

PROGRAM REQUIREMENTS FOR THE MS (ENBI)

PROGRAM STRUCTURE

Candidates for the degree of master of science in bioengineering may elect either the thesis or non-thesis option. This choice may be made at any time, although a delay in declaration may impact the completion date. This program is designed for completion in about seven quarters if two courses (6 or 7 quarter hours) are taken each quarter.

THESIS OPTION:

A thesis permits exceptional candidates an opportunity to gain depth in an area of study. Thesis candidates work closely with a thesis advisor, and thus this option requires support from a qualified faculty member. The thesis option is required for all graduate research assistants (GRAs) and graduate teaching assistants (GTAs). A grade of C or better must be obtained in each course to count toward the 45-quarter-hour requirement. The course work for the bioengineering and bioscience electives must be comprised of a minimum of four 4000-level courses of at least 3 quarter hours each. To satisfy graduation requirements, candidates must maintain a course GPA of 3.0/4.0 (excluding thesis credits). The basic structure is as follows:

Bioengineering Core 1	2 QH
Engineering Electives	9 QH
Bioscience Electives	9 QH
Thesis 1	5 QH
	45 QH

NON-THESIS OPTION:

The more flexible of the two options, this is designed with the working professional in mind. A grade of C or better must be obtained in each course to count toward the 45-quarter-hour requirement. To satisfy graduation requirements, candidates must maintain a GPA of 3.0/4.0. The basic structure of the minimum 45 quarter hours for the non-thesis option is as follows:

Bioengineering Core	12 QH
Engineering Electives	18 QH
Bioscience Electives	15 QH
	45 QH

BIOENGINEERING CORE

Bioengineering core courses are intended to provide bioengineering students with a set of common skills and an integrated experience in the engineering sciences and biosciences. The courses must be chosen from a set of courses identified as having the requisite integrated experience. Those currently available are:

ENME 4500 Biofluids	3 QH
ENGR 4510 Biomechanics	3 QH
BIOL 3705 Advanced Topics in Molecular Biology: Biophysics	4 QH
BIOL 4090 Biometry	4 QH

ENGINEERING ELECTIVES

Engineering elective courses are intended to provide bioengineering students with depth within a specific engineering discipline. The courses must be chosen from regular engineering course offerings (ENGR, ENBI, ENME, ENMT, ENEE, ENCE, MTSC) numbered 3000 or higher with a minimum of two courses at the 4000 level, and must be approved by the student's advisor.

BIOSCIENCE ELECTIVES

Bioscience elective courses are intended to provide bioengineering students with depth within a specific bioscience discipline. The courses must be chosen from regular biology or chemistry course offerings numbered 3000 or higher (e.g. BIOL/CHEM) and approved by the student's advisor. Courses should predominately consist of graduate-level work as defined by each department.