# Mathematics

## Major Map 2024

### Getting Started

**Your Course Journey**
- Take Calculus Courses and Natural Science or Computing Courses
- Consider which **type of mathematics major** is most interesting to you
- Apply for **SMCPA scholarships** each year

**Knowledge and Skills**
- Develop skills in mathematical modeling, in problem solving, and in using mathematical language
- Visit the **STEM Tutoring Center** or utilize other tutoring options from the **Tutoring-Learning Center (TLC)** for support in multiple classes

**Act Locally and Globally**
- Join the Math Club or other **student organizations** of interest
- Look into a **study abroad program**

### Making Progress

**Your Course Journey**
- Complete **Foundation Courses** in the major
- Explore minor options such as **Computer Information Systems, Web Development**, **Physics**, **Astronomy, Economics, Philosophy, Music, Data Analytics**

**Knowledge and Skills**
- Continue to develop pattern recognition, communication skills, and a variety of mathematical techniques
- Consider tutoring in the **MathPad or the TLC** as a great way to solidify your own mathematical knowledge and communication skills while supporting others

**Act Locally and Globally**
- Consider taking the **Putnam Seminar (Math 395)** and the **national Putnam Mathematical Competition** in any fall semester
- Consider **studying abroad**

### Making Progress

**Your Course Journey**
- Take **Core and Applied Mathematics Courses** commonly two per semester
- Determine your **major elective courses** with your faculty adviser

**Knowledge and Skills**
- Develop advanced skills in modeling and using mathematical language
- Consider presenting undergraduate research at the **CoLS Research Symposium** or a regional mathematics conference such as the **MAA Wisconsin Section Meeting** or the **undergraduate regional Pi Mu Epsilon Conference**

**Act Locally and Globally**
- Explore **Research Experience for Undergraduates (REU) programs** of interest
- Contribute to **volunteer efforts in the community**

### Preparing for What’s Next

**Your Course Journey**
- Complete the remaining 300-level courses in the major

**Knowledge and Skills**
- Recognize interconnected ideas in mathematics and discover connections between mathematics and other disciplines
- Consider an independent study course to deepen your understanding of a specific area of your major and/or minor

**Act Locally and Globally**
- Apply your experiences to your job or grad program application materials
- Network with UWSP Alumni on **LinkedIn**
- Join relevant professional associations. Take advantage of virtual and in-person networking opportunities

### Career Readiness

**Your Course Journey**
- Look for a job on campus using **Quest**
- Create a **college resume**
- Complete your **Handshake profile**
- Learn about and practice networking by attending a **Networking Workshop** or the **All-Major Career and Internship Fair**

**Knowledge and Skills**
- Explore **requirements for graduate programs and full-time jobs** which use mathematics
- Conduct an **informational interview** or **job shadow** with someone who works in a field of interest
- Further develop application materials, including a **cover letter**, more curated **Handshake profile**, and/or creating a **LinkedIn profile**
- Conduct a **Gap Analysis**

**Act Locally and Globally**
- Attend an **Interviewing Workshop**; seek additional **preparation tools**
- Gain **internship** or similar work experience in your field. A position using analytical thinking is productive
- If considering **graduate school**, research your options and understand testing requirements and application timelines
- Pursue opportunities at the **All-Major Career and Internship Fair**

### Careers

- Data Engineer
- Accountant
- Operations Planning Analyst
- Data Analyst
- Predictive Modeler
- Buyer
- Production Manager
- Statistical Analyst
- Statistician
- Estimator
- and many more!

### Available Online

Major Map documents are available online with additional information!