

Mathematics - Applied Mathematics (B.S.)

The specific mission of the major in Mathematics is to produce a well-trained mathematician capable of both research and teaching in general. In particular a Howard University-trained mathematician must be comfortable when employed as an actuarial scientist, a computer scientist and/or a mathematician/researcher in schools, government, or industry.

Freshman Year - First Semester

Item #	Title	Credits
MATH 156	Calculus I	4
ENGW 101	Rhetoric, Inquiry, and Critical Writing	3
	1 Credit General Elective (Options: Any 1 credit course offered at the university, tbd in consultation with advisor)	
	General Elective (Options: To be determined in consultation with 3 advisor) (3)	
FRSM 001	Freshman Seminar	1
CSCI 100	Intro to Computer Science	3
	Sub-Total Credits	15

Freshman Year - Second Semester

Item #	Title	Credits
MATH 157	Calculus II	4
MATH 101	Proof and Problem Seminar I	1
	ENGW 103/105	3
SLMC 101	Principles of Speech	3
	General Elective (Options: To be determined in consultation with 3 advisor) (3)	
	Sub-Total Credits	14

Sophomore Year - First Semester

Item #	Title	Credits
MATH 158	Calculus III	4
MATH 102	Proof & Prob Seminar II	1
MATH 795	Intro Anal I-Wrtg	3
	General Elective (Options: To be determined in consultation with 3 advisor) (3)	
	General Elective (Options: To be determined in consultation with 3 advisor) (3)	
	Sub-Total Credits	14

Sophomore Year - Second Semester

Item #	Title	Credits
MATH 159	Differential Equations	4
MATH 180	Intro to Linear Algebra	3
	General Elective (Options: To be determined in consultation with 3 advisor) (3)	
	General Elective (Options: To be determined in consultation with 3 advisor) (3)	
	General Elective (Options: To be determined in consultation with 3 advisor) (3)	
Sub-Total Credits		16

Junior Year - First Semester

Item #	Title	Credits
MATH 189	Probability & Statistics I	3
CSCI 135	Computer Science I	4
	Humanities Elective	3
	General Elective (Options: To be determined in consultation with 3 advisor) (3)	
	General Elective (Options: To be determined in consultation with 3 advisor) (3)	
Sub-Total Credits		16

Junior Year - Second Semester

Item #	Title	Credits
MATH 164	Numerical Analysis	3
	Specialization Course (3)	3
	Social Science Elective	3
	General Elective (Options: To be determined in consultation with 3 advisor) (3)	
	World Language and Culture Requirement (Options: See Elective 3 Group Descriptions)	
Sub-Total Credits		15

Senior Year - First Semester

Item #	Title	Credits
	Specialization Course (4)	4
	Specialization Course (3)	3
	Specialization Course (3)	3
	Math Elective (Options: Courses under code MATH) (3)	3
	Social Science Elective	3
Sub-Total Credits		16

Senior Year - Second Semester

Item #	Title	Credits
	Math Elective (Options: Courses under code MATH) (3)	3
	Social Science Elective	3
	Specialization Course (3)	3
	General Elective (Options: To be determined in consultation with advisor) (3)	3
	General Electives (Options: To be determined in consultation with advisor) (2)	2
	Sub-Total Credits	14
	Total credits:	120

Category Descriptions

1 Credit General Elective (Options: Any 1 credit course offered at the university, tbd in consultation with advisor)

(Options: Any 1credit course offered at the university, tbd in consultation with advisor)

General Elective (Options: To be determined in consultation with advisor) (3)

ENGW 103/105

Humanities Elective

Specialization Course (3)

Social Science Elective

World Language and Culture Requirement (Options: See Elective Group Descriptions)

Foreign Language - Amharic*	3
Foreign Language - Arabic*	3
Foreign Language - Chinese*	3
Foreign Language - French*	3

Foreign Language - German	3
Foreign Language - Haitian Creole* (Options: Courses under code HACR)	3
Foreign Language - Spanish*	3
Foreign Language - Swahili*	3
Foreign Language - Wolof*	3

Specialization Course (4)

Math Elective (Options: Courses under code MATH) (3)

General Electives (Options: To be determined in consultation with advisor) (2)