Handbook for Graduate Students
Department of Computer Science and Engineering

August 2015

MESSAGE FROM THE DEPARTMENT CHAIR

On behalf of all of the faculty and staff, we welcome you to the Department of Computer Science and Engineering at USC. We hope that your graduate study will be rewarding, instructive, and the foundation for a successful and exciting career! This handbook is written to explain the regulations affecting you while you are a student at USC and to maximize your educational experience as you progress towards earning a degree. You will find additional help from the Graduate Director and members of the Graduate Committee, but feel free to ask any of us for guidance about anything in the handbook or for help if you have any problems.

We look forward to your success as a graduate student. Welcome to USC!

Dr. Manton Matthews, Chair

This handbook is designed to provide students at the University of South Carolina information about graduate studies in the Department of Computer Science and Engineering. It includes details about the academic procedures of the department, various degree requirements, curricula, courses and many of the rules and regulations followed by the department. Many details are also available on the CSE Graduate page http://www.cse.sc.edu/graduate. Additional information about the University is contained in the USC graduate bulletin, which is available from the graduate school and accessible from the WWW at URL http://www.gradschool.sc.edu/. There is also substantial information at the CSE Department's Website: http://www.cse.sc.edu.

THE DEPARTMENT

In October 1999 the University merged the Computer Engineering program with the Department of Computer Science to form the Department of Computer Science and Engineering. There are 23 faculty in the department with a wide variety of research interests as indicated in the faculty profiles that appear later in this section. The Department offers comprehensive programs leading to the Master of Engineering, Master of Science, and Doctor of Philosophy degrees in Computer Science and Engineering. The department also offers the Master of Software Engineering and a Certificate in Information Assurance and Security. The graduate programs provide a broad curriculum with many different areas of research.

Organization of the Department

The administrative officers of the Department are the Chair, the Director of Graduate Studies, the Director of Undergraduate Studies, and the Office Manager. Faculty committees supervise various departmental functions. The graduate committee, headed by the Director of Graduate Studies, is responsible for all aspects of the graduate program: it reviews students' academic progress, approves all curriculum development and revisions at the graduate level before sending them to the faculty of the Department, and serves as an initial body for hearing student petitions and grievances.

Department Personnel

Chair: Dr. Manton M. Matthews
Office: 3A01K Swearingen Phone: (803) 777-3285

Assistant to the Chair/Office Manager: Ms. Barbara Ulrich
Office: 3A68 Swearingen Phone: (803) 777-2880

Associate Chair: Dr. Matt Thatcher
Office: 3A53 Swearingen Phone: (803) 777-2895

Graduate Director: Dr. Srihari Nelakuditi
Office: 3A63 Swearingen Phone: (803) 777-7206

Associate Graduate Director: Jason O'Kane
Office: 3A58 Swearingen Phone: (803) 777-1791

Graduate Program Coordinator: Ms. Crystal Jones
Office: 3A01L Swearingen Phone: (803) 777-6959

Administrative Assistant: Ms. Randi Baldwin
Office: 3A11 Swearingen Phone: (803) 777-7979

Receptionist: Yvonne Tang
Office: 3A01L Swearingen Phone: (803) 777-7849

System Manager: Mr. Ryan Austin
Office: 1D28 Swearingen Phone: (803) 777-4611

College Network Administrator: Ms. Veronica Wilkinson
Office: 1D30 Swearingen Phone: (803) 777-1205

Graduate Committee:

Dr. Jianjun Hu
Dr. Srihari Nelakuditi
Dr. Jason O'Kane
Dr. Ioannis Rekleitis
Dr. John Rose
Dr. Jijun Tang
Dr. Gabriel Terejanu
Dr. Yan Tong
Dr. Homayoun Valafar
Dr. Wenyuan Xu

Faculty Research Interests

Jason Bakos, Ph.D., University of Pittsburgh, 2005. Computer Architecture, VLSI.

Jenay Beer, Ph.D., Georgia Institute of Technology, 2013. Assistive technology, Human-Robot Interaction, Human-Computer Interaction, Human Factors, Engineering Psychology.

Duncan A. Buell, Ph.D., University of Illinois-Chicago, 1976. Parallel Algorithms and Architectures, Computational Number Theory, Information Retrieval, Analysis of Algorithms.

Caroline M. Eastman, Ph.D., North Carolina, 1977. Information Retrieval, Digital Libraries, Database Management Systems, Security, User Interfaces.

Csilla Farkas, Ph.D., George Mason University, 2000. Information System Security, Database Systems.

Stephen A. Fenner, Ph.D., University of Chicago, 1991. Computational Complexity Theory, Quantum Computing, Security.

Greg Gay, Ph.D., University of Minnesota, 2015. Software Engineering, Software Testing, Search, Optimization, Development Automation.

Jianjun Hu, Ph.D. Michigan State University, 2004. Bioinformatics, Data Mining, and Evolutionary Algorithms.

Chin-Tser Huang, Ph.D., University of Texas at Austin, 2003. Network Security, Protocol Design and Verification, and Distributed Systems.

Michael N. Huhns, Ph.D., University of Southern California, 1975. Multiagent Systems, Distributed Databases, Cooperative Information Systems.

Manton M. Matthews, Ph.D., University of South Carolina, 1980. Natural Language Processing, Parallel computing, Graph Theory.

Srihari Nelakuditi, Ph.D., University of Minnesota, 2001. Wireless Networking, Mobile Computing, Internet Routing.

Jason O'Kane, Ph.D., University of Illinois, 2007. Robotics.

Ioannis Rekleitis, Ph.D., McGill University, 2003. Mobile, Space, Aerial, and Underwater Robotics, Field Robotics, Multi-Robot Systems, Sensor Networks, Artificial Intelligence, Computer Vision and Image Processing.

John R. Rose, Ph.D., SUNY Stony Brook, 1991. Computational Science, bioinformatics.

Jijun Tang, Ph.D.**,** University of New Mexico, 2004. Algorithm Design and Analysis, Computational Biology and Bioinformatics, Computer Games and Simulation.

Gabriel Terejanu, Ph.D., State University of New York, Buffalo, 2010. Model validation and uncertainty quantification, information fusion, and decision making under uncertainty.

Matt Thatcher, Ph.D., University of Pennsylvania, 1998. Strategic and economic impacts of information technology (IT) with a focus on four themes: IT value, software patent policy design, IT offshoring, and the social costs of information privacy.

Yan Tong, Ph.D., Rensselaer Polytechnic Institute 2007. Computer vision and pattern recognition, especially on human computer interaction**.**

Homayoun Valafar, Ph.D., Purdue University, 1995. Bioinformatics, Medical Informatics, Computational Biology, Artificial Intelligence, Optimization, and Parallel Algorithms and Architectures.

Marco Valtorta, Ph.D., Duke, 1987. Artificial Intelligence, Bayesian Networks, Reasoning under Uncertainty.

Jose M. Vidal, Ph.D., University of Michigan, 1998. Multiagent Systems, Digital Libraries, Software Agents.

Song Wang, Ph.D., University of Illinois at Urbana-Champaign, 2002. Graphics, Computer Vision, Signal/Image/Video Processing, Pattern Recognition, and Machine Learning.

Wenyuan Xu, Ph.D., Rutgers University 2007. Network Security.

Computational Facilities

The department runs several labs of workstations in the Swearingen Engineering Center and in Sumwalt. The instructional machines are spread throughout Swearingen and are summarized in the following table.

Room	Resource
SWG 1D11	Windows Lab
SWG 1D15	Windows Lab
SWG 1D29	Windows Lab
SWG 1D39	Linux/Mac Lab
SWG 3D22	Linux Lab
Sumwalt 244	Windows Lab for 101/102
Sumwalt 361	Windows Lab for 101/102

Departmental Instructional Facilities

The departmental machines are operated 24 hours per day, and graduate students have access to them. Accounts on Departmental machines are assigned to students at the first occasion they are needed, and are kept active as long as the student remains enrolled. During the second week of each Fall and Spring semester, accounts for students that are no longer enrolled are deactivated.

The college also manages two mid-range Linux clusters and one shared-memory SGI super computer. Students engage in research can request access to these machines through their research advisors.

Calendar

Orientation: An orientation program for graduate students is conducted by the Department, each academic year, approximately one week before classes begin. At this meeting the graduate director will provide an overview of the degree programs and the courses for the upcoming semester.

Preregistration: Each November and April the University holds preregistration for classes for the following semester. Students must be advised before they can register. Make an appointment with the Graduate Director in the weeks just prior to pre-registration, and then register as soon as possible. Students receiving financial support from the department are required to pre-register during this pre-registration period.

Fee Payment Deadlines: Fees for the current year appear on the Bursar's website, http://sc.edu/bursar/fees.shtml. If fees are not paid by a certain date and time set by the University, the student's enrollment will be cancelled and the student must repeat the registration process. The cancellation dates are listed in the Master Schedule of Classes. You should not register for more courses than you plan to take, as the university sets your bill based on the number of hours for which you are registered.

Drop/Add Deadlines: During the first week of classes students may use Self Service Carolina (https://my.sc.edu/) to rearrange their schedules. The schedule at the end of the first full week of classes becomes the schedule that will appear on the transcript. Up until the end of the sixth week of classes, a class may be dropped without a penalty grade. The course will appear on the transcript with a grade of 'W'. When a student withdraws after the sixth week, a penalty grade of 'WF' is assigned. These dates are published by the Registrar at http://registrar.sc.edu/html/calendar and strictly enforced by the Graduate School.

Tuition and Fees: Fees for the current year appear on the Bursar's website, http://sc.edu/bursar/fees.shtml. For the 2015-2016 academic year, tuition for full-time (12 or more hours) graduate students is $6,192 for South Carolina residents and $13,266 for non-residents. The part-time tuition for South Carolina residents is $516 per semester hour and $1,105.50 per semester hour for non-residents. The tuition for graduate assistants is reduced to the in-state rate and will usually be further supplemented by the department. The University requires that all graduate assistants take at least six graduate hours in order to receive an assistantship, unless the student has been approved for special enrollment status (Z status). There is also a technology fee for all full-time students.

THE GRADUATE PROGRAMS

Doctor of Philosophy in Computer Science and Engineering

Requirements for the Ph.D. degree in computer science and engineering fall into four categories: course requirements, the qualifying examination, the comprehensive examination, and the dissertation. Students who enter the program with a bachelor's degree must complete a minimum of 48 credit hours or graduate course work (excluding CSCE 799 and 899) and 12 hours of dissertation preparation (CSCE 899). Of the 48 hours, at least 24 must be in CSCE courses numbered 700 or above. The student's dissertation committee must approve the program of study, so this committee should be formed as early in a student's course of study as possible.

Prior to admission to candidacy, the student is required to pass a written qualifying examination. This examination is designed to test fundamental knowledge and conceptual understanding of the mainstream areas of computer science and engineering.

The Ph.D. comprehensive examination combines a written and an oral examination and seeks to discover whether the student has a sufficiently deep understanding of topics in the area of interest to carry out the proposed research. The written portion includes the dissertation proposal that is prepared with the help and consent of the advisor. The oral examination is an in-depth test on the subject matter related to the student's dissertation topic and written exam. The committee may also examine the student on any other material it deems relevant. After completing the research and writing the dissertation, the student must defend the work in a public presentation.

Master of Science in Computer Science and Engineering

The Master of Science degree in Computer Science and Engineering requires 24 hours of course work beyond the B.S., six hours of thesis preparation (CSCE 799), and a thesis. This coursework must include CSCE 513, CSCE 531, CSCE 750, CSCE 791 (1 hour) and an additional 8 hours in CSCE courses numbered above 700. A maximum of six hours in non-CSCE courses may be applied toward the degree. Of the CSCE hours at most three hours of CSCE 798 and no hours of CSCE 797 may be included. The student must defend the thesis in a public presentation.

Master of Engineering in Computer Science and Engineering

The professional Master of Engineering degree in Computer Science and Engineering requires 30 hours of course work beyond the B.S. This course work must include CSCE 513, CSCE 531, CSCE 750, CSCE 791 (1 hour) and an additional 11 hours in CSCE courses numbered 700 and above. A maximum of six hours in non-CSCE courses and at most three hours of CSCE 798 may be applied toward the degree. CSCE 797 may not be applied toward the degree. All students must satisfactorily complete a comprehensive exam, which is offered on the Reading Day of the Spring and Fall semesters.

Master of Software Engineering

For students having adequate experience in software development or maintenance, the MSE degree requires 30 hours of course work consisting of CSCE 740, CSCE 741, CSCE 742, CSCE 743, CSCE 747, and an additional 15 hours in CSCE courses. A maximum of six hours in non-CSCE courses and at most three hours of CSCE 798 may be applied toward the degree. CSCE

797 may not be applied toward the degree. All students must satisfactorily complete a comprehensive software engineering exam, which is offered on the Reading Day of the Spring and Fall semesters.

Certificate of Graduate Studies in Information Assurance and Security

The graduate certificate program in information assurance and security requires at least 18 hours of graduate study, at least half of which must be courses at the 700 level or above with the CSCE designator, completed within a period of six years before the award of the certificate. The 18 hours must include the three core courses: CSCE 522 Information Security Principles, CSCE 715 Network Systems Security, and CSCE 727 Information Warfare. At least 9 hours of additional courses must be selected with the approval of the Director of Graduate Studies. Up to 6 hours of appropriate courses may be taken from other departments and/or by transfer credit. The Graduate School also limits the number of hours that may be included in another master's degree to 12 hours. Thus to complete a masters and the certificate requires at least 36 carefully selected hours.

Milestones for MS Program:

The Department has a collection of milestone forms that insure that students make steady progress towards completing their MS. Copies of each of these forms are available online.

Master's Degree Forms	Deadline
Thesis Advisor	During the semester the student will complete twelve graduate hours.
Thesis Committee	Before thesis proposal scheduling form
Thesis Proposal Scheduling	One week before Proposal
Thesis Proposal Approval	60 days before scheduling the thesis defense
Thesis Defense Scheduling	14 days before the defense

M.S. Thesis Requirement

A thesis is required for all M.S. degrees offered at the University. The M.S. thesis is a monograph, describing the student's research. The thesis is a significant original research paper of sufficient quality to be published in a refereed journal or be presented at one of the major Computer Science and Engineering conferences. It is expected that the work done in a thesis of this nature could be developed into research that has suitable depth for a Ph.D. dissertation.

Thesis Committee: A student may register for CSCE 799 only after completing the Thesis Advisor form (CSE 1). Students in the MS program are recommended to register for 3 hours of CSCE 799 in each of two semesters. During the first semester, after a topic is selected and the area of the thesis is clearly defined, the student should form a thesis committee. The thesis committee should consist of at least three members of the graduate faculty including the thesis advisor. The thesis advisor and a majority of members must be from the Computer Science and Engineering Department. The Thesis Committee form (CSE 2) should be completed at the time of the formation of the thesis committee.

Thesis Proposal: A proposal that outlines the scope of the M.S. thesis must be prepared in consultation with the advisor and thesis committee. An oral presentation of the proposal must be made to the thesis committee. The proposal presentation is open to the public and needs to be scheduled one week ahead by turning in a copy of the proposal and a Proposal Scheduling Form to the Graduate Coordinator. After the committee agrees that the thesis proposed is acceptable, they sign the Thesis Proposal Approval form.

Selecting a Date for the Thesis Defense: Copies of the final draft of the written thesis must be submitted to members of the thesis committee at least 2 weeks before the final defense. In addition, a copy of the thesis must be submitted to the Graduate Coordinator along with a written request on the Thesis Defense Scheduling form (CSE 4) to set up a date for the thesis defense. The defense must be scheduled to start between 9:00 a.m. and 5:00 p.m. on a day in which the University is in session. The date of the thesis defense will be set no earlier than two weeks from the date of the filing of the Thesis Defense Scheduling form. This is necessary to give the committee members and other members of the Department adequate time to read the final version of the thesis. The copy submitted to the Graduate Coordinator will be made available

online for public reference. The CSE 4 form cannot be filed earlier than at least 60 days after the Thesis Proposal form is filed and must be filed at least two weeks before the scheduled defense date.

Thesis Defense: A final oral examination covering the thesis and relevant course work must be passed. A member of the thesis committee other than the thesis advisor will act as the examination chair. The examination chair is responsible for administering the final exam. After the oral exam has been conducted, the examination chair writes a report, which is approved and signed by all members of the student's committee. This report will contain a record of the exam and its outcome. In the event that corrections or changes of any kind to the written thesis are required, the report shall indicate in writing the method that will be adopted to complete the work. It is the responsibility of the examination chair to insure that any changes stipulated in the report are made before notifying the Graduate Director that the student has completed his/her final examination successfully. After successful completion of the examination, the student must submit the approved thesis to the Graduate School.

Milestones for the PhD program:

The Department has a collection of milestone forms that insure that students make steady progress towards completing their degrees.

Doctoral Milestones	**Deadline**
Qualifying Exam	First attempt during the semester after first full-year in program
Dissertation Advisor	During the semester the student will complete twelve graduate hours.
Program of Study	During the semester the student will complete twelve graduate hours.
Dissertation Committee	At the completion of the qualifying exam
Dissertation Proposal Scheduling	One week before Proposal
Comprehensive Exam including Dissertation Proposal	9 months before the dissertation defense
Dissertation Defense Scheduling	14 days before the defense; final copy of dissertation to committee and department

Ph.D. Qualifying Examination

Prior to admission to candidacy for the degree of Doctor of Philosophy, the student is required to pass a written qualifying exam. The exam is given twice a year on Saturdays in February and September. PhD students are expected to attempt the qualifying exam for the first time no later than the third semester in the program. So, a student entering in the Fall would be expected to take the exam at the start of the Fall semester of the second year.

The CSE qualifying exam is in written format and consists of three sessions:

Session 1: Architecture or Compilers
Session 2: Algorithms or Theory
Session 3: Research Area: A course (see below) most relevant to student's research area.

Course	Research Areas	Advisors
513 & 531	Computer Architecture Reconfigurable Computing	Bakos, Buell
516	Computer Networks	Nelakuditi, Xu
522	Information Security	Eastman, Farkas, Xu
574	Robotics	O'Kane, Rekleitis, Beer
580	Artificial Intelligence Multiagent Systems	Huhns, Matthews, Valtorta, Vidal
715	Network Security	Huang, Matthews
551 & 750	Computational Complexity Theory	Fenner
747	Software Testing	Gay
883	Machine Learning	Terejanu
768	Bioinformatics Computational Biology Vision/Image Processing	Hu, Rose, Tang, Valafar, Wang

The exam will usually take a day. The first two sessions will be offered in the morning, separated by a short break. The third session will be offered in the afternoon after a lunch break. One month before the exam, students intending to take the qualifying exam must register and choose which courses they will prepare for. Approval from the graduate committee is needed if a student intends to choose a course other than that specified above for the research area. Students will be allowed two attempts to pass this examination, and only failed areas need be retaken. If someone's research area is Architecture or Compilers or Reconfigurable Computing, they should take the exam on both 513 and 531 (one satisfying Session 1 and the other satisfying Session 3). Similarly those in Algorithms or Complexity Theory should take the exam in both 750 and 551. The examination is constructed and graded by the faculty as a whole. The final construction and approval is by the Qualifying Exam Committee, which also will make the final decision on whether the student has passed or not.

Dissertation Advisor and Committee
Each student must form a dissertation committee to supervise his/her progress towards successful completion of the Doctoral Program. The committee shall consist of not fewer than 5 members; including one member from some department other than Computer Science and Engineering. The dissertation advisor and the majority of the committee members must be from the Department of Computer Science and Engineering. The Graduate Director will appoint a CSE faculty member other than the dissertation advisor to serve as chair of the examining committee.

Comprehensive Examination
The Ph.D. comprehensive examination combines a written and an oral examination and seeks to discover whether the student has a sufficiently deep understanding of topics in the area of interest to carry out the proposed research. The written component includes the dissertation proposal that is prepared with the advice and consent of the advisor. The dissertation proposal outlines the proposed research in some detail, stating the problem, its scope, the methodology to be used, and the nature of expected results. The dissertation proposal must be prepared and distributed to the dissertation committee. The committee may also examine the student on any other material it deems relevant.

The committee will take one of the following actions by majority vote: (i) pass, (ii) fail, or (iii) deferred decision. When the committee makes a deferred decision, they will submit a detailed report stating the student’s deficiencies and the prescribed course of action that will enable the student to make up these deficiencies. For example, additional course work or readings of relevant articles in the literature may be prescribed. The student will then have another chance to pass his/her written and/or oral comprehensive examination. A student who fails will be asked to withdraw from the Ph.D. program. The distinction between the fail and deferred decisions are based on the committee's evaluation of the candidate's potential for completing the doctoral program. If the decision of the committee is to pass the student, all members of the committee will sign the Dissertation Proposal form. The approved proposal then serves as the student's dissertation contract.

Completion of the Dissertation: When the candidate, dissertation advisor, and dissertation committee are satisfied that the research specified in the proposal is complete, the candidate presents his/her work to the committee in the form of a manuscript. This manuscript must

represent the student's original work; it must conform to the highest standards of accuracy, significance, methodology, and correctness of style in describing the original research. Every member of the student's dissertation committee must approve the manuscript before the student may request the final defense. The date of the defense must be at least two weeks from the date the final copy of the manuscript and CSE-4 form is submitted to the Department and Committee and at least 9 months after the comprehensive exam.

Public Presentation of the Dissertation: After approval of the manuscript, the candidate will request that the Graduate Director approve the schedule for the final oral defense. In order to promote attendance by faculty and graduate students, the defense must be scheduled to start between 9:00am and 4:00pm during a day in which the university is in session. The Graduate Director will appoint an examination chair other than the dissertation advisor to supervise all details of the public defense. The examination chair is responsible for filing a written report to the Graduate Director conveying formal approval of the defense, as well as any changes required to render the submitted manuscript acceptable. When all requirements are satisfied, the examination chair will notify the Graduate Director. After successful completion of the examination, the student must submit the approved dissertation to the Graduate School.

ACADEMIC REGULATIONS

All graduate students are subject to the academic regulations of both the Graduate School and the Department. Departmental regulations are given in this section. The academic regulations of the graduate school are outlined in the bulletin released by the Graduate School, and located at http://bulletin.sc.edu/. Students are urged to read the pertinent sections carefully.

Advisement: University requires each graduate student to be advised prior to enrolling in courses each semester. This advisement hold will only be removed after the student consults the Graduate Director regarding their choices of courses.

Program of Study: A program of study is a list of courses that fulfill all the requirements for a degree and when it is approved the student is assured that this is all that needs to be done to complete the degree. Students should consult their advisor to select an appropriate sequence of courses for their program of study. Every student must file a program of study that is approved by his/her advisor, the Graduate Director, and the Dean of the Graduate School. Students are expected to file a program of study at the beginning of their third semester in the program. The program of study may be modified or replaced by a new one if conditions warrant a change.

Residence Requirements: There is a residence requirement for all graduate students at the university.

- **Masters**: There is a residence requirement of at least two regular semesters (or the equivalent in summer sessions) for Masters students at the university.

- **PhD**: There is a residency requirement of at least three years of full-time graduate work or equivalent and at least 30 graduate hours after admission to the doctoral program. The doctoral residency requirement also stipulates that at least 18 hours must be completed within a span of three consecutive semesters. At least one year of the three must be spent on the Columbia Campus of the University of South Carolina;

Nine to twelve hours constitutes the normal graduate load in a regular semester. Graduate Assistants are considered fulltime if they are registered for 6 graduate hours. The International students (non assistants) are required to enroll for a full load to maintain F-1 visa status. The only exceptions to this rule are when a student is doing all the prerequisites that can legitimately be attempted or when all coursework has been completed.

Transfer of Credit: Course work from other institutions may be transferred subject to the following conditions.

- **Masters**: A maximum of 12 semester credit hours of graduate level courses may be transferred from other institutions.
- **PhD**: There is a limit of 24 semester hours of non-thesis graduate course work completed prior to admission that may be transferred towards satisfying the Ph.D. course requirements. At least 50% of the coursework on the program of study must be completed at the 700 level or above from our department, i.e., at least 24 course hours numbered above 700 must be in CSCE courses at USC.

- A grade of B or better is required for each course submitted for transfer credit.
- The Graduate Director and the Dean of the Graduate School must approve transfer credits. Documentation in the form of the appropriate pages of university bulletins and official transcripts must be supplied.
- The normal time that transfer courses are approved is when the student files the program of study.
- Transfer credit is allowed only for courses taken within the maximum allowed period prior to the expected date of completion of the program. Revalidation of transfer courses is not permitted.

Maintenance of Graduate Standing: Each student undergoes an annual review of academic progress by the student's advisor and the graduate committee. The following general guidelines are applicable to all students:

1. Full-time students are expected to be enrolled for at least 9 credits (6 credits for those with Graduate Assistantship) and no more than 12 credits in each semester.
2. The level of courses taken should be consistent with the stated degree program, as should the course content. The Graduate Director must approve courses outside the department for graduate credit.
3. Every graduate student must maintain an overall B average (3.00 on a 4.00 point scale). Failure to maintain a 3.00 for two consecutive semesters may result in expulsion from the university, see http://www.sc.edu/bulletin/grad/GCompSci.html "Academic Suspension Policy" under "Academic Standards for Progression".
4. For graduation, a student must have a 3.0 GPA on all graduate courses taken, all courses taken at the 700 level and on the courses listed on the program of study.

Seminars and Colloquia: The department periodically arranges colloquium talks to be presented by distinguished visitors. Colloquia provide a valuable addition to the academic program and are an integral part of graduate study. Graduate students are encouraged and all graduate assistants are required to attend departmental seminars/colloquia. Colloquium talks are also given as a part of faculty applicant interviews. The search committee encourages graduate student opinion on faculty applicants.

Waiver of a Degree Requirement: A candidate may apply for waiver of a departmental requirement if there are justified extenuating circumstances. No waiver will be granted that violates general policies of the Graduate School. The student must submit to the Graduate Committee a written petition substantiating both the necessity and justification for the requested waiver.

Application for Graduation: Students must be registered for at least one credit hour during the semester in which they complete their degree requirements. Application for a diploma must be made to the Graduate School early in the semester in which the degree is expected. The Graduate School enforces a set of deadlines associated with graduation including format check and final submission of theses and dissertations. Diplomas will not be awarded retroactively.

Maximum Period Allowed: A student must complete all degree requirements within a certain period after being admitted to the program as a regular student.

- **Masters**: Students have six (6) years from the date of admission into the program on a regular status to complete all requirements for the Masters Degree.

- **PhD**: Students have ten (10) years from the date of admission into the program on a regular status to complete all requirements for the Ph.D. Degree.

If a student requires more than the maximum allowed period to complete the program, special arrangements will have to be made with the Department for revalidation of courses taken by the student more than the maximum allowed period prior to the date of graduation. If a course has changed substantially since the time that it was originally taken, then it might not be possible to attempt to revalidate it. Students desiring revalidation must first request in writing that the Graduate Director approves the proposed plan for revalidation. For more details on revalidation, please refer to the graduate bulletin published by the Graduate School. Transfer credits may not be revalidated.

Incomplete Policy and Procedures: A grade of Incomplete may be given to a student whose attendance and performance is otherwise satisfactory but who for a good and valid reason has failed to complete some portion of the course work. The faculty member will establish a deadline by which the work must be completed. If it has not been completed by this date, the grade will automatically convert to the default grade that the professor established when assigning the Incomplete, if it has not already been changed.

The decision to give an incomplete is to be made prior to the end of the term and the incomplete form submitted to the department chair along with the grade reports. When an incomplete is given to a student, the time allocated for making up the incomplete grade should be reasonable: normally no more than 30 days. Attending the course in the subsequent semester is not an acceptable means to make up an incomplete. If the grade has not been completed by the end of one year, the "I" will automatically convert to an "F", (or whatever the instructor has assigned as the default grade).

Reasons for the incomplete should be fully explained. The following phrases are not sufficient by themselves: "unable to submit project on time", "other pressing business", "needed extra time", "personal problems", "another course interfered".

Use of Departmental Facilities: Smoking, eating, and drinking in laboratories and equipment rooms are prohibited. Smoking is prohibited in all University buildings.

Students with laboratory access are expected to take their trust very seriously. They will not loan their key to any other person nor give out the combination of any lock to any other person. Those who breach security will be subjected to disciplinary action.

Academic Integrity: Fundamental to the principles of independent learning and professional growth is the requirement of honesty and integrity in the conduct of both academic and non-academic life. This standard applies to all academic work, including assignments, examinations, theses, projects, and dissertations. Cheating, plagiarism and other forms of intellectual dishonesty are considered serious offenses against the academic community. These offenses are summarized in the University Code of Student Academic Responsibility, which is included in the

following section. In addition, students of the Computer Science and Engineering Department are expected to know and follow the professional standards set forth in the ACM Code of Professional Conduct (Communications of the ACM, October 1990).

Possible penalties for a substantiated violation include, but are not limited to the following: failing grade for the course, revocation of departmental financial support, expulsion from the Computer Science and Engineering program, and suspension from the University.

Code of Student Academic Responsibility: The following code is taken from the University Code of Student Academic Responsibility as it appears in the publication Carolina Community http://www.sa.sc.edu/carolinacommunity/.

Student Affairs Policy STAF 6.25
University of South Carolina Honor Code
http://www.housing.sc.edu/academicintegrity/honorcode.html

It is the responsibility of every student at the University of South Carolina Columbia to adhere steadfastly to truthfulness and to avoid dishonesty, fraud, or deceit of any type in connection with any academic program. Any student who violates this Honor Code or who knowingly assists another to violate this Honor Code shall be subject to discipline.

General Provisions and Definitions
http://www.housing.sc.edu/academicintegrity/stufaq.html
The University of South Carolina Honor Code is the University's policy regarding incidents involving academic integrity. The Honor Code codifies the values espoused in the tenets of the Carolinian Creed.

This Honor Code applies to all students of the University of South Carolina Columbia.

A "Student" is defined as any person who is admitted, enrolled or registered for study at the University of South Carolina for any academic period. Persons who are not officially enrolled for a particular term but who have a continuing student relationship with, or an educational interest in, the University of South Carolina are considered "students". A person shall also be considered a student when the person is attending or participating in any activity preparatory to the beginning of school including, but not limited to, orientation, placement testing, and residence hall check-in.

An "Instructor of Record" is defined as anybody responsible for the academic evaluation of work.

A "Dean" is defined as the Dean of a school or college offering the academic program in which the alleged violation occurred or his or her designee.
The "Assistant Vice Provost* for Academic Integrity" is defined as the Associate Vice President or any member of the Office of Academic Integrity designated by the Assistant Vice Provost.

A “College Committee” is defined as the group of faculty and students who hear cases of alleged violations of the Honor Code, and is composed of faculty members selected from a pool of faculty from the college where the alleged violation occurred designated by the Dean of the College and students from the College and/or the Carolina Student Judicial Council. Faculty members are appointed annually by the Dean, and student members are selected annually according to the guidelines set in the Constitution of the Carolina Student Judicial Council, or may be appointed by the Dean of the College.

The “University Committee of Academic Responsibility” shall consider appeals cases decided by the college academic responsibility committees when any party to the case formally appeals on grounds set forth in the University Academic Disciplinary Procedures. This committee shall perform any other functions provided for in the Academic Disciplinary Procedures. This committee consists of five faculty members, two undergraduate students, and two graduate students. (University of South Carolina Faculty Manual)

The “Office of Academic Integrity” is the office responsible for managing all administrative functions relating to complaints and allegations of Honor Code violations including investigations, making recommendations to the Dean, coordinating College Committee hearings, and convening the College Committee.

An “academic program” is defined as any graduate or undergraduate course, independent study or research for academic credit, laboratory, internship, externship, clinical program, practicum, field placement, or other form of study or work offered in furtherance of the academic mission of the University. Academic work includes any work performed or assigned to be performed in connection with any academic program.

This Honor Code is intended to prohibit all forms of academic dishonesty and should be interpreted broadly to carry out that purpose. The following examples illustrate conduct that violates this Honor Code, but this list is not intended to be an exhaustive compilation of conduct prohibited by the Honor Code:

1. Giving or receiving unauthorized assistance, or attempting to give or receive such assistance, in connection with the performance of any academic work.
2. Unauthorized use of materials or information of any type or the unauthorized use of any electronic or mechanical device in connection with the completion of any academic work.
3. Access to the contents of any test or examination or the purchase, sale, or theft of any test or examination prior to its administration.
4. Use of another person’s work or ideas without proper acknowledgment of source.
5. Intentional misrepresentation by word or action of any situation of fact, or intentional omission of material fact, so as to mislead any person in connection with any academic work (including, without limitation, the scheduling, completion, performance, or submission of any such work).
6. Offering or giving any favor or thing of value for the purpose of influencing improperly a grade or other evaluation of a student in an academic program.
7. Conduct intended to interfere with an instructor’s ability to evaluate accurately a student’s competency or performance in an academic program.

Whenever a student is uncertain as to whether conduct would violate this Honor Code, it is the responsibility of the student to seek clarification from the appropriate faculty member or instructor of record prior to engaging in such conduct.

Quoted from Carolina Community: This document is only published on the web http://www.sa.sc.edu/carolinacommunity/.

FINANCIAL AID

Several forms of financial aid are available to graduate students. The Graduate School and the College of Engineering and Computing award fellowships and the Department awards a fellowship and assistantships (TAs and RAs). Students seeking student loans must make necessary arrangements with the Office of Financial Aid.

Teaching Assistantships

For the 2015-2016 academic year, the stipend for a Teaching Assistant in Computer Science and Engineering is $13,400, or $12,800, depending on the duties assigned. The assistantship also includes a reduction in the tuition fee to the in state rate and additional tuition supplements provided by the department that eliminate tuition costs for full time graduate assistants. The workload of a TA would be 20 hours per week. Duties include grading papers, holding office hours for student consultation, and lecturing in laboratories under a faculty member's direction. Typically TA's assist a faculty member in teaching a large section of an elementary course. After completion of 18 hours, TA's may be asked to teach a course independently.

Research Assistantships

A number of graduate students are supported as research assistants (RA's) by research grants and contracts. This may entail work that leads to their thesis research. Faculty members who currently have research grants/contracts choose research assistants.

Fellowships

There are different sources of funds for fellowships. Some depend upon general University appropriations. Others are derived from endowed funds given to the University by donors. A list of available fellowships can be found in the Graduate Bulletin. The Department currently has the Rothberg fellowship in Bioinformatics that provides $25,000 in support.

Curricula Practical Training

International students on F-1 visas can only work off campus as part of curricula practical training, which is a one semester directed readings course that is augmented by a job off campus. This job serves to enhance the directed readings course by providing real world experience. Frequently students do this over the summer, but they are not allowed to extend the training beyond one semester or beyond one summer.

Payroll and Tax Information

I-9 Forms: Graduate assistants are required by the federal government to fill out an I-9 form to verify their employment eligibility. This form may be obtained from the Graduate Secretary and must be turned in to the Graduate Director within three days of the start of employment. Filling it out requires proof of identity and of employment eligibility. Usually some combination of passport or driver's license and social security card is used in filling out the form. Delay in filling out the I-9 will delay the student's initial paycheck.

Payroll: The graduate assistantship is an academic year (9 month) appointment. Summer assistantships are administered separately. Paychecks are issued bi-weekly on the last business day on or before the 15th and the last business day of the month. The first check arrives at the end of August, the last check in mid-May. One summer check is issued at the end of summer session I. For summer session II, two checks are issued; one at midterm (end of July), and one at the end of the session.

Taxes and Withholding: Each assistant should complete a W-2 form, available in the Graduate Director's office. If no W-2 is submitted to payroll, the default is 0 exemptions, resulting in a substantial amount of withholding. A method for determining the number of exemptions to claim and a form for calculating such exemptions is available from the local office of the IRS. The IRS normally considers income from a graduate assistantship taxable.