# Mathematics Area of Concentration, A.S. STEM



**Frederick Community College Suggested Transfer Pathway** 

**Catalog Year 2018-2019** 

		FCC Course	Credits	UMD College Park B.S. Mathematics, Traditional Track	UMBC B.S. Mathematics	Towson Pure Mathematics concentration	Hood B.A. Mathematics
Semester 1	1	EN 101 English Composition	3	EN 101*	EN 101*	EN 101*	EN 101*
	2	MA 210 Calculus I (Prerequisite MA 111)*	4	MA 210*	MA 210*	MA 210	MA 210
	3	Humanities Gen Ed	3	Choose	World Language 101, 102, or 201 or ASLS 102, 103 or 202	PH 205, 207, 208, or 210	PH 206
	4	PE/Health Requirement	1/3	Choose	Choose	Choose	Choose
	5	CIS 106 Introduction to Object Design & Programming	3	CIS 106 (transfers as elective)	CIS 106 (transfers as elective)	CIS 106	CIS 106
Semester 2	6	MA 211 Calculus II	4	MA 211*	MA 211*	MA 211	MA 211
	7	Biological & Physical Sciences Gen Ed with a lab (PY 203 Physics I recommended**)	4	PY203*	PY 203*	PY 203	PY 203
	8	Social & Behavioral Sciences Gen Ed	3	AN101 or AN103	Choose	Choose	Choose
	9	MA 214 Introduction to MATLAB	1	MA214 (transfers as Gen Ed)	MA 214 (transfers as elective)	MA 214 (may transfer)	MA 214 (does not transfer)
	10	MA 202 Introduction to Discrete Math or CIS 201 Computer Science I	3	MA 202	CIS 201* (must also take CIS 202)	MA 202 (transfers as elective)	MA 202
Semester 3	11	MA 212 Calculus III	4	MA212*	MA 212*	MA 212	MA 212
	12	Communications Gen Ed	3	Choose	Choose	Choose	Choose
	13	MA 218 Linear Algebra	3	MA218*	MA 218*	MA 218	MA 218
	14	Biological & Physical Sciences Gen Ed (PY 204 Physics II recommended)	3/4	PY204	PY 204	PY 204	PY 204
	15	General Education Elective	3	Choose	World Language 102, or 201 or ASLS 103 or 202	Choose	AR 103, GG 101, GG 102, HI 121, HU 105, HU 107, or MU 108
Semester 4	16	MA 213 Differential Equations	3	MA213*	MA 213*	MA 213	MA 213
	17	Choose an elective in consultation with an advisor (depending on transfer school CIS 202 Computer Science II may be recommended)	3/4	CIS 201	CIS 202**	CIS 201	CIS 201
	18	Social & Behavioral Sciences Gen Ed in a different discipline from the first	3	Choose	Choose	Choose	Choose
	19	Choose an elective in consultation with an advisor	3/4	Choose	World Language 201 or ASLS 202	Choose	MA 207
	20	Arts Gen Ed	3	Choose	Choose	Choose	Choose

Important Notes: The schools represented here are only a small sample of transfer options. Information is subject to change, and this suggested pathway is a guide, not a contract. Students should use this in consultation with an FCC advisor, the FCC catalog, ARTSYS (the state-wide online transfer system), and an advisor at the transfer institution. See the "Pathway Notes" section for more detailed information.

Full-time student: Follow the green semester blocks in order. Part-time student: Follow the blue course sequence at your own pace.

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## **Pathway Notes**

\* must earn a grade of "C" or higher in this course

#### **Transfer Institution Information**

**University of Maryland** In addition to the traditional track, University of Maryland offers tracks in Secondary Education, Statistics, and Applied Math, in addition to degrees in Computer Science. Your FCC advisor can help you customize your pathway with the best courses for transferring into these other programs.

University of Maryland Baltimore County (UMBC) FCC Cultural Competence courses that also fulfill UMBC's Culture requirement are: AN 101, ASLS 202, GG 201, HE 130, HU 210, World Languages, MU 108. In addition to Mathematics, UMBC offers an Area of Concentration toward Graduate Studies, and Areas of Concentration in Applied Mathematics, Optimization and Operations Research, Actuarial Science, Statistical Sciences, Mathematics Education; a Bachelor of Science in Statistics. Your FCC advisor can help you customize your pathway with the best courses for transferring into these other programs.

**Towson** The Towson Pure Mathematics Concentration requires 66 units completed with a grade equivalent of 2.00 or higher. In addition to Pure Mathematics, Towson offers Math majors concentrations in Actuarial Science & Risk Management, Applied Mathematics, Pure Mathematics, Mathematics Secondary Education, and combined majors in Mathematics and Computer Science with or without a Security Track." Your FCC advisor can help you customize your pathway with the best courses for transferring into these other programs.

**Hood** In addition to Mathematics, Hood offers a Bachelor of Arts in Secondary Education, Bachelor of Science Computational Science, and minors in Actuarial Science, Mathematics Education, and Mathematics. Your FCC advisor can help you customize your pathway with the best courses for transferring into these other programs.

A minimum GPA of 2.0 is required for admission.

### **Advising**

Students should meet with an advisor each semester to carefully select and sequence courses based on their specific academic goals and interests.

The Counseling & Advising Office offers general advice: emailadvising@frederick.edu • 301.846.2471 • frederick.edu/advising

Program managers offer specific academic area advice: frederick.edu/programs

#### **Completing the Pathway**

Students who take fewer than 15 credits each semester or who require developmental English or math coursework will need additional semesters to complete their degrees. Summer and January term classes may help students to make faster progress.

General Education CORE courses can often be taken in any semester. One course must be designated as a Cultural Competence course. A minimum of nine credits must be taken at the 200 level. Refer to the college catalog (frederick.edu/class-schedules) for course details and the list of General Education and Cultural Competence classes.

#### **Reverse Transfer**

FCC students who transfer to another school may transfer credits *back to FCC* from that school to fulfill FCC associate degree requirements. Visit <u>frederick.edu/credit-admissions/reverse-transfer</u> or contact an advisor for more information.