## Program Pathway - B.S. Mathematics

The B.S. in Mathematics will provide students with a broad background in mathematics and prepare students for graduate programs in mathematics as well as careers in both the public and private sector.

This map is a term-by-term sample course schedule. Highlighted courses have been identified as "key courses." It is strongly advised that students make every effort to pass these courses on the first attempt with a "C" or higher to be successful in this program. The milestones listed below each year are designed to keep you on course to graduate in four years. Missing milestones could prevent you from being eligible for a particular program or could result in a delay in graduation. The Program Pathway serves as a general guideline to help you build a full schedule each term.

| First Year - Fall |  | Course Title | Credits |
| :--- | :--- | :---: | :--- |
| Course Number | Pre-requisites |  |  |
| ENGL 1101 * | English Composition I | 3 | Minimum SAT/ACT/Accuplacer scores |
| MATH 1113 | Pre-calculus | 3 | MATH 1111 or Minimum <br> SAT/ACT/Accuplacer scores |
| CMPS 1301 | Principals of Programming I | 3 | MATH 1111 |
| COMM 1110 | Fundamentals of Speech | 3 |  |
| PRSP 1050 | Perspectives in STEM | 1 |  |
| Social Sciences <br> Elective | Subject options: ANTH, ECON, GEOG, <br> HIST, PHIL, POLS, PSYC, SOCI <br> Semester Total | $\mathbf{3}$ | varies |

## First Year - Spring

| Course Number | Course Title | Credits | Pre-requisites |
| :--- | :--- | :---: | :--- |
| ENGL 1102 | English Composition II | 3 | ENGL 1101 ('C' or higher) |
| MATH 2253 | Calculus \& Analytical Geometry I | 4 | MATH 1113 |
| Humanities <br> Elective | Subject options: ENGL, ARTS, HUMN, <br> MUSC, THEA | 3 | varies |
| HIST 2111 or <br> 2112 | United States History | 3 | ENGL 0999 unless exempt |
| POLS 1101 | American Government | $\mathbf{3}$ | ENGL 0999 unless exempt |
|  | Semester Total | $\mathbf{1 6}$ |  |

## First Year Milestones

- Complete ENGL 1102, MATH 1113, MATH 2253, and CMPS 1301
- Meet with your advisor
- Explore career options
- Consider the B.S. Mathematics: Actuarial Science Concentration
- Meet with Career and Professional Development as needed

[^0]| Second Year - Fall |  |  |  |
| :---: | :---: | :---: | :---: |
| Course Number | Course Title | Credits | Pre-requisites |
| MATH 2254 | Calculus \& Analytical Geometry II | 4 | MATH 2253 |
| MATH 2256 | Introduction to Linear Algebra | 3 | MATH 2253; Co-requisite: MATH 2254 |
| English Elective | English Literature (ENGL 2xxx) | 3 | ENGL 1102 ('C' or higher) |
| Lab science | Lab Science Sequence I (BIOL, CHEM, or PHYS) | 4 | varies |
|  | Semester Total | 14 |  |

Second Year - Spring

| Course Number | Course Title | Credits | Pre-requisites |
| :--- | :--- | :---: | :--- |
| MATH 2255 | Calculus \& Analytical Geometry III | 4 | MATH 2254 |
| MATH 2403 | Differential Equations | 4 | MATH 2254; Co-requisite: MATH 2256 |
| MATH 3101 * <br> (S) | Introduction to Advanced Math | 3 | MATH 2254 |
| Lab science | Lab Science Sequence II (BIOL, <br> CHEM, or PHYS) | 4 | Lab Science Sequence I |
|  | Semester Total |  | $\mathbf{1 5}$ |

## Second Year Milestones

- Complete MATH 3101
- Meet with your advisor
- Consider joining the Math Club
- If career path is undetermined, meet with Career and Professional Development

| Third Year - Fall |  |  |  |
| :---: | :---: | :---: | :---: |
| Course Number | Course Title | Credits | Pre-requisites |
| MATH 4701 * (F) | Probability and Stats I | 3 | MATH 2255 |
| MATH 3201 * (F) | Geometry | 3 | MATH 3101 |
| MATH elective * | Discuss with advisor | 3 | varies |
| MATH elective* | Discuss with advisor | 3 | varies |
| STM elective* | Subject options: MATH, CHEM, CMPS, ECON, ENGR, PHYS | 3 | varies |
|  | Semester Tota | 15 |  |


| Third Year - Spring |  |  |  |
| :---: | :---: | :---: | :---: |
| Course Number | Course Title | Credits | Pre-requisites |
| MATH elective * | Discuss with advisor | 3 | varies |
| MATH elective * | Discuss with advisor | 3 | varies |
| MATH elective * | Discuss with advisor | 3 | varies |
| STM elective* | Subject options: MATH, CHEM, CMPS, ECON, ENGR, PHYS | 3 | varies |
| STM elective* | Subject options: MATH, CHEM, CMPS, ECON, ENGR, PHYS | 3 | varies |
|  | Semester Total | 15 |  |

* denotes grade of ' C ' or higher required


## Third Year Milestones

- Meet with your faculty advisor
- Establish specific career goals and research necessary education/training
- Research graduate school programs (if applicable)
- Have completed resume and submit on Handshake
- Attend a Career Fair and explore internship opportunities
- Meet with Career and Professional Development as needed

| Fourth Year - Fall | Course Title | Credits | Pre-requisites |
| :--- | :--- | :---: | :--- |
| Course Number |  | MATH 3101 |  |
| MATH 4101* (F) | Abstract Algebra I | 4 | MATH 3101 \& 2255 |
| MATH 4601* (F) | Real Analysis I | 3 | varies |
| MATH elective* | Discuss with advisor | 4 | varies |
| STM elective* | Subject options: MATH, CHEM, CMPS, <br> ECON, ENGR, PHYS | Semester Total | $\mathbf{1 4}$ |
|  |  |  |  |

Fourth Year - Spring

| Course Number | Course Title | Credits | Pre-requisites |
| :--- | :--- | :---: | :--- |
| MATH 4102* (S) | Abstract Algebra II | 3 | MATH 4101 |
| MATH 4602* (S) | Real Analysis II | 3 | MATH 4601 |
| MATH elective * | Discuss with advisor | 3 | varies |
| STM elective* | Subject options: MATH, CHEM, <br> CMPS, ECON, ENGR, PHYS | 3 | varies |
| Social Sciences <br> Elective | Subject options: ANTH, ECON, <br> GEOG, HIST, PHIL, POLS, PSYC, SOCI | 3 | varies |
|  | Semester Total |  | $\mathbf{1 5}$ |

## Fourth Year Milestones

- Meet with your faculty advisor
- Polish resume or CV with Career and Professional Development
- Submit Graduation Application to Office of Enrollment Services the semester before you intend to graduate
- Apply to Graduate School and/or for jobs

Notes: Courses with (F) designates fall only courses, (S) designates spring only

The Program Pathway is not a contract, neither expressed or implied, between the student and Dalton State College, but represents a flexible program of the current catalog's curriculum which may be altered at any time to carry out the academic objectives of the College.

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