## ENGINEERING DEPARTMENT

## Central Connecticut State University

1615 Stanley St., New Britain, CT 06050
Email: DeptofEngineering@ccsu.edu
Tel: (860) 832-1815

## General Education Study Areas:

| I. Arts and Humanities (9 credits) ${ }^{\mathbf{1}}$ | 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: |  |  | Sem. |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Crs | 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 [l] | 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; | 8 to 12 | X | X |
| :--- | :--- | :--- | :--- |
| MM 226; MM 236; ENGR 392; ENGR 490; ROBO 420; TM 390; TM 464 |  |  |  |

## 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 | 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.


Bold lines represent the critical path.

