

DEGREE PLANS & TIMELINES

Doctor of Philosophy in Biomedical Engineering (from Bachelors)

The program requires the completion of a minimum of 84 credit hours of approved coursework, completion program milestones and a successful Dissertation defense.

Degree Plan: (as of Fall 2013)

36 Coursework Credits

- 2 Math Courses
- 1 Statistics Course
- 1 Core Course
- 8 Elective Courses

36 Research Credits

12 Dissertation Credits

Timeline (4- 6 Years)

- Coursework
- Qualifying Exam
- Form Dissertation Committee
- Prospectus
- Dissertation Defense
- Graduation

Doctor of Philosophy in Biomedical Engineering (from Masters)

The program requires the completion of a minimum of 54 credit hours of approved coursework, completion of program milestones and a successful Dissertation defense.

Degree Plan: (as of Fall 2013)

24 Coursework Credits

- 1 Math Courses
- 1 Core Course
- 6 Elective Courses

18 Research Credits

12 Dissertation Credits

Timeline (3-5 Years)

- Coursework
- Qualifying Exam
- Form Dissertation Committee
- Prospectus
- Dissertation Defense
- Graduation

Masters of Science in Biomedical Engineering (Non-Thesis)

The program requires the completion of a minimum of 36 credit hours of approved coursework.

Degree Plan: (as of Fall 2013)

36 Coursework Credits

- 1 Math Course
- 1 Statistics Course
- 1 Core Course
- 9 Elective Courses

Timeline (2 Years)

- Coursework
- Graduation

Masters of Science in Biomedical Engineering (Thesis)

The program requires the completion of a minimum of 30 credit hours of approved coursework and a successful Thesis defense.

Degree Plan: (as of Fall 2013)

21 Coursework Credits

- 1 Math Course
- 1 Statistics Course
- 1 Core Course
- 4 Elective Courses

3 Research Credits

6 Thesis Credits

Timeline (2 Years)

- Coursework
- Form Committee
- Thesis Defense
- Graduation

Thrust Areas

- Each Track allows for a specialized focus within a prominent area of Biomedical Engineering. Below are the three Tracks offered by the UH BME program:
 - **Neural, Rehabilitation and Cognitive Engineering:** We focus on neural implants, neurogenesis, neurochips, cognitive engineering, neural signal and image processing and modeling, and brain computer interface from hardware to experimentation.
 - **Biomedical Imaging:** We focus on in vivo molecular and cellular imaging research with strong emphasis on the imaging of cancer biomarkers, therapy assessment, and cancer biology models etc. We also focus on clinical cardiovascular and brain imaging and develop an advanced interdisciplinary research field based on human cardiovascular and brain imaging.
 - **Bionanoscience Engineering:** We focus on gene regulatory networks, genetics of systems biology, computational biology, and infectious diseases. We also focus on innovative drug discovery and design, translational research and personalized medicine, as well as the recent advances in bionano science and engineering.