

2019 Report on Efforts by State Universities to Promote the Green Technology Industry

June 2019

"The Board of Higher Education and the Illinois Community College Board shall annually publicize on their Internet websites information concerning efforts made by State

universities and community colleges to promote the green technology industry, including the development of new academic degree and certificate programs, courses of instruction, and initiatives made by these State universities and community colleges to align green jobs programs with employer needs." (Source: P.A. 97-241, eff. 8-4-11.)

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Degrees Offered and Centers Established by Illinois Public Universities that May Be Used to Promote the Green Technology Industry

May Be Used to Promote the Green Technology Industry			
Institution Name	Level	CIP2K	Program Name
Chicago State University	6	45.0701	Post-baccalaureate Certificate in Geographic Information Systems or Community Development
	7	45.0701	M.A. in Geography
	7	26.0101	M.S. in Biological Sciences
	7	45.0701	M.A. in Geography
Eastern Illinois University	5	26.0101	B.S. in Biological Sciences
	5	40.0601	B.S. in Geology
	5	45.0701	B.S. in Geography
	6	45.0702	Post-Baccalaureate Certificate in Geographic Information Sciences
	7	13.1316	M.S. in Natural Sciences
	7	26.0101	M.S. in Biological Sciences
	7	26.1201	MS in Biochemistry and Biotechnology
	7	30.0601	M.S. in Sustainable Energy
	7	45.0702	P.S.M. in Geographic Information Sciences
	59	90.1505	Center for Clean Energy Research and Education
	59	90.4507	Geographic Information Science Center
Governors State University	5	26.0101	B.S. in Biology
	6	13.1322	Post-Baccalaureate Certificate in Biology Education
	7	26.1305	M.S. in Environmental Biology
Illinois State University	5	01.0000	B.S. in Agriculture
	5	13.1322	B.S. in Biological Sciences Teacher Education
	5	15.0503	B.S. in Renewable Energy
	5	26.0101	B.S. in Biological Sciences
	5	26.0202	B.S. in Biochemistry
	5	26.0202	B.S. in Biochemistry and Molecular Biology
	5	26.0406	B.S. in Molecular and Cellular Biology
	5	40.0601	B.S. in Geology
	5	45.0701	B.A. and B.S. in Geography
	5	51.2202	B.S. in Environmental Health
	7	01.0000	M.S. in Agriculture
	7	26.0101	M.S. in Biological Sciences
	7	40.0699	M.S. in Hydrogeology
	17	26.0101	Ph.D. in Biological Sciences
	59	90.2703	Center for Collaborative Studies in Mathematical Biology; Intercollegiate Biomathematics Alliance

Institution Name	Level	CIP2K	Program Name
Northeastern Illinois University	5	03.0103	B.A. in Environmental Studies
	5	03.0104	Bachelor of Science in Environmental Science
	5	26.0101	B.S. in Biology
	5	40.0601	B.S. in Earth Science
	5	45.0701	B.A. in Geography
	7	26.0101	M.S. in Biology
	7	40.0601	M.S. in Earth Science
	7	45.9999	M.A. in Geography and Environmental Studies
Northern Illinois University	5	03.0103	B.A./B.S. in Environmental Studies
	5	14.0501	B.S. in Biomedical Engineering
	5	26.0101	B.S. in Biological Sciences
	5	40.0601	B.S. in Geology and Environmental Geosciences
	5	45.0701	B.A. and B.S. in Geography
	7	26.0101	M.S. in Biological Sciences
	7	40.0601	M.S. in Geology
	7	45.0701	M.S. in Geography
	17	26.0101	Ph.D. in Biological Sciences
	17	40.0601	Ph.D. in Geology
	17	45.0701	Ph.D.in Geography
			Analytical Center for Climate and Environmental
	59	90.0301	Change
	59	90.2602	Center for Biochemical and Biophysical Studies
	59	90.2604	Plant Molecular Biology Center
Southern Illinois University	_		
Carbondale	5	01.1101	B.S. in Plant and Soil Science
	5	01.1201	B.S. in Crop, Soil, and Environmental Management
	5	03.0103	B.S. in Geography and Environmental Resources
	5	03.0501	B.S. in Forestry
	5	13.1322	B.S. in Biological Sciences
	5	15.0303	B.S. in Electrical Engineering Technology
	5	26.0101	B.S. in Biological Sciences
	5	26.0301	B.A. and B.S. in Plant Biology
	5	26.0502	B.S. in Microbiology
	5	40.0601	B.A. and B.S. in Geology
			Post-Baccaureate Graduate Certificate in Earth
	6	40.0601	Science
	6	45.0701	Post-Baccalaureate Certificate in Geographic Info Sciences
	6	45.0701	Post-Baccalaureate Certificate in Sustainability

Institution Name	Level	CIP2K	Program Name
Southern Illinois University			
Carbondale	7	01.1101	M.S. in Plant, Soil and Agricultural Systems
	7	03.0103	M.S. in Geography and Environmental Resources
	7	03.0501	M.S. in Forestry
			Master of Science & Master of Engineering in
	7	14.0501	Biomedical Engineering
	7	14.0899	Master of Engineering in Civil and Environmental Engineering
	7	26.0101	M.S. in Biological Sciences
	,	20.0202	M.S. in Molecular Biology, Microbiology &
	7	26.0205	Biochemistry
	7	26.0301	M.S. in Plant Biology
			Professional Science Master's in Advanced
	7	30.0601	Energy and Fuels Management
	7	40.0601	M.A. and M.S. in Geology
	17	03.0103	Ph.D. in Environmental Resources and Policy
	17	03.0201	PhD in Environmental Resources
	17	14.1001	Ph.D. in Electrical and Computer Engineering
			Ph.D. in Molecular Biology, Microbiology &
	17	26.0205	Biochemistry
	17	26.0301	Ph.D. in Plant Biology
	59	90.0110	Beef Evaluation Station
			Center for Excellence for Soybean Research,
	59	90.0111	Teaching an
	59	90.0301	Touch of Nature
	59	90.0303	Fisheries and Illinois Aquaculture Center
	59	90.0306	Cooperative Wildlife Research Laboratory
	59	90.2699	Center for Systematic Biology
Southern Illinois University			
Edwardsville	5	03.0104	B.A. and B.S. in Environmental Sciences
	5	13.1316	B.S. in Earth and Space Science Education
	5	14.0801	B.S. in Civil Engineering
	5	26.0101	B.A. and B.S. in Biological Sciences
	5	45.0701	B.A. and B.S. in Geography
			Post-baccalaureate Certificate in Integrative
	6	30.0000	Studies
	7	03.0104	M.S. in Environmental Sciences
			Professional Science Master's (P.S.M.) in
	7	03.0199	Environmental Science Management
	7	26.0101	M.A. and M.S. in Biological Sciences

7	30.0000	M.A. and M.S. in Integrative Studies
7	45.0701	M.S. in Geography
59	90.1505	Environmental Resources Training Center
59	90.1506	National Corn to Ethanol Research Center

Institution Name	Level	CIP2K	Program Name
U of I at Chicago	5	14.0501	B.S. in Bioengineering
	5	14.1001	B.S. in Electrical Engineering
	5	26.0101	B.S. in Biological Sciences
	5	26.0202	B.S. in Biochemistry
	5	40.0601	B.S. in Earth and Environmental Sciences
	5	50.0404	B.S. in Industrial Design
	7	14.0501	M.S. in Bioengineering
	7	14.1001	M.S. in Electrical Engineering
	7	14.9999	Master of Energy Engineering
	7	26.0101	M.S. in Biological Sciences
	7	26.0210	M.S. in Biochemistry and Molecular Biology
	7	26.0407	M.S. in Anatomy and Cell Biology
	7	26.0508	M.S. in Microbiology and Immunology
	7	26.0901	M.S. in Physiology and Biophysics
	7	26.1002	M.S. in Biopharmaceutical Sciences
	7	26.1103	M.S. in Bioinformatics
	7	26.1201	M.S. in Medical Biotechnology
	7	40.0601	M.S. in Earth and Environmental Sciences
	7	45.0701	M.A. in Environmental and Urban Geography
	7	50.0404	B.S. in Industrial Design
	7	51.2703	M.S. in Biomedical Visualization
	17	14.0501	Ph.D. in Bioengineering
	17	26.0101	Ph.D. in Biological Sciences
	17	26.0407	Ph.D. in Anatomy and Cell Biology
	17	26.0508	Ph.D. in Microbiology and Immunology
	17	26.0901	Ph.D. in Physiology and Biophysics
	17	26.1002	Ph.D. in Biopharmaceutical Sciences
	17	26.1103	Ph.D. in Bioinformatics
	17	26.9999	Ph.D. in Biochemistry and Molecular Genetics
	17	30.0101	Biological and Physical Sciences
	17	40.0601	Ph.D. in Earth and Environmental Sciences
	17	51.2706	Ph.D. in Biomedical and Health Informatics
	59	90.0301	Institute of Environmental Science and Policy
	59	90.0302	Energy Resources Center
	59	90.2602	Center for Structural Biology

59	90.5105	Center for Molecular Biology of Oral Diseases
59	90.5112	Center for Lung & Vascular Biology
59	90.5120	Center for Biomolecular Sciences

Institution Name	Level	CIP2K	Program Name
U of I at Springfield	5	03.0103	B.A. in Environmental Studies
	5	26.0101	B.S. in Biology
	5	26.0202	B.S. in Biochemistry
	7	03.0104	M.S. in Environmental Sciences
	7	26.0101	M.S. in Biology
U of I at Urbana/Champaign	5	01.1102	B.S. in Crop Sciences
			B.S. in Natural Resources and Environmental
	5	03.0104	Sciences
	5	04.0601	Bachelor of Landscape Architecture
	5	11.0199	B.S. in Computer Science and Crop Sciences
	_		B.S.L.A.S. in Computer Science and Geography
	5	11.0199	and Geographic Information Science
	5	14.0301	B.S. and B.S.Ag. in Agricultural and Biological Engineering
	5	14.0501	B.S. in Bioengineering
	5	26.0101	B.S. in Biology
	5	26.0202	B.S. in Biochemistry
	5	26.0406	B.S.L.A.S. in Molecular and Cellular Biology
	5	26.9999	B.S.L.A.S. in Integrative Biology
	<u> </u>	20.3333	B.S.L.A.S. in Earth, Society, and Environmental
	5	30.0601	Sustainability
	5	40.0601	B.S. & B.S.L.A.S. in Geology
			B.A.L.A.S. in Geography and Geographic
	5	45.0701	Information Science
	7	01.1102	M.S. in Crop Sciences
			M.S. in Natural Resources and Environmental
	7	03.0104	Sciences
	7	04.0601	Master of Landscape Architecture
	7	13.1322	M.S. in the Teaching of Biological Science
	7	13.1337	M.S. in the Teaching of Earth Science
	7	14.0301	M.S. in Agricultural and Biological Engineering
	7	14.0501	M.Eng. in Bioengineering
	7	14.0501	M.S. in Bioengineering
	_		M.S. in Environmental Engineering in Civil
	7	14.1401	Engineering
	7	26.0101	M.S. in Biology

			M.S. in Veterinary Medical Science Comparative		
	7	26.0102	Biosciences		
	7	26.0202	M.S. in Biochemistry		
	7	26.0203	M.S. in Biophysics and Quantitative Biology		
	7	26.0301	M.S. in Plant Biology		
Institution Name	Level	CIP2K	Program Name		
U of I at Urbana/Champaign	7	26.0399	M.S. in Plant Biotechnology		
	7	26.0401	M.S. in Cell and Developmental Biology		
	7	26.0502	M.S. in Microbiology		
	7	26.1103	M.S. in Bioinformatics		
	7	26.1201	M.S. in Bioprocessing and Bioenergy		
			M.S. in Ecology, Evolution and Conservation		
	7	26.1310	Biology		
	7	30.3301	M.S. in Sustainable Urban Management		
	7	40.0601	M.S. in Geology		
	7	45.0701	M.A. in Geography		
	7	45.0702	M.S. in Geography		
	7	51.2505	M.S. in Veterinary Medical Science Pathobiology		
	17	01.1102	Ph.D. in Crop Sciences		
			Ph.D. in Natural Resources and Environmental		
	17	03.0104	Sciences		
	17	04.0601	Ph.D. in Landscape Architecture		
	17	14.0301	Ph.D. in Agricultural and Biological Engineering		
	17	14.0501	Ph.D. in Bioengineering		
	17	14.1001	Ph.D. in Electrical and Computer Engineering		
			Ph.D. in Environmental Engineering in Civil		
	17	14.1401	Engineering		
	17	26.0101	Ph.D. in Biology		
	17	26.0102	Ph.D. in Comparative Biomedical Sciences		
	17	26.0202	Ph.D. in Biochemistry		
	17	26.0203	Ph.D. in Biophysics and Quantitative Biology		
	17	26.0301	Ph.D. in Plant Biology		
	17	26.0401	Ph.D. in Cell and Developmental Biology		
	17	26.0502	Ph.D. in Microbiology		
			Ph.D. in Ecology, Evolution and Conservation		
	17	26.1310	Biology		
	17	40.0601	Ph.D. in Geology		
	17	45.0701	Ph.D. in Geography		
	59	90.0101	TIAA-CREF Center for Farmland Research		
			Institute for Sustainability, Energy, and		
	59	90.0301	Environment		
	59	90.2602	Center for Biophysics and Quantitative Biology		
	59	90.2608	Carl R. Woese Institute for Genomic Biology		

59	90.2612	Biotechnology Center
59	90.3018	Institute for Universal Biology (IUB)

Institution Name	Level	CIP2K	Program Name
Western Illinois University	5	01.0000	B.S. in Agriculture
Western Illinois University	5	26.0101	B.S. in Biology
Western Illinois University	5	40.0601	B.S. in Geology
Western Illinois University	5	45.0701	B.S. in Geographic Information Science
Western Illinois University	7	26.0101	M.S. in Biology
Western Illinois University	7	26.0101	Master of Science (M.S.) in Biology
Western Illinois University	7	45.0701	M.A. in Geography
Western Illinois University	17	03.0104	Environmental Science
Western Illinois University	59	90.0301	Institute for Environmental Studies

 $^{{}^*\}mathrm{Note}$: All Centers and degree programs are in active status as of June 2017 unless indicated otherwise.

Chicago State University

Chicago State University Sustainability Initiatives

Global Institute of Sustainable Development

The Global Institute of Sustainable Development, GISD, is an innovative approach to furthering the global citizenship mission of Chicago State University with particular interest in utilizing sustainability principles to stimulate university/community partnership for cross-cultural education, faculty-student interaction in research, service, and community development. More information can be found at: http://www.csu.edu/internationalstudies/globalinstitute/

Aquaponics Facility

In the summer of 2010, Chicago State University opened the Aquaponics Facility. The project consists of raising tilapia fish in a controlled, continuously circulating water system. The effluent of the fish holding tanks are circulated through growbeds, providing nourishment where plants will be grown hydroponically. This integrative process between aquaculture and hydroponics is known as aquaponics. More information can be found at: http://www.csu.edu/bioprehealth/facilities/aquaponics.htm

CSU Prairie Garden

Started in 2003 with a grant from the Illinois Department of Natural Resources (IDNR), the Prairie Garden is populated with species native to Illinois grasslands. The garden allows students to conduct research and also serves as a platform for instruction in how to teach biology. More information can be found at: http://www.csu.edu/bioprehealth/facilities/prairiegarden.htm

CSU Go Green Recycling Program

Chicago State University has a campus-wide recycling program that collects paper, cardboard, bottles, and cans for recycling. Recycling bins are available in all campus buildings. More information about "green" facilities initiatives can be found at: http://www.csu.edu/PFPM/ehs.htm

Eastern Illinois University

Graduate programs that would qualify as green: http://www.eiu.edu/sustainable/

- -MS in Sustainable Energy (Approved by IBHE Board: 12/4/12)
- -Duel MS in Sustainable Energy and Technology
- -Duel MS in Sustainable Energy and MBA
- -Duel MS in Sustainable Energy and MS in Geographic Information Sciences

We also have an Undergraduate Minor in Environmental Sustainability and a Concentration in Alternative Energy and Sustainability. http://castle.eiu.edu/energy/undergraduate.php

Another program that focuses on sustainability is our BS in Environmental Biology. https://www.eiu.edu/evb/index.php

We have created the Center for Clean Energy Research and Education (CENCERE), which is committed to the development of clean, sustainable energy sources. CENCERE partners with a crossdisciplinary team engaged in catalyzing new initiatives in energy research and education. More information about the center can be found here http://castle.eiu.edu/energy/. (4/12/11)

Campus green initiatives include having a Renewable Energy Center that can produce energy using biomass, water conservation and recycling programs.

The Norm Plummer ANNUAL RESEARCH FUND is an institutional program that encourages students research in sustainability.

We have received the following awards for our campus efforts:

Tree Campus USA 2010, 2011, 2012, 2013, 2018 — National Arbor Day Foundation and Toyota (2011)

Information about campus initiatives: http://www.eiu.edu/sustainability/index.php

Renewable Energy Center: http://www.eiu.edu/sustainability/eiu_renewable.php

Governors State University "Green" Jobs Report

http://www.govst.edu/About/Offices and Departments/Institutional Research and Effectiveness/Public Act 97-241/

• Governors State University has a deep commitment toward preparing our students, traditionally underserved and marginalized in public higher education, for the jobs of tomorrow in a global economy while contributing to the ongoing stewardship of the environment at an affordable tuition rate. That commitment is not just in our degree programs and course offerings, but modeled in the efforts of the students, faculty, and staff of Governors State University to look for sustainable and environmental solutions and programming that creates and promotes "Green" Jobs and in the long-term saves money for the university and the state of Illinois.

• Degree Offerings

- At the undergraduate level, the B.S. in Biology and B.S. in Chemistry programs prepare a student with the latest technology and teaching methods for careers in the life and physical sciences as well as the field of environmental science and sustainability. This degree program is available to direct-entry and transfer-entry students, including those through our nationally-recognized Dual Degree Program which provides a pipeline for students from study at the community college to "Green" and sustainable jobs after completion of a bachelor's degree. Undergraduate students also have the opportunity to elect minors in Biology and Chemistry
- At the master's degree level our Master of Science in Environmental Biology, Management, and Policy. Students may choose either the Environmental Biology or Environmental Management and Policy concentration that comprises the remainder of their required and selective courses. The Environmental Biology concentration emphasizes applied ecological research, and is designed for students interested in designing and conducting work in ecological research and data acquisition, entering a doctoral degree program, or teaching at the college level. The capstone experience in this concentration is independent research culminating in a graduate thesis or project. The Environmental Management and Policy concentration emphasizes application of sound principles in natural resource management, environmental policy and planning to natural resource policy and management decisions. The capstone experience in this concentration is a professional internship with a public land management or regulatory agency, a private consulting firm or a non-profit organization with an environmental conservation mission.
- Graduates may obtain employment in biological and related fields or pursue advanced degrees. A
 number of graduates work as naturalists and natural resource managers at county, state, and
 national parks. Other employment opportunities include work in the public or private sector in
 environmental consulting, habitat assessment, environmental policy, or as laboratory scientists.
 The curriculum also serves certified secondary school biology teachers who wish to develop an
 environmental focus. Governors State University is uniquely located where urban and rural areas
 meet, allowing students to explore a diverse range of complex environments. Internships are
 available with the U.S. Fish and Wildlife Services, U.S. Environmental Protection Agency, Illinois
 Department of Natural Resources, Forest Preserve District of Will County, Indiana Dunes National
 Lakeshore, Brookfield Zoo, and the Argonne National Laboratory, among many other locations.

- Courses that are available to degree-seeking students and those who are not seeking a degree
 plan but wish to augment their existing knowledge and skills to be better prepared for
 employment in "Green" industries are listed below. More information on courses and programs
 can be found in the university catalog.
- ANTH-1100 (Cultural Anthropology)
- ANTH-4100 (Urban Anthropology)
- ANTH-4610 (Ethnographic Research Methods)
- ANSO-3099 (Junior Seminar in Anthropology and Sociology)
- ANSO-3300 (Ecology, Environment, and Culture)
- ANSO-4300 (Food, Culture, and Society)
- BIOL-1200/1201 (Environmental Biology, Lecture/Laboratory)
- BIOL-2104/2109 (Biological Science Foundations II, Lecture/Laboratory)
- BIOL-3118 (Environmental Studies: A Case Studies Approach)
- BIOL-3322/3323 (Ecology, Lecture/Laboratory)
- BIOL-4140/4141/4142/4143/4144/4145/4146/4147/4148/4149/4150 (Natural History Topics in Biology)
- BIOL-6101/6102/6103/6104/6105/6106/6107 (Environmental Science Topics)
- BIOL-6516 (Topics in Ecology)
- CHEM-1111/1112 (Chemical Science Foundations, Lecture/Laboratory)
- CHEM-1141/1142/1143/1144 (General Chemistry I and II, Lecture/Laboratory)
- CHEM-4155 (Chemical Literature)
- CHEM-5145/5146 (Environmental Chemistry, Lecture/Laboratory)
- ENGL-4483 (Literature of the Environment)
- PADM-8400 (Seminar in Public and Strategic Planning)
- SOC-1100 (Introduction to Sociology)
- SOC-3200 (Social Inequalities)
- SOC-3500 (Population Studies)
- SOC-4400 (Social Movements)
- Modeling Sustainability and Environmental Advocacy as a University
- In addition to our degree offerings, Governors State University offers programming based around environmental issues, takes efforts to protect the local and global environment through good stewardship of our planet, and looks for efficiencies through sustainable practice. More information on university sustainability measures can be found below and at our university sustainability website.
- Large-scale programming on campus
- GSU is a signatory to the America College and University Presidents Climate Commitment, showcasing our promise toward reducing our carbon footprint.
- • GSU employs a full-time Environmental Health and Safety officer.
- Annual participation as a campus in Earth Week celebrations.
- Partner with local corporations and cities (e.g., City of Chicago Heights; Solvay, University Park; NuFarm, Chicago Heights) for litter clean-up on Earth Day.
- Campus Clean-up of the Thorn Creek watershed.
- • GSU's Sustainable Garden in which faculty, staff, and students rent a lot for gardening.
- Vet Tech in which small appliances are repaired by Veterans who receive training. The appliances are then reused or recycled.

- Hydration stations across campus, energy-efficient lighting with vacancy/occupancy controls, multiple scene light controls in classrooms for reduced lighting levels, night light control system to monitor and control current fixtures and future installations.
- DDC controls for local AHU and HVAC systems.
- Campus sustainability practices
- Use of bio-solids on university-owned farm land.
- Use of beet juice instead of road salt in the winter to combat ice on all paved surfaces and sidewalks.
- Make use of a 64 panel solar-thermal system, offsetting the cost of hot water heating for its shower rooms and 168,000 gallon swimming pool, and displacing approximately 40 therms of natural gas daily.
- Recycling lamps and batteries which eliminates more than 150 CFL lamps, 160 HID lamps, 230 Non-PCB Ballast, 120 2' Linear lamps, 180 3' Linear lamps, 1,000 4' Linear lamps, and 1,200 alkaline batteries.
- Campus environmental stewardship practices
- Recycling is available in every department and classroom.
- Use of bio-friendly cleaning products throughout the university by the Housekeeping Department.
- Large-scale organic farming on university-owned farm land and the use of a Conservation Agriculture plan.
- • Installation of permeable pavers in the parking lot to promote effective drainage.
- Installation of bio-swales.
- Roller-brushing snow off surfaces to limit use of melting products.
- Below are highlights of the university's Energy Performance Contract:
- Campus energy audit
- Implementing Energy Conservation Measures (ECMs) across campus
- Heating, Cooling, Air Handling controls
- Lighting and motion sensors to limit unnecessary lighting
- Reduce greenhouse gas emissions by 3,000 metric tons annually
- Generate annual guaranteed energy savings

Illinois State University

Green IT Degree Offerings

Technology plays an intricate role throughout societies and industries. To meet the needs of society and employers Illinois State offers a range of degree programs that encompass technology to advance the capacity of 'green' industry, research and community efforts.

Beginning in the fall of 2017 Illinois State began offering the first Cybersecurity Major in the state of Illinois. The major includes courses on defensive security, offensive security, and a combination of security incident and event management with forensics. Security of energy and natural resources is a high priority as the systems that manage these resources are high value targets for cyber attacks.

Majors (Undergraduate)

Biological Sciences

Cybersecurity

Environmental Health

Geography

<u>Geology</u>

Recreation & Park Administration - Therapeutic Recreation

Renewable Energy

Social Work

Sociology

Minors (Undergraduate)

Business Environment & Sustainability

Civic Engagement and Responsibility

Environmental Health

Environmental Studies

Urban Studies

Masters (Graduate)

Applied Community and Economic Development

Conservation Biology

Political Science - Global Politics and Culture

Centers & Institutes

Center for Renewable Energy

<u>Institute for Geospatial Analysis and Mapping</u> (GeoMap)

Stevenson Center for Community and Economic Development

Center for Mathematics, Science and Technology

Center for a Sustainable Water Future:

https://about.illinoisstate.edu/watercenter/pages/default.aspx

CeMast (Center for Mathmatics, Science and Technology): https://cemast.illinoisstate.edu/

Innovation Consulting Community: http://innovationconsulting.community/

Milner Library Make It Space: https://library.illinoisstate.edu/services/technology/make-it-space/

Graduate Certificates

Certificates provide students with focused studies and exposure to the very latest topics and trends in the IT industry.

- Enterprise Computing Systems Graduate Certificate
- <u>Geographic Information Systems (GIS) Graduate Certificate</u> Certificates are offered in specialized disciplines for Anthropology, Hydrogeology and Biology.
- Information Assurance and Security Graduate Certificate
- Internet Application Development Graduate Certificate
- Networking and Telecommunications Management Graduate Certificate
- Systems Analyst Graduate Certificate

Green Technology Efforts at Illinois State University

eRefurbishment (http://at.illinoisstate.edu/eRecycling)

The goal of the eRefurbishment program is to repurpose and reuse equipment rather than sending it to a landfill. eRefurbishment ensures all data has been erased from computers and all other electronic devices that may have data on them, then refurbishes the systems and offers them back to the campus at no cost.

Each piece of equipment is cleaned, the drives are wiped, and a series of diagnostic tests occur in order to deliver a dependable machine. This process is designed to guarantee the system is functional and that University data is protected.

This service is open to any State of Illinois agency. Department of Corrections, Illinois State Police and other state institutions of higher educations have utilized this service.

Totals for 2013 thru June 2017 are as follows

Desktops recovered and reissued = 676

Notebooks recovered and reissued = 456

Monitors recovered and reissued = 485

Mac's recovered and reissued = 138

Dollars saved by the university = \$1,568,257

Weight saved from being discarded 22,376.8 lbs.

Energy Conservation

Mitigation of energy consumption has been accomplished through virtual server environments, upgrading data centers, establishing disaster recovery sites, consolidating enterprise services and creating collaborative work spaces.

Building and energy systems are highly automated to ensure the most efficient operation of mechanical systems. Additionally devices such as photovoltaic and occupancy sensors provide an effective method of mitigating energy loss in classrooms, parking decks, and other built areas of campus.

Implementation of campus Energy Conservation Measures to reduce our tons of CO2 per square foot by 15% since 2008.

Renewable Energy

A <u>demonstration hybrid 1 kW wind / 1 kW solar</u> grid-tie capable renewable energy system has been installed at the <u>Horticulture Center</u> on Raab Rd. The system serves as a research and educational tool for students in the Renewable Energy major. Two additional photovoltaic panels have been installed on top of the technology lab of Turner Hall, with live metering data fed into the lab.

Center for Sustainable Water Future

The Center for a Sustainable Water Future was established at Illinois State University in April 2018. The Center is an interdisciplinary initiative that brings together academically diverse faculty from across campus to advance research, creative expression, teaching, and outreach activities promoting and enhancing effective and viable water solutions and stewardship within Illinois and with our regional, national, and global partners. Through action research, our interdependence and relationship with water is explored, investigated, and shared promoting a broader sustainable water ethic for the future.

Research Partnerships on Renewable Energy

Illinois State University was one of four institutions to partner on a Department of Energy funded research program on the feasibility of implementation of renewable systems on college campuses.

Technology & Global Climate Change Research

Illinois State University faculty and students are utilizing an advanced buoy system (only the second in the world to be deployed) to provide fishermen with near real-time information about lake conditions, and the high-frequency data will help develop a model that can be used to predict impacts of climate change into the future.

- ISU has achieved Tree Campus USA designation from the Arbor Day Foundation
- Weibring Golf Club at Illinois State University has achieved designation as a "Certified Audubon Cooperative Sanctuary" through the Audubon Cooperative Sanctuary Program for Golf Courses. Many members of the Illinois State University community led the effort to obtain sanctuary designation on the property. Weibring Golf Club at Illinois State University is one of 56 golf courses in Illinois and 897 in the world to hold the title of Audubon Cooperative Sanctuary.
- Illinois State University received the 2017 AASHE Campus Sustainability Achievement Award for the Fix It Friday project: www.isufixitfriday.org

Northeastern Illinois University: Efforts to Promote the Green Technologies Industry 2016-2017

https://www.neiu.edu/about/northeastern-voices/northeastern-turning-every-day-earth-day

DEGREES AND CERTIFICATES

UNDERGRADUATE PROGRAMS:

B.S. Biology

B.S. Earth Science

B.S. Environmental Science

B.A. Environmental Studies

B.A. Geography

Undergraduate Certificate Geographic Information Science (GIS)

Minor in Environmental Studies

Minor in Geographic Information Science (GIS)

Minor in Geography

Minor in Earth Science

GRADUATE PROGRAMS:

M.S. Biology

M.A. in Geography and Environmental Studies

Graduate Certificate in Geographic Information Science (GIS)

ACADEMIC PROGRAMS AND CURRICULUM

BIOLOGY PROGRAM: The Biology Program includes course offerings at the undergraduate and graduate level that deal with conservation and ecology.

SELECTED COURSES IN BIOLOGY:

BIO-305. WIP: General Ecology

BIO-453. Conservation Biology

BIO-455. Restoration Ecology

EARTH SCIENCE PROGRAM: The Earth Science Program includes course offerings at the General Education and undergraduate level that emphasize the study of geologic processes, oceanography and meteorology.

SELECTED COURSES IN EARTH SCIENCE:

ESCI-109W: First Year Experience: Chicago's Muddy Waters-Environmental Geology

ESCI-123: Environmental Geology

ESCI-207: Global Climate and Weather

ESCI-327: Aqueous Environmental Geochemistry

ESCI-341: Environmental Hydrology

ENVIRONMENTAL SCIENCE PROGRAM: The interdisciplinary Environmental Science program includes coursework in biology, chemistry, earth science, environmental studies, geography, math and physics.

SELECTED COURSES IN ENVIRONMENTAL SCIENCE:

ENVI-101. Introduction to Environmental Science

ENVI-301. Field Methods in Environmental Science

ENVI-390. Environmental Science Research and Practice

ESCI-207. Global Climate and Weather

GEOGRAPHY AND ENVIRONMENTAL STUDIES PROGRAM: The structure and focus of the Geography and Environmental Studies program has been addressing sustainability issues since 1965. The undergraduate Environmental Studies program has two focus areas: environmental policy and planning, and environmental education and interpretation. The graduate program combines geographic and environmental studies approaches to the understanding of human-environment interactions.

SELECTED COURSES IN GEOGRAPHY AND ENVIRONMENTAL STUDIES:

GES-109B. First Year Experience: Chicago Geographies: Environmental Chicago

GES-150. Introduction to Environmental Studies

GES-218. Conservation of Natural Resources

GES-220. Pollution Control and Prevention

GES-301. Great Lakes Environmental Management

GES-305. Geography and Map Skills for Teachers

GES-307. Environmental Education Seminar

GES-308. Conservation Psychology

GES-309. Principles and Methods of Environmental Interpretation

GES-311. Social Dimensions of Water Resources Management

GES-319. Environmental and Natural Resources Policy

GES-321. Environmental Impact Assessment

GES-323. Green Infrastructure Planning and Management

GES-327. Forest Resource Management

GES-328. Wildlife Resource Management

GES-329. Sustainable Energy Policy

GES-336. Solid Waste Issues

GES-338. Sustainable Development

GES-339. Geography of Energy

- GES-344. Chicago River Issues
- GES-349. Environment and Urbanization
- GES-359. Environmental Planning
- GES-360. Environmental Justice and Activism
- GES-368. Changing Global Climates
- GES-380. Field Methods
- GES-416. GIS for Natural Systems Management
- GES-437. Seminar: Global Wildlife Issues
- GES-445. Seminar in Resource Management and Decision-Making
- GES-449. Seminar in Land Use Controls
- GES-453. Seminar in Sustainable Development
- GES-454. Seminar: Population and Environment
- GES-455. Seminar in Environmental Planning
- GES-456. Seminar in U.S. Environmental Policy
- GES-457. Seminar: International Environmental Policy
- GES-462. Seminar in Environmental Education

UNIVERSITY INITIATIVES AND HIGHLIGHTS

Arbor Day 2017 Celebration: On April 25, the University celebrated Arbor Day with the theme of "May the Forest Be With You." Attendees could visit four stations: a forester-guided campus tree tour, photos with Star Wars-related props and trees, nature-based yoga sessions in the quad, and oak sapling giveaway/tree planting education. The tree giveaway was made possible by a partnership with the Metropolitan Water Reclamation District of Greater Chicago.

DIVVY Partnership and Ridesharing: Chicago's Divvy bike-sharing service installed a docking station adjacent to the University's Main Campus. The docking station location was determined, in part, by an initiative where students could recommend their preferred locations. Northeastern students can receive a discounted Student Annual Membership to DIVVY, giving them access to thousands of bikes at hundreds of stations across Chicago.

Green Business Conference 2017: The Green Conservative Group's (GCG) annual Green Business Conference, held April 4, provided an opportunity to network and increase students' and the Northeastern community's knowledge and understanding of today's progress towards a sustainable world. The GCG partnered with student organizers of the annual International Business Conference. In collaboration with the NEIU Alumni All Access series, GCG brought author, producer and broadcaster John St. Augustine, and broadcaster Bill Kurtis, to deliver the keynote address.

Green Conservation Group (GCG): This student organization promotes environmental responsibility at Northeastern through education and community involvement. All are welcome to participate in their

activities to promote sustainability and common-sense environmental practices. Their activities include workshops, film festivals, Earth Day events and social activities off-campus, such as visiting special museum exhibits, gardens, etc.

Green Fee Committee: In 2007, the Green Cycle Group (a student environmental club on campus at the time) initiated the idea of a student "green fee" that would be used to promote campus sustainability initiatives. Green initiatives were becoming more popular across campuses all over the country, and a few universities had similar student-approved fees to help pay for such projects. The proposal was presented to and endorsed by the Student Government Association. Then, the green fee was approved during a referendum of the student body. Finally, it was approved by the Northeastern Illinois University Board of Trustees, and the \$3-per-semester-green-fee was implemented in Fall 2007. A sample of the accomplishments of the Green Fee Committee includes:

Bike Racks: By adding more bike racks on the main campus, the University increases the potential for bicycle commuting to ease driving and traffic congestion.

Bike Repair Station: A covered bike repair station offers students, faculty, and staff a safe way to repair bicycles on campus.

Bird-Safe Windows: A new bird-safe initiative replaced outdated materials with clear decals to deter bird collisions with windows in breezeways on the main campus.

Demonstration Rain Barrel: A rain collection system was approved for installation near the library to be used to water the president's garden.

Electric Maintenance Vehicle: Replacing a pickup truck, this battery-powered vehicle, which is primarily used by Facilities Management, cuts down on greenhouse emissions and noise pollution.

Electric Vehicle Charging Stations: Helping El Centro in its bid to obtain LEED certification, three electric vehicle-charging stations at that location promote the adoption of pollution-free electric cars.

Energy-Saving Led Lights and Motion Sensors: Efficient bulbs and sensors that switch off lighting when not in use save electricity and the need for maintenance with longer-lasting bulbs.

Leaf Composting Program: A pilot leaf composting program was approved that will be implemented starting summer and fall as an additional agreement with the waste hauler to collect leaf litter and yard waste for off-campus composting purposes.

Marker Recycling Program: A pilot marker collection and recycling program was approved for classrooms with heavy whiteboard marker use.

Planting of Trees and Greenery: Native trees and plants benefit local wildlife as well as cut down on air pollution, recharge ground water and reduce runoff that contributes to water pollution and flooding. These aesthetic improvements also contribute to biodiversity. Improvements take place in many areas of the main campus and most recently on Northeastern's Jacob H. Carruthers Center for Inner City Studies location.

Recycling Bins: These receptacles, located throughout the University, are some of the most visible displays of sustainability. They encourage the community to think about waste disposal and how it contributes to growing landfills.

Solar PV Panels: Introduced by President Sharon Hahs on Earth Day 2012, these photovoltaic panels on Building B convert the sun's energy into electricity and reduce Northeastern's reliance on polluting energy sources. A TV monitor in a highly trafficked part of the building shows visitors its real-time and cumulative power savings.

Solar Water Heating System: Solar panels were installed in 2013 atop the Physical Education Building to heat its swimming pool, allowing Northeastern to reduce its dependence on fossil fuels and reduce its natural gas bills.

Water Bottle Filling Stations: New water fountains with bottle-filling stations that dispense filtered water have been installed around the University since 2013 to reduce plastic bottle waste as well as energy and resource consumption.

Maintenance of On-Campus Prairies, Savanna, and Natural Areas: The Departments of Biology and Geography & Environmental Studies along with Facilities Management maintain small grassland prairies and Swamp White Oak savanna on NEIU's campus with periodic controlled burns, planting, and invasive species control for educational, historic, and aesthetic purposes. A recent partnership was created with the Conservation Foundation to implement the management of focus areas on campus in order to control invasive species, increase native trees and plants, and create visually appealing natural areas on campus.

Tree Campus USA: In February 2016, the Arbor Day Foundation designated the University as a "Tree Campus USA" in recognition of excellence in campus tree management and student and community involvement. Being awarded this designation was a team effort, with collaboration between the Departments of Geography and Environmental Studies, Biology and Facilities Management, and the Division of Student Affairs. The Geography and Environmental Studies program maintains a Geographic Information Systems map of all the trees and shrubs on campus since 1997.

Northern Illinois University 2019 Green Initiatives Report

Northern Illinois University offers the following undergraduate academic options that promote green technologies and align with green jobs programs

(http://www.niu.edu/sustainability/academics/index.shtml).

Academic Degrees

Majors:

<u>Biological Science - Biodiversity (BS/MS/PhD): (CIP 2K: 26.0101)</u> In our biological sciences program, you will learn methods to conserve, preserve, and protect plant and animal species along with the habitats necessary for their survival. This program best prepares students interested in pursuing research in plant and animal biodiversity. BS/MS/PhD

<u>Environmental Studies (CIP 2K: 03.0103):</u> The Environmental Studies (ENVS) offers six different emphases:

- Biodiversity and Restoration (BS)
- Energy Studies (BS)
- Nature in Society (BA/BS)
- Environmental Policy (BA/BS)
- Water Science (BS)
- Educator Licensure-Environmental Science (BA/BS)

<u>Geology - Environmental Geosciences (BS/MS/PhD) (CIP 2K: 40.0601):</u> As a geology major with an emphasis in environmental geosciences, you'll apply physical and life sciences to solving environmental problems. You might be interested in a career in law, political science, economics, or land use planning where your credentials in environmental geosciences are highly valued.

Geographic and Atmospheric Sciences - Natural Environmental Systems (BS/MS/PhD) (CIP 2K: 40.0601): In this program you will incorporate the physical sciences with human management approaches to the environment. You'll have the foundation for a career in several environmental fields including agriculture, soil science and climatology.

<u>Management - Entrepreneurship and Social Responsibility (BS) (CIP 2K: 52.0701):</u> You will learn to drive innovation and transformation in addressing environmental challenges by building strong and sustainable organizations. You have the opportunity to make a difference through nonprofit or private companies.

Mechanical Engineering - Sustainable Energy (BS) (CIP 2K: 14.1901): In this program you learn both ends of the energy spectrum from source to utilization and how technological advances in energy generation and sustainable conservation are applied within the field of mechanical engineering. In your studies, you will gain an understanding of energy conservation and environmental sustainability, alternative and renewable energy, propulsion, and refrigeration and air conditioning.

<u>Nonprofit and NGO Studies (BA/BS) (CIP 2K: 44.0000):</u> You will learn the skills to serve as an effective leader in a nonprofit organization and make a difference for any number of environmental and social justice causes.

<u>Public Health - Environment and Health (BS) (CIP 2K: 51.1504):</u> You will learn the environmental factors that contribute to public health problems along with methods to prevent and control diseases and epidemics.

Minors:

<u>Counseling, Adult and Higher Education - Social Change Leadership:</u> You gain hands-on experience to be an effective leader in multiple contexts while examining the connections between social justice, ethics, and collaboration in order to promote positive social change. With environmental sciences already well established, we need leaders directing social change for environmental issues.

<u>Environmental Studies</u>: You have the opportunity to complement your degree with a minor in environmental studies. The minor is designed for students who want to remain in another discipline, but who have an interest in the environmental field as a focus area.

<u>Industrial and Systems Engineering - Sustainable Engineering:</u> In this program, you focus on the integration of social, environmental, and economic considerations into product, process, and energy systems design methods. This minor will equip you, as a graduating engineer or scientist, with the tools they need to meet the challenges associated with delivering goods, energy, and services through sustainable means.

<u>Management - Social Entrepreneurship:</u> With a minor in social entrepreneurship, you will develop the entrepreneurial skills to help build and sustain ventures that generate economic, social, and environmental change.

Certificates of Undergraduate Study:

<u>Engineering Technology - Energy Management:</u> This certificate is designed to provide students fundamental knowledge in energy sciences with an emphasis in industrial applications.

<u>Environmental Studies - Sustainable Food Systems:</u> You will learn about the interactions between environmental changes (e.g. growing population, changing weather patterns), community health, food production, and food security. This certificate is intended to draw from and inform a variety of majors and can also be pursued as a stand-alone certificate.

<u>Geographic and Atmospheric Sciences - Geographic Information Systems:</u> You will learn to use Geographic Information Systems (GIS) to create and examine information stored within maps. With the GIS certificate, you will have the knowledge to use spatial analysis technology to examine and solve environmental problems.

<u>Industrial and Systems Engineering - Lean Six Sigma:</u> With this certificate, you are introduced to the skills required in manufacturing and service plants that apply the principles of lean production and six sigma. Industry professionals expect you to have an understanding of optimization and process efficiency as a means to reduce waste at all levels of production.

<u>Management - Social Entrepreneurship:</u> This certificate will help you to develop the entrepreneurial skills related to the unique features of building and sustaining ventures to generate economic, social, and environmental change and the role of microfinance organizations.

<u>Public Administration - Public Service Leadership:</u> Leadership skill and knowledge are fundamental for individuals contemplating or currently pursuing career positions with public service organizations. You will learn how to frame a vision, how to think strategically, how to solve problems, how to motivate employees, and how to adapt an organization to complex environmental change.

Green and Sustainable Initiatives

Performance Contracts: NIU has achieved major reductions in energy consumption by making renovations through performance contracts with Energy Systems Group that began in 2000. Based on 1995 energy/water consumption levels the university since has saved:

- 42.3% of electricity
- 23.0% of natural gas
- 34.84 metric tons of CO2 emissions
- 37,972 kgal of water

Solar Energy: As a sustainable measure to conserve natural gas, NIU installed solar water heating systems for the indoor swimming pools at Gabel Hall and Anderson Hall. A solar water heating

system, in conjunction with a pool cover, eliminates the need for central plant steam for heating the pool water.

H2O 2Go: Starting in 2012, NIU began installing H2O 2Go refilling stations to reduce water from single-use water bottles and encourage students to use reusable water bottles. The university also distributes reusable water bottles at the beginning of each semester.

Waste Reduction and Recycling: NIU has engaged in a number of recycling initiatives since 2011 such as:

- Updates to recycling containers and labeling
- Recycling products such as alkaline batteries, oil filters, used tires, and mercury-containing bulbs
- Between 2015 and 2016 NIU recycled over 750 tons of recyclable material
- Partnership with Goodwill starting in 2015 to collect upwards of 10,000 lbs of goods each year
- Unlimited free printing on campus was eliminated in 2016 to reduce paper waste

Transportation: NIU has engaged in measures to improve sustainability of transportation infrastructure

- Using 10% ethanol blend gasoline and B11/B2 soy biodiesel to help address greenhouse gas emissions.
- Incorporating 35 hybrid vehicles in the fleet to promote increased fuel efficiency.
- An electric charging station was completed in Oct 2016 to support commuters with electric vehicles.
- Supporting alternative transportation methods by supporting a Zipcar program and a free bike loan program with 150 bikes.

Chemical Management/Reduction: NIU uses at least 65% green cleaning products in janitorial operations, uses herbicides and pesticides only as a last resort, and tracking the refrigerant emissions and over 1,800 pieces of equipment.

Energy Conservation: Over \$50M of energy conservation improvements (lighting improvements, heating/cooling improvements, insulating improvements, etc.) have been systematically made over the past 15 years, generating ~\$4M of savings annually. More energy conservation improvements are currently underway and energy conservation is a major design consideration for all repair/construction projects.

Web Highlights: NIU launched a website that highlights these sustainability initiatives across campus at http://www.niu.edu/sustainability/index.shtml and many highlights from individual departments can be found in the following pages:

- Institute for the Study of Environment, Sustainability and Energy: http://www.niu.edu/ese
- Campus Dining: http://www.niu.edu/dining/about/sustainability/index.shtml
- NIU Green Team: http://www.niu.edu/sustainability/about/green-team.shtml
- Student Association Director of Environmental Affairs: http://www.niu.edu/student-association/about/leadership.shtml
- Achievements: http://www.niu.edu/sustainability/about/achievements.shtml
- History of Sustainability at NIU: http://www.niu.edu/sustainability/about/history.shtml
- Student Organizations: http://www.niu.edu/sustainability/get-involved/organizations.shtml
- Sustainability Plan (Development Ongoing):
 http://www.niu.edu/sustainability/about/plan.shtml
- Regular Events: http://www.niutoday.info/2017/04/11/gogreenniu-celebrates-earth-week/
- Communiversity Gardens: http://www.niu.edu/communiversitygardens/index.shtml
- Biological Sciences Greenhouse: http://www.niu.edu/biology/campus-experiences/facilities/greenhouse.shtml
- Map of Green Initiatives:
 http://www.myatlascms.com/map/index.php?id=249#!ce/10311?ct/10312,10381,21395,213
 97,21403,10311

Southern Illinois University Carbondale

At SIU, we believe that the daily actions of every individual can drive a more sustainable community. The Sustainability Office catalyzes sustainable decision making on campus, with a goal of balancing **environmental health**, **social equity**, and **economic prosperity**.

- Sustainability at SIU Carbondale: http://sustainability.siu.edu/
- Students, faculty, staff, and community members are encouraged to get involved with SIU Sustainability.

Sustainability Programs and Initiatives

Majors: Agribusiness Economics Biological Sciences Civil and Environmental Engineering Crop, Soil and Environmental Management Forestry Geography and Environmental Resources Geology Horticulture Outdoor Recreation Leadership and Management Plant Biology Zoology

Minors or specializations:

Sustainability Minor

Environmental Studies Minor

Environmental Sustainability Specialization

Environmental Chemistry Specialization

Environmental Engineering Specialization

Energy and Environmental Policy Specialization

Energy Engineering (Mechanical Engineering) Specialization and Minor

Courses (partial list):

UCOL 101G 1-3: Foundations of Inquiry Campus Sustainability: SIU Environmental Activities

GEOG 100-3 Environmental Conservation

GEOG 300 Geography, People & Environment

GEOG 303I – 3 Physical Geography

GEOG 320-3 Introduction to Environmental Sustainability

GEOG 421-3 Urban Sustainability

GEOG 424-3 Sustainable Development

GEOG 470 Contemporary Issues in Environmental Studies

GEOG 470-3 Continuing Issues in Environmental Studies

ANTH 207-3 Sustainability

ARC 481-3 Environmental Design II: Energy and Systems

CSEM 347-3 Urban Soils

CSEM 370-3 Agroecology Sustainable Agricultural Systems

FOR 201-3 Ecology of North American Forests

FOR 285-3 Social Influences on Forestry

FOR 331-3 Forest Ecosystems

AUT 430-1 Automotive Investigations

AUT 480-3 Alternative Fueled Vehicles

HORT 462-3 Sustainable Landscape Practice

HORT 463-3 Plants in Ecological Landscape

HORT 480-3 Designing Outdoor Spaces

TRM 440-3 Technology and Management of Sustainable Enterprises

PLB 301I-3 Environmental Issues

ZOOL 312I-3 Conservation of Natural Resources

ENGR 301I-3 Humans and Their Environment

ENGR 303I-3 The Role of Energy in Society

ABE 405-3 Management of Ethanol Production Facilities

ABE 440-3 Natural and Environmental Resources Economics and Policy 5

-An inventory of the courses offered at SIU which touch on sustainability and a listing of faculty engaged in sustainable research can be found here: https://sustainability.siu.edu/participate/curriculum.php.

Sustainability Initiatives

In 1999, Southern Illinois University broke ground in sustainability, becoming the first institution of higher education in Illinois to sign the Talloires Declaration. SIU committed to mobilize its resources in order to address the problems and reverse the trends of environmental degradation.

In May 2009, the SIU Board of Trustees unanimously passed the \$10 per semester student-initiated <u>Green Fee</u> "to provide a regularized source of funding for on-campus renewable energy, energy efficiency, and sustainability projects and research." This fee was passed after overwhelming approval by 73% of the students who voted in a campus wide referendum in the first student-led fee increase in SIU history. The Sustainability Council, along with the Green Fund Committee, was formed to make campus-wide recommendations concerning sustainability and allocate Green Fee revenue. Since then, the Committee has allocated over \$2.2 million toward sustainability across the SIU Carbondale campus community via the <u>Green Fund grant program</u>. Categories of projects have included food, energy efficiency, renewable energy, greening/grounds, transportation, waste, and outreach for sustainability efforts. Funded projects have ranged from events, to graduate and undergraduate research, to long-term investments in facilities on campus to ensure a sustainable future for the SIU campus. More details about funded projects can be found here.

SIU Carbondale has achieved the following recognitions and designations.

AASHE (Association for the Advancement of Sustainability in Higher Education) STARS (Sustainability Tracking, Assessment & Rating System) Silver: Received in 2013 and 2016. More info.

- Tree Campus USA Received annually since original designation in 2015. More info.
- Bicycle Friendly University This 4-year designation was first received in 2016. More info.
- Princeton Review's Guide to Green Colleges Inclusion in the guide in the following years: 2011, 2013-2018. More info.

• Sierra Magazine Cool Schools - Inclusion in the Sierra Club's "Cool Schools" list in the following years: 2016-2018. More info.

Students, faculty, staff, and community members are encouraged to get involved with SIU Sustainability!

Southern Illinois University Edwardsville

Homepage- https://www.siue.edu/sustainability/

Housing- https://www.siue.edu/housing/about/sustainability.shtml

Department of Environmental Scienceshttps://www.siue.edu/artsandsciences/environment/

Department of Geographyhttps://www.siue.edu/artsandsciences/geography/sustainability.shtml

Green Roof Environmental Evaluation Networkhttps://www.siue.edu/green/about/index.shtml

University of Illinois at Chicago

Sustainability at UIC: https://sustainability.uic.edu/

Summer Institute on Sustainability and Energy: https://uicsise.com/

Sustainability Internship Program: http://sustainability.uic.edu/student-experience/sustainability-internship-programs/

The Voorhees Center: http://voorheescenter.uic.edu/what-we-do/areas-of-research/economic-development/

University of Illinois at Springfield

Sustainability at UIS: https://www.uis.edu/sustainability/

University of Illinois at Urbana/Champaign

Institute for Sustainability, Energy, and Environment: http://sustainability.illinois.edu/

Student Sustainability Committee: http://ssc.sustainability.illinois.edu/

Illinois Sustainable Technology Center: http://www.istc.illinois.edu/info/govs_awards.cfm

Western Illinois University

Sustainability at WIU:

www.wiu.edu/vpas/sustainability

http://www.wiu.edu/vpas/sustainability/education.php

Sustainable WIU Pledge:

http://www.wiu.edu/student services/university union/sustainability/

CIP Code	Program
01.0000	B.S., Agriculture
26.0101	B.S., Biology, Option in Environmental Biology
03.0104	Ph.D., Environmental Science: Large River Ecosystems
45.0701	B.S., Geography and Geographic Information Science
45.0701	M.A., Geography
45.0701	Post-Baccalaureate Certificate, Geographic Information Systems (GIS) Analysis
40.0701	B.S., Geology
30.0000	B.S., Interdisciplinary Studies: Renewable Energy and Biofuels Technology
30.0000	B.S., Interdisciplinary Studies: Renewable Energy and Wind Technology
30.0000	B.S., Interdisciplinary Studies: Renewable Energy Policy, Planning, and Management
40.0404	B.S., Meterology
24.0101	BLAS, Emphasis in Environmental Studies
90.0301	Institute of Environmental Studies
	Undergraduate minor in Geographic Information Systems (Geography)
	Undergraduate Interdisciplinary minor in Environmental Studies
	Undergraduate minor in Natural Resources Conservation (Agriculture)
	Undergraduate minor in Weather and Climate (Geography)