

Degree Schedule - Graduate Certificate in Sustainability

Due in the Graduate School following completion of all required coursework.

Please type; handwritten forms are not acceptable

Provide information about you and your program.

Please type your name exactly as you would like it to be printed on your certificate.

Name as it will appear
on certificate

M Number (ex: M12345678)

Are you enrolled in a graduate
program at Michigan Tech? Yes No - I'm only earning this certificate at this time.

The certificate requires a total of 15 credits. Students must obtain a grade of B or higher in each of the courses. At least 9 of the total certificate credits must be at the 5000-level or higher.

Students can only substitute a course if they have the prior approval of the Sustainable Futures Institute Director and Graduate School Dean. If a course is substituted, a memo signed by the Sustainable Futures Institute Director (or one of the Co-Directors or Deputy Directors) must be attached to this degree schedule explaining that the course content for the substituted course meets the requirement of the Certificate. This should include the course number and name as well as the applicable section (i.e. "Industry and Society").

In the tables below, mark the classes taken for the certificate with the semester the credits were earned. Note that at least one course is required from each of the four areas.

Required Coursework - Sustainability (requires minimum of two courses)

Semester and Year Taken	Course Number	Course Title	Number of Credits
	ENG/SS 5510	Sustainable Futures I (PPOL/EX 780 Transfer equivalent)	3
	ENG/SS 5520	Sustainable Futures II (PPOL/EX 625 Transfer equivalent) OR CE 5993 Field Engineering in the Developing World + 1 credit CE 5994 /GE 5994/ED 5994/FW 5730	3

Required Coursework - Industry and Society (requires minimum of one course)

Semester and Year Taken	Course Number	Course Title	Number of Credits
	OSM 4100/5100	Operations Strategy	3
	BA 5610	Business Process Management	3
	BA 5780	Managing in the Global Environment	3
	CE 5408	Public Transit	3
	CE 5993	Engineering with Developing Communities	2
	CE/CSE 5710	Modeling and Simulation Applications for Decision-Making in Complex Dynamic Systems	variable to 6.0
	EC/GE 4620/ 5620	Energy Economics	3
	EC 5640	Natural Resource Economics	3
	ENVE 4512	Green Engineering Design for Sustainability	3

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Last Name, First Name MI (M Number)

The table below is continued from the previous page

Semester and Year Taken	Course Number	Course Title	Number of Credits
	ENG 5540	Sustainable Forest-based Biofuel Pathways	3
	HU 4625	Risk Communication	3
	SS 3800	Energy Technology and Policy	3
	SS 3820	Ethical, Legal and Societal Implications of Nanotechnology	3
	SS 4700	Communities and Research	3
	SS 4390	Seminar in Sustainability Issues	1
	SS 5310	Communities and Research	3
	SS 6100	Advanced Seminar in Energy and Climate Policy	3
	UN 5540	Pan American Biofuels and Bioenergy Sustainable Development	3

Required Coursework - Environment and Society (requires minimum of one course)

Semester and Year Taken	Course Number	Course Title	Number of Credits
	BL 4120	Environmental Remediation and Toxicology	3
	EC 4650/5650	Environmental Economics	3
	CE 5490	Sustainable Transportation	3
	CE 5666	Water Resources Planning and Management	3
	FW 3110	Natural Resource Policy	3
	FW 3410	Conservation Policy	3
	FW/SS 3760	Human Dimensions of Natural Resources	3
	FW 5180	Conservation Ethics	3
	SS 5300	Environmental Policy and Politics	3
	FW 3313/SS 5313	Sustainability Science, Policy and Assessment	4
	SS 5315	Population and the Environment	3
	SS 5340	Principles of Interdisciplinary Sustainability Research	3
	SS 5350	Environmental Policy Analysis	3
	SS 5400	Sociology of the Environment	3
	SS 5550	Global Environmental History	3

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Last Name, First Name MI (M Number)

Required Coursework - Industry and Environment (requires minimum of one course)

Semester and Year Taken	Course Number	Course Title	Number of Credits
	BL 4220	Applied and Industrial Microbiology	3
	CE 4050/5050	Green Building Design	3
	CE 4640/5640	Stormwater Management and Low Impact Development	3
	CM 4550	Industrial Chemical Production	3
	CM 4710	Biochemical Processes	3
	CMG 4800	Sustainable Construction	3
	EC 4620/5620	Energy Economics	3
	EE 5260	Wind Power Integration	3
	ENVE 4504	Air Quality Eng. and Science	3
	ENVE 4506	Application of Sustainability Principles to Engineering Practice	3
	ENVE 4508	Water and Waste Treatment	3
	ENVE 5511	Air Quality/Built Environment	3
	ENVE 5930	Independent Study in Environmental Engineering	3
	FW 5413	Sustainable Biomass	3
	FW 5550	GIS for Resource Management	4
	GE 4630	Mineral Industry Economics	3
	MEEM/ENVE 5453/5454	See Think Design Delight	4
	MEEM 5685	Environmentally Responsible Design & Mfg.	3

Graduate School Use Only: Total Credits