

Mechanical Engineering (B.S.)

The Department of Mechanical Engineering offers studies leading to the Bachelor of Science in Mechanical Engineering. Mechanical Engineers apply the principles of mechanics and energy to the design of machines and devices. They must be able to control mechanical systems and usually work with other professionals in designing these systems. Automobiles, engines, heating and air-conditioning system, gas and steam turbines, air and space vehicles, trains, ships, servomechanisms, transmission mechanisms, machine tools, material handling systems, elevators and escalators, and robots used in industry are a few of the systems and devices requiring mechanical engineering knowledge.

Type: B.S.

Technical Electives

- For technical electives in design and manufacturing, elective options include the following courses: MEEG 421, MEEG 443, MEEG 444, MEEG 445, and MEEG 450.
- For technical electives in energy, elective options include the following courses: MEEG 438, MEEG 445, MEEG 461, and MEEG 462
- For technical electives in applied mechanics and aerospace, elective options include the following courses: MEEG 308, MEEG 318, MEEG 416, MEEG 418, MEEG 445, and MEEG 447

Freshman Year First Semester

Item #	Title	Credits
	ENGW 101/102/104	3
MATH 156	Calculus I	4
CHEM 003	Gen Chemistry I	4
EGPP 101	Introduction to Engineering	2
	Health Education Requirement (Options: Courses under subject code HHPL)	1
	Sub-Total Credits	14

Freshman Year Second Semester

Item #	Title	Credits
	ENGW 103/105	3
MATH 157	Calculus II	4
PHYS 013	Phys for Sci & Engr Lec I	3
PHYS 023	Phys for Sci & Engr Lab I	1
MEEG 103	Intro to Computer Aided Design	2
ECON 001	Principles of Economics I	3
	Sub-Total Credits	16

Sophomore Year First Semester

Item #	Title	Credits
	Social Science/Humanities Elective	3
MATH 158	Calculus III	4
PHYS 014	Phys for Sci & Engr Lec II	3
PHYS 024	Phys for Sci & Engr Lab II	1
MEEG 207	Intro to Eng. Computations	3
CIEG 202	Statics	3
Sub-Total Credits		17

Sophomore Year Second Semester

Item #	Title	Credits
MATH 159	Differential Equations	4
CIEG 302	Dynamics	3
MEEG 204	Intro to Solid Mechanics	3
EECE 310	Principles of Electronics	2
MEEG 206	Solid Mechanics Lab	1
MEEG 209	Material Science	3
Sub-Total Credits		16

Junior Year First Semester

Item #	Title	Credits
MEEG 304	Thermodynamics	3
MEEG 307	Fluid Mechanics	3
MEEG 310	Mechanical Design I	3
MEEG 319	Manufacturing	3
MATH 189	Probability & Statistics I	3
Sub-Total Credits		15

Junior Year Second Semester

Item #	Title	Credits
MEEG 301	Systems Dynamics	3
MEEG 306	Applied Thermodynamics	3
MEEG 311	Mechanical Design II	3
MEEG 316	Instrumentation & Exper Lab	2
MEEG 320	Fluid Mechanics II	3
MEEG 350	Comp Aided Engineering	3
Sub-Total Credits		17

Senior Year First Semester

Item #	Title	Credits
MEEG 403	Heat Transfer	3
MEEG 423	Thermal/Fluid Science Lab	1
MEEG 441	Senior Project I	3
	Technical Elective	3
	Afro-American Studies Elective * (Options: see Elective Group Descriptions)	3
Sub-Total Credits		13

Senior Year Second Semester

Item #	Title	Credits
	General Elective (Options: To be determined in consultation with advisor) (3)	3
	Social Science/Humanities Elective	3
MEEG 442	Senior Project II	3
	Technical Elective	3
Sub-Total Credits		12
Total credits:		120

Category Descriptions

ENGW 101/102/104

Choose between ENGW 101, ENGW 102, OR ENGW 104

Health Education Requirement (Options: Courses under subject code HHPL)

ENGW 103/105

Social Science/Humanities Elective

Technical Elective

Please consult with your academic advisor.

Physics Majors :(PHYS, CHEM, BIOL, CSCI, MATH, Engineering)

Afro-American Studies Elective * (Options: see Elective Group Descriptions)

ENGL 054	Afro-American Lit to 1940	3
ENGL 055	Afro-American Lit From 1940	3
AFRO 005	Intro Afro-American Studies I	3
AFRO 006	Intro Afro-America Studies II	3
HIST 005	Intro Black Diaspora I	3
HIST 006	Intro to Black Diaspora II	3
AFST 101	Intro to Contemporary Africa	3
FASH 102	African American Dress	3
POLS 006	Pan-Africanism	3
MUTP 100	Blacks in the Arts	3

General Elective (Options: To be determined in consultation with advisor) (3)