

CCV STEM Studies to Vermont Tech Renewable Energy Technology PATHWAY

Students who have completed the CCV STEM Studies A.S. degree with the technical courses listed below may transfer to the Renewable Energy B.S. program and can complete that degree with 60 credits of courses shown in the lower table.

- MAT-1531 Calculus I (4)
- MAT-2021 Statistics I
- PHY-1041 Physics I (4)
- PHY-1042 Physics II (4)
- BIO-1020 Environmental Biology (4)
- CHE-1031 General Chemistry I (4)

Note: Students must take MAT-1531 Calculus I prior to transfer to VTC.

Recommended Pathway

CCV STEM Studies A.S.	VERMONT TECH Renewable Energy B.S.
First Semester Seminar: INT-1050 or INT-1060 Dimensions	INT-1005 Self, Career, and Culture
Technical Literacy: CIS-1041 Microcomputer Applications I	Elective
Communication	Elective
Research Writing Intensive: ENG-1061 English Composition	ENG-1061 English Composition
Mathematics: MAT-1330 Pre-Calculus	MAT-1311 Pre-Calculus
ENG-2135 Technical Writing & Research	ENG-2080 Technical Communication <i>Substitution approved for CCV graduates only.</i>
Scientific Method: CHE-1031 General Chemistry I	CHE-1031 General Chemistry I
Human Expression: Choose course to meet Vermont Tech Arts and Humanities	Arts and Humanities
Human Behavior: Choose course to meet Vermont Tech Social Science	Social Science
Global Perspectives & Sustainability: Choose BIO-1020 Env Biology	Biology Lab Science
HUM-2010 Seminar in Educational Inquiry	Arts and Humanities
INT-2860 Professional Field Experience	Elective
STEM Studies program requirements – at least 23 credits* <u>Required</u> for Renewable Energy B.S.: MAT-1531 Calculus I (4) MAT-2021 Statistics I (3) PHY-1041 Physics I (4) PHY-1042 Physics II (4) Consider: MAT-1230 College Algebra (3) <i>if needed prior to Pre-Calculus</i> ENV-2010 Moving toward Sustainability (3) ARC-1211 CAD I (3) (meets VTC engineering course*) ARC-1212 CAD II (3) (meets VTC engineering course*)	MAT-1520 Calculus for Engineering MAT-2021 Statistics I PHY-1041 Physics I PHY-1042 Physics II SSC-2030 Energy Systems & Sustainability VTC engineering course VTC engineering course
Total CCV credit: 60+	
	16 credits of engineering courses including CAD (4), AC and DC Electrical Circuits (4)
	ARE 2031 Environmental Systems I (3)
	ARE 2032 Environmental Systems II (3)
	ARE 3050 Fundamentals of Fluids and Thermodynamics (4)
	ARE 4030 HVAC Systems (4)
	BUS 2020 Principles of Management (3)
	BUS 3250 Organizational Behavior and Management (3)
	BUS 4530 Technical Project Management (3)
	MEC 2150 Solar Photovoltaics (3)
	MEC 3010 Wind Power (3)
	MEC 3040 Bioenergy (3)
	MEC 3170 Renewable Heating Systems (3)
	MEC 4721 Capstone Project I (3)
	MEC 4722 Capstone Project II (3)
	MEC 4802 Internship Review (1)
	SSC-2030 Energy Systems & Sustainability <i>(or ENV-2010 at CCV)</i>
	ELE-3XXX 3000-level Arts and Humanities or Social Science Elective
	Elective credits to reach 120 total credits
	Total VTC credits: 60+
	Estimated Total CCV and Vermont Tech credits: 120+