MISSOURI SOUTHERN STATE UNIVERSITY

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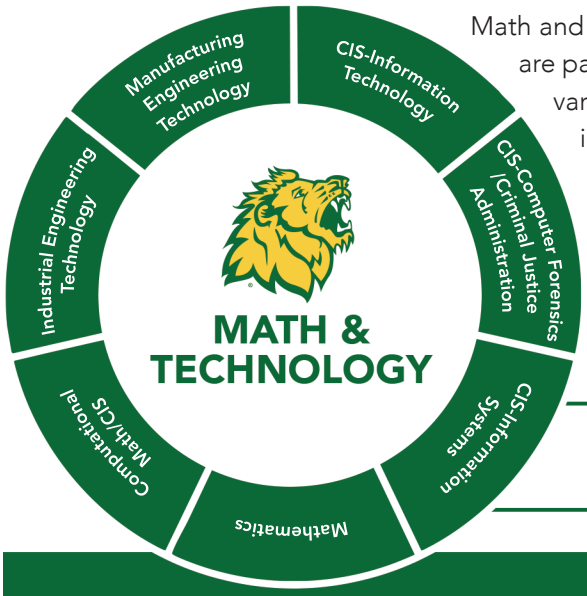
META MAJORS
MATH & TECHNOLOGY PATHWAY



Math and Technology is an exciting academic pathway designed for students who are passionate about numbers, logic, and innovative solutions. It encompasses various fields such as mathematics, computer information science, and industrial engineering technology, each offering unique opportunities for growth and discovery.

The first year of the Math and Technology pathway major provides an understanding of some key foundational areas of these majors: mathematics, computer information science, or industrial engineering technology.

You may decide to pursue one of these Math and Technology areas:

WHY CHOOSE MATH & TECHNOLOGY?

MATH:

- **Critical Thinking:** Mathematics sharpens your analytical skills, allowing you to solve complex problems and think logically.
- **Versatility:** A strong foundation in math is applicable in numerous fields, including data analytics, artificial intelligence, finance, and education.
- **Innovation:** Math is at the heart of technological advancements and scientific discoveries that shape our world.

INDUSTRIAL ENGINEERING TECHNOLOGY:

- **Efficiency:** Industrial engineering focuses on optimizing processes, improving productivity, and reducing waste, making operations more efficient.
- **Problem-Solving:** This field requires a strategic approach to solving complex industrial and organizational challenges.

COMPUTER INFORMATION SCIENCE:

- **Creativity:** Computer information science allows you to create innovative software, applications, and systems that solve real-world problems.
- **Impact:** Technology has a profound impact on society, and working in this field means contributing to significant changes and improvements in everyday life.

CAREER OPPORTUNITIES

MATH

- Data Scientist
- Statistician
- Mathematician
- University Professor
- Operations Research Analyst
- Information Security Analyst
- Actuary

INDUSTRIAL ENGINEERING TECHNOLOGY

- Industrial Engineer
- Process Engineer
- Quality Engineer
- Continuous Improvement Engineer
- Manufacturing Engineer

COMPUTER INFORMATION SCIENCE

- Data Analyst
- Programmer
- Cybersecurity
- Network Engineer

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Common courses for the first two semesters (15 credits per semester) are outlined below.

SEMESTER 1

Course #	Course Title	GE/PR	Cr Hrs
Highest math qualified (Area 4)	Math	GE	3-5
ENG 101 (Gen. Ed. 2A)	College Composition I	GE	3
IET 105 (satisfies UE 100 requirement)	Professional Skills	GE	3
COMM 100 (Gen. Ed. 2B)	Oral Communication	GE	3
ECON 201 (Gen. Ed. 1A)	Principles of Economics (Micro)	GE	3
TOTAL:			**15-17**

SEMESTER 2

Course #	Course Title	GE/PR/EL	Cr Hrs
Highest math qualified (Area 4)	Math	GE	3-5
ENG 102 (Gen. Ed. 2A)	College Composition II	GE	3
CIS110 (Elective for IET majors)	Programming I	PR/EL	3
Gen. Ed. Area 5B	Gen. Ed. Fine Arts	GE	3
IET 230 (Elective for Math Majors)	Excel/Visio Applications	PR/EL	2
IET 235 (Elective for Math Majors)	PowerBI Fundamentals	PR/EL	1
TOTAL:			**15-17**

GE *Gen Ed Requirement* • ***PR*** *Program Requirement* • ***EL*** *Elective*

Students may complete a maximum of 60 credit hours within a Meta Major Pathway before transitioning to a program of study.

CONTACT US

For additional information and advising contact Claudia Wilson at **Wilson-C@mssu.edu**