ADVISING

Students are advised by their assigned major advisor while pursuing these additional endorsements.

- Find my advisor
- Meet with my advisor
- Virtual Drop-Ins
  Tuesdays 9am to 4pm via Zoom

MICHIGAN TEST FOR TEACHER CERTIFICATION (MTTC)

- MTTC Information
  https://www.mttc.nesinc.com/
- MTTC Support
  https://education.wayne.edu/students/mttc

CERTIFICATION AREAS

Grade Bands:
- Arabic (K-12)
- English Language Arts (7-12)
- French (K-12)
- Mathematics (5-9)
- Mathematics (7-12)
- Spanish (K-12)

ADDITIONAL CLINICAL EXPERIENCES

Students may be required to complete an additional clinical experience depending on which additional subjects/grade bands they add to their program. Please consult your advisor.

Please consult the University Bulletin (bulletins.wayne.edu/undergraduate) for official curriculum.
### ADVISING

Students are advised by their assigned major advisor while pursuing these additional endorsements.

- **Find my advisor**
- **Meet with my advisor**
- **Virtual Drop-Ins**
  Tuesdays 9am to 4pm via Zoom

### MICHIGAN TEST FOR TEACHER CERTIFICATION (MTTC)

- **MTTC Information**
  [https://www.mttc.nesinc.com/](https://www.mttc.nesinc.com/)
- **MTTC Support**
  Daniel Lewis
  djlewis@wayne.edu
  [https://education.wayne.edu/students/mttc](https://education.wayne.edu/students/mttc)

### CERTIFICATION AREAS

**Legacy Major Concentrations:**
- Biology (6-12)
- Chemistry (6-12)
- Earth/Space Science (6-12)
- Economics (6-12)
- History (6-12)
- Integrated Science (6-12)
- Physics (6-12)
- Political Science (6-12)
- Social Studies Group (6-12)
- Social Studies Comprehensive (6-12)

### ADDITIONAL CLINICAL EXPERIENCES

Students may be required to complete an additional clinical experience depending on which additional subjects/grade bands they add to their program. Please consult your advisor.

---

**ADVISORY GUIDE**

**Secondary Education**

**Additional Endorsements for Legacy Major Concentrations**

### SINGLE SUBJECT SCIENCE

#### REQUIREMENTS

- Choose from: Biology, Chemistry, Earth/Space, or Physics
- May only be added to a legacy major concentration
- Students pursuing these minors must complete the following:
  1. **Subject area Coursework (below)**
  2. MAT 1800: Elementary Functions (4cr)
  3. SCE 6010: Safety in the Science Classroom
  4. SCE 5060: Methods & Materials: Secondary Science I (3cr)

#### BIOLOGY

- BIO 1500: Basic Life Diversity (3cr)
- BIO 1501: Lab (concurrent w/1500) (1cr)
- BIO 1510: Basic Life Mechanisms (3cr)
- BIO 1511: Lab (concurrent w/1501) (1cr)
- BIO 2270: Principles of Microbiology (3cr)
- BIO 2271: Lab (concurrent w/2271) (2cr)
- BIO 2870: Anatomy and Physiology (5cr)
- BIO 3070: Genetics (4cr)

#### CHEMISTRY

- CHM 1100: General Chemistry I (4cr)
- CHM 1130: Lab (concurrent w/1100) (1cr)
- CHM 1140: Lab (concurrent w/1150) (1cr)
- CHM 1240: Organic Chemistry I (4cr)
- CHM 1250: Lab (concurrent w/1240) (1cr)
- CHM 2220: Organic Chemistry II (4cr)
- CHM 2230: Lab (concurrent w/2220) (1cr)

#### EARTH/SPACE

- ESG 1010: Geology (3cr)
- ESG 1011: Lab (concurrent w/1010) (1cr)
- ESG 1020: Interpreting the Earth (4cr)
- ESG 1370: Meteorology (3cr)
- ESG 2130: Mineralogy (4cr)
- ESG 3160: Petrology (4cr)
- AST 2010: Descriptive Astronomy (4cr)
- AST 2111: Lab (concurrent w/2110) (1cr)

#### PHYSICS

- PHY 2130: Physics for Life Science I (4cr)
- PHY 2131: Lab (concurrent w/2130) (1cr)
- PHY 2140: Physics for Life Science II (4cr)
- PHY 2141: Lab (concurrent w/2140) (1cr)
- PHY 5015: Physics for Educators (3cr)
- PHY 3310: Lab (concurrent w/5015) (2cr)
- PHY 5620: Elect & Electrical Measure (3cr)
- PHY Elective (1XXX or higher) (3cr)

### SINGLE SUBJECT SOCIAL STUDIES

#### REQUIREMENTS

- Choose from: Economics, History, or Political Science
- May only be added to a legacy major concentration
- Students pursuing these minors must complete the following:
  1. **Subject area Coursework (below)**
  2. SSE 6710: Methods and Materials of Instruction in Secondary Social Studies (3cr)

#### ECONOMICS

- ECO 2010: Microeconomics (4cr)
- ECO 2020: Macroeconomics (4cr)
- ECO 5300: International Trade (4cr) or ECO 5310: International Finance (4cr)
- ECO 5400: Labor Economics (4cr)
- ECO Electives (5XXX or higher) (4cr)

#### POLITICAL SCIENCE

- PS 1010: American Government (4cr)
- PS 2710: Intro to Comp Politics (4cr)
- PS 2810: World Politics (4cr)
- PS 3020: Political Parties & Elections (4cr)
- PS 3070: Michigan Politics (4cr)

#### HISTORY

- Choose from:
  1. HIS 1000: World Civilization to 1500 (3cr)
  2. HIS 1300: Eur & World: 1500-1945 (3cr)
  3. HIS 1400: The World Since 1945 (4cr)
  4. HIS 2040: US Foundations to 1877 (3cr)
  5. HIS 2050: Modern US: Since 1877 (3cr)
  6. HIS 2240: History of Michigan (3cr)
  7. HIS 3140: Afr Am Hist I: 1400-1865 (3cr) or HIS 3150: Afr Am Hist II: 1865-1968 (3cr)

---

*Please consult the University Bulletin ([bulletins.wayne.edu/undergraduate](https://bulletins.wayne.edu/undergraduate)) for official curriculum.*