

# MS in Medical Biotechnology

## Admissions Requirements

In addition to the Graduate College minimum requirements, applicants must meet the following admissions requirements:

- **Baccalaureate Degree** A baccalaureate degree or its equivalent in a science- or engineering-related field from an accredited college or university will be required, except in special cases. Prior academic work should include college mathematics, general biology and biochemistry, general and organic chemistry, or the equivalent engineering courses.
- Generally qualified candidates may be required by the department to remove specific coursework deficiencies by completing selected undergraduate courses prior to matriculation or graduation.
- **Grade Point Average**
  - *Undergraduate*: At least 3.00/4.00 for the final 60 semester hours (90 quarter hours) of undergraduate study. Exceptions to this requirement may be considered on a case-by-case basis.
  - *Postbaccalaureate*: The student's grade point average for any postbaccalaureate coursework must be 3.00/4.00 or greater.
- **Transcripts Required** Transcripts are required from all institutions where the applicant earned the last 60 semester hours (90 quarter hours) of credit toward the baccalaureate degree and from all institutions where postbaccalaureate work has been done.
- **Tests Required** GRE General Test is not required.
- **Minimum English Competency Test Scores** (*score cannot be more than two years old; UIC's Institutional Code is 1851*) All persons who do not have English as their native language must submit the results of one of the three language skills tests:
  - **TOEFL iBT** 80, with subscores of Reading 19, Listening 17, Speaking 20, and Writing 21, **OR**,
  - **IELTS Academic** 6.5, with 6.0 in each of the four subscores, **OR**,
  - **PTE-Academic** 54, with subscores of Reading 51, Listening 47, Speaking 53, and Writing 56.
- **Letters of Recommendation** Three required. If applicant is employed, one of the letters of reference must come from the employer confirming employer commitment to student participation. The other letters should be from former professors, teachers, or persons who can refer the candidate based on personal experience with the candidate's professional competence.
- **Personal Statement** Required statement of career goals.

## Degree Requirements

In addition to the Graduate College minimum requirements, students must meet the following program requirements:

- **Minimum Semester Hours Required** 34 semester hours.
- **Coursework**

Code	Title	Hours
<b>Required Courses (20 semester hours)</b>		
MBT 501	Cell Biology	
MBT 504	Principles and Techniques in Protein Biochemistry	

MBT 505	Principles and Techniques in Molecular Biology
MBT 506	Principles and Techniques in Immunology
MBT 510	Ethics in Medical Biotechnology
MBT 511	Statistics for Biotechnology Research
MBT 513	Research Planning, Design and Execution
MBT 520	Biotechnology Product Development: Concepts, Practice and Regulatory Issues
MBT 595	Student Seminar in Medical Biotechnology

### Electives

At least 6 semester hours.

- **Comprehensive Examination** Not required
- **Thesis, Project, or Coursework-Only Options:** Research Project or Coursework-Only.
  - *Research Project Option* (lab research or library paper) with written and oral final reports.
    - In addition to required courses and electives, students must earn 8 semester hours in MBT 597.
    - Research project requirement requires design, justification, and execution of a research project and preparation of written and oral final reports. This requirement may be met by research conducted at University of Illinois Rockford or other University of Illinois sites or in the laboratories of one of our industrial/academic partners or a combination of both.
    - Formal defense of the research project is required.
  - *Coursework-Only Option:*
    - In addition to required courses, students must complete at least 14 semester hours of electives yielding a minimum total of 34 semester hours.
    - The Coursework-Only Option also allows for students to do an internship at an approved site. Students choosing to do an internship must complete up to 8 semester hours of MBT 592. Students must then select enough elective semester hours to complete the 14 semester hours of electives required for the Coursework-Only option. For every one semester hour of MBT 592, students must complete 75 hours of internship. Upon completion of the internship, students must submit a written report and give an oral presentation.