

AS: Engineering Science

Curriculum Chair: Professor John Collins

Location: TECH-106 Telephone: (914) 606-6941

Email: John.Collins@sunywcc.edu

ADVISOR NAME:

Developmental Courses as required based on placement scores

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

Core Requirements

<input type="checkbox"/>	ENG 101 – Writing and Research Choose an item.
<input type="checkbox"/>	ENG 102 – Writing and Literature Choose an item.
<input type="checkbox"/>	MATH 181¹ – Calculus 1: MATH 161 or 165 are the prerequisites. Choose an item.
<input type="checkbox"/>	MATH 191 – Calculus 2: MATH 181 is the prerequisite. Choose an item.
<input type="checkbox"/>	MATH 230 – Calculus 3: MATH 191 is the prerequisite. Choose an item.
<input type="checkbox"/>	MATH 240 – Differential Equations: MATH 191 is the prerequisite. Choose an item.
<input type="checkbox"/>	PHYS 121 – Engineering Physics 1 and Lab: MATH 161 is the prerequisite and MATH 181 is a co-requisite. Choose an item.
<input type="checkbox"/>	PHYS 122 – Engineering Physics 2 and Lab: PHYS 121 or equivalent and MATH 181 are the prerequisite and MATH 191 or instructor's permission is a co-requisite. Choose an item.
<input type="checkbox"/>	CHEM 107 – Inorganic Chemistry 1 and Lab: MATH 130, 135 or higher level MATH course are the prerequisites. Choose an item.
<input type="checkbox"/>	CHEM 111² – Inorganic Chemistry 2 and Lab: CHEM 107, MATH 130, 135 or higher level MATH course are the prerequisites. Choose an item.
<input type="checkbox"/>	HUMANITIES: One course (3 credits) Courses include: <ul style="list-style-type: none"> Art (ART) 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 ART classes; see catalog for details. Communications (COMM) 101, 103, 109, or 115 Dance (DANCE) 101, 102, 105, 107, 121, 205, or 207 OR A combination of three 1 credit dance classes to be chosen from DANCE 112, 115, 120, or 122 English (ENG) any ENG course EXCEPT ENG 101, 101H, 102, 102H, 124, or 222 CANNOT BE USED TO FULFILL Humanities elective. Film (FILM) 100, 101, 102, 103, 109, 113, 114H, 115H, 125, 125H, 220, 220H

¹ Calculus I is the prerequisite or co requisite Engineering Physics I & Lab.

² Inorganic Chemistry or an approved substitute.

	<ul style="list-style-type: none"> Foreign Language to be chosen from: ARAB, CHIN, FREN, GER, ITAL, JAPN, RUSS, SPAN. ITAL 104 or ITAL 105 CANNOT BE USED TO FULFILL a Foreign Language elective, but CAN BE USED TO FULFILL a Humanities elective Music (MUSC) 100, 101, 102, 103, 111, 150, or 211 Philosophy (PHIL) 101A, 102A, 111, 150, 160, or 201H Theater (THEAT) 101, 103, 111, 113, or 201 <p>THEAT 117A is a 2 credit course which must be combined with another 1 credit approved Humanities elective.</p>
3□ / 4□	
<input type="checkbox"/>	SOCIAL SCIENCE: One course (3 credits) Courses include: History (HIS), Political Science (POLSC), Economics (ECON), and Geography (GEOG). <i>However SS 102 and SS 105 CANNOT BE USED TO FULFILL Social Science.</i>
3	
<input type="checkbox"/>	BEHAVIORAL SCIENCE: One course (3 credits) Courses include: Sociology (SOC), Psychology (PSYCH), Anthropology (ANTHR), Linguistics (ANTHR), and Geography (GEOG). <i>However SS 101 and SS 103 CANNOT BE USED TO FULFILL Behavioral Science.</i>
3	
<input type="checkbox"/>	PEC/PEH/PES: A combination of two courses (2 credits) either PEH and PES , or PEC and PES , or PEC or PEH , PEC and PEC . PEC 110 (2 credits) <i>IS THE ONLY COMBINATION COURSE THAT FULFILLS BOTH P.E. REQs.</i>
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Degree Requirements			
<input type="checkbox"/>	MECH 162 – CAD 1 OR Choose an item.		
	MECH 255 – Solidworks Choose an item.		
<input type="checkbox"/>	COMSC 101 – Computer Programming 1: MATH 130, 135, 161, 181 or 191 are the prerequisites. Choose an item.		
<input type="checkbox"/>	MECH 126 – Statics: MATH 181 and PHYSC 121 are the prerequisites. Choose an item.		
<input type="checkbox"/>	ENGINEERING ELECTIVES: Select three courses from list below (9 credits)		

Completed credits of 64 required

NOTES:

- Chemical - See Curriculum Chair
- Civil & Mechanical** should take **MECH 227: Dynamics**: (Prerequisite **MECH 126: Statics**), **CIVIL 221: Strength of Materials**: (Prerequisite **MATH 181: Calculus 1** and **PHYSC 101A: Engineering Physics 1**), plus 3 additional credits. See Curriculum Chair.
- Electrical** should take **ELEC 224 Network Transformations** (4 credits), **ELEC 255: Circuits for Engineers**: (Co-Requisite **MATH 165: Technical Math w Calculus**), plus 3 additional credits. See Curriculum Chair.