



Mathematics Major: Computational Mathematics

Total Credits: 43-45

Subj/Course #	Title	Prerequisites	Term	✓	Credits	Resid
REQUIRED COURSES (27 CREDITS)						(O/R)
MAT 1412	Calculus 1	placement exam			4	
MAT 1413	Calculus 2	MAT 1412			4	
MAT 1510	Multivariable Calculus	MAT 1413			4	
MAT 2105	Linear Algebra	MAT 1412			3	
MAT 2461	Probability Theory	MAT 1510			3	
MAT 2462	Mathematical Statistics	MAT 2461			3	
MAT 2601	Ordinary Differential Equations	MAT 1413			3	
MAT 2651	Numerical Methods	MAT 1510, MAT 2105			3	

ELECTIVES (SELECT 4 OF THE FOLLOWING, 13-15 CREDITS)						
COM 1300	Introduction to Computer Science				4	
COM 1310/ MAT 1504	Math for Computer Science/ Discrete Structures	COM 1300			3-4	
COM 1320	Data Structures	COM 1300			4	
COM 2545	Algorithms	COM 1320			3	
COM 3920	Machine Learning	COM 2546, COM 3760, MAT 2462			3	

CORRELATE (1 COURSE, 3 CREDITS)						
<i>Select one course from the following areas: MAT 1000-4999, COM 1000-4999, IDS 1500-4999</i>						
<i>Recommended: IDS 1556, 2020, 2030, 2460, 2550, 3800</i>						
CORR #1					3	

- Notes:
- 60% of this major must be taken at Yeshiva College
 - Major/Minor courses require a grade of a "C-" or better to fulfill its requirement