

IBEHS 4E09/5E15 Guidelines

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The following information is for students registered in levels III and IV of the iBioMed HESE program.

Due date to submit the signed Thesis Permission Form for Spring/Summer 2022 is May 5, 2022.

Due date to submit the signed Thesis Permission Form for Fall/Winter 2022-23 is September 5, 2022 or before you intend to register for the course as permission from the IBEHS Program must be obtained prior to registering.

Undergraduate Student Research Thesis Guidelines

Undergraduate research is considered a vital component of learning by the Integrated Biomedical Engineering and Health Sciences Program, and is therefore a degree requirement for students enrolled in the Health, Engineering Science and Entrepreneurship specialization. During this course, students will have the opportunity to conduct original research under the supervision of a McMaster University faculty member. In some instances, students may be able to accomplish work that will contribute to a research publication.

The following information will help in the selection of a potential supervisor(s) and research project.

Course Basics

IBEHS 4E09 will require at least as much time as the equivalent of three regular 3 unit courses across the full academic year; whereas IBEHS 5E15 will require at least as much time as the equivalent of five regular 3 unit courses across the full academic year. The thesis course differs from a regular course in terms of the more independent nature of the work, and the degree of student responsibility and initiative.

Assessment will be based on work completed (an average of approximately 20-30 hours per week over two terms, depending on the distribution of the 15 unit course load for 5E15; and 10-20 hours per week over two terms, depending on the distribution of the 9 unit course load for 4E09), assessments as agreed upon with your supervisor and a written thesis. If the thesis is completed during the Spring/Summer term, please note that the terms are condensed compared to Fall/Winter, and therefore, the number of hours of work per week would be commensurate.

Making Arrangements for a Research Supervisor and Topic

In the fall of their penultimate year, students should begin to think about potential supervisors and research projects for IBEHS 4E09 or 5E15. (Note: Students who choose to remain in the five year HESE program MUST take 5E15.) The selection of a research topic should derive from a student's course experience and interests. It is recommended that students review the research interests of faculty members and reach out to schedule an interview with one or more faculty members to discuss possibilities for a research project and supervision. Supervisors may be from any Faculty on campus (Health Sciences, Engineering, Business, etc.), as long as the project has a relationship to biomedical engineering and health. You are encouraged to consider seeking out a co-supervisor from another Faculty to support your project; however, this is not a requirement. Students must seek approval and permission from the iBioMed Program for the proposed supervisor and intended project prior to registering for the course by completing the 'IBEHS 4E09/5E15 Thesis Permission Form' found on the IBEHS website:

<https://www.eng.mcmaster.ca/ibiomed/resources#forms>

Students might also want to consider whether they wish to use the thesis as an opportunity to continue research and development of a promising project that they completed in one of the P courses or E courses with a suitable supervisor.

Each Department in each Faculty will have a faculty listing that you can review. Here are just a few listings that you might also find helpful to get started in your search:

https://fhs.mcmaster.ca/medsci/faculty_research.html

<https://www.eng.mcmaster.ca/msbe/people/faculty>