STEM

Liberal Arts: Mathematics and Science (Mathematics Track) Degree Map

🔶 TRANSFER DEGREE 🛛 MIDDLETOWN CAMPUS 🔂 DISTANCE LEARNING

Career and Transfer Focus

Graduates have flexibility to pursue a variety of transfer programs and career paths, such as statistics, artificial intelligence, actuarial science, teaching, cryptology, mathematical modeling, finance, economics and more. Salaries for these disciplines are highly competitive with other STEM fields.

Three Reasons to Consider the Mathematics Track in Liberal Arts: Mathematics and Natural Science

- 1. There is a significant cost savings during your first two years of study while learning problem solving, logic and critical thinking skills.
- 2. We offer small class sizes that provide the ability to interact with professors both inside and outside of the classroom as well as a math tutorial center to give you the best opportunity for success.
- 3. The courses in our program are transferable to most math-related 4-year programs..

Keep This in Mind

To complete in two years, you have to place into MAT 205 (Calculus 1).

While most math courses are offered on the Middletown campus during the day, some are offered during the evening, online, hybrid, and at alternative locations.

MAT 214 (Differential Equations and Series) is typically offered in the Spring and Summer semesters. MAT 136 (Introduction to Discrete Mathematics) is typically not offered in the Summer.

In addition to the college tutorial center, the SUNY Orange Math department has a mathematics tutorial lab on the Middletown and Newburgh Campuses (walk-in tutorial center).

Four year programs may have specified science classes in their programs as well as computer science courses. As you narrow your choices of transfer destinations, pay close attention to science requirements and sequencing.

Mathematics Track Gateway Courses:

• Gateway courses: MAT 205

Courses above have been recommended by the department to help introduce you to the program (Gateway courses) and guide you in selecting courses that will provide you with the best academic experience (Key courses and suggested Electives).

First Semester

| Course # | Course Name | P, C, P/C | Cr |
|----------|------------------------|-----------|----|
| ENG 101 | Freshman English 1 | Р | 3 |
| MAT 205 | Calculus 1 | Р | 4 |
| | Elective | | 3 |
| | SUNY Elective (GE 2) | | 3 |
| | SUNY Elective (GE 3) | | 3 |
| | Total Semester Credits | | 16 |

Milestones

During this semester, students should:

- Visit Career Services and explore a career inventory
- Connect with the Math Lab and the Center for Student Success to discuss challenges and become more academically successful
- If you are interested in becoming a tutor, discuss the qualifications with the Math Lab Coordinator or the Director of the Center for Student Success

Second Semester

| Course # | Course Name | P, C, P/C | Cr |
|----------|-------------------------------|------------------|----|
| MAT 206 | Calculus 2 | Р | 4 |
| ENG 102 | Freshman English 2 | Р | 3 |
| MAT | Restricted Math Elective * | | 3 |
| | SUNY Elective (GE 2) | | 3 |
| | SUNY Elective (GE 4, 5 or 6) | | 3 |
| PES 100 | Concepts of Physical Wellness | | 1 |

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| Course # | Course Name | P, C, P/C | Cr |
|----------|------------------------|-----------|----|
| | Total Semester Credits | | 17 |

Milestones

During this semester, students should:

- Visit Transfer Fair and speak with potential transfer schools
- Apply for returning student scholarships
- When choosing electives, consider degree requirements at your top transfer school choices

Third Semester

| Course # | Course Name | P , C , P / C | Cr |
|----------|------------------------------|---|-----|
| MAT 207 | Calculus 3 | Р | 4 |
| MAT | Restricted Math Elective * | | 3 |
| COM 101 | Foundations of Communication | | 3 |
| | SUNY Elective (GE 8 or 9) | | 3 |
| PES | Physical Education | | 0.5 |
| PES | Physical Education | | 0.5 |
| | Total Semester Credits | | 14 |

Milestones

During this semester, students should:

- Begin communication with potential references and apply to transfer school
- Seek guidance on resume development

Fourth Semester

| Course # | Course Name | P , C , P / C | Cr |
|----------|---|---|----|
| MAT | Restricted Math Elective * | | 3 |
| Either | | | |
| | SUNY Elective (GE 2) | | |
|)r | | | |
| CSC 101 | Computer Science 1 | | |
|)r | | | |
| CSC 102 | Computer Science 2 | | |
| Dr | | | |
| CSC 201 | Data Structures | | |
| Dr | | | _ |
| CSC 204 | Computer Organization and Assembly Language | | 3 |
| | Elective | | 3 |
| Either | | D | |
| MAT 122 | College Trigonometry*** | Р | |
|)r | | | 2 |
| Either | Elective | | 3 |
| MAT 121 | College Algebra** | Р | |
| Or | Conege Algeora | I | |
| MAT 131 | Pre-Calculus** | Р | |
|)r | | I | |
| /1 | Elective | | 3 |
| | Total Semester Credits | | 15 |
| | | | 10 |

Milestones

During this semester, students should:

• Apply for graduation

• Apply for transfer scholarships

TOTAL DEGREE CREDITS: 62

Notes:

* Students may select from these Restricted Math electives: MAT 120 Intro. to Statistics, MAT 136 Intro. to Discrete Math, MAT 211 Linear Algebra, MAT 214 Differential Equations

** For students who place into MAT 121 or MAT 131

*** For students who place into MAT 121