

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)



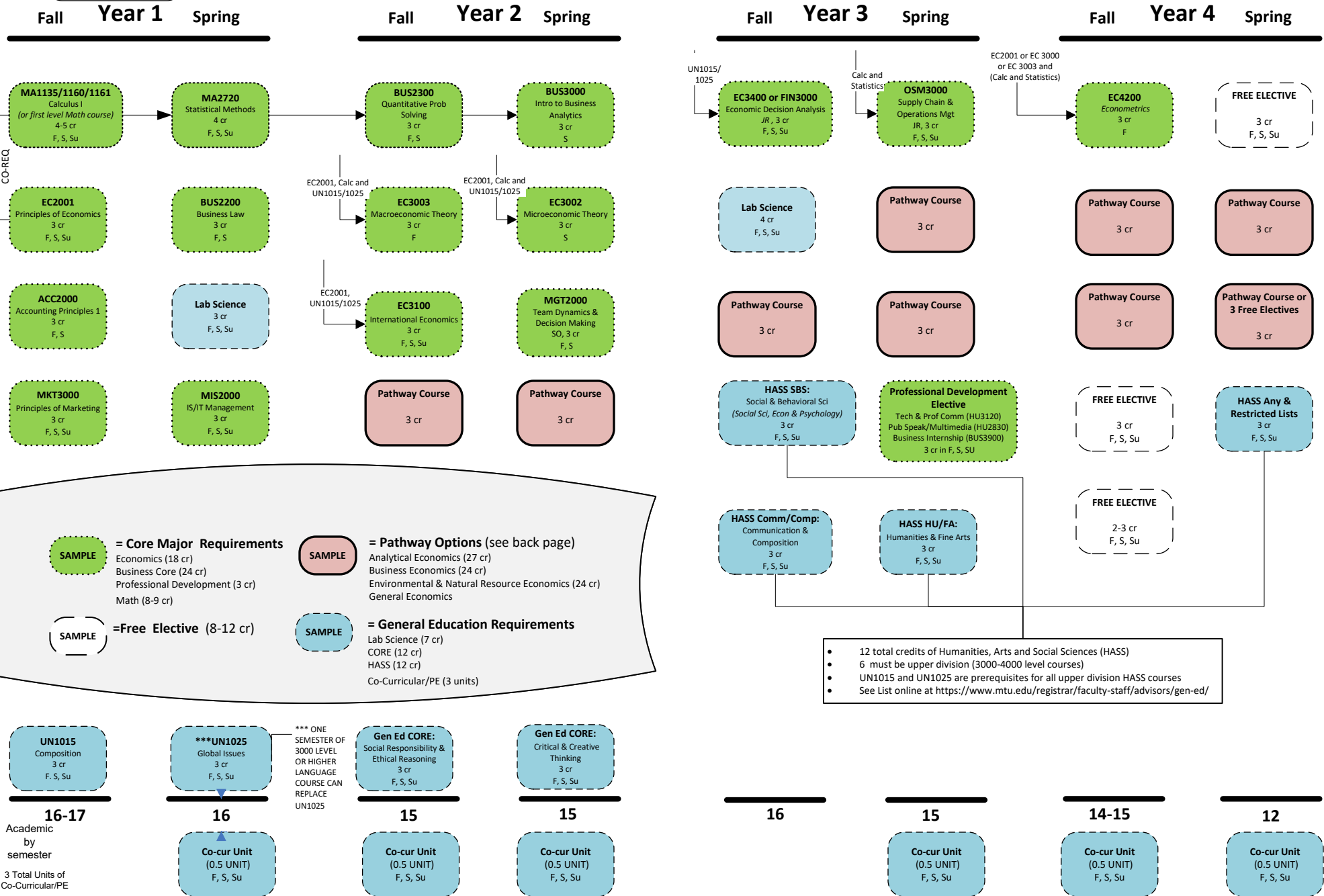
ECONOMICS^(BEC)

*FLOWCHART

2023-24 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.



- 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/>

| 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 |
| Required Courses (13 credit hours) | | | |
| EC 4100 | Mathematical Economics | 3 | Spring |
| 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 | On Demand |
| 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 |
| EC 4400 | Banking and Financial Institutions | 3 | Fall |
| EC 4500 | Public Sector Economics | 3 | On Demand |
| EC 4710 | Labor/Human Resource Economics | 3 | On Demand |
| 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] Students interested in 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 those who want to 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 | Fall, odd years |
| Economics Electives (6-12 credit hours) | | | |
| EC 3300 | Industrial Organization | 3 | Fall |
| EC 4050 | Game Theory | 3 | Spring |
| EC 4100 | Mathematical Economics | 3 | Spring |
| 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 | On Demand |
| 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 most.

| 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 |
| 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 | Fall, odd years |
| EC 4710 | Labor/Human Resource Economics | 3 | On Demand |
| 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/