

## **AS: Computer Science**

Curriculum Chair: Prof. Dennis Ramos TECH-117 Tel # (914) 606-6085 Email: <u>Dennis.Ramos@sunywcc.edu</u> Academic Dean: Dr. Kwesi Amoa TECH-106 Tel # (914) 606-6789 Email: <u>Kwesi.Amoa@sunywcc.edu</u>

Developmental Courses as required based on placement scores						
	<b>ENG 91</b> Writing for College 1 – Score of 4 E Code 1 and below, <b>30.01</b> Choose an item.					
	<b>ENG 92</b> Writing for College 2 – Score of 6 E Code 2, <b>30.02</b> Choose an item.					
	ENG 99 Writing Studio (with linked section of ENG 101+) - Score of 6 E Code 2, 30.02					
	ESL 94 Academic Writing 1 – Score of 5 or 6 E Code 6, 20.01.					
3□	ESL 122 Academic Writing 2 – Score of 7 E Code 7, 21.01					
	MATH 92 Pre-Algebra – Arithmetic score 44 and below, Elementary Algebra 54 and below, 40.01 Choose an					
OR 🗆	<ul> <li>MATH 93 Beginning Algebra – Arithmetic score 45 and above, Elementary Algebra 54 and below, 40.02 Choose an item.</li> <li>MATH 94 Foundations of Mathematical Reasoning – Arithmetic score 45 and above, Elementary Algebra 54 and below, 40.02 Choose an item.</li> </ul>					
	<b>READ 93</b> Foundation of College Reading – Score of 57 and below, <b>10.01</b> Choose an item.					
3□	<b>READ 105</b> Analytical Reading – Score of 58 and higher <b>11.01</b> Choose an item.					

	New General Education Requirements					
3□	ENG 101 – Writing and Research OR ENG 101H Choose an item.					
3□	ENG 102 – Writing and Literature OR ENG 102H Choose an item.					
3□	MATH 178 – Discrete Mathematics: MATH 160, 161 or 165 and COMSC 101 are the prerequisites. Choose an item.					
4□	MATH 181 – Calculus 1 Computer Science Math Requirements include MATH 181, MATH 191 and MATH 178. Students who need to take the prerequisite courses for these required courses, (MATH 135 and MATH 161), must start taking these prerequisites in the first semester. While students may need to take MATH 135 and MATH 161, they will not be applied toward the degree. Computer Science students who need to take College Algebra, must take MATH 135- College Algebra with Trigonometry. After MATH 135, students must take MATH 161-Pre-calculus. For more information contact the Curriculum Chair. Choose an item.					
4□	MATH 191 – Calculus 2 Choose an item.					
	NATURAL SCIENCE GENERAL ED REQUIREMENTS – Select two sequence 4 credit Science w LAB course: BIOL 115, 115H, and 117, 117H, 121, and 123, CHEM 107, and 111, 201, and 205, PHYSC 111 and 112 or 121 and 122					
4□						
4□						
	<b>SOCIAL SCIENCES GENERAL ED REQUIREMENTS – Select a 3 credit course:</b> <b>ANTHR</b> 101, 102, 103, 201, CJ 111, ECON 101, 101H, 102, 102H, GEOG 101, HSERV 102, 200, LIN 201, <b>POLSC</b> 111, 111H, 115, PSYCH 101, 101H, 103, 103H, 107, 109, 110, 111, 112H, SOC 101, 101H, 102, 103, 104					
3□						
	THE ARTS, FOREIGN LANGUAGE, or OTHER WORLD CIVILIZATIONS GENERAL ED REQUIREMENTS – Select a 3/4 credit course:					



	<b>ART</b> 101, 102, 103, 104, 105, 106, 107, 108, 109, 109A, 110, 111, 112, 125, 129, 130, 133, 134, 135, 137, 138, 140, 141, 147, 201, 203, 212, 265, <b>DANCE</b> 101, 102, 107, 112, 115, 120, 121, 205, 207, <b>FILM</b> 100, 101, 102, 130 <b>MUSIC</b> 110, 110H, 111, 120, 121, 130, 131, 132, 133, 150, 230, 231, 232, 233, <b>THEAT</b> 111, 113, 201						
	ARABC 101, 102, CHINS 102, FREN 101, 102, 201, ITAL 101, 102, 103, 201, 201H, 202, 202H, 250, JAPNS 101, 102, RUSSN 101, SPAN 101, 102, 103, 104, 201, 201H, 202, 202H, 203, 204, ANTHR 120, 210, 215H, HIS 119, 128, 129, 131, POLSC 113						
3□/4□							
	AMERICAN HISTORY or WESTERN CIVILIZATION GENERAL ED REQUIREMENTS – Select a 3 credit						
	AMERICAN HISTORY or WESTERN CIVILIZATION GENERAL ED REQUIREMENTS – Select a 3 credit course:						
	course:						
	course: ART 108, 109, HIS 101, 102, 104, 106, 110, 111, 112, 121*, 133**, 134**, POLSC 102, 104, 107 *Students who complete this course cannot use HIS 133 or 134 to fulfill degree and/or general education						

	Degree Requirements
4□	COMSC 101 – Computer Programming 1: Prerequisite: Placement Reading score of 80 or above or passing READ 105. MATH 181 or higher are pre/ co-requisites. Choose an item.
4□	<b>COMSC 110</b> – Computer Programming 2: <b>COMSC 101 with a grade of "C" or higher is the prerequisite.</b> Choose an item.
4□	<b>COMSC 201</b> – Data Structures: <b>COMSC 110 with a grade of "C" or higher is the prerequisite.</b> Choose an item.
4□	<b>COMSC 207</b> – Java Programming: <b>COMSC 110 with a grade of "C" or higher is the prerequisite.</b> Choose an item.
4□	COMSC 217 – Computer Architecture: COMSC 101 with a grade of "C". Choose an item.
3□/4□	COMSC 116 – LINUX Operating System: COMSC 101 with a grade of "C" or higher is the prerequisite. OR COMSC, Engineering or MATH ELECTIVE. (SEE NOTE BELOW) Choose an item.
3□/4□	COMSC, Engineering or MATH ELECTIVE. (SEE NOTE BELOW) Choose an item.

**SEEN BY:** 

Completed credits of 60 required

<u>COMSC 101-Computer Programming I:</u> The Co requisite for COMSC 101 is MATH 181 or higher. The Prerequisite for COMSC 101 is a Reading Placement score >= 80 or a passing grade in READ 105.

<u>COMSC 100-Intro to Computing Concepts:</u> Students who need to take developmental courses, and so are ineligible to take COMSC 101, should take COMSC 100. It is a good alternative for students who are trying to decide between CS, CIS, Networking, or Computer Arts. Students who have never used a computer, not even for email, the internet or word processing should also take this course before taking COMSC 101.

Computer Science. Engineering. or Math electives (min. 6 Credits)

ELEC (Electrical Technology) - Any course

**CIVIL** (Civil Technology) – Any course

COMSC 106, COMSC 114, COMSC 118, COMSC 120, COMSC 121, COMSC 123, COMSC 124, COMSC 125, COMSC 128, COMSC 130, COMSC 132, COMSC 134, COMSC 136, COMSC 138, COMSC 142, COMSC 145, COMSC 208A, COMSC 214A. There is one exception, COMSC100; this is a survey course. MATH 215, MATH 230, MATH 240.

MECH (mechanical technology) – Any course



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Academic Plan		Completed		credits of 60 required	
		Fall/Spring		Fall/Spring	
Class	<u>Credits</u>	<u>Class</u>	<u>Credits</u>	<u>Class</u>	<u>Credits</u>
		Fall/Spring		Fall/Spring	
<u>Class</u>	<u>Credits</u>	<u>Class</u>	<u>Credits</u>	<u>Class</u>	<u>Credits</u>