

ENGINEERING DEPARTMENT**Central Connecticut State University**

1615 Stanley St., New Britain, CT 06050

Tel: (860) 832-1815

Email: DeptofEngineering@ccsu.edu**General Education Study Areas:**

I. Arts and Humanities (9 credits)¹		Crs
Literature (200 level or higher)		3
PHIL or Fine Arts		3
Literature or PHIL or Fine Arts		3

II. Social Sciences (6 credits)

History		3
ET 399 (or ECON or GEOG or HIST or POL. SCI.)		3

III. Behavioral Sciences (3 credits)

Anthropology or Psychology or Sociology		3
-----------------------------------------	--	---

IV. Natural Sciences (8 credits)

PHYS 121 - Gen Physics or PHYS 125 - Univ Physics I		4
PHYS 122 - Gen Physics or PHYS 126 - Univ Physics II		4

General Education Skill Areas:**I. Communication Skills (6 credits)**

WRT 110 - Intro to College Writing ²		3
ENGR 290 - Engr Tech Writing & Presentation		3

II. Mathematics (6 or 8 credits)²

MATH 135 - Applied Engr. Calculus I or MATH 152 - Calc I		3 or 4
MATH 136 - Applied Engr. Calculus II or MATH 221 - Calc II		3 or 4

III. Foreign Language Proficiency (0-6 credits)³

--	--	--

IV. University Requirement (2-3 credits)

PE 144-Fitness/Wellness (or appropriate transfer credit ⁴)		2 or 3
------------------------------------------------------------------------	--	--------

International Requirement (6 credits)⁵

--	--	--

Equity, Justice, and Inclusion Requirement (3 credits)⁶

--	--	--

Major Requirements:

			Crs	Sem.	
				F	S
ENGR 150	Introduction to Engineering		3	X	X
ME 216	Manufacturing Engineering Processes		2	X	X
ME 217	Manufacturing Engineering Processes Lab		1	X	X
ET 251	Applied Mechanics I (Statics)		3	X	X
ET 252	Applied Mechanics II (Dynamics)		3	X	X
ET 354	Applied Fluid Mechanics		3	X	X
ET 357	Strength of Materials		3	X	X
ET 361	Engineering Technology Instrumentation		3	X	X
ET 399	Engineering Economy		3	X	X
ETM 260	Computer Aided Design & Integrated Manufacturing		3	X	X
ETM 340	Geometric Dimensioning and Tolerancing [I]		3	X	X
ETM 356	Materials Analysis		3	X	X
ETM 358	Applied Thermodynamics		3	X	X
ETM 367	Machine Design		3	X	X
ETM 454	Applied Heat Transfer		3		X
ETM 462	Manufacturing Process Planning and Estimating		3	X	X
ETM 464	CAD Solid Modeling and Design		3	X	X
ETM 466	Design for Manufacture		3	X	X
ETM 467	Applied Finite Element Analysis		3	X	X
ETM 497	Engineering Technology Senior Project Research		2	X	X
ETM 498	Engineering Technology Senior Project (Capstone)		2	X	X

Directed Technical Electives:

Student chooses from courses such as ET 495; ETM 360; ETM 461; ETM 463; MM 226; MM 236; ENGR 392; ENGR 490; ROBO 420; TM 390; TM 464	8 to 12	X	X
--------------------------------------------------------------------------------------------------------------------------------------	---------	---	---

Additional Requirements:

MM 121	Mechanical CAD		3	X	X
CET 236	Circuit Analysis		3	X	X
CHEM 161	General Chemistry		3	X	X
CHEM 162	General Chemistry - LAB		1	X	X
ENGR 240	Computational Methods for Engineering		3	X	X
MATH 119 ⁷	Pre-Calculus with Trigonometry		4	X	X
STAT 104	Elementary Statistics		3	X	X

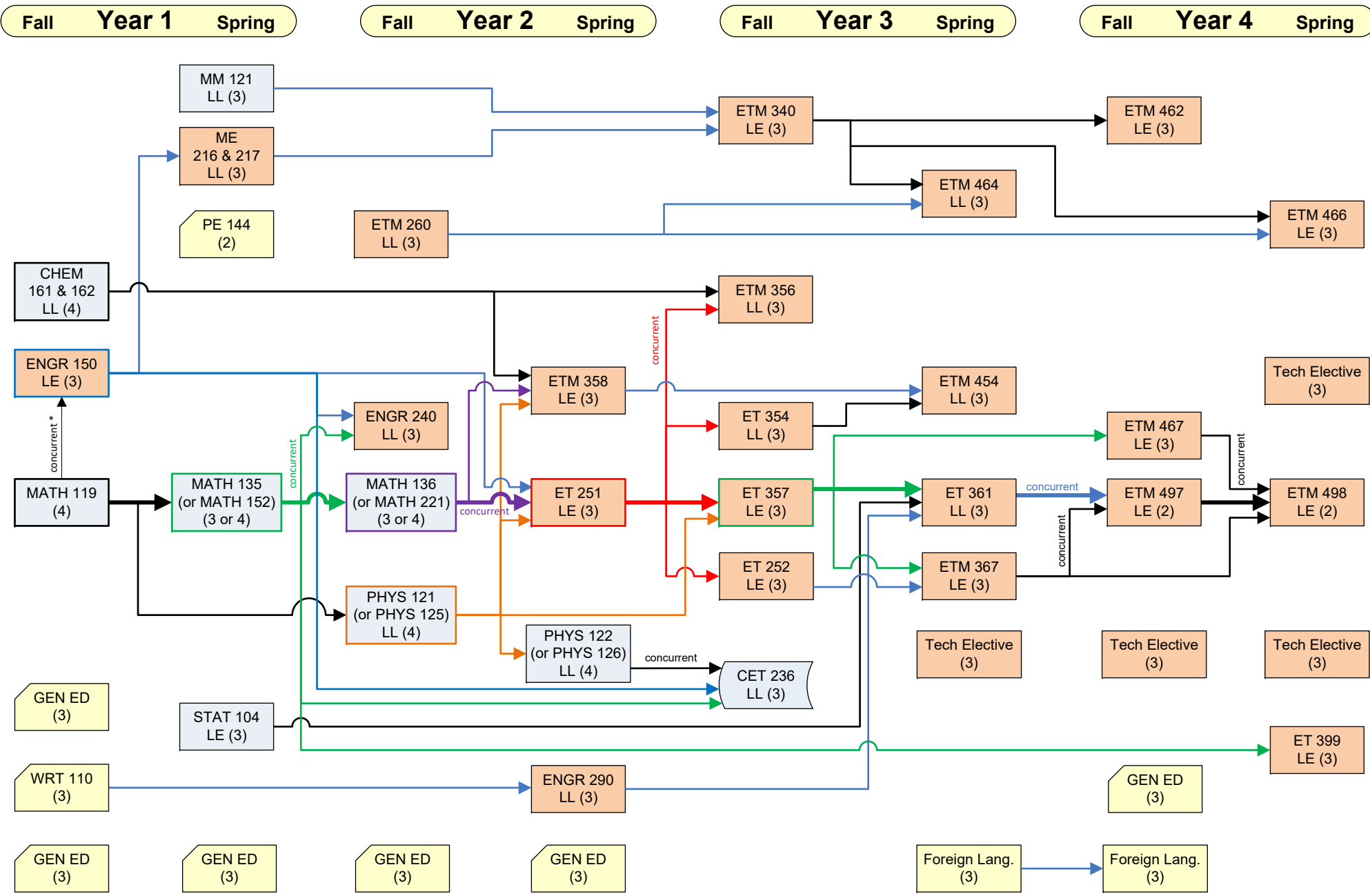
TOTAL CREDITS 130

Minimum grade of C- required in all courses in the major, all additional requirements, and all courses in Study Area IV, Skill Area I, and Skill Area II.

¹ For Study Area I, no more than 6 credits from any one discipline.² Placement examination may be required before enrolling in initial English and Mathematics courses. Contact CCSU's Learning Center.³ Refer to the University Catalog, Undergraduate General Education Program, for Foreign Language proficiency requirements.⁴ Transfers entering with 15 or more credits may fulfill this requirement with 2 or 3 additional credits from any of the four general education skill areas, or with ENGR 150 or other courses listed under "Skill Area IV. University Requirement" in the University Catalog.⁵ Courses with the International designation can be double-counted to fulfill the International Requirement. Note that the required course ETM 340 fulfills 3 credits of the 6-credit International Requirement.⁶ Courses with the EJI designation can be double-counted to fulfill the Equity, Justice, and Inclusion Requirement.⁷ MATH 116 (3 credit PreCalc) is acceptable but then Calc I will also require MATH 115 as a prereq. MATH 115 credits do not apply towards the degree. Refer to the online University Catalog for additional information.

CCSU – Mechanical Engineering Technology Program Flowchart

Effective Fall 2023



Bold lines represent the critical path.

The word "concurrent" indicates that two courses may be taken in the same semester.

* Alternatively, MATH 115 can serve as a prerequisite for ENGR 150. But in that case, MATH 116 would also have to be taken before any calculus courses.