

Honors Program
in the Department of Biomedical Engineering

Document last updated on 2/15/18 by Dr. Kyle Quinn

INTRODUCTION

The Honors Program in the Department of Biomedical Engineering (BME) is designed for high-achieving students who are interested in more vigorous and in-depth academic challenges. Students enrolled in this program will have access to a variety of special fellowships and research opportunities unavailable to other students. These benefits include:

- Priority registration
- Innovative honors courses
- Undergraduate research fellowships for up to \$3,000
- Opportunity to win Study abroad grants after completing six hours of honors courses
 - \$1000 to \$3000 for summer programs
 - \$2000 to \$7000 for semester programs
- Honors community housing
- Special assistance in applying for prestigious scholarships and post-graduate fellowships
- Latin distinction at graduation

Students enrolled in the BME Honors Program will automatically be enrolled in the College of Engineering Honors Program and the University of Arkansas Honors College, which will further enrich the academic learning experience at the University of Arkansas.

For up-to-date information regarding the College of Engineering Honors Program, please visit: <https://engineering.uark.edu/academics/undergraduate-students/honors-program.php>

For up-to-date information regarding the Honors College, please visit: <https://honorscollege.uark.edu/>

ENROLLMENT IN THE HONORS PROGRAM

Students must meet the following qualifications in order to enroll in the BME Honors Program:

- High School GPA of at least 3.50; ACT Score of at least 28 or SAT Score of at least 1240 for entering freshmen
- Cumulative GPA of at least 3.50 for current UA undergraduates
- Cumulative GPA of at least 3.50 on transfer classes for transfer students

Students must register for the program before beginning honors thesis study. Please visit: <https://engineering.uark.edu/academics/undergraduate-students/honors-program.php> and click on the 'Apply to the Honors College' link.

GRADUATING FROM THE HONORS PROGRAM

Students who have demonstrated exceptional academic performance in baccalaureate degree programs will be recognized at graduation by the honors designation of *cum laude*, *magna cum laude* or *summa cum laude*. To earn this distinction, the student must meet the following criteria:

1. Must have at least a 3.50 GPA on University of Arkansas coursework, computed at graduation
2. Must successfully complete the Engineering Honors Program, which includes a minimum of 12 hours of Honors courses (at least 6 of these hours from biomedical engineering courses), and an undergraduate research/design experience with corresponding thesis.
3. Research and thesis material shall be evaluated and approved by the BMEG department
4. For the student to earn the designation *cum laude*, the student must achieve a GPA of 3.50 or higher
5. For the student to earn the designation *magna cum laude*, the student must achieve a GPA of 3.75 or higher
6. For the student to earn the designation *summa cum laude*, the student must achieve a GPA of 3.90 or higher.

The criteria may be evaluated and changed periodically by the College of Engineering.

Students must complete their thesis requirements and all required forms *one week prior to the last day of classes during their last semester.*

HONORS COURSEWORK

Students must take a minimum of 12 hours of honors courses, with at least 6 of these 12 hours in BMEG. Up to 3 of the 6 hours of courses in BMEG may include BMEG 450VH Honors thesis. Below are the additional honors courses offered in the BME department that can be taken to satisfy the 6-hour requirement:

- BMEG 3653H Biomedical Modeling and Numerical Methods
- BMEG 3824H Biomolecular Engineering
- BMEG 4623H Biomedical Transport Phenomenon

In addition to the normal pre- and co-requisites for the regular section of the class, students require instructor consent to enroll in the honors section of a course. Students must receive the consent by the end of the first week of classes. Students will need to identify the honors assignment and a faculty mentor for conducting the honor's assignment. Students are required to complete an honors class assignment that is mentored by the instructor of record or another faculty member in addition to attending the regular section of the class. The honors assignment should consist of 10-20 hours of work on a project related to the course content.

If the honors assignments are incomplete at the end of the semester, the student will receive an 'I' in the course BMEG 450VH and the final course grade will be entered into the student's record after the completion of the assignments and honors thesis defense. Students are not allowed to switch from the honors section to the regular (non-honors) section (or the regular section to the honors section) once the deadline "to register, add a course, or change from audit to credit" has passed.

HONORS THESIS

In addition to the honors coursework, honors students are required to complete an honors thesis research project. The honors thesis project should be designed to enrich students' research experience and offer in-depth training in a special field. It can be either hypothesis or technology-driven. The student must complete the Honors Thesis Proposal Form and the honors thesis research project must be approved by the Department Honors Coordinator. Students registering for the honors thesis course (BMEG 450VH) must register under the course section corresponding to the faculty mentor guiding their research experience. BMEG 450VH can be counted as a BMEG engineering elective to satisfy the undergraduate degree requirement.

Students are encouraged to conduct their honors thesis research in the laboratory of a BMEG professor. In cases where an honors student would like to work with faculty outside of BMEG for their honors thesis research, the student is required to inform the BMEG Honors Program Coordinator about the title of the research project, a brief description of the research work, and the name of their proposed thesis research mentor.

Upon the completion of the honors thesis research, the students are required to present, defend, and submit their honors thesis. An honors thesis is a document presenting students' research and findings. Students are required to present their honors research at the Undergraduate Research Symposium held in the second half of every spring semester. A complete draft of the student's honors thesis is due 1 day prior to the Undergraduate Research Symposium. Additionally, each honors student is required to create a poster summarizing their research experience and thesis. The poster should be 4 feet wide by 3 feet tall and include the same sections as your thesis document (see outline below). Poster files are due 1 week prior to the Undergraduate Research Symposium to facilitate printing by Department staff.

At the Undergraduate Research Symposium, each honors student will be asked to provide a brief 2-minute summary of their research in front of the BMEG faculty. Faculty will also be provided access to the thesis draft of each honors student. After the student's research summary, an additional 3 minutes will be allotted for questions. After questions have been answered, the student may solicit any faculty signatures needed for their honors thesis work. Students are expected to remain present for the remainder of the Symposium to answer additional questions from faculty, staff and students regarding their research.

Students will be permitted to make modifications to their thesis draft following the Symposium. The finalized honors thesis, the submission agreement form, honors graduation certification form, and honors advising form are all due one week prior to the last day of classes during the student's last semester. The honors thesis must be submitted electronically and approved by your thesis advisor. Please consult the following resources for more information.

Honor thesis policies:

<http://scholarworks.uark.edu/uht/policies.html>

Description of the thesis submission process:

<http://uark.libguides.com/c.php?g=536547&p=3672218>

Submission instructions:

http://uark.libguides.com/ld.php?content_id=30693845

Recommended Honors Thesis Format

All honors theses must have a title page and follow any requirements detailed by the College of Engineering (<https://engineering.uark.edu/academics/undergraduate-students/honors-program.php>). Below is a suggested outline:

- Title Page
- Abstract
(300 word summary)
- Introduction
(describing background, rationale, and significance of the work)
- Materials and Methods
- Results
- Discussion
- Acknowledgements
- References
- Appendix (if applicable)

For additional insight into the expectations of an honors thesis, please visit Mullins Library for access to accepted BMEG honors theses from previous years.

Department of Biomedical Engineering
Honors Program Checklist

- Apply to the Honors Program
- Take a minimum of 12 hours of honors courses
- Take a minimum of 6 hours of honors courses in the BMEG Department
- Select an honors project mentor before the end of your junior year and inform the BMEG Honors Coordinator
- Complete and submit honors advising form before 100 credit hours have been met (https://engineering.uark.edu/_resources/documents/Honors-Advising-Form-Rev-021116.pdf)
- Perform honors research project and submit your thesis to your faculty mentor for revisions prior to the Undergraduate Research Symposium
- Submit copy of your research poster to the BMEG Department 1 week prior to the Undergraduate Research Symposium
- Submit draft of your thesis to the BMEG Department at least 1 day prior to the Undergraduate Research Symposium
- Present honors thesis research at the Undergraduate Research Symposium
- Complete and submit the Honors College Graduation Certification form 1 week prior to the last day of classes (https://engineering.uark.edu/_resources/documents/honors-graduation-certification-5-17.pdf)
- Complete and submit the Thesis Submission Agreement 1 week prior to the last day of classes (http://uark.libguides.com/ld.php?content_id=33113144)
- Submit honors thesis 1 week prior to the last day of classes (Step-by-step guide at <http://uark.libguides.com/c.php?g=536547&p=3672218>)