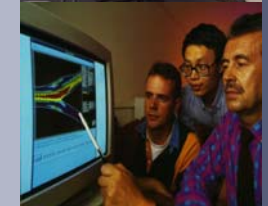


B.S. Degree in Mechanical Engineering

ME Curricula

- Design of Machines Elements
- Design of Machines
- Automotive Engineering
- Thermodynamics
- Fluid Mechanics
- Mechatronics
- Air conditioning and Refrigeration
- Computer Aided Engineering
- Electromechanical Systems
- Control Engineering
- Metrology
- Modern Manufacturing Processes

Are You Taking The Right High School Courses?
You may receive placement in advanced courses
and accelerate your studies in ME at NCSU.
For more info: www.mae.ncsu.edu



Mechanical Engineering (036)

Freshman Year

Fall Semester

Course #	Course Name	Hrs
CH 101	Chemistry, A Molecular Science	3
CH 102	General Chemistry Lab	1
E 101	Introduction to Engr & Prob Solv	1
E 115	Intro to Computing Environ	1
ENG 101	Academic Writing and Research	4
MA 141	Calculus I	4
***	Human/Social Science Elect	3

Semester Total 17

Spring Semester

Course #	Course Name	Hrs
CSC 112	Intro to Comp - FORTRAN	3
MA 241	Calculus II	4
PY 205	Physics for Engr & Sc I	4
***	Human/Social Science Elect	3
PE 10*	Fitness and Wellness Elective	1

Semester Total 15

Sophomore Year

Fall Semester

Course #	Course Name	Hrs
GC 211	Engineering Graphics for MAE	3
MA 242	Calculus III	4
MAE 206	Engr Statics	3
PY 208	Physics for Engr & Sc II	4
***	Human/Social Science Elect	3

Semester Total 17

Spring Semester

Course #	Course Name	Hrs
MA 341	Appl Differential Eq	3
MAE 208	Engr Dynamics	3
MAE 314	Solid Mechanics	3
MSE 200	Mech. Prop. Engr. Materials	3
***	Human/Social Science Elect	3
PE ***	Physical Education	1

Semester Total 16

Junior Year

Fall Semester

Course #	Course Name	Hrs
ENG 331	Comm for Engr & Tech	3
MAE 301	Engr Thermodynamics I	3
MAE 305	ME Lab I	1
MAE 308	Fluid Mechanics	3
MAE 315	Dynamics of Machines	3
ST 370	Prob & Stat for Engineers	3

Semester Total 16

Spring Semester

Course #	Course Name	Hrs
ECE 331	Principles of Elec. Engr. I	3
MAE 302	Engr Thermodynamics II	3
MAE 306	ME Lab II	1
MAE 310	Heat Transfer Fundamentals	3
MAE 316	Strength of Mech Comp	3
***	Human/Social Science Elect	3

Semester Total 16

Senior Year

Fall Semester

Course #	Course Name	Hrs
MAE 405	ME Lab III	1
MAE 415	Mech Engr Analysis	3
MAE 435	Prin of Auto Control	3
MAE 4**	Tech Elective	3
MAE 4**	Tech Elective	3
***	Human/Social Science Elect	3

Semester Total 16

Spring Semester

Course #	Course Name	Hrs
MAE 412	Energy Systems	3
MAE 416	ME Design	4
MAE 4**	Tech Elective	3
***	Ethics Elect (Hum/Soc Sci Elect) ¹	3

Semester Total 13

Total Hours Required for Graduation = 126

All students who graduate from this curriculum must demonstrate competency in a foreign language at the 102 level (second semester).

¹One of the H/SS courses must be an Ethics elective chosen from the following: MDS302, MDS304H, MDS320, PHI275, or PHI314.