CCV STEM A.S. to Vermont State University (VTSU) Biology B.S.

Catalog Year: 2024-25

This transfer pathway will help you plan courses at the Community College of Vermont (CCV) that will meet course specific requirements at VTSU.

- CCV and VTSU are both a part of the Vermont State College System (VSCS). Students have one common VSCS transcript. As such, courses taken at CCV are not considered transfer credit.
- VTSU is a partner in the Vermont Transfer Guarantee, https://ccv.edu/academics/transfer-from-ccv/vermont-transfer-guarantee/
- Students who have completed an associate degree at the Community College of Vermont will have completed all associate level general education requirements at VTSU.
- VTSU accepts all general education credits and associate's level VSCS graduation standards from CCV.
- Transfer courses from regionally accredited institutions will be accepted if grades are C- or better.

| Associates of Science | Bachelor of Science |
|----------------------------------------------------|-----------------------------------------------------|
| in STEM Studies at CCV | in Biology at VTSU |
| General Education: First Semester Seminar - CCV | General Education Requirement - VTSU |
| INT 1050 Dimensions of Self & Society | CNX 1010 Connections Seminar 1 |
| General Education: Introductory Written Expression | General Education: Introductory Written Expression |
| - VSCS | - VSCS |
| ENG 1061 English Composition | ENG 1061 English Composition |
| General Education: Digital & Computing Literacy – | General Education: Digital & Computing Literacy |
| Any eligible course | |
| General Education: Mathematics – VSCS | General Education: Mathematics - VSCS |
| Choose: | Program requirement |
| MAT 1330 Precalculus or | |
| MAT 1531 Calculus I | MAT 1531 Calculus I (or MAT 2040 Stats & Science at |
| | VTSU required) |
| General Education: Natural Science - VSCS | General Education: Natural Science - VSCS |
| BIO 1211 Introduction to Biology: Ecology & | BIO 1122 Biology II |
| Evolution | |
| General Education: Social Science – VSCS | General Education: Social Science – VSCS |
| Any eligible course in this category | |
| General Education: Arts & Aesthetics - VSCS | General Education: Arts & Aesthetics- VSCS |
| Any eligible course in this category | |
| General Education: Humanistic Perspectives - VSCS | General Education: Humanistic Perspectives - VSCS |
| Any eligible course in this category | |
| General Education: Communication - CCV | Meets general education requirement for |
| Any eligible course in this category | bachelor's degree |
| General Education: Research & Writing Intensive - | VTSU general education requirement |
| CCV | |
| ENG 2135 Technical Writing & Research | Connections Seminar 2* |

| General Education: Seminar in Educational Inquiry - CCV | Meets general education requirement for bachelor's degree | |
|---------------------------------------------------------|-----------------------------------------------------------|--|
| HUM 2010 Seminar in Education Inquiry | | |
| Core Program Requirements: | | |
| INT 1017 Creative & Critical Thinking | Elective | |
| INT 2860 Professional Field Experience | Elective | |
| Choose 22 STEM credits | Program Requirements | |
| Choose: | | |
| BIO 1212 Introduction to Biology: Cells & the | BIO 1121 Biology I | |
| Genetic Basis Life | | |
| CHE 1031 Chemistry I | CHE 1031 Chemistry I | |
| CHE 1032 Chemistry II | CHE 1032 Chemistry II | |
| PHY 1041 Physics I | PHY 1051 Physics I | |
| BIO 2340 Fund of Ecology | BIO 3060 Ecology | |
| Recommendations: | | |
| MAT 1531 Calculus I (if not completed for Math | MAT 1531 Calculus I | |
| General Education requirement. | | |
| or | | |
| PHY 1042 Physics II (required for Molecular Biology | PHY 1052 Physics II (required for Molecular Biology | |
| & Biomedicine Concentration only) | & Biomedicine Concentration only) | |
| Total CCV Credits: 60-63 | Total Remaining Credits at VTSU: 60 | |
| Courses to be taken at VTSU (38-42 program credits) | | |

Courses to be taken at VTSU (38-42 program credits)

Program Core (26 credits):

BIO 3025 Cellular & Molecular Biology 4 cr

BIO 3060 Ecology 4 cr (if BIO 2340 not taken at CCV)

BIO 3070 Genetics 4 cr

BIO 3140 Microbiology 4 cr

BIO 4030 Evolution 3 cr

CHE 2040 Organic Chemistry 4 cr

CHE 2050 Spectroscopy 1 cr

SCI 1001 Science Colloquium 1 cr

SCI 1230 Pathways to Science 1 cr

SCI 3100 Science Colloquium II, 1 cr

Program electives - 12 Credits (or choose Molecular Biology & Biomedicine Concentration below)

BIO 3000 Pharmacology 3 cr

BIO 3030 Ecology of Water 3 cr

BIO 3035 Vermont Herpetology 4 cr

BIO 3090 Virology 3 cr

| BIO 3155 Vertebrate Biology 4 cr | |
|-----------------------------------------------------------------------------------|--|
| BIO 3215 Developmental Biology 4 cr | |
| BIO 3240 Advanced Human Physiology 3 cr | |
| BIO 3270 Forest Ecology 4 cr | |
| BIO 3320 Ornithology 4 cr | |
| BIO 3350 Ecology of the Mojave Desert 4 cr | |
| BIO 3530 Conservation Biology & Biogeography 3 cr | |
| BIO 4015 Biogeochemistry: Soils & Elemental Cycle 4 cr | |
| BIO 4260 Field Techniques & Current Topics in Wildlife Biology 3 cr | |
| BIO 4360 Immunology 4 cr | |
| BIO 4710 Special Topics in Biology 3 cr | |
| BIO 4930 Biology Research Project 1-6 cr | |
| CHE 3011 Biochemistry I 4 cr | |
| Molecular Biology & Biomedicine Concentration (BS.BIO.MBB) 14-16 credits required | |
| CHE 3011 Biochemistry I 4 cr | |
| PHY 1052 Physics II 4 cr (if PHY 1042 not completed at CCV) | |
| Choose 2 of the following: | |
| BIO 3000 Pharmacology 3 cr | |
| BIO 3090 Virology 3 cr | |
| BIO 3215 Developmental Biology 4 cr | |
| BIO 3240 Advanced Human Physiology 3 cr | |
| BIO 4360 Immunology 4 cr | |
| For all students: | |
| CNX 3010- Connections Culminating Seminar, 1 cr^ | |
| Electives to equal total of 120 credits to bachelor's degree | |
| Electives to equal total of 120 credits to bachelor's degree | |

^{*}Students who have graduated from CCV or who are transferring with 30 credits or more and have previously completed an intermediate research and writing intensive course are exempt from VTSU Connections Seminar 2.

[^] Connections 3 seminar is not required for transfer students in the 23-24 or 24-25 catalog. Transfer students should consult with their VTSU advisor on course planning and may find this course beneficial from an academic and/or career perspective.