

B.S. in Mathematics

Degree Requirements (120 credits)

(Revised Fall '22)

For Students matriculating on or after Fall 2013

<u>General Education Requirements (42 credits)</u>	<u>Credits</u>
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)¹

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
		Total 10 credits

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
		Total 13 credits

AND

MTH 214	Applied Statistics using Computers	4
OR*		
CSC 126	Introduction to Computer Science	4

* It is recommended that students include both these courses in their curriculum; one of these courses can be taken as an elective.

AND

Two courses with laboratories chosen from one of the following sequences:	Total 8 credits
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
GEO 115-116, ESC 110-111	Physical Geology, Meteorology and Climatology with labs
AST 120-160	Space Science I and II with laboratories

¹ Courses used to fulfill premajor requirement can be used to fulfill gen-ed requirement.

<u>Major Requirements (36 credits)</u>		<u>Credits</u>
MTH 301	Introduction to Proof	4
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	Abstract Algebra	4
MTH 341	Advanced Calculus I	4
Three Elective Upper-Level (300-400 level) Mathematics Courses		12

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. Residency Requirement – 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. Liberal Arts and Sciences Requirement - 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 .