Guidelines for Honors Students in the Electrical Engineering Program

The School of Electrical, Computer and Energy Engineering offers honors students enrolled in the Electrical Engineering (EE) Undergraduate Program several opportunities to help them to fulfill requirements for graduation from Barrett, the Honors College (BHC). This document describes three opportunities: turning EE program courses into honors courses through Honors Enrichment Contracts, courses receiving automatic honors credit, and performing research for the BHC Thesis/Creative Project. In addition, it provides information on how a student can use their senior design capstone project to fulfill BHC requirements.

Honors Course Credit

Any EEE course may be turned into an honors course through an Honors Enrichment Contract. Students wishing to receive honors credit for the course should confer with the course instructor at the beginning of the semester in order to develop a mutually acceptable plan for the honors enrichment activity. Most honors contracts involve either a project that extends the ideas and techniques covered in the course or outside research on topics relevant to the course work. Students have the responsibility to apply for the honors contract through BHC. The honors college contacts the instructor to approve the contract only after the student has initiated the process.

Automatic Honors Courses

At the present time, one course in the EE undergraduate program (EEE 230) is considered to be an automatic honors course for honors students. Honors students enrolled in this course will automatically receive honors credit without needing to complete an honors contract.

The Honors Thesis

Students graduating from BHC must complete an honors thesis/creative project, which is a document that describes the body of research undertaken by the student. EE students may use their senior capstone design project (EEE 488/489) to fulfill this requirement. Alternatively, the student may use EEE 493 (Honors Thesis) or HON 493 (Honors Thesis) to fulfill this requirement. In this case, the student would have to complete a separate capstone project to fulfill EE program requirements.
A later section of this document provides a detailed description of the procedures that students must follow to use EEE 488/489 to fulfill BHC requirements. These students perform additional work for the honors thesis above and beyond the normal senior design project. This additional work is defined by the Thesis Director.

Note that if the student is working with an EE program faculty member on an honors thesis project that is different from the senior design project he or she would register for EEE 493 in the final semester. (Students may be able to count EEE 493 toward technical elective credits in their program of study at the discretion of the EE undergraduate program chair.) If the student is working with a faculty member outside of the EE program, he/she would register for HON 493 in the final semester. Most students working on an honors thesis project that is different from their senior design project would also register for EEE 492 (or HON 492) in the first semester of their senior year. The EE program advisors can assist students in defining an appropriate plan of study to ensure that all EE program and BHC requirements are being fulfilled.

Prior to enrolling in EEE 488, EEE 493 or HON 493, students planning to graduate from BHC must complete a thesis/creative project information session. The session is designed to make certain they have been informed about the process, expectations, and deadlines imposed by BHC. Students may complete this requirement through an on-line workshop offered through Barrett via ASU Blackboard. Students may self-enroll in the Blackboard course by following the instructions below:

Step 1. Go to [www.myasucourses.asu.edu](http://www.myasucourses.asu.edu) and log in with your ASURITE UserID and Password.

Step 2. Once on the Blackboard homepage, click the "Courses" tab at the top of the page.

Step 3. There you will see a "Course Search" box on the left side of the screen. Type in a part of the name of the course you are trying to enroll in and click Go. Course is called Barrett Thesis/Creative Project Online Workshop

Step 4. A list of courses will appear. Locate the course you are looking for, click the double-down arrows and select Enroll.

Step 5. A confirmation page will appear. Review the information and click Submit.

The honors thesis should represent a body of work performed independently by the student under the guidance of a faculty mentor. The honors research MUST be work performed above and beyond the normal coursework required for the BSE degree, and it MUST be work completed individually by the student. Students are encouraged to seek out a faculty mentor early so that the honors research can be clearly defined well in advance of the senior year.

There are some opportunities for BHC students to receive funding for their projects and perhaps even a stipend for themselves. For example, the Fulton Undergraduate Research Initiative (FURI) provides a stipend and a small amount of funding for undergraduate research. Honors students may use their FURI-funded project as their honors research. For more information on the FURI program, please visit the FURI website. Another opportunity is the ASU/NASA Space Grant which supports graduate and

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undergraduate students in a variety of disciplines to further their educational experiences in science, engineering research, and informal education programs. Individual faculty members may also choose to fund undergraduate researchers working under their mentorship from sponsored research grants or contracts.
Barrett Honors College (BHC) Thesis/Creative Project

and

EEE488/489 Senior Design Laboratory

Electrical Engineering BHC students can use their senior design capstone project completed during EEE488+489 to fulfill the BHC Honors Thesis/Creative Project requirements, or they can take the traditional EEE/HON 493 (3 hr) Honors Thesis outlined in the BHC Thesis/Creative Project Handbook. The following describes the procedure for using EEE 488+489 to fulfill the BHC Thesis/Creative Project requirements.

In addition to the completion of the EEE488/489 capstone project:

1. Prior to enrolling in EEE 488, EEE 493 or HON 493, students planning to graduate from BHC must complete a thesis/creative project information session. The session is designed to make certain they have been informed about the process, expectations, and deadlines. Students may complete this requirement through an on-line workshop offered through Barrett via ASU Blackboard. Students may self-enroll in the Blackboard course by following the instructions below:

   Step 1. go to www.myasucourses.asu.edu and log in with your ASURITE UserID and Password.

   Step 2. Once on the Blackboard homepage, click the "Courses" tab at the top of the page.

   Step 3. There you will see a "Course Search" box on the left side of the screen. Type in a part of the name of the course you are trying to enroll in and click Go. Course is called Barrett Thesis/Creative Project Online Workshop

   Step 4. A list of courses will appear. Locate the course you are looking for, click the double-down arrows and select Enroll.

   Step 5. A confirmation page will appear. Review the information and click Submit.

2. The BHC needs documentation to serve as the written portion of the thesis/creative project. This written report, and its contents, will always be determined by the project director (who is also the EEE 488/489 faculty mentor). The written report might narrate in detail what the student has done, the project's importance to the engineering field and what its importance could be, any problems the student encountered and how they were solved, and how the student might expand the project if given more time and opportunity. It is appropriate to ask for additional research in the report if the project lends itself to such research. Again, the
thesis/creative project director determines what is to be included in the written report and how it is presented, but the report should include more than just a superficial description of the project.

3. The BHC also requires that the thesis/creative project include a traditional **oral defense attended by a thesis committee.** The minimum number of committee members is two, a Director and a second committee member. Only the director MUST be an ASU faculty member (lecturer or tenure-line).

**SEE NEXT PAGE FOR STUDENT PROCEDURE**
1. Prior to the semester you are planning to enroll in EEE 488, complete the online workshop offered by BHC to inform you of the about the process, expectations, and deadlines for completing your honors thesis.

2. Register for EEE 488. During the first week of the semester, determine which project you will pursue.

3. **Before the end of the 2nd week of the semester** in which you enroll in EEE 488:
   a) Complete and submit the **Thesis Prospectus form**. **If the prospectus is not received by the deadline, you could be postponing your graduation from the Barrett Honors College.** Every thesis/creative project is officially launched with a prospectus. The prospectus is an action plan for honors research and provides a definite list of goals and procedures with which you and your committee will work. As you progress on your project, you might have to update your prospectus to reflect changes that occur after the process begins. Your first draft may well not be your final draft, and in most cases, it is not. Revisions must be submitted using a Revised Thesis Prospectus Form.
   
   b) In consultation with your Thesis Director, prepare and submit an honors enrichment contract for EEE 488. The course instructor (not your Thesis Director) provides the approval for the honors contract.

4. At mid-term of your EEE488 semester, register for EEE 489 Senior Design Laboratory II.

5. **Before the end of the 1st week of the semester** in which you enroll in EEE 489:
   In consultation with your Thesis Director, prepare and submit an honors enrichment contract for EEE 489. This is a new formalized contract in which you and your project director renegotiate the EEE 489 course requirements. Contracts should be explicit and fully detail the expectations for both the quantity and quality of work. At the very minimum, the contract will require an individual **written report and thesis/creative project oral defense**. The course instructor (not your Thesis Director) provides the approval for the honors contract.


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