BACHELOR OF SCIENCE IN APPLIED MATHEMATICS

Required Courses

Applied Mathematics Requirements			(42)
MATH 100	Introduction to the Profession		3
MATH 151	Calculus I		5
MATH 152	Calculus II		5
MATH 230	Introduction to Discrete Math		3
MATH 251	Multivariate and Vector Calculus		4
MATH 252	Introduction to Differential Equations		4
MATH 332	Elementary Linear Algebra		3
MATH 350	Introduction to Computational Mathematics		3
MATH 380	Intro to Mathematical Modeling		3
MATH 400	Real Analysis		3
Select one of the following:			3
MATH 410	Number Theory	3	
MATH 430	Applied Algebra	3	
MATH 431	Computational Algebraic Geometry	3	
MATH 454	Graph Theory and Applications	3	
MATH 475	Probability		3
Applied Mathematics Electives			(18)
Select 18 credit hours [1]			18
Humanities and Social Science Requirements			(21)
See IIT Core Curriculum, sections B and C			21
Minor Requirement			(15)
Select five related courses from an area outside of applied mathematics			15
Interprofessional Projects (IPRO)			(6)
See IIT Core Curriculum, section E			6
Computer Science Requirements			(4)
Select one of the following sequences:			4
CS 115 & CS 104	Object-Oriented Programming I and Introduction to Computer Programming for Engineers	4	
CS 115 & CS 116	Object-Oriented Programming I and Object-Oriented Programming II	4	
CS 105 & CS 201	Introduction to Computer Programming and Accelerated Introduction to Computer Science	6	
Science Requirement			(4)
PHYS 123	General Physics I: Mechanics		4
Science Electives			(9)
Select 9 credit hours			9
Free Electives			(9)
Select 9 credit hours			9
Total Credit Hours			128

[1] Applied mathematics electives are to be chosen after consultation with an academic adviser. Student goals, interests, and course availability should be determining factors in this selection process. The optional specializations on the Specializations tab may also serve as a guide to applied mathematics elective selection.