Pre-Molecular Biotechnology, AS

Award Granted: Associate in Science
Credits/Contacts Required: **61/75**
Major code: 02/226
CIP Code: 260299

Description

The Pre-Molecular Biotechnology Degree is designed for students who want to transfer and complete degrees in Biochemistry, Biotechnology, Genetics, and Molecular Biology. Specific requirements for transfer to the Biotechnology Degree Program at Ferris State University are noted below. In addition, for preparation for transfer, this program provides students with a strong general education background. By satisfying the program requirements listed below, a student also satisfies the Michigan Transfer Agreement requirements. ✪

Transfer Areas of Interest

- Biochemistry
- Biotechnology
- Genetics

General Education Requirements (Min 32 Credits) @

- ENGL 101 - Rhetoric & Composition **Credits: 3**
- XXXX xxx - Communications Elective (ENGL 102 or ENGL 145; COMM 103, COMM 104, or COMM 120) **Credits: 3**
- MATH 141 - Analytical Geometry & Calculus I **Credits: 5**
- BIOL 110 - Evolution & Diversity **Credits: 4**
- CHEM 110 - General Chemistry I **Credits: 5**
- PSYC 201 - Introduction to Psychology **Credits: 3**
- XXXX xxx - Social & Behavioral Science Electives (ECON 131 & ECON 132 are desirable electives for the Biotechnology degree.) **Credits: 3** *
- XXXX xxx - Humanities Electives **Credits: 6** *

Program Requirements (Min 29 Credits) @

- BIOL 112 - Cells & Molecules **Credits: 4**
- CHEM 112 - General Chemistry II **Credits: 5**
- CHEM 201 - Organic Chemistry I **Credits: 4**
- CHEM 202 - Organic Chemistry II **Credits: 4**
- MATH 210 - Introduction to Statistics **Credits: 4**
- PHYS 201 - Elements of Physics I **Credits: 4** **
- PHYS 202 - Elements of Physics II **Credits: 4** **

Suggested Sequences per Semester

First Semester

- BIOL 110 - Evolution & Diversity **Credits: 4**
- CHEM 110 - General Chemistry I **Credits: 5**
- ENGL 101 - Rhetoric & Composition **Credits: 3**
- MATH 141 - Analytical Geometry & Calc I **Credits: 5**

First Semester Total - Credit(s): 17 | Contacts: 21

Second Semester

- BIOL 112 - Cells & Molecules **Credits: 4**
- CHEM 112 - General Chemistry II **Credits: 5**
- MATH 210 - Introduction to Statistics **Credits: 4**
- XXXX xxx - Communications Elective **Credits: 3**

Second Semester Total - Credit(s): 16 | Contacts: 20

Third Semester

- CHEM 201 - Organic Chemistry I **Credits: 4**
- PHYS 201 - Elements of Physics I **Credits: 4** **
- PSYC 201 - Introduction to Psychology **Credits: 3**
- XXXX xxx - Humanities Electives **Credits: 3** *

Third Semester Total - Credit(s): 14 | Contacts: 17

Fourth Semester

- CHEM 202 - Organic Chemistry II **Credits: 4**
- PHYS 202 - Elements of Physics II **Credits: 4** **
- XXXX xxx - Social & Behavioral Science Electives **Credits: 3** *
- XXXX xxx - Humanities Electives **Credits: 3** *

Fourth Semester Total - Credit(s): 14 | Contacts: 17

NOTES:

✪ This degree requires fulfillment of the Michigan Transfer Agreement General Education requirements. All courses used to fulfill the MTA must have a grade of "C" or higher.
@ Many courses require specific placement scores or prerequisite courses. Students not meeting the prerequisites for their required courses may need to take more time and more credits to fulfill the degree requirements.
* Students must choose courses in Social & Behavioral Sciences and Humanities, each from two different subject areas to meet MTA. See advisor for details.
** Students may take PHYS 205 & PHYS 206 as an alternative.

Actual courses and sequence vary with transfer institution and undergraduate degree specialization. It is in the student's best interest to review transfer guides for specific university and program requirements. Students should regularly consult their transfer institution as well as their Bay College advisor prior to scheduling courses.
Students transferring to FSU Biotechnology program only need to complete MATH 140 and are not required to complete PHYS 202. Due to credit transfer limits, students transferring to NMU are advised to complete either Organic Chemistry or Physics at NMU. These students would be better served by completing the general AS degree.