Donaghey College of Engineering and Information Technology University of Arkansas at Little Rock

Guidelines for Graduate Teaching Assistantships Supporting EIT Graduate Programs

EIT Graduate Teaching Assistantships: A brief overview

Graduate assistantships (GA) are awarded to academically talented students to pursue studies in the doctoral programs such as Integrated Computing (IGCP), Engineering Science and Systems (ENSS) and the MS programs in Computer Science, Construction Management, Information Science and Systems Engineering. These cover stipends and tuition. In return for the stipends, full-time GAs have to work 20 hours/week and half-time GAs have to work 10 hours/week. Note that this effort is separate from their effort spent on advancing their graduate studies and research towards a successful master's thesis/doctoral dissertation. If the funding comes from a research grant, then the student having the graduate research assistantship (GRA) is obligated to work on the research grant. If the funding comes from university sources, the student having the graduate teaching assistantship (GTA) will assist professors with their teaching responsibilities, predominantly in support of undergraduate courses. The graduate teaching assistant is asked to report to a Department Chair who in turn assigns duties. The "ideal" GTA will be a student who has experimental and/or computational skills as well as pedagogical (teaching) skills in his/her discipline in addition to excellent academic credentials.

This document focuses predominantly on graduate teaching assistantships for students in the IGCP and ENSS doctoral programs. Recommendations for awards of GTAs will originate from the respective programs. These recommendations will be considered by a GTA award committee consisting of Chairs of the Departments of Systems Engineering, Computer Science and Information Science, as well as Graduate Coordinators of the Integrated Computing and Engineering Science & Systems program. The committee will be led by the Associate Dean, EIT.

The committee will develop a set of recommendations and present to the Dean for approval prior to implementation. In certain instances, an EIT faculty member may wish to mentor a student in another College if that is allowed by the program. In such instances, all the rules articulated in this document will apply. In addition,

- i. An assessment will be made by the GTA award committee as to whether the student's credentials meets or exceeds the minimum qualifications of the relevant EIT graduate program. The student will be eligible for funding only if he/she is deemed to be qualified for admission in that program.
- ii. Funding needs of students enrolled in EIT graduate programs will have priority.

Typically, students in MS programs are eligible for half-time GAs only whereas students in doctoral programs are eligible for both half-time and full-time GAs.

Responsibilities of the Program

Graduate programs in EIT are not obligated to admit each and every student who meets the minimum requirements. Availability of mentors in the students' area of interest, funding sources for full-time students, laboratory facilities, study space etc. are all factors that could limit the number of students who are admitted to the program. While part-time students typically "work" while they undertake graduate studies, full-time students usually focus their entire effort on graduate studies. It is the norm for fulltime graduate students to support their education through graduate assistantships from such sources as the university itself, research grants as well as fellowships from federal agencies as well as private sources. It is the program's responsibility to strike an appropriate balance between the numbers of who are admitted and who are likely to be funded. Prioritized recommendations to award EIT GTAs will originate from the graduate programs. There is no guarantee that all the students recommended by a graduate program will actually be funded.

Responsibilities of the Thesis/Dissertation Advisor

The financial well-being of a student is an important ingredient for a graduate student's success in his/her studies. When a faculty member in EIT recruits and/or mentors the student as his/her thesis/dissertation advisor, the faculty member bears the primary responsibility in guiding the student in seeking financial support if the student seeks that guidance. The decision of a faculty member to mentor a student on their thesis/dissertation work needs to be supported by information on the funding needs of the student, the source from which such needs will be met and the extent of the laboratory facilities to be required by the student's research. The faculty member is encouraged to secure funding from external grants. While all faculty are expected to support their full-time doctoral students on research grants if the students are seeking that support, this expectation is significantly higher for full professors as compared to Assistant and Associate Professors. In addition, if the student is a US citizen or permanent resident, the faculty member is encouraged to mentor the domestic student to apply for external fellowships.

A typical full-time EIT GTA at the doctoral level receives a stipend of \$18000/yr, an estimated tuition of \$5900/yr and health insurance of \$800/yr. A typical full-time EIT GA at the masters' level carries a stipend of \$15000/yr and an estimated tuition of \$5900/yr; health insurance costs have to be borne by the GA. The funding of a full-time EIT doctoral GA mounts to an equivalent of \$32662/yr if the funding were to come from a grant with overhead costs. A faculty member's benefit over a 5-yr period if his/her student were to have such a GTA is the equivalent of \$163,310 (net over 5 years) in external research funding. That benefit needs to be leveraged by the faculty member for new sources of external research funding. The faculty member can rely on graduate assistantships but their availability will decrease with an increase in the seniority of the faculty member. Full professors may have no more than one student under his/her mentorship who has a GTA. Assistant and Associate Professors may have no more than two. If a faculty member has one or more of his/her doctoral students on a GTA, he/she needs to make a sustained effort to move the student from a graduate teaching assistantship to a graduate research assistantship or a fellowship funded by external sources. Faculty members recruiting students must not make any commitment of a GTA before it is actually awarded to the student in question. Further, once a student funded by a GTA graduates from a doctoral program, there is absolutely no guarantee that the faculty member can expect continued use of the GA line vacated by his/her student. A student who receives a full-time (half-time) EIT GTA will be expected to support EIT pedagogical activities for 20 hours/week (10 hours/week) (see details in the section on "Obligations and Benefits of a Graduate Teaching Assistant").

Note that the amounts stated in the above paragraph are subject to availability of funding and are subject to change.

Graduate Teaching Assistantships: Terms and Conditions of award and renewal

Two types of Graduate Teaching Assistantships may be awarded: (i) an EIT GTA, (ii) a temporary (TEMP) GTA. Beyond the period for which it is awarded, the college will have no obligations whatsoever in continuing the support once the term of the TEMP GTA expires. A student on a TEMP GTA will have to go through the EIT GTA award process to be awarded an EIT GTA.

Terms and Conditions

- 1. Students who have acquired at least 9 credits in a graduate program prior to joining the doctoral program will have a GTA for no more than 3 years of residency (total) in one or more EIT programs.
- 2. Students who are admitted to a doctoral program after their Bachelors' degree will have a GTA for no more than 4 years of residency (total) in one or more EIT programs.
- 3. If the student switches from one doctoral program to another, the total residency in all such programs will count in assessment of maximum GTA support.
- 4. A GTA will be awarded to a student for no more than one year at a time. Continuation and renewal will depend on satisfactory academic and research progress as well as satisfactory performance on their GTA assignment. Departmental Chairs will solicit feedback from faculty who act as supervisors of the pedagogical activities of the GTA. Indicators of academic progress are
 - (i) Successful completion of candidacy exams within three semesters of joining any EIT doctoral program
 - (ii) Successfully completed proposal defense within five semesters of joining any EIT doctoral program

The assistantship may be terminated if the above benchmarks are not met. The termination will occur from the fourth semester in case of 4(i) and the sixth semester in case of 4(ii). The assistantship may be restored only after the student demonstrates satisfactory progress. All other rules for maximum residency limit for GTA eligibility will be enforced (Items 2 through 4 above).

- 5. Awards of half-time MS GAs are done in consultation with the graduate coordinators of the MS programs and the respective department chairs.
- 6. All EIT GA's must be enrolled in at least nine graduate-level credit hours at UALR per Fall/Spring term. Failure to comply with this minimum enrollment requirement will lead to termination of his/her GA appointment and the GA will have to pay back the tuition to the funding source for the term for which he/she dropped below nine graduate-level credit hours.
- 7. In order to maintain a GA appointment and earn a stipend during the summer months (May 16-August 15), each GA will be required to register for at least one credit hour during the summer term (preferably Summer 1 term). Each GA will be responsible to pay his/her tuition and fees for the summer term. GA appointment will be suspended during the summer months if this obligation is not fulfilled.

The Procedure for Award of Graduate Teaching Assistantships

The bulk of the decisions for admissions and possible funding usually happen in Fall for Spring admissions and vice-versa. During Fall, it is desirable to complete the entire process by the end of September and in Spring, it is desirable to complete the entire process by middle of March.

The general process is outlined below for doctoral GAs and every effort will be made to follow that process. However, there are notable exceptions, some of which are spelt out at the end of this section.

- 1. The Integrated Computing (IGCP) Steering Committee and the Engineering Science & Systems (ENSS) governing committee need to take decisions on applicants and compile a set of recommendations on admissions to be sent to graduate school.
- 2. Among those recommended for admission, send the decision letters to graduate school for only those students who will be funded on research grants. For the rest (regardless of whether they have requested funding or not), wait until Step 5 below is complete.
- 3. The graduate coordinator of IGCP and ENSS, in consultation with their respective committees, will develop a list of students to be recommended for funding based on the following priorities:
 - i. PRIORITY 1: Students who are currently on EIT GTAs, and are up for renewals.
 - ii. PRIORITY 2: Students who were on EIT GTAs, subsequently went on research grants and have requested to be put back on a GTA line after expiry of grant funding.
 - iii. PRIORITY 3: Students who were never on EIT GTAs but were supported by grant funding for two years or more. Preference will be given to students who had a longer duration of grant funded support.
 - iv. PRIORITY 4: New applicants and continuing students who do not fall into categories (i)-(iii) above.

It is expected that students who receive a GTA following expiry of their grant funded support will revert back to grant funded support when their advisor receives new grants or renewal/extension of their expired grants.

In assessment of applicants prior to awards being made under the above priorities, the process will attempt to enforce the guideline that full professors will have no more than one student under their mentorship who has a GA. Assistant and Associate Professors will have no more than two. Clearly, there are situations when that guideline may not be met, e.g. when two doctoral students who have joined an EIT Ph.D. program at the same time on 3-yr graduate research assistantships funded by the research grant of their dissertation advisor. Once the students come off their research assistantships, the above priorities will be invoked.

Adherence to the priorities over a sustained period of time through collective decision-making will ensure that the demographics of the GA awards will reflect the priorities that are spelt out here.

- 4. The recommendations developed in (3) above will be considered by the GTA award committee.
- 5. Once awards to new applicants are approved, the Graduate Coordinators of each program will send decision letters on admission of applicants to graduate school. It is the program's

responsibility to strike an appropriate balance between the numbers of who are admitted and who are likely to be funded.

Students who received funding under PRIORITY 4 (in 3(iv) above) will need to choose their advisors within a limited timeframe (two semesters for new students, one semester for continuing students). Subsequent funding will have to be continued, in most cases, through research grants or other sources (i) if the student's advisor is a full professor and is mentoring one or more doctoral students who are funded by Graduate Assistantships, (ii) if the student's advisor is an Assistant Professor or Associate Professor who is mentoring two or more doctoral students funded by Graduate Assistantships. The program (through the Graduate Coordinator and/or Program Chair) will be the point of contact for the student on this issue.

While the above process will be implemented at least twice a year (if not more), it is possible that there will be situations when exceptions will have to be made when there is an exigency when the process cannot be implemented in its entirety. One such example is when an excellent student has applied for admission to a doctoral program and the college needs to move expeditiously to recruit the student with a GTA at a time when it is not possible to activate the entire process above. It will be the prerogative of the Dean to provide appropriate directions in using a GTA to recruit that student.

Obligations and benefits of a Graduate Teaching Assistant

Obligations

In return for their stipends, full-time GTAs have to work 20 hours/week and half-time GTAs have to work 10 hours/week. Note that this effort is separate from their effort spent on advancing their graduate studies and research towards a successful doctoral dissertation. In most of these cases, the graduate assistant is asked to report to a Department Chair who in turn assigns duties. In certain cases, where the student is being recruited by a faculty member who has been promised a contractual obligation by the college to provide a GTA to work on faculty-assigned research. Typically, it is the first year that the student is assigned duties by the faculty member. Following the first year, the student's GTA assignment will be made by the relevant departmental chair.

GTAs perform an important pedagogical role in assisting professors with their teaching responsibilities predominantly in undergraduate programs. Therefore, the "ideal" GTA will be a student who has experimental and/or computational skills and/or pedagogical (teaching) skills in his/her discipline in addition to excellent academic credentials. In certain limited cases, they may provide research support.

The GTA's efforts, when assigned by the departmental chair, will predominantly support undergraduate programs in the respective department. The GTA will have a faculty member who will function as the GTA supervisor. This assignment will be made by the departmental chair. In certain cases, the GTA supervisor may be the departmental chair. The GTA is obligated to perform his/her functions when the university is open for business, including Spring Break except when the GTA is on approved leave as per Item 2 under "Benefits" below.

Typical duties are:

- 1. Teaching some selected undergraduate courses,
- 2. Assist professors in laboratory teaching,
- 3. Grading of homework assignments and/or students' lab work,
- 4. Development of new laboratories, laboratory procedures/experiments, manuals etc.,
- 5. Need to offer office hours for consultation,
- 6. Attend lectures, if required by the faculty supervisor, of the course for which the GTA is providing support.

Benefits

The primary benefit of a GTA to a student is to have his/her own graduate education financially supported during the duration of their education. Other benefits are:

- 1. Student health insurance (only for full-time doctoral GAs), reimbursable up to \$400 per term (Fall/Spring only), depending upon the type of policy the GA holds.
- 2. A maximum of ten business days of paid leave per calendar year for full-time GAs on an annual appointment will be allowed. The number of days of paid leave will be prorated if the GA is on a shorter term of appointment (e.g. one semester) and not carrying a full load (e.g. half-time GA). Unspent paid leave does not accumulate from one calendar year to the next. The GTA will have to take approval of his/her GTA supervisor, Departmental Chair, and the Associate Dean before

going on leave. The student is likely to lose his/her GTA for the rest of the graduates studies in EIT if he/she proceeds on leave without having official approval in place.

The following notice will be seen by applicants to all EIT graduate programs as soon as they start the process of application through BOSS.

Notice of financial responsibility

Admission to any graduate program in the Donaghey College of Engineering and Information Technology (EIT) does not imply any form of financial support. While the exact length of the study will depend on the individual student as well as the degree program the student is enrolled in, a typical length of study for a graduate certificate is 1.5 years, a M.S. degree is 2 years and the Ph.D. degree is 4 to 5 years. Limited on-campus employment for all students as well as off-campus employment for domestic students (US citizens and permanent residents) may be available. It is the student's responsibility to secure such opportunities. When a faculty member in EIT recruits and/or mentors the student as his/her thesis/dissertation advisor, the faculty member bears the primary responsibility in guiding the student seeking financial support. At all other times (e.g. when the student has not been recruited by any faculty member and/or does not have a thesis/dissertation advisor), it is the program's responsibility to offer that guidance. Some support for full-time students may be in the form of graduate research assistantships from grants and, in the case of full-time doctoral students, graduate teaching assistantships (GTAs). Securing a GTA is a very competitive process. While all faculty are expected to support their full-time doctoral students on research grants if the students are seeking that support, this expectation is the highest for full professors. In those cases where a student joins the program as a graduate teaching assistant, he/she will have two semesters within which to select an advisor. GTA funding to the student, in most cases, may be discontinued after the first two semesters if they select as their dissertation advisor full professors who have one or more GTA as a doctoral student or Assistant and Associate Professors who have two or more. If this advisor is a full professor, it will be the professor's responsibility to find alternative funding sources for the student. However, the primary financial responsibility of funding the student's education (tuition, fees, room and board etc.) during the entire duration of their study rests with the student. An applicant for full-time graduate study who wishes to secure a graduate assistantship but does not have one at the time of joining the program is not guaranteed an assistantship during the course of their study.