

2021 - 2022

## 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: \_\_\_\_\_

### 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 (one) | 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         | 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: