

# 2022 - 2023

# Mathematics Associate in Science Degree

Complete the following program of study (Major C.6200.AS). Major requirements (23 units minimum).

Purpose: To prepare students for transfer into four-year mathematics programs. The major also provides fundamental background for persons who plan to become systems analysts or computer programmers. The following courses must be completed with a "C" or better grade.

Name:	Student ID:	Date:
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#### Course Overview and Selection

### **Core Courses:**

Course	Course Description	Units	Completed	In Progress	Planned
MATH 5A	Math Analysis I (one)	5			
MATH 5B	Math Analysis II (two)	4			
MATH 6	Math Analysis III (three)	5			
MATH 17	Differential Equations and Linear Algebra	5			

#### Select one course from:

Course	Course Description	Units	Completed	In Progress	Planned
CSCI 40	Programming Concepts and Methodology I	4			
ENGR 40	Programming for Scientists and Engineers	4			
MATH 11	Elementary Statistics	4			
PHYS 2A	General Physics 1	4			
PHYS 4A	Physics for Scientists and Engineers I	4			

### Notes:

No credit will be given for a course if a student has previously passed ("D" or better grade) a more advanced course in mathematics.

## **Program Learning Outcomes:**

- 1. Communicate mathematics with understanding (read, write, listen, speak).
- 2. Use critical thinking and mathematical reasoning to solve a variety of problems.
- 3. Apply mathematical models to real world situations.
- 4. Use technology, when appropriate, to enhance their mathematical understanding, critical thinking, and problem solving skills.
- 5. Demonstrate the ability to use symbolic, graphical, numerical, and written representations of mathematical ideas.

#### Comments: