave Policy permits students to take a leave of absence for a full-semester, mini-semester, or for the time remaining in the semester during which the leave is taken. Students who take a Formal Leave of Absence (www.cmu.edu/policies/student-and-student-life/student-leave.html) drop all remaining courses for the semester and are unenrolled for the semester. International students must consult with the Office of International Education (www.cmu.edu/oie/) before considering this option due to visa implications.

Parental Accommodation for Doctoral Students

The university offers a Parental Accommodation for qualifying doctoral student parents to include up to four (4) weeks of time away from academic responsibilities with continued stipend support. This accommodation can be utilized within six months of the birth or placement of a child through adoption, foster care or legal guardianship. Gestational parents may utilize both the Short-Term Accommodation for Gestational Parents and the parental accommodation. Careful planning and consultation is necessary given the unique contexts and requirements of each student's situation. Students will remain fully enrolled and will receive assistance in navigating the necessary planning and consultation processes.

Financial Assistance for Student Parents

Carnegie Mellon also offers the following options for financial assistance to students who become parents while enrolled:

Interest Free Loan – Any student who becomes a parent is eligible to apply for an interest-free parental loan (www.cmu.edu/student-affairs/dean/loans/) from the Office of the Dean of Students.

Doctoral Stipend Continuation (Gestational Parents) – Doctoral students who are the gestational parent and who receive an academic stipend funded by Carnegie Mellon are eligible to continue to receive stipend funding for up to six (6) weeks during a Short-Term Accommodation for Gestational Parents or during a Formal Leave of Absence. Continued academic stipend funding may be extended by two (2) weeks, for a total of eight (8) weeks, if an absence longer than six weeks is medically necessary.

Doctoral Stipend Continuation (Non-gestational Parents) – Doctoral students who receive an academic

stipend funded by Carnegie Mellon and are becoming a parent by adoption, birth, or through guardianship are eligible to continue to receive stipend funding for up to four (4) weeks during a Short-Term Parental Accommodation.

www.cmu.edu/graduate/programs-services/maternity-accommodation-protocol.html

6.5 Consensual Intimate Relationship Policy Regarding Undergraduate Students

This policy addresses the circumstances in which romantic, sexual or amorous relationships/interactions with undergraduate students, even if consensual, are inappropriate and prohibited. The purpose of this policy is to assure healthy professional relationships. This policy is not intended to discourage consensual intimate relationships unless there is a conflicting professional relationship in which one party has authority over the other as in the policy. www.cmu.edu/policies/student-and-student-life/consensual-relationships.html.

7 Additional Policies and Protocols

7.1 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/registrar/studentrecords/verifications/enrollment.html.

7.2 Change of Address

Departments are asked to encourage students to keep their current local address up to date in SIO. This supports a university initiative to have accurate living information for students for official program/department/college/university notices, the ability to facilitate wellness checks, ensure international students are in compliance with visa requirements, etc.

7.3 Computing Services and Accessing the CMU Andrew Network

Questions on computing and connecting to the Andrew Network should be sent to the Carnegie Mellon Computing Services at it-help@cmu.edu, 412/268-4357.

For information on computer/network registration for wired and wireless connections, visit: www.cmu.edu/computing/services/endpoint/network-access/.

CMU Computing Services has a wide array of free software programs for download onto personal machines, as well as computing clusters with access to other software licensed for student use. Students may access this information using their Web ISO (andrew ID and password). www.cmu.edu/computing/software/all/msazure-dev-tools/index.html.

7.4 New Policy Governance

Students are bound by the rules and procedures set forth in the Graduate Student Handbook published in the academic year in which they enter the program. As noted in the Preface, while

college and university policies and protocols are binding, the department attempts to be flexible with EPP rules and procedures while striving to be fair and equitable among students. Thus, if an EPP policy changes from the time of matriculation, where possible a student has the option of being governed by the older policy.

7.5 EPP PhD Student Work Hours, Vacations, and Time Off Expectations

EPP strongly supports a healthy work/life balance for students. Being at CMU means being surrounded by individuals who are both driven and ambitious, but getting a degree in EPP is a marathon, not a sprint. We recognize the declining marginal productivity of additional hours invested in a week after a certain point and that the point where returns start to diminish is different for every member in the department. We encourage all our members to find a sweet spot that allows them to have sustainable levels of productivity for the entirety of their program.

The guidelines outlined in the following sections aim to achieve two things: 1) provide guidance and consistency across the department for handling certain academic and life events; and 2) establish a baseline for students to convey to them what we deem reasonable when something new or unexpected (e.g., a death in the family) occurs. In some rare cases, stipulations of an external funding source may override department guidelines.

The department also realizes the close nature of student/advisor relationships and strongly encourages ongoing conversations where both parties discuss their preferences and define and continue to develop a healthy work relationship.

Regular work weeks

During normal work weeks, EPP graduate students generally devote about 40 to 50 hours **on average**¹ in total to their academic responsibilities, which include coursework, academic research, and serving as a teaching assistant. During semesters when a student is serving as a teaching assistant, they generally spend on average 10-15 hours per week on their teaching assistant responsibilities. If students find the teaching workload is out of line with the average hours as noted, they should contact the associate department head for graduate affairs, the associate department head for undergraduate affairs, or the department head.

In reality, and especially in the more advanced stages of the program, academic life often requires that more time is invested at certain periods to meet specific deadlines. If such situations occur, it is reasonable to take more rest time after the deadline has passed to recover to maintain a healthy work/life balance.

Advisors and students are encouraged to talk about their regular work schedules and respect each other's communication boundaries when not working. Generally, meetings between students and advisors should be scheduled on weekdays during normal business hours unless an alternate time is mutually preferable. Especially in the beginning of the program, it is also advisable that students do some of their research work on campus during business hours on

¹ See for example research discussed at <https://hbr.org/2015/08/the-research-is-clear-long-hours-backfire-for-people-and-for-companies>

weekdays. This is helpful for collaborating with other students and faculty. However, if campus presence is not necessary for a project, students may work remotely and/or outside of normal business hours if that is more convenient or more conducive to their productivity.

When students find themselves struggling to meet their responsibilities, whether due to extenuating circumstances, having overcommitted themselves, or other reasons, they should discuss the situation with their advisor and consider options such as reducing their course load, asking instructors for extensions on assignments, taking an incomplete in a course, or reducing their research credits. The department head, associate department head, or EPP Ombudsperson may also be good resources for students in this situation.

University Holidays

Generally, CMU students are not expected to work on the [official university holidays](#) or on other days when the university is officially closed (e.g. Winter Break closure; weather/emergency closures). Some members of our department may wish to work on these days, and instead take time off on other days. The department encourages this kind of flexibility, provided it is clearly communicated to advisors.

Expectations for Time Off

Advisors are expected to be flexible in allowing their students to take a reasonable amount of time off as long as they are making good progress and meeting their academic responsibilities. In addition to university holidays and days when the university is closed, graduate students may take approximately 15 regular workdays off from their academic responsibilities each year. This includes long weekends, short vacations, and religious holidays that are not one of the official university holidays. Graduate students are expected to discuss their plans to take time off with their advisors at least two weeks in advance and prior to finalizing any travel arrangements (except in emergencies). The department does not keep track of graduate student work schedules.

Advisors may ask students who wish to take more than the typical amount of time off to make up work time or to take an unpaid leave of absence. Sometimes students make up work by working remotely part time while traveling or by working on evenings or weekends before or after their time off.

As research assistants, EPP graduate students are expected to work on all days when the university is open for business, including Spring Break, in the summer months, and during the weekdays of the winter semester break period when the university is open (the university generally is closed for approximately seven weekdays over the winter semester break period). However, many students arrange with their advisor to take most of their time off from academic activities during the times when classes are not in session.

Students taking the Part B qualifying exam at the beginning of January are encouraged to take advantage of the winter university holidays to be well rested and well prepared, and their advisors are encouraged to temper their own expectations accordingly. Students are not expected to spend time on research work while taking the Part B exam or in the week leading up to it.

Personal Issues

When students need to stay at home to take care of personal, family, or household responsibilities, they are encouraged to work from home. Generally, working from home due to personal issues should be temporary. Examples include working from home to care for a sick family member, to attend a routine medical appointment, to address a household maintenance issue, and/or due to weather affecting the ability to safely commute.

Students who are not meeting their responsibilities due to extenuating or distressing circumstances are encouraged to inform the department and/or seek help through CaPS or the appropriate means.

Absences Due to Illness

For minor illnesses such as a cold or the flu, students should stay home and rest if needed, and are encouraged to do so to not infect others. When illness may impact a student's research schedule or other CMU responsibilities, they should reach out to their advisors to inform them about their expected timeline for recovery and how their research or other activities may be affected. Advisors are expected to allow students extra time off to recover (beyond the typical 15 days away from academic responsibilities).

Advisors and other departmental staff may not request documentation of an illness or medical condition.

Students with a serious illness, chronic illness or a disability may contact the [Office of Disability Resources](#) to request accommodations. The Office of Disability Resources may require medical documentation of the condition.

Civic Duties

Advisors are expected to be flexible in allowing students reasonable time off (in addition to the typical 15 days) to fulfil civic duties and obligations, such as jury duty and elections. Advisors should be notified when these obligations occur so adaptations to research schedules can be made if necessary. Jury service that extends beyond two weeks may require a leave of absence.

Bereavement and Similar Personal Events

In the case of loss of a loved one, all students should have the opportunity to take time off work (in addition to the typical 15 days) and spend it with their families/loved ones to grieve. Advisors are expected to allow students extra time off in these circumstances, including allowing time for students to travel to be with their families.

Leave of Absence

In case of a protracted leave of absence, students must inform their advisor and the department and potentially initiate the formal process of taking extended leave from the department/university. Students considering a leave of absence should discuss the possibility with their advisor as early as possible. Section 3.14 outlines the Leave of Absence process.

7.6 Employment Eligibility Verification

Students receiving a stipend, payment as a TA, or are planning to have a position with CMU an Employment Eligibility Verification is required. Form I-9 must be completed within 3 business days of beginning work for any type of compensation (stipend or employment). Additional details are highlighted below.

To ensure compliance with federal law, Carnegie Mellon University maintains the [Employment Eligibility Verification \(I-9\) Policy \[pdf\]](#) covering the university's I-9 and E-Verify requirements:

- Every individual receiving a stipend from CMU or employed by CMU must comply with the I-9 Policy by completing the Form I-9 within three business days following the first day of stipend start date/employment.
- Individuals who expect to work on a federally funded project are further responsible for submitting an E-Verify Processing Request Form to the Office of Human Resources if required.

For more information, see CMU's Guidance for Completing the Form I-9 and E-Verify Requirements at CMU <https://www.cmu.edu/hr/assets/recruiting/restrict/i-9-guidance.pdf>, or visit the Human Resources Service website to learn more about Form I-9 and E-Verify and to schedule an appointment to complete the Form I-9.

Students who fail to complete the Form I-9 in a timely manner may have stipend payments suspended. If employed by the university, an individual who fails to timely complete the Form I-9 may be subject to disciplinary action up to and including termination of employment.

7.7 Evaluation and Certification of English Fluency for Instructors

Non-native English-speaking 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. The fluency of all instructional personnel will be rated by Language Support in the Student Academic Success Center to determine at what level of responsibility the student can teach.

In addition to administering the International Teaching Assistant (ITA) Test (a mandatory screening test for any non-native speaker of English), Language Support in the Student Academic Success Center helps teaching assistants who are non-native English speakers develop fluency and cultural understanding to teach successfully at Carnegie Mellon. Visit the Student Academic Success Center for more information www.cmu.edu/student-success/programs/language-support/index.html.

7.8 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 to manage expectations on available funds and to avoid surprises.

7.9 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/policies/administrative-and-governance/intellectual-property.html

Other policy websites that should be noted are:

- University Policies: www.cmu.edu/policies/index.html
- CMU Graduate Education Policies: www.cmu.edu/graduate/policies/
- Office of Research Integrity and Compliance: www.cmu.edu/research-compliance/
- Office of Community Standards and Integrity: www.cmu.edu/student-affairs/ocsi/academic-integrity/index.html
- The Word/CMU Student handbook: www.cmu.edu/student-affairs/theword/index.html

8 Financial Support

The majority of EPP doctoral students are supported by research funding procured from sources external to the University. Research grants and contracts are the most common funding vehicles and are usually applied for by a faculty member who serves as the Principal Investigator. Funding sources often include, but are not limited to, government agencies and not-for-profit foundations. 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.

Funding for doctoral students covers tuition and the technology fee and provides a semi-monthly stipend for living expenses. During admissions, the department attempts to match available faculty funding with prospective student's research area of interest. The primary responsibility for procuring funding lies with the faculty advisor. Students should explore additional funding opportunities by applying for fellowships. When funding provided by an external source is not sufficient to cover all tuition and/or stipend expenses, other sources of

funding are needed to cover the difference. Below, this additional funding is referred to as a tuition or stipend offset.

Students should know the status of their available funding sources through communication with their faculty advisors, and in pursuing fellowships. Refer to the academic program advisor for fellowship applications.

8.1 Graduate Research Assistantship (Stipends) and Tuition Payments

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. It is subject to federal tax withholding and is exempt from Pennsylvania state tax. A student receiving a stipend may not work for other remuneration either on or off campus except in very special circumstances and with the approval of their faculty advisors and permission of the department head (e.g., you may be permitted if it is work directly related to your research) as discussed in the next section.

Should a student receive any amount of pay greater than their usual stipend or receive payment while not in an active student status (such as while on leave of absence or in absentia) an error has occurred, and the overpayment must be returned to the department immediately. Likewise, if an underpayment has occurred, students need to report this as quickly as possible to the EPP business manager and/or academic program advisor so they can begin the process of correcting the error. Please note that it is student's responsibility to verify they have received the correct amount of stipend each pay period.

Tuition and technology fee payments are set up on a nine-month payroll deduction plan August to May. Students on payroll deduction will see nine semi-monthly credits applied to their student account beginning August 16 for the fall semester until their tuition and technology fee are paid in full. In January, students will see nine more semi-monthly credits applied to their student account until spring tuition and technology fee are paid in full.

Students may be eligible to contribute to the CMU employee retirement plan through Workday. For information on eligibility and steps to follow, contact the HR Works Service Center at 412-268-4600 or online at www.cmu.edu/cmworks/index.html.

8.2 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.”²

It is therefore policy in EPP that while paid work beyond a student’s 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 faculty advisors and the department head to take on any additional paid work in addition to their stipend. The stipend is intended to be a commitment of full financial support from the department during the program so that a student may devote full time to graduate study and research.

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 their faculty advisors 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 will have a 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 presidential 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).

8.3 Student Health Services and Insurance

Carnegie Mellon Student Health Services offers a range of services similar to those offered by any doctor’s office outside of the University, but the cost is often more affordable.

² <https://engineering.cmu.edu/education/academic-policies/graduate-policies/general-policies.html>

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, University Health Services (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.

Health Insurance

CMU requires that all students have a standard level of health insurance coverage. The CMU Health insurance plans for the academic year begin August 1 and run through July 31. Students planning an August graduation and wish to purchase CMU health insurance for the month of August will need to contact University Health Services well in advance of August 1 and follow their procedures. www.cmu.edu/HealthServices/.

The following information is taken from a recent email from the Office of the Vice Provost for Education to doctoral students regarding health care insurance support.

As a part of our Doctoral Student Holistic Support efforts, we are pleased to share that each doctoral program will continue to offer support to their qualifying doctoral students in the amount of the individual student premium cost for medical coverage (\$2,577) through the University's Student Healthcare Insurance Program (SHIP).

Qualifying doctoral students are defined as having full-time enrollment in a CMU doctoral program, making progress toward their degree in line with their program's policy, are stipend-supported and are not receiving full external support from another source.

Billing

If you are enrolled (defaulted or elected coverage) in SHIP, University Health Services will assess the health insurance charges to your student account.

If you are an eligible PhD student, the University will apply a credit to your account equal to the Student Only Medical SHIP premium (\$2,577). This credit will appear on your student account as "PhD Insurance Support" and has started to be applied as early as July 28, 2023 for those who have enrolled. Tuition invoices where credit has not yet been posted will not be assessed interest related to the health insurance account balance.

Tax Implications

The health care premium credit is a non-qualified scholarship, and is **considered taxable income** by the Internal Revenue Service (IRS) to all students who receive it. The credit will be included on your Form 1098-T in Box 5.

For international students, the university has an IRS reporting and tax withholding obligation on non-qualified scholarship payments for students who are considered non-resident aliens for tax purposes. If you do not qualify for tax treaty benefits, a 14% tax will be withheld from your health insurance support credit and remitted to the IRS. In this scenario you will see the full PhD Insurance Support credited to your student account along with an IRS Tax Withholding charge equal to 14% of the support.

A Form 1042-S will be issued to you in early 2024 to assist you with your personal tax return. Carnegie Mellon University cannot provide tax guidance. Therefore, if you have any questions regarding your individual tax obligation, we encourage you to consult expert resources. Information on non-qualified scholarships can be found in Tax Topic No. 421 Scholarships, Fellowship Grants, and Other Grants at www.irs.gov. For additional information on tax treaties, please read IRS Publication 901, U.S. Tax Treaties. When using this guide, be sure to review the section that is relevant to your situation; either “Professors, Teachers and Researchers” or “Students and Apprentices.” CMU provides general information regarding U.S. taxation to assist students and scholars in complying with U.S. tax obligations. You may need to consult tax agencies, personal tax advisers, or accountants for additional assistance. If you have further questions or concerns, please visit the [frequently asked questions](#) or contact my office at VPE@andrew.cmu.edu.

More information about the SHIP plan, eligibility requirements, vaccinations, and processes for coverage waiver, can be found at [CMU Health Plans - University Health Services - Student Affairs](#).

8.4 Student Fees

Students are responsible for paying the student activities fee and the transportation fee in each academic semester.

The technology fee will be paid for students who are receiving tuition and/or stipend support (whether full or partial) that is paid from EPP. Technology fee payments will, in most cases, be handled through the payroll deduction plan described earlier and appear as semi-monthly credits on a student’s account throughout the fall and spring semesters until the fee is paid in full at the end of each semester. Students in the Portugal program physically located in Portugal 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 external funding that covers fees, are part-time, are on reduced tuition (such as ABD 5 or 18 units), or are In Absentia.

Students who receive scholarships administered by CMU that cover fees (such as the NSF graduate research fellowship) will have their fees paid in a lump sum by a scholarship posted to their student account prior to the start of the semester.

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, these fees will not be assessed.

8.5 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) to attend the conference. It is also expected that the student will seek funding using campus resources such as the CMU Fellowships and Scholarships Office and GSA 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 academic program advisor. The student will be expected to submit original receipts to the department for determining reimbursement.

Conference funding should be sought in this order:

1. Conference organizers
2. Faculty 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 graduate studies canvas for information and guidelines)
5. EPP Department and CMU GSA and Graduate Programs Office (GUSH conference travel grants)

8.6 Policy on External Scholarships

Section 8.2 states that additional funds received would be first used to offset existing departmental or institutional support. It is intended to be related only to funding from additional employment.

The department encourages all doctoral students to pursue additional scholarships to fund their tuition and stipends. Scholarships come in different forms and with various restrictions. They may be funded by groups on or off campus, and may make awards directly to the student, or to the university. Some scholarships can only be used for tuition or stipend expenses, while others are flexible and could be used for appropriate research expenses like computers or conference travel.

Student Role: For students interested in pursuing additional scholarships, please follow this process as early as possible before applications are due:

- 1) Check with faculty advisors and the department staff to verify the sources of funding for the current and next year.
- 2) Discuss current and future funding with faculty advisors, verify the expense constraints of the scholarship, and agree upon research expenses beyond tuition and stipend for which funds are being sought (e.g., computing, conference travel, etc.).
- 3) Propose and justify a reasonable budget of research expenses to the department head for approval before submitting the application.

Faculty Advisor Role: Advisors may seek to have such scholarships offset some of a student's tuition or stipend expenses, which is why students need to have a discussion with their faculty advisors before proposing a budget to the department.

Department Role: The department will seek to be flexible in sharing scholarship funds with awardees, given appropriate budgeted expenses, and across personal expenses and tuition and stipend expenses when needed.

The expectation is this advance negotiation phase will lead to more open discussions about funding sources, as well as manage expectations and incentivize students to seek and win more external scholarships that lead to more funding for their own research expenses.

Scholarships paid to the university on behalf of a student will receive a financial account (Oracle) that can be tracked to verify expenditures in line with the original plan.

8.7 University Financial Aid, Emergency Funds, and GuSH

Graduate students seeking financial aid should consult the graduate student financial aid information found on The HUB website: www.cmu.edu/sfs/financial-aid/graduate/index.html. Students will find the Graduate Financial Aid Guide, information about funding options and how to apply for financial aid and other helpful links.

Graduate students who find themselves in need of immediate funds for emergency situations should contact the Office of the Dean of Student Affairs (see Appendix 5) www.cmu.edu/student-affairs/index.html, to inquire about an Emergency Student Loan.

GuSH Research Funding is a source of small research grant funds provided by GSA and the Provost's Office and managed by the Office of Graduate and Postdoc Affairs. Students can find more information about the application process and deadlines at: www.cmu.edu/graduate/professional-development/research-funding/index.html.

8.8 Purchasing and Travel Reimbursement Policies and Procedures (full description)

General Purchasing Approval Process

All purchases of goods, services, and equipment using University funds, including restricted accounts and research grants and contracts, must receive **PRIOR** approval from the department business manager. Purchases made under sponsored research awards must be pre-approved by the faculty principal investigator. Please check with the EPP Business Office before purchasing. Only authorized department staff are able to confirm an order with an outside vendor. Please plan ahead. Rush orders for pick-up or delivery are difficult to accommodate.

Department Travel Card

When traveling for University business, contact the department travel coordinator BEFORE making travel arrangements. The EPP Department has a department travel card which can be used for:

- Airfare
- Lodging
- Car rental and ground transportation
- Conference registration

Students are strongly encouraged to arrange travel by utilizing the EPP Department Travel Card. It is beneficial for numerous reasons:

- Compliance with [Business and Travel Expense \(BTE\) Policy](#)
- Access to university contracted relationships and pricing
- Better university negotiated terms
- Increased safety and tracking for faculty, staff and students
- Students don't have to use personal funds

Business and Travel Expense Reimbursement Policy

A Reimbursement Form is to be completed and submitted for ALL business expenses such as domestic or international travel, or for any purchases made to support research. All expenses being submitted will require an email approval of the faculty advisor or principal investigator (PI), along with the charging account information. **Please obtain the proper permissions prior to submitting this form.**

Requirements for Expense Reimbursement (ER) processing:

- Submit all requests for reimbursement as soon as travel conclude, and no later than 30 days after incurring the business or travel expense
- List the business purpose and travel dates for the expense(s)
- Submit ORIGINAL/ITEMIZED receipts
 - Itemized receipt and charge receipt must be submitted for meals. **(PER DIEM REIMBURSEMENT FOR MEALS IS NOT PERMITTED FOR STUDENTS)**
- Reimbursement for expenses when attending a workshop or conference must be accompanied by a copy of the workshop/conference agenda
- All charge receipts must include student's name and method of payment. Please note that any receipts that do not have this information MUST be accompanied by a copy of the credit card statement with sensitive information redacted (i.e. account information)
- Alcohol charges will **NOT** be reimbursed
- When using a personal car for business travel, calculating mileage will begin and end at "5000 Forbes Avenue, Pittsburgh, PA 15213"
- When renting a vehicle, only the cost for a **COMPACT** car is reimbursable.
 - **DO NOT** accept the additional insurance that the rental company offers. Rental cars are covered by the University policy when traveling for business.
 - **NOTE** that under University policy, GPS costs cannot be reimbursed.
- The **FLY AMERICA ACT** states that all University travelers must use US 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 will not be influenced by factors of cost, convenience or personal travel. See: www.gsa.gov/policy-regulations/policy/travel-management-policy/fly-america-act
- When booking flights, if traveling outside of the dates of the conference or to/from

cities other than Pittsburgh or the conference location for personal or other business travel, students MUST also print out a copy of what the flights would have cost for just the dates of business travel the same day that the ticket was booked. This is called a “*Constructive Cost*” and must be included with the reimbursement request. If the constructive cost is higher than the actual ticket price, students will be reimbursed the value of the actual ticket purchased. If the constructive cost is lower than the amount of the actual ticket, students will only be reimbursed the amount of the constructive cost.

- ***Note that the IRS states that any receipts that are processed for reimbursement 90 days past the payment/purchase date are considered taxable reimbursement.***

For full university travel policy visit: www.cmu.edu/finance/controller/bte/files/bte_policy.pdf

See Appendix 1 for the appropriate staff member to contact prior to incurring business and travel expenses.

Appendix 1: Department and University Contacts

Department Contacts

Peter Adams, Department Head. Location: Wean Hall 5222, 412/268-5624, peteradams@cmu.edu.

Vicki Finney, Academic Program Advisor. Location: Wean Hall 5122, 412/268-1462, vicki@cmu.edu. See Vicki for issues that pertain to the graduate program, including academic policies and procedures for the department and college, registration and student coding, stipend and tuition processing, degree completion and graduation, and fellowship information. In addition, Vicki is the department's student liaison with OIE and Enrollment Services (the Registrar's Office).

Baruch Fischhoff, EPP Graduate Ombudsperson; Chair of the EPP Diversity, Equity and Inclusion Committee. The EPP Graduate Ombudsperson is available as a confidential resource to listen to concerns, provide advice on potential remedies, and to bring concerns to the department's attention. EPP's Diversity Committee oversees the department's efforts to improve diversity in the department, promote a welcoming culture, and is available to listen to and help with concerns related to diversity, equity, and inclusion. Location: Posner Hall 385B 412/268-3246, baruch@cmu.edu.

Jenny Hurst, Associate Director for Career Services, Engineering & Technology Innovation Management MS Program. Location: Hamburg Hall A206D, 412/268-6426, jennyhur@andrew.cmu.edu.

Deborah Kuntz, Senior Academic Coordinator. Location: Wean Hall 5107, 412/268-3303, deborahk@andrew.cmu.edu. Debbie provides administrative support to the Associate Department Head for Undergraduate Affairs and the Academic Program Advisor. Debbie maintains the graduate studies canvas site, coordinates the graduate admissions process, and coordinates graduate student office moves.

Adam Loucks, Front Office Coordinator and Support Staff. Location: Wean Hall 5215, 412/268-1090, aloucks@andrew.cmu.edu. Contact Adam for issues pertaining to general office maintenance (such as if the lights go out in the office, the air conditioning stops working, etc.), incoming & outgoing mail, reservations for the EPP conference room and equipment, and social media publicity. Adam also provides administrative support for the PhD qualifying exams.

Peter Luetkehans, Business Financial Manager. Location: Wean Hall 5111, 412/268-5486, pluetkeh@andrew.cmu.edu.

Deanna Matthews, Associate Department Head for Undergraduate Affairs. Location: Wean Hall 5103, 412/268- 7889, dhm@cmu.edu.

Kimberly Martin, Financial Assistant and EPP Personnel Administrator. Kim processes expense reimbursements and supports the Business Financial Manager. Location: Wean 5115, 412/268-1987, kamartin@andrew.cmu.edu. See Kim for questions prior to business and travel expenses for general department related travel.

Julie Mull, Senior Academic Coordinator, Engineering & Technology Innovation Management (ETIM) master's program. Location: Hamburg Hall A206, 412/268-1420, jmull@andrew.cmu.edu.

Nick Muller, Associate Department Head for Graduate Affairs. Location: Tepper 4215, 412/268-8121, nzm@andrew.cmu.edu.

Nesli Ozdoganlar, Senior Academic Program Manager and MS Advisor, Engineering & Technology Innovation Management (ETIM) and EPP. Location: Hamburg Hall A206, 412/268-5626, neslio@andrew.cmu.edu.

Deb Scappatura, Administrative Assistant. Location: Wean Hall 5125 ds73@andrew.cmu.edu. Deb provides administrative support for Patti Steranchak, Jerry Cohon, Erica Fuchs, Paulina Jaramillo, Granger Morgan, Ramteen Sioshansi, and Katie Whitefoot. See Deb for questions prior to business and travel if you work with any of the faculty Deb supports. Deb also maintains the department's travel card.

Patti Steranchak, Assistant to Peter Adams and Granger Morgan. Location: Wean Hall 5216, 412/268-1085, patti@cmu.edu.

Lucas Valone, Events and Web Content Coordinator. Location: Wean Hall 5121, lvalone@andrew.cmu.edu. Lucas manages EPP websites, coordinates departmental seminars, and serves as the department's technology liaison. In addition, Lucas provides administrative support for the Center for Climate and Environmental and Decision Making (CEDM). Reach out to Lucas if you have any questions relating to the EPP website, department seminars, CEDM, the reservations calendar, or the rEPPort newsletter.

Phillip Yu, Executive Director of Master's Programs, and Associate Teaching Professor. Location: Hamburg Hall A206E, 412/268-8370, pyu2@andrew.cmu.edu.

University Contacts

Alaine Allen, Associate Dean for Diversity, Equity, and Inclusion, College of Engineering. Location: Ansys Hall 226, alainea@andrew.cmu.edu.

Monica Cooney, CIT Marketing and Communications Representative. Location: 311 South Craig Street, mcooney@andrew.cmu.edu.

John Papinchak, University Registrar. Location: Warner Hall

Lisa Porter, Associate Dean for Faculty and Graduate Affairs, College of Engineering. Location: Ansys Hall.

William Sanders, Dean, College of Engineering. Location: Ansys Hall 219, sanders@cmu.edu.

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

Elizabeth Vaughan, Associate Dean of Student Affairs, Director of Student Leadership, Involvement and Civil Engagement, EPP Student Affairs Liaison. Location: Cohon University Center 103, 412/268-8704, eav@andrew.cmu.edu.

Appendix 2: Qualifier Guidance Document

This document is intended to provide guidance to doctoral students on expectations for the Part A qualifier and how to prepare for completing the research and creating the materials for the qualifier.

Goal and Purpose of Qualifiers

Assure that students are prepared and able to complete research necessary for completing a doctoral dissertation and defense.

Knowing the Research Process

Success in a doctoral program depends on students completing research in their area. For doctoral students in EPP, that means being able to examine an interdisciplinary problem using sound knowledge of science/engineering and social processes and applying good analytical methods and being able 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.

Elements of Good Research and Criteria for Evaluating Qualifier Materials

The following table lists criteria by which the EPP faculty judge a student's Part A examination, reflecting our expectations of a student's research ability at that point in their doctoral study. For additional discussion regarding the grading process see Section 3.9 of the Ph.D. student handbook. The table also describes how those components manifest in the deliverables of a paper, presentation, and Q&A that are parts of the qualifier in EPP. It also describes examples that detract from research being excellent, but no such list can be exhaustive. These are the elements that faculty are asked to rate as they review a student's paper, presentation, and responses to questions.

Criterion	Description	Common mistakes
Research Question	Clear and novel research question that focuses the work.	Research question is not explicitly stated or is missing. Question as stated is not falsifiable or a question that has already been answered (or with only little difference) in prior literature.
Background	Understanding of the societal context, framing the problem in context of technology and policy space.	While the specific issue of the research may be stated, how the specific question relates to broader societal problems is not described. Lacks understanding of how this problem relates to the big picture and to adjacent problems.
Literature Review	Literature review includes the most relevant sources to situate the research in the appropriate context and motivates the research design	Some relevant references may be missing, literature in a related area was not reviewed and is unknown to the student. Likewise, having a long

	employed in the paper.	list of references that appear for the sake of having enough references without a clear understanding of how they shape the research performed.
Methods	Methods are well-suited to answer the research question or are novel with a strong justification. Methods are applied accurately, and the student understands their inner workings (e.g., inherent assumptions, how to program an algorithm, the math behind an inferential method, the details of relevant processes). If a new method is presented, an analysis of its improvement relative to existing methods should be included or planned (e.g., more efficient, more robust, more generalizable).	Methods are appropriate for the research question (i.e., the assumptions to use them are satisfied in the current research context) but have important limitations that are not fully explored that may hinder the results claimed. Methods may have some minor issues with their application that could be fixed. The student does not understand the methods in general or may do so but may have difficulty fully reproducing results without additional work or guidance. The student may have difficulty explaining methods in detail verbally but can express them clearly in writing given the appropriate time.
Results and Interpretation	Study results are thoroughly examined within the appropriate context of prior research and relevant policy questions. Limitations, uncertainty, and generalizations and follow-up analysis are given appropriate discussion.	Study results are examined in some depth, but some components are not given enough analysis or are omitted. Results are not compared to similar results in the literature and/or reasons for differences are not explored. Limitations, uncertainty, and generalizations are discussed but in inconsistent ways that may miss some key issues or relevant policy impact.
EPP Connection between science/ engineering and policy implications	Students should identify what are the decisions and who are the decision-makers being informed by the analysis. Students should be able to articulate what are the engineering or science details that matter to the policy decision. Students often have not completed in-depth analyses in both science/engineering and policy spaces at this point; however, students should	Work is technically sound but has no indication of policy impacts or implications; or, policy analysis is sound but the essential science/engineering elements of the problem have not been identified as important.

	demonstrate an awareness of what research needs to be completed in areas where more analysis will be needed.	
Professional Communication of Research	The paper and presentation are well written, with appropriately formatted graphics and information design, sufficient detail describing any analyses, and are transparent for reproducing results. Content of paper and presentation are appropriate for the audience of EPP faculty who are from a range of disciplines. During Q&A, student responds to questions specific to their research efforts but also the larger domain of their methods and field, explaining limits of their knowledge. Responses should stay on topic, be succinct, and distinguish between what is known with certainty, what is an educated guess, and what is an opinion.	Paper and presentation have errors, do not meet the requirements for length, or are unprofessional in design. Content is aimed at an audience with either much more subject knowledge or far too simply. Presentation of work is not rehearsed. During Q&A, student is unable to “think on their feet” and reason out responses. Student veers off topic, rambles on, and gives opinions rather than factual evidence.

Important notes: students are NOT penalized for a problem selection often made by an advisor. They ARE being evaluated on how well they can articulate that this is a “policy problem where the engineering and science details matter”. The mix of engineering, science, and social science content will vary across research presented.

Preparing for the Part A Qualifier

Students should avail themselves of the various opportunities, formal and informal, prior to their qualifier to gain an understanding of the expectations for publishable papers and presentations for their respective fields and to practice developing their skills in these areas. Students should be reminded that: papers they read for their courses and in research preparation are models of research and writing, presentations in seminars demonstrate how one summarizes research and what skills at presenting and handling Q&A are needed, and opportunities to write and present allow them to practice those skills themselves and get feedback on their abilities. The graduate student handbook has lists of various resources across campus to support developing these skills beyond the activities in the department and through working well with one’s advisor.

The qualifier process allows students ample time to frame their research, work with their advisor(s) to make progress, get feedback from faculty other than their advisor(s), and practice the writing, presenting, and Q&A that are the final products. Students should take advantage of the various qualifier milestones (research plan submission, pre-quals presentation practices, etc.) and access to faculty and other advanced doctoral students to get feedback on their research work and progress.

Being successful in qualifiers requires working closely with one’s advisor. For most students, this involves regular (often weekly or biweekly) meetings to discuss past efforts and plan next steps, summarize literature that has been read, share analysis approaches and results, outline writing tasks, ask questions and talk about challenges the student is

facing in their work. Through this process, the advisor should guide the student in developing the research paper and presentation, and in asking questions like those that may come up during the qualifier process. Students should obtain feedback at the various stages of this process and determine how to address the suggestions provided (or, how to be prepared to defend why such suggestions were not undertaken if they would not be beneficial). Students should feel comfortable in the relationship with their advisor to ask for direct feedback about their progress and the advisor's judgment of where the student stands with respect to Part A expectations. Students should work with faculty to adjust as needed based on this feedback.

More on the Qualifier Deliverables

The paper should be of professional quality. Students should follow as appropriate the writing style of high-quality journals or conference proceedings in their field. It is expected that the paper will be well-written, free of grammatical and spelling errors and typos, be formatted for ease of reading, and provide sufficient detail. Students should have another student (ideally one who has successfully completed qualifiers) review their paper and provide feedback.

The level of writing and tone should broadly adhere to the standards of the journal where the work might eventually be submitted. However, the audience for the paper is the EPP faculty. This means that the student should not assume specialized knowledge that the average EPP faculty member may not have. Therefore, the paper might include a bit more background and perhaps some more basic description of methods than a paper submitted to a target journal.

The presentation materials should summarize the research and written paper, extracting key points from the work to highlight for the audience. The presentation materials should use effective strategies for figures, tables, and other information design. The oral presentation of the material should demonstrate facility and skill in communicating the research to the audience and keep within the time allocated.

During the question-and-answer period, students may be asked questions specific to their research efforts but also questions regarding the situation of their research in the larger domain of their field. Through the Q&A, students should display a clear grasp of this research and domain space, as well as the general concepts in the science/engineering area and public policy. For example, if research uses concept such as Value of a Statistical Life (VSL), faculty may ask where the value for the VSL comes from (source) and how it was determined (methods), limitations of approaches for calculating VSL, how other VSL values might be deemed also valid or not, and impact such different values would have on results, etc. Students are not necessarily expected to have the answers to every question, but instead should be able to explain the limits of their knowledge and suggest approaches that could be used to answer questions they do not have an answer for at the current time. The student responses should stay on topic (not ramble on), using the fundamental knowledge and theories in their field to inform their answers. Opinions should be avoided unless explicitly asked for.

Note: for both the oral presentation and the Q&A (and to a lesser extent the written paper), students with English as a second language are expected to have level of fluency in English to allow the audience to comprehend their work. It is not expected to be 100% perfect, and students will not be penalized for moments when an English term or phrased has been forgotten or misused. Students should consult on-campus resources, such as the Language and Cross-cultural Support offered through the Student Academic Success Center. Advisors can also help students assess a student's English language proficiency for the exams.

Appendix 3: Curriculum PhD Progress Sheets

Name: _____ Year of Entry: _____

Advisor(s): _____

		Graduate Credit Units	Semester	Grade
I. Core Courses				
1.	19-701 Theory & Practice of Policy Analysis	12	_____	_____
2.	19-702 Quantitative Methods for Policy Analysis	12	_____	_____
3.	19-703 Applied Data Analysis or 36-607 Modern Regression	6 or 9	_____	_____
4.	19-705 Workshop in Applied Policy Analysis (Optional, though serves to help prepare students for Part B qualifier)	6	_____	_____
	Total	_____		

II. Quantitative Methods (18 units required):

Courses on probability and statistics, optimization, machine learning, game theory, and other quantitative methods. It is strongly recommended that at least 6 units should be oriented to probability and statistics.

1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
	Total	_____		

III. Economics (12 units required):

Courses on microeconomics and application of economic analysis in markets. Recommended courses include 19-706 Microeconomic Analysis (6 units), and 90-908 PhD Microeconomics (12 units). Students completing 19-706 are required to complete an additional 6 units of economics coursework. 19-706 is appropriate for students seeking an applied treatment of graduate level microeconomics and is tailored to the analyses that EPP PhD students use in their research. 90-908 is calculus-based and provides a theoretical treatment of microeconomics. Students with a weak calculus background and no previous courses in economics may request to first take 19-681 Managerial & Engineering Economics, but are encouraged to take 19-706 or 90-908 after as a social science elective.

1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
	Total	_____		

IV. Technical Electives (36 units required):

1.	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
5.	_____	_____	_____	_____
	Total	_____		

V. Social Science Electives (24 units required):

1.	Approved course in law, political science, regulation (min 6)			
	_____	_____	_____	_____
2.	_____	_____	_____	_____
3.	_____	_____	_____	_____
4.	_____	_____	_____	_____
	Total	_____		

VI. EPP Teaching and Project Management Practicum

Semester
Completed

Practicum I	_____
Practicum II	_____

VII. Milestones

Semester

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

Thesis Advisor

Appendix 4: Memo on Proper Attribution

Memorandum

TO: EPP Students
FROM: Peter Adams¹
DATE: August 2023
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.

¹This memo was originally written by Granger Morgan. Given the long history of use and revision that went into its production, I am re-using it with his permission.

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. (Schackern, 2004)

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

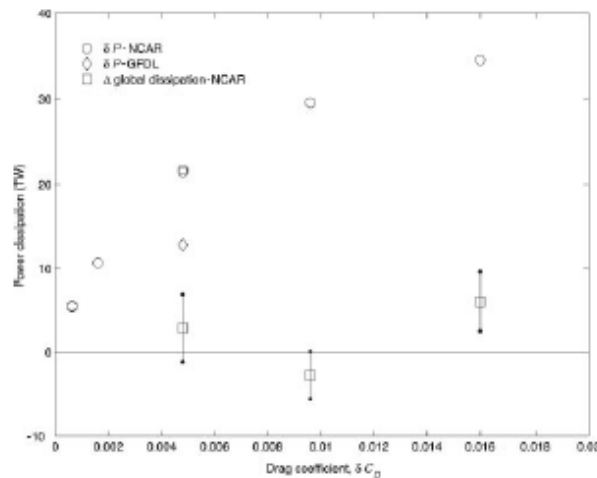


Figure from Keith et al., (2004).

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 and in some situations may need to get permission from the original copyright holder. For example:

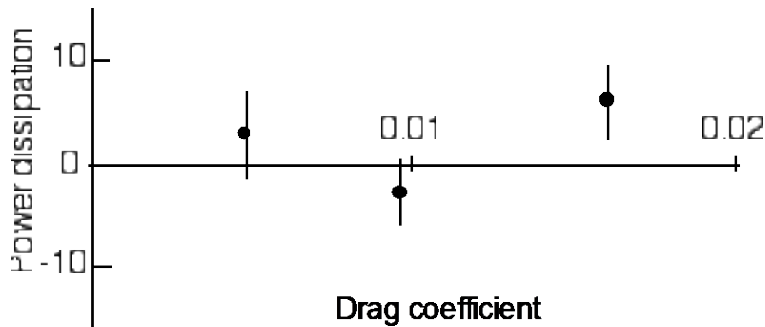


Figure modified from Keith et al., (2004).

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: <https://www.cmu.edu/student-affairs/ocsi/>.

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://tedfrick.sitehost.iu.edu/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 5: 2023-2024 Highlighted University Resources for Graduate Students

Note: The following pages are meant to broadly include only some of the resources available to graduate students. It is not an exhaustive appendix of resources, and students are strongly encouraged to visit the various websites linked below for the most up-to-date information.

Table of Contents

Key Resources for Graduate Student Support	70	
Office of Graduate and Postdoctoral Affairs		70
Office of the Dean of Students		70
The Division of Student Affairs		70
Center for Student Diversity & Inclusion		71
Assistance for Individuals with Disabilities		71
Eberly Center for Teaching Excellence & Educational Innovation		71
Graduate Student Assembly		71
Office of International Education (OIE)		72
Veterans and Military Community		72
Carnegie Mellon Ethics Hotline		72
Policy Against Retaliation		72
Key Offices for Academic & Research Support	72	
Computing and Information Resources		72
Student Academic Success Center		72
University Libraries		73
Research at CMU		73
Office of Research Integrity & Compliance		73
Key Offices for Health, Wellness & Safety	73	
Counseling & Psychological Services		73
Health Services		73
Campus Wellness		74
Religious and Spiritual Life Initiatives (RSLI)		74
University Police		74
Shuttle and Escort Services		74
The WORD	74	

Key Resources for Graduate Student Support

Office of Graduate and Postdoctoral Affairs

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

graded@cmu.edu

The Office of Graduate and Postdoctoral Affairs provides university-wide support for all graduate students and academic programs, with a focus on supporting graduate student success at Carnegie Mellon. Examples of resources offered through the Office of Graduate and Postdoctoral Affairs include, but are not limited to:

- Website with university resources, contact information for CMU programs and services, possible financial assistance and potential funding opportunities, and various procedural and policy information
- Newsletter to all graduate students with information on activities, resources, and opportunities
- Professional development seminars and workshops, and various programming and events for the graduate student community

The Office of Graduate and Postdoctoral Affairs also works directly with the colleges and departments on issues related to graduate students and serve as a resource for developing policy and procedures. The Office of Graduate and Postdoctoral Affairs partners with many other offices and organizations, such as the Graduate Student Assembly, to support the holistic graduate student educational experience.

Office of the Dean of Students

<https://www.cmu.edu/student-affairs/dean/>

The Office of the Dean of Students provides central leadership of the metacurricular experience at Carnegie Mellon including the coordination of student support. Graduate students will find the enrollment information for Domestic Partner Registration and Parental Accommodations in the Office of the Dean of Students or on their website. This Office also manages the Student Emergency Support Funding process. There are currently three forms of support funding for enrolled students: emergency student loans, student parental loans, and the Tartan Emergency Support Fund. Inquiring students will be provided with additional information about the various types of funding during a consultation meeting with a member of the Dean of Students team. Tuition costs are not eligible for Student Emergency Support funding.

College Liaisons and the Student Support Resources team serve as additional resources for graduate students. College Liaisons are senior members of the Division of Student Affairs who work with departments and colleges addressing student concerns across a wide range of issues. College Liaisons are identified on the Important Contacts list in Student Information Online (SIO). The Student Support Resources team offers an additional level of support for students who are navigating a wide range of life events. Student Support Resources staff members work in partnership with campus and community resources to provide coordination of care and support appropriate to each student's situation.

The Division of Student Affairs

The Division of Student Affairs includes (not an exhaustive list):

- Athletics, Physical Education and Recreation
- Career and Professional Development Center (CPDC)
- Center for Student Diversity and Inclusion
- Cohon University Center
- Counseling & Psychological Services (CaPS)
- Dining Services
- Office of Community Standards and Integrity (OCSI)
- Office of Student Leadership, Involvement, and Civic Engagement (SLICE)
- University Health Services (UHS)
- Wellness Initiatives

Center for Student Diversity & Inclusion

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

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

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

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

Assistance for Individuals with Disabilities

<https://www.cmu.edu/disability-resources/>

The Office of Disability Resources at Carnegie Mellon University has a continued mission to provide physical, digital, and programmatic access to ensure that students with disabilities have equal access to their educational experience. The Office works to ensure that qualified individuals receive reasonable accommodations as guaranteed by the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act of 1973. Students who would like to receive accommodations can begin the process through Disability Resources' secure online portal or email access@andrew.cmu.edu to begin the interactive accommodation Process.

Students with physical, sensory, cognitive, or emotional disabilities are encouraged to self-identify with the Office of Disability Resources and request needed accommodations. Any questions about the process can be directed to access@andrew.cmu.edu, or call (412) 268- 6121.

Eberly Center for Teaching Excellence & Educational Innovation

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

The Eberly Center offers a wide variety of confidential, consultation services and professional development programs to support graduate students as teaching assistants or instructors of record during their time at Carnegie Mellon University and as future faculty members at other institutions. Regardless of one's current or future teaching context and duties, Eberly's goal is to disseminate evidence-based teaching strategies in ways that are accessible and actionable. Programs and services include campus-wide Graduate Student Instructor Orientation events and our Future Faculty Program, both of which are designed to help participants be effective and efficient in their teaching roles. The Eberly Center also assists departments in creating and conducting customized programs to meet the specific needs of their graduate student instructors. Specific information about Eberly Center support for graduate students is found at:

<https://www.cmu.edu/teaching/graduatestudentsupport/>

Graduate Student Assembly

<https://www.cmu.edu/stugov/gsa/>

The Graduate Student Assembly (GSA) is the branch of Carnegie Mellon Student Government that represents and advocates for the diverse interests of all graduate students at CMU. GSA is composed of representatives from the different graduate programs and departments who want to improve the graduate student experience at the different levels of the university. GSA is funded by the Student Activities Fee from all graduate students. 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's recent accomplishments are a testament to their making a difference, and steps to implementing the vision laid out by the strategic plan.

<https://www.cmu.edu/stugov/gsa/about-the-gsa/strategic-plan.html>

GSA offers an expanding suite of social programming on and off-campus to bring graduate students from different departments together and build a sense of community. GSA is the host of the Graduate Student Lounge on the 3rd floor of the Cohon University

Center. GSA also maintains a website of graduate student resources on and off-campus. GSA continues to rely on student feedback to improve the graduate student experience at CMU. Feel free to contact them at gsa@cmu.edu to get involved, stop by their office in the Cohon University Center Room 304 or become a representative for your department.

Office of International Education (OIE)

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

Carnegie Mellon hosts international graduate and undergraduate students who come from more than 90 countries. The Office of International Education (OIE) is the liaison to the University for all non-immigrant students and scholars, as well the repository for study abroad opportunities. OIE provides many services including: advising on personal, immigration, study abroad, academic, and social and acculturation issues; presenting programs of interest such as international career workshops, tax workshops, and cross-cultural and immigration workshops; 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 and pre-departure programs.

Veterans and Military Community

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

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

Carnegie Mellon Ethics Hotline

<https://www.cmu.edu/hr/resources/ethics-hotline.html>

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, violations of university policy, or violations of law. Students, faculty and staff can anonymously file a report by calling 1-844-587-0793 or visiting <https://cmu.ethicspoint.com/>. All submissions are reported to appropriate university personnel and handled discreetly.

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

Policy Against Retaliation

It is the policy of Carnegie Mellon University to protect from retaliation any individual who makes a good faith report of a suspected violation of any applicable law or regulation, university Policy or procedure, any contractual obligation of the university, and any report made pursuant to the Carnegie Mellon University Code of Business Ethics and Conduct.

Additional details regarding the Policy Against Retaliation are available at:

<https://www.cmu.edu/policies/administrative-and-governance/whistleblower.html>

Key Offices for Academic & Research Support

Computing and Information Resources

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

Computing Services maintains and supports computing resources for the campus community, including the campus wired and wireless networks, printing, computer labs, file storage, email and software catalog. As members of this community, we are all responsible for the security of these shared resources. Be sure to review the Safe Computing

(<https://www.cmu.edu/computing/safe/>) section and the University Computing Policy

(<https://www.cmu.edu/policies/information-technology/computing.html>)

Visit the Computing Services website (<https://www.cmu.edu/computing/>) to learn more. For assistance the Computing Services

Help Center is available at 412-268-4357 (HELP) or ithelp@cmu.edu.

Student Academic Success Center

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

The Student Academic Success Center's (SASC) work to support success focuses on creating spaces for students to engage in their coursework and approach to learning through many group and individual program options. SASC supports student success by providing academic coaching, subject-specific tutoring, effective communication strategies, accommodations for students with disabilities, and language support for multilingual learners. SASC engages with faculty and staff to improve the coordination and professional development for academic advisors. Visit the SASC website for more information about services offered in areas such as communication and language support; language and cross-cultural support; and learning support.

University Libraries

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

The University Libraries offers a wide range of information, resources, and services supporting graduate students in coursework, research, teaching, and publishing. The library licenses and purchases books, journals, media, and other needed materials in various formats. Library liaisons, consultants, and information specialists provide in-depth and professional assistance and advice in all-things information, including:

- Locating and obtaining specific resources
- Providing specialized research support
- Advanced training in the use and management of data

Sign up for workshops and hands-on topic-specific sessions such as data visualization with Tableau, cleaning data with OpenRefine, and getting started with Zotero. Weekly drop-in hours for Digital Humanities and for Research Data Research Management are scheduled during the academic year. Start at the library home page to find the books, journals, and databases you need; to identify and reach out to the library liaison in your field; to sign up for scheduled workshops; and to connect with consultants in scholarly publishing, research data management, and digital humanities.

Research at CMU

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

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 are found by visiting the Research at Carnegie Mellon website.

Office of Research Integrity & Compliance

<https://www.cmu.edu/research-compliance/>

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, and institutional animal care & use. ORIC also provides consultation, advice, and review of allegations of research misconduct.

Key Offices for Health, Wellness & Safety

Counseling & Psychological Services

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

Counseling & Psychological Services (CaPS) affords the opportunity for students to talk privately about academic and personal concerns in a safe, confidential setting. An initial consultation at CaPS can help clarify the nature of the concern, provide immediate support, and explore further options if needed. These may include a referral for counseling within CaPS, to another resource at Carnegie Mellon, or to another resource within the larger Pittsburgh community. CaPS also provides workshops and group sessions on mental health related topics specifically for graduate students on campus. CaPS services are provided at no cost. Appointments can be made in person, or by telephone at 412-268-2922.

Health Services

<https://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. Appointments can be made by visiting UHS's website, walk-in, or by telephone, 412-268-2157.

Campus Wellness

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

At Carnegie Mellon, we believe our individual and collective well-being is rooted in healthy connections to each other and to campus resources. The university provides a wide variety of wellness, mindfulness and connectedness initiatives and resources designed to help students thrive inside and outside the classroom.

Religious and Spiritual Life Initiatives (RSLI)

<https://www.cmu.edu/wellbeing/resources/religious-spiritual/index.html>

Carnegie Mellon is committed to the holistic growth of our students, including creating opportunities for spiritual and religious practice and exploration. RSLI has relationships with local houses of worship from various traditions and many of these groups are members of CMU's Council of Religious Advisors. They also offer programs and initiatives that cross traditional religious boundaries in order to increase knowledge of and appreciation for the full diversity of the worldview traditions. RSLI staff are available to support students across the spectrum of religious and spiritual practice and would be more than happy to help you make a connection into a community of faith during your time at CMU.

University Police

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

x2323

The University Police Department is located at 4551 Filmore Street. The department's services include police patrols and call response, criminal investigations, fixed officer and foot officer patrols, event security, and crime prevention and education programming as well as bicycle and laptop registration. Visit the department's website for additional information about the staff, emergency phone locations, crime prevention, lost and found, fingerprint services, and annual statistic reports. 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. The report also contains 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 x2323. The annual security and fire safety report is also available online at:

<https://www.cmu.edu/police/annualreports/>

Shuttle and Escort Services

<https://www.cmu.edu/parking/transport/>

Parking and Transportation coordinates the Shuttle Service and Escort Service provided for CMU students, faculty, and community. The Shuttle & Escort website has full information about these services, stops, routes, tracking and schedules.

The WORD

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

The WORD is Carnegie Mellon University's online student handbook and serves as the foundation for the department (and sometimes college) handbook. The WORD contains university-wide academic policy information and resources, community policies and resources, and describes the university level procedures used to review possible violations of these standards. 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. Graduate students are encouraged to bookmark this site and refer to it often. University policies can also be found in full text at: <https://www.cmu.edu/policies/>.

Appendix 6: Reporting interpersonal and professional concerns

In EPP, no student should have to quietly endure any interpersonal or professional concerns. In striving to continue to make EPP an inclusive and welcoming community, EPP and CMU have processes for reporting three types of concerns: norm violations, bias incidents, and harassment/discrimination.

Norm violations are breaches of accepted standards of behavior in the department, similar to microaggressions, that are often unpredictable, unintentional, and distributed among many individuals, but not consistent or harmful enough to be considered harassment or discrimination. We define a norm violation as *teasing, offhand comments, or isolated incidents that may be hurtful but not so frequent or severe that it creates a hostile or offensive work environment*. An example of a norm violation would be a professor telling a student to “stop talking in slang” in front class during a presentation, which would be upsetting and embarrassing. If the professor’s behavior was perceived to be frequent or severe, this would create a hostile or offensive work environment and should be treated as harassment or discrimination. Reporting norm violations gives the students, faculty, and staff an opportunity to reflect and improve upon their own actions that may be harmful to others. While there are always exceptional circumstances that will be handled with care, the general approach of EPP is to handle norm violations within the department, but relay bias incidents and harassment/discrimination to the appropriate CMU central administrative channels and authorities.

Anonymous survey reporting

An anonymous reporting mechanism is available through EPP’s Inclusion, Culture, and Well-Being (ICWB) Survey collected once per semester (or available through the EPP website). This survey provides a way to anonymously report norm violations, harassment, and bullying. This reporting mechanism is appropriate for anonymous reports that include enough details for review by faculty to suggest changes that can improve department culture, inclusion, and well-being. *Anonymous* means you and those involved are left unnamed, and details are not specific enough to identify you. The purpose of the anonymous reporting is to help the department assess rates and trends in norm violations, raise awareness about hurtful behavior, and make recommendations for suggested behavior changes for students, faculty, and staff. Reporting of such incidents is crucial for addressing problems as they arise.

Confidential reporting

Non-survey reporting mechanisms are *confidential* but not anonymous. Confidential reports reveal your identity to the person receiving the report but not necessarily to others.

Confidential reports can be made to the EPP Ombudsperson, your faculty advisor, the EPP Department Head, EPP Associate Department Head, or another EPP confidant who you feel comfortable with. EPP and CMU make every effort to ensure that your wishes in remaining confidential can be met where possible. Once a norm violation incident is reported - the incident will be investigated and corrective actions will be taken, as deemed necessary by the Department Head. If the Department Head was not entrusted with the initial report, the chosen confidant will ask the reporting party if they are comfortable with sharing their identity to inform further action. If you are uncomfortable revealing your identity, the confidant will make every effort to retain confidentiality so as to only supply the Department Head with the confidential information needed to inform an appropriate corrective action. As is legally permissible and as much as possible, those entrusted with such information will take all feasible steps to protect the identities of those involved when investigating such issues.

-EPP Ombudsperson: Baruch Fischhoff (baruch@andrew.cmu.edu)

-EPP Department Head: Peter Adams (petera@andrew.cmu.edu)

-EPP Associate Department Head: Nick Muller (nzm@andrew.cmu.edu)

EPP process for handling norm violation reports

Confidential norm violation reports will be handled directly by the Department Head. Anonymous norm violation reports collected through the survey will be collated by the ombudsperson, Diversity, Equity, and Inclusion committee, and Culture and Well-Being committee to be reviewed at the final EPP faculty meeting of each semester. The faculty will discuss the survey results and make suggestions for corrective action, most likely in the form of communications to faculty, students, and staff about appropriate behavior. Because the aim of norm violation reports is to raise awareness about harmful behaviors in the department, the results of the survey and deliberation at the faculty meeting will be shared with the EPP department along with explanations about corrective action before the end of the semester.

Reporting Bias Incidents and Harrassment/Discrimination

A bias incident is “when the departmental culture is disrupted through negative and/or discriminatory conduct, speech, or expression directed towards a group or individual based on perceived or actual race, color, national origin, sex, handicap or disability, age, sexual orientation, gender identity, religion, creed, ancestry, belief, veteran status, generic information, or any combination of these factors” (see: <https://www.cmu.edu/diversity/resources/bias-reporting.html>)

Harrassment/Discrimination can “include, for example, racial slurs, offensive or derogatory remarks about a person’s race or color, or the display of racially-offensive symbols” (see: <https://www.eeoc.gov/racecolor-discrimination>)

Regarding bias incidents and harrassment/discrimination, students are strongly encouraged to report concerns to the department and university, including issues related to academic and student life, harassment, and research misconduct. Each report can be made directly through one or more channels to the university as well as through anonymous reporting mechanisms. In addition to the reporting channels below, students are encouraged to reach out to EPP faculty they feel comfortable with, including their advisor, the Department Head, Associate Department Head for Graduate Affairs, and Ombudsperson. Just as with norm violations, such reporting back to the department can help us be aware of any problematic trends in these incidents so as to ensure we take corrective actions to ensure that these incidents do not systematically undermine the trust and culture of the department.

Anonymous reporting. Anonymous reports can be made by phone or through reportit.net. All reports are handled through a process described in Section 4 through the appropriate university office.

-Channel 1 - Call 877-700-7050

-Channel 2 - <http://www.reportit.net/> (username: tartans; password: plaid)

Academic and Student life. Academic and student life concerns include issues with other students, such as discrimination, abusive practices, and academic dishonesty. These can be reported directly through two channels, either to the dean of students or Title IX office.

-Channel 1 - Office of the Dean of Students - <https://www.cmu.edu/student-affairs/dean/>, 412-268-2075

-Channel 2 - Office of Title IX initiatives - <https://www.cmu.edu/title-ix/>, 412-268-7125

Harassment and Discrimination. Any form of sexual misconduct, harassment, violence, or discrimination, including race, gender identity, sexual preference, age, religion should be reported to the Title IX office, HR, or the university ombudsperson.

-Channel 1 - Office of Title IX initiatives - <https://www.cmu.edu/title-ix/>, tix@cmu.edu, 412-268-7125

Channel 2 - Office of Human Resources, <https://www.cmu.edu/hr/>, 412-268-1243

Channel 3 - Office of the University Ombudsperson, 412-268-1018, ombudsperson@andrew.cmu.edu

Research misconduct. Research misconduct includes violations of conflict of interest, falsifying reports, intellectual property infringement, misappropriation of grants and expenses, and scientific misconduct (falsification, fabrication, plagiarism).

-Channel 1 - Office of the Vice President for Research, <https://www.cmu.edu/research-office/>, 412-268-5073

-Channel 2 - Office of Research Integrity and Compliance, <https://www.cmu.edu/research-compliance/>, 412-268- 7166

University process for handling reports

We want to give you a better sense of how the university usually handles reports outside of EPP. All reports are first documented by the university. The university response then differs slightly depending on whether the report is anonymous or non-anonymous. For anonymous reports, there is first a determination of whether there is enough information in the report to take action. As with non-anonymous reports, if there is enough information and action is warranted, the next step is for the university to bring in key resources needed for action (e.g., Title IX office, Center for Student Diversity and Inclusion). The resulting course of action depends on two factors: 1) whether there is a violation of university policy (www.cmu.edu/policies), and 2) the preferences of the reporting party balanced with the welfare of the CMU community. If the reporting party wishes to remain confidential, the university will make every attempt to ensure that confidentiality is maintained. Throughout each step, there is a strong desire for transparency. In each step of the process, there are requirements for reporting back to you as to how the process will unfold and to update you on the outcomes of each step. There are some specific additions to this process depending on the nature of the concern that are more fully elaborated here:

<https://www.cmu.edu/graduate/policies/appeal-grievance-procedures.html>, including a further disciplinary committee hearing and appeals process. If there are any questions with this process, you are encouraged to reach out to EPP faculty you feel comfortable with, including your advisor, the Department Head, Associate Department Head for Graduate Affairs, and Ombudsperson.