University of Central Florida
College of Engineering and Computer Science
School of Electrical Engineering and Computer Science

ELECTRICAL ENGINEERING
GRADUATE STUDENT HANDBOOK

August 2009
INTRODUCTION

The heart and soul of any academic program resides in its students and in their accomplishments. Promoting student success is a primary goal of the Electrical Engineering (EE) Program of the School of Electrical Engineering and Computer Science (EECS). This Graduate Handbook serves as a guide for Master’s and Doctoral students (as well as faculty and staff) of the EE program. In this handbook, we explain many of the details of the graduate student policies and procedures at UCF, as well as specific rules observed by EE. The objective of the Graduate Handbook is to provide effective direction and guidance to graduate students that will lead to each individual’s success at UCF. Since the Graduate Catalog serves as a source for general policies, it does not explain in great detail the policies and procedures of specific programs; that is the role of this document in the context of EE.

Electrical Engineering is one of the oldest disciplines in Engineering but it has considerably evolved over the years. The Electrical Engineering Department at the University of Central Florida covers a wide variety of areas related to electronics, power electronics, microelectronics, electromagnetics, communications, controls, digital signal processing and optics. It is one of the few programs that has a lot of connections with a number of other disciplines on campus such as optics within the School of Optics, physics within the College of Sciences and its strong connections with the area of microelectronics, Computer Engineering because of the many course overlaps in their undergraduate programs, and Computer Science because of the interdisciplinary nature of many of the graduate Electrical Engineering areas (e.g., there is a strong connectivity between digital signal processing and image processing that are typical Electrical Engineering areas and computer vision which is a typical Computer Science area).

More specifically, faculty in the Electrical Engineering program are involved in research related to power electronics, dc-to-dc power supplies, dynamic and control of power converters, power factor correction, controls, system theory, robotics and automation, power systems, robust stabilization and control of certain unstable plants, semiconductor device modeling, device simulation and characterization, computer aided integrated circuit design, surface acoustic wave technology, surface acoustic wave device modeling, surface acoustic wave device computer aided design, semiconductor device technology, solid state device fabrication, analog/digital circuit analysis and design, microelectronics, optoelectronic material, thin films, micromachining, digital signal processing, adaptive signal processing, multidimensional signal compression, filtering, transversal filter design theory, image processing, audio processing, voice recognition systems, adaptive median filtering, neural networks, pattern recognition, modeling and simulation, applications of neural networks in communications, antenna design and analysis, electromagnetics, microwaves, mobile communications, wireless systems, error control, coding, information theory, fast simulation, signal processing, remote sensing, satellite communications, RF communications, systems engineering, and optical propagation through random media, amongst others.

The primary objectives of this Handbook are to help students understand the process of completing an EE graduate program at UCF, provide information on resources that will help them develop academically and professionally, and define all expectations required to complete the degree programs by making the implicit explicit. The handbook serves as a reference tool to guide graduate students through their graduate programs and help students stay on track for degree completion. It should also help faculty and staff to better guide these students.

The Graduate Catalog is the university’s official record of graduate policies, and this Graduate
Handbook must be consistent with university policy. In any case where the two documents appear to disagree, the Graduate Catalog is the final authority. In this handbook we sometimes will directly reference the Graduate Catalog on policies that are comprehensive and intricate in detail, providing only a short description of the policy, and then giving the direct website link to the section of that particular policy.

If anyone has any questions about the content of this handbook, please do not hesitate to contact the EE Graduate Coordinator, Michael Georgiopoulos, at 407-823-5338 or via e-mail at micalhelg@mail.ucf.edu.

MISSION STATEMENT

The mission of the M.S. degree program is to provide students with an in-depth education geared toward meeting the needs of business and industry in Florida and throughout the U.S. Our goal is to produce graduates with a good, solid understanding of Electrical Engineering with strong emphasis on at least one of the major areas of focus in the Electrical Engineering program, such as electronics, power electronics, microelectronics, controls, communications, digital signal processing, electromagnetics, and optics. Such graduates will be prepared to continue studies towards a Ph.D. or directly enter industry or government positions.

The mission of the Ph.D. program is to produce professionals trained at the highest possible academic level in the theory and practice of Electrical Engineering to meet current and projected market demand for Electrical Engineering experts. Our Ph.D. students graduate with proven abilities in research and instruction, suitable to make immediate contributions in academia, industry and government, conducting original research in the area of Electrical Engineering and its allied disciplines, and educating others in the discipline.

GRADUATE STUDIES AT UCF

College of Graduate Studies

Graduate programs and their students at UCF are supported at the university-level by the College of Graduate Studies which operates under the leadership of the Dean of Graduate Studies. It works collegially with the Faculty Senate, various committees of the Senate, the deans of the other colleges, and other campus entities that serve graduate students. In essence, the College of Graduate Studies works as a convening authority within the university, providing leadership among campus stakeholders to establish a vision and take action on major issues affecting graduate education at UCF.

International Services Center

The UCF International Student Services (ISC) helps international students, assisting with admission to the university, obtaining immigration documents, and adapting to a new academic environment and culture. It is necessary that all international students keep ISC informed of any potential changes in status. This office provides the guidance needed to understand and abide by regulations for international students.
College of Engineering and Computer Science

The College of Engineering and Computer Science has an Associate Dean for Graduate Studies with a staff dedicated to helping students at every stage from admission through graduation. Of course, your primary contacts as a CS graduate student lie within the faculty and staff of the department. The day-to-day operations are overseen by the Graduate Program Coordinator and a Graduate Admissions Specialist. The longer term goals and procedures are established by the Graduate Program Committee, with approval from the faculty as a whole. However, from an individual graduate student’s perspective, the most important person in his or her academic life is the faculty advisor, a person who will guide students by helping in the selection of courses and, in the cases of a PhD student or thesis option MS student, in the choice of a research topic.

GRADUATE PROGRAM COMMITTEE AND COORDINATORS

The Graduate Program Committee in the School of Electrical Engineering and Computer Science (EECS) is a group composed of administrative and research faculty within EECS and makes all recommendations to the EECS faculty body concerning changes in the academic program and the procedures associated with qualifying reviews, candidacy, etc. It is chaired by one of the graduate coordinators (EE/CpE coordinator or CS Coordinator). This body gives guidelines to the respective coordinators concerning graduate teaching assistantship selection, fellowship selection and recruiting goals. The committee administers the qualifying reviews, discussed later in this document.

The EE and CpE Graduate Program Coordinator checks and approves all plans of study (POS) of MS and PhD computer science students before they are advanced to the college and university offices for final approval. The graduate coordinator is also the primary academic advisor for all non-thesis option Master’s students. With guidance from the Graduate Program Committee and many individual faculty members, the coordinator makes decisions concerning graduate teaching assistantship offers and recommendations for university fellowships. Appeals are usually initiated through the coordinator, but the actual decision on all appeals is done by the graduate committee.

Together with his or her faculty advisor the graduate student plans courses and research topics. Furthermore, the faculty advisor is typically the one who commits funding to support a student on a research grant. However, many others within the department and the college play an important role in a graduate student’s experience while at UCF.

ADVISING/MENTORING

Advising and mentoring are two very important elements in a graduate student’s career. Upon acceptance into the EE program, graduate students are assigned an academic advisor. This person advises the student on course selections during the early stages of the student’s graduate career. For thesis-option MS students and PhD students, the academic advisor needs to be rapidly replaced by a research advisor who serves as course advisor and research mentor. The research advisor may or may not be the person initially assigned as academic advisor, depending primarily on the research path the student chooses.
In many cases, students entering the PhD program will already have been contacted by and reached an accord with a faculty member willing to advise and support them during their studies. Otherwise, PhD students need to seek out a research advisor in their chosen area by the end of the first or second semester.

The student/research advisor relationship is not irrevocable for either the student or the faculty member. The most common reason for change is incompatibility of research agendas between the advisor and the student. For this reason, students should not only talk to potential advisors, but also to students already in the advisor's research group to learn first-hand the dynamics of the group and the expectations of students in the group. While changes are natural and acceptable, we highly discourage students from jumping from one advisor to another, especially when there is financial support involved. Moreover, when a student starts a research project with an advisor, that student has a professional obligation to complete the agreed-upon research tasks to the best of his or her capabilities, leaving everything in a state that makes it easy for another student to continue the work. Additionally, the student has a moral obligation to not use the unpublished research results of one advisor's group when moving to another group, unless that is agreed upon by the first advisor. Of course, this does not preclude use of published results or of general knowledge gained in the research area and its accepted practices, results and tools.

It is highly recommended that PhD students contact potential advisors in advance of their arrival at UCF to explore mutual research interests. Regardless, new students should meet with the graduate coordinator upon arrival at UCF. The graduate coordinator will provide initial guidance on overall academic requirements, program and university policies and procedures, while the research advisor serves more as a mentor providing direction on research, advice on program of study, and guidance on other areas of academic life.

Roles and Responsibilities:

- **Faculty Advisor**
  - The advisor helps the student select which courses to take.
  - The advisor (in consultation with the student) develops the student’s program of study
  - The advisor directs the student’s research
  - For MS thesis-option and PhD students, the advisor reviews and approves the student’s thesis or dissertation
  - The advisor often provides financial support for the student (based upon a research grant)

- **Student**
  - The student takes coursework as required, maintaining a minimum 3.0 GPA
  - The student maintains a full course load and works diligently to complete all requirements in a timely manner
  - The student (in consultation with the faculty advisor) develops a program of study prior to completing the first 9 hours of coursework
  - The student identifies (in consultation with the faculty advisor) a suitable research topic
The student works in the lab or field or other venue as needed to complete his or her research.

The student is responsible for knowing and meeting all university deadlines, rules, and regulations – see the section titled Student Responsibilities in the Graduate Catalog.

In those cases when a student wants to change faculty advisors, the student should discuss the situation with his or her current faculty advisor first, and then request the change through the graduate coordinator. The change must be approved by the current faculty advisor, the new faculty advisor, and the graduate coordinator.

Another kind of mentoring is by ones peers. Particularly by the associations establishes through student professional clubs and societies. The oldest and largest educational and scientific computing society is the Association of Computing Machinery (ACM) which offers student memberships for $19 per year. The local chapter is at UCF ACM Chapter. Female students in our school have formed Women in EECS/WIE and host many activities important to women in a scientific and technical area including an active mentoring program. Membership is free.

DEGREE REQUIREMENTS

This section describes the process for degree completion. Students must follow a prescribed, yet flexible path, achieving milestones along the way. Although there is no guarantee that each student will be able to complete all the requirements, if a student is hard working and diligent, and is a full-time graduate student, he or she should be able to complete a Master’s program within 1 to 2 years and a PhD program within 4–5 years (typically 2 to 3 years beyond the MS). For non-thesis Master’s students who are working full-time and going to school part-time, it may take 4 to 6 years to earn the degree.

A summary follows. Please visit the EEMS Program and the PhD EE Program for more detailed description. A current list of EE courses can be found at Graduate EE Courses. Typically, students can begin registering for Summer, Fall, and Spring of the following year in mid-late March. See UCF Registration Practices to get an idea of how to do this. Changes to a preselected schedule can be made up until a few days after classes in a particular term begin (the "add/drop" period). One exception is registration in one-on-one course – Independent Study, Doctoral Research, Thesis, and Dissertation. These require the submission of a form (see the graduate secretary), indicating an agreement and syllabus between the student and a faculty member, at least one week prior to the beginning of classes.

In all programs, students must maintain a 3.0 GPA or better in all coursework taken since admission into the program. Furthermore, a 3.0 GPA must be maintained on just the courses on the POS. In addition, there are specific GPA requirements on certain individual courses or sets of courses as detailed below. No course can be on the POS with a grade below a C (2.0) and at most two below a B (3.0). These and the stipulations outlined below can not be waived.

Masters students may choose one of two options – the thesis option or the non thesis option.
Both are 30 semester hour programs. The latter requires slightly more coursework and of course, does not require that a thesis be written. One might think of a thesis as being a "mini" PhD dissertation. MS non-thesis option students must, in their last term, submit to the EECS Graduate Committee, a portfolio detailing all major activities in which they have participated as a result of their tenure in the program. This should include a SASS audit, resume, and details of term papers, and projects that they have completed as part of their coursework.

**MS Degree**

a) At least 30 semester hours of credit at the 5-6000 level. At least half of these must be at the 6000 level, and under no circumstances can they contain Doctoral Research credit or undergraduate credit.

b) Most of the courses should be taken from one of the technical areas of concentration, listed in the Graduate Catalog. The EE areas of concentration are: Signal Processing and Systems, Micro and Nano Systems, Electromagnetics and Optics.

e) Thesis option – At least 18 credit hours of coursework, 6 of Thesis (EEL 6971), and at most 6 hours of Independent Study credit.

f) Non Thesis option – At least 24 credit hours of coursework and at most 6 hours of Independent Study credit, as well as a portfolio submission.

Although there are no required courses in the EE areas of concentration, an MS student must have his Program of Study Approved by the Graduate Coordinator, before the completion of 9 credit hours into the program.

A typical MS degree program (concentration area: Signal Processing and Systems)

<table>
<thead>
<tr>
<th>Fall, 1st Year (9 credits)</th>
<th>Spring, 1st Year (9 credits)</th>
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<tbody>
<tr>
<td>EEL 5542 Random Processes I</td>
<td>EEL 6530 Communication Theory</td>
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<tr>
<td>EEL 5513 SP Applications</td>
<td>EEL 6502 Adaptive Digital Signal Processing</td>
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<tr>
<td>EEL 5630 Digital Control Systems</td>
<td>EEL 6616 Adaptive Control</td>
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<tr>
<th>Fall, 2nd Year (6 credits)</th>
<th>Spring, 2nd Year (6 credits)</th>
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<tbody>
<tr>
<td>EEL 5820 Image Processing</td>
<td>EEL 6938 Independent Study</td>
</tr>
<tr>
<td>EEL 6938 Independent Study</td>
<td>EEL 6823 Image Processing II</td>
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**PhD Degree**

a) At least 72 semester hours of credits at the 5–7000 level, beyond the BS degree. At
least one half of these must be 6–7000 level and none can be undergraduate credit.

b) A total of at least 36 credit hours of coursework and excludes Independent Study/Doctoral Research/Dissertation credits.

c) At least 15 credit hours of Dissertation and no more than 24 credit hours of Dissertation (EEL 7980).

Although there are no required courses in the EE Ph.D. program, a Ph.D. student must have his Program of Study Approved by the Graduate Coordinator, before the completion of 9 credit hours into the program.

A typical PhD degree program (once all 72 hours are completed and the above requirements are met the student can defend their Dissertation defense, and graduate upon the dissertation committee’s approval):

<table>
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<tr>
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<tr>
<td>EEL 5513 SP Applications</td>
<td>EEL 6502 Adaptive Digital Signal Processing</td>
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<tr>
<td>EEL 7919 Doctoral Research</td>
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<th>Summer, 1st Year (6 credits)</th>
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<tr>
<td>EEL 6918 Independent Study</td>
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<th>Spring, 2nd Year (9 credits)</th>
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<tbody>
<tr>
<td>EEL 5630 Digital Control Systems</td>
<td>EEL 6616 Adaptive Control</td>
</tr>
<tr>
<td>EEL 6504 Communication Systems Design</td>
<td>EEL 6812 Introduction to Neural Networks</td>
</tr>
<tr>
<td>EEL 7919 Doctoral Research</td>
<td>EEL 7919 Doctoral Research</td>
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<th>Fall, 3rd Year (9 credits)</th>
<th>Spring, 3rd Year (9 credits)</th>
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<tbody>
<tr>
<td>EEL 5820 Image Processing</td>
<td>EEL 6823 Image Processing II</td>
</tr>
<tr>
<td>EEL 5825 Pattern Recognition</td>
<td>EEL 6617 Fundamentals of Multivariate Digital Control</td>
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PLAN OF STUDY (POS)

The Plan of Study (POS), sometimes referred to as the Program of Study, is an agreement between the student and the program listing requirements for completing the degree. All EE graduate students must have an approved Plan of Study (POS) developed by the student and his/her advisor that lists the specific courses to be taken as part of the degree. The student must maintain a minimum GPA of 3.0 in his or her POS, as well as in all coursework taken since entering the program.

No coursework can appear on a POS that is more than 7 years old at the time of graduation.

The POS must be filed prior to the completion of 9 credit hours after admission to the program. This is mandatory! The College of Graduate Studies automatically places a "hold" on future registration for non compliance. The POS can, and usually will, be revised later to reflect changes in the courses actually taken, but it is crucial that a POS be on file, signed by the student and the faculty advisor, and approved by the Graduate Program Coordinator. Any variation from the current POS must be approved by research advisor and Graduate Program Coordinator and then immediately reflected in an updated POS.

The POS for students is flexible and unique to each student. However, it must meet university, college, and department rules for minimum number of hours, etc. (see Program Requirements, above). The doctoral candidate’s final POS must be completed, submitted, and approved before the student will be allowed to register for dissertation hours (EEL 7980).
Transfer of credit

MS students, with the approval of their advisor and the graduate coordinator, can transfer up to 9 credit hours, of B grade (3.0) or better, in graduate coursework (no Independent Study/Thesis credit) from another program at UCF or from an regionally accredited institution. This must appear on the initial POS submitted by the student within their first 9 credit hours in the EE graduate program.

PhD students may also transfer up to 9 credit hours with the same restrictions as their MS counterparts. Or (not both), if the student has earned an MS degree in a related area, they may upon the approval of the advisor and graduate coordinator transfer up to 30 credit hours of non thesis hours into the POS. This must be approved prior to entering candidacy status.

In no case can courses with a grade below a B (3.0) be transferred, nor can undergraduate credit.

PhD MILESTONES

After a student has been admitted into the PhD program and has a research advisor, there are several points in their academic career that require special attention. We cover these in more detail in the following.

QUALIFYING REVIEW

To better ensure that PhD students have acquired the requisite background and are prepared to make a successful transition into the research phase of their academic career, the Schools Graduate Committee requires students to prepare a portfolio containing evidence of their academic performance, their research progress to-date, and an evaluation of this and related intangible evidence as provided by the students research advisor. The portfolio should contain a complete record of their coursework (SASS Audit), a resume, particularly listing publications and submissions of conference and journal papers, and any related information the student believes bolsters their case of being ready to embark upon a research career. An initial evaluation must occur prior to entering the students 19th credit hour of graduate work in the program. In most cases a second review will take place prior to beginning the 37th credit hour. In rare cases (some students enter the program "better prepared" than others), a single review may be sufficient. At the other extreme, again hopefully rare, students can be removed from the program for poor academic performance and/or inadequate performance in their assigned GTA/GRA responsibilities. Review files must contain an evaluation and recommendation by the research advisor.

The Graduate Committee will entertain qualifying review portfolios after each Fall and Spring term. Students can avail themselves of the reviewing process at most twice. While a student may resubmit an updated portfolio in consecutive terms, this is not recommended. The main reason a student is asked to resubmit a second time is that the research component has not sufficiently emerged in either the advisors opinion or that of the committee. That is something that normally takes more than an additional term to establish.
Students who have not successfully navigated their way through the review by the 37th credit hour will be removed from the program. As with many decisions of this type, there is a degree of subjectivity in judging whether there is a sufficiently high probability that the student can, in fact, finish the PhD degree. To err is costly, to both the student and the program. We believe, in addition to a good academic record, one of the strongest indicators of success is the relationship forged between the student and advisor that has arisen from the advisor watching the student "in action" in a research environment and which has resulted in the advisors belief that the student has the drive and ability to make a significant contribution to the discipline.

Technically, students admitted to the PhD program are initially given "Pre-doctoral" Status. After successfully completing the qualifying review, they are officially placed in "Doctoral" status.

**CANDIDACY**

A student must demonstrate his or her readiness for the PhD program in Electrical Engineering by authoring an accepted journal article or high quality conference paper. This should occur by the time the student is nearing the end of their coursework. The appropriateness of the work and venue will be judged by the student’s dissertation advisory committee and, if deemed satisfactory, will result in a recommendation that the student be given Candidacy status. Admission to candidacy requires the approval of the program director and the college coordinator and is forwarded to the UCF College of Graduate Studies for status change. Only after admission to candidacy may a student register for doctoral dissertation hours (EEL 7980).

External members of dissertation advisory committee are not appointed until after the student has entered candidacy. By general University guidelines, a student and his or her dissertation advisory committee must formally convene for the committee to appraise the student’s progress at least once per calendar year.

All transfer of credits, grade changes, and incomplete grades must be resolved prior to entering candidacy status.

Upon entering candidacy status, students must be registered continuously (including summer) as full-time students until graduation. Students in candidacy status are considered "full-time" when enrolled in 3 credits of EEL 7980, Dissertation.

**DISSERTATION PROPOSAL**

All PhD students must write a dissertation. Please visit [UCF Thesis and Dissertation](#). This must be preceded by an oral presentation of a written dissertation proposal, which, in turn, can not occur until a term after admission into candidacy status. The purpose of the written proposal, given to members of the research committee at least two weeks prior to the presentation, is to show the student has sufficiently explored the literature of a significant research problem in electrical engineering to be able to embark upon solving that problem. The written proposal should also detail a proposed methodology and plan for undertaking the research work, and its completion. Rules governing the proposal announcements, scheduling and committee attendance
can be found in the UCF Graduate Catalog.

The oral presentation of the proposal is open to the public and must be announced at least two weeks prior to its occurrence. The presentation should last approximately 45 minutes to an hour, and it should show the student is aware of the background, has a good idea of the problem being addressed, and has a reasonable plan for carrying out the research. The committee’s role is to assess the significance of the proposed problem, the feasibility of the proposed solution, and to offer advice.

The proposal is not to be interpreted as "cast in stone." It is a proposal. The research may change direction as new information is uncovered. That is perfectly acceptable and expected. Of course, if the direction of the research becomes too "off target" a new proposal should be considered. This is at the discretion of your advisor, committee, and the graduate coordinator.

**DISSERTATION and DEFENSE**

The following can be found in the UCF Graduate Catalog (2009-10), Dissertation, and is worthy of repeating here.

"The dissertation consists of an original and substantial research study designed, conducted, and reported by the student with the guidance of the Dissertation Committee. The written dissertation must include a common theme with an introduction and literature review, details of the study, and results and conclusions prepared in accordance with program and university requirements. The dissertation is expected to represent a significant contribution to the discipline. Since this work is original, it is very important that care is taken in properly citing ideas and quotations of others. Failure to do so is academic dishonesty and subject to termination from the program without receiving the degree. An oral defense of the dissertation is required."

Students are responsible for being completely aware of the rules and regulations in the "UCF Thesis and Dissertation Manual" which can be obtained from the link given above. Once the dissertation is in its final stages, it must be submitted electronically to the UCF "Turnitin.com" system for format approval. Then, again, two weeks prior to the defense, for a check of originality (i.e., don't plagiarize – it will get you).

As with the proposal, the defense is announced and open to the public. Furthermore, the defense can not be scheduled in the same term as the proposal. Please see UCF Thesis and Dissertation.

**GRADUATION**

Graduation is the culmination of a challenging and arduous journey in the pursuit of a higher degree. To get to this pinnacle, it takes dedication, sacrifice, and hard work (and meeting all the bureaucratic processes and deadlines of UCF). In order to eliminate or reduce the potential for any unnecessary delays or complications with graduation, each student must be aware of and comply with all degree requirements and deadlines, and must submit all necessary forms on time.
University requirements for courses, numbers of hours, etc. are in the Graduate Catalog as noted earlier in the Handbook. The student is responsible for keeping up with his or her course records and knowing where they are in the program. In the last semester (the semester in which the student plans to graduate), several additional steps must be taken, as explained below.

1. File the intent to graduate form early in the semester.
2. Finish writing the thesis or dissertation early enough to allow time for committee to review at least two weeks before the defense deadline.
3. Obtain format review and approval by the graduate studies thesis editor before giving copies to the committee.
4. Contact each member of the thesis or dissertation committee to schedule a date for the defense.
5. Coordinate with the EE graduate secretary and your advisor to ensure that your SASS audit is “clean.”
6. Complete clean up of lab space (after you have passed the exam and have been told that no more work is needed), and check out with your advisor and the lab manager. Remember that all university property must be returned in good working order.

GENERAL POLICIES

In this section, we recap program and university general policies that commonly affect the majority of graduate students. For the final word on policies, please see the Graduate Catalog.

For Master’s Programs, see: Electrical Engineering Masters Program

For Doctoral Programs, see: Electrical Engineering Doctoral Program.

- Satisfactory academic performance means that you must maintain a GPA of 3.0 in your graduate POS, with no more than 2 courses with grades below B (3.0), as well as an overall GPA of at least 3.0 in all graduate coursework taken since entering the program.
- Satisfactory academic progress toward degree completion means that you take a full course load each semester (typically 9 hours per Fall and Spring, and 6 hours in Summer) until you complete all courses.
- The department will accept no more than 9 hours of transfer credits for Master’s students (not more than 12 credit hours of transfer for BS+MS students) and up to 30 hours of Master’s work for PhD students, provided a Master’s degree was earned. These include courses taken at UCF in non-degree seeking status. No courses with grades less than B (3.0) can be transferred into the program.
- Each research lab has a policy on laboratory safety and procedures. Please coordinate directly with the lab’s manager on this if you work in a lab.
- Before passing the candidacy exam, PhD students may not enroll in dissertation hours, but they may enroll in Doctoral research hours. After passing the candidacy exam, PhD students may be considered to be full-time if they enroll in 3 dissertation hours per semester until they graduate. Prior to this point, nine credits in Fall/Spring and six in Summer are required to retain assistantship support.
• All graduate students are expected to abide by UCF’s Golden Rule. See UCF Golden Rule.
• Students have available an Academic Grievance Procedure. See UCF Grievance Policies.
• Students may withdraw from a class meeting all conditions stated in the Graduate Catalog. However, this may result in loss of tuition waiver, and, for international students, this may place them in jeopardy of being considered out of status. See UCF Graduate Admission Policies.

PROFESSIONAL DEVELOPMENT

In this section, we identify university resources available to students for professional development. A graduate student’s professional development goes beyond completing course work, passing exams, conducting research for a thesis or dissertation, and meeting degree requirements. Professional development also involves developing the academic and non-academic skills needed to become successful in the field of choice.

• UCF has an active professional development program for graduate students, including the Professoriate Program, sponsored by Faculty Center for Teaching and Learning, the GTA Certificate Program, sponsored by FCTL, the Graduate Student Association Seminar Series, the Graduate Research forum, sponsored by the Division of Graduate Studies, and special award recognitions such as the Award for Excellence by a Graduate Teaching Assistant, the Award for Excellence in Graduate Student Teaching, the Award for the Outstanding Master’s Thesis, and the Award for the Outstanding Dissertation.
• The university has active student chapters of the ACM and the IEEE. The cost for student membership in the national organizations is subsidized by professional memberships. This is a “bargain” that no student should pass up.
• EECS sponsors regular colloquia talks by leading researchers in the discipline. All students are strongly encouraged to attend as many as feasible within the constraints of their courses and other academic obligations. In fact the School of EECS sets a minimum number of attendances for PhD students supported by the School or its faculty members – all PhD students will be apprised of how to sign up for colloquia (a zero-credit course) and how to report attendance.
• Various research groups hold their own seminars in which students present their research in front of other members of their research group.
• Doctoral students have the opportunity to develop grant-proposal writing skills by working closely with faculty mentors.
• Students are expected to publish the results of their research. In fact, the EECS PhD requires publication to enter candidacy.
• Graduate students in EECS are encouraged to present papers at conferences. Often their faculty mentor will be able to fund one or more such opportunities. The School of EECS and the Student Government Association are other sources of such support.
• Graduate students in EECS are also encouraged to participate in summer research internships when this is compatible with their research agendas – see your research advisor for more information and guidelines.

FINANCIAL SUPPORT

Financial support is a major concern for graduate students, especially since many rely on financial support from the university to pursue graduate study. In combination, the college, the university, and the school provide financial assistance to graduate students in several ways: (1) Fellowships and Scholarships are available to academically outstanding students, (2) Graduate Teaching Assistantships – GTA’s (for grading, recitation instruction, or laboratory teaching) are available for most newly arriving PhD students, (3) Graduate Research Assistantships – GRA’s (for participating in sponsored faculty directed research) are available depending on the current funding levels of the faculty. The department generally commits to some form of funding for at least the first two years of a PhD student’s academic career. Rapid progress by the student, especially in completing the qualifying review and publishing research results, aids in further commitment from the student’s faculty mentor. Students must maintain satisfactory academic progress (earning good course grades, registering and completing a full course load and passing qualifiers), and do acceptable research or grading or teaching work to maintain their financial support.

• All students must maintain a 3.0 GPA in their Program of Study, as well as over all courses taken since entering the program. They must not receive more than two grades below B (3.0), and those must be balanced to maintain the 3.0 overall. Students on contract are expected to work 10 to 20 hours per week on their assigned tasks (whether it be grading, teaching, or research), while they are maintaining satisfactory progress in completing their academic courses. Note that satisfactory progress for a supported student is not the same as maintaining the minimum grades, or of just barely performing at research. Support is a privilege not a right.
• All GTA’s (especially international students) who have any contact with undergraduate students must take all training required by Graduate Studies. These training modules include
  1. GTA Training: UCF GTA Training.
  2. SPEAK Exam: UCF SPEAK Exam.
  3. GTA Legal Module (online beginning June 6, 2005)
• Students must meet their obligations to continue to receive their financial support. If the students are on time cards, the cards must be filled out properly and filed on time. If they are on contract, they must maintain satisfactory work as defined by their supervisor. Also, being on contract requires that the students register for the proper number of hours of classes in time to process tuition waiver and so forth.
• The duration of financial support may vary from one semester at a time to up to a 4-year renewable fellowship.
International students are expected to be here as full-time students, and may not work off campus except under very strict conditions. Please see UCF International Admissions.

Graduate students may receive financial assistance through fellowships, assistantships, tuition support, or loans. For more information, see UCF Financial Information, which describes the types of financial assistance available at UCF and provides general guidance in planning your graduate finances. The UCF Student Financial Assistance section of the Graduate Catalog is another key resource.

Key points about financial support:

- If you’re interested in financial assistance, you’re strongly encouraged to apply for admission early. A complete application for admission, including all supporting documents, must be received by the priority date listed for your program under "Admissions." However, no explicit application is needed for consideration for Graduate Teaching Assistantships, Graduate Research Assistantships or Fellowships. That is, all applicants accepted to the EE Ph.D. program are automatically considered for such forms of financial assistance. The primary source of support for the MS students are research assistantships.
- You must be admitted to a graduate program before the university can consider awarding financial assistance to you.
- If you want to be considered for loans and other need-based financial assistance, review the UCF Student Financial Assistance website at http://finaid.ucf.edu and complete the FAFSA (Free Application for Federal Student Aid) form, which is available online at http://www.fafsa.ed.gov. Apply early and allow up to six weeks for the FAFSA form to be processed.
- UCF Graduate Studies awards university graduate fellowships, with most decisions based on nominations from the colleges and programs. All admitted graduate students are automatically considered in this nomination process. To be eligible for a fellowship, a student must be accepted as a graduate student in a degree program and be enrolled full-time. University graduate fellowships are not affected by FAFSA determination of need.
- Please note that select fellowships do require students to fill out a fellowship application (either a university fellowship application, an external fellowship application, or a college or school fellowship application). For university fellowship applications, see Financing Grad School.

Contact Information

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MISCELLANEOUS

- Primary School Faculty and Staff Involved in Graduate Student Support
• Dr. Issa Batarseh – Director
• Dr. Gary Leavens – Associate Director
• Dr. Ronald Dutton – Graduate Program Coordinator
• Ronda Hill-Bermudez (EE Ph.D.), and Traci Freund (EE Masters)– graduate admissions specialist, contracts administrator, programs of study, thesis/dissertation announcements, SASS audits, graduation certifications

• Department and college resources available for supported (GTA and GRA) students. EE provides
  • office space, desks, etc
  • e-mail accounts, server space and software to all full-time graduate students
  • campus mailboxes to graduate students
  • use of telephones, and copy and fax machines (for university business).

• Most faculty members in the school are active in research. Their areas and current research projects can be found by starting on the school’s home page www.eecs.ucf.edu and following the links under “Research” and “Faculty and Staff.”

• UCF provides University resources for students. Some examples are:
  • Library
  • Computer facilities
  • Student Associations and Student Support Groups
  • Campus social life
  • University Writing Center
  • The Counseling Center

• The University Academic Calendar can be found at UCF Academic Calendar

FORMS

During their career at UCF, graduate students will be required to complete forms to progress through their degree program. The most relevant forms are listed below, and a complete listing can be found at UCF Graduate Forms

Program of Study – must be filed and signed within the first 9 hours of graduate coursework (may be amended later).

Change of Status – Graduate Status Change Form officially advances a PhD student after passing a major milestone (such as entering candidacy)

Contracted Graduate Assistant – Offer of Appointment – contract allowing a grad student to be hired and paid for teaching assistance in the department or for working as a research assistant for a professor. These must be signed prior to the beginning of the semester, and influence how much tuition waiver you will get.
Graduate Petition Form – required for petitioning old courses into your program, and for numerous other requests for waivers or extensions

Intent to Graduate Form – a most important form for students!

Transfer Request Form – used for transferring courses from other institutions into your program of study.