MSU Program Contact Info:

Dr. William Bray WBray@MissouriState.edu 417-836-6270

OZARKS TECHNICAL COMMUNITY COLLEGE



OTC Associate of Science in Mathematics

MSU Bachelor of Science in Mathematics

OTC Year 1 Semester 1

Available on campus only.

Comprehensive majors do not require a minor or second major.

REQUIREMENT DESCRIPTION	OTC COURSE ID/TITLE		CREDIT HOURS	MSU EQUIVALENT	MSU MAJOR REQUIREMENT
Mathematical Sciences 5 credit hours required for the A.S. in Mathematics	MTH 140	Analytic Geometry and Calculus I	5	MTH 261	<
	Choose one:				
Written Communications	ENG 100 ENG 101	Composition I with Support Composition I	3-5	ENG 110	
CIS 120 Prerequisite	CIS 101	Technology and Digital Literacy	3	ITC 200	
Computer Applications Course	CIS 120	Introduction to Computer Programming	3	CSC 130	✓
Semester 1 To			14-16		

Ω	C V	/ear	1 9	am	act	tor	9

REQUIREMENT DESCRIPTION	OTC COURSE ID/TITLE		CREDIT HOURS	MSU EQUIVALENT	MSU MAJOR REQUIREMENT
Program Requirement	MTH 141	Analytic Geometry and Calculus II	5	MTH 280	✓
Natural Sciences*	PHY 220	Physics Engrs & Scientists I	5	PHY 203	✓
Humanities and Fine Arts*	Choose one Humani	Choose one Humanities and Fine Arts course.		Varies	
Written Communications	ENG 150	Technical Writing	3	ENG 221	
		Semester 2 Total	16		

OTC	Year	2	Semester 3	

REQUIREMENT DESCRIPTION	OTC COURSE ID/TITLE		CREDIT HOURS	MSU EQUIVALENT	MSU MAJOR REQUIREMENT
Program Requirement	MTH 240	Analytic Geometry and Calculus III ("C" or better required)	3	MTH 302	✓
Program Requirement	MTH 215	Algebraic Structures	3	MTH 315	✓
Social/Behavioral Sciences	ECO 270	Principles of Macroeconomics	3	ECO 155	
Oral Communications	Choose one Oral Con	nmunications course.	3	Varies	
Natural Sciences*	BIO 160	General Biology I	4	BIO 121	
		Semester 3 Total	16		

OTC Year 2 Semester 4

REQUIREMENT DESCRIPTION	OTC COURSE ID/TITLE			CREDIT HOURS	MSU EQUIVALENT	MSU MAJOR REOUIREMENT
Social/Behavioral Sciences* - Civics	Choose one: PLS 101	HST 120	HST 130	3	Varies	
Program Elective	MTH 241	Differential Equations		3	MTH 303	✓
Program Elective	MTH 230	Linear Algebra		3	MTH 333	✓
Institutional Elective 8 hours required for A.S. Mathematics	Any course numbered 10	Any course numbered 100 and above - your choice.		5	Varies	
			Semester 4 Total Total Hours at OTC		Total MSU Major Hours:	30

^{*}Must fulfill two disciplines



MSU Bachelor of Science in Mathematics

MSU Year 3 Semester 1

OTC Associate of Science in Mathematics

REQUIREMENT DESCRIPTION	MSU COURSE ID/TITLE		CREDIT HOURS
Major Requirement - Capstone	MTH 532	Introduction to Abstract Algebra	3
Major Requirement - Capstone	MTH 540	Statistical Theory	3
Major Elective	Choose any Mathematic	es course numbered 400 and above with the assistance of an advisor.	3
Social/Behavioral Sciences 9 credit hours required for Core 42	Choose one Social a	nd Behavioral Sciences course.	3
General Elective **			3
		Semester 1 Total	15

MCIT Voor o Comestor o

MSU Year 3 Semester 2 REQUIREMENT DESCRIPTION	MSU COURSE ID/TITLE	MSU COURSE ID/TITLE	
Major Requirement - Capstone	MTH 503	Advanced Calculus I	3
	Choose one:		
Major Requirement	MTH 421 MTH 541	Numerical Analysis I Statistical Theory II	3
Major Elective	Choose any Mathemati	cs course numbered 400 and above with the assistance of an advisor.	3
Major Elective	Choose any Mathemati	cs course numbered 400 and above with the assistance of an advisor.	3
Humanities and Fine Arts* 9 credit hours required for Core 42	Choose one Human	ities and Fine Arts course.	3
		Semester 2 Total	15

MSU Year 4 Semester 3

REQUIREMENT DESCRIPTION	MSU COURSE ID/TITLE	CREDIT HOURS
Major Elective	Choose any Mathematics course numbered 400 and above with the assistance of an advisor.	3
Major Elective	Choose any Mathematics course numbered 400 and above with the assistance of an advisor.	3
Humanities and Fine Arts* 9 credit hours required for Core 42	Choose one Humanities and Fine Arts course.	3
General Elective **		6
	Semester 3 Total	15

MSII Year 4 Semester 4

REQUIREMENT DESCRIPTION	MSU COURSE ID/TITLE	ISU COURSE ID/TITLE	
Major Requirement - Capstone	MTH 497	Topics	1
Major Elective	Choose any Mathematic	es course numbered 400 and above with the assistance of an advisor.	3
Core 42 Elective	Choose MOTR coded co	ourse of your choice with the assistance of an advisor.	1
General Elective **			10
		Semester 4 Total	15
		Total Hours at MSU	60
		Total Hours Overall	120-122

^{**}Work with your MSU advisor to identify courses that will complement your specific career goals. Electives provide the opportunity to customize your degree program. Some elective credits may or may not be needed to bring total credit hours to a minimum of 120 credit hours and upper division hours (300+) to 40.

This degree is also available as a Bachelor of Arts (BA).

Please consult an MSU transfer advisor to determine your best degree options.

- This information is provided as a guide only.

 OTC students are strongly encouraged to meet with their major specific MSU transfer advisor early in their OTC education to discuss the most appropriate OTC coursework for their intended MSU major, MSU degree requirements, etc.
- Students are required to fulfill MSU graduation and GPA requirements to receive a degree and should consult with their MSU advisor and the MSU undergraduate catalog for details, as there may exist pre-
- requisite requirements as well as periodicity limitations that could affect scheduling sequences.

 Please note that transfer students from Missouri public colleges and universities may follow the general education and general baccalaureate degree requirements in effect at Missouri State when they first enrolled (or re-enrolled after an absence of one calendar year or more) as degree-seeking students at the institutions from which they transferred (e.g., OTC).

Date Modified:	5.8.25