MANUAL FOR U2G BACHELOR'S TO ECE <u>GRADUATE</u> DEGREE PROGRAM

Offered by

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IOWA | College of Engineering

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This manual describes the U2G program for Electrical and Computer Engineering (ECE). The program is available for all undergraduate students at the University of Iowa to apply. Each applicant will be reviewed by the ECE Graduate Committee to assess the student's ability to succeed in our program by bringing a diverse array of backgrounds and experiences to meet the many advanced career paths supported by a graduate education in electrical and computer engineering.

1. Introduction

To meet the prevailing and growing national need for electrical and computer engineers with education beyond the BS level, the Department of Electrical and Computer Engineering (ECE) provides a joint bachelor's/MS and bachelor's/PhD degree programs. **The purpose of these programs is to attract the most qualified undergraduate students from the University of Iowa ECE and related disciplines programs into the ECE graduate program,** thereby increasing the size and quality of the graduate student body in this important engineering discipline.

With a strong job market for BS-level graduates, it is becoming increasingly difficult to convince well-qualified undergraduate students of the benefits of pursuing an advanced graduate degree. The reduced time-to-degree offered by a U2G program will make the prospect of pursuing an advanced graduate degree more attractive to some students. For those students already contemplating graduate studies, the U2G program will make our program more competitive in comparison to other graduate schools. The joint program will permit students to become deeply engaged with research at an earlier point in time, hopefully stimulating interest in research-related career paths.

Undergraduate students admitted to this program will be allowed, under well-defined and restricted conditions, to take a limited number of courses that count towards fulfilling both the BS and PhD degree requirements. Students in the joint program will be permitted to double count up to twelve semester hours (s.h.) of graduate-level coursework toward fulfillment of both ECE BS and PhD degree requirements and to complete up to six additional semester hours of PhD degree requirements prior to receiving their BS degree (18 s.h. total).
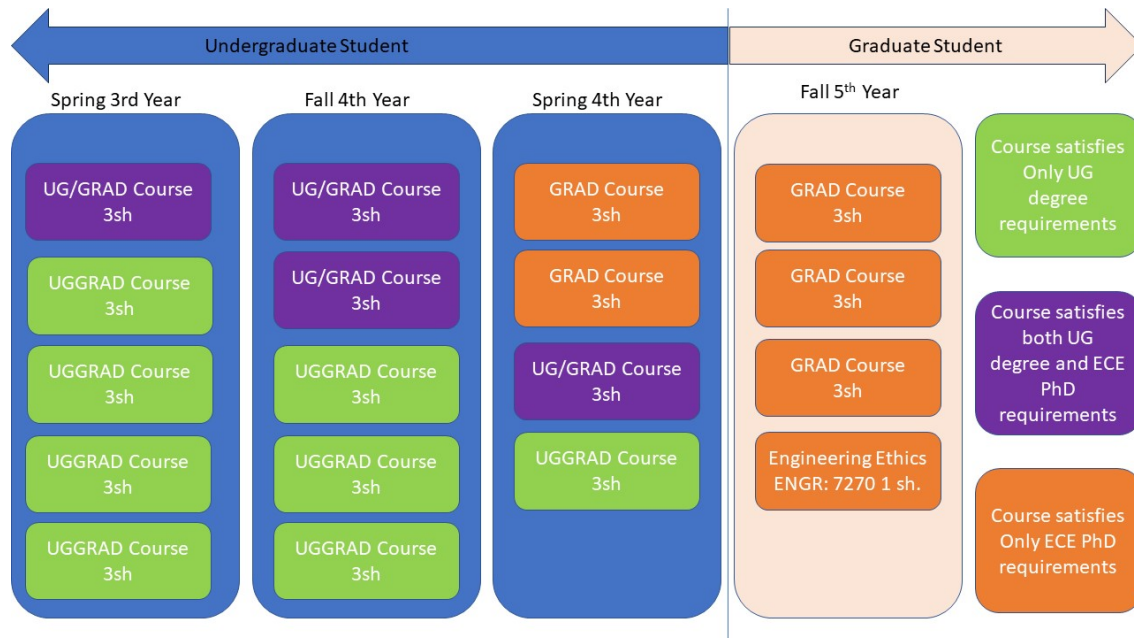

Figure 1Example plan of study for a U2G PhD student to maximize credits taken before receiving bachelor's degree.
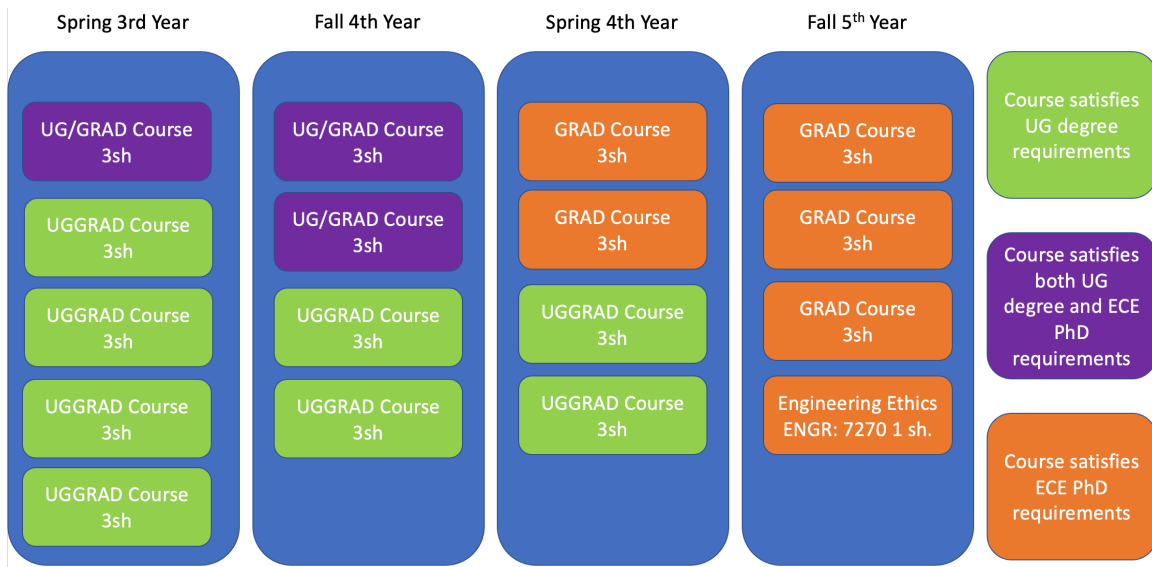
Spring 3rd Year | Fall 4th Year | Spring 4th Year | Fall 5th Year

Spring 3rd Year
- UG/GRAD Course 3sh
- UGGRAD Course 3sh
- UGGRAD Course 3sh
- UGGRAD Course 3sh
- UGGRAD Course 3sh

Fall 4th Year
- UG/GRAD Course 3sh
- UG/GRAD Course 3sh
- UGGRAD Course 3sh
- UGGRAD Course 3sh

Spring 4th Year
- GRAD Course 3sh
- GRAD Course 3sh
- UGGRAD Course 3sh
- UGGRAD Course 3sh

Fall 5th Year
- GRAD Course 3sh
- GRAD Course 3sh
- GRAD Course 3sh
- Engineering Ethics ENGR: 7270 1 sh.

Legend:
- Course satisfies UG degree requirements
- Course satisfies both UG degree and ECE PhD requirements
- Course satisfies ECE PhD requirements

Figure 2 Example course load for a U2G PhD student for achieving the maximum transfer credits.

2. U2G Eligibility Criteria and Application Process

The U2G program requires that students be in good standing and receive the undergraduate degree before entering the grad-only portion of the graduate program.

Regular Admissions Requirements	U2G Admissions Requirements
N/A	Completion of 80 hours of undergraduate work and declaration of a major by the end of the semester of application. A student who did not start their academic career at the University of Iowa must have completed 30 semester hours at the University of Iowa prior to application.
A minimum GPA of 3.0 for MS program and 3.25 for PhD program on a four-point basis is required.	A minimum undergraduate GPA 3.25 for MS programs and 3.5 for PhD programs on a four-point basis are required.
Students with baccalaureate degrees and strong credentials in related areas (e.g., physics, mathematics, and computer sciences) may be admitted. In such cases, additional course work without graduate credit may be required.	Students pursuing baccalaureate degrees with strong science credentials in related areas (e.g., physics, mathematics, computer sciences, or others) may be admitted. In such cases, additional coursework without graduate credit may be required.
Demonstrate an eagerness to participate in and dedication to complete	Demonstrate an eagerness to participate in and dedication to complete

a research-focused academic program in an ECE compatible field of study.	a research-focused academic program in an ECE compatible field of study.
All new foreign students scoring less than 550 on the Test of English as a Foreign Language are required to take an examination administered by the Linguistics Department upon arrival. Any remedial courses recommended by the Linguistics Department upon the result of this examination must be completed at the earliest opportunity.	N/A

Eligible students must apply to the ECE Graduate Program (Graduate Admissions, apply online) at least 6 weeks before the intended entry into the joint BS/PhD program.

Admitted students must work with their advisor to predetermine both the graduate-level courses they will pursue for U2G credit and the semester in which they plan to take them. Any changes to the U2G course schedule must be approved prior to early registration to ensure U2G credit eligibility. Only courses that are properly documented on the students U2G schedule will be eligible for graduate credit.

3. Advisory System

For the U2G MS-thesis and PhD students the mentor of a student engaged in PhD level research will act as the graduate advisor, and a student entering the program without immediate research engagement will default to the Chair of the ECE Graduate Committee as the student's graduate advisor.

4. Tuition and Fees Assessment

The student is assessed undergraduate tuition/fees until the bachelor's degree is conferred.

5. Cross-Crediting

*** Only graduate courses completed after admission to the U2G program may be counted toward the graduate degree. ***

A maximum of nine (9) for MS students or twelve (12) s.h. for PhD students may be counted toward both the bachelor's and graduate degrees.

One additional for MS students or two additional courses for PhD students, constituting a maximum of three (3) for MS and six (6) for PhD additional semester hours of graduate credit, taken after admission to the U2G program and prior to award of the bachelor's degree, may be applied toward the PhD degree requirements, provided that these courses are not used to satisfy BS degree requirements.

6. Academic Standards

6.1 Additional PhD requirements

The student in the U2G/PhD program is expected to continue the high level of academic performance that was evident when admitted into the program. The double-counted program courses must be completed with a grade of B (3.0 grade point) or better.

A minimum undergraduate GPA of 3.25 on a four-point basis is required to matriculate to the grad-only portion of the program, i.e., continue with the PhD. An undergraduate student whose cumulative GPA at any time falls below this minimum for more than one semester will be removed from the U2G program. After completing the requirements for the bachelor's degree, the student must meet the regular performance criteria of the graduate program.

6.2 Additional MS requirements

The student in the U2G/MS program is expected to continue the high level of academic performance that was evident when admitted into the program.

6.3 Transition from U2G/PhD to U2G/MS path

A student may transition to the U2G bachelor's/MS program from the U2G bachelor's/PhD, but will then be subject to the requirements and limitations of the master's U2G program (i.e., 12 s.h. of graduate credit earned, rather than 18 s.h.). **Excess courses beyond those allowed for the U2G BS/MS program will be applied as undergraduate electives.**

If a student withdraws from the U2G program, the graduate credit earned during the blended portion of the U2G program is revoked. The blended graduate credits will revert to be applied as undergraduate electives.

7. Degrees

A student in the U2G program will receive the bachelor's when all the requirements have been completed. After receiving the bachelor's degree, the student will enter the graduate program in Electrical and Computer Engineering. The student will receive the graduate degree in Electrical and Computer Engineering when all of the requirements for the graduate degree have been completed.

8. Graduate Curricula

The current graduate curricula requirements are provided in the ECE Graduate Manual.