Total Academic Credits.: 120
+ 3 Co-Curricular Units

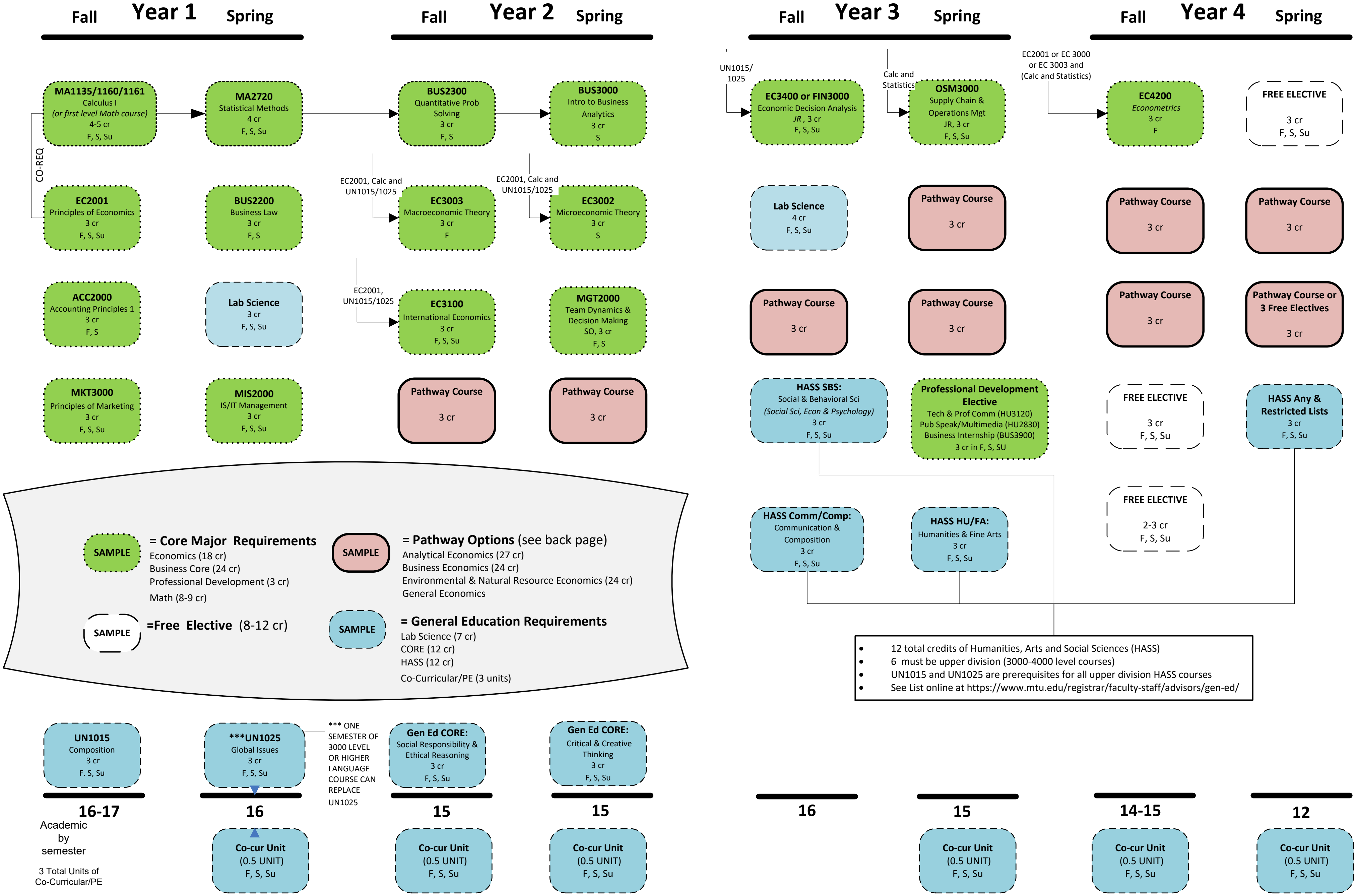
Course Subject and Number
Course Title
Level Restrict, Course Cr
Semesters Offered
(F=Fall, S=Spring,Su=Summer)

1885
Michigan Tech
College of Business

ECONOMICS (BEC)
*FLOWCHART
2024-25 Academic Catalog Year

***NOTE:**
- Flowchart is a guide for course sequencing recommendations.
- COB courses have some flexibility.
- Note if any pre-requisites or class level required before taking a course.
- Actual Degree requirements are determined by your catalog term
- Meet with COB Academic Advisor annually for academic goal planning

Your Official Audit can be found in MyMichiganTech
with u.achieve Interactive Degree Audit.



Year 1

Fall

MA1135/1160/1161
Calculus I
(or first level Math course)
4-5 cr
F, S, Su

CO-REQ

EC2001
Principles of Economics
3 cr
F, S, Su

ACC2000
Accounting Principles 1
3 cr
F, S

MKT3000
Principles of Marketing
3 cr
F, S, Su

UN1015
Composition
3 cr
F. S, Su

16-17

Academic
by
semester

3 Total Units of
Co-Curricular/PE

Spring

MA2720
Statistical Methods
4 cr
F, S, Su

BUS2200
Business Law
3 cr
F, S

Lab Science
3 cr
F, S, Su

MIS2000
IS/IT Management
3 cr
F, S, Su

*****UN1025**
Global Issues
3 cr
F, S, Su

*** ONE SEMESTER OF 3000 LEVEL OR HIGHER LANGUAGE COURSE CAN REPLACE UN1025

16

Co-cur Unit
(0.5 UNIT)
F, S, Su

Year 2

Fall

BUS2300
Quantitative Prob Solving
3 cr
F, S

EC2001, Calc and UN1015/1025

EC3003
Macroeconomic Theory
3 cr
F

EC2001, UN1015/1025

EC3100
International Economics
3 cr
F, S, Su

Pathway Course
3 cr

Gen Ed CORE:
Social Responsibility & Ethical Reasoning
3 cr
F, S, Su

15

Co-cur Unit
(0.5 UNIT)
F, S, Su

Spring

BUS3000
Intro to Business Analytics
3 cr
S

EC2001, Calc and UN1015/1025

EC3002
Microeconomic Theory
3 cr
S

MGT2000
Team Dynamics & Decision Making
SO, 3 cr
F, S

Pathway Course
3 cr

Gen Ed CORE:
Critical & Creative Thinking
3 cr
F, S, Su

15

Co-cur Unit
(0.5 UNIT)
F, S, Su

Year 3

Fall

UN1015/1025

EC3400 or FIN3000
Economic Decision Analysis
JR , 3 cr
F, S, Su

Lab Science
4 cr
F, S, Su

Pathway Course
3 cr

HASS SBS:
Social & Behavioral Sci
(Social Sci, Econ & Psychology)
3 cr
F, S, Su

HASS Comm/Comp:
Communication & Composition
3 cr
F, S, Su

16

Spring

Calc and Statistics

OSM3000
Supply Chain & Operations Mgt
JR, 3 cr
F, S, Su

Pathway Course
3 cr

Pathway Course
3 cr

Professional Development Elective
Tech & Prof Comm (HU3120)
Pub Speak/Multimedia (HU2830)
Business Internship (BUS3900)
3 cr in F, S, SU

HASS HU/FA:
Humanities & Fine Arts
3 cr
F, S, Su

15

Co-cur Unit
(0.5 UNIT)
F, S, Su

Year 4

Fall

EC2001 or EC 3000 or EC 3003 and (Calc and Statistics)

EC4200
Econometrics
3 cr
F

Pathway Course
3 cr

Pathway Course
3 cr

FREE ELECTIVE
3 cr
F, S, Su

FREE ELECTIVE
2-3 cr
F, S, Su

14-15

Co-cur Unit
(0.5 UNIT)
F, S, Su

Spring

FREE ELECTIVE
3 cr
F, S, Su

Pathway Course
3 cr

Pathway Course or 3 Free Electives
3 cr

HASS Any & Restricted Lists
3 cr
F, S, Su

12

Co-cur Unit
(0.5 UNIT)
F, S, Su

- 12 total credits of Humanities, Arts and Social Sciences (HASS)
- 6 must be upper division (3000-4000 level courses)
- UN1015 and UN1025 are prerequisites for all upper division HASS courses
- See List online at https://www.mtu.edu/registrar/faculty-staff/advisors/gen-ed/

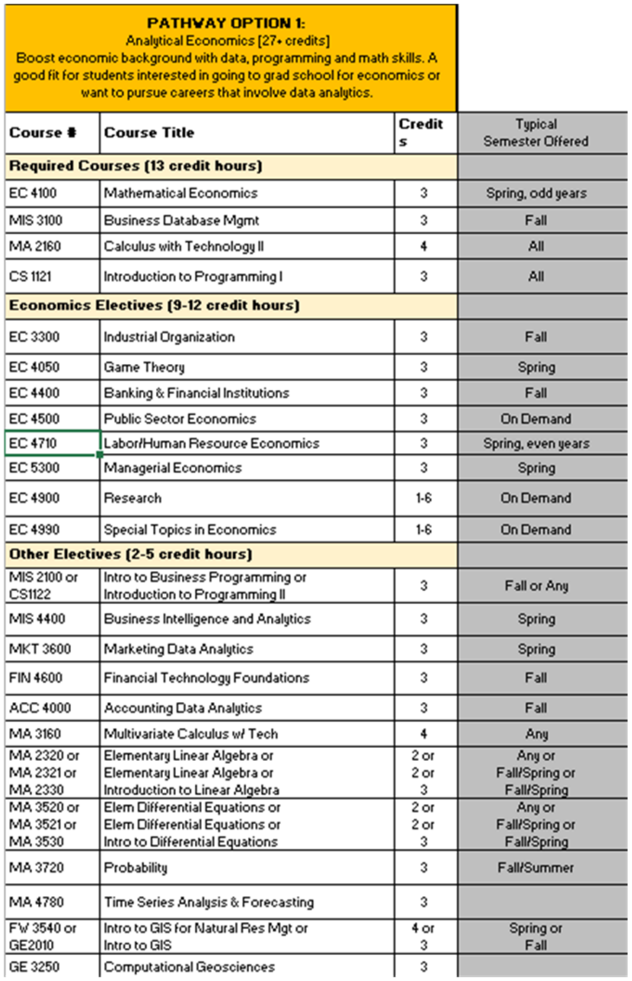
SAMPLE **= Core Major Requirements**
Economics (18 cr)
Business Core (24 cr)
Professional Development (3 cr)
Math (8-9 cr)

SAMPLE **= Pathway Options** (see back page)
Analytical Economics (27 cr)
Business Economics (24 cr)
Environmental & Natural Resource Economics (24 cr)
General Economics

SAMPLE **=Free Elective** (8-12 cr)

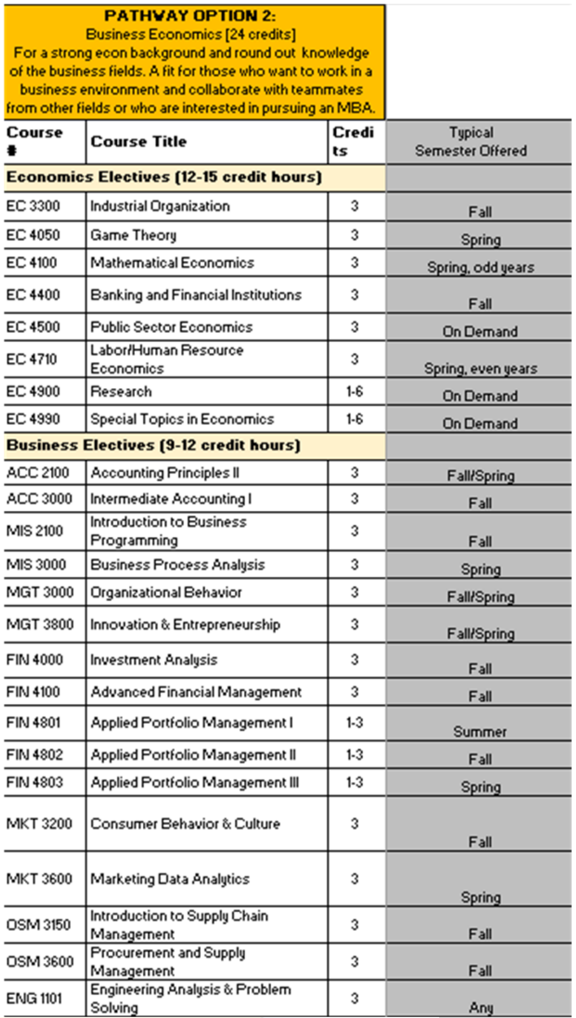
SAMPLE **= General Education Requirements**
Lab Science (7 cr)
CORE (12 cr)
HASS (12 cr)
Co-Curricular/PE (3 units)

Updated August 2023



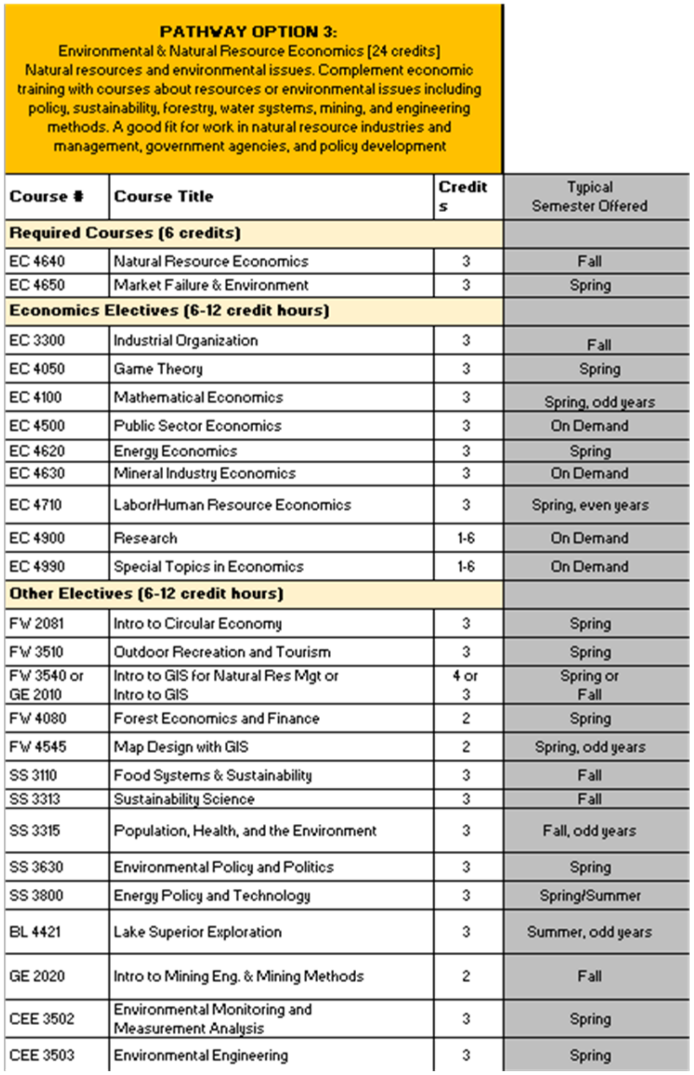
PATHWAY OPTION 1:
Analytical Economics [27+ credits]
Boost economic background with data, programming and math skills. A good fit for students interested in going to grad school for economics or want to pursue careers that involve data analytics.

Course #	Course Title	Credits	Typical Semester Offered
Required Courses (13 credit hours)			
EC 4100	Mathematical Economics	3	Spring, odd years
MIS 3100	Business Database Mgmt	3	Fall
MA 2160	Calculus with Technology II	4	All
CS 1121	Introduction to Programming I	3	All
Economics Electives (9-12 credit hours)			
EC 3300	Industrial Organization	3	Fall
EC 4050	Game Theory	3	Spring
EC 4400	Banking & Financial Institutions	3	Fall
EC 4500	Public Sector Economics	3	On Demand
EC 4710	Labor/Human Resource Economics	3	Spring, even years
EC 5300	Managerial Economics	3	Spring
EC 4900	Research	1-6	On Demand
EC 4990	Special Topics in Economics	1-6	On Demand
Other Electives (2-5 credit hours)			
MIS 2100 or CS1122	Intro to Business Programming or Introduction to Programming II	3	Fall or Any
MIS 4400	Business Intelligence and Analytics	3	Spring
MKT 3600	Marketing Data Analytics	3	Spring
FIN 4600	Financial Technology Foundations	3	Fall
ACC 4000	Accounting Data Analytics	3	Fall
MA 3160	Multivariate Calculus w/ Tech	4	Any
MA 2320 or MA 2321 or MA 2330	Elementary Linear Algebra or Elementary Linear Algebra or Introduction to Linear Algebra	2 or 2 or 3	Any or Fall/Spring or Fall/Spring
MA 3520 or MA 3521 or MA 3530	Elem Differential Equations or Elem Differential Equations or Intro to Differential Equations	2 or 2 or 3	Any or Fall/Spring or Fall/Spring
MA 3720	Probability	3	Fall/Summer
MA 4780	Time Series Analysis & Forecasting	3	
FW 3540 or GE2010	Intro to GIS for Natural Res Mgt or Intro to GIS	4 or 3	Spring or Fall
GE 3250	Computational Geosciences	3	



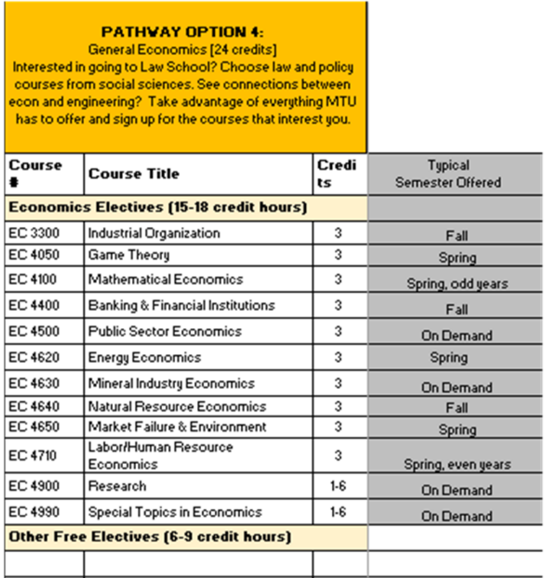
PATHWAY OPTION 2:
Business Economics [24 credits]
For a strong econ background and round out knowledge of the business fields. A fit for those who want to work in a business environment and collaborate with teammates from other fields or who are interested in pursuing an MBA.

Course #	Course Title	Credits	Typical Semester Offered
Economics Electives (12-15 credit hours)			
EC 3300	Industrial Organization	3	Fall
EC 4050	Game Theory	3	Spring
EC 4100	Mathematical Economics	3	Spring, odd years
EC 4400	Banking and Financial Institutions	3	Fall
EC 4500	Public Sector Economics	3	On Demand
EC 4710	Labor/Human Resource Economics	3	Spring, even years
EC 4900	Research	1-6	On Demand
EC 4990	Special Topics in Economics	1-6	On Demand
Business Electives (9-12 credit hours)			
ACC 2100	Accounting Principles II	3	Fall/Spring
ACC 3000	Intermediate Accounting I	3	Fall
MIS 2100	Introduction to Business Programming	3	Fall
MIS 3000	Business Process Analysis	3	Spring
MGT 3000	Organizational Behavior	3	Fall/Spring
MGT 3800	Innovation & Entrepreneurship	3	Fall/Spring
FIN 4000	Investment Analysis	3	Fall
FIN 4100	Advanced Financial Management	3	Fall
FIN 4801	Applied Portfolio Management I	1-3	Summer
FIN 4802	Applied Portfolio Management II	1-3	Fall
FIN 4803	Applied Portfolio Management III	1-3	Spring
MKT 3200	Consumer Behavior & Culture	3	Fall
MKT 3600	Marketing Data Analytics	3	Spring
OSM 3150	Introduction to Supply Chain Management	3	Fall
OSM 3600	Procurement and Supply Management	3	Fall
ENG 1101	Engineering Analysis & Problem Solving	3	Any



PATHWAY OPTION 3:
Environmental & Natural Resource Economics [24 credits]
Natural resources and environmental issues. Complement economic training with courses about resources or environmental issues including policy, sustainability, forestry, water systems, mining, and engineering methods. A good fit for work in natural resource industries and management, government agencies, and policy development

Course #	Course Title	Credits	Typical Semester Offered
Required Courses (6 credits)			
EC 4640	Natural Resource Economics	3	Fall
EC 4650	Market Failure & Environment	3	Spring
Economics Electives (6-12 credit hours)			
EC 3300	Industrial Organization	3	Fall
EC 4050	Game Theory	3	Spring
EC 4100	Mathematical Economics	3	Spring, odd years
EC 4500	Public Sector Economics	3	On Demand
EC 4620	Energy Economics	3	Spring
EC 4630	Mineral Industry Economics	3	On Demand
EC 4710	Labor/Human Resource Economics	3	Spring, even years
EC 4900	Research	1-6	On Demand
EC 4990	Special Topics in Economics	1-6	On Demand
Other Electives (6-12 credit hours)			
FW 2081	Intro to Circular Economy	3	Spring
FW 3510	Outdoor Recreation and Tourism	3	Spring
FW 3540 or GE 2010	Intro to GIS for Natural Res Mgt or Intro to GIS	4 or 3	Spring or Fall
FW 4080	Forest Economics and Finance	2	Spring
FW 4545	Map Design with GIS	2	Spring, odd years
SS 3110	Food Systems & Sustainability	3	Fall
SS 3313	Sustainability Science	3	Fall
SS 3315	Population, Health, and the Environment	3	Fall, odd years
SS 3630	Environmental Policy and Politics	3	Spring
SS 3800	Energy Policy and Technology	3	Spring/Summer
BL 4421	Lake Superior Exploration	3	Summer, odd years
GE 2020	Intro to Mining Eng. & Mining Methods	2	Fall
CEE 3502	Environmental Monitoring and Measurement Analysis	3	Spring
CEE 3503	Environmental Engineering	3	Spring



PATHWAY OPTION 4:
General Economics [24 credits]
Interested in going to Law School? Choose law and policy courses from social sciences. See connections between econ and engineering? Take advantage of everything MTU has to offer and sign up for the courses that interest you.

Course #	Course Title	Credits	Typical Semester Offered
Economics Electives (15-18 credit hours)			
EC 3300	Industrial Organization	3	Fall
EC 4050	Game Theory	3	Spring
EC 4100	Mathematical Economics	3	Spring, odd years
EC 4400	Banking & Financial Institutions	3	Fall
EC 4500	Public Sector Economics	3	On Demand
EC 4620	Energy Economics	3	Spring
EC 4630	Mineral Industry Economics	3	On Demand
EC 4640	Natural Resource Economics	3	Fall
EC 4650	Market Failure & Environment	3	Spring
EC 4710	Labor/Human Resource Economics	3	Spring, even years
EC 4900	Research	1-6	On Demand
EC 4990	Special Topics in Economics	1-6	On Demand
Other Free Electives (6-9 credit hours)			

Economics Pathway courses;
Refer to the online Course Descriptions for further detail, descriptions, pre-requisites, etc.

www.mtu.edu/catalog/courses/