

Biology/Pre-Optometry Concentration • Bachelor of Science

Why Choose Pre-Optometry?

The Pre-Optometry program stresses a foundation of chemistry, biology, physics and mathematics to meet the requirements of the Michigan College of Optometry at Ferris State University and most other optometry schools. In addition to completing coursework, students can serve as practice patients in the University's optometry clinic and can join the Pre-Optometry Club, a supportive network of students with common goals and interests. Superior academic preparation and awareness of optometry as a profession are very important factors in a candidate's preparation.

The Michigan College of Optometry (MCO) prefers to accept applicants who have completed a bachelor degree. However, MCO will continue to accept applications from candidates who have completed a minimum of three years (90 semester hours) of specified course work at a college or university. The listing of courses presented in this program sheet fulfills the minimum specified course work to be contained in the initial 90 credits as well as the additional course work necessary to complete the Bachelor's Degree in Biology. An application to the Michigan College of Optometry may be submitted while the minimum requirements are being completed. The Michigan College of Optometry website at www.Ferris.edu/mco will provide additional information on application issues.

The coursework also prepares students to take the Optometry Admission Test. This test should be initially taken in early summer of the year prior to the year of entry to MCO. This test may be retaken without penalty ninety days after the initial test.

Get a Great Job

Pursuing a career in optometry can be demanding, but graduates find the career both financially and personally rewarding. Students who are interested in becoming optometrists and who are enrolled in the Pre-Optometry program are assured of programming that meets the specific requirements of the Michigan College of Optometry.

Students have the opportunity to interact with fellow students and faculty of the Michigan College of Optometry and to explore the program and facilities firsthand.

Generally, admission to a college of optometry requires at least three years of undergraduate preparation. The doctor of optometry degree offered by Ferris requires a minimum of three years of pre-professional study followed by four years of study in the Optometry curriculum.

Admission Requirements to Pre-Optometry

First year student admission is open to high school graduates (or equivalent) who demonstrate academic preparedness, maturity and seriousness of purpose with educational backgrounds appropriate to their chosen program of study. High school courses and grade point average, ACT composite score, and ACT reading and mathematics subscores will be considered in the admission and placement process. Transfer students must have at least 12 credits at the time of application with a minimum 2.0 overall GPA including an English and mathematics course, or they must provide their high school records and ACT scores for admission review.

Graduation Requirements

The Pre-Optometry program at Ferris leads to a Bachelor of Science degree. Graduation requires a minimum 2.0 GPA overall and a minimum of 121 credits including completion of all general education requirements as outlined on the General Education website. No grade lower than a 'C-' is acceptable in courses that apply to the major, supporting sciences, and application area of the program. At least 50% of the semester credits applying toward the Biology major must be completed at FSU with a minimum of 30 FSU credits overall.

Required Courses

Credit Hours

General Education

This degree requires completion of the General Education requirements for a Bachelor of Science degree. Details of these requirements are delineated on the General Education website. Courses listed below as program/major required courses with the indicators: C, S, Z, R, G, may also be used to satisfy some of these general education requirements.

The listing of courses below presents both the courses The Michigan College of Optometry requires and recommends be included in the first 90 credits to be minimally qualified for application and the courses that would need to be added to complete the Bachelor in Applied Biology Degree at Ferris State University.

Required Courses or Program:

Biology classes

BIOL 121	General Biology 1	4
BIOL 122	General Biology 2	4
BIOL 205	Human Anatomy-Physiology	5
BIOL 286	General Microbiology	3
BIOL 370	Developmental Biology	4
BIOL 373	Cell Biology	3
BIOL 375	Principles of Genetics	3
BIOL 460	Current Topics in BIOL	2
	Biology Electives 300 or higher	6

Choose 1 of the following 2 Ecology classes:

BIOL 346	Ecological Assessment	3
BIOL 347	Environmental Conservation	3
BIOL 442	Ecology	3

Supporting Sciences

MATH 220	Analytical Geometry-Calculus 1	5
CHEM 121	General Chemistry 1	5
CHEM 122	General Chemistry 2	5
CHEM 321	Organic Chemistry 1	5
CHEM 322	Organic Chemistry 2	5
PHYS 211	Introductory Physics 1	4
PHYS 212	Introductory Physics 2	4

Choose 1 of the following Biochemistry options

CHEM 324	Fund of Biochemistry	3
CHEM 364	Biochemistry	4

Biology Ap- 2 credits in addition to
plication Area

MATH 251 Stats for the Life Sciences 3

Additional Program Requirements

Computer competence (consult advisor)	
COMM 121 Fundamentals-Public Speaking	3
Electives to a credit total of: 121 credits (consult advisor)	12 - 13



More Information

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FERRIS STATE UNIVERSITY

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