# **B.S. in Mathematics**

# Degree Requirements (120 credits) For Students matriculating on or after Fall 2013 (Revised Fall '19)

General Education Requirements (42 credits)	<b>Credits</b>
Required Common Core	12
Flexible Common Core	18
College Options	12
See Attachment for Recommended and suggested courses in this	category.

# Pre-Major Requirements (22-25 credits)<sup>1</sup>

MTH 229	Calculus Computer Laboratory	1
MTH 231	Analytic Geometry and Calculus I	3
MTH 232	Analytic Geometry and Calculus II	3
MTH 233	Analytic Geometry and Calculus III	3
	OR	
MTH 229	Calculus Computer Laboratory	1
MTH 230	Calculus I with Pre-Calculus	6
MTH 232	Analytic Geometry and Calculus II	3
MTH 233	Analytic Geometry and Calculus III	3

#### AND

*MTH 214	Applied Statistics using Computers	4
	OR	
*CSC 126	Introduction to Computer Science	4
* It is recommen	nded that students include both these courses in their of	curriculum; one of these courses can
be taken as an el	ective.	

## AND

Two courses with laboratorie	s chosen from one of the following sequences:	8
BIO 170-171, 180-181	General Biology I and II with laboratories	
CHM 141-121,142-127	General Chemistry I and II with laboratories	
PHY 120-121, 160-161	General Physics I and II with laboratories	
GEO 115-116, 102-103	Physical and Historical Geology with laboratories	
AST 120-160	Space Science I and II with laboratories	

<sup>&</sup>lt;sup>1</sup> Courses used to fulfill premajor requirement can be used to fulfill gen-ed requirement.

Major Requirements (36 credits)		Credits	
	MTH 311	Probability Theory and an Introduction to	
		Mathematical Statistics	4
	MTH 330	Applied Mathematical Analysis I	4
		OR	
	MTH 334	Differential Equations	4
	MTH 338	Linear Algebra	4
	MTH 339	Applied Algebra	4
	MTH 341	Advanced Calculus I	4
	Four Elective	e Upper-Level (300-400 level) Mathematics Courses	16

### **Electives (0-33 credits)** See the 8 semester Sample Schedule

#### Total (120 credits)

To graduate with Honors in the major, students must have at least a 3.5 GPA in the courses under the major requirement category and must complete an Honors thesis or project.

Note: 1. GPA Requirement - In order to graduate, you will need an overall GPA of 2.0 as well as a GPA of 2.0 in the courses under major requirement category.

- 2. <u>Residency Requirement</u> To obtain a B.S. degree from CSI, students must earn at least 30 credits at CSI and must also earn at least half (50%) of the credits in the major requirement category at CSI. For details refer to the catalog.
- 3. <u>Liberal Arts and Sciences Requirement</u> For a B.S. degree NY state requires that one half of credits must be in Liberal Arts and Sciences. For details refer to the catalog .