

# MINOR: MATHEMATICS

## Student Learning Outcomes

Students graduating from this program will:

- a) demonstrate reasoning skills necessary to read and understand basic mathematical proofs.
- b) construct basic mathematical or statistical models for solving real-world problems.
- c) apply well-known analytical, statistical, or numerical techniques to analyze basic models.
- d) produce a well-written technical report or assignment related to mathematics or statistics.

## Program Requirements

A minor in mathematics may be obtained by completing a total of 19-20 hours of mathematics courses, including:

Code	Title	Credits
MATH 210 or MATH 266	Calculus I Accelerated Calculus I	4
MATH 220 or MATH 268	Calculus II Accelerated Calculus II	3-4
One MATH/STAT course at 200-level or above <sup>1</sup>		3-4
MATH 250 STAT 235	Calculus III Elementary Statistics	
Three MATH/STAT courses at the 300-level or above in the department <sup>2</sup>		9
MATH 300	Linear Algebra I	
MATH 301	On Solid Ground: Sets and Proof	
MATH 314	Graph Theory with Applications	
MATH 345	Ordinary Differential Equations	
MATH 402	Advanced Analysis I	
MATH 406	Partial Differential Equations	
MATH 407	Introduction to Complex Variables	
MATH 410	Abstract Algebra	
MATH 420	Linear Algebra II	
MATH 434	Scientific Computing	
MATH 464WI	History of Mathematics	
MATH 469	Mathematical Modeling	
STAT 415	Statistical Design of Experiments	
STAT 436	Introduction To Mathematical Statistics I	
STAT 441	Introduction To Mathematical Statistics II	
STAT 480	Statistical Models in Actuarial Science	
STAT 482	Statistical Models for Life Contingencies	
<b>Total Credits</b>		<b>19-21</b>

<sup>1</sup> One of the following courses can be taken to fulfill an elective at the 200-level: E&C-ENGR 241, MEC-ENGR 272.

<sup>2</sup> One of the following courses can be taken to fulfill for the 300-level or above elective: CIV-ENGR 319, COMP-SCI 394R, E&C-ENGR 341R, PHYSICS 330.