

# GENERAL STUDIES IN MATH AND NATURAL SCIENCES (AS)

**Catalog Effective Term:** Fall 2024

**Program Code:** ASGSMS

**Credential:** Associate in Science

This program allows students to design a program of study to meet their individual needs. This may be a good option if students are undecided about a major and want to explore a variety of discipline areas with a concentration in math and natural sciences. The program also allows students to customize their coursework to the requirements of the senior college or university to which they are transferring. Students should begin by meeting with a counselor who will assist them in developing a program of study that meets all of the College's graduation requirements. A counselor can also help students determine their interests and career and educational goals as well as provide transfer and career information.

## Articulation

Eastern Michigan University, Technology Management BS

Complete both of the following concentrations:

- Math/Science Concentration
- Concentration 2

**Minimum Credits Required for the Program: 60**

## Math/Science Concentration

Complete a concentration in math or science 15 credit hours from no more than two disciplines chosen from Biology, Chemistry, Environmental Science, Geology, Math or Physics (A minimum of 6 credits at the 200 level is strongly recommended).

Please see an advisor to select courses that will meet the requirements of the college to which you are transferring.

Students transferring to EMU should select from the following WCC courses:

Code	Title	Credits
BIO 161	General Biology I Ecology and Evolution	4
BIO 162	General Biology II Cells and Molecules	4
BIO 208	Genetics	4
BIO 215	Cell and Molecular Biology	4
BIO 227	Biology of Animals	4
CEM 105	Fundamentals of Chemistry	4
CEM 111	General Chemistry I	4
CEM 122	General Chemistry II	4
CEM 140	Organic Biochemistry	4
CEM 211	Organic Chemistry I	4
CEM 222	Organic Chemistry II	4
ENV 101	Introduction to Environmental Science	4
ENV 105	Introduction to Environment and Society	3
GLG 100	Introduction to Earth Science	4
GLG 103	Field Geology	3
GLG 104	Weather	4
GLG 114	Physical Geology	4

GLG 276	Principles of Geographic Information Systems	3
MTH 191	Calculus I	5
MTH 192	Calculus II	4
MTH 197	Linear Algebra	4
MTH 293	Calculus III	4
MTH 295	Differential Equations	4
PHY 111	General Physics I	4
PHY 122	General Physics II	4
PHY 211	Analytical Physics I	5
PHY 222	Analytical Physics II	5

## Concentration 2

Complete a second concentration. Select 9 credits from no more than two disciplines listed below (A minimum of 3 credits at the 200 level is strongly recommended). Select from Anthropology, Arabic, Art, Astronomy, Biology, Chemistry, Chinese, Communication, Computer Information Systems, Computer Networking Technology, Computer Science, Computer Systems Security, Computer Systems Technology, Criminal Justice, Dance, Drama, Economics, English, Environmental Science, French, Geography, Geology, German, Health Science, History, Humanities, Math, Music, Philosophy, Physics, Political Science, Psychology, Sociology or Spanish.

Course	Title	Credits
<b>First Semester</b>		
ENG 111	Composition I	4
Nat. Sci. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#naturalsci">https://coursecatalog.wccnet.edu/academics/general-education/#naturalsci</a> ) <sup>1</sup>		3
Soc. Sci. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#socbehavsci">https://coursecatalog.wccnet.edu/academics/general-education/#socbehavsci</a> ) <sup>1</sup>		3
Concentration 2 course		3
Math/Science Concentration course		3
<b>Credits</b>		<b>16</b>
<b>Second Semester</b>		
MTH 191	Calculus I (or higher)	5
Arts/Human. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#arthuma">https://coursecatalog.wccnet.edu/academics/general-education/#arthuma</a> ) <sup>1</sup>		3
Speech/Comp. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#writing">https://coursecatalog.wccnet.edu/academics/general-education/#writing</a> ) <sup>1</sup>		3
Math/Science concentration course		3
<b>Credits</b>		<b>14</b>
<b>Third Semester</b>		
Nat. Sci. Lab Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#natscilab">https://coursecatalog.wccnet.edu/academics/general-education/#natscilab</a> ) <sup>1</sup>		3
Concentration 2 course		3
Math/Science concentration course		3
Math/Science concentration course		3
Open Elective(s) to reach a minimum of 60 total credits.		3
<b>Credits</b>		<b>15</b>
<b>Fourth Semester</b>		
Arts/Human. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#arthuma">https://coursecatalog.wccnet.edu/academics/general-education/#arthuma</a> ) <sup>1</sup>		3
Soc. Sci. Elective(s) ( <a href="https://coursecatalog.wccnet.edu/academics/general-education/#socbehavsci">https://coursecatalog.wccnet.edu/academics/general-education/#socbehavsci</a> ) <sup>1</sup>		3
Concentration 2 course		3

2 General Studies in Math and Natural Sciences (AS)

Math/Science concentration course	3
General Education and/or open elective(s) to reach a minimum of 30 General Education and 60 total credits. <sup>1</sup>	3
<b>Credits</b>	<b>15</b>
<b>Total Credits</b>	<b>60</b>

<sup>1</sup> Courses used to meet General Education Requirements cannot be counted toward the minimum credits for the concentrations.