Mathematics Area of Concentration, A.S. STEM

Frederick Community College Suggested Transfer Pathway

Catalog Year 2020-2021

Frederick Community College

		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	ENGL 101 English Composition	3	ENGL 101*	ENGL 101*	ENGL 101*	ENGL 101*
	2	MATH 185 Calculus I (Prerequisite MATH 165)*	4	MATH 185*	MATH 185*	MATH 185	MATH 185
	3	Humanities Gen Ed	3	Choose	World Language 101, 102, or 201	PHIL 105, 207, 208, or 210	PHIL 206
	4	Physical Education, Health, or Nutrition Requirement	1/3	Choose	Choose	Choose	Choose
	5	CMIS 106 Introduction to Object Design & Programming	3	CMIS 106 (transfers as elective)	CMIS 106 (transfers as elective)	CMIS 106	CMIS 106
Semester	6	MATH 195 Calculus II	4	MATH 195*	MATH 195*	MATH 195	MATH 195*
	7	Biological & Physical Sciences Gen Ed with a lab (PHYS 151 General Physics I recommended**)	4	PHYS 151*	PHYS 151*	PHYS 151	PHYS 151
	8	Social & Behavioral Sciences Gen Ed	3	ANTH 101 or ANTH 103	Choose	Choose	Choose
	9	MATH 220 Introduction to MATLAB	1	MATH 220 (transfers as Gen Ed)	MATH 220 (transfers as elective)	MATH 220 (may transfer)	MATH 220 (does not transfer)
	10	MATH 170 Introduction to Discrete Math or CMIS 201 Computer Science I	3	MATH 170	CMIS 201* (must also take CMIS 202)	MATH 170 (transfers as elective)	MATH 170
Semester	11	MATH 285 Calculus III	4	MATH 285*	MATH 285*	MATH 285	MATH 285
	12	Communications Gen Ed	3	Choose	Choose	Choose	Choose
	13	MATH 265 Linear Algebra	4	MATH 265*	MATH 265*	MATH 265	MATH 265
	14	Biological & Physical Sciences Gen Ed (PHYS 252 General Physics II recommended)	3/4	PHYS 252*	PHYS 252	PHYS 252	PHYS 252
	15	Choose an elective in consultation with an advisor	3	Choose	World Language 102 or 201	Choose	ARTT 103, GEOG 101, GEOG 102, HIST 121, HUMN 105, HUMN 107, or MUSC 201
Semester 4	16	MATH 275 Differential Equations	3	MATH 275*	MATH 275*	MATH 275	MATH 275
	17	Choose an elective in consultation with an advisor	3/4	CMIS 201	CMIS 202*	CMIS 201	CMIS 201
	18	Social & Behavioral Sciences Gen Ed in a different discipline from the first	3	Choose	Choose	Choose	Choose
	19	Arts Gen Ed	3	Choose	Choose	Choose	Choose
	20	Choose an elective in consultation with an advisor (credits may vary; to fulfill 60 credits for degree)	2/3	Choose	World Language 201	Choose	MATH 127

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, <u>ARTSYS</u> (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: ANTH 101, ASLS 223, GEOG 201, PHED 155, HUMN 210, World Languages, MUSC 201. 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 University 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 Mathematics 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 College 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. Students who transfer to Hood College with a completed A.A. will have met Hood's lower level general education core requirements, and will not need to take World Languages.

Stevenson University FCC has an articulation agreement with Stevenson University's Bachelor's degree in Applied Mathematics; see an advisor for details.

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.