

BACHELOR OF SCIENCE IN MATHEMATICS - APPLIED MATHEMATICS TRACK

Summary of Graduation Requirements

Subject Area	Credits
General Education Core (https://catalog.nsu.edu/undergraduate/academic-information/general-education-core-program/)	42
Major Requirements	59
Restricted Electives	15
General Electives	4
Total Credit Hours	120

Curriculum

Course	Title	Credits
First Year		
BIO 100	Biological Science	3
BIO 100L	Biological Science Lab	1
CSC 169	Introduction to Computer Science	3
CSC 170	Computer Programming I	3
CSC 170L	Computer Programming Laboratory I	1
ENG 101	College English I	3
ENG 102	College English II	3
HED 100	Personal and Community Health	2
SEM 101 & SEM 102	Spartan Seminar 101 and Spartan Seminar 102	2
MTH 184	Calculus I	4
MTH 251	Calculus II	4
PED 100	Fundamentals of Fitness for Life	1
Credits		30
Second Year		
SEM 201	Spartan Seminar 201	1
CSC 2XX	Computer Programming Electives (200 Level)	6
PHY 152	General Physics	3
PHY 152L	General Physics Laboratory I	1
MTH 252	Calculus III	4
MTH 300	Linear Algebra	3
MTH 372	Differential Equations	3
MTH 373	Advanced Vector Calculus	3
PHY 153	General Physics	3
PHY 153L	General Physics Laboratory II	1
XXX XXX	Cultural Perspectives (Humanities) ¹	3
Credits		31
Third Year		
XXX XXX	Applied Electives ²	3
XXX XXX	Science Electives (200 level or above)	3
XXX XXX	General Electives	2
MTH 273	Mathematical Foundations	3
MTH 331	Algebraic Structures	3

MTH 351	Probability & Statistics I	3
MTH 352	Probability & Statistics II	3
XXX XXX	Cultural Perspectives (Social Science) ³	3
ENG 285	Public Speaking	3
XXX XXX	Social Sciences Elective ⁴	3
XXX XXX	Humanities ⁵	3

Credits 32

Fourth Year

XXX XXX	Applied Electives ²	12
XXX XXX	General Electives	2
MTH 401	Numeric Analysis I	3
MTH 473	Real Analysis	3
MTH 496	Mathematics Seminar I	2
MTH 497	Mathematics Seminar II	2
ENG 203 or ENG 303	Advanced Communication Skills or Professional & Technical Writing	3

Credits 27

Total Credits 120

- ¹ Cultural Perspectives (Humanities)
Note: Students will take 3 hours of Cultural Perspectives (Humanities) as indicated: ENG 383 African-American Literature, 1940-PRESENT, MUS 234 African-American Music.
- ² Applied Electives
Note: students will take 15 hours of applied electives as indicated:
Third year: MTH 382 Introduction to Applied Mathematics, MTH 384 Mathematical Modeling in the Sciences, PHY 3xx (6 hours)
Fourth year: MTH 402 Numeric Analysis II, MTH 474 Complex Variables, MTH 484 Topics in Applied Mathematics, PHY 3xx, PHY 4xx, EEN 3xx (9 hours)
- ³ Cultural Perspectives (Social Science)
Note: Students will take 3 hours of Cultural Perspectives (Humanities) as indicated: HIS 335 African-American History, HIS 336 African-American History Since 1865, HIS 371 Modern African History & Cultures 1600-PRESENT, HRP 320 African American Health.
- ⁴ Social Sciences
Note: Students will take 3 hours of Social Sciences as indicated:
SOC 101 Introduction to the Social Sciences, HIS 101 History of World Societies II, HIS 103 United States History Since 1865, BUS 175 Introduction to Business & Entrepreneurship, ECN 200 Basic Principles of Economics.
- ⁵ Humanities
Note: Students will take 3 hours of humanities as indicated: ENG 207 Introduction to World Literature, FIA 201 Basic Art Appreciation, MUS 301 Music Appreciation.