LAGUARDIA COMMUNITY COLLEGE

NEW YORK INSTITUTE OF TECHNOLOGY

Associate of Science Liberal Arts: Mathematics and Science Applied Math

Bachelor of Science in Applied and Computational Mathematics

Course	Credit	Course	Credit
Semester 1			
LMF101 First Year Seminar for Liberal Arts: Math Science	3	Credit applied to DATA 101 Waiver	3
ENG101 English Composition I (or ENA101)	3	FCWR 101 Writing I	3
MAT115 Algebra and Trigonometry (or MATH 117)	3	General Elective	3
Flexible Core Course	3	General Elective	
MAT200 Precalculus	4	General Elective	4
Semester 2			
ENG102 English Composition II	3	FCWR 151 Writing II	3
SCB Biology, SCC Chemistry or SCP Physics	3	Science Elective	3
MAT201 Calculus I	4	MATH 170 Calculus I	4
MAC101 Introduction to Computer Science	3	CSCI 125 Computer Programming I	3
Flexible Core Course	3	General Elective	3
Semester 3			
MAT202 Calculus II	4	MATH 180 Calculus II	4
MAT210 Linear Algebra	3	MATH 310 Linear Algebra	3
Unrestricted Elective:	2	General Elective	2
1-2 credits required but may need 3 credit option			
Flexible Core Course (Urban Study)	3	General Elective	3
Flexible Core Course - Recommended: Literary Studies	3	ICLT Literature Elective	3
Semester 4			
LIB200 Humanism, Science & Technology	3	ICSS Social Science Elective	3
MAT203 Calculus III	4	MATH 260 Calculus III	4
MAT231 Introduction to Discrete Math	3	CSCI 235 Elements of Discrete Structures	3
MAC190 Object-Oriented Programming	3	CSCI 185 Computer Programming II	3
TOTAL	60	TOTAL	60

Note – Recommended course is identified to maximize transfer credit award at New York Tech. Fewer credits may transfer if "Recommended" course is not completed.

Effective as of Fall 2023

Program of Study at New York Institute of Technology Bachelor of Science in Applied and Computational Mathematics

<u>Courses to be c</u>	completed at New York Tech:	<u>Credits</u>	
Major courses:			(35)
PHYS 170	General Physics I	4	(55)
PHYS 180	General Physics II	4	
MATH 220	Probability and Statistics	3	
MATH 320	Differential Equations	3	
MATH 330	Computational Analysis	4	
MATH 350	Advanced Calculus	3	
MATH 410	Numerical Linear Algebra	3	
MATH 490	Mathematical Modeling Capstone	5	
MATH 3XX	Mathematics Elective -300 -level and above	3	
MATH 3XX	Mathematics Elective: 300-level and above	3	
	courses: Choose One		(16)
General Conce	ntration		
MATH 450	Partial Differential Equations or		
MATH 455	Numerical Analysis	3	
MATH 3XX	Mathematics Elective: 300-level and above	3	
Computer Scien	ce or Science Elective	3	
Computer Scien	ce or Science Elective	3	
Science Elective	2	4	
	<u>01'</u>		
Mathematical	Modeling Concentration		
MATH 450	Partial Differential Equations	3	
MATH 470	Mathematical Fluid Dynamics	3	
PHYS 220	General Physics III	4	
PHYS 225	Intro to Modern Physics	3	
PHYS 450	Mathematical Physics	3	
	<u>or</u>		
	putation Concentration		
CSCI 312	Theory of Computations	3	
CSCI 335	Design and Analysis of Algorithms	3	
MATH 440	Numerical Optimization	3	
MATH 455	Numerical Analysis	3	
Science Elective	2	4	
	tional Requirements:		(9)
FCWR 3XX	Professional Communication	3	
3XX Seminar	Seminar subject based on courses completed at LaGuardia CC	3	
3XX Seminar	Seminar subject based on courses completed at LaGuardia CC	<u>3</u>	
Total Credits at New York Institute of Technology:			

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12/6/2023

Date

2 Dr. Daniel Quigley, Dean College of Arts and Sciences, New York Institute of Technology