

MOLECULAR & CELLULAR BIOLOGY, MS

for the degree of Master of Science in Molecular & Cellular Biology

Graduate Degree Programs in Molecular & Cellular Biology

The Master of Science in Molecular and Cellular Biology (MS in MCB) at the University of Illinois provides a non-thesis, course-based degree program for those students interested in additional advanced preparation for professional or graduate school or for future careers in industry, government or academia. The goal of the program is to provide students with a strong and broad educational background and problem-solving skill set in molecular and cellular biology at the advanced level without requiring a research thesis component. While the MS in MCB program is suitable as preparation for a PhD program in MCB or related areas, it is uncommon for students to enter the MCB PhD program at the University of Illinois after finishing this degree.

The MS in MCB degree program primarily serves two different audiences:

- Those students who wish to obtain a master's degree during a post-baccalaureate gap year, but prior to admission to professional or graduate school, by deepening and broadening their scientific knowledge base to better prepare for the next degree program.
- Those students who plan to obtain employment in industry, government, or nongovernmental organizations, where additional coursework at the advanced level would enhance their competitiveness, and in particular, where their laboratory skills could be bolstered through advanced laboratory courses without the necessity of conducting a research-based thesis project.

Students will take foundation and advanced courses from an approved list in the School of Molecular and Cellular Biology, choosing from a wide range of course topics, including biochemistry, molecular genetics, cell biology, microbiology, neurobiology, systems and computational biology, and advanced laboratory methods. Students will take advanced lecture, discussion, and seminar courses that hone scientific critical reading, analytical thinking, and communication skills that are highly desirable for advanced degree programs and future employers.

The MS in MCB degree requires a minimum of two full-time semesters of 16 credit hours each. Many students elect to take three semesters to finish the degree program. Some students may choose to take up 4 semesters to complete the program, particularly if they are employed part-or full-time. To maintain active status in the program, students must register for a minimum of 12 credit hours in 400- or 500-level MCB courses per semester.

Students entering the MS in MCB program will be expected to have completed a Bachelor's degree from an accredited 4-year college or university with undergraduate coursework in biology, chemistry, physics, calculus and English composition. Applicants must have completed the last 60 hours of coursework with grades of B (3.0 on a scale of 1 to 4) or better. Deficiencies in these areas will require additional coursework, as necessary, for successful completion of the degree.

for the degree of Master of Science Major in Molecular & Cellular Biology

Minimum required major and supporting course work: To maintain active status in the program students must register for a minimum of 12 credit hours in 400- or 500-level MCB courses per semester. A course-based master's degree requires a minimum of two full-time semesters. Consult the List of Approved Courses for the MS in MCB Program at this link (https://mcb.illinois.edu/msmcb/MS_MCB_ApprCrslst.pdf) for the most up-to-date information. For additional details and requirements refer to the MS MCB Program Handbook and the Graduate College Handbook (<http://www.grad.illinois.edu/gradhandbook/>).

Core Curriculum

Code	Title	Hours
One 3- or 4-hour 400-level course from each of 4 disciplinary areas:		12-14
Area 1: Biochemistry		
Area 2: Cell & Developmental Biology		
Area 3: Microbiology		
Area 4: Molecular & Integrative Physiology		

Elective Hours

Code	Title	Hours
Electives Hours Required		6-8
Courses to be chosen from the MS in MCB approved list of courses. See link above.		
Minimum 500-level Hours Required		12
Courses to be chosen from the MS in MCB approved list of courses. See link above.		
Other courses may be available See MS MCB Program Office for review request.		
Total Hours Required		32

Other Requirements

Requirement	Description
Minimum 500-level Hours Required:	12
Minimum Hours Required Within the 8 Unit:	
Courses taken "credit/no credit" may not be used toward degree requirements.	
Courses, or their equivalents, taken as an undergraduate/prior to admission to this program, may not be counted toward the requirements for this program.	
MCB 450 is only available to students who have not already taken MCB 354 or the equivalent.	
Minimum GPA:	3.0

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School of Molecular & Cellular Biology

Head of School of MCB: Milan Bagchi

Director of Graduate Studies (for MS in MCB): Melissa Michael

MS in MCB website (<https://mcb.illinois.edu/msmcb/>)

School of MCB Instructional Program Office (for MS in MCB): 127 Burrill Hall, 407 South Goodwin Avenue, Urbana, IL 61801

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College of Liberal Arts & Sciences

College of Liberal Arts & Sciences website (<https://las.illinois.edu/>)

School of Molecular & Cellular Biology

School of Molecular & Cellular Biology website (<http://mcb.illinois.edu/>)

Admissions

Graduate College Admissions & Requirements (<https://grad.illinois.edu/admissions/apply/>)