

# AS: Computer Science

**Curriculum Chair:** Professor Dennis Ramos **Location:** TECH-30 **Telephone:** (914) 606-6085

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**ADVISOR NAME:**

Developmental Courses as required based on placement scores	
<input type="checkbox"/>	<b>No Developmental Courses Required</b>
<input type="checkbox"/>	<b>ENG 91</b> Writing for College 1 – Score of 4 E Code 1 and below
<input type="checkbox"/>	<b>ENG 92</b> Writing for College 2 – Score of 6 E Code 2
<input type="checkbox"/>	<b>ESL 94</b> Academic Writing 1 – Score of 5 or 6 E Code 6
<input type="checkbox"/>	<b>ESL 122</b> Academic Writing 2 (3 credits) – Score of 7 E Code 7
<input type="checkbox"/>	<b>MATH 92</b> Pre-Algebra – Arithmetic score 44 and below, Elementary Algebra 54 and below
<input type="checkbox"/>	<b>MATH 93</b> Beginning Algebra – Arithmetic score 45 and above, Elementary Algebra 54 and below <b>OR</b> <b>MATH 94</b> Math Literacy – Arithmetic score 45 and above, Elementary Algebra 54 and below
<input type="checkbox"/>	<b>READ 93</b> Foundation of College Reading – Score of 57 and below
<input type="checkbox"/>	<b>READ 105</b> Analytical Reading (3 credits) – Score of 58 and higher

Core Requirements	
<input type="checkbox"/>	<b>ENG 101</b> – Writing and Research
<input type="checkbox"/>	<b>ENG 102</b> – Writing and Literature
<input type="checkbox"/>	<b>MATH 181</b> – Calculus I <b>Computer Science Math Requirements include MATH 181, MATH 191 and MATH 178.</b> Students who need to take the prerequisite courses for these required courses, ( <b>MATH 135</b> and <b>MATH 161</b> ), must start taking these prerequisites in the first semester. While students may need to take <b>MATH 135</b> and <b>MATH 161</b> , they will not be applied toward the degree. Computer Science students who need to take College Algebra, must take <b>MATH 135</b> -College Algebra with Trigonometry. After <b>MATH 135</b> , students must take <b>MATH 161</b> -Pre-calculus. <b>For more information contact the Curriculum Chair.</b>
<input type="checkbox"/>	<b>MATH 191</b> – Calculus 2
	<b>SCIENCE (BIOL), (CHEM), (PHYSC): Science courses must be taken as a pair from the following specified list of courses (8 to 10 credits)</b> <b>PHYSC 121/122</b> -Engineering Physics I & II w/Lab, <b>PHYSC 111/112</b> -College Physics I & II w/Lab, <b>BIOL 115/117</b> -General Biology I & II w/Lab, <b>BIOL 121/123</b> -Anatomy & Physiology I & II w/Lab, <b>CHEM 107/111</b> -Inorganic Chemistry I & II w/Lab, or <b>CHEM 201/205</b> -Organic Chemistry I & II w/Lab.
<input type="checkbox"/>	<input type="checkbox"/>
	<b>HUMANITIES: One course (3 credits)</b> <b>Courses include:</b> <ul style="list-style-type: none"> <li>▪ Art (<b>ART</b>) 101, 103, 105, 108, 108A, 108B, 109, 109A, 125, 128, 129, 133, 139, 185, or 265. Additional fees and/or supplies may be required of <b>ART</b> classes; see catalog for details.</li> <li>▪ Communications (<b>COMM</b>) 101, 103, 109, or 115</li> <li>▪ Dance (<b>DANCE</b>) 101, 102, 105, 107, 121, 205, or 207 OR A combination of three 1 credit dance classes to be chosen from <b>DANCE</b> 112, 115, 120, or 122</li> <li>▪ English (<b>ENG</b>) any <b>ENG</b> course <b>EXCEPT</b> <b>ENG</b> 101, 101H, 102, 102H, 124, or 222 CANNOT BE USED TO FULFILL Humanities elective.</li> <li>▪ Film (<b>FILM</b>) 100, 101, 102, 103, 109, 113, 114H, 115H, 125, 125H, 220, 220H</li> <li>▪ Foreign Language to be chosen from: <b>ARABC, CHINS, FREN, GER, ITAL, JAPNS, RUSSN, SPAN. ITAL 104</b> or <b>ITAL 105</b> CANNOT BE USED TO FULFILL a Foreign Language elective, but CAN BE USED TO FULFILL a Humanities elective</li> <li>▪ Music (<b>MUSIC</b>) 100, 101, 102, 103, 111, 150, or 211</li> </ul>

<input type="checkbox"/>	<ul style="list-style-type: none"> <li>▪ Philosophy (<b>PHIL</b>) 101A, 102A, 111, 150, 160, or 201H</li> <li>▪ Theater (<b>THEAT</b>) 101, 103, 111, 113, or 201</li> </ul> <p><b>THEAT 117A</b> is a 2 credit course which must be combined with another 1 credit approved Humanities elective.</p>
<input type="checkbox"/>	
<input type="checkbox"/>	<p><b>SOCIAL SCIENCE: One course (3 credits)</b></p> <p><b>Courses include:</b> History (<b>HIS</b>), Political Science (<b>POLSC</b>), Economics (<b>ECON</b>), and Geography (<b>GEOG</b>). <i>However SS 102 and SS 105 CANNOT BE USED TO FULFILL Social Science.</i></p>
<input type="checkbox"/>	
<input type="checkbox"/>	<p><b>BEHAVIORAL SCIENCE: One course (3 credits)</b></p> <p><b>Courses include:</b> Sociology (<b>SOC</b>), Psychology (<b>PSYCH</b>), Anthropology (<b>ANTHR</b>), Linguistics (<b>ANTHR</b>), and Geography (<b>GEOG</b>). <i>However SS 101 and SS 103 CANNOT BE USED TO FULFILL Behavioral Science.</i></p>
<input type="checkbox"/>	
<input type="checkbox"/>	<p><b>PEC/PEH/PES:</b> A combination of two courses (2 credits) either <b>PEH</b> and <b>PES</b>, or <b>PEC</b> and <b>PES</b>, or <b>PEC</b> or <b>PEH</b>, <b>PEC</b> and <b>PEC</b>. <b>PEC 110</b> (2 credits) <i>IS THE ONLY COMBINATION COURSE THAT FULFILLS BOTH P.E. REQ.</i></p>
<input type="checkbox"/>	<input type="checkbox"/>

### Degree Requirements

<input type="checkbox"/>	<b>COMSC 101 – Computer Programming 1: Prerequisite: Placement Reading score of 80 or above or passing READ 105. MATH 135, or MATH 161, or MATH 181, or MATH 191 are co-requisites.</b>
<input type="checkbox"/>	<b>COMSC 110 – Computer Programming 2: COMSC 101 with a grade of “C” or higher is the prerequisite.</b>
<input type="checkbox"/>	<b>COMSC 116 – LINUX Operating System: COMSC 101 with a grade of “C” or higher is the prerequisite. COMSC 120 – Internship in Computer Science is alternative with permission from the Computer Science Curriculum Chair. COMSC 101, one other Computer Science course, ENG 101, and a G.P.A. of 2.5 or higher are the prerequisites.</b>
<input type="checkbox"/>	<b>COMSC 201A – Data Structures: COMSC 101 with a grade of “C” or higher is the prerequisite.</b>
<input type="checkbox"/>	<b>COMSC 207 – Java Programming: COMSC 110 with a grade of “C” or higher is the prerequisite.</b>
<input type="checkbox"/>	<b>COMSC 208A – GUI Development: COMSC 207 with a grade of “C” or higher is the prerequisite. MATH 230 – Calculus 3 and MATH 215 – Linear Algebra are alternative with permission from the Computer Science Curriculum Chair. MATH 191 is the prerequisite for both courses.</b>
<input type="checkbox"/>	<b>COMSC 214A – Web Programming: COMSC 110 with a grade of “C” or higher is the prerequisite. MATH 230 – Calculus 3 and MATH 215 – Linear Algebra are alternative with permission from the Computer Science Curriculum Chair.</b>
<input type="checkbox"/>	<b>COMSC 217 – Computer Architecture: COMSC 101 with a grade of “C” or higher and MATH 135 are the prerequisites.</b>
<input type="checkbox"/>	<b>MATH 178 – Discrete Mathematics: MATH 160, 161 or 165 and COMSC 101 are the prerequisites.</b>

**COMSC 101-Computer Programming I:** The Co requisite for COMSC 101 is MATH 135 or MATH 161 or MATH 181 or MATH 191. The Prerequisite for COMSC 101 is a Reading Placement score  $\geq 80$  or a passing grade in READ 105.

**COMSC 100-Intro to Computing Concepts:** 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.