

BIOLOGY (MS)

Master of Science in Biology

Unit: College of Arts and Sciences (<http://louisville.edu/artsandsciences/>) (GA)

Department: Biology (<http://louisville.edu/biology/>)

Program Website (<http://louisville.edu/biology/graduate/>)

Academic Plan Code(s): BIOLMS_THE, BIOLMS_NTH, BIOLMS_NAC

Program Information

The degree program is available to qualified individuals possessing a bachelor's degree from an accredited college or university. A biology undergraduate major is preferred. However, other majors containing sufficient biology, chemistry and math may be acceptable.

The Department of Biology offers master's degrees with programs of study tailored to the needs and interests of a diverse student population. Students may enroll on a full or part-time basis. The Department of Biology offers both thesis and non-thesis options. The thesis option is generally chosen by students with career goals which include a research emphasis. Students choosing this option take coursework and carry out an intensive independent research project under the supervision of a member of the Graduate Faculty, culminating in a written thesis based upon the research project. The non-thesis option is usually chosen by those who wish to advance their knowledge of biology but are not sure of a specific career goal or do not anticipate a research emphasis in their future.

Accelerated BA-BS/MS in Biology

Undergraduate students interested in the program's accelerated options should visit the catalog pages for the BA in Biology (<https://catalog.louisville.edu/undergraduate/majors/biology-ba/>) or the BS in Biology (<https://catalog.louisville.edu/undergraduate/majors/biology-bs/>) for more information.

Admission Requirements

Program admission requirements and application requirements can be viewed on the Department of Biology website (<http://louisville.edu/biology/>).

The following requirements/standards apply to applicants to the MS program in the Department of Biology:

1. The applicant must have a baccalaureate degree with a major in Biology or an acceptable sub-discipline, with an undergraduate GPA of 3.0 or higher.
2. While there is no minimum requirement for GRE scores, competitive students usually have scores around the 50th percentile or better on the general GRE test (verbal + quantitative). MCAT or DAT test scores at similar percentiles are also acceptable. **NOTE: SUBMISSION OF GRE SCORES IS OPTIONAL. WE SUGGEST ONLY SUBMITTING SCORES IF THEY WILL HELP PROVIDE A MORE HOLISTIC PERSPECTIVE TO YOUR APPLICATION. GRE SCORES ARE NOT USED FOR FUNDING DECISIONS.**
3. For foreign students, a TOEFL score of 83 on the internet-based exam, at least 6.5 on the IELTS exam is required or Duolingo score of 105 (students holding a baccalaureate or advanced degree from an

accredited institution in the United States or other English-speaking country are exempt from this requirement).

Deadline for Completed Applications

- July 1 for Fall admission
- November 1 for Spring admission.

Application Materials

Applications will be complete when the following materials have been received (final action on applications will not be taken until complete):

- A completed graduate application (<https://louisville.edu/graduate/futurestudents/apply-materials/application/>) form and fee
- Official transcripts of all previous undergraduate and graduate coursework. All academic credentials not in English must be accompanied with a notarized verbatim English translation in addition to official transcripts. If you studied outside of the United States, you are required to submit your academic records to a NACES (National Association of Credential Evaluation Services) verified credential evaluation service for a course-by-course evaluation to determine that your degree is equivalent to a US bachelor's degree.
- Official GRE, MCAT or DAT exam scores (optional)
- Two or more letters of recommendation from persons familiar with your academic performance and capabilities
- Official TOEFL, IELTS or Duolingo scores if required.

Send to:

Official documentation should be sent to the Graduate School.

Program Requirements

MS in Biology and Accelerated BA-BS/MS in Biology

Thesis option students are required to complete a minimum of 30 credit hours; non-thesis option students must complete a minimum of 33 credit hours.

A minimum of 12 (thesis option) or 17 (non-thesis option) credit hours, exclusive of thesis credit, must be in courses at the 600 level. Students intending to seek a PhD degree later are advised to take as many of their courses as possible at the 600 level or above.

Thesis Option

| Code | Title | Hours |
|---------------------------------------------------------------|---------------------------------------------|-----------|
| General Background Courses | | |
| One course from two of the following categories: ¹ | | 6-8 |
| | Cellular/Physiology | |
| | Subcellular/Genetics | |
| | Evolution or Systematics | |
| | Population, Community, or Ecosystem Ecology | |
| Other Coursework | | |
| BIOL 650 | Advanced Biostatistics | 4 |
| Electives | | 12-14 |
| Thesis Research (600 level) | | 6 |
| Minimum Total Hours | | 30 |

Non-Thesis Option

| Code | Title | Hours |
|----------------------------------------------------|---------------------------------------------|-----------|
| General Background Courses | | |
| One course from three of the following categories: | | 9-12 |
| | Cellular/Physiology | |
| | Subcellular/Genetics | |
| | Evolution or Systematics | |
| | Population, Community, or Ecosystem Ecology | |
| Other Coursework | | |
| BIOL 650 | Advanced Biostatistics | 4 |
| BIOL 691 | Independent Research | 3-4 |
| Electives | | 13-17 |
| Minimum Total Hours | | 33 |

¹ Courses to be selected by student's committee: one course from each of two (thesis option) or three (non-thesis option) Background Coursework categories.