## B.S. in Mathematics

Degree Requirements (120 credits)
(For students who matriculated before Fall 2013)
General Education Requirements (33-39 credits)
ENG 111
Credits

ENG 151
3

PED 190
4
COR 100,

Scientific Analysis (11 credits)
Science and Technology ${ }^{1}$ 8

> Mathematics

Social Scientific Analysis (see p. 47 for details) $)^{2,3}$ 3-4
The Contemporary World (see p. 49 for details) ${ }^{2}$
Textual, Aesthetic, and Linguistic Analysis (see p. 49 for details) ${ }^{2} \quad$ 3-4
Pluralism and Diversity Requirement (see p. 51 for details) ${ }^{2,4}$ 0-4
Pre-Major Requirements ( $\mathbf{1 4 - 1 7}$ credits) ${ }^{5}$

| 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 | Statistics using Computers | 4 |
|  | OR |  |
| *CSC 126 I | uction to Computer Science | 4 |
|  | OR |  |
| CSC 270 | uction to Scientific Programming | 4 |
| * It is recommended that students include both these courses in their curriculum; one of these courses can be taken as an elective. |  |  |

1 Two courses with laboratories chosen from one of the following sequences:
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 100-101, 102-103 Physical and Historical Geology with laboratories
AST 100-101, 102-103 Contemporary Theories of the Solar System (with planetary laboratory)
and of the Universe (with galactic laboratory). THIS choice is eliminated as of Fall 2015.
Space Science I and II with laboratories
AST 120-160
${ }^{2}$ Page numbers refer to the undergraduate catalog 2012-13
${ }^{3}$ Can be satisfied by PSY 100, Psychology a prerequisite for EDS 202 and is required for students majoring in Mathematics with an Adolescence Education concentration.
${ }^{4}$ Remark: This requirement can be satisfied by appropriate selection in Social Scientific Analysis, Contemporary World or TALA.
${ }^{5}$ Courses used to fulfill premajor requirement can be used to fulfill gen-ed requirement.

| MTH 311 | Probability Theory and an Introduction to <br> Mathematical Statistics | 4 |
| :--- | :--- | :---: |
| MTH 330 | Applied Mathematical Analysis I <br> OR | 4 |
| MTH 334 | Differential Equations | 4 |
| MTH 338 | Linear Algebra | 4 |
| MTH 339 | Applied Algebra |  |
| MTH 341 | Advanced Calculus I | 4 |
| Four Elective Upper-Level (300-400 level) Mathematics Courses | 4 |  |
|  | 16 |  |
| lectives (28-37 credits) | $28-37$ |  |

## Total ( 120 credits)

To graduate with Honors in the major, students must have at least a 3.5 GPA in mathematics courses 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 catalog on page $39^{2}$.
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 (2012-2013) on page $53^{2}$,

