

Name:	SID:	Advisor:
Start Date:	Catalog Date:	Expected Graduation Date:

Freshman

Sophomore

junior

Senior

Program Map: Mechanical Engineering Technology
Department of Engineering Technology, College of Sciences and Technology

Core Curriculum (Program Preferred Options in Bold)

Area I – Institutional Options 5 hrs

- i. AFRS 1501 Survey of African American Experience 2 hrs
- Select one of the following:
 - i. DATA 1501 Introduction to Data Science 3 hrs
 - ii. POLS 2401 Global Issues 3 hrs
 - iii. HUMN 1201 Critical Thinking & Communication 3 hrs
 - iv. AFRS 2000 Introduction to Africana Studies 3 hrs

Area M – Mathematics & Quantitative Skills 3 hrs

- Select one of the following:
 - i. MATH 1001 - Quantitative Reasoning 3hrs
 - ii. MATH 1111 - College Algebra 3hrs
 - iii. MATH 1401 - Elementary Statistics 3hrs
 - iv. **MATH 1113 - Pre-Calculus 3hrs**

Area P – Social Science 6 hrs

- i. POLS 1101 American Government 3 hrs
- 1. Select one of the following:
 - i. HIST 2111 U.S. History to the Post-Civil War Period 3 hrs
 - ii. HIST 2112 U.S. History from the Post-Civil War to Pre 3 hrs

Area A – Humanities/Fine Arts, and Ethics 6 hrs

- Select two of the following:
 - i. ENGL 2111 World Literature I 3 hrs
 - ii. ENGL 2112 World Literature II 3 hrs
 - iii. ENGL 2121 British Literature I 3 hrs
 - iv. ENGL 2122 British Literature II 3 hrs
 - v. ENGL 2131 American Literature I 3 hrs
 - vi. ENGL 2132 American Literature II 3 hrs
 - vii. ENGL 2140 - Introduction to African American Literature 3hrs
 - viii. ENGL 2521 Introduction to Film 3hrs
 - ix. PHIL 2010 Introduction to Philosophy 3 hrs
 - x. PHIL 2030 Introduction to Ethics 3 hrs
 - xi. ARTS 1101 Introduction to Visual Art 3 hrs
 - xii. DNCE 2010 Dance Appreciation 3 hrs
 - xiii. HUMN 2011 Humanities 3 hrs
 - xiv. MUSC 1101 Introduction to Music 3 hrs
 - xv. THEA 2101 Introduction to Theatre 3 hrs

Area C – Communicating in Writing 6 hrs

- i. ENGL 1101 English Composition I 3 hrs
- ii. ENGL 1102 English Composition II 3hrs

Area T – Natural Sciences, Math & Technology 11 hrs

- 1. Select one of the following:
 - i. **CSCI 1130 Computer Applications 3 hrs**
 - ii. CSCI 1301 Computer Science I 3 hrs
 - iii. CILS 1130 - Introduction to Computer Applications 3hrs
 - iv. ASTR 1000 - Introduction to the Universe 3hrs
 - v. ISCI 1101 - Integrated Science I 3hrs
 - vi. BIOL 1103 - General Biology 3hrs
 - vii. BIOL 1104 - Human Biology 3hrs
 - viii. DATA 1501 Introduction to Data Science 3 hrs
 - ix. ENVS 1140 Environmental Issues 3 hrs
 - x. FSCI 1101 - Introduction to Molecular Forensic Science 3hrs
 - xi. MATH 1111 - College Algebra 3hrs
 - xii. MATH 1401 - Elementary Statistics 3 hrs
 - xiii. MATH 1113 - Pre-Calculus 3 hrs
- 2. Select two of the following lab sciences in sequence:
 - i. **PHYS 1111K Introductory Physics I 4 hrs**
 - ii. **PHYS 1112K Introductory Physics II 4 hrs**
 - iii. **PHYS 2211K Principles of Physics I 4 hrs**
 - iv. **PHYS 2212K Principles of Physics II 4 hrs**
 - v. BIOL 1103/1103L General Biology 4 hrs
 - vi. BIOL 1104/1104L Human Biology 4 hrs
 - vii. BIOL 1107/1107L Principles of Biology I 4 hrs
 - viii. BIOL 1108/1108L Principles of Biology II 4 hrs
 - ix. CHEM 1101K - Introductory Chemistry 4hrs
 - x. CHEM 1211/1211L Principles of Chemistry I 4 hrs
 - xi. CHEM 1212/1212L Principles of Chemistry II 4 hrs
 - xii. ISCI 1111K - Integrated Science II 4hrs
 - xiii. MSCI 1501K - Introduction to Marine Biology 4hrs
 - xiv. PHSC 1011K - Physical Science I 4hrs

- xv. PHSC 1012K - Physical Science II 4hrs
- xvi. CISM 1130 Computer Applications 3 hrs
- xvii. ENVS 1140 Environmental Issues 3 hrs

Area S – Social Science 6 hrs

- Select two of the following:
 - i. AFRS 2000 Introduction to Africana Studies 3 hrs
 - ii. ANTH 1101 Introduction to Anthropology 3 hrs
 - iii. ECON 2105 Principles of Macro-Economics 3 hrs
 - iv. GEOG 1101 Introduction to Human Geography 3 hrs
 - v. HIST 1111 World Hist to Early Modern Times 3 hrs
 - vi. HIST 1112 World History Early Modern Times to Pres 3 hrs
 - vii. POLS 2401 Global Issues 3 hrs
 - viii. PSYC 1101 Intro to General Psychology 3 hrs
 - ix. PSYC 2103 Human Growth & Development 3 hrs
 - x. SOCI 1101 Introduction to Sociology 3 hrs
 - xi. SOCI 1160 Social Problems 3 hrs

Mechanical Engineering Technology Major Technical Electives (3 hrs.)

Select one from the following:

MECT 3201K	Manufacturing Processes	3 credits
MECT 4611	Lean Engineering	3 credits
MECT 4621	Operations Research	3 credits
MECT 4911	Renewable Energy Concepts	3 credits
ENGT 4901	Engineering Technology Internship	3 credits

Mechanical Engineering Technology

The Mechanical Engineering Technology program curriculum provides students with the foundation to design, develop, test, troubleshoot, and manufacture mechanical devices, including tools, engines, and machines. Emphasis is placed on a broad range of courses, including the properties and processes of engineering materials, thermal-fluid-energy sciences and applications, computer-aided design and analysis, mechanical design and analysis, robotics, mechatronics, and manufacturing and industrial engineering areas.

Students learn to apply basic engineering principles and utilize technical skills in the diversified mechanical and manufacturing fields. Graduates work with the latest technologies in a broad range of fields like automotive, logistics, materials, maintenance, quality assurance, reliability and testing, manufacturing, robotics, supply chain, aerospace, alternative/clean energies, nanotechnology, biomedical, and more.