

UNIVERSITY OF Nebraska Lincoln

Department of Electrical Engineering
Graduate Program Policies & Procedures

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1 Introduction

This document explains the policies and procedures of the University of Nebraska-Lincoln (UNL) for the Masters of Science (MS) and the Doctor of Philosophy (PhD) programs. In some cases, additional rules or higher standards than those of UNL may have been enacted by the Department of Electrical Engineering (EE) and these are also outlined here. UNL policies and procedures are explained more fully in the UNL Graduate Studies Bulletin, available at the University Bookstore. Every graduate student should obtain a copy of the Graduate Studies Bulletin. It is the responsibility of each student to become familiar with the graduate policies and procedures and to meet filing deadlines.

In this document, step by step procedures are explained and summarized for both MS and PhD students, from the time the student is admitted, until graduation. Note that specific deadlines vary, but are published each year by the Office of Graduate Studies for both the MS (Masters Degree Deadline Dates) and PhD degrees (Doctoral Degree Deadline Dates) and are available on the Office of Graduate Studies web page <www.unl.edu/gradstud>.

If particular questions are not answered by this document, please contact the Graduate Committee Chair of the EE Department.

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1.1 Membership in the EE Graduate Committee

The Department of Electrical Engineering determines the membership in the EE Graduate Committee through a process outlined in their department bylaws. All members must be either Graduate Faculty Members or Fellows. Since the EE Department participates as a field of the unified PhD program of the the College of Engineering and Technology (COET), the majority of the faculty members and the Chair must be Graduate Faculty Fellows. The remaining members must be Graduate Faculty Members. One current graduate student in good standing is also asked to serve on the Graduate Committee.

The four faculty committee members, other than the Chair, will often be called upon to cast votes related to Graduate Committee issues. In the case of a tie, the Chair will cast the deciding vote. The student member serves in an advisory role and is not a voting member.

1.2 Graduate Committee Duties

The EE Graduate Committee has several responsibilities related to the graduate MS and PhD programs. Generally, the Graduate Committee decides all issues and policies related to the graduate program in the EE Department. Outlined below are several of the specific duties:

- Review and decide admission/dismissal cases for all EE graduate students.
- Through a formal application process, award teaching assistantships.
- Compile and administer MS Provisional and PhD Qualifying Examinations.
- Administer the annual Graduate Student Research Paper Competition.
- Administer the Graduate Student Travel Grant awards.
- Recruit high-quality graduate students.

2 A Graduate Student's First Week

Teaching Assistants (TA) and Research Assistants (RA) are required to report to the department at least one week before the beginning of classes. However, all non-native English speaking graduate students who have been awarded a TA and who have not taught a previous course within the United States of America must pass the *Speak Test*, which is administered by the English as a Second Language (ESL) program within the English Department at UNL. After passing the examination, the TA must enroll in and pass the *International Teaching Assistants (ITA) Institute* at the earliest possible date. Institutes are typically held at the end of July and the end of the Fall semester and are provided by the Office of Graduate Studies. Therefore, new students entering in the Fall semester must arrive at UNL by July 1 in order to take the *Speak Test* and the subsequent ITA Institute. The following is an ordered list of tasks the student must accomplish immediately after arriving on campus.

1. All new graduate students should first meet with the Graduate Committee Chair.
2. All new foreign graduate students should go to the International Affairs Office (420 University Terrace, 472-5358) and speak with a student advisor. The student will be advised on issues related to obtaining a student ID and/or social security number, bank account, housing, etc.
3. All students should obtain a student ID at the ID Card Office in the Student Union building (NU Lower Level, 472-7331). It is essential for library checkout, entrance to the recreation center and other purposes.
4. The student should report to the EE Graduate Secretary, who will direct the student to the appropriate paperwork that needs to be done in the department. Note that a social security number and bank account are first needed in order to set up payment for assistantships. Students who are TAs must report, before the start of classes, to the Department Chair who

will make the teaching assignments and provide an overview of expectations. Students who are RAs should report to their advisor for an initial orientation.

5. New students should obtain a computer account. Although other computer systems are available, it is recommended that new graduate students obtain an account on `engrs.unl.edu`. The IBM RS/6000 workstations are physically located in WSEC 109 and are administered by James Nau (137W NH, 472-7097). Contact James Nau to obtain an account, or login to `engrs.unl.edu` using the `username register` with the `password register`, then answer the questions. There is no charge. All students are required to report their email address to the EE Graduate Secretary.
6. All EE students should obtain an electronic lock combination, which may be needed to gain access to department facilities. This can be accomplished by sending an email to `mpaul@engrs.unl.edu` with the following format. The subject should be Request Combination. The message should contain only their last name and student ID number separated by a comma: Smith, 123-45-6789. If the message does not work, a reply will explain why not and will explain the correct format again. If repeated tries fail, the student should directly contact Paul Marxhausen in the Electronics Shop (122 WSEC, 472-1969). It is important to note that requests must be sent from the student's own account.
7. Students who wish to park vehicles on campus are required to register their vehicle and have a parking permit. Permits are issued by the UNL Parking & Transit Services (472-1800) in the Stadium Drive Parking Garage. All information regarding the parking locations and rules will be provided with the parking permit.
8. Graduate students will typically work in the building after the normal building hours. Therefore, building keys are needed. Contact the EE department secretary for assistance. A security deposit for the keys is required but is refunded upon return of the keys.
9. All graduate students, who are TAs or RAs, are assigned a mailbox in 209N WSEC. TAs will also be assigned an office, unless they already have one. Contact the EE department secretary for assistance.
10. All students who are non-native speakers of English must take the English Placement Test before enrollment. The examination is administered by the English Department. For information concerning the next examination date, contact the English Department or the International Affairs Office.
11. New students must register for courses during the General Registration period. Continuing students can register in advance during the Pre-registration period. The registration process is accomplished using the automated telephone system called NRoll (472-7272). For announcement of registration periods and explanation of the registration process, consult the Schedule of Classes. It is emphasized that students are not allowed to enroll in courses for which they do not have a thorough understanding of all prerequisite and/or corequisite material.

3 Common Issues: MS and PhD Programs

3.1 Minimum Documentation for Admission Consideration

The following table provides the required documentation for consideration for admission into both the EE Graduate MS and PhD Programs.

Applicant	Transcript	References	GRE	TOEFL
US Citizen	Yes	Yes	Yes	No
Foreign	Yes	Yes	Yes	Yes
Foreign (Graduate of US Inst)	Yes	Yes	Yes	No

The EE Department has set a minimum TOEFL score of 550 on the paper-based examination, which is equivalent to 213 on the computer-based examination. Applicants with TOEFL scores below this value are automatically denied admission and will not be reviewed by the Graduate Committee. TOEFL scores are valid for two years. Some foreign students come to UNL without admission and then enroll in the Intensive English Program in order to improve their English competency. Successful completion of this program does not allow the TOEFL requirement to be waived. However, the institutional TOEFL examination, administered through the ESL program within the English Department at UNL, is considered equivalent to the formal TOEFL examination. Typically, the institutional TOEFL is given more often and is less expensive.

After the application packets are complete, the Graduate Committee reviews and decides on each applicant's case. Application materials of students who have been granted admission will be made available to the entire faculty for review. In the case of students who were directly recruited for an RA by an individual faculty member, the Graduate Admission Review Form (F2) will be issued immediately after admission and must indicate the faculty member offering the RA.

3.2 Full-Time Status

The course load for graduate students requiring certification as full-time students is nine credit hours for both the Fall and Spring semesters, and six credit hours for the Summer session. Students with RA or TA support are required to be registered for at least one credit hour during the period of their appointments, including the Summer session. Students should be aware that there may be certain tax implications due to course load, which should be considered when enrolling for classes. In particular, it is recommended that students, with RA or TA support, enroll for three credit hours during the summer, one during the first five-week session and two during the eight-week session. Note that foreign students are not required to be enrolled during the summer. However, all students with RA or TA support are required to be enrolled during the summer. Students with departmental TA support are expected to work on research under the guidance of an advisor in the Fall and Spring semesters as well as the Summer session. With special approval of the Dean of Graduate Studies, using the UNL form *Certification of Full Time Graduate Status*, students in the final semester of the MS degree (Option I only) or candidates for the doctoral degree may obtain full-time status by enrolling in only one credit hour.

3.3 Choosing an Advisor

Every new EE graduate student should contact the Graduate Committee Chair at the time he or she reports to the department. The goal of this meeting is to help the student in the early days of graduate study. If the student has not already decided on the choice of a graduate advisor, it is expected that the student will make this choice during the first semester of study. The Graduate Chair will serve as the student's temporary advisor until the permanent choice has been made. Choice of a graduate advisor is extremely important and should be made carefully. The advisor provides information regarding course work, general academic requirements, research program, and plays a major role in the professional growth of the student. The student should begin the search for an advisor by studying the list of EE faculty and their research interests, which can be found on the department web page <www.ee.unl.edu>. The student should visit faculty whose interests match the student's and should ask them about their area of current research projects and their expectations of their students. The student is also encouraged to talk with fellow graduate students about the selection of an advisor. At no time should a student select an advisor without the explicit consent of the faculty member.

In order to be eligible to advise graduate students, EE faculty members must be either Members or Fellows of the Graduate Faculty. Graduate Faculty Members may serve as advisors for MS students. Graduate Faculty Fellows may serve as advisors for both MS and PhD students. Graduate Faculty Members may serve as co-advisor for PhD students with a Graduate Faculty Fellow.

3.4 Academic Credit Policies

3.4.1 Courses With Graduate Credit

All UNL courses numbered in the 800 or 900 series offer graduate credit. However, the EE Department allows graduate credit to be obtained for an 800-level course (with 400-level counterpart) only if (1) the 400-level counterpart course is not required for the Bachelors of Science in EE (BSEE) at UNL, (2) the student has not taken the 400-level counterpart at UNL, and (3) the student has not taken an equivalent course at another institution. It is the duty of the student's advisor to determine if graduate credit should be allowed for each 400/800-level course. In order to gain knowledge in areas where formal courses are not offered, a maximum of three credit hours of Independent Study (ELEC 991) are allowed for the MS degree in the EE Department. For MS students, an outline of the Independent Study course must be submitted along with the *Memorandum of Courses* to the Graduate Committee Chair. Note that this requirement may mean that the Independent Study course outline would have to be submitted before the course is actually taken. The course outline must be provided by the faculty member who has agreed to teach the Independent Study course.

3.4.2 Graduate Credit for Seniors

Seniors can take up to 12 credit hours of graduate courses. The courses must be taken within a maximum of one year prior to completion of the Bachelors degree. The senior must file the UNL form *Hold for Credit* with the Office of Graduate Studies before registering for the graduate classes.

Seniors within nine credit hours of graduation have the option of formally applying for graduate admission and, if accepted, take graduate courses. The acceptance of the credit earned would be contingent on the student completing their undergraduate degree within one year.

3.4.3 Transfer of Credit

All graduate credit must be recommended by the Graduate Committee. Not less than 50% of the course work (excluding thesis or dissertation hours) required for any graduate degree must be completed at UNL. For the Option I MS degree, this restriction means that a maximum of 12 credit hours may be transferred. Although Options II and III have higher course credit hour requirements, the maximum number of transfer hours remains 12 for both options. Transfer credit must be from an institution fully accredited to offer graduate work in the student's field of study. Further, graduate credit cannot be transferred from an equivalent level degree from another institution. For example, a student who has completed an MS degree from another institution cannot use those credits as transfer credit for the UNL MS degree. However, if the degree program was never completed at the other institution, those credits can be transferred within the stated hour limitations. The same policy holds for the PhD program. Presently, graduate courses taken at the University of Nebraska-Omaha (UNO) are considered transfer credit. Official transcripts from the transfer institutions are required for approval of transfer credit.

3.4.4 Scholastic Grade Requirements

The EE Department has set the following minimum requirements for students in either the MS or PhD programs. Violation of any of these requirements can result in academic probation or dismissal from the graduate program.

- A minimum grade of B must be obtained in each 800-level course with a 400-level counterpart.
- With the exception of thesis/dissertation hours, classes taken as pass/no-pass (P/NP) cannot be used for graduate credit in either the MS or PhD degree programs within the EE Department.
- A minimum grade of C must be obtained for graduate-only courses (900-level or 800-level with no 400 counterpart).
- MS students under Option II must receive at least a B in any course used for the minor field requirement. If a lower grade is obtained that course will not count toward the minor requirement of the degree.
- It may be necessary at times for a student to withdraw from a course or courses. However, if the Graduate Committee perceives a pattern of abuse of the withdrawal system, the student will be placed on probation for the following semester. Withdrawal from a course during the probationary period will be considered unsatisfactory.
- All MS and PhD students in the EE Department are required to maintain an overall graduate GPA of 3.0.

3.5 Probation and Termination

The UNL Graduate Studies Bulletin states that no student on probation may receive a graduate degree. For all graduate students at UNL, probation or termination recommendations may be made under any of the following conditions:

- violations of the Student Code of Conduct.
- failure to satisfy scholastic grade requirements.
- failure in provisional/comprehensive/qualifying examinations.
- failure to master the methodology and content of ones field in a manner that is sufficient to complete a successful thesis or dissertation.
- ethical misconduct or lack of professional promise in the professional field.

Typically, MS students are given a warning or are placed on academic probation after the first occurrence of unsatisfactory academic performance. Any subsequent unsatisfactory academic performance results in the student being terminated from the EE graduate program. When exceptionally poor academic performance has occurred, the student may be terminated without a warning or being placed on academic probation. During the PhD program, the Supervisory Committee plays an important role in the student's education. Therefore, the general procedure leading to possible termination of PhD students includes the Supervisory Committee in the decision making process. After each occurrence of unsatisfactory academic performance, the Graduate Committee sends a letter to the academic advisor, who is tasked to reach a consensus among the members of the Supervisory Committee as to a proper course of action. Within approximately two weeks, the advisor must reply to the Graduate Committee with a recommendation from the Supervisory Committee. The three options are a warning, academic probation, or termination from the PhD program. Using this recommendation, the Graduate Committee sends a letter to the student, copied to each member of the Supervisory Committee, explaining the action to be taken. When the Supervisory Committee has yet to be formed, the Graduate Committee consults solely with the advisor. However, the final decision is made by the Graduate Committee.

A student placed on probation for scholastic reasons must achieve satisfactory performance (see Section 3.4.4) in all future semesters or Summer sessions until the probationary status is lifted. Satisfactory performance will be evaluated on courses appropriate to be used for the EE graduate degree, as determined by the Graduate Committee. Performance in courses unrelated to the EE graduate degree will not be considered. The probation status will remain in effect until the overall graduate GPA is raised to at least 3.0. These procedures will be implemented using the Probation/Termination Checklist in Appendix B.

3.6 Department Colloquia

The EE Department invites accomplished researchers for colloquia at various times. Colloquia are normally held on Tuesday or Thursday afternoons, when few graduate courses are offered. This allows all graduate students to participate in this educational experience. It is an important

part of a student's experience in graduate school and all graduate students are strongly encouraged to attend the colloquia. **Students with TAs are required to attend the department colloquia.** Announcements for such events are posted in advance of the actual presentations.

EE graduate students are also encouraged to attend the final oral examinations of graduating MS and PhD students. This experience provides the student with examples of what to expect during their own oral examinations. Further, the student will be exposed to research being conducted in the department and by fellow graduate students.

3.7 Graduate Student Travel Grants

The EE Department has a Graduate Student Travel Grant Program, subject to continued availability of funds. The purpose of this program is to provide travel funds to EE Department graduate students so that they may be able to present papers at conferences as first authors. The full conditions of this grant program are:

1. Funds will only be provided to support graduate students to present their accepted papers as first author.
2. Only EE graduate students are eligible.
3. Each graduate student may receive only one travel grant per fiscal year (July 1-June 30).
4. The grant program will provide support in the amount not exceeding two-thirds of the total travel expenses, subject to a maximum of \$500.
5. The graduate student will need to make a formal application on the departmental form, provided in Appendix A, and on the department web page. The form must be endorsed by the graduate advisor and the Graduate Committee Chair. The abstract and acceptance letter must be submitted with the application form.

3.8 Graduate Student Research Paper Competition

The EE Department has in place an annual Graduate Student Research Paper Competition. The purpose of this competition is to recognize those graduate students who prepare and present outstanding papers on their current research activities. Candidates will be judged primarily on the clarity of their oral and written presentations, audience perception of their understanding of the subject matter, and their ability to field questions on their presentation. Announcements for the competition will be posted well in advance. The conditions of this competition are:

1. Graduate students interested in participating in the competition will need to formally apply to the Graduate Committee Chair on the departmental form provided in Appendix A, and on the department web page on or before September 15 each year.
2. All EE graduate students are eligible.
3. Three prizes will be awarded each year. In addition to a certificate of recognition, cash prizes will be awarded.

4. The oral presentation should be made in a professional manner.
5. A three-page (maximum) written paper must accompany the application.
6. Papers will be judged by a faculty committee consisting of not less than three faculty members.

4 MS Degree Program

The work required for the MS degree must be completed within 10 consecutive years from the earliest course listed on the *Memorandum of Courses*. Courses taken before that time will not be counted for graduate credit for the MS degree. Procedures for MS students depend on whether or not admission was provisional, and which MS option the student chooses. The latter choice is formally declared approximately halfway through the degree program (usually before the end of the second semester) on the *Memorandum of Courses*.

4.1 MS Admission Status

Admission to the graduate MS program in EE requires completion of a BS substantially equivalent to the BSEE program of UNL. Students can be admitted to the MS program with either provisional or full graduate standing. Provisionally admitted students are required to pass the MS Provisional Examination in order to gain full graduate standing. Students with a BS other than EE may be admitted with deficiencies, which means that they must take background undergraduate courses in addition to the required graduate credit hours. These students can also be admitted provisionally, in which case they must pass the MS Provisional Examination.

4.1.1 Requirements for Students Admitted With Deficiencies

Entering MS students will be expected to have an undergraduate background equivalent to that covered by the required EE undergraduate courses listed below. If not, they will be required to take those courses in addition to their regular graduate program. A grade of B or better will be required in all of the background courses. Note that, in addition to the courses below, the student may need to take other undergraduate courses as prerequisites to the graduate courses they wish to take. These requirements must be met before the *Memorandum of Courses* can be filed. The exact list of undergraduate background courses a particular student must take will be determined in consultation with the Graduate Committee Chair.

Course Number	Course Name
ELEC 304	Signals and Systems
ELEC 305	Probability & Random Processes
ELEC 306	Electromagnetic Field Theory
ELEC 316	Electronics & Circuits III
ELEC 370	Digital Logic Design

In addition to the above requirements, a working knowledge of a high-level computer language such as C, C++, or Fortran is mandatory. This requirement can be met by previously taken courses, work experience, or other means which are determined to be appropriate by the Graduate Committee Chair.

4.1.2 Requirements for Students Admitted Provisionally

In some cases when the Graduate Committee feels the student is not adequately prepared for graduate school but does show some potential, the student may be admitted provisionally. In such cases, and when the admission is without deficiencies, the student must take the MS Provisional Examination in the **first semester** in which they begin to take EE graduate courses. The examination is offered only during the Fall and Spring semesters. Students admitted provisionally, and with deficiencies, may need to take undergraduate background courses before beginning graduate courses. In such cases, the student must take the examination the first semester in which they are enrolled in graduate EE courses. The student is allowed only a **single attempt** to pass the examination. Therefore, it is strongly recommended that students, who feel unprepared to take the MS Provisional Examination, allow at least one semester to undertake remedial activities. For example, a provisionally admitted student may wish to enroll in particular undergraduate courses in which they do not feel confident.

The examination will consist of six problems, one from each of the required courses listed below. At the time of the examination, four problems are selected by the student, and a grade of at least 70% overall is required to pass. The examination is closed book and closed notes. Non-programmable calculators will be supplied by the Department during the examination. All work must be shown to receive full credit. It is given in a single day, with a total of eight hours for all problems. After the overall grade has been compiled, the student may review the examination but is not allowed to keep the examination.

Course Number	Course Name
ELEC 216	Electronics & Circuits II
ELEC 304	Signals and Systems
ELEC 305	Probability & Random Processes
ELEC 306	Electromagnetic Field Theory
ELEC 316	Electronics & Circuits III
ELEC 370	Digital Logic Design

Information concerning the course outlines and appropriate books can be obtained from individual professors who have recently taught the courses. See the EE graduate secretary for recent teaching assignments or check the department web page <www.ee.unl.edu>. A general description of the courses can also be obtained in the UNL Undergraduate Bulletin.

An announcement of the examination sign-up will be posted at the beginning of each semester. The student should register for the examination with the EE graduate secretary on or before the posted deadline. The examination date/time will be set by the Graduate Committee Chair and will typically be one to two months after the beginning of classes each semester.

4.2 MS Degree Options

4.2.1 Option I Requirements

The vast majority of MS students in the EE Department choose Option I. Students with either TA support or a departmental fellowship are required to perform research and complete a thesis under Option I. Students considering a PhD degree would also generally choose this option. For this degree option, a minimum of 30 credit hours and a written thesis are required. At least six credit hours must be taken as thesis research under ELEC 899. In addition, a minimum of 24 hours of formal course work must be taken including at least nine credit hours in graduate-only courses (900-level or 800-level with no 400 counterpart). As part of the required courses, a maximum of three credit hours of Independent Study (ELEC 991) are allowed. Of the total minimum of 30 credit hours, at least 15 credit hours must be EE credits, including thesis.

For Option I students in the EE Department, the Final Examination consists of an oral defense of the written thesis before the Examining Committee, chaired by the student's advisor. The examination must be taken within 10 months prior to the date of graduation. Normally, only one attempt to pass the Final Examination is allowed. However, the Examining Committee can recommend modifications, or additional work, which would allow a second, and final, attempt to pass the examination. The second attempt cannot be taken during the same semester or Summer session that the student failed.

4.2.2 Option II Requirements

Option II does not require thesis research and provides the student with a broader range of courses in his/her program. Normally, this option is not appropriate for students interested in continuing with a PhD degree. Furthermore, students with a departmental TA or fellowship support may not select Option II. A minimum of 36 credit hours of formal course work are required. A single minor must be designated. Two or more minors are not allowed. The program must consist of a minimum of 18 credit hours in EE and nine hours in the minor field. A minimum of 12 credit hours of graduate-only courses are required. As part of the required courses, a maximum of three credit hours of Independent Study (ELEC 991) are allowed.

The EE Department requires MS graduate students in Option II to pass a Final Examination within 10 months prior to the date of graduation. The intent of the examination is to test the **breadth** of the student's knowledge. Normally, only one attempt to pass the Final Examination is allowed. However, the Examining Committee can recommend modifications or additional work which would allow a second, and final, attempt to pass the examination. The second attempt cannot be taken during the same semester or Summer session that the student failed. The examination will consist of a project selected in concurrence with an EE faculty member, who will typically be the student's advisor. If the student does not have an advisor, the Graduate Committee Chair will help facilitate a match between the student and an EE faculty member. The project will be designed to test the student's ability in several facets of electrical engineering. An oral defense of the project will be scheduled by the student in agreement with the members of the Examining Committee. The Examining Committee will consist of the faculty member assigning the project and two other faculty members. One member of the Examining Committee must be from the minor department.

4.2.3 Option III Requirements

Option III is designed for students who anticipate continuing their graduate studies toward a PhD degree here at UNL. This option does not require a masters thesis but has a minimum course requirement of 36 credit hours. At least 18 credit hours must be earned in graduate-only courses. As part of the required courses, a maximum of three credit hours of Independent Study (ELEC 991) are allowed. A minimum of 18 credit hours must be EE courses. No minor is required. Students with departmental TA or fellowship support may not select Option III.

The EE Department requires MS graduate students in Option III to pass a Final Examination within 10 months prior to the date of graduation. Normally, only one attempt to pass the Final Examination is allowed. However, the Examining Committee can recommend modifications or additional work which would allow a second, and final, attempt to pass the examination. The second attempt cannot be taken during the same semester or Summer session that the student failed. The final examination will consist of a project selected in concurrence with an EE faculty member, who will typically be the student's advisor. If the student does not have an advisor, the Graduate Committee Chair will help facilitate a match between the student and an EE faculty member. The purpose of the examination is to test the student's ability for **independent research** needed for continuation of their graduate studies. An oral defense of the project will be scheduled by the student in agreement with the members of the Examining Committee. The Examining Committee will consist of the faculty member assigning the project and two other faculty members with knowledge of the area of the examination.

4.3 Members of the Examining Committee

The MS Examining Committee is chaired by the student's advisor and must consist of three members of the Graduate Faculty. One member of the Examining Committee must be a Graduate Faculty Fellow. In the case of Option II, one member of the Examining Committee must be from the minor department. In all cases, at least one member of the MS Examining Committee must be an EE faculty member.

4.4 Admission to Candidacy (Memorandum of Courses)

The *Memorandum of Courses* must be filed with the Office of Graduate Studies before grades (letter grades, Incompletes or No reports) have been received in more than half of the program. For Option I students, this means before more than 15 graduate credit hours have been completed. Provisional and EE background course requirements must be met before it can be filed. On this form the student indicates the MS option (I, II, or III), and lists all courses taken to date, and the courses to be taken to complete the degree. Option I students should also include the topic or field of the thesis. It must be approved by the student's advisor and by the Graduate Committee Chair. For Option II, the *Memorandum of Courses* must also be approved by Graduate Committee in the student's minor. After obtaining the appropriate signatures, the *Memorandum of Courses* should be presented to the EE graduate secretary who will forward it to the Office of Graduate Studies. If Independent Study (ELEC 991) is included on the *Memorandum of Courses*, the course outline must be submitted along with the form.

4.5 Application for Degree

The UNL form *Application for Degree* must be filed at the beginning of the semester or Summer session in which graduation is planned. A non-refundable application fee is also required at the time of submission. Specific deadlines are given on the Office of Graduate Studies web page <www.unl.edu/gradstud>.

4.6 Final Examination Report

The UNL form *Final Examination Report for Masters Degree* must be received in the Office of Graduate Studies four weeks (three weeks in Summer) before the final examination. The names of the Examining Committee members, including the major advisor, are included. For Option I students, the thesis title and the date of the final oral examination (thesis defense) are entered. The written comprehensive examination in the major is waived. If applicable, the student should inquire with the minor department Graduate Committee Chair as to written comprehensive examination requirements.

4.7 Preliminary Copies of Thesis

All Option I students must complete a thesis under the supervision of a member of the graduate faculty. The student is required to write the thesis in a standard style (see the *Guidebook for Preparing Your Thesis or Dissertation* available from the Office of Graduate Studies.) It is extremely important that the advisor thoroughly review and assist in the correction of the thesis before copies are given to the members of the Examining Committee. The student must give the committee at least two weeks (one week in Summer) prior to the final oral examination to review the thesis. A copy of the thesis must also be deposited with the Office of Graduate Studies two weeks before the examination (one week in Summer).

4.8 Final Oral Examination

The final oral examination is required for all Option I MS students. The oral examination should be scheduled for at least two hours and consist of the presentation and defense of the thesis research. The presentation is open to the public and all EE faculty and graduate students are strongly encouraged to attend. It is the student's responsibility to properly announce the defense date, time, and location, one week in advance to the examination. After the public presentation and a question-and-answer period, the remainder of the examination is conducted privately by the Examining Committee.

The Examining Committee may require the student to make changes to the thesis and/or conduct additional research. The advisor is responsible for making sure that the work is completed.

4.9 Final Thesis Copies

After appropriate changes have been made to the thesis based on the comments of the committee, and the Examining Committee has approved the thesis, the student must make several copies of the

thesis. The student is required to give a hard-bound copy to the advisor as well as the departmental office. It is also customary to offer each member of the Examining Committee a copy of the final thesis. The student should also submit official copies through the Office of Graduate Studies and the UNL Library. A complete description of the final copy requirements can be found in the *Guidebook for Preparing Your Thesis or Dissertation* available from the Office of Graduate Studies.

For tracking purposes, the student is required to complete the EE Department Exit Survey included in Appendix B and on the department web page.

4.10 Procedure Summary for the Masters Degree

Following is a summary of the procedures described above. A more detailed description can be found in this handbook or in the Graduate Studies Bulletin. Students are responsible for following procedures, and seeing that all forms are filed by the appropriate deadlines. An MS Checklist is provided in Appendix B with major milestones in the MS program. The student should use this checklist to track his or her progress. A copy of this form will be placed in each students' file in the EE Department office.

The work required for a masters degree must be completed within 10 consecutive years from the earliest course listed on the *Memorandum of Courses*.

Beginning of Program: Registration by consultation with the Graduate Committee Chair and the major advisor and with the approval of the Dean of Graduate Studies.

Before EE Graduate Courses Taken: Removal of admission deficiencies.

Before More Than One-Half of Program Complete: File the *Memorandum of Courses*.

Beginning of Graduation Semester: File the *Application for Degree* at the Office of Registration and Records.

Four Weeks (three weeks in Summer) Before Final Examination: File the *Final Examination Report for Masters Degree* at the Office of Graduate Studies.

Two Weeks (one week in Summer) Before Final Oral Examination: Present a preliminary copy of the thesis (Option I only) for the use of the Examining Committee.

One Week Before Final Oral Examination: Pass written examinations, if required, in major and minor fields at least one week prior to the time the oral examination is to be taken.

One Week Before Final Oral Examination: Produce announcement for the thesis defense (Option I only) and distribute to all EE faculty and graduate students.

Day of Final Oral Examination: Present oral defense of thesis research (Option I only) or final examination (Options II and III).

After Passing Final Oral Examination: Deposit final copies of the thesis in proper form, along with the UNL form *Final Examination Report* signed by the Examining Committee, to the

Office of Graduate Studies (Option I only). Option II and III students will only deposit the *Final Examination Report* form.

After Passing Final Oral Examination: One hard-bound copy of the thesis should be deposited with the EE graduate secretary. The student is required to complete the EE Department Exit Survey.

5 PhD Degree Program

The PhD program in the COET is a unified program with various participating fields, one of which is *Electrical Engineering*. The Engineering PhD Program is administered by the COET Unified PhD Program Graduate Board of Faculty. The contact information for the Coordinator of this program is given below:

Coordinator of the Engineering Doctoral Studies
University of Nebraska-Lincoln
114 Othmer Hall
College of Engineering and Technology
P.O. Box 880642
Lincoln, NE 68588-0642, USA

The work required for the PhD degree must be completed within eight consecutive years from the time of filing the student's program of studies. A minimum of 90 credit hours beyond the BS degree is required for the PhD degree, with not fewer than 45 credit hours from UNL. The Office of Graduate Studies has established a residency requirement for the purpose of ensuring that the doctoral program should be reasonably compact, continuous, and coherent; and that a substantial portion be in fact done at and under close supervision by faculty at UNL. The PhD residency requirement is normally satisfied by completing 27 credit hours of graduate work within a consecutive 18-month period. The EE Department waives the requirement for language and research tools.

5.1 PhD Admission Status

To enter the PhD program a student must have completed the equivalent of the UNL MS degree in EE or a closely related field. The documentation needed for admission into the EE PhD program is essentially the same as that for the MS program. However, all PhD applicants must submit three letters of recommendation. All admitted PhD students are considered provisional until after successful completion of the PhD Qualifying Examination.

5.2 PhD Qualifying Examination

The PhD Qualifying Examination is offered only during the Fall and Spring semesters. The student must **pass the examination by the end of the third semester** of his or her program. The first

semester of the program is defined as the semester in which an EE graduate course is taken as a PhD student. Only **two attempts** to pass the examination are allowed.

The examination consists of a Mathematics section with five questions, and an EE section with a total of six questions in three areas selected by the student. Each section requires an overall grade of 70% to pass. The examination is closed book and closed notes. Non-programmable calculators will be supplied by the Department during the examination. All work must be shown to receive full credit. It is given in a single day, with a total of eight hours for both sections. After the overall grade has been compiled, the student may review the examination but is not allowed to keep the examination.

One mathematics question is provided from each area listed below. At the time of the examination, the student selects three of the five mathematics problems to work. An average score of 70% is required to pass.

Mathematics Area

Probability and Random Processes
 Differential Equations
 Vector Calculus
 Matrix Theory
 Transform Techniques

Prior to the examination, the student selects three of the following electrical engineering areas. Two questions will be supplied from each area. The student must work four of the six questions, with at least one from each area. An overall score of 70% is required to pass. The courses listed by each area cover the material the student will be tested on.

Electrical Engineering Area	Course Numbers
Communication Systems	ELEC 462/464
Digital Signal Processing	ELEC 304/463
Control Theory	ELEC 444/451
Electronic Circuits	ELEC 316(circuits)/361
Digital System Design	ELEC 370/476
Electromagnetics	ELEC 306/467
Materials and Devices	ELEC 316(materials)/421
Power Systems	ELEC 438/406
Optics	ELEC 480/486

Information concerning the course outlines and appropriate books can be obtained from individual professors who have recently taught the courses. See the EE graduate secretary for recent teaching assignments or check the department web page <www.ee.unl.edu>. A general description of the courses can also be obtained in the UNL Undergraduate Bulletin.

An announcement of the PhD Qualifying Examination sign-up will be posted at the beginning of each semester. The student should register for the examination with the EE graduate secretary on or before the posted deadline, specifying the three areas he or she wishes to be tested on. The examination date will be set by the Graduate Committee Chair and will typically be one to two months after the beginning of classes each semester.

5.3 Members of the Supervisory Committee

Before the student is within 45 hours of completion of his or her program, the Supervisory Committee should be constituted with a minimum of four Graduate Faculty Fellows using the UNL form *Appointment of Supervisory Committee for the Doctoral Degree*. The Supervisory Committee will typically be chaired by the student's advisor, who must be a Graduate Faculty Fellow in the Electrical Engineering field. In the case of co-advisors, at least one of the co-advisors must be a Graduate Faculty Fellow in the Electrical Engineering field. All members of the Supervisory Committee must be members of the Graduate Faculty. At least one Graduate Faculty Fellow, external to the EE Department, must be on the Supervisory Committee.

5.4 Program of Studies

Immediately following the formation of the Supervisory Committee, the committee should meet and design the student's program of study, which is a list of the courses the committee believes will complete the student's PhD program. The student will normally provide an oral presentation of preliminary results from his or her research and a proposal for his or her dissertation topic. This will help the committee to more efficiently design the program of study, which is reported on the UNL form *Program of Studies for the Doctoral Degree*. Transfer credits are denoted on this form. Ninety (90) credits hours beyond the BS degree are needed for the PhD program.

Although the final decision is made by the Supervisory Committee, a typical program of study will include a minimum of 30 credit hours of dissertation research (ELEC 999) and 60 credit hours of formal course work. Not less than 50% of the course work (excluding dissertation hours) must be completed at UNL. Transfer credits can be from another institution or from an MS degree obtained from UNL. However, the EE Department does not allow the use of thesis research as transfer credit. Under no circumstances can transfer hours be taken from another PhD degree.

5.5 Admission to Candidacy (PhD Comprehensive Examination)

The PhD Comprehensive Examination shall be conducted by the PhD Supervisory Committee of the individual student. The Comprehensive Examination will be given only after the student has substantially completed his or her course work outlined in the program of studies. Normally, the Comprehensive Examination is given in the semester following completion of all formal course work. The comprehensive examination will be a written examination and will be designed to test the student's **breadth** of knowledge and not simply a repetition of course work. The Supervisory Committee may require an oral defense of the Comprehensive Examination. If the student fails the Comprehensive Examination, the Supervisory Committee may decide to give a second chance to the student or recommend termination of graduate status. If the student passes, the Supervisory Committee will recommend to the Office of Graduate Studies their admission to candidacy for the PhD degree using the UNL form *Application for Admission to Candidacy for the Doctoral Degree*. The examination results should be reported to the Office of Graduate Studies at least seven months before the final oral examination.

5.6 Application for Degree

The UNL form *Application for Degree* must be filed at the beginning of the semester or Summer session in which graduation is planned. A non-refundable application fee is also required at the time of submission.

5.7 Preliminary Copies of Dissertation

All PhD students must complete a dissertation under the supervision of a fellow of the Graduate Faculty. It is expected that the dissertation research will make an original and significant contribution to the field and is of a quality that could be published in a refereed journal. The student is required to write the dissertation in a standard style (see the *Guidebook for Preparing Your Thesis or Dissertation* available from the Office of Graduate Studies.)

Following a thorough review by the advisor, copies of the dissertation are given to the members of the Reading Committee (two members of the Supervisory Committee excluding the chair). The student must give the Reading Committee at least two weeks for review. Upon approval of the Reading Committee, a copy of the completed *Application for Final Oral Examination*, and a copy of the dissertation, are submitted to the Office of Graduate Studies, at least three weeks prior to the final oral examination.

5.8 Final Oral Examination

The final oral examination is required of all PhD students. The oral examination should be scheduled for two hours and consist of the presentation and defense of the research. The presentation is open to the public and all EE faculty and graduate students are strongly encouraged to attend. It is the student's responsibility to properly announce the defense date, time, and location, one week in advance to the examination. After the public presentation, and a question-and-answer period, the remainder of the examination is conducted privately by the Supervisory Committee.

The Supervisory Committee may require the student to make changes to the dissertation and/or conduct additional research. The advisor is generally responsible for making sure that the work is completed.

5.9 Final Examination Report

After appropriate changes have been made to the dissertation based on the comments of the committee, and the Supervisory Committee has approved the dissertation, the student must make several copies of the dissertation. The student is required to give a hard-bound copy to the advisor as well as the departmental office. It is also customary to offer each member of the Supervisory Committee a copy of the final dissertation. The student should also submit official copies through the Office of Graduate Studies and the UNL Library. A complete description of the final copy requirements can be found in the *Guidebook for Preparing Your Thesis or Dissertation* available from the Office of Graduate Studies.

For tracking purposes, the student is required to complete the EE Department Exit Survey included in Appendix B and on the department web page.

5.10 Procedure Summary for PhD Degree

Following is a summary of the procedures described above. A more detailed description can be found in this handbook or in the Graduate Studies Bulletin. Students are responsible for following procedures, and seeing that all forms are filed by the appropriate deadlines. A PhD Checklist is provided in Appendix B with major milestones in the PhD program. The student should use this checklist to track his or her progress.

The work required for the PhD degree must be completed within eight consecutive years from the time of filing the student's program of studies.

Beginning of Program: Registration by consultation with the Graduate Committee Chair and the major advisor and with the approval of the Dean of Graduate Studies.

By End of Third Semester in Program: Pass PhD Qualifying Examination.

Before 45 Credit Hours Remain in Program: Appointment of the Supervisory Committee.

Immediately After Appointment of the Supervisory Committee: Devise and submit program of studies.

After Completing Formal Course Work: Pass PhD Comprehensive Examination at least seven months before Final Oral Examination.

Beginning of Graduation Semester: File the *Application for Degree* at the Office of Registration and Records.

Two Weeks Before Submitting Application for Final Oral Examination: After thorough review by the advisor, present preliminary copy of dissertation to Reading Committee.

Three Weeks Before Final Oral Examination: Submit the form *Application for Final Oral Examination* with Reading Committee approval. Also submit a copy of the dissertation and abstract for preliminary review.

Two Weeks (one week in Summer) Before Final Oral Examination: Present a preliminary copy of dissertation to all members of the Supervisory Committee.

One Week Before Final Oral Examination: Produce announcement for the dissertation defense and distribute to all EE faculty and graduate students.

Day of Final Oral Examination: Present required oral defense of dissertation research.

After Passing Final Oral Examination: Deposit final copies of the dissertation in proper form, and a signed agreement for microfilming the dissertation and publication of the abstract, with the Dean of University Libraries after final approval from the doctoral specialist in graduate studies. Delivery of the certificate of deposit, signed by members of the Supervisory Committee, the Dean of University Libraries, and the Comptroller, to the Office of Graduate Studies.

After Passing Final Oral Examination: One hard-bound copy of the dissertation should be deposited with the EE graduate secretary. The student is required to complete the EE Department Exit Survey.

6 Guidelines for Assistantships/Fellowships

The first priority for the assignment of TAs within the EE Department is to assist in laboratory instruction and/or grading tasks. In addition, the assignment of TAs will be used as a mechanism to attract high-quality graduate students to the department thus increasing research productivity. Fellowships are also used as a mechanism to attract high-quality students to the department. However, fellowships do not have any specific duties associated with their acceptance.

RAs have no teaching responsibilities and are hired at the discretion of a faculty member supervising a research grant. As a general rule, all TAs and RAs of the same level (MS or PhD) should be paid the same salary.

MS and PhD students are limited to two and four years of department support, respectively. Department support is defined as either TA or full-time fellowship support. For example, an MS student supported for one year on a full-time department fellowship and one year on a TA would not be eligible for further support during the MS program. Supplemental fellowships are not considered in these limits. It will be the responsibility of the Graduate Committee to award TAs. Deadlines for TA applications are **October 1 for the Spring semester** and **March 1 for the Fall semester**. The Graduate Committee should distribute, to the EE faculty, a list of the current TAs and possible openings well in advance of these deadlines. The distribution will serve two purposes. First, faculty will be alerted to any TA openings. Second, students who are in their final semester of possible TA support will have adequate warning in order to obtain alternate funding. Some TAs or department fellowships may be awarded outside of these deadlines in an attempt to attract outstanding candidates to the graduate program. Such exceptions will be made by a vote of the Graduate Committee.

The Department Chair will determine the number of TAs required each semester and the degree of direct student contact. Students interested in TA support should file the departmental *Graduate Teaching Assistantship Application Form* by the appropriate deadlines. The form can be found in Appendix A of this handbook, and on the department web page. The Graduate Committee will choose TAs from either (1) the submitted applications for that semester, or (2) any direct faculty requests (see Section 6.4). After the Graduate Committee has decided the recipient of a TA award, the Department Chair and Graduate Committee Chair will send a letter awarding the assistantship to the student. In the case of a student who was requested by an individual faculty member, the offer letter should state with which faculty member the TA will be working on his/her research project. Such students should be aware that if he/she changes advisors after accepting the TA, the support may be terminated.

6.1 Student Priority

The Graduate Committee should prioritize prospective graduate students admitted into the program according to academic quality and potential. These can be measured by the GRE, previous

grades, previous institution, letters of recommendation, or any other criteria the Graduate Committee deems important. The goal is to attract the best students in order to improve research productivity. However, the TA must be able to fulfill the teaching requirements of the position. TAs having direct student contact must be assigned to graduate students having a good command of the English language. TAs not having direct contact may be assigned to graduate students with only moderate English ability. In all cases, the graduate student must have adequate teaching competence to perform the required tasks.

Faculty interested in recruiting potential graduate students will normally have RA funds intended to support the students. Faculty who would like to recruit a student specifically for TA support should make the request directly through the Faculty Assistantship Request Procedure outlined in Section 6.4.

6.2 Teaching Assistantship Requirements

Students who have been granted a TA must meet the requirements listed below. Any deviation from these requirements must be approved by the Graduate Committee.

1. All non-native English speaking graduate students who have been awarded a TA and who have not taught a previous course within the United States of America must pass the *Speak Test*, which is administered by the ESL program within the English Department. After passing the examination, the TA must enroll in and pass the *International Teaching Assistants (ITA) Institute* within one year of starting the TA. If the student does not complete the ITA Institute within one year, his or her TA support will be terminated. Successful completion of the ITA Institute is required before the TA can have student contact. Institutes are typically held at the end of July and the end of the Fall semester. Therefore, new students entering in the Fall semester must arrive at UNL by July 1 in order to take the *Speak Test* and the subsequent ITA Institute. New students beginning in the Spring semester should arrive one week prior to the start of classes and take the *Speak Test* during that semester. These students would enroll in the ITA Institute the next Summer. The TA must inform the Graduate Committee Chair when the ITA Institute has been successfully completed.
2. It is the TA's responsibility to obtain a graduate advisor who must be a member of the EE faculty. This decision must be made by the end of the student's first graduate semester at UNL. The TA must inform the EE Graduate Secretary when an advisor has been chosen.
3. Students receiving TA support are required to be enrolled as full-time graduate students in the EE department.
4. All MS degree students who have a TA must choose Option I.
5. All TAs must report, before the start of classes, to the Department Chair who will make teaching assignments and provide an overview of expectations.
6. Students should be aware that UNL abides by the Resolution Regarding Graduate Scholars, Fellows, Trainees, and Assistants. This agreement is among member schools of the Council of Graduate Schools and basically states that students should not accept assistantships from

more than one institution. If more than one assistantship is being considered, the student should provide sufficient notification of acceptance or rejection to all institutions. Contact the Office of Graduate Studies for complete details.

6.3 Termination of Assistantships

If any of the requirements listed above are not met within the given time limits, termination of the TA is possible. In this case, the Graduate Committee Chair should send a letter to the student outlining the particular failure in meeting the requirements and informing the student of the date of termination. Further, a maximum of two and four years of TA support is possible for MS and PhD students, respectively.

In addition to the previous requirements, the TA's major responsibilities include continued progress toward degree, teaching, and research. Unsatisfactory performance in any category can result in termination of the assistantship.

Lack of preparation, missing laboratory meeting times, improperly graded laboratory reports, and/or missing office hours are examples of possible reasons for termination of the TA due to unsatisfactory performance in teaching. Such conduct should be outlined in a letter from the Department Chair to the student, which should be copied to the Graduate Committee. If immediate improvement is not observed, the TA will be terminated.

Unsatisfactory performance in research will be evaluated by the graduate advisor. The advisor should discuss the situation with the student and attempt to remedy the problem. If immediate improvement is not observed, the TA will be terminated.

Each semester, the general academic performance of all TAs will be evaluated by the Graduate Committee. This evaluation will include a review of course performance and progress toward completion of the student's degree program. Students receiving TA support are required to be enrolled as full-time graduate students in the EE department. If a problem exists, the Graduate Committee may decide to terminate the TA.

For any reason should the student wish to terminate his or her TA support, a letter should be sent to the Graduate Committee Chair and copied to the Department Chair. This notification should be given at least one month in advance of the termination date.

6.4 Faculty Assistantship Request Procedure

In an effort to assist faculty in their research efforts, a procedure has been established which would allow for the formal request of a TA by an individual faculty member. Faculty should exercise care when submitting such requests and only recruit students who they are confident will work with them on the research component of their studies. By doing so, it is anticipated that there will be less chance of the student changing graduate advisors after coming to UNL, thus eliminating the loss in research productivity. Furthermore, this would discourage students from using UNL as a platform for the application to other schools.

Faculty requesting TA support must use the departmental *Faculty TA Request Form*. The form can be found in Appendix A of this handbook, and on the department web page. After the deadlines for TA applications (see Section 6), the Graduate Committee will meet to decide TA awards. Well

before this meeting, the Graduate Committee Chair will inform all faculty about the date of the meeting. At least one week before the meeting, any faculty interested in requesting TA support should submit the *Faculty TA Request Form* including the name of the student, who should have been admitted into the EE graduate program. The request should include a justification for the TA support for a particular student. Although TAs may work with temporary faculty (visiting faculty, postdoctoral fellows, etc.) under the rules set by UNL, direct requests for a TA are limited to tenured or tenure-track faculty. The following is a list of the general priorities, in decreasing preference, for faculty to be granted TAs for particular students. However, special circumstances will be considered and evaluated by the Graduate Committee. If the request is approved, the faculty member will be informed about the timeline for the start of the TA which is dictated by department needs.

6.4.1 Applicant Priority

- *Tenure-track faculty*: If possible, tenure-track faculty without substantial academic experience should routinely be given the opportunity of supervising the research activities of a TA.
- *Faculty with few, or no, students*: A faculty member who has few, or no, students but is actively pursuing quality research will be eligible for this program. Quality research activity will be defined by the recent publication of journal articles and/or recent research grants, for example.
- *Expiration of RA support*: Support for continuing students whose RA support has expired will be considered. However, faculty should make every effort to continue supporting the student from alternate grants.
- *Previous TA Assignments*: Faculty who have had previous TAs under this program will have lower priority but are not excluded. Any such TA requests should outline the performance of students who have previously been granted TAs under this program.

7 Frequently Asked Questions

What should I do if I need to make a change to either the Memorandum of Courses or Program of Studies? You should use the UNL form *Request for Change of Program*. Only the advisor's signature is required.

I am a graduate student at UNO or UNK. How can I enroll in a UNL graduate course? You must complete a *Inter-Campus Registration Form*, which is available at your home campus. After you get it approved by your graduate office, it would be sent to UNL and you would then be allowed to register for classes.

Given that I have finished all my course requirements, do I have to enroll in a course during my graduation semester? No, you do not have to enroll in a course unless you are supported on any type of assistantship.

I was previously admitted but did not start. Do I have to apply again? Admissions are valid for only the semester indicated on the *Certificate of Admission*. Under certain conditions, however, you can apply for deferred admission through the Office of Graduate Studies.

I am currently a PhD student but would like to switch to the MS program. How do I do this? You and your advisor must request that the EE Graduate Committee Chair write a letter to the Office of Graduate Studies requesting the program change. Note that dissertation hours will not count toward the MS requirements.

How many hours of graduate credit can be transferred from another institution? A maximum of 50% of the course work (excluding thesis or dissertation hours) required for any graduate degree can be transferred. However, transfer credit must be from an institution fully accredited to offer graduate work in the student's field of study. Further, graduate credit cannot be transferred from an equivalent level degree from another institution.

Are UNO courses considered transfer? Yes, UNO courses are considered transfer credit.

How is transfer credit noted on the Memorandum of Courses? Transfer credit should be listed in the Minor and/or Related Courses column on the *Memorandum of Courses*. The courses should be listed by their original name and numbers and a footnote should be used to indicate the originating institution. In addition, transcripts with the relevant courses must be supplied to the Office of Graduate Studies with the *Memorandum of Courses*.

Is the institutional TOEFL accepted by the EE Department? Yes, the institutional TOEFL examination, administered through UNL, is considered equivalent to the formal TOEFL examination. Typically, the institutional TOEFL is given more often and is less expensive.

How long are TOEFL scores considered valid? Two years.

How long are GRE scores considered valid? Five years.

Can seniors get graduate credit before graduation with the BSEE? Yes, seniors can take up to 12 hours of credit for graduate courses. The courses must be taken within a maximum of one year prior to completion of the Bachelors degree. The senior should use the UNL form *Hold for Credit*.

A Department Forms

Department Forms

**University of Nebraska-Lincoln
Department of Electrical Engineering**

**Graduate Student Travel Grant
Application Form**

(revised Nov 2000)

Date of Application: _____

Graduate Student Name: _____

Email Address: _____

Student ID Number: _____

Graduate Degree Program: MS PhD

Year of Entrance: _____

Conference Name: _____

Conference Dates: _____

Conference Location: _____

Authors (in order): _____

Title of Paper: _____

Estimated Expenses: _____

Amount Requested: _____ (\$500 maximum)

Signature of Advisor: _____

Name of Advisor: _____

Have you received a travel grant this fiscal year? Yes No

Attach abstract and acceptance letter and submit to the Graduate Committee Chair.

Graduate Committee Chair Approval: _____ Date: _____

Department Chair Approval: _____ Date: _____

**University of Nebraska-Lincoln
Department of Electrical Engineering**

**Graduate Student Research Paper Competition
Application Form**

(revised Nov 2001)

Date of Application: _____

Graduate Student Name: _____

Email Address: _____

Student ID Number: _____

Graduate Degree Program: MS PhD

Year of Entrance: _____

Title of Paper: _____

Signature of Advisor: _____

Name of Advisor: _____

Graduate Committee Chair Pre-approval: _____

Attach a 3-page (max) paper and submit to the Graduate Committee Chair.

Deadline: September 15

**University of Nebraska-Lincoln
Department of Electrical Engineering**

Faculty TA Request Form

(revised April 2001)

TA for Semester: _____

Faculty Name/Rank: _____

Email: _____

Previous TA Request: Yes (date: _____) No

Student Name: _____

New Student: Yes No
If no, list any current support: _____

Student's Communication Skills: _____

Degree Program: MS PhD

Faculty Member Information

Attach list of recent publications and grant activity.

Attach list of current graduate students and their means of support.

Attach additional justification and submit to the Graduate Committee Chair.

The following is a list of the general priorities, in decreasing preference, for faculty to be granted TAs for particular students. However, special circumstances will be considered and evaluated by the Graduate Committee.

- *Tenure-track faculty:* If possible, tenure-track faculty without substantial academic experience should routinely be given the opportunity of supervising the research activities of a TA.
- *Faculty with few, or no, students:* A faculty member who has few, or no, students but is actively pursuing quality research will be eligible for this program. Quality research activity will be defined by the recent publication of journal articles and/or recent research grants, for example.
- *Expiration of RA support:* Support for continuing students whose RA support has expired will be considered. However, faculty should make every effort to continue supporting the student from alternate grants.
- *Previous TA Assignments:* Faculty who have had previous TAs under this program will have lower priority but are not excluded. Any such TA requests should outline the performance of students who have previously been granted TAs under this program.

B Graduate Program Survey & Checklists

Graduate Program Survey & Checklists

MS Program Checklist

(revised Nov 2000)

Advisor: _____

Graduate Student Name: _____

Email Address: _____

Option			Required Task	Date	Comments
I	II	III			
x	x	x	Entered Program	_____	_____
x	x	x	Remove Any Deficiencies	_____	_____
x	x	x	First EE Graduate Course	_____	_____
x	x	x	Advisor Chosen	_____	_____
x	x	x	Provisional Examination <small>(only required of provisionally admitted students) (1 attempt only and must be taken during first semester enrolled in EE graduate course)</small>	_____	_____
x	x	x	Memorandum of Courses <small>(before one-half of program complete)</small>	_____	_____
x	x	x	Application for Degree <small>(beginning of graduation semester)</small>	_____	_____
x	x	x	Final Examination Report <small>(4 weeks before examination (3 weeks in Summer))</small>	_____	_____
x			Preliminary Thesis Copy <small>(2 weeks before final oral examination (1 week in Summer))</small>	_____	_____
	x	x	Written Examinations <small>(minor & major departments if needed: 1 week before final oral examination)</small>	_____	_____
x			Advertise Thesis Defense <small>(1 week before defense)</small>	_____	_____
x	x	x	Final Oral Examination	_____	_____
x			Final Copies of Thesis <small>(after passing final oral examination)</small>	_____	_____
x	x	x	Exit Survey <small>(after passing final oral examination)</small>	_____	_____

PhD Program Checklist

(revised Nov 2000)

Advisor: _____

Graduate Student Name: _____

Email Address: _____

Required Task	Date	Comments
Entered Program	_____	_____
First EE Graduate Course (PhD Program)	_____	_____
Advisor Chosen	_____	_____
PhD Qualifying Examination: Attempt 1	_____	Math: P F EE: P F
PhD Qualifying Examination: Attempt 2 <small>(2 attempts and must pass within 3 semesters of first EE PhD course)</small>	_____	Math: P F EE: P F
Supervisory Committee <small>(before 45 credit hours remain in program)</small>	_____	_____
Program of Studies <small>(immediately after appointment of the supervisory committee)</small>	_____	_____
PhD Comprehensive Examination <small>(after completing formal course work)</small>	_____	_____
Application for Degree <small>(beginning of graduation semester)</small>	_____	_____
Preliminary Dissertation to Reading Committee <small>(2 weeks before submitting Application for Final Oral Examination)</small>	_____	_____
Application for Final Oral Examination <small>(3 weeks before final oral examination)</small>	_____	_____
Preliminary Dissertation to Supervisory Committee <small>(2 weeks before final oral examination (1 week in Summer))</small>	_____	_____
Advertise Dissertation Defense <small>(1 week before defense)</small>	_____	_____
Final Oral Examination	_____	_____
Final Copies of Dissertation <small>(after passing final oral examination)</small>	_____	_____
Exit Survey <small>(after passing final oral examination)</small>	_____	_____

Probation/Termination Checklist

(revised Nov 2000)

Advisor: _____

Graduate Student Name: _____

Academic Event	Semester	Course(s) & Grade(s)	Overall Graduate GPA	Recommendation <small>W (warning) P (probation) T (termination)</small>
_____	_____	_____	_____	_____
_____		_____		_____
_____		_____		_____
_____		_____		_____
Date: _____				
_____	_____	_____	_____	_____
_____		_____		_____
_____		_____		_____
_____		_____		_____
Date: _____				
(1 semester later academic performance)				
_____	_____	_____	_____	_____
_____		_____		_____
_____		_____		_____
_____		_____		_____
Date: _____				
(2 semesters later academic performance)				
_____	_____	_____	_____	_____
_____		_____		_____
_____		_____		_____
_____		_____		_____
Date: _____				
(3 semesters later academic performance)				
_____	_____	_____	_____	_____
_____		_____		_____
_____		_____		_____
_____		_____		_____
Date: _____				
(4 semesters later academic performance)				