

EDU 556B Student Teaching Adolescence/ Special Education (Grades 10-12)	3
EDU 557B Student Teaching Seminar Adolescent Special Education (Grades 7-12)	0
<b>5th Year Spring of Professional Year—(6 credits):</b>	
EDU 549C Teacher as Researcher in Special Education and Inclusive Classrooms of Adolescent Learners	3
EDU 575 Curriculum Content and Practices for Teaching Adolescent Students with Disabilities	3
<b>FST Requirement:</b>	
FST 101 College Experience (If required)	1
<b>Electives:</b> 5 Elective credits must be Liberal Arts and Sciences (LAS) for a B.A. degree. (6 LAS Elective credits are required if FST is waived.)	5
<i>(Adjust Electives needed for having a Minor(s), Remedials, ESL, Honors Programs, PED/FST waivers as needed, under consultation with advisor.)</i>	--
<b>Total:</b>	<b>149</b>

**NOTE: The General Education requirement is 44, and has been adjusted to 38, because the following Major or Related requirements will also satisfy the General Education requirements: MAT 115/MAT 225 and a Lab Science course.**

**The Education 5 Year Adolescence/Special Education General Education requirement is 6 and has been adjusted to 0, because the following Major and Related requirements are taken: MAT 221 and a second Lab Science course.**

†EDU 515 is a required course in the Graduate Education Program. When this course is not offered, the advisor may approve for students to substitute one of the following for either course: EDU 540, EDU 541, EDU 542, EDU 570, EDU 571, EDU 574 and/or EDU 575.

## Programs for Computer Studies Majors

Computer Studies introduces students to the concepts and applications of computers and prepares them to effectively utilize computers in their respective fields and subsequent careers.

### GOALS AND OBJECTIVES OF COMPUTER SCIENCE (CSC)

- To enable the student to explore a problem from different perspectives.
- To give the student a background in programming that permits him/her to move from a language they know to an unfamiliar language.
- To provide the student with an understanding of general underlying concepts in order to prepare the student to keep pace with a rapidly changing field.
- To prepare the student for a career in the computer field.
- To provide the student with sufficient background for graduate study in the field.

### GOALS AND OBJECTIVES OF COMPUTER INFORMATION SYSTEMS (CIS)

- To provide students with the skills to analyze, design, implement and manage large-scale information systems.
- To prepare computer majors for careers and/or graduate work in systems analysis and design, communications networks and web development.
- To enable all students to acquire knowledge and skills in information technology necessary for career success.

### GOALS AND OBJECTIVES OF COMPUTER PROFICIENCY COURSES (CSP)

- To develop the student's proficiency in using personal computer hardware and software through hands-on experience.

To offer a variety of one-credit computer application courses so that departments may select a combination of courses more appropriate to their particular discipline.

### COMPUTER SCIENCE—B.A.

New York State Registered Program Code: 86099

HEGIS Code: 701.00 (Computer and Information Sciences, General)

Molloy Program of Study Code: CSCBA

	<b>Credits</b>
<b>General Education Requirements:</b> Acceptable courses listed under General Education Requirements — (41 credits needed) See <b>NOTE</b>	
<i>Arts and Fine Arts (2 out of 3 disciplines) (6 credits):</i> ART History/MUS History/COM Speech	6
<i>English and Modern Languages (1 of each discipline) (9 credits):</i> ENG 110; Modern Language; and Modern Language/Literature	9
<i>Social and Behavioral Sciences (3 out of 4 disciplines) (9 credits):</i> HIS/POL/PSY/SOC	9
<i>Math and Science (3 credits):</i> Science course (Lab course in BIO, CHE or PHY preferred)	3
<i>Philosophy, Theology and Ethics (1 of each discipline) (9 credits):</i> PHI; TRS; and ETH (PHI/MAT 324 preferred)	9
<i>Physical Education (1 credit):</i> PED	1
<i>Core Course (4 credits):</i> COR	4
<b>Major Requirements - (Minimum of 37 credits):</b>	
CSC 120 Programming I	3
CSC 121 Programming II	3
CSC 229 Discrete Mathematical Structures	3
CSC/CIS 235 Introduction to Web Scripting	3
CSC 244 Data Structures	4
<i>Core Complete two of the following courses* (6 credits):</i>	6

CSC 323 Assembly Language and Systems Programming	*
CSC 330 Operating Systems	*
CSC 337 Web/Mobile Game Development	*
CSC 352 Back-end Web Development	*
CSC 460 Internship	3
CSC 491 Capstone Seminar	3
Complete <b>at least 9 additional credits**</b> from the following (9 credits):	9
CIS/CSC any level courses	**
<b>Related Requirements</b> - (17 credits):	
MAT 221 Calculus I	4
MAT 222 Calculus II	4
Complete <b>either***</b> MAT 115, MAT 225 or MAT 361 (3 credits):	3
MAT 115 Elementary Statistics	***
MAT 225 Statistics for the Natural Sciences	***
MAT 361 Probability and Mathematical Statistics	***
MAT 228 Topics in Discrete Math for Computer Science Majors	3
MAT 232 Introduction to Linear Algebra	3
<b>FST Requirement:</b>	
FST 101 College Experience (If required)	1
<b>Electives:</b> 17 Elective credits must be Liberal Arts and Sciences (LAS) for a B.A. degree. Depending on the course, some of the electives for the Major can be counted as LAS, some will not count. (34 Electives with 1 LAS credit are required if FST is waived.)	33
<i>(Adjust Electives needed for having a Minor(s), Remedials, ESL, Honors Programs, PED/FST waivers as needed, under consultation with advisor.)</i>	--
<b>Total:</b>	<b>128</b>

**NOTE: The General Education requirement is 44 and has been adjusted to 41 because the following Related requirement will also satisfy the General Education requirement: MAT 221.**

## MATHEMATICS/COMPUTER SCIENCE—B.A. (DOUBLE MAJOR)

New York State Registered Program Code: 07465  
 HEGIS Code: 1701.00 {Mathematics, General}  
 New York State Registered Program Code: 86099  
 HEGIS Code: 701.00 {Computer and Information Sciences, General}  
 Molloy Program of Study Code: MATBA/CSCBA

Since several required courses (MAT/CSC) are the same for both majors the requirements for a double major are:

<b>Credits</b>	
<b>General Education Requirements:</b>	
Acceptable courses listed under General Education Requirements — (38 credits needed) See <b>NOTE</b>	

Arts and Fine Arts (2 out of 3 disciplines) (6 credits): ART History/MUS History/COM Speech	6
English and Modern Languages (1 of each discipline) (9 credits): ENG 110; Modern Language; and Modern Language/Literature	9
Social and Behavioral Sciences (3 out of 4 disciplines) (9 credits): HIS/POL/PSY/SOC	9
Philosophy, Theology and Ethics (1 of each discipline) (9 credits): PHI; TRS; and ETH	9
Physical Education (1 credit): PED	1
Core Course (4 credits): COR	4
<b>Mathematics Major Requirements</b> - (36 adjusted credits from 42) Required courses same as for mathematics major (Excluding MAT 229/CSC 229) and CSC/MAT460 - Shared Requirement)	36
<b>Notice:</b> For the option in the Mathematics Major Requirements for Statistics: Complete MAT 225 - (MAT 225 is preferred); This will also satisfy the Computer Science Related Requirement.	
<b>Computer Science Major Requirements</b> - (31 adjusted credits from 37) Required courses same as for computer science major (Excluding CSC 229/MAT 229 and CSC/MAT460- Shared Requirement)	31
<b>Mathematics and Computer Science Shared Requirements:</b> (6 credits)	
CSC 229/MAT 229 Discrete Mathematical Structures	3
MAT 115 Elementary Statistics or MAT 225 Statistics for the Natural Sciences are required for either major. (MAT 361 can be taken for the Mathematics Major Elective requirements. Both majors require either MAT 115 or MAT 225, so one of these should be taken.)	3
<b>Mathematics and Computer Science Internship Shared Requirement</b> (3 credits included)	
CSC/MAT 460 Internship (CSC 460 preferred)	3
<b>Related Requirements (Double Major)</b> - At least 6-8 credits in Lab Science, preferably including PHY 270 OR a lab course in BIO, CHE or PHY preferred	6
<b>For Math-Specific Related Requirements</b> - (0 credit) Note: CSC 120 in the Computer Science major satisfies the other related requirements	0
<b>For Computer Science-Specific Related Requirements</b> - (3 credits) Note: MAT 221, MAT 222, MAT 225 and MAT 232 in the Math major satisfies the Computer Science related requirements. (MAT 228 Topics in Discrete Mathematics for Computer Science Majors for 3 credits is required as part of the double major)	3

<b>FST Requirement:</b>	
FST 101 College Experience (If required)	1
<b>Electives:</b> The Liberal Arts and Sciences (LAS) for a B.A. degree is met. (9-11 Electives are required if FST is waived.)	8-10
<i>(Adjust Electives needed for having a Minor(s), Remedials, ESL, Honors Programs, PED/FST waivers as needed, under consultation with advisor.)</i>	--
<b>Total:</b>	<b>128</b>

**NOTE: The General Education requirement is 44 and has been adjusted to 38 because the following Major and Related requirements will also satisfy the General Education requirements: MAT 221; Lab Science course.**

### COMPUTER INFORMATION SYSTEMS—B.S.

New York State Registered Program Code: 22308  
 HEGIS Code: 702.00 (Information Sciences and Systems)  
 Molloy Program of Study Code: CISBS

	<b>Credits</b>
<b>General Education Requirements:</b> Acceptable courses listed under General Education Requirements — (35 credits needed) See <b>NOTE</b>	
<i>Arts and Fine Arts (1 out of 2 disciplines) (3 credits):</i> ART History/MUS History	3
<i>English and Modern Languages (1 of each discipline) (9 credits):</i> ENG 110; Modern Language; and Modern Language/Literature	9
<i>Social and Behavioral Sciences (3 out of 4 disciplines) (9 credits):</i> HIS/POL/PSY/SOC (POL 303 and SOC 166 recommended)	9
<i>Math and Science (3 credits):</i> Science course	3
<i>Philosophy, Theology and Ethics (1 of each discipline) (6 credits):</i> PHI; TRS	6
<i>Physical Education (1 credit):</i> PED	1
<i>Core Course (4 credits):</i> COR	4
<b>Major Requirements - (36 credits)</b>	
CIS 102 Computer Application and CIS	3
<i>Complete two courses* from the following</i>	6
CIS 103 Visual Programming	*
CIS 120 Programming I	*
CIS 121 Programming II	*
CIS 235 Introduction to Web Scripting	*
CIS 112 Introduction to Web Design and Development	3
CIS 224 Introduction to Database Management	3
CIS 318 Systems Analysis and Design	3
CIS 339 Networks I - Local Area Networks	3
CIS 360 Computer Information Systems in Business	3
CIS 460 Internship	3
CIS 491 CIS Capstone Seminar	3

<i>Complete two courses** from the following (6 credits):</i>	6
CIS any level course	**
CSC any level course	**
<b>Related Requirements (27 credits):</b>	
BUS 101 Introduction to Business	3
BUS 260 Accounting I	3
BUS 301 Principles of Management	3
BUS 330 Principles of Marketing	3
<i>Complete either** COM 110 or COM 114:</i>	3
COM 110 Experiences In Communication	**
COM 114 Group Discussion	**
ENG 236 Effective Business Writing	3
ETH 257 Business Ethics	3
MAT 115 Elementary Statistics	3
<i>Complete either*** MAT 116 or MAT 118 (3 credits):</i>	3
MAT 116 College Algebra and Trigonometry	***
MAT 118 Pre-Calculus	***

<b>FST Requirement:</b>	
FST 101 College Experience (If required)	1
<b>Electives:</b> The Liberal Arts and Sciences (LAS) for a B.S. degree is met. (30 Electives are required if FST is waived.)	29
<i>(Adjust Electives needed for having a Minor(s), Remedials, ESL, Honors Programs, PED/FST waivers as needed, under consultation with advisor.)</i>	--
<b>Total:</b>	<b>128</b>

**NOTE: The General Education requirement is 44 and has been adjusted to 35 because the following Related requirements will also satisfy the General Education requirements: COM 110/COM 114, MAT 115 and ETH 257.**