

SUSTAINABLE RESOURCE MANAGEMENT, B.S.

Major Code: 3167

The Bachelor of Science in Sustainable Resource Management (SR) degree provides students with a comprehensive curriculum in resource planning and adaptive management while comprehending the regulatory policy envelope which directs the actions of agricultural and natural resource planners in the 21st century. Built around a core curriculum of foundational sciences and resource conservation and management practice, students may specialize their SRM BS by selecting offered electives in agriculture and natural/renewable resources disciplines.

This program requires a full-semester internship that places students in supervised work with a cooperating agricultural or environmental agency. This provides students with opportunities to gain valuable experience, make professional contacts, and build their resumes in preparation for future employment and career decisions. Most internships are paid. Opportunities exist nationwide in both the public and private sectors. Many placement sites are available in New York State, but students who wish to travel can find opportunities in other parts of the country. Successful internships may include experiences in agricultural resource planning, ecosystem and resource sustainability, soil and water conservation, forestry, outdoor recreation management, GIS (geographic information system) mapping, wetlands delineation, and management, or fish and wildlife management.

Admission to the SRM BS requires a minimum 2.5 grade point average with the NYS Regents Diploma, with the Advanced NYS Regents Diploma preferred. A student who does not meet this requirement may be admitted on a conditional basis.

Career Opportunities: The B.S. in Sustainable Resource Management is designed to prepare students for graduate-level studies in resource sustainability or for entry into public- and private-sector careers at the planning, supervisory, and management levels where technical, business, and communication skills are necessary. Students completing the Sustainable Resource Management B.S. can pursue jobs in agricultural and natural resource planning and management, soil and water conservation, ecological restoration, and conservation biology. This degree program offers a unique opportunity to blend agriculture and natural resource fields with a blend of technical electives. Furthermore, this allows the students to seek employment in the fields that bridge the gap between agriculture and natural resource management, such as soil and water conservation districts and the natural resource conservation service. (NRCS)

Graduation Requirements: Students in the Sustainable Resource Management major must complete ALL the requirements listed below. A minimum of 120 credit hours of coursework is required.

MATH 103 or higher is required for completion of this program. All bachelor's degree students must complete the State University of New York Board of Trustees mandated general education requirements (see catalog section titled Academic Information: SUNY General Education Requirements).

Student Learning Outcomes

Upon completion of the program, and according to the specialization of this major, a successful graduate will be able to:

- Display critical thinking through the ability to recognize issues in resource sustainability.
- Interpret sustainability problems and opportunities across spatial scales from local to global.
- Correspond professionally and ethically with clients, the public, and agency personnel.
- Integrate the input and perspectives of diverse stakeholders regarding sustainable resource allocation issues.
- Interpret laws and policies in agricultural, natural, and renewable resource conservation and management.
- Apply critical thinking and problem-solving skills in evaluating alternative solutions to complex problems in sustainable resource management.
- Produce actionable management plans in accordance with current best management practices and in line with adaptive resource management theory.
- Defend a proposed management plan in terms of best management practice alternatives.
- Develop a comprehensive knowledge of their field of expertise and utilize that knowledge in pursuing potential career opportunities.

Curriculum

A minimum of 120 credits is required for degree completion.

Requirements

Code	Title	Credits
AGBS 225	Environmental Economics	3
AGRO 110	Soil Science	3
BIOL 102	Botany-Form Function Seed Plt	3
BSAD 300	Management Communications	3
NATR 101	General Ecology	3
NATR 113	Intro toGlobal Positioning Sys	1
NATR 142	Plane Surveying I	3
NATR 144	Seminar/Environmental Resc I	1
NATR 145	Intro Environmental Technology	3
RENG 102	Renewable Energy Resources	3
RENG 310	Biomass Energy Resources	3
ENRM 305	Environment Law Policy Justice	3
ENRM 332	Environment Planning & NR Mgt	3
ENRM 412	Ecosystem Adaptive Management	3
ENRM 450	Environmental & Natural Resource Management Internship Orientation	1
NATR 213	Basics Geospatial Technology	2
or AGSC 132	Introduction to Precision Farming	
ENRM 303	Fundamentals Geospatial System	3-4
or AGBS 450	Ag Policy & Development	
ENRM 470	Internship in Environmental & Natural Resource Management	15
or AGBS 470	Internship in Ag Business Dev	
Technical Electives in AGBS, AGEN, AGRO, AGSC, ANSC, BIOL, BSAD, CANA, CHEM, DASC, ENRM, ENSC, ENVT, HORT, NATR, or RENG		19
General Education & Liberal Arts and Science Courses		
CHEM 121	General College Chemistry I	4
CHEM 122	General College Chemistry II	4

COMM 111	Introduction to Speech	3
COMP 101	Composition and Research	3
COMP 102	Writing About Literature	3
COMP 310	Advance Tech Communication	3
HIST 171	Environmental History	3
MATH 103	College Algebra w/ Trig	3
MATH 123	Elementary Statistics	3
PHIL 311	Professional Ethics	3
Select one of the following:		4
BIOL 121	General Biology II	
BIOL 260	Principles of Zoology	
CHEM 241	Organic Chemistry I	
PHYS 107	Introductory Physics I	
SUNY General Education Diversity, Equity, Inclusion and Social Justice as advised		3
Must also complete General Education (http://catalog.morrisville.edu/general-education/)		3
Total Credits		120-121

Suggested Course Sequence

Course	Title	Credits
Year 1		
Fall		
BIOL 102	Botany-Form Function Seed Plt	3
COMP 101	Composition and Research	3
MATH 103	College Algebra w/ Trig	3
NATR 113	Intro toGlobal Positioning Sys	1
NATR 144	Seminar/Environmental Resc I	1
NATR 145	Intro Environmental Technology	3
Credits		14
Spring		
AGRO 110	Soil Science	3
COMM 111	Introduction to Speech	3
COMP 102	Writing About Literature	3
RENG 102	Renewable Energy Resources	3
Must also complete General Education (http://catalog.morrisville.edu/general-education/)		3
Credits		15
Year 2		
Fall		
MATH 123	Elementary Statistics	3
CHEM 121	General College Chemistry I	4
HIST 171	Environmental History	3
AGBS 225	Environmental Economics	3
NATR 142	Plane Surveying I	3
Credits		16
Spring		
CHEM 122	General College Chemistry II	4
SUNY General Education Diversity, Equity, Inclusion and Social Justice as advised		3
NATR 101	General Ecology	3
Technical Sequence Elective as Advised		2
NATR 213 or AGSC 132	Basics Geospatial Technology or Introduction to Precision Farming	2
Credits		14
Year 3		
Fall		
PHIL 311	Professional Ethics	3
COMP 310	Advance Tech Communication	3

RENG 310	Biomass Energy Resources	3
Technical Sequence Elective as Advised		2
Select one of the following:		4
BIOL 120	General Biology I	
BIOL 260	Principles of Zoology	
CHEM 241	Organic Chemistry I	
PHYS 107	Introductory Physics I	
Credits		15
Spring		
ENRM 305	Environment Law Policy Justice	3
ENRM 332	Environment Planning & NR Mgt	3
ENRM 450	Environmental & Natural Resource Management Internship Orientation	1
Technical Sequence Elective as Advised		6
ENRM 303 or AGBS 450	Fundamentals Geospatial System or Ag Policy & Development	3-4
Credits		16-17
Year 4		
Fall		
BSAD 300	Management Communications	3
ENRM 412	Ecosystem Adaptive Management	3
Technical Sequence Electives as Advised		9
Credits		15
Spring		
ENRM 470 or AGBS 470	Internship in Environmental & Natural Resource Management or Internship in Ag Business Dev	15
Credits		15
Total Credits		120-121