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## Biotechnology

The Biotechnology masters program offers Master of Arts (A.M.) and Master of Science (Sc.M) degrees and is designed for students interested in a range of topics related to the field of biotechnology and therapeutics including drug discovery, drug & gene delivery, cell therapy, and biotechnology business.

The educational objectives of the program are to promote an understanding of: 1.) the designs and materials used in novel cell and drug delivery systems; 2.) the molecular, cellular and animal sciences of drug discovery & drug development; and 3.) the development and testing of cell-based therapies for the treatment of diseases. We also offer courses on the business and management of biotechnology. Active areas of research include: cancer therapeutics, bioadhesive drug delivery systems, mesenchymal stem cells, alternatives to animal testing, nerve guidance channels, cartilage regeneration, cardiac arrhythmias, micro-vesicles, antimicrobials, insulin regulation, neuroactive & neuroprotective agents and cell delivery & encapsulation strategies.

## **Requirements for the ScM Degree**

- · A minimum of 8 tuition units are required.
  - At least five of the required eight courses must be structured, advanced level courses in biology or the sciences.
  - Must receive a grade of B or better, courses must be taken for a grade rather than credit/no credit.
  - No more than three of the required eight courses are to be used for thesis research (Graduate Independent Study).
- Program Director endorses the student's proposed curriculum.
- Must identify Brown faculty member willing to host student in lab.
- Students do research for the duration of the time in the Program.
- · Student and faculty mentor select Thesis Committee.
- Submit final thesis, present work as a seminar and pass final oral examination by Thesis Committee.

## Requirements for the AM Degree

- A minimum of 8 tuition units are required.
- Must receive a grade of B or better, courses must be taken for a grade rather than credit/no credit.
- · Program Director endorses the student's proposed curriculum.
- Must complete an approved program of study consisting of at least eight structured, advanced-level courses in biology or the sciences.
- Students who elect to fulfill the requirements of a non-thesis degree receive the A.M. degree.

For further information on admission and program requirements, please visit: https://www.brown.edu/academics/biotechnology-graduate-program/masters-degree-programs (https://www.brown.edu/academics/biotechnology-graduate-program/masters-degree-programs/) and for additional information: https://graduateprograms.brown.edu/ graduate-program/biomed-biotechnology-am-scm (https:// graduateprograms.brown.edu/graduate-program/biomed-biotechnology-am-scm/)