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Welcome to the College of Engineering!

Welcome to the College of Engineering, otherwise known as the Carnegie Institute of Technology, or CIT. This handbook provides answers to many of the questions graduate students have as they begin their studies at Carnegie Mellon. I’m sure you will find it to be a valuable resource. If you should have a question that is not addressed in the handbook, faculty and staff are always available to answer your questions.

The college you see today is over one hundred years in the making. From our humble beginning as a trade school for the children of steelworkers to our current ranking as a top-ten engineering college, the college has consistently looked to the future as the measure for its mission. As a student-centered, research-intensive college, it is our goal to offer an education that encourages innovative thinking, develops technical excellence, and builds collaboration, communication, and leadership skills.

Today's engineers must be citizens of the world. From Pittsburgh to Portugal, Silicon Valley to Kigali, engineers are challenged to solve problems on a global scale. In the College of Engineering, we are committed to building multi-cultural skills and communication, challenging our students and faculty to grow beyond borders and boundaries. This is demonstrated by our curriculum and in the staff, faculty, and students we attract.

With a global economy comes opportunity and competition. We help our students meet these challenges through a curriculum and culture that embraces innovation. Our graduate programs include master's and doctorate degrees focused on innovation management and entrepreneurship. Our faculty is well known for, and committed to, both outstanding teaching and innovations in curricula and pedagogy. For both graduate and undergraduate students, research within the college transcends disciplinary, departmental, and college boundaries and offers a unique opportunity for students to experience hands-on training. This training leads to the development of the next generation of innovations that will impact and change society.

Our students represent the best and brightest minds—we are committed to their professional development and securing their future. Good luck as you begin your graduate program.

Sincerely,

James H. Garrett, Jr., P.E.
Dean, College of Engineering and
Thomas Lord Professor of Civil and Environmental Engineering
Mission of the College of Engineering

To be a world-class engineering college recognized for excellence, innovation and the societal relevance and impact of its pursuits.

Our mission is to produce creative and technically strong engineers and to research pioneering solutions to global challenges. We do this with an unprecedented commitment to integrating across engineering, sciences, arts, business and other disciplines to yield transformative results.

Graduate Student Handbook

In Graduate Education programs, students will work closely with the department faculty in their chosen field. However, the College of Engineering establishes standards for graduate education that apply across all programs in the College of Engineering. Students are also expected to be familiar with and abide by their department’s policies as listed in their handbooks.

In addition to this handbook, there are several other resources and offices graduate students are encouraged to consult during their tenure at Carnegie Mellon University. Information about The Word, the student handbook, the Office of the Assistant Vice Provost for Graduate Education, the Office of the Dean of Student Affairs and others are included in Appendix A of this handbook.

Please contact the College of Engineering Dean’s Office to request this handbook in a different format to address accessibility needs.

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:

- Academic Integrity Website: www.cmu.edu/academic-integrity
- University Policies Website: www.cmu.edu/policies/
- Graduate Education Website: http://www.cmu.edu/graduate/policies/index.html
- College of Engineering (CIT) website: http://engineering.cmu.edu/
- College of Engineering Graduate Policies: https://engineering.cmu.edu/education/academic-policies/graduate-policies/index.html

Please see Appendix A for additional information about The Word and University resources.
Carnegie Mellon University Statement of Assurance

Carnegie Mellon University does not discriminate in admission, employment, or administration of its programs or activities on the basis of race, color, national origin, sex, handicap or disability, age, sexual orientation, gender identity, religion, creed, ancestry, belief, veteran status, or genetic information. Furthermore, Carnegie Mellon University does not discriminate and is required not to discriminate in violation of federal, state, or local laws or executive orders.

Inquiries concerning the application of and compliance with this statement should be directed to the vice president for campus affairs, Carnegie Mellon University, 5000 Forbes Avenue, Pittsburgh, PA 15213, telephone 412-268-2056. Obtain general information about Carnegie Mellon University by calling 412-268-2000. The Statement of Assurance can also be found on-line at: http://www.cmu.edu/policies/documents/SoA.html.

The Carnegie Mellon Code

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

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

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

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

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

Please consult the department/program handbook for information on departmental resources and the ombudsperson. Additionally, students may confer with the university graduate ombudsman, Suzie
Laurich-McIntyre, slaurichmcintyre@cmu.edu, on issues of process or other concerns as they navigate conflicts. Suzie Laurich-McIntyre is the Assistant Vice Provost for Graduate Education.

Degree Attainment

M.S. Degree

A candidate for the Master of Science degree in the College of Engineering must complete satisfactorily the requirements specified by the major department or program in addition to the general requirements of the College of Engineering. The Master of Science degrees usually require one to two academic years of full-time study beyond the B.S. degree.

The general requirements include the satisfactory completion of a minimum of 96 units of academic work at Carnegie Mellon. A minimum of 60 units (including graduate project units) must be graduate level work from the College of Engineering, MCS or SCS. The satisfactory completion of a master's degree comprehensive examination may also be required in some departments or programs. A master's thesis may be required by the major department in lieu of, or in addition to, other requirements. Specific requirements can be obtained from each department or program:

- Biomedical Engineering
- Chemical Engineering
- Civil and Environmental Engineering
- Electrical and Computer Engineering
- Energy Science, Technology & Policy
- Engineering and Public Policy
- Engineering and Technology Innovation Management
- Information Networking Institute
- Integrated Innovation Institute
- Materials Science and Engineering
- Mechanical Engineering

If a thesis is submitted in partial fulfillment of degree requirements, it must meet the approval of the instructor in charge of the work, the department head, and the dean (or his/her designee). The completed thesis should be prepared following the M.S. Thesis and Ph.D. Dissertation Document Standards and must be submitted to the department by the specified due date (pg.13) for the semester in which completion is planned. Any publication derived from the thesis should be prepared in consultation with the faculty advisor, and should acknowledge that the manuscript was derived from a thesis submitted in partial fulfillment of the requirements for the degree of Master of Science at Carnegie Mellon.

Ph.D. Degree

The degree of Doctor of Philosophy (Ph.D.) is granted by Carnegie Mellon to candidates who give evidence of proficiency, high attainment, and research ability in the field of their major work, and who have satisfied the specific coursework and other requirements of the department in which they are
enrolled. Doctoral candidates are required to maintain full-time residence at Carnegie Mellon for a minimum of one year.

Please also see our policies specifically related to College of Engineering Ph.D. Qualifications, Dissertation and Degree and or M.S. Thesis and Ph.D. Dissertation Document Standards.

**College of Engineering Policy on Joint Degrees with EPP**

The unique doctoral program in Engineering and Public Policy provides opportunities for advanced graduate study of both the technical and policy aspects of a broad range of topics at the interface of technology and policy. EPP and any College of Engineering department can agree to offer a joint Ph.D. degree (i.e., one degree with two fields listed in the title) to a particular student.

Students interested in pursuing a joint Ph.D. degree must apply to the second department within the first academic year of Ph.D. study. Students cannot apply for a joint Ph.D. degree program upon initial entry; initial Ph.D. applications must be to one department only. If both departments agree to admit a student to a joint Ph.D. program, the student must either pass the Ph.D. qualifying exams of both departments or pass a mutually agreed upon shared exam.

In addition, the student must either meet the course requirements of both departments or meet a mutually agreed upon set of course requirements. The doctoral committee for a joint Ph.D. student must include representation from both departments involved, and the dissertation topic should make significant contributions in both fields. The extent to which the dissertation research speaks to both fields must be discussed explicitly at the proposal stage and revisited by the doctoral committee over the course of the degree program.

**Interdisciplinary Degrees**

If the formal graduate curricula do not suit the needs of a student, an individualized curriculum can be designed to meet the student’s abilities, interests, and professional objectives utilizing the educational resources of Carnegie Mellon.

The student is encouraged to consider courses offered by the other colleges of Carnegie Mellon, such as the Mellon College of Science, the School of Computer Science, the Heinz School, and the Tepper School of Business.

The student obtains a faculty advisor, who, together with two other Carnegie Mellon faculty members for a master's degree and at least three other faculty members for a Ph.D. degree, constitute an advisory committee to oversee the student’s research, specify degree requirements (within the general requirements of the university) and recommend the student for the degree upon completion of the program.

The degree attached to the particular program generally will not be offered by Carnegie Mellon departments since the intention of the individualized program is to increase the options available to students.

All curricula and degrees must be reviewed by an Ad Hoc Committee on Interdisciplinary Studies and written approval should be obtained from the committee before starting a curriculum program. This
committee is chaired by the Associate Dean for Graduate and Faculty Affairs, who, with at least two other college faculty members, makes a recommendation for approval to the Engineering College Council. Students who are interested in this program should contact the college's Associate Dean for Graduate and Faculty Affairs.

The degree would be offered by the College of Engineering. Requests for Interdisciplinary degrees are reviewed by the Associate Dean for Graduate and Faculty Affairs with advice from college faculty, and approved by the Engineering College Council. Normally for Ph.D. students the faculty advisor and home department would be within the college. Interdisciplinary Ph.D. students in the College of Engineering must usually satisfy one component of an engineering department Ph.D. comprehensive examination.

**College of Engineering Integrated Master’s/Bachelor’s (IMB) Degree Program Policy**

The goal of this program is to enable students in any College of Engineering Department’s undergraduate (UG) degree program to continue seamlessly into that Department’s main master’s degree program. In order to be awarded the Master’s degree in the IMB degree program, the student must also earn their BS degree, either simultaneously with the Master’s degree or in a semester prior to the awarding of the Master’s degree.

**College of Engineering Policy**

Following is the college's policy for admission into the integrated master’s/bachelor’s (IMB) degree program. The requirements for completing the master’s degree and bachelor’s degree remain unchanged.

- **GPA:** Students admitted to this IMB degree program should have a minimum GPA of 3.0; exceptions can be made by the Department on the basis of other factors including extenuating (e.g., medical) circumstances, improvement in grades, strong recommendation letters, etc.
- **Number of Units:** Students will declare their intention to apply to this IMB degree program after completing the number of units completed typically by students in that department after the first five semesters.
- **Graduate Status:** All IMB degree program students must have graduate status once they have completed their BS degree and beyond eight semesters. IMB degree program students must have full-time graduate student status in at least one (e.g., their final) semester whether or not they have already completed their BS degree.

The application process for this IMB degree program will be straightforward. Students will be able to indicate their intent to join the IMB degree program via e-mail or a web interface. There will be no need for a formal application process involving a formal application, application fee, GRE scores, recommendation letters, official transcripts and a statement of purpose.

**Master's Student Statute of Limitations**

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

Student Status

Full-time Status and Part-time Status

For part-time students, certain graduate courses may be offered on a rotating basis in two- or three-year cycles. The Master of Science degree requirements can usually be completed on a part-time basis within three to four years, in part through the substitution of additional course work, or project work for a graduate research thesis project according to the departmental stipulations. All students are encouraged to complete the degree program as rapidly as possible.

All part-time Ph.D. degree candidates must complete one academic year (two full semesters) in residence on a Carnegie Mellon campus after beginning studies in the Ph.D. program. The two semesters in residence do not have to be contiguous. The purpose of the residency requirement is to ensure that all Ph.D. graduates of the College of Engineering have spent time interacting closely with college faculty members and graduate students as part of their Ph.D. experience. The time in residence also ensures an adequate opportunity to prepare for and complete the Ph.D. qualifying examinations at the beginning of Ph.D. studies. Consequently, students intending to become Ph.D. degree candidates must consult their faculty advisors concerning the appropriate format and timing of their qualifying examinations and residency before or upon initiation of Ph.D. studies. Special situations may warrant modifications of the residency requirement, e.g., pursuit of a Ph.D. degree by a Carnegie Mellon staff member. Petitions for modification of the residency requirement must be approved by the relevant department head(s) and the Associate Dean for Graduate and Faculty Affairs. For more information on the Doctoral Student Status please view the University’s policy:  

Credit and Course Registration

Transfer Credit & Special Students

Applicants with a degree of Bachelor of Science may be admitted as part-time special students with no intention of working toward a graduate degree. Some of them may later wish to become degree candidates. Even though the applicant may have been admitted as a non-degree student, courses taken at Carnegie Mellon with a grade of B or better will be counted toward the degree, provided that such courses fall within the requirements of the degree sought.

If offered by your program, up to 24 units (two courses) of graduate work completed at other universities, with a grade point average of 3.0 or better, may be given transfer credit, provided that such course work is part of the graduate program leading to the degree sought. These units cannot have been
used toward a previous degree at another university. Such transfer credit is not granted prior to admission to the graduate program and must be approved by the department after the student has satisfactorily completed at least 36 units of graduate courses at Carnegie Mellon.

This policy is subject to change within the individual academic departments and programs. Download the Graduate Transfer Credit Request form.

Please consult the department/program handbook for information on:

- GPA Requirements and QPA Requirements for graduation
- The definition for successful academic standing
- The process for, definition of, and communication of:
  - probationary status and returning to good standing;
  - suspension and returning to program;
  - dismissal from the program/department/college
- Policy on Pass/Fail
- Policy on Grades for Retaking a Course

**Cross Registration**

Cross-registration is available through neighboring institutions (e.g., the University of Pittsburgh, Duquesne University) and the grade earned for courses completed during the Fall or Spring semester will appear on the Carnegie Mellon transcript. Course and/or distribution credit may be granted by petition to the department (subject to the College of Engineering’s Transfer Credit policy described above) for courses not used for a previous degree requirement. For more information on the Pittsburgh Council on Higher Education (PCHE) and cross registration please view the University’s policy: [https://www.cmu.edu/hub/registration/undergraduates/cross/](https://www.cmu.edu/hub/registration/undergraduates/cross/).

**Policy on Course Drop and Withdrawal by Graduate Students**

College of Engineering graduate students may drop a course on-line on or before the deadline published in the official university calendar. When a course is dropped before the deadline, the course is removed entirely and disappears from a student’s academic record. After the official university deadline to drop, graduate students may withdraw from a course on-line on or before the last day of classes, excluding final examinations. The deadline to withdraw from a half-semester mini course is the last class day of the mini course. When a College of Engineering graduate student withdraws from a course between the official university deadline to drop a course and the last day of classes, a “W” (Withdrawal) is assigned as a grade, which appears on the student’s academic record. 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.

**Course Electives**

Courses counted as electives towards MS degrees in CIT must be at the 300 level or above. Courses numbered as xx-299 or lower do not qualify as MS degree electives.
Double Counting of Course Units for M.S. and Ph.D. Degrees

No course that has been counted toward another degree can be counted toward fulfilling course requirements in graduate programs, unless explicitly authorized for a particular program as set forth in the specified requirements for the program, or by the department head(s) of the primary department(s) of the graduate student.

Grades and Grading

The general grading policy is described on the university grading policy page (http://www.cmu.edu/policies/documents/Grades.html) including the definitions of GPA (letter) and QPA (quality point). The following are College of Engineering-specific policies for graduate grading.

Project work may be given an S (Satisfactory) grade on a semester-by-semester basis, but a letter grade (A, A-, B+, B, B-, C+, C, C-, D+, D, or R) must be given in the final semester for a multi-semester project. The grading scale does not include the grade A+, i.e., no A+ grade will be given in College of Engineering courses and no College of Engineering students can be given an A+ grade. The units with an S grade are counted toward degree requirements but are not included in computing the average grade.

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

MS Degree

Most, but not all, College of Engineering M.S. programs require 96 units. For those that require 96 units, the average grade of 96 units applied to the degree shall be at least B, and the student may choose any 96 units satisfying the degree requirements of the first 120 units attempted to compute the grade average. Individual departments and programs may have specific requirements regarding grades in certain courses. For M.S. programs that require more than 96 units the program-specific grading policies and degree requirements apply and should be consulted.

Ph.D. Qualification, Dissertation and Degree

Qualifying Exam

The examination comprises written and/or oral parts, and may include review of a thesis proposal (described in this section). The student will be considered to have passed the qualifying examination when he or she has successfully completed all the required parts. A candidate must take the qualifying examination at the time specified by the department. Upon satisfactorily passing the examination, the student will be accepted as a candidate for the degree of Doctor of Philosophy. If the student has not already received a Master's degree, upon application and provided that all other requirements have been met, he or she may be granted the degree of Master of Science at the next commencement.

Passing the Ph.D. qualifying examination admits a student to candidacy for the Ph.D. degree for a period of no longer than six calendar years. If, at the end of this six-year period, the Ph.D. 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.

If the student is re-admitted, he or she may, at the discretion of the department, be requested to pass the qualifying examination again before the Ph.D. is awarded. A student may petition for extension of the six-year limit under extenuating circumstances such as a forced change of advisor, military service, or prolonged illness. Note that the time limits on the duration of Ph.D. candidacy outlined here are more restrictive than those of the general university policy.

**Ph.D. Dissertation Overview**

*Thesis Proposal*
The thesis proposal generally will be presented to the Dissertation Committee (see below) reasonably early in the student’s tenure as a Ph.D. student, within the time limits specified by the department. The purpose of the thesis proposal is to allow the student to demonstrate that the proposed research is likely to meet the criteria for doctoral dissertations, stated below, and that the proposed research can be accomplished in a reasonable period of time.

*Ph.D. Dissertation Committee*
The dissertation is prepared under the supervision of a faculty advisor who also usually serves as the chair of the Dissertation Committee. The Dissertation Committee shall consist of a minimum of four members. At least two of these will be full time Carnegie Mellon faculty affiliated with the candidate’s academic department, and at least one will be a person who is not primarily affiliated with the candidate's department. Departments may impose additional constraints on the make-up of the Committee.

The Dissertation Committee shall review and approve satisfactory thesis proposals, and act as the examining body for the final public examination of the candidate on the thesis subject. It is recognized that faculty leaves or other absences may require substitutions to be made on the Dissertation Committee. Any such substitutions, however, should conform with the rules on the composition of the Committee.

*Ph.D. Dissertation*
The doctoral dissertation must embody the results of extended research, be an original contribution to knowledge, and include material worthy of publication. It should demonstrate the candidate’s ability to conduct an independent investigation, to abstract principles upon which predictions can be made, and to interpret in a logical manner facts and phenomena revealed by the research. (In the event that irreconcilable differences arise between a student and his or her faculty advisor on whether the dissertation research is ready to be defended, appeal may be made to the Department Head to resolve those differences.) The dissertation must be prepared in accordance with the College of Engineering thesis and dissertation document standards.

*Ph.D. Dissertation Time Table*
- Completion of Written Dissertation—not more than six years after being admitted to candidacy.
- Submission of Dissertation to Committee—at least one and one-half months before the Final Grade due date for the semester in which completion is planned.
• Public Announcement of Defense—at least two weeks before Dissertation Defense.
• Dissertation Defense—at least 15 days before the Final Grades Due date for the semester in which completion is planned.
• 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.
• Submission of Dissertation to the Dean of the College of Engineering—by the Final Grades Due date for the semester in which completion is planned.

Upon completion of the dissertation, copies must be submitted to the Dissertation Committee according to the departmental regulations. If the dissertation is accepted by the Committee, the candidate is eligible for a final public examination. A public announcement of the date, time, place, candidate name, title, and dissertation committee must be posted in each engineering department at least two weeks prior to the date of the exam.

Upon satisfactorily passing the final public examination, the candidate will be recommended for the doctoral degree. Copies of the dissertation must be presented to the appropriate Department Head and to the Dean of the College of Engineering for approval, as described in the college's thesis and dissertation document standards.

**Thesis and Dissertation Document Standards**

Please consult the department/program handbook for requirements and review committee information.

**M.S. Thesis and Ph.D. Dissertation Due Dates**

**August and December Graduates**
Theses and dissertations must be submitted to the department ten days before the Final Grades Due date. The department must submit the thesis or dissertation and documentation to the Dean by the Final Grades Due date.

**May Graduates**
Theses and dissertations must be submitted to the department ten days before the Final Grades for Graduating Students Due date. The department must submit the thesis or dissertation and documentation to the Dean by the Final Grades for Graduating Students Due date.

**Submission Procedure**

The College of Engineering requires that all theses and dissertations be submitted to both the Carnegie Mellon University Institutional Repository and the ProQuest ETD Administrator Repository. This can be accomplished through the ProQuest ETD Administrator website: [http://www.etdadmin.com/cgi-bin/student/etd?siteld=717;createacct=1](http://www.etdadmin.com/cgi-bin/student/etd?siteld=717;createacct=1).
ProQuest offers two publishing options: Traditional Publishing and Open Access Publishing PLUS. In all types of publishing, you will retain the copyright to your work. For a fee, ProQuest will officially register a student’s copyright with the U.S. Copyright Office. Official registration is not required to maintain the copyright, but registration may provide certain legal benefits. For more information, view the UMI Copyright Guide: [http://media2.proquest.com/documents/UMI_CopyrightGuide.pdf](http://media2.proquest.com/documents/UMI_CopyrightGuide.pdf).

**Traditional Publishing**
Students enter into an agreement granting ProQuest the non-exclusive license to publish their abstract and to duplicate and distribute their dissertation. The abstract, bibliography, and other metadata of the thesis or dissertation will be included in the ProQuest Dissertations and Theses database (PQDT). ProQuest pays authors 10% royalty on any sales of their work.

**Open Access publishing through ProQuest PLUS**
Students enter into an agreement granting ProQuest the non-exclusive license to publish their work on the ProQuest Dissertations and Theses Open Database and make it available for free download. Students do not receive royalties with this option. There is a one-time upfront fee. View more information on Open Access Publishing PLUS: [http://media2.proquest.com/documents/open_access_overview.pdf](http://media2.proquest.com/documents/open_access_overview.pdf).

**Carnegie Mellon University Institutional Repository**
During the ProQuest ETD Administrator submission process, students will be required to publish their thesis or dissertation at the Carnegie Mellon University Institutional Repository. This repository, supported by the Libraries, will provide online, open access to work produced by Carnegie Mellon University faculty and students. There is the option to restrict the thesis or dissertation to only campus (archival) access. There is no fee to submit.

Publishing to the Institutional Repository does not affect authorial copyright ownership. All embargo options will be honored.

**Embargo Options**
An embargo is the ability to delay the release of a thesis or dissertation for a limited period of time, often due to pending patents, material within the work that cannot be released due to copyright, or a desire to publish all or part of the work in a journal or book.

**Supplementary Materials**
Supplementary materials such as the raw data underlying the research should be uploaded during the submission to the ProQuest ETD Administrator process. The materials will be made available online with the thesis or dissertation in the Institutional Repository or available on a CD or DVD if a printed copy is requested.

**Departmental Copies**
The thesis or dissertation may be archived by the department on a non-public server. In some departments, the author will have the option to post the thesis or dissertation on a publicly-accessible internet site maintained by the department. Review the departmental handbook more information.
Required Documentation

The following documents must be submitted the College of Engineering Graduate School in additional to the uploaded submission of the dissertation:

- A pdf of the completed document
- A Signature Page, signed by the advisor(s) and Department Head(s)
- A Committee Page, signed by all committee members
- A Submission Checklist that confirms proper formatting of the document and copyright assertion decision

Signature Page
Separate from the pdf of each thesis or dissertation must be a Signature Page and must follow the format specified for regular degrees and joint degrees. The original signature page must be signed by the thesis or dissertation advisor(s), the department head and the Dean or Associate Dean for Graduate and Faculty Affairs of the College of Engineering. Only one original signature page should accompany the thesis or dissertation submitted to the department head and Dean for review and approval.

Committee Page
Separate from the pdf of each thesis or dissertation must be a Committee Page. The original Committee Page must be signed by all members of the committee for doctoral works and all readers for master's works.

Submission Checklist
Separate from the pdf of each thesis or dissertation must be a Submission Checklist. The Submission Checklist should be thoroughly reviewed to ensure all requirements for submission have been met. The Checklist must be completed and signed by the student.

Manuscript Format Requirements

Except as specifically superseded by directions from the candidate's major department and ProQuest, the general rules with respect to form shall follow those provided below. Some of the guidance is from K. L. Turabian, A Manual for Writers of Term Papers, Thesis and Dissertations, 8th Edition, University of Chicago Press, Chicago, 2013.

The preparation of the thesis and dissertation and copies are the student's responsibility, unless departmental policies dictate otherwise.

Title
Your title is the first thing your readers read. It should announce the topic and communicate the conceptual framework of the thesis or dissertation using keywords that provide information to both the reader and potential search algorithms.

Font
Choose a single, readable and widely available typeface/font, such as Times New Roman, Arial or Helvetica. If using a less common typeface, embed the font in the electronic file. Avoid ornamental typefaces. In general, use at least ten-point or twelve-point font for the body of the text.
**Title Page**
The first page of the pdf will be a title page. The title page of the dissertation should follow the format specified in the template. Note that the title page must follow the template and not include additional information.

**Copyright Page**
If the student asserts their copyright then the second page of the pdf will be the copyright page, according to the template. If the student does not wish to assert copyright then they must indicate that choice on the submission checklist page.

**Acknowledgements Page**
All theses and dissertations must include an Acknowledgments section. This section is used to thank mentors and colleagues or name the individuals or institutions that supported your research or provided special assistance, such as consultation or aid. Acknowledge any owners of copyrighted materials that have granted you permission to reproduce their work. Describe all sources of funding from outside grants, fellowships, awards, or self-supported funding. For any grants, include the identifying number. Acknowledgment of the source(s) of support is important ethically in all research publications and presentations, including theses, to give the sponsors the recognition they deserve, and also to disclose publicly the organization or persons funding the research.

For doctoral submissions, the doctoral committee must also be listed in the Acknowledgments, and the chair of the committee must be identified. **The doctoral committee should not be listed on the title page.**

**Abstract**
The abstract will be made available in the ProQuest Dissertations and Theses database (PQDT). Do not include footnotes, references, or unexplained abbreviations. There is no word limit on the abstract, however it should be concise.

**Table of Contents**
The table of contents should include page references.

**List of Tables**
Include titles and page references.

**List of Figures and Illustrations**
Include titles and page references.

**Body**
The body of the thesis or dissertation should be broken into the following sections:

A. **Introduction**
B. **Main Body** – with larger divisions and more important minor divisions indicated by suitable, consistent headings
C. **Summary and Conclusions** – highlighting the key findings and conclusions of the work presented. For engineering and science theses and dissertations, this section often also includes recommendations for follow-up research.
D. **References** – see below
E. Appendices – each appendix should have a title and be listed in the Table of Contents

Pagination
Each page in a thesis or dissertation should be assigned a number. The following plan of page numbering generally is accepted:

A. Do not number the Title or Copyright Page, although these pages will be included in the page count
B. Preliminaries: Use small Roman numerals (i, ii, iii, iv, etc.). The numbering begins with iii; the title page counts as page I and the copyright page as ii, but the number does not appear.
C. Rest of the Thesis or Dissertation – the body of the thesis, including text, illustrations, appendices, and bibliography, use Arabic numerals (1, 2, 3, 4, etc.). Each page must be numbered. Try to avoid use of letter suffixes such as 10a, 10b. The numbering begins with 1 and runs consecutively to the end of the dissertation.

Footnotes
If footnotes are needed, they should be placed at the bottom of the page below a 1.5 inch underscore (starting at the left border). The first line of each footnote should be indented 0.5 inches and identified by a raised numeral corresponding to that used in the text. Footnotes should be numbered consecutively throughout each chapter.

Reproduction of Data
The data on which the thesis or dissertation is based should be made accessible to the reader in substantially complete form. Generally, this means that raw data should be reproduced in a convenient manner in one or more appendices to the main document and made available in the Carnegie Mellon repository, on a web site that will be supported by the advisor or department, or an external repository related to the pertinent field. In the case of extensive data gathered from readily available published sources, specific detailed citations will suffice, provided that that data is included in an Appendix of the document pdf, if available, or otherwise a stable url is included. Deviations from a procedure of full disclosure must be specifically approved by the M.S. thesis advisor(s) or Ph.D. Dissertation Committee and explained fully in the thesis or dissertation.

Reproduction of Materials
All instruments, analytic procedures, apparatus, or other critical elements in the execution of the study should be described in detail. Apparatus normally should be described in an engineering drawing and by photograph. Instruments normally should be reproduced in full in pictures or drawings, unless they are easily available from other sources. Procedures of analysis should be specified fully either by citation or by detailed discussion in one or more appendices. Computer calculations that are essential to the central arguments of the research must be fully and clearly explained. If the computer programs which provide the basis for these calculations are originated by the student, the student is required to provide a program listing and minimal documentation on the program in the thesis or dissertation.

The program listing and documentation normally would be included in a separate appendix to the thesis or dissertation. However, in the case of extensive computer work considered by the student and his or her advisor to be too long to include in the thesis or dissertation, presentation in the form of tables elucidating important components is acceptable. In this case, the student is advised to submit a separate internal report giving further details. Standard subroutines or packaged programs which are routinely included as software support to a computer installation and which can be readily obtained are
exempted from this requirement, but these should be clearly cited and the source of these programs made apparent in the thesis.

References
Citations of the professional literature should be standardized throughout the thesis or dissertation. The form of citation should be consistent with the form used in a standard professional journal of the candidates' field. The Harvard Citation Style is used commonly in engineering and science. The following journals are recommended as samples in each field of engineering:

- Biomedical Engineering - *Annals of Biomedical Engineering, Journal of Biomechanical Engineering*
- Chemical Engineering - *Langmuir, Optimization and Engineering*
- Electrical and Computer Engineering - *Proceedings of the IEEE.*
- Engineering and Public Policy - *Science, Proceedings of the IEEE.*
- Mechanical Engineering - *Transactions of the American Society of Mechanical Engineers.*

Additional Guidance
Refer to the ProQuest document "Guide 1: Preparing Your Manuscript for Submission to ProQuest" for margins, paper type, line spacing and additional formatting guidelines that have not been noted above.

All But Dissertation (ABD) Status

After completion of all formal Ph.D. degree requirements other than the completion of and approval of the doctoral dissertation, and the public final examination, doctoral candidates shall be regarded as ABD (all but dissertation). The College of Engineering and CMU rules recognize two categories of ABD (All but Dissertation) doctoral students:

- ABD Students *In Absentia* (Registrar code:ABS).
- ABD Students *In Residence*.

University policies governing ABD status are available at [https://www.cmu.edu/policies/student-and-student-life/doctoral-student-status.html](https://www.cmu.edu/policies/student-and-student-life/doctoral-student-status.html). The major features of these policies are summarized below, and college-specific procedures are described.

In Absentia Status for ABD Candidates

An ABD doctoral candidate may, upon departmental certification thereof, be regarded as being in absentia when and, so long as, the following three conditions concur:

- The candidate has been enrolled as a full-time doctoral candidate at Carnegie Mellon University for at least one academic year. Part-time graduate enrollment may, at the department's discretion, be counted *pro rata* towards this total.
The candidate does not receive a stipend predicated on his or her status as a graduate student or doctoral candidate and paid by or administered by the university (whether teaching or research assistantship, scholarship, or fellowship).

The student does not require substantial use of University resources. Note: Departmental certification of this condition shall be subject to guidelines established by the school or college. Typically, substantial use shall include: office space other than desk space, if available; all but minimal use of laboratory space or university-furnished laboratory equipment and expendables; and all use of computer resources that is not specifically exempted for thesis text preparation. In absentia candidates shall be permitted use of the libraries or consultation with faculty or students (in particular, with a thesis advisor or members of the advising and thesis committees). The university will provide in absentia candidates with identification for access to the library and other services permitted under the guidelines.

ABD students in absentia will not be certified by the university as a "student" for immigration or loan purposes. "Non-resident alien" students on J-1 or F-1 visas who become ABD in absentia must continue to follow the Department of Homeland Security (DHS) regulations and maintain their status as "full-time students." Any questions about employment or about leaving Carnegie Mellon for extended periods of time should be coordinated with the Office of International Education (OIE).

While an ABD candidate is in absentia, no formal enrollment or payment of tuition shall be required to maintain doctoral candidacy status, with the exception of the academic semester in which the degree requirements are to be completed.

An ABD candidate who is in absentia shall be required to change from In Absentia to In Residence and enroll for a minimum of five units of graduate study during the final academic semester in which the degree requirements are to be completed; in default of which a fee equal to the corresponding tuition shall be paid before the degree is conferred. The student cannot receive any financial support from the university.

In addition, all ABD students in absentia will be responsible each semester for the technology fee, which provides them with an Andrew email id and access to university licensed software.

**In Residence Status for ABD Candidates**

ABD students in Residence may be certified as full-time students for immigration purposes. Ordinarily, ABD students in Residence in the College of Engineering are required to register for a minimum of 36 units of academic credit per term, except that: "Under exceptional circumstances, ABD students who are self-supported, and who can demonstrate financial hardship, may petition the College through the departments for permission to register for 5 units of thesis research per semester." The exceptional circumstances for such approval include:

- Self-supporting with demonstrated financial hardship.
- At least three years of full time student status.
- Good standing and progress towards a degree.
- No more than two semesters of required work; ABD with In Residence status and 5 units of tuition per term will not be allowed for more than two semesters of work, where a summer is considered to be one semester.
All doctoral degree candidates enrolled as In Residence students and who are supported by the university must be registered for thirty-six units for the entirety of their final semester and will be assessed full-time tuition. If a student completes all Ph.D. degree requirements and is certified by:

- September 30th (in the fall), or February 28th (in the spring), tuition will be adjusted to $0; however, they will remain enrolled for thirty-six units for the semester.
- October 31st (in the fall), or March 31st (in the spring), tuition will be adjusted to 50% of the full-time tuition; however, they will remain enrolled for thirty-six units for the semester.
- After October 31st (in the fall), or after March 31st (in the spring), but BEFORE the first day of the next semester, tuition will not be adjusted and they will remain enrolled for thirty-six units for the semester.
- Fees will not be adjusted.

Doctoral candidates' departments shall notify the Registrar's Office of the appropriate financial arrangement.

**Academic Integrity**

Please review the University expectations at: [http://www.cmu.edu/academic-integrity/](http://www.cmu.edu/academic-integrity/)

Please review the entire policy at [https://www.cmu.edu/policies/student-and-student-life/academic-integrity.html](https://www.cmu.edu/policies/student-and-student-life/academic-integrity.html)

Please consult the department/program handbook for more information on specific expectations, consequences and the appeal process, as well as the University-wide Protocol [http://www.cmu.edu/academic-integrity/documents/academic-disciplinary-actions-overview-for-graduate-students.2013.pdf](http://www.cmu.edu/academic-integrity/documents/academic-disciplinary-actions-overview-for-graduate-students.2013.pdf)

**Graduate Student Consulting**

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.
Withdrawal from Program & Leave of Absence

Please see The HUB’s webpage for information on the Process for Withdrawal from Program and Taking & Returning from Leave of Absence: http://www.cmu.edu/hub/registration/leave.html.

Enrollment Verification

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: https://www.cmu.edu/hub/records/verifications/enrollment.html.

Additional Department and University Policies/Protocols

Assistance for Individuals with Disabilities

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

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

Responsible Conduct of Research (RCR) Education

The College of Engineering fully supports the position of the university on research ethics, as stated on the Office of Research Compliance site: "Carnegie Mellon University promotes the responsible conduct of research through high standards of ethics and accountability in planning, conducting and reporting research. The responsible conduct of research is demonstrated through behavior that meets generally accepted standards. These standards are set forth by state and federal regulations, institutional policies, professional codes of conduct and personal convictions."

The College of Engineering graduate students participating in research will be required to take the appropriate on-line training offered by the Collaborative Institutional Training Initiative (CITI). For college graduate students, the CITI physical science module package is recommended rather than the module package for engineers, although both are acceptable. Please check with your department for which Responsible Conduct of Research (RCR) course(s) it requires. The courses are available at CITI's Website. Select Carnegie Mellon University as your participating institution when you create your account.
The course(s) may take a few hours to complete but can be done over a period of time. Upon completion of the course(s), print the certificate(s) of completion for submission to your department’s graduate coordinator.

Further information about the Carnegie Mellon program for Responsible Conduct of Research Education is available at the Office of Research Compliance.

**Summary of Graduate Student Appeal and Grievance Procedures**

Graduate students are expected to discuss any concerns or grievances initially with members of their academic departments, including their academic advisor and Department Head, as appropriate. If a student wishes, the Associate Dean for Graduate and Faculty Affairs of the College of Engineering is available for consultation. All such discussions will be considered confidential at the request of a student.

If resolution of an academic grievance or concern cannot be obtained within their academic departments, graduate students may file a formal appeal of academic actions to the Associate Dean for Graduate and Faculty Affairs of the college. In accordance with the Carnegie Mellon Student Handbook, such appeals will ordinarily be heard and decided by the Engineering College Council. Written materials and findings of such appeal processes are considered confidential for all parties involved.

If a resolution cannot be reached by this process, an appeal may be made to the Provost at the request of either the student or the college.

Contacts for the college and departments are given below:

**College of Engineering**
Jonathan Cagan, Associate Dean for Graduate and Faculty Affairs

Biomedical Engineering
Yu-li Wang, Department Head
Maryia Rakach, Graduate Program Administrator

Chemical Engineering
Lorenz Biegler, Department Head
Allyson Danley, Graduate Coordinator

Civil and Environmental Engineering
David Dzombak, Department Head
Maxine Leffard, Graduate Program Administrator

Electrical and Computer Engineering
Jelena Kovačević, Department Head
Tara Haslam-Moe, Associate Director of Graduate Affairs

Energy Science, Technology & Policy
Additionally, students may confer with the graduate student ombudsman, Suzie Laurich-McIntyre, slaurichmcintyre@cmu.edu, on issues of process or other concerns as they navigate conflicts.

For more information on additional grievances please consult the Summary of Graduate Student Appeal and Grievance Procedure: http://www.cmu.edu/graduate/policies/appeal-grievance-procedures.html.

Procedures
[Excerpted from the university Academic Disciplinary Actions Overview for Graduate Students; italicized text is specific to the College of Engineering and has been added.]

Incidents of suspected academic integrity violations shall be handled at the level at which the incident occurs (e.g., course or research project) and at the department level, reported immediately to designated parties and (where appropriate as stated below) shall receive second-level review(s) in the manner outlined in the following section.

Initial Review, Decision, and Actions(s)
Initial review, decision and action(s) shall remain local, to involve the instructor(s) or academic supervisor(s) and, if desired, consultation with a third party from the faculty, the department/program
head or associate head, or the Dean of Student Affairs. Instructors are free to discuss alleged violations informally with the student(s) thought to be involved, but should avoid revealing the identity of other students involved, if at all possible. Suspected violations that would result in a penalty should be handled by the instructor(s), in direct communication with the student(s) involved, within one week of discovery of the suspected infraction and imposition of a penalty.

After discussion with the student(s) involved and their response, the instructor(s) shall conclude, within a reasonable period of time and based on available evidence, whether the suspected violation(s) occurred. Instructors are encouraged to consult at this stage with their department/program head about the nature of the suspected violations, the nature of the evidence of these violations and the range of penalties under consideration. They may also choose to consult with the Dean of Student Affairs. If the conclusion is that the suspected violation(s) did occur, the instructor(s) shall also choose an appropriate penalty.

The most severe penalty available at this level of review and action shall be failure in the course or dismissal from a project, although instructors may also recommend a more severe penalty to the student’s home department/program head, who retains the options to impose more severe penalties (e.g., including suspension or dismissal from the program) at this level (see Penalties for Graduate Student Academic Integrity Violations in the College of Engineering). Elements to consider include prior incidents of academic disciplinary action in a student's record, available from the Dean of Student Affairs. The department/program head may discuss the issue with a student and choose to convene a disciplinary hearing according to the procedures of the department/program.

The student shall be notified immediately, and in writing, of this decision, the basis for this decision and (when applicable) the penalty imposed. This notification will come from the instructor and/or department/program head depending on the penalty involved. Students whose penalty is failure in the course in question will not be allowed to drop the course and should be so informed. Students should also be informed at this time of their right (and attendant procedures) for appeal (see Student Appeals).

**Reporting of Initial Actions**

A copy of the letter outlining the initial decision and action to the student(s) involved in cases of academic disciplinary violations should also be directed to the following parties:

- Student's home department/program head
- College of Engineering Associate Dean of Graduate and Faculty Affairs
- Dean's office of the college housing the course in which the violation(s) occurred (if different from the College of Engineering)
- The head of the student's major department
- The Dean of Student Affairs
- The Provost

The Dean of Student Affairs will maintain the central record of academic disciplinary violations and actions. If the Dean of Student Affairs is aware of information on prior incidents of academic disciplinary actions in the student's record, he or she should communicate that information to the department/program head and give the department/program head the opportunity to impose an appropriate sanction.
Second-level Review and Action(s)

Normally, a second-level review of an initial decision and action follows from at least one of three sources: (1) appeal by the student(s) involved because the student deems the penalty inappropriate and/or believes that improper procedure has been followed, (2) recommendation by the instructor, home department/program/college that the student be permanently expelled from the university, (3) recommendation by the Provost for a review.

Where an appeal is made or a second-level action appears warranted, the Provost will determine what action should be taken. The Provost may decide to deny the appeal or waive the opportunity for a second-level action, to remand the case to the department/program head for additional consideration, to order a new or different penalty or to convene a Review Committee for additional investigation of facts and/or determination of appropriate sanctions.

Student Appeals

In general, students who want to appeal an academic disciplinary action must state in writing to the Provost their intention to do so within one week of the penalty date in question, and then must present their appeal to the provost no later than two weeks after said penalty date. Appeals must be in writing, with appropriate documentation.

If the Provost determines that a second-level review is warranted and that a Review Board should be convened, the Provost or his/her designee shall immediately form and convene a Review Board and designate a chair. The board will include faculty from the College of Engineering, a graduate student from the College of Engineering, the Dean of Student Affairs and others deemed appropriate by the Provost. If a student appeal and a review of a recommendation for second-level action occur at the same time, both shall be considered by this Review Board simultaneously. Where appropriate, it is expected that the instructor(s) from the course/project involved (or appropriate representatives designated by the department) will be available for participation or at least for consultation. The chair of the board shall inform the student(s) involved, in writing, of this step. Copies of this letter should go to:

- The instructor(s) in the course in question
- The department head of the course involved
- College of Engineering Associate Dean for Graduate and Faculty Affairs
- Dean's office of the college housing the course in which the violation(s) occurred (if different from the College of Engineering)
- The head of the student's major department
- The Provost CHECK IF ITALICIZED ITEMS CAN BE ADDED

The Review Board shall (a) review the facts of incidents involved and (b) make a recommendation about second-level action to the provost or his/her designee. The Provost shall then render a decision subject only to appeal to the president of the university.

Penalties for Graduate Student Academic Integrity Violations in the College of Engineering

Upon the first academic integrity violation, in addition to the course-level action the student will be placed on academic probation and may be subject to one or more of the following additional actions as determined by the instructor and/or department head or program director: revocation of any financial award or position received through the college, department, or program; and, in cases where a first violation is particularly deplorable, a student may be expelled. Upon a second academic integrity
violation, the student will be removed from the College of Engineering and a recommendation will be made to the Provost to expel the student from the University.

Penalties and limitations for students on academic probation may include:

- Students on academic probation may have any scholarships and/or financial awards from the college/department/program suspended.
- Students on academic probation are required to seek approval from the department/program head for all academic activities until they are removed from probation.
- Students on academic probation may be denied admission to certain courses, as determined by the department/program head.
- Students on academic probation are required to seek approval from the department/program head to take "Pass/Fail" courses or independent study courses.
- Students on academic probation cannot be selected to receive new awards or scholarships.
- Students on academic probation may not formally represent the college, department, or program as an officer or other position in a student club or campus organization.
- Students on academic probation may be required to perform community service for the department, college, or program.

A student with an academic integrity violation may be removed from probation during a later semester. However, he/she may not hold an elected office or officially represent the college, department, or program in a campus organization for the duration of their program. Students have the right to appeal the department/program penalty, as described under Student Appeals.

**Safeguarding Educational Equity Policy against Sexual Harassment and Sexual Assault**

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

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

Female students who anticipate the delivery of a child during the course of a semester may need to take time away from their academic responsibilities. There are two Maternity Accommodations:

- **Short-Term Maternity Accommodation** – A short term absence from academic responsibilities up to a maximum of six (6) weeks. Short-Term Maternity 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 Maternity 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 drop all remaining courses for the semester and are unenrolled for the semester. International students must consult with the Office of International Education before considering this option due to visa implications.

Carnegie Mellon also offers financial assistance to female students who give birth to a child:

- **Interest Free Loan** – Any female student who gives birth to a child is eligible to apply for an interest-free Maternity Loan from the Office of the Dean of Student Affairs.

- **Stipend Continuation** – Doctoral students 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 Maternity Accommodation or 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.

For more information, please review the Student Maternity Accommodations Protocol. For questions regarding support for stipend-supported doctoral students, please first contact your department head. If needed, your next contact regarding the support is the College of Engineering’s Associate Dean of Graduate and Faculty Affairs.

New Policies/ “Grandfather” Policy

When policies are changed it is because the department believes the new rules offer an improvement; any such changes will be announced to the graduate students. Students currently enrolled whose degree program is affected by a change in policy may choose to be governed by the older policy that was in place at the time of their matriculation. In case degree requirements are changed and certain courses are no longer offered, the department will try to find some compromise that allows those students to satisfy the original requirements.

Vacations and Time-Off
Students with graduate assistantships are expected to continue with their research during academic breaks (including Summer months) with the exception of official University holidays*. Paid time off for personal business or vacations generally is not included as part of a graduate's financial support. A supported graduate student who wants to take a short break (up to ten days) must get approval for that break from his/her advisor and, if required by the terms of the student's support package, must make up the work. Supported graduate students wishing to take longer periods of personal time off must do so without financial support and must receive approval from their advisor at least five weeks prior to the requested time off. The advisor will notify the Department's Business Office of any such arrangements so that an appropriate adjustment in the student's support package can be processed.

*University Holidays:
- New Year's Day
- Martin Luther King, Jr. Day
- Memorial Day
- Independence Day
- Labor Day
- Thanksgiving Day
- Day After Thanksgiving
- Day Before Christmas
- Christmas Day
- Day Before New Year's Day

**Graduation**
The university has three graduation dates: May, August and December. There is only one graduation ceremony (May).
Financial Support

Tuition and Funding
Current tuition rates and cost of living including books, insurance, activities and technology fees, food and lodging costs can be found at the Enrollment Services website. Please consult the department/program handbook for specific information.

Consumer Information
Carnegie Mellon University suggests that all current and prospective students be informed consumers. Please see this link for detailed consumer information http://www.cmu.edu/hub/consumer/index.html

Internal Funding Opportunities through Carnegie Mellon

Financial Aid Information:
www.cmu.edu/finaid

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

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

For more information on both internal and external funding opportunities, please consult your department/program handbook.
Appendix A

University Resources for Graduate Students and The WORD, Student Handbook

Key Offices for Graduate Student Support

Office of the Assistant Vice Provost for Graduate Education
www.cmu.edu/graduate; grad-ed@cmu.edu

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

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

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

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

- Conference Funding Grants
- Graduate Small Project Help (GuSH) Research Funding
- Graduate Student Professional Development: seminars, workshops and resources
- Graduate Women Gatherings (GWG)
- Inter-university Graduate Students of Color Series (SOC)
Office of the Dean of Student Affairs
www.cmu.edu/student-affairs/index.html

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

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

Graduate students will find the enrollment information for Domestic Partner Registration and Maternity Accommodations in the Office of the Dean of Student Affairs and on the website. The Office of the Dean of Student Affairs also manages the Emergency Student Loan (ESLs) process. The Emergency Student Loan service is made available through the generous gifts of alumni and friends of the university. The Emergency Student Loan is an interest-free, emergency-based loan repayable within 30 days. Loans are available to enrolled students for academic supplies, medication, food or other expenses not able to be met due to unforeseeable circumstances. The Office of Integrity and Community Standards also provides consultation, support, resources and follow-up on questions and issues of Academic Integrity: www.cmu.edu/academic-integrity.

Assistance for Individuals with Disabilities
http://www.cmu.edu/education-office/disability-resources/

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

For more information, please see http://www.cmu.edu/education-office/disability-resources/. Students with disabilities are encouraged to self-identify with Equal Opportunity Services by contacting Catherine Getchel, 412-268-6121, getchell@cmu.edu to access the services available at the university and initiate a request for accommodations.
Support for graduate students who are or will be teaching is provided in many departments and centrally by the Eberly Center for Teaching Excellence & Educational Innovation. The Eberly Center offers activities for current and prospective teaching assistants as well as any graduate students who wish to prepare for the teaching component of an academic career. The Center also assists departments in creating and conducting programs to meet the specific needs of students in their programs. Specific information about Eberly Center support for graduate students can be found at: [www.cmu.edu/teaching/graduatesupport/index.html](http://www.cmu.edu/teaching/graduatesupport/index.html).

**Carnegie Mellon Ethics Hotline**

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

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

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

**Graduate Student Assembly**

[www.cmu.edu/stugov/gsa/index.html](http://www.cmu.edu/stugov/gsa/index.html)

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

**Intercultural Communication Center (ICC)**

[www.cmu.edu/icc/](http://www.cmu.edu/icc/)

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

Office of International Education (OIE)
www.studentaffairs.cmu.edu/oie/

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

Veterans and Military Community
http://www.cmu.edu/veterans/

Military veterans are a vital part of the Carnegie Mellon University community. Graduate students can find information on applying veteran education benefits, campus services, veteran’s groups at CMU, non-educational resources and international military service information through the Veterans and Military Community website. There are also links and connections to veteran resource in the Pittsburgh community. The Naval ROTC and Veteran Affairs Offices are located at 4615 Forbes Avenue, uro-vaedbenefits@andrew.cmu.edu, 412-268-8747.

Key Offices for Academic & Research Support

Computing and Information Resources
www.cmu.edu/computing

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

The Carnegie Mellon Computing Policy establishes guidelines and expectations for the use of computing, telephone and information resources on campus. The policy is supported by a number of guidelines graduate students should know. The policy and guidelines are available at: www.cmu.edu/computing/guideline/index.html.
Research at CMU  
www.cmu.edu/research/index.shtml

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

Office of Research Integrity & Compliance  
www.cmu.edu/research-compliance/index.html

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

Key Offices for Health, Wellness & Safety

Counseling & Psychological Services  
www.studentaffairs.cmu.edu/counseling

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

Health Services  
www.cmu.edu/HealthServices/

University Health Services (UHS) is staffed by physicians, advanced practice clinicians and registered nurses who provide general medical care, allergy injections, first aid, gynecological care and contraception as well as on-site pharmaceuticals. The CMU student insurance plan covers most visit fees to see the physicians and advanced practice clinicians & nurse visits. Fees for prescription medications, laboratory tests, diagnostic procedures and referral to the emergency room or specialists are the student’s responsibility and students should review the UHS website and their insurance plan for detailed information about the university health insurance requirement and fees. UHS also has a registered dietician and health promotion specialists on staff to assist students in addressing nutrition, drug and alcohol and other healthy lifestyle issues. In addition to providing direct health care, UHS administers the Student Health Insurance Program. The Student Health Insurance plan offers a high level of coverage in a wide network of health care providers and hospitals. Graduate students should contact
UHS to discuss options for health insurance for spouses, domestic partners and dependents. Appointments can be made by visiting UHS’s website or by telephone, 412-268-2157.

Campus Wellness
www.cmu.edu/HealthServices/

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

University Police
http://www.cmu.edu/student-affairs/wellness/

412-268-2323 (emergency only), 412-268-6232 (non-emergency)  
The University Police Department is located at 300 South Craig Street, Room 199 (entrance is on Filmore Street). The department’s services include police patrols and call response, criminal investigations, shuttle and escort services, fixed officer and foot officer patrols, event security, and crime prevention and education programming. Visit the department’s website for additional information about the staff, escort and shuttle, emergency phone locations, crime prevention, lost and found, finger print services, and annual statistic reports.

Shuttle and Escort Services
University Police coordinates the Shuttle Service and Escort Service provided for CMU students, faculty, and community. Full information about these services, stops, routes, tracking and schedules can be found online at: http://www.cmu.edu/police/shuttleandescort/

Carnegie Mellon University publishes an annual campus security and fire safety report describing the university’s security, alcohol and drug, sexual assault, and fire safety policies and containing statistics about the number and type of crimes committed on the campus and the number and cause of fires in campus residence facilities during the preceding three years. Graduate students can obtain a copy by contacting the University Police Department at 412-268-6232. The annual security and fire safety report is also available online at www.cmu.edu/police/annualreports.

The WORD
http://www.cmu.edu/student-affairs/theword/

The WORD is Carnegie Mellon University’s student on-line handbook and is considered a supplement to the department (and sometimes college) handbook. The WORD contains campus resources and opportunities, academic policy information and resources, community standards information and resources. It is designed to provide all students with the tools, guidance, and insights to help you achieve your full potential as a member of the Carnegie Mellon community. Information about the following is included in The WORD (not an exhaustive list) and graduate students are encouraged to bookmark this site and refer to it often. University policies can also be found in full text at: http://www.cmu.edu/policies/.
Carnegie Mellon Vision, Mission
Carnegie Code
Academic Standards, Policies and Procedures
   Educational Goals
   Academic and Individual Freedom
   Statement on Academic Integrity
   Standards for Academic & Creative Life
      Assistance for Individuals with Disabilities
      Master’s Student Statute of Limitations
      Conduct of Classes
      Copyright Policy
      Cross-college & University Registration
      Doctoral Student Status Policy
      Evaluation & Certification of English Fluency for Instructors
      Final Exams for Graduate Courses
      Grading Policies
      Intellectual Property Policy
      Privacy Rights of Students
   Research
      Human Subjects in Research
      Office of Research Integrity & Compliance
      Office of Sponsored Programs
      Policy for Handling Alleged Misconduct of Research
      Policy on Restricted Research
   Student’s Rights
   Tax Status of Graduate Student Awards
Campus Resources & Opportunities
   Alumni Relations
   Assistance for Individuals with Disabilities
   Athletics, Physical Fitness & Recreation
   Carnegie Mellon ID Cards and Services
   Cohon University Center
   Copying, Printing & Mailing
   Division of Student Affairs
   Domestic Partner Registration
   Emergency Student Loan Program
   Gender Programs & Resources
   Health Services
   Dining Services
   The HUB Student Services Center
   ID Card Services
   Leonard Gelfand Center
   LGBTQ Resources
   Multicultural and Diversity Initiatives
   Opportunities for Involvement
   Parking and Transportation Services
   SafeWalk
Survivor Support Network
Shuttle and Escort Services
Spiritual Development
University Police
Student Activities
University Stores

Community Standards, Policies and Procedures
Alcohol and Drugs Policy
AIDS Policy
Bicycle/Wheeled Transportation Policy
Damage to Carnegie Mellon Property
Deadly Weapons
Discriminatory Harassment
Disorderly Conduct
Equal Opportunity/Affirmative Action Policy
Freedom of Expression Policy
Health Insurance Policy
Immunization Policy
Missing Student Protocol
Non-Discrimination Policy
On-Campus Emergencies
Pets
Political Activities
Recycling Policy
Riotous and Disorderly Behavior
Safety Hazards
Scheduling and Use of University Facilities
Sexual Harassment and Sexual Assault Policy
Smoking Policy
Student Accounts Receivable and Collection Policy and Procedures
Student Activities Fee
Student Enterprises
Workplace Threats and Violence Policy
Statement of Assurance

Last updated: June 16, 2017