CCV STEM Studies A.S. to UVM Mathematical Sciences (Mathematics) B.S.MSC. Pathway College of Engineering and Mathematical Sciences (CEMS) Catalogue Year: 2020-2021	
CCV Degree Program - STEM Studies	**UVM Degree Program - B.S.MSC. Mathematics**
Gen Ed - First Semester Seminar INT 1050 - Dimensions of Self and Society	HUMN 0XX - CEMS Humanities and Social Sciences
Gen Ed - Technological Literacy *Select from approved list of CCV offerings*	Elective (please refer to the UVM Transfer Guide)
Gen Ed – Communication ANT 2020 - Language, Culture, and Communication	ANTH 028 - D2:Linguistic Anthropology (fulfills University D2 requirement and CEMS Humanities and Social Sciences)
Gen Ed - English Composition ENG 1061 - English Composition	ENGS 001 - FW:Written Expression (fulfills University FWIL requirement and CEMS Humanities and Social Sciences)
Gen Ed – Mathematics MAT 1531 - Calculus I	MATH 021 - QR:Calculus I (fulfills University QR requirement and CEMS Core
Gen Ed - Research and Writing Intensive ENG 2135 - Technical Writing and Research	ENGS 0XX, CEMS Humanities and Social Sciences
Gen Ed - Scientific Method *Choose 4-credit lab course from BIO, CHE, or PHY categories as outlined in the approved list of CCV offerings*	CEMS Allied Field Requirement (please refer to the UVM Transfer Guide)
Gen Ed - Human Expression *Select one course from approved list of CCV offerings(Note: COM 2045 does not meet UVM CEMS Humanities and Social Sciences requirement)*	CEMS Humanities and Social Sciences (please refer to the UVM Transfer Guide)
Gen Ed - Human Behavior *Choose one course from:* HIS 1220 SOC 1020 SOC 2040	Fulfills University D1 requirement and CEMS Humanities and Social Sciences (please refer to the UVM Transfer Guide)
Gen Ed - Global Perspectives and Sustainability *Choose one course from the following:* ANT 1010 ANT 2010 GEO 2020 SOC 1010	Fulfills University SU requirement and CEMS Humanities and Social Sciences (please refer to the UVM Transfer Guide)
Gen Ed HUM 2010 - Seminar in Educational Inquiry	HUMN 0XX - CEMS Humanities and Social Sciences

CCV Degree Program - STEM Studies	UVM Degree Program - B.S.MSC. Mathematics
Choose a minimum of 23 college-level credits from: AHS ARC BIO CHE CIS (above CIS-1020) ENV MAT MEC PHY *Recommend:* MAT 2532 - Calculus II MAT 2021 - Statistics I ENV 1010 - Introduction to Environmental Science ENV 1230/ENV 2010/ENV 2050 BIO or CHE course (in addition to the course used to meet Science Method Requirement) *Additional courses will meet Elective credits towards UVM degree*	 MATH 022 - QR:Calculus II, CEMS Core STAT 111 - QR:Elements of Statistics, CEMS Major*** ENSC 001 - SU:Introduction to Environmental Sciences, CEMS Allied Field requirement Refer to the UVM Transfer Guide Refer to the UVM Transfer Guide
INT 2860 - Professional Field Experience	EDEC XXX, Elective
Total CCV credits: 60	

UVM Course Requirements	
UVM Semester One*	**UVM Semester Two***
MATH 121 - QR:Calculus III, CEMS Core**	MATH 122 - QR:Applied Linear Algebra or MATH 124 - QR:Linear Algebra, CEMS Core**
MATH 052 - QR:Fundamentals of Mathematics, CEMS Core	MATH/STAT/CS Major Course*** *Recommend:* MATH 141, 151, 173, 255, or 260
MATH/STAT/CS Major Course***	MATH/STAT/CS Major Course***
CS 021 - QR:Computer Programming I, CEMS Core	Allied Field Course
Elective	Elective
UVM Semester Three*	**UVM Semester Four***
MATH 241: QR:Analysis in Several Real Variables I, CEMS Core *or* MATH 251: QR:Abstract Algebra I, CEMS Core *(both are required)*	MATH 241: QR:Analysis in Several Real Variables I, CEMS Core *or* MATH 251: QR:Abstract Algebra I, CEMS Core *(both are required)*
MATH/STAT/CS Major Course***	MATH/STAT/CS Major Course***
MATH/STAT/CS Major Course***	Allied Field Course
Allied Field Course/Elective (24 required credits in Allied Field classes)	Allied Field Course/Elective (24 required credits in Allied Field classes)
Elective, if needed	Elective, if needed
Total credits required to earn Bachelor's degree is minimum 120	

*The schedule outline at UVM represents one possible plan, but order of courses will be dependent on course offerings each year.

**Due to the rigor of the MATH curriculum, students can utilize summer course offerings of MATH 121 and MATH 122, prior to matriculation at UVM, to provide for a more balanced workload.

***A minimum of twenty-one additional credits in mathematics, statistics, or computer science courses numbered 100 or above. At least twelve credits must be in courses numbered 200 or above and no more than twelve credits can be taken in computer science.

Please note: CEMS 050 - CEMS First-Year Seminar is waived for transfer students.