

CCV STEM Studies A.S. to UVM Mathematical Sciences (Mathematics Major) B.S. Pathway
College of Engineering and Mathematical Sciences (CEMS)
Catalogue Year: 2026-2027

CCV DEGREE PROGRAM: STEM Studies	UVM DEGREE PROGRAM: Mathematics (CEMS)
Gen Ed: First Semester Seminar INT 1050 - Dimensions of Self & Society	Catamount Core: D1 – Race & Racism in the US: HUMN 1XXX – 1000-level HUMN credit, D1
Gen Ed: Introductory Written Expression ENG 1061 - English Composition	Catamount Core: WIL1 – Writing and Information Literacy: ENGL 1001 - Written Expression, WIL1
Gen Ed: Digital and Computer Literacy Select from approved list of CCV Course Offerings	Elective (please refer to the UVM Transfer Guide)
Gen Ed: Mathematics: <i>Choose: MAT 1531 - Calculus I</i> <i>MAT 1330 - Pre-Calculus (if needed) to best prepare for MAT 1531 and can apply towards STEM electives – see below</i>	Major Requirement MATH 1234 - Calculus 1, MA
Gen Ed: Natural Science <i>Choose: CHE 1031 - General Chemistry I</i>	CEMS Ancillary Requirement CHEM 1400 - General Chemistry 1, N2, QD
Gen Ed: Social Science <i>Choose from:</i> ECO 2020 - Macroeconomics ECO 2030 - Microeconomics PSY 1010 – Introduction to Psychology	Catamount Core: S1 – Social Science ECON 1400 – Principles of Macroeconomics, S1 ECON 1450 – Principles of Microeconomics, S1 PSYS 1400 – Intro to Psychological Science, S1
Gen Ed: Arts and Aesthetics <i>Choose from:</i> ARH 1040 – History & Meaning of Public Art ARH 1050 - Art Appreciation ARH 2050 - Women & Art ART 1011 - Drawing I ART 1020 - Introduction to Studio Art ART 1070 - Introduction to Jewelry ART 1160 - Two-Dimensional Design ART 1170 - Foundations of Sculpture ART 1350 - Typography ART 2020 - Color Theory ART 2031 - Life Drawing I ART 2212 - Painting II ART 2311 - Printmaking I ART 2315 - Digital Photography II ART 2320 - Stained Glass ART 2440 – Digital Animation II ENG 2090 – Travel Writing ENG 2101 – Creative Writing ENG 2150 - CW: Autobiography & Memoir FLM 1050 - Digital Filmmaking I FLM 2050 - Introduction to Film Study FLM 2060 - Digital Filmmaking II ARH 2200 - Decolonizing Arts & Culture	Catamount Core: AH1 – Arts (UVM Transfer Guide) ARTH 1XXX – 1000-level ARTH, AH1 ARTH 1XXX – 1000-level ARTH, AH1 ARTH 2XXX – 2000-level ARTH, AH1 ARTS 1100 – Drawing, AH1 ARTS 1XXX – 1000-level ARTS, AH1 ARTS 1XXX – 1000-level ARTS, AH1 ARTS 1XXX – 1000-level ARTS, AH1 ARTS 1XXX – 1000-level ARTS, AH1 ARTS 2410 – Graphic Design, AH1 ARTS 1XXX – 1000-level ARTS, AH1 ARTS 2XXX – 2000-level ARTS, AH1 ARTS 2XXX – 2000-level ARTS, AH1 ARTS 2300 – Topics in Printmaking, AH1 ARTS 2XXX – 2000-level ARTS, AH1 ARTS 2XXX – 2000-level ARTS, AH1 ARTS 2XXX – 2000-level ARTS, AH1 ENGL 1017 – Topics in FYS: Writing, AH1, WIL1 ENGL 1730 – Intro to Creative Writing, AH1 ENGL 2XXX – 2000-level ENGL, AH1 FTS 1XXX – 1000-level FTS, AH1 FTS 1420 – Classical Cinema, AH1 FTS 2XXX – 2000-level FTS, AH1 HUMN 1XXX – 1000-level HUMN, AH1, D1
Gen Ed: Humanistic Perspectives <i>Choose: ANT 1010 - Introduction to Cultural Anthropology</i>	Catamount Core: D2 – Diversity of Human Experience ANTH 1100 - Cultural Anthropology, D2, S1, SU
Gen Ed: Communication <i>Choose from:</i> COM 1010 Effective Workplace Communication COM 1020 - Interpersonal & Small Group Communication	Catamount Core: OC – Oral Communication CDAE 1XXX - OC SPCH 1XXX – OC

COM 2010 Principles of Persuasion ENG 1070 Effective Speaking	SPCH 1XXX – OC SPCH 1400 - OC
Gen Ed: Research & Writing Intensive ENG 2135 - Technical Writing & Research	ENGL 1XXX – 1000-level ENGL, WIL1
Gen Ed: HUM 2010 - Seminar in Educational Inquiry	HUMN 1XXX – 1000-level HUMN, AH3, WIL1
Program Requirements: INT 1017 - Creative and Critical Thinking INT 2860 - Professional Field Experience MEC 1330 Fundamentals of Engineering and Design	IDSS 1XXX - Elective EDEC XXXX - Elective ENGR 1010 – First-Year Design Experience, Elective
STEM Electives: <i>Choose a minimum of 19 college-level credits in:</i> AHS, BIO, CHE, CIS, ENV, HOH, MAT, MEC, or PHY <i>Complete these courses at CCV prior to enrolling at UVM:</i> MAT 1330 - Pre-Calculus (if needed) to best prepare for MAT 1531 MAT 2532 - Calculus II CHE 1032 - General Chemistry II CIS 2210 – Python Programming <i>Additional STEM Electives:</i> consult with advisor about applicability of these electives towards your minor requirements at UVM.	Pre-Calculus transfers into UVM as an Elective MATH 1248 - Calculus II, MA, Major CHEM 1450 - General Chemistry 2, N2, QD, CEMS Ancillary CS 1210 – Computer Programming I, QD, Major Please refer to the UVM Transfer Guide
Total Credits at CCV: 61	

Core/Major: 41 credits total: 1 credit in CEMS 1500: CEMS First Year Seminar 4 credits in MATH 2248: Calculus III 3 credits in MATH 2522: Linear Algebra 3 credits in STAT 1410 or 2430: Statistics 3 credits in MATH 2055: Fundamentals of Mathematics 3 credits in MATH 3468: Any in Several Real Vars I 3 credits in MATH 3551: Abstract Algebra I 3 credits in MATH 4344 Topology, 4788 Exploring Biomathematics, or 4996 Special Topics 9 credits in MATH above the 2000-level 9 credits in MATH above the 3000-level CCC: 3 credits; GC1 or GC2; Need 40 unique CCC credits. ***Minor: 15-18 credits; Must complete a minor in a field other than Mathematics. Completion of a second major or second degree other than Mathematics will satisfy the minor requirement. Elective credits as needed to reach total credits for graduation. Total credits required to earn Bachelor's degree is minimum 120. <i>Students must complete 30 of their last 45 credits at UVM to earn a UVM degree.</i>	<i>Order of UVM courses will be dependent on course offerings each year.</i> <i>*Please note: CEMS 1500 – Please consult with your CEMS advisor for an approved substitution.</i> <i>**Students can utilize summer course offerings of MATH 2248 and MATH 2522, prior to matriculation at UVM, to provide for a more balanced workload.</i> <i>***Please review the UVM catalogue for a list of available minors. Minor options can slightly vary in number of credits. The average number of credits is 18. Any adjustment will affect the number of elective credits needed to earn a UVM degree. Due to course sequencing and pre-requisite completion, not all minors can be completed in four semesters. Please connect with your advisor to discuss your career goals and degree completion timeline.</i> <i>Students completing Calculus and/or specific foreign languages at UVM will be required to complete placement tests prior to registering into these courses at UVM.</i> <i>Students with applied transfer credit to their CCV degree and other transfer credits must send an official transcript from <u>each</u> transcribing institution to UVM. How transfer credits are accepted by CCV may differ from UVM's policies. Please note that this includes evaluation of AP, IB, and CLEP scores.</i> <i>Contact Undergraduate Admissions, transfer.apply@uvm.edu with questions about minimum admissions requirements and about transfer credits from other institutions.</i> <i>Information related to Academic Honors can be found in the UVM undergraduate catalogue. Please note: to graduate with Latin Honors, a student must have taken at least sixty credits at UVM in which a letter grade of A, B, C, D, or F has been awarded.</i>
--	---

CATAMOUNT CORE: UVM'S GENERAL EDUCATION CURRICULUM



CATAMOUNT CORE CURRICULUM

CATAMOUNT CORE is made up of 42 credits in courses distributed across three main areas:

- Liberal Arts (21 credits)
- Core Skills (9 credits)
- Common Ground Values (12 credits)

Students will be able to take courses that fulfill more than one category, but they must still take at least 40 unique credits of courses that have been approved to fulfill CATAMOUNT CORE CURRICULUM requirements.

LIBERAL ARTS 21 CREDITS	CORE SKILLS 9 CREDITS	COMMON GROUND VALUES 12 CREDITS
AH ARTS & HUMANITIES 6 CREDITS FROM ANY OF THE FOLLOWING AH1: Arts AH2: Literature AH3: Humanities S1 SOCIAL SCIENCES 6 CREDITS N NATURAL SCIENCES 6 CREDITS FROM ANY OF THE FOLLOWING N1: Natural Science (no Lab) N2: Natural Science (w/Lab) MA MATHEMATICS 3 CREDITS	QD QUANTITATIVE & DATA LITERACY 3 CREDITS WIL1 WRITING & INFORMATION LITERACY 1 3 CREDITS WIL2/ OC WRITING & INFORMATION LITERACY 2 3 CREDITS WIL2: Writing & Information Literacy Tier 2 - OR - OC: Oral Communication	D DIVERSITY 6 CREDITS (INCLUDING AT LEAST 3 D1 CREDITS) D1: Race and Racism in the US D2: Diversity of Human Experience SU SUSTAINABILITY 3 CREDITS GC GLOBAL CITIZENSHIP 3 CREDITS GC1: Global Systems & Problems - OR - GC2: Developing Global Citizens

[LEARN MORE AT GO.UVM.EDU/CATAMOUNTCORE](https://go.uvm.edu/catamountcore)