MY ADVISOR'S NAME IS: _____

MATHEMATICS

REQUIREMENTS

CORE CURRICULUM
The Core Curriculum is designed to foster critical thinking skills and introduce students to basic domains of thinking that transcend disciplines. The Core applies to all majors. Information on specific classes in the Core can be found at marshall.edu/gened.

CORE 1: CRITICAL THINKING

CODE	COURSE NAME		HRS	GRADE
FYS 100	First Year Seminar	●	3	_____
MTH 229	Critical Thinking Course	●	5	_____
_____	Critical Thinking Course	●	3	_____

Additional University Requirements

	COURSE NAME	HRS	GRADE
_____	Writing Intensive	3	_____
_____	Writing Intensive	3	_____
_____	Multicultural or International	3	_____
MTH 490 or 491	Capstone	2	_____

CORE 2:

CODE	COURSE NAME		HRS	GRADE
ENG 101	Beginning Composition	●	3	_____
ENG 201	Advanced Composition	●	3	_____
CMM 103	Fund Speech-Communication	●	3	_____
MTH 229	Calculus/Analytic Geom I (CT)	● ♦	5	_____
_____	Core II Natural/Physical Science	●	4	_____
_____	Core II Humanities	●	3	_____
_____	Core II Social Science	●	3	_____
_____	Core II Fine Arts	●	3	_____

COLLEGE-SPECIFIC
All Mathematics majors are required to take 7 additional hours in Physical or Natural Sciences beyond the Core II requirement. These hours must be from two different areas:

CODE	COURSE NAME		HRS	GRADE	CODE	COURSE NAME		HRS	GRADE
_____	COS Physical/Natural Science	■	4	_____	_____	COS Physical/Natural Science	■	3	_____

MAJOR-SPECIFIC
Students who wish to major in Mathematics must take the following courses:

CODE	COURSE NAME		HRS	GRADE	CODE	COURSE NAME		HRS	GRADE
CS 110	Computer Science I	♦	3	_____	MTH 490 or 491	Internship or Sr. Seminar	♦	2	_____
MTH 229	Calculus/Analytic Geom I (CT)	♦	5	_____	STA 445	Probability & Statistics I	♦	3	_____
MTH 230	Calculus/Analytic Geom II	♦	4	_____	_____	300/400 MTH or STA Elective	♦	3	_____
MTH 231	Calculus/Analytic Geom III	♦	4	_____	_____	300/400 MTH or STA Elective	♦	3	_____
MTH 300	Intro to Higher Math	♦	4	_____	_____	300/400 Elective		3	_____
MTH 331	Linear Algebra	♦	4	_____	_____	Free Elective		3	_____
MTH 335	Ordinary Diff Equations	♦	3	_____	_____	Free Elective		3	_____
MTH 427	Advanced Calculus I	♦	3	_____	_____	Free Elective		3	_____
MTH 428	Advanced Calculus II	♦	3	_____	_____	Free Elective		3	_____
MTH 443	Numerical Analysis	♦	3	_____	_____	Free Elective		3	_____
MTH 450	Modern Algebra I	♦	3	_____	_____	Free Elective		3	_____
MTH 452	Modern Algebra II	♦	3	_____	_____	Free Elective		2	_____

MAJOR INFORMATION
- Students who double-major in both Mathematics and Statistics may have an opportunity to double-count electives toward the respective majors. Please contact the director of undergraduate studies in the Mathematics department for more details.
- Please check with advisor about course offerings. Not all classes will be offered every semester.
- Forty (40) hours must be earned in courses numbered 300-499.

◆ Area of Emphasis
♦ Major Requirement
■ College Requirement
● General Education Requirement

Milestone Course: This is a key success marker for your major. See your advisor to discuss importance of this course in your plan of study.

MY ADVISOR'S NAME IS: _____

MATHEMATICS

The Marshall University Department of Mathematics prepare students for careers in the mathematical sciences and related disciplines. Graduates of our mathematics programs have had successful careers in government and industry. Our graduates have also earned advanced degrees in mathematics, statistics, engineering, and economics. Our degree programs may also be used to prepare for secondary mathematics certification and for professions such as law or medicine. The department has a dynamic and engaged faculty who focus both on excellent teaching and on many areas of mathematical research.

YEAR ONE

	FALL SEMESTER					SPRING SEMESTER			
CODE	COURSE NAME		HRS	GRADE	CODE	COURSE NAME		HRS	GRADE
FYS 100	First Year Sem Crit Thinking	●	3	_____	MTH 230	Calculus/Analytic Geom II	♦	4	_____
ENG 101	Beginning Composition	●	3	_____	_____	Core I Critical Thinking	●	3	_____
MTH 229	Calculus/Analytic Geom I (CT)	● ♦	5	_____	CMM 103	Fund Speech-Communication	●	3	_____
_____	Core II Fine Arts	●	3	_____	_____	Core II Social Science	●	3	_____
UNI 100	Freshman First Class		1	_____	CS 110	Computer Science I	♦	3	_____
TOTAL HOURS			**15**		**TOTAL HOURS**			**16**	

Summer Term (optional):

YEAR TWO

	FALL SEMESTER					SPRING SEMESTER			
CODE	COURSE NAME		HRS	GRADE	CODE	COURSE NAME		HRS	GRADE
MTH 300	Intro to Higher Math	♦	4	_____	MTH 331	Linear Algebra	♦	4	_____
MTH 231	Calculus/Analytic Geom III	♦	4	_____	MTH 335	Ordinary Diff Equations	♦	3	_____
ENG 201	Advanced Composition	●	3	_____	_____	COS Physical/Natural Science	■	4	_____
_____	Core II Physical/Natural Science	●	4	_____	_____	Free Elective		3	_____
					_____	Free Elective		1	_____
TOTAL HOURS			**15**		**TOTAL HOURS**			**15**	

Summer Term (optional):

YEAR THREE

	FALL SEMESTER					SPRING SEMESTER			
CODE	COURSE NAME		HRS	GRADE	CODE	COURSE NAME		HRS	GRADE
MTH 427	Advanced Calculus I	♦	3	_____	MTH 428	Advanced Calculus II	♦	3	_____
STA 445	Probability & Statistics I	♦	3	_____	_____	Writing Intensive	●	3	_____
_____	Multicultural or International	●	3	_____	_____	Core II Humanities	●	3	_____
_____	COS Physical/Natural Science	■	3	_____	_____	300/400 MTH or STA Elective	♦	3	_____
_____	Free Elective		3	_____	_____	Free Elective		3	_____
TOTAL HOURS			**15**		**TOTAL HOURS**			**16**	

Summer Term (optional):

YEAR FOUR

	FALL SEMESTER					SPRING SEMESTER			
CODE	COURSE NAME		HRS	GRADE	CODE	COURSE NAME		HRS	GRADE
MTH 443	Numerical Analysis	♦	3	_____	MTH 490 or 491	Internship or Sr. Seminar	● ♦	2	_____
MTH 450	Modern Algebra I	♦	3	_____	MTH 452	Modern Algebra II	♦	3	_____
_____	Writing Intensive	●	3	_____	_____	300/400 MTH or STA Elective	♦	3	_____
_____	300/400 Elective		3	_____	_____	Free Elective		3	_____
_____	Free Elective		3	_____	_____	Free Elective		3	_____
TOTAL HOURS			**15**		**TOTAL HOURS**			**14**	

Summer Term (optional):

◆ Area of Emphasis
♦ Major Requirement
■ College Requirement
● General Education Requirement

Milestone Course: This is a key success marker for your major. See your advisor to discuss importance of this course in your plan of study.

MATHEMATICS — 2023-2024

INVOLVEMENT OPPORTUNITIES

- SGA
- Campus Activity Board
- JMELI
- Commuter Student Advisory Board
- Community Engagement Ambassadors
- Club Sports
- Religious Organizations
- Political Organizations
- Residence Hall Association
- Cultural Organizations
- National Society of Leadership and Success
- Math Club
- Pi Mu Epsilon Mathematics Association
- Greek Life

RELATED MAJORS

- Statistics
- Finance
- Business
- Data Science
- Accounting
- Economics
- Entrepreneurship

GRADUATION REQUIREMENTS

- Have a minimum of 120 credit hours (some colleges or majors require more);
- Have an overall and Marshall Grade Point Average of 2.00 or higher;
- Have an overall Grade Point Average of 2.00 or higher in the major area of study;
- Have earned a grade of C or better in English 201 or 201H;
- Have met all major(s) and college requirements;
- Have met the requirements of the Core Curriculum;
- Have met the residence requirements of Marshall University, including 12 hours of 300/400 level coursework in the student's college (see section entitled "Residence Requirements" in the undergraduate catalogue);
- Be enrolled at Marshall at least one semester of the senior year;
- Have transferred no more than 72 credit hours from an accredited West Virginia two-year institution of higher education.

Colleges and specific programs may have unique requirements that are more stringent than those noted above. Students are responsible for staying informed about and ensuring that they meet the requirements for graduation.

YEAR ONE

Have questions? Need to talk? You already have a Friend-At-Marshall ready to help you succeed. Find your FAM Peer Mentor here: www.marshall.edu/fam

Stay on the Herd Path and come to class! Class attendance is more important to your success than your high school GPA, your class standing, or your ACT/SAT scores.

In order to graduate on time, you need to take an average of 15 credits per semester. Are you on track? Take 15 to Finish!

Meet with your Advisor to ensure you take the necessary prerequisites that are required for your sequences.

Declare a major before your 30th hour. Participate in a Career Exploration Experience (job shadow) to help decide on your major and career goals.

Join or create a club or organization on campus about a particular issue you care about. Marshall has more than 200 student organizations.

Attend an intercultural festival or event on campus or in town.

YEAR TWO

Are you completing enough credits to graduate on time? Dropping or failing a class can put you behind. Use summer terms to quickly get back on track.

Take a Community Based Learning (CBL) class that connects course content to the community. Stay engaged and make a difference.

Join the Marshall Mentor Network and connect with professionals in your field to discuss your major, career path, and more.

Join the Math Club and/or the Pi Mu Epsilon Mathematics Association

College is a great time to experience the world! Consider studying abroad in the summer, during Spring Break, or for an entire semester.

Meet with a career education specialist to conduct a "gap analysis." Figure out the skills you'll need for the career you want while you still have time to build them.

Have you considered adding a minor? Think about personal areas of interest you'd like to explore or how you might enhance your major with a related skill set.

YEAR THREE

Team up with a faculty mentor and participate in the Virginia Tech Regional Mathematics Competition

No need to wait until graduate school. Discuss undergraduate research opportunities with faculty in your major right now.

Are you on track to graduate? Meet with your advisor for your Junior Eval to make sure you know what requirements you have left.

College is a great time to experience the world! Consider studying abroad in the summer, during Spring Break, or for an entire semester.

Networking is key! Attend a Career Expo to seek employment opportunities and network with employers in your field.

Develop relationships with professors who can serve as future references by attending their office hours.

Think about who can help you grow as a student and a professional (professors, advisors, alumni, etc.) and ask at least one to be your mentor.

YEAR FOUR

This is it! Are you on track to graduate? Meet with your advisor for your Senior Eval to see what requirements you have left.

Prepare to present at the regional MAA Section Meetings or any other conferences. Team up with your faculty research mentor
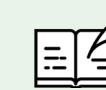
Did you do really well in a hard course? Become a Tutor or a Supplemental Instructor.

Apply to be a New Student Orientation Leader or a Campus Tour Guide.

Prepare to present at the College of Science Research EXPO in April.

Be at the top of your professional game! Prepare a final resume and practice your interview skills with a career coach in Career Education.

Want to continue your education and increase your opportunities? Talk to a faculty member about whether graduate school fits your career goals.

TRANSFERABLE SKILLS ASSOCIATED WITH THIS MAJOR

- Mathematical Ability
- Attention to Detail
- Strong Oral and Written Communication Skills
- Organizational Skills

ASSOCIATED CAREERS

- Engineering
- Education
- Banking
- Finance
- Statistics
- Actuarial Positions
- Data Science/Analytics
- Business
- Management
- Employment with Government Agencies

This academic map is to be used as a guide in planning your coursework toward a degree. Due to the complexities of degree programs, it is unfortunate but inevitable that an error may occur in the creation of this document. The official source of degree requirements at Marshall University is DegreeWorks available in your myMU portal. Always consult regularly with your advisor.

MARSHALL

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