

MOLECULAR BIOLOGY - MASTER OF SCIENCE

The MB program offers curricula leading to the MS and Ph.D. degrees in the areas of biochemistry, molecular genetics, molecular biology, cell biology, bioinformatics, and microbiology. Admission to the MB Program without deficiency is based on an undergraduate program essentially equivalent to that pursued by an undergraduate major in chemistry, biology, agronomy, horticulture, biochemistry, or microbiology at this university. An entering student is required to complete the Graduate Record Examination (General Aptitude). Undergraduate deficiency courses must be passed with a minimum grade of B.

Applicants are strongly encouraged to contact at least three individual program faculty before applying to identify a prospective advisor and laboratory in which to pursue graduate research. Previous course records and GPA standings (typically minimum of 3.3/4.0), GRE scores (typically minimum of 300 combined verbal and quantitative), TOEFL scores of foreign applicants (typically minimum of 550 on the paper-based or 213 on the computer-based), a letter of interest from the applicant that identified faculty laboratories of interest, and three letters of reference regarding research performance or potential are weighted heavily during the selection process.

Students with a BS degree in one of the disciplines listed above can expect to earn the MS degree in about 30 credits, including at least 6 credits of thesis research. Because research is central in both the MS and Ph.D. curricula, early selection of a research advisor is required. The master's committee is organized to assist in planning a program appropriate to the background and goals of the student. A final, formal presentation and oral defense of the original research documented in the MS thesis completes the degree requirements.

MS candidates must enroll in MOLB 599 Master's Thesis for 6 credits. May register for additional credits to maintain full-time status.

New Mexico State University master's accelerated program provides **the opportunity for academically qualified undergraduate students** to begin working on a master's degree **during their junior and senior years** while completing a bachelor's degree. Typically, a bachelor's degree requires four years to complete, and a master's degree requires an additional two years. The master's accelerated programs allow students the opportunity to complete a graduate program in an accelerated manner. You can also check NMSU's catalog for additional information about our programs. The MAP program allows undergraduate students to take graduate courses and count up to twelve credits toward both undergraduate and graduate degrees in COMM.

MAP Requirements

- The Graduate School allows qualified junior or senior students to substitute its graduate courses for required or elective courses in an undergraduate degree program and then subsequently count those same courses as fulfilling graduate requirements in a related graduate program.
- Undergraduate students may apply for acceptance to the accelerated master's program after completing 60 semester hours of undergraduate coursework of which a minimum of 25 semester credit hours must be completed at NMSU.
- The grade point average must be at a minimum of 3.25.

- Students must receive a grade of B or higher in this coursework to be counted for graduate credit. If a grade of B- or lower is earned, it will not count toward the graduate degree.

Accepted MAP Courses

Undergraduate students majoring in Genetics, Biochemistry, and Biology would be the most qualified to enter the Masters Accelerated Program. The courses that can be taken during the student's last two years of their BS degree program prior to graduation, and as a full graduate student are listed below. Students may only take a maximum of 12 credit hours towards their MAP.

The following courses are accepted for use in the MAP program, any other courses may be considered after a consultation with an advisor. An exception will need to be made to the degree audit in order for the additional course(s) to be included on both the Undergraduate and Graduate degrees.

Prefix	Title	Credits
Students may count a maximum of two of the following 450-499 level courses towards their MAP		
BIOL 470	Developmental Biology	
BIOL 474	Immunology	
BIOL 475	Virology	
BIOL 478	Molecular Biology of Microorganisms	
EPWS 486	Plant Virology	
GENE 486	Genes and Genomes	
Courses 500-599 level that may be taken for MAP		
BIOL 540	Science and Ethics	
MOLB 542	Biochemistry I	
MOLB 520	Molecular Cell Biology	
MOLB 550	Topics in Molecular Biology	

Qualifications for students entering the MAP program include all NMSU guidelines including a GPA of 3.2. Students who complete MAP in Molecular Biology will be expected to meet all of the requirements of the program for entry into the Molecular Biology and Interdisciplinary Program Graduate Program to complete their graduate degree. (GRE score will be waived for MAP.) These requirements can be found at <https://molb.nmsu.edu/how-to-apply/>. The MOLB-ILS program does not have a non-thesis option so all MS students in the program perform research that culminates to a published thesis.