## DEPARTMENT OF ENGINEERING

Central Connecticut State University									
1615 Stanley St.									
New Britain, Connecticut 06050									
Tel: 860-832-1815; Fax: 860-832-1811									
Web: www.ccsu.edu/sest/									

Name:				
ID#:		E-ma	uil:	
Entry: Fall	_ Spring	Summer_	Year	Transfer Credits

Advisor:

## Degree: Bachelor of Science Major: Manufacturing Engineering Technology Effective: 2020 Spring Semester

						Se	m.
General Education			Major Requirements				S
STUDY AREAS:			ENGR 150	Introduction to Engineering	3	Х	Х
I. Arts & Humanities (9 credits)	Crs		ET 251	Applied Engineering Mechanics I (Statics)	3	Х	Х
English Literature	3		ET 252	Applied Engineering Mechanics II (Dynamics)	3	Х	Х
Philosophy or Fine Arts	3		ET 357	Strength of Materials	3	Х	Х
English Lit. or Philosophy or Fine Arts	3		ET 361	Engineering Technology Laboratory	3	Х	Х
			ET 399	Engineering Economy	3	Х	Х
II. Social Sciences (6 credits)			ETM 260	Computer Aided Design & Intgrtd. Manufacturing	3	Х	Х
History	3		ETM 340	Geometric Dimensioning and Tolerancing	3	Х	
ECON or GEOG or HIST or Polit.Sci. or ET 399	3		ETM 356	Material Analysis	3	Х	Х
			ETM 360	Computer Aided Planning (CAP)	3	Х	
III. Behavioral Sciences (3 credits)			ETM 461	Manufacturing with Plastics and Composites	3		Х
Anthropology or Psychology or Sociology	3		ETM 462	Manufacturing Process Planning and Estimating	3	Х	Х
			ETM 466	Design for Manufacture	3	Х	Х
IV. Natural Sciences (8 credits)			ETM 497	Enginering Technology Senior Project Research	2	Х	Х
PHYS 121-Gen Physics I or PHYS 125-Univ Physics I	4		ETM 498	Enginering Technology Senior Project (Capstone)	2	Х	
PHYS 122-Gen Physics II or PHYS 126-Univ Physics II	4		Directed tech. electives selected in consultation with advisor (*6) 3 to4			Х	Х
			ET 300; ET	495; ETM 358; ETM 367; ETM 423; ETM 460; ETM 463;			
SKILL AREAS:			ETM 467; ETM 468; MM 366; MM 390; MFG 496; TM 432; ENGR 392;				
I. Communication Skills (6 credits)			ENGR 490				
WRT 110-Freshman Composition (*1)	3						
ENGR 290-Engr Tech Writing & Presentation	3		Additional Requirements				
			MM 121	Technical Drafting and CAD	3	Х	Х
II. Mathematics (6 or 8 credits) <sup>(*2)</sup>			MM 216	Manufacturing Processes	3	х	Х
MATH 135-Applied Engr. Calculus I or MATH 152-Calc I 3 or 4			MM 226	Principles of Numerical Control	3	Х	Х
MATH 136-Applied Engr. Calculus II or MATH 221 -Calc II	3 or 4		MM 236	Tool Design	3	Х	Х
			TM 464	Six Sigma Quality	3	Х	Х
III.a Foreign Language (0-6 credits) <sup>(*3)</sup>			ROBO 420	Manufacturing Automation	3		Х
			CET 236	Circuit Analysis	3	Х	Х
			CHEM 161	General Chemistry I	3	Х	Х
			CHEM 162	General Chemistry I - LAB	1	Х	Х
III.b International (6 credits) (*4)			ENGR 240	Computational Methods for Engineering	3	х	Х
, , , ,			MATH 119	Pre-Calc. with Trig. <b>Or</b> MATH 116-Pre-Calc. <sup>(*2)</sup>	4 or3	Х	_
			STAT 104	Elementary Statistics	3	Х	Х
			+	Manufacturing Elective 1	3	Х	Х
IV. University Requirements (2-3 credits) (*5)			Electives (to	o complete 130 credits minimum degree requirement)	3	Х	-
PE 144-Fitness/Wellness (or ENGR 150 for transfer student	t 2 or 3	-		TOTAL CREDITS	130		
						1	

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

- (\*2) For students with credit for MATH 116, but not for MATH 119, MATH 115 is also required as a prerequisite for MATH 135 or MATH 152. MATH 115 credits do not apply towards the degree.
- (\*3) Refer to the Univesity Catalog, Academic Programs for Foreign Language proficiency and International (6 credit) requirements.

(\*4) Any course with designator [I] in its description fulfills not only its the General Education requirement or Major requirement,

but also fulfills Skill Area III.b requirement. Note that the required course ETM 340 fulfils 3 credits of the 6-credit the International Requirem. (\*5) Transfers entering with 15 or more credits may complete this requirement with 2 or 3 credits from any of the other skill areas or with:

ENGR150; COMM115, COMM140; CET113; CS113; CS115; CS151; MATH115; MIS201; STAT200.

(\*6) If ET 399 is used for Study Area II and ENGR 150 is used for Skill Area IV, 6 more credits of technical electives must be completed.

† ET 354 or ETM 367 or ETM 460 or ETM 464 or ETM 467 or ROBO 330

<sup>(\*1)</sup> Placement examination may be required before enrolling in English and Mathematics courses. Contact CCSU's Learning Center.

## Manufacturing ET Program Flowchart

**Revised Spring 2020** 

prerequisite path (prerequisite course must be taken before)

corequisite path (corequisite course must be taken before or at the same time)

(\*2) For students with credit for MATH 116, but not for MATH 119, MATH 115 is also required as a prerequiste for MATH 135 or MATH 152.

