

Master of Science in Biology

Admission Requirements

1. Must meet current minimum general requirements as published by the School of Graduate Studies.
2. GRE test scores are not required for admission to the biology graduate programs. Applicants have the option to submit GRE scores if they believe the scores provide evidence of academic qualifications.
3. Minimum GPA of at least 2.75 for all undergraduate work or 3.0 for the junior - senior credits.
4. Students must indicate thesis vs. non-thesis option upon application. M.S. (thesis) students may request a change to M.S. (non-thesis) only within the first two semesters (not including summer) of enrollment. Such requests will be evaluated by the Graduate Director and the student's advisory committee.
5. Satisfy the School of Graduate Studies' English Language Proficiency requirements as published in the graduate catalog.

Students admitted to the M.S. program may, after one calendar year, and upon the recommendation of his/her advisory committee, request to by-pass the masters degree and work directly toward the Ph.D. degree. The same GRE and GPA requirements apply for by-pass as for students applying for the doctoral program through normal application procedures, i.e., a GPA no lower than 3.0 for work completed while in the M.S. program. The recommendation of the advisory committee shall be brought to a vote in a faculty meeting. A minimum of one week before such a meeting, the faculty shall be notified that the student's updated file consisting of the materials used for application to the M.S. program, a transcript of all academic work completed at UND, and any additional materials the student wishes to have considered is available for review.

Students seeking summer or fall admission should complete their applications by February 15. Students seeking spring admission should check the School of Graduate Studies webpage for application deadline information. Master's degree applicants should specify interest in either the thesis or non-thesis option. Inquiries should be directed to the Director of Graduate Studies, Biology Department.

Degree Requirements

Students seeking the Master of Science degree at the University of North Dakota must satisfy all general requirements set forth by the School of Graduate Studies as well as particular requirements set forth by the Biology Department. The Master of Science degree program is designed to produce broadly trained biologists for job opportunities or continued graduate study.

Thesis Option

The M.S. degree program with thesis requires the completion of a program of study of at least 30 semester credits beyond the baccalaureate degree. The program of study, prepared with the approval of a three-member faculty advisor committee, includes the following:

1. A minimum of 30 credits including coursework, research and thesis with research and thesis accounting for no more than 50% of credits.
2. A minimum of three (3) credits of BIOL 503 Seminar (credits included in 1. above).
3. A minimum of four (4) credits of BIOL 509 Scientific Writing, (credits included in 1. above). Two credits should be taken while the student is writing their thesis proposal (see below).
4. BIOL 470 Biostatistics (3 credits) or other introductory statistics course and either 1) BIOL 571 Research Design and Statistical Analysis (3 credits), 2) a 500-level, data analysis course (3 credits minimum) in a specialty area approved by the student's advisory committee, or 3) prior equivalent graduate course in statistical analysis and experimental design if approved by the student's advisory committee.

5. Satisfactory completion of an acceptable thesis proposal (written proposal, proposal presentation and proposal defense) evaluated by the student's advisory committee.
6. Satisfactory completion of a comprehensive examination administered by the student's advisory committee; and
7. Satisfactory completion of an acceptable thesis (written thesis, thesis seminar and thesis defense) evaluated by the student's advisory committee.

Non-Thesis Option

This degree program is designed for students who wish to obtain broad training in graduate biology without research emphasis. The M.S. non-thesis degree program requires the completion of a program of study of at least 30 semester credits beyond the baccalaureate degree. The program of study prepared with the approval of a faculty supervisor, includes the following:

1. At minimum of 30 credits of coursework.
2. A minimum of three (3) credits of BIOL 503 Seminar (credits included in 1. above).
3. A minimum of 23 credits in the major (credits included in 1. above).
4. BIOL 599 Research and BIOL 998 Thesis credits will not count toward the 30 credits.
5. Satisfactory completion of a comprehensive examination administered by the student's advisor and two other faculty members selected by the student with the concurrence of the advisor, the faculty members involved and the department chairperson.
6. Satisfactory completion of an acceptable Independent Study. The Independent Study should be substantial and rigorous and involve a written report and a formal oral presentation to the Department.

Accelerated Bachelor of Science in Biology/Master of Science in Biology

The Accelerated Bachelor's/Master's (ABM) degree program allows exceptional undergraduate students at UND an opportunity to complete the requirements for both the bachelor's and master's degrees at an accelerated pace. These students may double count up to 12 graduate-level credits and obtain a non-thesis master's degree within 12 months of completing the bachelor's degree.

Student eligibility requirements for application to the ABM (4+1) program

1. Students must meet all graduate admissions eligibility requirements.
2. Students must have completed a minimum of 60 credits, including credits earned from advanced placement and dual credit. Students must apply before completion of the undergraduate degree.
3. Transfer students with a minimum of 60 credits—whether from the transfer institution alone or in combination with UND credits—and a minimum cumulative GPA of 3.0/4.0.
4. Students must have a minimum cumulative grade point average (GPA) of 3.0/4.0 at UND at the time of admission into the ABM degree program

Accelerated Bachelor's/Master's Application:

Timing: Students should apply for the program during their junior year as part of our graduate consideration for fall (deadline currently Feb 15).

1. In addition to the above-listed requirements, a prospective ABM student must identify a Biology faculty member willing to serve as the graduate advisor for the student.
2. A prospective student that meets the eligibility requirements above should schedule a meeting with his/her advisor to develop a plan of work for his/her bachelor's and master's degree programs.
3. Before admission to an ABM program can be finalized, students must submit, while still an undergraduate, the standard application for admission to the School of Graduate Studies, including an application, application fee, personal statement, and transcripts.

4. A Program of Study, signed by the applicant, the advisor, and the Director of Graduate Studies must be submitted by the Director of Graduate Studies on behalf of the student.
5. The Program of Study must clearly indicate:
- The courses (a maximum of 12 graduate credits) that will be double counted for both bachelor's and master's degrees. These courses will be taken prior to completing the bachelor's degree.
 - The courses that will be taken after being accepted into the graduate program. These courses will be taken after completing the bachelor's degree.
 - The graduation date for the master's degree that meets the time limit for the ABM program (i.e. completing the non-thesis master's degree within 12 months for a 4+1 program.)
 - After review of the materials submitted by the Director of the Graduate Program to the School of Graduate Studies, a letter of acceptance (or denial) to the master's program, contingent upon meeting the ABM requirements, is issued.
 - Applications accepted for admission to the Graduate Program will not be matriculated until completion of the bachelor's degree.
- Note: Students would be encouraged to take 16 credits each semester of the 4-year degree and then 9 credits in each semester of the 5th year.*

Requirements for Completion of the Accelerated Bachelor's/Master's Degree Program:

- Students must complete the bachelor's degree prior to entering the master's program. Students in the ABM may not elect to bypass the bachelor's degree.
- Students must maintain a cumulative GPA of 3.0/4.0 at UND to remain eligible for the ABM degree program.
- Students must maintain a cumulative GPA of 3.0/4.0 or better in the double counted graduate level courses.
- No more than twelve (12) credits of graduate work may be counted toward the requirements of both degrees.
- For a 4+1 program, students must complete the master's degree within 12 months from the completion of the bachelor's degree for a non-thesis master's degree.

Continuing Eligibility for Accelerated Bachelor's/Master's Degree Programs:

- If a student completes the bachelor's degree requirements with a cumulative GPA of less than 3.0/4.0, then he/she needs program approval to continue to pursue the ABM degree program.
- If a student becomes ineligible to participate in the ABM degree program, the Director of the Graduate Program must inform the student, the Department Chair, and the School of Graduate Studies in writing of his/her ineligibility.
- A student who is ineligible to participate in (or withdraws from) the ABM program, cannot double count any courses for both bachelor's and master's degrees.

Requirements for a Non-Thesis M.S. beyond B.S. degree include (per academic catalog):

- A minimum of 30 credits of coursework
- A minimum of 3 credits of BIOL 503 Seminar
- A minimum of 23 credits in the major
- BIOL 599 Research and BIOL 998 Thesis credits will not count toward the 30 credits.
- Satisfactory completion of a comprehensive examination administered by the student's advisor and two other faculty members selected by the student with the concurrence of the advisor, the faculty members involved, and the department chairperson
- Satisfactory completion of an acceptable Independent Study. The independent study should be substantial and rigorous and involve a written report and a formal oral presentation to the department.