MATHEMATICS | BACHELOR OF SCIENCE: MATHEMATICS (INDUSTRIAL/ACADEMIC)

Program Summary

Code	Title	Hours
General Education Courses		34
Major Core Courses		45
Cognate Course		4
Science Requirement [2]		20
Open Electives [1]		17
Total Hours		**120**

[1] Open electives are the credit hours required to reach a minimum of 120 total hours and 45 upper-level hours. The number listed assumes all courses are completed at FHSU as listed. This number may vary if students transfer courses, or have individual substitutions allowed. Students should speak with their advisor if either situation applies to determine if the number will vary, and to ensure they enroll in a minimum of 45 upper-level hours.
Students entering within 1 year of high school graduation will take UNIV 101 Freshman Seminar and may apply that hour in the open elective category.

[2] A candidate for a Bachelor of Science degree must complete 20 hours of Natural Science coursework.

Program Requirements

General Education

All undergraduate degrees require completion of the Kansas Systemwide General Education (https://catalog.fhsu.edu/general-education/).

Courses identified with GE on this page may satisfy a general education requirement in addition to the identified degree requirement. Students who apply a degree requirement to satisfy a general education requirement will typically add an equal number of hours to the the university elective category. This flexibility may allow you to complete a minor or certificate within the 120 hour degree. Transfer students and students majoring in programs with approved exceptions (https://www.fhsu.edu/general-education/documents/fhsu-gen-ed-transfer-exceptions-explainer1.pdf) are especially encouraged to select these courses in completing General Education requirements to maximize the likelihood of completing the degree with 120 credit hours.

Code	Title	Hours
General Education		**34-35**

Code	Title	Hours
Major Core Courses		
CSCI 121	Computer Science I	3
MATH 234	Analytic Geometry and Calculus I GE	5
MATH 235	Analytic Geometry and Calculus II	5
MATH 236	Analytic Geometry and Calculus III	3
MATH 240	Linear Algebra	3
MATH 250	Elements of Statistics GE	3
MATH 301	Introduction to Proof	3
MATH 350	Mathematical Statistics	3
MATH 354	Differential Equations	3
MATH 610	Higher Algebra	3
or MATH 646	Discrete Structures	
MATH 631	Advanced Calculus I	4
MATH 665	Numerical Analysis	3
MATH 675	Seminar in Mathematics	1
MATH 300+	Select one 300+ level Mathematics elective	3
Cognate		
PHYS 211/211L	Engineering Physics I GE	4
Science Requirement		**20**
Select 20 credit hours of science courses outside of major		
Total Hours		**69**

Degree Requirements

Code	Title	Hours
All bachelor degrees require:		
GPA of 2.0 on FHSU courses & 2.0 on all coursework (Higher program requirements prevail over the 2.0 when set)		
A minimum of 30 hours earned from FHSU with a grade of D, C, B, or A		
Successful completion of an upper division Writing and Information Literacy course (Most majors contain a course designated)		
A minimum of 45 hours of recognized upper division credit		
A minimum of 120 hours of recognized college credit		

Degree Maps

Academic Degree Maps are term-by-term sample course plans that specify milestones, courses, and special requirements that are necessary for facilitating on-time completion. Degree Maps are ***examples*** and are not prescriptive. Individualized choices such as concentration options, transfer credits, optional minors, advisory programs (certificates), etc. can alter the recommended coursework. Course offerings are subject to change. Students should consult with their academic advisors for additional guidance on course planning.

To determine courses to take in the directed choices (often listed as Program Elective Course) and directed elective course blocks see the overview tab for courses. To locate approved courses in General Education areas (Undergraduate Programs) see the general education section (https://catalog.fhsu.edu/general-education/) of the catalog.

The undergraduate course maps typically advise the most efficient route for students to complete the general education requirements. Courses that are required in the major may be listed as fulfilling relevant general education requirements. This will result in more open elective course hours in some maps than is listed on the degree overview page.