Language Technology Institute
Computational Biology Department

M.S. in Biotechnology Innovation and Computation (MSBIC)

Graduate Student Policy Handbook
2015-2017

Last revision date (7.15.2015)
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The Director’s Welcome:

Welcome to the Master’s of Science in Biotechnology Innovation and Computation (MSBIC) program. As students of this program, you are joining a group of Computer Scientists who are working to apply software and computing technologies to create innovative solutions for the biotechnology, pharmaceutical and health care industries.

In this program, you will learn to plan, design, build and deliver innovative solutions for these industries utilizing data mining, information retrieval, machine learning, machine translation, computational linguistics, and computational biology technologies. As these industries are rapidly evolving, there is a great need for people who can envision, design, plan and deliver solutions that integrate emerging technologies into effective business solutions.

Our curriculum consists of several challenging courses designed to ensure that you will develop robust knowledge and skills that will enable you to become a technical innovator. You will be working on a “simulated start-up” project that allows you to develop entrepreneurship skills to create your own company. Throughout the program, you will receive proper career guidance from a group of experienced faculty to help you achieve your educational goals.

While this handbook is specific to your academic experience in the department, there are several other resources and offices that you are encouraged to consult during your 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.

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Distinguished Career Professor of Computer Science
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1.0 The Program

The M.S. in Biotechnology Innovation and Computation (MSBIC) is a professional master’s program offered jointly by the Computational Biology Department (CBD) and the Language Technologies Institute (LTI) in the School of Computer Science at Carnegie Mellon University. This program seeks to educate students in the innovative use of computing technologies to create solutions in the biotechnology sector. As the biotechnology industry matures there is a great need for students who can envision, design, plan and deliver solutions that integrate computing technologies (such as Big Data analytics, Text mining, and Machine learning) into innovative applications and effective business solutions for biotechnology R&D.

The curriculum is designed for students who have a strong background in computer science with an interest in working at the interface of these two disciplines. The integrated curriculum includes course work and case studies with the emphasis in the application of computing technologies in realistic business environments. As part of their ongoing course work, students complete a series of system and business development objectives as they tackle current real-world problems. Industry leaders participate in many of the courses, both as presenters and as students’ mentors.

1.1 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](http://www.cmu.edu/academic-integrity)
- University Policies Website: [www.cmu.edu/policies/](http://www.cmu.edu/policies/)
- Graduate Education Website: [http://www.cmu.edu/graduate/policies/index.html](http://www.cmu.edu/graduate/policies/index.html)

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

1.2 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.


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

1.3 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.

2.0 Program Contacts

John D. Vu, Director, MSBIC Program  
Distinguished Career Professor  
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Jaime Carbonell  
Department Head, Language Technologies Institute  
Allen Newell Professor, Computer Science  
GHC 6721  
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Robert F. Murphy  
Department Head, Computational Biology Department  
Ray and Stephanie Lane Professor of Computational Biology and Professor of  
Biological Sciences, Biomedical Engineering and Machine Learning  
GHC 7723  
412-268-3480  
murphy@cmu.edu

2.1 Graduate Student Ombudsman

Additionally, students may confer with the university graduate student 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.
3.0 Degree Attainment

3.1 Course Grade and GPA requirements

To receive the M.S. degree, all students must take and successfully complete at least 192 units of coursework. All required Core Courses must be completed with a grade of B or better. For the Knowledge Area Courses, students must maintain a B average. No grade lower than C shall be used for credit applied toward graduation.

Students are required to repeat any required course that they have completed with a grade less than the required minimum, preferably at the next offering. (Please note that Core courses and Knowledge courses are only offered once per year.) Students will be allowed to retake a required course only once. If a student fails in the second attempt, he or she will be dropped from the MSBIC program.

If a student fails an elective course, she or he will need to repeat the same or take a substitute course (equivalent course approved/recommended by their advisor).

All grades count towards the program GPA, except for repeated courses, in which case the final grade replaces the previous grade. Students who do not achieve the required minimum grade in a required course, who elect to take an incomplete in a required course, or whose cumulative grade point average is below a B (3.0), will be placed on academic probation. Students on probation are not eligible to graduate. Students who are placed on academic probation shall receive written notice of this finding, including a list of measures that need to be taken to be removed from academic probation. A student on academic probation for two consecutive semesters will be dropped from the program.

3.2 incomplete grade

Carnegie Mellon students are expected to complete a course during the academic semester in which the course was taken. However, if the instructor agrees, a grade of “I” (incomplete) may be given when a student has been unable to complete the work of a course. However, the work completed up to that date must be of passing quality and the grade of incomplete provides no undue advantage to that student over other students.

By awarding an “I” grade, an instructor must specify the requirements for the completion of the work and designate a default letter grade in the event that the student fails to complete the remaining work.

Students must complete the required course work by no later than the end of the following academic semester or sooner if required by the instructor.
The instructor must record the permanent course grade by the last day of the examination period of the following semester, or the Registrar will automatically assign the default grade.

If further work has not been completed after one semester and a default grade is rendered, the “default” will become the grade of record.

3.3 Change of Grades and missing Grades

If a grade has been assigned in error, it can be changed to a different permanent grade. The procedure for changing a grade is as follows:

1. Discuss the matter with the course instructor; provide evidence that the grade issued was not the grade earned.

2. If the instructor agrees, the student should contact the program administrator to process a Change of Grade Form in order to correct the grade that was issued in error. Generally, the instructor is the final authority for a course grade.

3. If a grade has not been assigned, please notify the course instructor for the completion of a Missing Grade Form.

3.4 Course Requirements:

Students are required to take and successfully complete:

1) The Core Courses (84 units):
   • 02-651 - New Technology & Future Market – (12 units)
   • 11-695 - Competitive Engineering (12 units)
   • 02-654 – Biotechnology Enterprise Development (12 units)
   • 11-691 - Capstone Project (48 units)

2) The Knowledge Area Courses (84 units):
   • 11-693 - Software Methods (12 units)
   • 11-675 – Big Data Systems in Practice (12 units)
   • 11-683 – Mathematics foundations for Data Science (12 units)
   • 10-601 – Machine-Learning (12 units)
   • 02-652 – Fundamentals of Biotechnology (12 units)
   • 02-613 – Algorithms & Data Structures (12 units)
   • 02-750 - Automation of Biological Research (12 units)
In the event that a course is not available, a course covering equivalent material with a similar degree of difficulty may be substituted with the permission of their advisor. If a student has already taken an equivalent course and shows proficiency in the subject area, a more advanced course in the area may be taken in place of these required courses with permission of the advisor.

3) Electives:

A minimum of 24 units of LTI or CBD courses must be taken. Examples include but are not limited to

- 02-712 – Computational Methods for Biological Modeling (12 units)
- 11-601 - Coding Boot-Camp (12 units)
- 11-642 – Search Engine (12 units)
- 11-676 – Big Data Analytics (12 units)
- 11-741 – Information Retrieval (12 units)
- 11-755 – Machine-Learning using Signal processing (12 units)
- 11-643 – Text Mining & Scalability

A student who wants to take a relevant course outside of the LTI and CBD must obtain permission by writing and getting approval in writing from the MSBIC Director at least two weeks before registration.

4) Supporting courses:

Students who want to improve their foundation in Computer Science may want to take additional supporting courses such as Fundamentals of Programming 15-112 or Introduction to Computer Systems 15-213. Units for these supporting courses will not count toward the 192 units for graduation.

The MSBIC course offerings are available at bic.cs.cmu.edu/curriculum.

The university’s complete Schedule of Classes can be found at www.cmu.edu/hub/courses.
4.0 COURSE REGISTRATION

4.1 Status

All Students must be registered for 48 units during each semester. Any questions about registration should be directed to the Enrollment Services (the HUB). Note that International students are required by Federal Law to maintain full-time status by registered for a minimum of 36 units. Failure to maintain full-time status will result in loss of a student visa (and, therefore, “permit of stay”).

4.2 Academic Calendar

The Academic Calendar can be found at http://www.cmu.edu/hub/calendar.htm. All dates pertaining to registration, add/drop deadlines, university holidays and more can be found there.

4.3 Online Registration

All new students will be able to register for their classes during the MSBIC orientation session. After that, students will register following the schedule set by the HUB. Note that students must meet with their advisor to obtain approval for their course selection.

Registration information is available at www.cmu.edu/hub/online_services

Online registration is done with an Andrew ID at www.cmu.edu/hub/sio

All students must register for at least 48 units per semester.

4.4 Pass/Fail Courses

With approval of their advisor, a graduate student may elect to take a course pass/fail (P/F). By the deadline for changing a course to P/F, the student must fill out the Pass/Fail Approval Form and receive permission from the course’s instructor. Classes taken P/F cannot be used to fulfill graduation requirements, and P/F status is irrevocable.

(P/F form can be found at www.cmu.edu/hub/forms)

4.5 Auditing a Course

With approval of their advisor, a graduate student may audit a course by obtaining permission of the instructor or teaching department and completing the Course Audit
Approval Form. Audited classes are not taken for credit and cannot be used to fulfill graduation requirements.

(Audit form can be found at www.cmu.edu/hub/forms)

4.6 Adding a Course

During the ADD period of each semester (the first two weeks of the semester), students may add a course by registering online. After the ADD deadline, they may add a course by completing the Late Add Request form and obtaining permission of both: 1) the instructor or teaching department and 2) their advisor.

(Add form can be found at www.cmu.edu/hub/forms)

4.7 Dropping a Course

Students may withdraw from a course online. The university has a DROP deadline toward the end of the semester, after which the course appears on the student's transcript as withdrawn (W). The last day to withdraw from a class is the final day of classes. Complete the Retroactive Add/Drop form (found at www.cmu.edu/es/forms/) student will need to obtain permission of both: 1) the instructor or teaching department and 2) the advisor. Note that the Core courses and some Knowledge courses are only offered once per year so dropping a course may delay program completion.

Note: International students must maintain a minimum of 36 units (Full time) to meet the U.S. government’s visa requirement. Please check with the Office of International Education (OIE) for more information.

4.8 Leave of Absence

Students who need to delay their studies for personal, medical or academic reasons may do so with a leave of absence (leaving the university temporarily with a commitment to return). Students must contact the MSBIC Director to discuss their plans and fill out the appropriate form. The student's place in the program will be held until a mutually determined time. For more information, refer to www.cmu.edu/policies/documents/StLeave

When planning to return from Leave of Absence students must complete the appropriate paperwork before returning to the University.
4.9 Withdrawal

Students who need to withdraw from the program (leave the university with no intention of returning) for personal, medical or academic reasons must contact the MSBIC Director to discuss their plans and fill out the appropriate form. For more information, refer to www.cmu.edu/policies/documents/StLeave.

5.0 TUITION AND FEES

Information about tuition and fees is available at www.cmu.edu/hub/tuition/index.

MSBIC students will pay tuition according to the rates set for the School of Computer Science. All tuition and fees must be paid in full by the due date; a student not in good financial standing will be dismissed from the program. Students taking summer courses must pay tuition.

5.1 Master’s Students Statute of Limitations Policy

Students will complete all requirements for the master’s degree within a maximum of three years from original matriculation as a master’s student, or less if required by a more restrictive department, school or college policy. Additional information can be found at http://www.cmu.edu/policies/documents/MastersStudentStatuteLimitations.html

5.2 Full-time Status and Part-time Status

All students attend the MSBIC program must be full-time and register for 48 units per semester.

5.3 Double counting courses

No course may be used to complete two MS degree program requirements, nor may course complete requirements in two-degree programs.

5.4 Transferring Credits

The MSBIC program does not accept transferring credits from another school.

5.5 Courses outside of the School of Computer Science

Students who wish to take courses in other Schools at Carnegie Mellon must request in writing and get approval by the Program Director.
5.6 On transfer from Master to Doctoral program

If the requirements for the MSBIC degree have not been completed when a student leaves to pursue another academic program, the degree will not be awarded. Completion of the MSBIC degree does not guarantee admission into any doctoral degree program at Carnegie Mellon University. The courses that will be completed as part of the MSBIC may serve to enhance one’s application to these programs but will in no way insure admittance.

5.7 Teaching Assistants

The MSBIC degree does not have a teaching requirement. Only second year students who wish to be a teaching assistant can apply to this position.

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 full university policy can be reviewed at www.cmu.edu/policies/documents/EngFluency.html.

In addition to administering the International Teaching Assistant (ITA) Test (a mandatory screening test for any non-native speaker of English may be required), the Intercultural Communication Center (ICC) helps teaching assistants who are non-native English speakers develop fluency and cultural understanding to teach successfully at Carnegie Mellon. Visit the ICC website for additional information: www.cmu.edu/icc.

5.8 Advising

Every MSBIC student will be assigned an advisor. Before the course registration period each semester, students must meet with their advisor to obtain approval for their course selection. New students will be given instructions to register for their classes during the MSBIC orientation.

Monitoring Progress

The advisor meets with the student at least twice a year, providing guidance and monitoring the student’s overall progress. Should a student’s effort fall below the acceptable level of academic performance and/or fail to meet standards established by Carnegie Mellon University, the student may be terminated from the program. Should a student’s overall QPA drop below 3.0 during any given semester, he/she will be placed on departmental probation for the following semester and will be required to improve his/her grades to no less than an overall 3.0 QPA during that period. Failure to improve to an overall 3.0 QPA or better the following semester may result in termination from the program. That is, students are evaluated every semester and a metric of evaluation is the student’s QPA during the entire course of the degree program. In addition, should a
student fail to meet other standards established by Carnegie Mellon University, the student may be terminated from the program.

5.9 Internship

Students are encouraged to seek an internship in an organization during the summer between the first and second years of the program. Although it is not a requirement, an internship will provide students with the opportunity to apply the knowledge and technical skills learned during the first year of the program, to gain insight into new technologies and future market needs to further their experience and develop a strong context for the second-year concentration coursework.

Students are encouraged to intern with an organization that corresponds to your individual area of interest and career goals such as Software, Pharmaceuticals, Biotechnology, and Startups etc.

International students who secure paid internships outside of Carnegie Mellon must register for three units Curricular Practical Training (CPT) in either 02-801 (Comp. Bio Internship) or 11-935 (LTI Practicum). These courses can be taken with Pass/Fail and counted toward graduation units. The Office of International Education (OIE) oversees CPT registration. To obtain CPT students need the offer letter spelling out employment dates, work hours, and amount of wages or stipend.

Students are encouraged to contact the MSBIC Director or their advisor for assistance with their internship plans (i.e. resume, cover letters and making contacts).

International students who are interested in working in the U.S after graduated should apply for the Optional Practical Training (OPT). The office of International Education (OIE) oversees the OPT registration. To obtain OPT, students need the offer letter spelling out employment dates, work hours etc. Note: OPT must only be used after students have completed the training at Carnegie Mellon.

NOTE: Students are personally responsible for securing a suitable internship. CMU Career and Professional Development Center will provide assistance in their search through counseling, workshops, and internship opportunity listings in CareerNavigator. We strongly suggest students begin the internship search beginning in the Fall of your first year. Some internship opportunities have application deadlines in the Fall, so by starting your search early, you will not miss out on these internships. CMU Career and Professional Development Center will assist students with the internship search, but does not match students with employers; obtaining an internship is students’ responsibility.

The following steps are recommended to ensure a successful internship outcome.

**September/October**

- Meet with your advisor to discuss your interests and plan your internship search.
• Review the internships of previous students. We also encourage you to speak informally with second year students who can offer first-hand information about their internships.

• Attend the Technical Opportunities Conference (TOC) at CMU for exposure to potential employers for internships.

**November/December**

• Begin researching organizations and internship opportunities. Pay close attention to organizations that have established internship programs and their deadlines.

• Attend the workshops to perfect your resume, hone your interviewing skills, and gain knowledge about the internship search process.

**January/February**

• At this point, you should have a “short list” of organizations at which you would like to intern. This list can include organizations that have established internship programs as well as those that interest you without formal internship programs.

• Update your resume with relevant academic projects, coursework, etc.

• Begin utilizing your personal network for internship leads as well as checking organization’s websites for internships.

• Make contact with employers, sending resumes and applications, and initiating internship interviews in person or by phone.

• Attend Network Nights and talk to alumni about internship opportunities in their organization. They are an excellent resource for learning more about a particular organization, career field or employment opportunity. You can find alumni in the Alumni Directory, Alumni Career Advisor Network, and Carnegie Mellon Alumni LinkedIn Network.

**March/April**

• At this point you should have secured an internship or be interviewing with various organizations.

• Prepare a back-up plan if your first choice internships do not work out.

• Attend relevant Network Nights and Career Fairs by CMU.

• If you are an F-1 Visa student, you must apply for CPT.

• MSBIC students should enroll in internship 02-601 or 11-935 for three units. You will not have to pay tuition for this course.
5.10 Graduation Ceremonies

The University holds one Commencement ceremony in May of each year.

There are no August or December commencement ceremonies. Students who graduate in December should stay in contact with the MSBIC Director and the Associate Dean for Graduate Education should they wish to participate in the May commencement ceremonies.

There are 2 May graduation ceremonies that pertain to MSBIC students:

The University Commencement is typically held on the third Sunday in May; see the Academic Calendar at http://www.cmu.edu/hub/calendar.html for the date.

The LTI and CBD Diploma Ceremony and Reception are usually held immediately after the university-wide Sunday Commencement. Students who graduated in December, as well as those receiving their degrees in May or the upcoming August, are eligible to participate in both the Diploma and Commencement Ceremonies.

6.0 ACADEMIC INTEGRITY

Please review the University expectations at www.cmu.edu/academic-integrity/index.html

6.1 Intellectual property policy

The MSBIC degree program adheres to Carnegie Mellon University policy on intellectual property:

http://www.cmu.edu/policies/documents/IntellProp.html

This policy was developed to encourage and support the generation and dissemination of new knowledge by faculty, staff and students. It applies to patentable inventions, copyrightable material or trade secrets, works of art, and inventions and creations that might be considered proprietary.

6.2 University Policy on Plagiarism and Cheating

The university considers any form of cheating or plagiarism to be a serious violation of student ethics. The student is required to understand and rigorously follow only the permitted forms of collaboration as defined by the instructor in every class.

The work you submit must be your own, unless you have clearly attributed it to others. You must not use the work of others without proper citation. And, you must not use resources, including other persons, except as authorized by the course or project for which you are submitting the work. Such conduct might be accepted or commonplace elsewhere, but it is not here. Be careful. Be warned. Failure to abide by these rules, even just once, can result in your permanent separation from the University without refund of monies paid.
Please review the entire policy at http://www.cmu.edu/policies/documents/Academic%20Integrity.htm.

Note that the policy requires the student to be informed and understand the academic integrity rules for every assignment or exam in a course.

6.3 MSBIC Program Policy on Plagiarism and Cheating

While there is a university-wide disciplinary committee, which handles serious disciplinary matters referred to it, the responsibility for establishing disciplinary guidelines also rests with each department. It is felt that the following set of rules can be uniformly and fairly applied in the MSBIC program.

Cheating in any form is not permitted as an ethical or professional behavior and will not be tolerated. Cheating includes, but is not necessarily limited to

• The submission or use of falsified data.

• The submission of work that is not the student's own.

• Plagiarism - use or close imitation of the language and thoughts of another author and the representation of them as one's own original work.

• The use of an alternate/stand-in/proxy during an examination.

• Supplying unauthorized data to another student for the preparation of an assignment or during an examination.

• Collaboration in the preparation of an assignment, unless specifically required or allowed by the instructor, will usually be viewed as cheating. Each student, therefore, is responsible for understanding the policies of the instructor offering any course as they refer to the amount of help and collaboration permitted in preparation of assignments.

Should any student be found guilty of cheating on a quiz, exam, homework or project, at minimum a zero grade will be recorded and then averaged in with the other grades (should there be any) for the term. Depending on the circumstances, and at the discretion of the instructor and the Department Head, the student may be failed in the course. Instructors may also recommend more severe penalties to the student’s home department and program director, which may include suspension or dismissal from the program. In any case, the University will be notified of any case of cheating or plagiarism. A repeated occurrence of cheating will be treated as an automatic failure in the course; the student will be dropped from the program.

A subtler form of cheating arises in the form of plagiarism, which is defined as "passing off as one’s own the ideas or works of another." Making use of reference material and failing to note (either at all or properly) the original source constitutes plagiarism. When two or more people work together on an individual project and each then turns in his/her individual report as though no collaboration was involved, this also is plagiarism. Simply
rewriting another’s words or thoughts, or rearranging another’s materials, is in every sense plagiarism - unless the student properly and completely references such material, each and every time it is used and to the full extent of usage.

Should a case of plagiarism arise, the initial responsibility for judging the seriousness of the offense will rest with the instructor. If the instructor feels that the student plagiarized flagrantly, and intentionally meant to mislead the instructor into thinking that the work was the student's own original work, the grade for the report, project will be recorded as zero and a report shall be filed with the department head and the office of the Dean of Students Affairs. It is up to the department head to impose additional penalties. Additional information can be found online at:

http://www.cmu.edu/policies/documents/GradDisc.html

Students need to be aware that any group collaboration that involves individual take-home projects, papers or theses should be carried out only with considerable discretion. That is, students are encouraged to discuss and collaborate among themselves on the various principles, which are exposted in class or covered in the reading material, etc.; but any group discussion or collaboration, which involves any specifics of take-home projects, papers or theses, should be avoided - unless the ideas or efforts of others are properly noted. Put differently, when individual work and thinking is called for, group thinking and/or work is entirely inappropriate and is a form of plagiarism.

Be aware that in addition to the information provided above each course instructor can set their own requirements regarding the amount of collaboration that is allowed and this may vary from college to college and within a department. Thus, it is important to consult with the faculty teaching the course if you have any questions about the level of group work and/or collaboration allowed in the course.

In any case, of cheating or plagiarism, the student may request a review of the instructor's decision by the department head, who will then make the final decision for the department. The student, of course, can appeal following the process as outlined in the Academic Disciplinary Actions Overview for Graduate Students.

http://www.cmu.edu/policies/documents/Cheating.html

University-wide Protocol http://www.cmu.edu/academic-integrity/documents/academic-disciplinary-actions-overview-for-graduate-students.2013.pdf

6.4 Student Rights in Academic Conflicts

A student wishing to appeal a program disciplinary decision should first speak with the faculty member directly involved. A student who is uncomfortable approaching the faculty member may discuss the matter with the Associate Dean for Graduate Education. (MSBIC students should contact Dr. Robert Frederking 412 268 6656 email: Ref+@cs.cmu.edu) If the conflict cannot be resolved on this level, the student is
referred to the LTI or CBD Department Heads, who may, with the student’s permission, meet with both the student and the faculty member involved.

6.5 Summary of Graduate Student Appeal and Grievance Procedures

http://www.cmu.edu/graduate/policies/Summary%20of%20Graduate%20Student%20Appeal%20and%20Grievance%20Procedures.html

A student who is not satisfied with the resolution achieved through this internal departmental procedure may file a formal written appeal to both the Associate Dean for Graduate Education and the Dean of the School of Computer Science. The policies and procedures governing this process are explained in detail in the Summary of Graduate Student Appeal and Grievance Procedures which can be found at http://www.cmu.edu/graduate/policies/.

6.6 University Graduate Student Ombudsperson

Any grievance that cannot be resolved at the departmental level should be referred to the Assistant Vice Provost for Graduate Education, Dr. Suzanne Laurich-McIntyre (suzannel@andrew.cmu.edu). The Ombudsperson is also available to students if they would like to consult with a resource outside the department prior to an issue becoming a grievance or during any part of a grievance process.

7.0 OTHER RESOURCES

7.1 Graduate Student Support Services:

www.cmu.edu/graduate

There are a number of resources offered to graduate students through the office of the Assistant Vice Provost for Graduate Education. These include professional and personal development seminars, programs for underrepresented groups, the distribution of the GSA/Provost Conference and Small Research Grant Funds, and general resources for graduate students.

7.2 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: http://www.cmu.edu/hub/transcripts/verifications/enrollment.html.

7.3 Assistance for Individuals with Disabilities

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

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

7.4 Orientation

There are two orientations for incoming graduate students. Both take place in the weeks preceding the Fall semester.

1. The university-wide orientation organized by the Offices of the Assistant Vice-Provost for Graduate Education, Student Affairs and International Education introduces students to university resources and services. This occurs two weeks before the Fall semester begins.

2. The MSBIC orientation introduces students to departmental faculty, research, administration, policies and services. The CBD arranges for students to receive the necessary information for enrollment, registration and timelines.

7.5 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. 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
7.6 Maternity Accommodation Protocol

Students whose anticipated delivery date is during the course of the semester may consider taking time away from their coursework and/or research responsibilities. All female students who give birth to a child while engaged in coursework or research are eligible to take either a short-term absence or formal leave of absence. Students in coursework should consider either working with their course instructor to receive incomplete grades, or elect to drop to part-time status or to take a semester leave of absence. Students engaged in research must work with their faculty to develop plans for the research for the time they are away.

Students are encouraged to consult with relevant university faculty and staff as soon as possible as they begin making plans regarding time away. Students must contact the Office of the Dean of Student Affairs to register for Maternity Accommodations. Students will complete an information form and meet with a member of the Dean’s Office staff to determine resources and procedures appropriate for the individual student. Planning for the student’s discussion with her academic contact(s) (advisor, associate dean, etc.) will be reviewed during this meeting.

7.7 Health Insurance

Carnegie Mellon has a Student Health Insurance policy requiring full-time, degree-seeking students to carry adequate medical insurance. Students will either be required to purchase the plan offered by the University or an application for a waiver can be made if the student is “enrolled as the dependent, partner/spouse or principal in an employer or government-sponsored insurance plan”


It is the responsibility of each student to arrange with Student Health Services to either pay for their insurance at the beginning of the semester, or elect a payment plan over the course of the academic year.

More information is available at the Student Health Services Web site www.studentaffairs.cmu.edu/HealthServices/insurance

7.8 Student Health Services

The Student Health Services Center provides general and some specialized medical care at a discount or free of charge to all full-time Carnegie Mellon students. There are fees for laboratory tests and prescription drugs at the on-site pharmacy.
Information can be found at www.studentaffairs.cmu.edu/HealthServices

7.9 Graduate Student Assembly
www.cmu.edu/stugov/gsa/

The Graduate Student Assembly organizes campus wide activities and initiatives for graduate students funded through the student activities fees. A calendar of events and other resources are provided on their website.

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

The Office of International Education (OIE) provides critical services to international students, including advice on immigration, and on social and cultural issues. These services are explained during the Graduate Student Orientation in August before the fall semester begins.

7.11 Intercultural Communication Center (ICC)
www.cmu.edu/icc

The Intercultural Communication Center (ICC) offers non-native English speakers language support and cross-cultural training, as well as helping teaching assistants develop fluency.

7.12 Libraries
www.library.cmu.edu

There are three university libraries that provide research support for science students: the Sorells Library, the Hunt Library and the Mellon Library. First-year students receive a tour of the Mellon Library during orientation; one-on-one informational sessions can also be arranged.

7.13 Assistance for Individuals with Disabilities
www.cmu.edu/hr/eos/

Resources for individuals with disabilities are available through the Equal Opportunity Services Office.
7.14 Computing Services

Many general computer questions can be resolved quickly by contacting the Help Center (412-268-HELP [8-4357] or computing facility at:
http://www.cs.cmu.edu/~help/about/about_us.html

7.15 Enrollment Services (the HUB)

www.cmu.edu/hub

The HUB provides a range of enrollment services. Information regarding the academic calendar, forms, official transcripts, schedule of classes, online registration, graduation procedures and other issues can be found on their Web site.

7.16 Honorary Societies

Graduate students are encouraged to belong to professional societies such as Phi Kappa Phi and Sigma Xi, and are nominated, if qualified, by the department. They are also urged to join the society’s specific for their sub-discipline.

7.17 University Financial Aid

Graduate students should consult the graduate student financial aid information found on The HUB website: http://www.cmu.edu/finaid/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 to inquire about an Emergency Student Loan.

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

7.18 Reasonable Person Policy

Treat others as you would wish to be treated yourself. Show consideration for others when using facilities and supplies.

7.19 Accidents on CMU property

Please report all accidents to Jim Skees skees@cs.cmu.edu and the MSBIC program administrator. You will be asked to complete an accident report. By reporting accidents, the student helps minimize future harm!
7.20 Expenses

The program will reimburse any expenses incurred on behalf of the MCDS program if approved by the Director. Please receive approval before purchase. Verification of purchase and/or expenses along with receipts is to be presented to the program administrator for reimbursement.

Acknowledgements

This document is based on the CMU MSE policy handbook on July 14, 2005 and the Graduate Student Program Policy template of 2014.

University policies can also be found in full text at: http://www.cmu.edu/policies/
Appendix A

Highlighted University Resources for Graduate Students and The WORD, Student Handbook

Key Offices for Graduate Student Support

Office of the Assistant Vice Provost for Graduate Education

www.cmu.edu/graduate

grad-ed@cmu.edu

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

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

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

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

- Conference Funding Grants
- Graduate Small Project Help (GuSH) Research Funding
- Graduate Student Professional Development: seminars, workshops and resources
- Graduate Women Gatherings (GWG)
- Inter-university Graduate Students of Color Series (SOC)

**Office of the Dean of Student Affairs**

[www.cmu.edu/student-affairs/index.html](http://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 Dean of Student Affairs Gina Casalegno, include:

- Career and Professional Development Center
- Counseling & Psychological Services (CAPS)
- Housing & Dining Services
- Orientation & First Year Programs (note: for undergraduate students)
- Office of International Education (OIE)
- Student Activities
- Student Life.

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 the Dean of Student Affairs also provides consultation, support, resources and follow-up on questions and issues of Academic Integrity: [www.cmu.edu/academic-integrity](http://www.cmu.edu/academic-integrity).

**Assistance for Individuals with Disabilities**

Students with disabilities are encouraged to self-identify with Equal Opportunity Services by contacting Larry Powell, 412-268-2013, lpowell@andrew.cmu.edu to
access the services available at the university and initiate a request for accommodations.

**Eberly Center for Teaching Excellence & Educational Innovation**

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

Support for graduate students who are or will be teaching is provided in many departments and centrally by the Eberly Center for Teaching Excellence & Educational Innovation. The Eberly Center offers activities for current and prospective teaching assistants as well as any graduate students who wish to prepare for the teaching component of an academic career. The Center also assists departments in creating and conducting programs to meet the specific needs of students in their programs. Specific information about Eberly Center support for graduate students can be found at: [www.cmu.edu/teaching/graduatetestudentsupport/index.html](http://www.cmu.edu/teaching/graduatetestudentsupport/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 in locally and in Washington D.C. on behalf of graduate student issues and needs, and otherwise acts on behalf of all graduate student interests. GSA also contributes a
significant amount of funding for conferences and research, available to graduate students through application processes. GSA also plans various social opportunities for graduate students and maintains a website of graduate student resources on and off-campus, www.cmu.edu/stugov/gsa/resources/index.html. Each department has representation on GSA and receives funding directly from GSA’s use of the student activities fee for departmental activities for graduate students. The department rep(s) is the main avenue of graduate student representation of and information back to the graduate students in the department.

**Intercultural Communication Center (ICC)**

www.cmu.edu/icc/

The Intercultural Communication Center (ICC) is a support service offering both credit and non-credit classes, workshops, and individual appointments designed to equip nonnative English speakers (international students as well as international students who attended high school 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.
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 fees. UHS also has a registered dietician and health promotion specialists on staff to assist students in addressing nutrition, drug and alcohol and other healthy lifestyle issues. In addition to providing direct health care, UHS administers the Student Health Insurance Program. The Student Health Insurance plan offers a high level of coverage in a wide network of health care providers and hospitals. Graduate students should contact UHS to discuss options for health insurance for spouses, domestic partners and dependents. Appointments can be made by visiting UHS’s website or by telephone, 412-268-2157.

University Police

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

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

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

**Shuttle and Escort Services**

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

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

**The WORD**


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/](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 10, 2015