

Departmental/Program Major Courses (73-102 credits)

Required Major Courses (43-46 credits): Average GPA in courses must be 2.00 excluding Calculus I, II and III

- _____ (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^{cc}
- _____ (4) MA 36600 Ordinary Differential Equations
- _____ (3) MA 34100 Foundations Of Analysis or MA 44000 Real Analysis Honors
- _____ (3) MA 35300 Linear Algebra II With Applications
- _____ (3) Advanced Calculus Selective: MA 36200 Topics In Vector Calculus/MA 44200 - Multivariate Analysis I Honors
- _____ (3) CS 31400/MA 51400 Numerical Methods
- _____ (3) MA 45300 - Elements Of Algebra I or MA 45000 - Algebra Honors
- _____ (3) MA 30300 - Differential Equations and Partial Differential Equations for Engineering and the Sciences or MA 30400 - Differential Equations And Analysis Of Nonlinear Systems For Engineering And The Sciences
- _____ (3) Applied Math Selective: MA 42500 - Elements Of Complex Analysis/MA 42800 - Introduction To Fourier Analysis/MA 52300 - Introduction To Partial Differential Equations
- _____ (3) Math/Statistics Selective: MA/STAT 41600 Probability or STAT 51600 - Basic Probability And Applications/MA 37500 - Introduction To Discrete Mathematics/MA 42100 - Linear Programming And Optimization Techniques/MA 42500 - Elements Of Complex Analysis/MA 42800 - Introduction To Fourier Analysis

Other Departmental /Program Course Requirements (30-56 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*)
- _____ (0-4) 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*)
- _____ (3) General Education II Option (*Select courses COULD satisfy Human Culture Behavioral/Social Science or Humanities for core*)
- _____ (3) STAT 35000 Introduction To Statistics
- _____ (3-4) Computing Option
- _____ (0-4) Teambuilding and Collaboration Experience*
- _____ (3) Great Issues Option
- _____ (0-3) 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 (18-47 credits)

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

University Core Requirements

Human Cultures Humanities	<input type="checkbox"/>	Science, Technology & Society	<input type="checkbox"/>
Human Cultures Behavioral/Social Science	<input type="checkbox"/>	Selective	<input type="checkbox"/>
Information Literacy	<input type="checkbox"/>	Written Communication	<input type="checkbox"/>
Science Selective	<input type="checkbox"/>	Oral Communication	<input type="checkbox"/>
Science Selective	<input type="checkbox"/>	Quantitative Reasoning	<input type="checkbox"/>

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

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

Applied Mathematics

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 First-Year Composition		3-4	Computing Option (rec. CS 17700 & meets Teambuilding and Collaboration Experience)	
3-4	Language I Option		3-4	Language II Option	Language 10100
1	Free Elective (MA 10800)				
3-4	Free Elective		3	Free Elective	
			2	Free Elective	
15-17			15-18		

Credits	Fall 2nd Year	Prerequisite	Credits	Spring 2nd Year	Prerequisite
4-5	Calculus III Option	Calculus II C- or higher	3	MA 35100 ^{cc} Elementary Linear Algebra	Calculus III C- or higher
3-4	Laboratory Science I Option		3	STAT 35000 Introduction To Statistics	Calculus II C- or higher
3-4	Language III/Culture/Diversity Option	See Course Info	3-4	Laboratory Science II Option	Lab Sci Option I
3	Free Elective (MA 30100)	Calculus II C- or higher	3-6	Technical Writing Option and Technical Presenting Option (COM 21700)	
2	Free Elective		0-3	Free Elective	
15-18			15-16		

Credits	Fall 3rd Year	Prerequisite	Credits	Spring 3rd Year	Prerequisite
4	MA 36600 Ordinary Differential Equations	Calculus III; co-req or pre MA 35100 C- or higher	3	MA 35300 Linear Algebra II With Applications	MA 35100 C- or higher
3	MA 34100 or MA 44000	Calculus III C- or higher	3	Advance Calculus Selective	Varies by Class
3	General Education I Option		3	CS 31400/MA 51400 Numerical Methods	CS Programming and MA 35100 C or higher
3	Free Elective (Science, Technology & Society Selective Course)		3	General Education II Option	
2	Free Elective		3	Free Elective	
15			15		

Credits	Fall 4th Year	Prerequisite	Credits	Spring 4th Year	Prerequisite
3	MA 45300 or MA 45000	MA 35100 C- or higher	3	Applied Math Selective	Varies by Class
3	MA 30300 or MA 30400	MA 36600 and MA 35100 D- or higher	3	Math/Statistics Elective	Varies by Class
0-3	Multidisciplinary Experience		3	Great Issues Option	Jr/Sr Standing; may require COM or ENGL
3	General Education III Option		3	Free Elective	
3-6	Free Elective		3	Free Elective	
15-18			15		

^{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 2.0 average in MATH/STAT/CS courses required for major.

120 semester credits required for Bachelor of Science degree.

2.0 Graduation GPA required for Bachelor of Science degree.

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

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Revised 2/2016 (effective Fall 2016)