PURDUE UNIVERSITY

Mathematics Education
College of Science

MATH-BS
Code-MAED
120 Credits

Departmental/Program Major Courses (98-115 credits)

Required Major Courses (44-47 credits): Average GPA in courses below [higher of grade between STAT 35000 and MA Selective is used] must be 2.50

_____	(4-5)	Calculus I Option – Select from MA 16100, MA 16500 ***(satisfies Quantitative Reasoning for core)*** [cc]
_____	(4-5)	Calculus II Option – Select from MA 16200, MA 16600 ***(satisfies Quantitative Reasoning for core)***
_____	(4-5)	Calculus III Option – Select from MA 26100, MA 27101 ***(satisfies Quantitative Reasoning for core)***
_____	(3)	MA 35100 Elementary Linear Algebra
_____	(4)	CS 17700 Programming With Multimedia Objects ***(satisfies Computing Requirement)***
_____	(3)	MA 46000 Geometry (Fall Only)
_____	(3)	MA 37500 - Introduction To Discrete Mathematics
_____	(3)	STAT 31100 Introductory Probability or MA/STAT 41600 Probability or STAT 51600 - Basic Probability And Applications
_____	(3)	MA 30100 An Introduction To Proof Through Real Analysis
_____	(3)	STAT 35000 Introduction To Statistics ***(satisfies Statistics Requirement)***
_____	(4)	MA 36600 Ordinary Differential Equations
_____	(3)	MA 45300 - Elements Of Algebra I or MA 45000 - Algebra Honors
_____	(3)	MA Selective: MA Elective must be 300 level or higher (CANNOT be MA 373, 303, 304)

Educational Program Course Requirements (33 credits) Average GPA in courses must be 3.00 – no grade lower than C-

_____	(3)	EDCI 27000 Introduction To Educational Technology And Computing
_____	(3)	EDCI 20500 Exploring Teaching As A Career
_____	(3)	EDCI 28500 Multiculturalism And Education ***(satisfies Behavior/Social Science for core) (satisfies Language III)***
_____	(3)	EDPS 23500 Learning And Motivation ***(satisfies Behavior/Social Science for core) (satisfies General Education Requirement)***
_____	(3)	EDPS 26500 The Inclusive Classroom ***(satisfies Behavior/Social Science for core)***
_____	(1)	EDST 20010 Educational Policies and Laws
_____	(2)	EDPS 32700 Assessment Literacy
_____	(3)	EDCI 42500 Teaching of Mathematics in Secondary Schools ***(satisfies Multidisciplinary Requirement)***
_____	(2)	EDCI 42600 Teaching Mathematics In The Middle And Junior High School
_____	(10)	EDCI 49800 Supervised Teaching ***(satisfies Teamwork Experience requirement))***

Other Departmental /Program Course Requirements (21-35 credits)

_____	Met within Major	Calculus I Option – Select from MA 16100, MA 16500 ***(satisfies Quantitative Reasoning for core)*** [cc]
_____	Met within Major	Calculus II Option – Select from MA 16200, MA 16600 ***(satisfies Quantitative Reasoning for core)***
_____	(3-4)	ENGL 10600 or ENGL 10800 - ***(satisfies Written Communication and Information Literacy for core)***
_____	(0-4)	Language I Option* ***(Select courses COULD satisfy Human Cultures Humanities for core)***
_____	(0-4)	Language II Option* ***(Select courses COULD satisfy Human Cultures Humanities for core)***
_____	Met with ED requirements	Language III/Culture/Diversity Option* ***(Select courses COULD satisfy Human Cultures Humanities for core)***
_____	(3-6)	Technical Writing Option and Technical Presenting Option ***(Select courses COULD satisfy Oral Communication for core)***
_____	(3-4)	Laboratory Science I Option ***(satisfies Science Selective for core)***
_____	(3-4)	Laboratory Science II Option ***(satisfies Science Selective for core)***
_____	(3)	General Education I Option ***(Select courses COULD satisfy Human Culture Behavioral/Social Science or Humanities for core)***
_____	(3)	General Education II Option ***(Select courses COULD satisfy Human Culture Behavioral/Social Science or Humanities for core)***
_____	Met with ED requirements	General Education II Option ***(Select courses COULD satisfy Human Culture Behavioral/Social Science or Humanities for core)***
_____	Met within Major	STAT 35000 Introduction To Statistics
_____	Met within Major	Computing Option
_____	Met with ED requirements	Teambuilding and Collaboration Experience*
_____	(3)	Great Issues Option
_____	Met with ED requirements	Multidisciplinary Experience* ***(Select courses COULD satisfies Science, Technology, and Society Selective for core)***

*Requirement may be met with a zero credit experiential learning option. See your advisor for more information

Electives (5-22 credits)

_____ ( ) _____ _____ ( ) _____ _____ ( ) _____ _____ ( ) _____

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University Core Requirements

Human Cultures Humanities	☐ _____	*Science, Technology & Society Selective*	☐ _____
Human Cultures Behavioral/Social Science	☐ _____	*Written Communication*	☐ _____
Information Literacy	☐ _____	*Oral Communication*	☐ _____
Science Selective	☐ _____	*Quantitative Reasoning*	☐ _____
Science Selective	☐ _____		

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The student is ultimately responsible for knowing and completing all degree requirements.

(Degree Works) MyPurduePlan is knowledge source for specific requirements and completion

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Revised 2/2016 (effective Fall 2016)

Mathematics Education

Suggested Arrangement of Courses:

Credits	**Fall 1st Year**	**Prerequisite**	Credits	**Spring 1st Year**	**Prerequisite**
4-5	Calculus I Option [cc]	ALEKS 85	4-5	Calculus II Option	Calculus I C- or higher
3-4	ENGL 10600/10800		4	CS 17700 Programming With Multimedia Objects	
3-4	Language I Option		3-4	Language II Option	Language 10100
1	Free Elective (MA 10800)		1	Free Elective	
3	EDCI 20500 Exploring Teaching As A Career		3	EDCI 28500 Multiculturalism And Education	
1	Free Elective				
15-18			**15-17**		

Credits	**Fall 2nd Year**	**Prerequisite**	Credits	**Spring 2nd Year**	**Prerequisite**
4-5	Calculus III Option	Calculus II C- or higher	3	MA 37500 Introduction To Discrete Mathematics	Calculus III C- or higher
3	MA 46000 Geometry	Calculus II C- or higher	3	STAT 31100 Introductory Probability (or STAT/MA 41600 or STAT 51600)	Calculus II C- or higher
3-4	Laboratory Science I Option		3-4	Laboratory Science II Option	Lab Sci Option I
3	EDCI 27000 Introduction To Educational Technology And Computing		3-6	Technical Writing Option and Technical Presenting Option (COM 21700)	
3	Free Elective		0-3	Free Elective	
16-18			**15-16**		

Credits	**Fall 3rd Year**	**Prerequisite**	Credits	**Spring 3rd Year**	**Prerequisite**
3	MA 30100 An Introduction To Proof Through Real Analysis	Calculus II C- or higher	3	STAT 35000 Introduction To Statistics	Calculus II C- or higher
3	MA 35100 Elementary Linear Algebra	Calculus III C- or higher	4	MA 36600 Ordinary Differential Equations	co-req or pre MA 35100 C- or higher
3	EDPS 23500 Learning And Motivation		3	Great Issues Option	Jr/Sr Standing; may require COM or ENGL
3	EDPS 26500 The Inclusive Classroom		2	EDPS 32700 Assessment Literacy (2 cr) OR **EDPS 32700 Assessment Literacy (1 cr) AND EDPS 49100 Secondary Create & Mgt Environ (1 credit) - RECOMMENDED**	EDPS 23500
1	EDST 20010: Educational Policies and Law		3	General Education Option I	
3	Free Elective				
16			**15**		

Credits	**Fall 4th Year**	**Prerequisite**	Credits	**Spring 4th Year**	**Prerequisite**
3	MA 45300 or MA 45000	MA 35100 C- or higher	2	EDCI 42600 Teaching Mathematics In The Middle And Junior High School	EDCI 20500, 28500, 42500 and EDPS 23500, 26500 (C- or better)
3	MA Selective	Varies by Class	10	EDCI 49800 Supervised Teaching	EDCI 20500, 28500 and EDPS 23500, 26500 (C- or better)
3	General Education Option II				
3	EDCI 42500 Teaching of Mathematics in Secondary Schools	EDCI 20500, 28500 and EDPS 23500, 26500 (C- or better)			
4	Free Elective (Science, Technology & Society Selective Course)				
15			**12**		

[cc] Identified as a critical course. Student should earn minimum of a B- see advisor for further details.
Courses in ( ) are recommended.

Students must earn a 2.5 average in MATH/STAT/CS courses required for major.
120 semester credits required for Bachelor of Science degree.
2.5 Graduation GPA required for Bachelor of Science degree.
*For Licensing – Students must pass GATE C

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