

Accelerated Master of Forestry Program

School of Forest Resources and Environmental Science

**A 4+1 program for Michigan Tech Forestry students
with enhanced training in Natural Resources Business Economics.**

Contacts:

Tara L. Bal, Master of Forestry Program Coordinator

Summary of Class Requirements:

Required classes	FW5810 – Research methods in natural resources. Fall and Spring.	2 credits	Subtotal 14 credits
	FW5800 – Master’s graduate seminar. Fall and Spring.	1 credit	
	FW5377 - Advanced Forest & Environmental Resource Management II. Fall and Spring.	2 credits	
	MA5701 - Statistical Methods. (or alternate from list) Fall.	3 credits	
	Credits applied to both BS and MF degree	6 credits	
Directed electives			
Directed electives	Two classes in economic or business related topics covering natural resources or environmental topics.	5-7 credits	Subtotal 14-18 credits
	Two classes in any economic or business related topic.	5-7 credits	
	One class in the area of forest biology or advanced GIS.	2-4 credits	
Free electives			
Free electives		0-3 credits	Subtotal 0-3 credits
		Grand total	30-32 credits

Directed Electives

Two classes in economic or business related topics covering natural resources or environmental topics from the list below (5-7 credits)

Fall	Spring
EC 4640 or 5640 - Natural Resource Economics (3 credits) Prereq: EC 2001 or EC 3002 or FW 4080	FW 4170 - Consulting Forestry (2 credits)
SS 5310 - Ecological Economics (3 credits, on demand)	EC 5620 - Energy Economics (3 credits)*
	EC 4650 or 5650 - Environmental Economics (3 Credits) Prereq: EC 2001 or EC 3002

*must be enrolled as a graduate student and have departmental permission

Two classes in an economic or business related topic. Suggested classes are listed below but others may be substituted (such as courses listed as BA) with Instructor and Coordinator's approval. (5-7 credits).

Fall	Spring
EC – 3400 Economic Decision Analysis (3 credits) Fall, spring, summer (if not applied to undergraduate degree)	MGT 3000 - Organizational Behavior (3 credits, Fall, spring, summer)
EC - 5300 Managerial Economics (3 credits, Fall, Spring, Summer) *	MGT 3100 - Leadership Development (3 credits) Fall, spring alternate years beginning 2008-2009
MKT 3000 - Principles of Marketing (3 credits) Fall, spring, summer	FW 4900 - Applied Experiment Design and Data Analysis. Offered alternate years starting in 2013-14 academic year (3 credits)
MGT 3800 - Entrepreneurship (3 credits)	OSM 3200 – Project Management (3 credits, Fall, spring, summer) (if not applied to undergraduate degree)
MKT 4100 - Sales and Sales Management (3 credits) fall, spring, summer, Prereq: BA 3800 or MKT 3000	MKT 3400 - Integrated Marketing Communications (3 credits) Prereq: BA 3800 or MKT 3000
FIN 4001 – Advanced Financial Management (3 credits) Prereq: Ba 3400 or EC 3400 or FIN 3000	EC 4000 – Senior Seminar in Economics (3 credits)
EC 4500 – Public Economics (3 credits) Prereq: EC 2001	EC 5000 – Microeconomics (3 credits) Fall, spring, Prereq: EC 3002

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One class in forest biology or advanced GIS. 2-4 credits.

Fall	Spring
FW 5368 - Forest Ecophysiology Offered alternate years beginning with the 2012-2013 academic year (2 credits)	FW 5130 - Forest Vegetation Dynamics Offered alternate years beginning with the 2012-2013 academic year (3 credits)
FW 5340 - Population Genetics and Applied Forest Genetics (3 credits)	FW 5135 - Plant Community Ecology Offered alternate years beginning with the 2013-2014 academic year (3 credits)
FW5550 - GIS for Resource Management (4 credits)	FW 5115 - Restoration Ecology Offered alternate years beginning with the 2013-2014 academic year (3 credits)
FW4540 - Remote Sensing of the Environment (3 credits - alternate Fall semesters)	FW 5100 – Advanced Terrestrial Ecology) (3 credits)
FW5540 - Advanced Terrestrial Remote Sensing (4 credits, alternate Fall semesters)	FW5560 - Digital Image Processing: A Remote Sensing Perspective (3 credits, Spring) Pre-requisite: FW5550
	FW4545 - Map Design with GIS (3 credits, alternate Spring) Pre-requisite: FW3540 or FW5550
	FW5555 Advanced GIS concepts and Analysis (3 credits)
	FW5556 GIS Project management (3 credits)

Sample Curriculum after completion of undergraduate degree (assumes no credits taken under senior rule)

6 credits counted towards both degrees (3000 level or higher).

Fall	Spring
MA5701 - Statistical Methods (3 credits)	EC 5650 - Environmental Economics (3 Credits) Prereq: EC 2001 or EC 3002
FW5810 - Research methods in natural resources (2 credits)	MGT 3100 - Leadership Development (3 credits) Fall, spring alternate years beginning 2008-2009
FW 5800 - Master's Graduate Seminar (1 credit)	FW 5377 - Advanced Forest & Environmental Resource Management II. (2 credits).
EC 5640 - Natural Resource Economics (3 credits) Prereq: EC 2001 or EC 3002 or FW 4080	FW5556 GIS Project management (3 credits)
SS 5310 - Ecological Economics (3 credits, on demand)	FW 4170 - Consulting Forestry (2 credits)
Total 12 credits	Total 13 credits

*must be enrolled as a graduate student

Sample 5-year curriculum (Class number, name and number of credits)

Year 1	Fall	Spring
	UN1001 Perspectives on inquiry (3) FW2051 Field Techniques (1) FW2010 Vegetation of North America (4) MA1135 Calculus for Life Sciences (4) HASS Distribution (3)	UN1002 World Cultures (4) BL2160 Botany (4) CH1150 University Chemistry I (3) CH1151 University Chemistry Lab I (1) FW1050 Natural Resources Seminar (1) Free Elective (3)
	Total 15 credits	Total 16 credits
Year 2	Fall	Spring
	UN2001 Composition (3) MA2720 Statistical Methods (4) FW3020 Forest Ecology (3) FW3330 Soil Science (4) HASS Distribution (3)	UN2002 Institutions (3) FW1035 Wood anatomy (4) FW3200 Biometrics and Data Analysis (4) FW3540 Intro to GIS (4)
	Total 17 credits	Total 15 credits
Year 3	Fall	Spring
	FALL CAMP FW3010 Practice of Silviculture (4) FW3840 Forest Health (3) FW3600 Wildlife Habitat (3) FW3170 Land Measurements/GPS (1) FW3190 Multi-resource Assessment (3) FW3150 Timber Harvesting (2)	FW4080 Forest Economics and Finance (3) Directed Elective (3) FW3110 Natural Resource Policy (3) FW4140 Vegetation Modeling (2) Directed Elective (3) HASS Distribution (3)
	Total 16 credits	Total 17 credits
Year 4	Fall	Spring
	FW4810 Integrated Resource Assessment (4) HASS Distribution (3) FW4150 Forest Resource Management (3) Free Elective (6)	Free Elective (13) EC3400 Economic Decision Analysis (3) OR BUS2200 Business Law (3) OR BUS2300 Quantitative Problem Solving (3) OR OSM 3200 Project Management (3)
	Total 16 credits	Total 16 credits
Year 5	Fall	Spring
	MA5701 Statistical Methods (3) FW5810 Research Methods in Natural Resources (2) EC 5640 Natural Resource Economics (3) SS 5310 Ecological Economics (3) FW5800 Master's Graduate Seminar (1)	EC 5650 Environmental Economics (3) FW 5377 Advanced Forest & Environmental Resource Management II. (2) FW 4170 Consulting Forestry (2) FW5556 GIS Project management (3) EC 4000 Senior seminar in Economics (3)
	Total 12 credits	Total 13 credits

Grand Total: 153 Credits

Directed electives for undergraduates are selected from FW3320 Forest Genetics and Genomics (3 cr.), FW4120 Tree Physiology (3 cr.), FW4220 Wetlands (4 cr.), FW4370 Forest and Landscape Hydrology (3 cr.)