

# Computer Science AS (CMPS)

Catalog: 2013 - 2014

Effective Date: 9/01/2012

CR COURSE		SEMESTER							
		CA#	TR						
1-4	HRD 100A, 100 or 110								
3	ENG 101 or ENG 100A & B								
3	SUNY GEN ED Basic Communication Course (Choose from : ENG 102-110)								
4	MAT 131 (Prereq Required)								
3-4	SUNY GEN ED Natural Science Lab Course (PHY 111 or EGR 105 recommended)								
3	MATH or SCIENCE COURSE (MAT 132 recommended)								
1	PHYSICAL EDUCATION –activity credit (Note: PED 105, 106, 172, 206, 210, 211, & 212, do not fulfill this requirement)								
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3	WESTERN CIVILIZATION Choose one from: HIS 100,101 or 102								
3	AMERICAN HISTORY Choose one from: HIS 103 or HIS 104								
3	SUNY GEN ED Social Science (ANT, PSY or SOC)								
3	SUNY GEN ED The Arts, Foreign Language or Humanities								
3	Liberal Arts Elective								
3	Liberal Arts Elective								
3	CIS 143 (Prereq Required)								
3	CIS 144 (Prereq Required.)								
3	CIS 150 (Prereq Required)								
4	CIS 243 (Prereq Required)								
3	CIS 244 (Prereq Required) (Spring Only)								
3	MAT 129								
3-4	Choose one course from the following: CIS 131,151,222,237, MAT 132 or 231, 220, 223 (Fall Only)								
3	Elective								
3	Elective								
65	<b>Minimum</b> credits required for graduation								65+

## Computer Science AS Degree Tips Sheet

The CS AS degree is designed to provide the first two years of a rigorous four year program in Computer Science. Students who are interested in a two year career training program should consider the IT AAS or IT-Networking AAS degrees instead.

- Prerequisites for all required Math courses and Computer Science courses are enforced.
- A student that enters the program without the necessary math prerequisite (MAT 108 or appropriate placement test score) needs to take the necessary math prerequisite before they consider taking CIS 143 (the 1<sup>st</sup> course in a four course (semester) sequence). These students should be encouraged to take CIS122 (can be used in the degree sheet as a free elective) while they are catching up on their math prerequisites.
- The CS degree requires math up through Calc I (MAT 131) but most transfer schools require up through at least Calc II and some require up through Calc III. CS majors should check as soon as possible with their transfer school about their Calculus requirement. RPI transfers need to take up through Calc III which will transfer into RPI as two calculus courses and meet their calculus requirement. **It is highly recommended that students complete their Calculus requirement at SUNY Adirondack rather than doing some of it here and the remainder at their transfer institution.**
- Many CS programs at transfer schools require two semesters of Physics. Students should check with their transfer schools. RPI transfers should take EGR 105 and EGR 106 to satisfy RPI's physics requirement.
- CIS 243 is the most rigorous course in the CS major. Since the assignments in that course require **LARGE** amounts of time, when registering for 243, students should plan their schedules with that in mind.
- The prerequisite for CIS244 is CIS 243 or permission of the instructor. Since this course is a spring only course, some students may find themselves taking CIS243 (the 3<sup>rd</sup> course in a sequence of 4) in the spring and then needing to wait until the following spring to take CIS244 (the 4<sup>th</sup> course in the sequence). To take both courses in the same spring semester, students must get permission from the 244 instructor, which is typically granted as long as the student has received at least a B in CIS 144. A student that falls into that category should also have taken CIS150 before the semester that he/she is forced to take 243 and 244 together.

## Notes on Computer Science AS (CMPS)

❖ **Financial Aid Recipients:** You **must** choose courses that are within your degree program. Visit the Advisement and Testing Center in Warren Hall if you have any questions.

### Prerequisites for:

**CIS 131** - Familiarity with PC/Windows or CIS 111  
**CIS 143** - MAT 108 or appropriate placement score or CIS 122  
**CIS 144** - CIS 143  
**CIS 150** - CIS 143  
**CIS 151** - CIS 143 or CIS 122  
**CIS 222** - CIS 144  
**CIS 237** - CIS 144

**CIS 243** - CIS 144 & MAT 129  
**CIS 244** - CIS 243 (or CIS 144 and permission of instructor)  
**MAT 131** - MAT 123 or appropriate placement score  
**MAT 129** - MAT 108  
**MAT 132** - MAT 131  
**MAT 220** - MAT 131  
**MAT 223** - MAT 121  
**MAT 231** - MAT 132

### Definition of Terms

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**Social Science** - ANT, ECO, GEG 110, HIS, HED103, PSC, PSY, and SOC

**Math & Science** - ANT103, AST, BIO, CHM, GEO, MAT, PHY, EGR 105, 106, & 204, and SCI

**Humanities** - ENG 200 level, ART, ASL, CHN, FRN, GRM, INT, MUS, PHI, RUS, SPA, SPH, and THR.

**Liberal Arts** - Any of the above courses and COM 183.

**Electives** - Any credit course offered by the College.

**Physical Education** - Two credits are required. PED 105, 106, 172, 206, 210, 211, and 212 are NOT activity courses.

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## RECOMMENDED SEQUENCES

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### FIRST YEAR

#### First Semester

1-4 HRD 100A, 100, or 110  
3 ENG 101 or 100A & B  
3 MAT 129  
3 CIS 143  
3 SUNY GEN ED Social Science (ANT, PSY, SOC)  
3 Liberal Arts Elective  
1 PED

#### Second Semester

3 ENG 102 - 110  
3 MAT Liberal Arts Elective  
3 CIS 144  
3 CIS 150  
3 HIS 100, 101 or 102  
1 PED

### SECOND YEAR

#### Third Semester

4 CIS 243  
4 MAT 131  
3-4 Lab Science Course (EGR 105 or PHY 111)  
3 SUNY GEN ED The Arts, Foreign Language or Humanities  
3 HIS 103 or HIS 104

#### Fourth Semester

3 CIS 244  
3 CIS or MAT Elective  
3 Math or Science (MAT 132 recommended)  
6 Electives

### Additional Information:

**Recommended Free Electives:** Any course from the above group listed under "Choose one from the Following:" or Intro to Internet Development (CIS 122)

**SUNY General Education Knowledge Areas: (See the SUNY GEN ED Requirements in the current catalog)**

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|--------------------------|------------------------------|
| # 1 Mathematics          | # 6 Other World Civilization |
| # 2 Natural Sciences     | # 7 Humanities               |
| # 3 Social Sciences      | # 8 The Arts                 |
| # 4 American History     | # 9 Foreign Languages        |
| # 5 Western Civilization | # 10 Basic Communication     |