STATISTICS

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: CRIT	ICAL THINKING				COF	RE 2:		5		
CODE	COURSE NAME		HRS	GRADE		CODE	COURSE NAME		HRS	GRADE
FYS 100	First Year Seminar	•	3			ENG 101	Beginning Composition	•	3	
ल MTH 229	Critical Thinking Course	• •	5		-	ENG 201	Advanced Composition	•	3	
	Critical Thinking Course	•	3			CMM 103	Fund Speech-Communication	•	3	
					-	MTH 229	Calculus/Analytic Geom I (CT)	• •	5	
Additiona	al University Requirements						Core II Natural/Physical Science	٠	4	
	Writing Intensive		3				Core II Humanities	٠	3	
	Writing Intensive		3				Core II Social Science	•	3	
	Multicultural or International		3				Core II Fine Arts	٠	3	
MTH 490	Capstone		2							
or 491										

COLLEGE-SPECIFIC

All Mathematics majors are required to take 7 additional hours in Physical or Natural Sciences beyond the Core II requirement. These electives 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 Statistics must take the following courses:

		,		5						
	CODE	COURSE NAME		HRS	GRADE	CODE	COURSE NAME		HRS	GRADE
	CS 110	Computer Science I	٠	3		STA 445	Probability & Statistics I	•	3	
-	MTH 229	Calculus/Analytic Geom I (CT)	٠	5		STA 446	Probability & Statistics II	•	3	
•	MTH 230	Calculus/Analytic Geom II	٠	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 Level Elective	•	3	
	MTH 331	Linear Algebra	•	4			Free Elective		4	
	MTH 427	Advanced Calculus I	•	3			Free Elective		3	
	MTH 490	Internship or Sr. Seminar	• •	2			Free Elective		3	
	or 491						Free Elective		3	
	STA 412	Regress Analysis	•	3			Free Elective		3	
	STA 413	Experiment Design	•	3			Free Elective		3	
	STA 420	Nonparametric Statistics	•	3					5	
	STA 435	Statistical Data Mining	•	3						

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 Empahsis

Major Requirement

College Reguirement

STATISTICS

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.

		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			CS 110	Computer Science I	•	3	
	UNI 100	Freshman First Class		1				Core II Social Science	•	3	
_											
	TOTAL HO	OURS		15			TOTAL HO	OURS		16	
Sum	nmer Term (op	tional):									
		FALL SEMESTER						SPRING SEMESTER			
	CODE	COURSE NAME		HRS	GRADE		CODE	COURSE NAME		HRS	GRAD
	MTH 300	Intro to Higher Math	•	4			MTH 331	Linear Algebra	•	4	
-	MTH 231	Calculus/Analytic Geom III	•	4				300/400 Level Elective	•	3	
	ENG 201	Advanced Composition	•	3				Physical/Natural Science Elective		4	
		Core II Physical/Natural Science	•	4				Free Elective		4	
	TOTAL HO	DURS		15			TOTAL HO	OURS		15	
Sum	nmer Term (op	itional):									
		FALL SEMESTER						SPRING SEMESTER	ļ		
	CODE	COURSE NAME		HRS	GRADE		CODE	COURSE NAME		HRS	GRAD
	MTH 427	Advanced Calculus I	٠	3				Humanities Elective	•	3	
	STA 445	Probability & Statistics I	•	3				Writing Intensive	•	3	
		Physical/Natural Science Elective	•	3			STA 446	Probability & Statistics II	•	3	
		Multicultural or International Elective	•	3				300/400 MTH or STA Elective	•	3	
		Free Elective		3				Free Elective		3	
	TOTAL HO			15			TOTAL HO			15	

		FALL SEMESTER					SPRING SEMESTE	R		
	CODE	COURSE NAME		HRS	GRADE	CODE	COURSE NAME		HRS	GRADE
	STA 412	Regress Analysis	•	3		STA 413	Experiment Design	•	3	
	STA 435	Statistical Data Mining	•	3		MTH 490	Internship or Sr. Seminar	• •	2	
JR		300/400 MTH or STA Elective	•	3		or 491				
FOI		Writing Intensive	•	3		STA 420	Nonparametric Statistics	•	3	
БЧ		Free Elective		3			Free Elective		3	
EA]							Free Elective		3	
ΥF										
	TOTAL HOURS			15		TOTAL HO	OURS		14	
	Summer Term (op	otional):								

Area of Empahsis

Major Requirement