

ENVIRONMENT, SUSTAINABILITY, AND MANAGEMENT - ASSOCIATE IN SCIENCE



ESMD

The Environment, Sustainability, and Management Associate in Science degree prepares students to achieve professional employment in sustainable agriculture, horticulture, land management, and related businesses in the Green Sector. The program introduces students to key concepts in resource management, pollution, our evolving interactions with an ever-changing ecological landscape, and industry practices necessary to operate a business effectively yet conscientiously. The curriculum explores topics in land, water, and air; how humans positively and negatively impact their local and global environments; business management, entrepreneurship, innovation, and design, and includes a cooperative work experience with an employer in agriculture, sustainability, or a related field.

Program Learning Outcomes

Upon completion of this program, a student will be able to:

1. Understand and correctly apply principles of environmental and sustainable science.
2. Understand and correctly apply principles of business practices, including management, accounting, and design.
3. Apply {sound ethical} business practices to situations in environment and sustainability.
4. Integrate knowledge of geological, chemical, and biological sciences, environment, and sustainability.
5. Critically research opportunities and effectively design solutions in environment, sustainability, and management.
6. Evaluate and discuss important business practices impacting environment and sustainability with peers, mentors, and community leaders.
7. Gain relevant work experience with one or more established industry partners.

Requirements

Code	Title	Hours
General Education Requirements		
BIOL 1001	Introductory Biology: Organismal Thinking; Social and Professional Responsibilities	4
BUSN 1010	Introduction to Business Social and Professional Responsibilities	3
CHEM 1030	General Chemistry I	5
COMM 1010	Communication Fundamentals [^]	3
ECON 2030	Principles of Microeconomics	3

ENGL 1010	Composition I (or ENGL 1010A)	HUMN; Written Communication; Information Literacy	3
History Elective (https://catalog.ccri.edu/academic-information/general-education/course-attributes/#histgened/)			3
Literature Elective (https://catalog.ccri.edu/academic-information/general-education/course-attributes/#litgened/)			3
MATH 1240	Statistical Analysis I	MSCI; Scientific Reasoning; Quantitative Literacy	4
Subtotal			31
Major Requirements			
BIOL 1050	Humans and the Environment		3
BIOL 2410	Biology of Insects		4
BIOL 2420	Introduction to Soil Science		4
BUSN 1145	Entrepreneurship 1: Introduction to Entrepreneurship		3
BUSN 1165	Entrepreneurship 2: The Design Process		3
BSTM 2499	BSTEM Cooperative Work Experience I [^]		3
BSTM 2500	Human Environmental Impacts and Ethical Business Practices Capstone		3
Choose one of the following:			3-4
ACCT 1010	Financial Accounting		
BUSN 1060	Leadership Development		
BUSN 1175	Operations and Supply Chain Management		
BUSN 1185	Entrepreneurship 3: The Lean Startup		
BUSN 2050	Principles of Management [^]		
BUSN 2060	Principles of Marketing		
Choose ONE of the following:			2-4
AGIS 1000	ArcGIS I: Introduction to ArcGIS		
ENGT 1060	AutoCAD (Basic)		
Choose ONE of the following:			3-4
BIOL 2025	Biology of Trees and Shrubs		
BIOL 2130	Food from the Sea		
Choose ONE of the following:			4
GEOL 1010	Introduction to Geology - How the Earth Works		
GEOL 1050	Urban and Environmental Geology		
OCEN 1040	Introduction to Oceanography (Formerly OCEN 1010 and 1030)		
Choose ONE of the following:			3
PLS 132G	Sustainable Agriculture, Food Systems, and Society (Take at URI)		
PLS 150	Plants, People and the Planet (Take at URI)		
Subtotal			38-42
Total Hours			69-73

¹ See specified list of general education history or English literature electives in the list below.

² Courses taken at URI.

³ Supervised cooperative work experience placement during last academic semester. Contact department chair for further information.

[^] Work-based learning course

History or English Literature Electives

Code	Title	Hours
AAAF 1248	African-American Literature and Culture	4
ENGL 1021	American Literature since 1865	3
ENGL 1040	World Literature to 16th Century	3
ENGL 1200	Introduction to Literature	3
ENGL 1210	Introduction to Film	3
ENGL 1250	Readings in the Short Story	3
ENGL 2040	World Literature from 16th Century	3
HIST 1010	Survey of Western Civilization I	3
HIST 1020	Survey of Western Civilization II	3
HIST 1210	History of the United States to 1877	3
HIST 1220	History of the United States from 1877	3

Recommended Course Sequence

Course	Title	Hours
Year 1		
Semester 1		
BIOL 1001	Introductory Biology: Organismal	4
BUSN 1010	Introduction to Business	3
COMM 1010	Communication Fundamentals ¹	3
ENGL 1010	Composition I (or ENGL 1010A)	3
MATH 1240	Statistical Analysis I	4
Hours		17
Semester 2		
BIOL 1050	Humans and the Environment	3
BUSN 1145	Entrepreneurship 1: Introduction to Entrepreneurship	3
CHEM 1030	General Chemistry I	5
Choose ONE of the following:		2-4
AGIS 1000	ArcGIS I: Introduction to ArcGIS	
ENGT 1060	AutoCAD (Basic)	
ECON 2030	Principles of Microeconomics	3
Hours		16-18
Year 2		
Semester 1		
BIOL 2410	Biology of Insects	4
BIOL 2420	Introduction to Soil Science	4
BUSN 1165	Entrepreneurship 2: The Design Process	3
Choose ONE of the following:		3-4
GEOL 1010	Introduction to Geology - How the Earth Works	
GEOL 1050	Urban Geology	
OCEN 1040	Introduction to Oceanography (Formerly OCEN 1010 and 1030)	
Choose ONE of the following:		3
History Elective (https://catalog.ccri.edu/academic-information/general-education/course-attributes/#histgened/)		
Literature Elective (https://catalog.ccri.edu/academic-information/general-education/course-attributes/#litgened/)		
Hours		17-18
Semester 2		
Choose ONE of the following: ²		3

PLS 132G	Sustainable Agriculture, Food Systems, and Society (take at URI)	
PLS 150	Plants, People, and the Planet (take at URI)	
Choose ONE of the following:		3-4
ACCT 1010	Financial Accounting	
BUSN 1060	Leadership Development	
BUSN 1175	Operations and Supply Chain Management	
BUSN 1185	Entrepreneurship 3: The Lean Startup	
BUSN 2050	Principles of Management ¹	
BUSN 2060	Principles of Marketing	
Choose ONE of the following:		3-4
BIOL 2025	Biology of Trees and Shrubs	
BIOL 2130	Food from the Sea	
BSTM 2499	BSTEM Cooperative Work Experience I ³	3
BSTM 2500	Human Environmental Impacts and Ethical Business Practices Capstone	3
Hours		15-17
Total Hours		65-70

¹ See specified history and English literature general education electives in the list below.

² Courses taken at URI.

³ Supervised cooperative work experience placement during last academic semester. Contact department chair for further information.

History or English Literature General Education Electives

Code	Title	Hours
HIST 1010	Survey of Western Civilization I	3
HIST 1020	Survey of Western Civilization II	3
HIST 1210	History of the United States to 1877	3
HIST 1220	History of the United States from 1877	3
ENGL 1021	American Literature since 1865	3
ENGL 1040	World Literature to 16th Century	3
ENGL 1200	Introduction to Literature	3
ENGL 1210	Introduction to Film	3
ENGL 1250	Readings in the Short Story	3
ENGL 2040	World Literature from 16th Century	3

Transfer

Please meet with an Academic Advisor/Student Success Coach (<https://ccri.edu/advising/>) if you are interested in earning a bachelor's degree. Your Academic Advisor will help you select the courses that best prepare you for transfer to a four-year college or university.

Check out the Joint Admissions Agreement (<https://ccri.edu/jaa/>) if you are interested in transferring to Rhode Island College or the University of Rhode Island. The JAA program offers seamless transfer to RIC or URI with additional benefits. Transfer information, events, and articulations are available on the Transfer Center website (https://ccri.edu/oes/transfer_center/).