



## Mathematics Major: *Computational Mathematics*

Total Credits: 42-45

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

<b>ELECTIVES (SELECT 4 OF THE FOLLOWING, 13-15 CREDITS)</b>					
<b>COM 1300</b>	Introduction to Computer Science			4	
<b>COM 1310/ MAT 1504</b>	Math for Computer Science/ Discrete Structures			3-4	
<b>COM 1320</b>	Data Structures			4	
<b>COM 2545</b>	Algorithms			3	
<b>COM 3920</b>	Machine Learning			3	
<b>COM 3921</b>	Applied Machine Learning			3	

<b>CORRELATE (1 COURSE, 3 CREDITS)</b>					
<i>Select one course from the following areas: MAT 1000-4999, COM 1000-4999, IDS 1000-4999</i>					
<i>Recommended: IDS 1400, 1556, 2020, 2030, 2460, 2550, 3800</i>					
<b>CORR #1</b>				3	

Notes:

1. 60% of this major must be taken at Yeshiva College
2. Major/Minor courses require a grade of a "C-" or better to fulfill its requirement