

Mechanical Engineering Coursework OSU

OSU Course #	Generic Description
100/200 CLASSES REQUIRED FOR PRO SCHOOL	
ENGR 112 – 3 cr	MATLAB, C, Pascal, or FORTRAN Programming
CH 201 – 3 cr	Chemistry For Engineering Majors
PH 211 – 4 cr	General Physics I with Calculus
PH 212 – 4 cr	General Physics II with Calculus
PH 213 – 4 cr	General Physics III with Calculus
MTH 251 – 4 cr	Differential Calculus
MTH 252 – 4 cr	Integral Calculus
MTH 306 – 4 cr	Matrix and Power Series Methods
MTH 254 – 4 cr	Vector Calculus I
MTH 256 – 4 cr	Applied Differential Equations
ENGR 211 – 3 cr	Statics
ENGR 212 – 3 cr	Dynamics
COMM 111/114 – 3 cr	Public Speaking or Argument/Critical Discourse
WR 121 – 3 cr	English Composition
ADDITIONAL 200 CLASSES REQUIRED FOR MECOP ENTRANCE**	
CH 202, 205 – 3,1 cr	Chemistry II for Engineering Majors & Lab
ENGR 213 – 3 cr	Strengths of Materials
ENGR 201,202 – 3,3 cr	Electrical Fundamentals I & II
ENGR 248 – 3 cr	Engineering Graphics (Solid Modeling)
MINIMUM REQUIRED CLASSES** TO BE COMPLETED BEFORE FIRST INTERNSHIP	
ME 311 – 4 cr	Thermodynamics
ME 316 – 3 cr	Mechanics of Materials
ME 317 – 4 cr	Dynamics
ME 331 – 4 cr	Momentum, Energy, & Mass Transfer (Fluids)
ME 373 – 3 cr	Mechanical Engineering Methods
ME 382 – 4 cr	Introduction to Design
ME 383 – 4 cr	Mechanical Component Design
ENGR 321 – 3 cr	Material Science
ENGR 407 – 1 cr	MECOP Engineering Seminar

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WR 327 – 3 cr	Technical Writing
ADDITIONAL COURSE RECOMMENDED BUT NOT REQUIRED BEFORE FIRST INTERNSHIP	
ST 314 – 3 cr	Principals of Statistics
ENGR 390 – 3 cr	Engineering Economy
MINIMUM REQUIRED CLASSES** TO BE COMPLETED BEFORE SECOND INTERNSHIP	
ME 312 – 4 cr	Thermodynamics
ME 332 – 4 cr	Momentum, Energy, & Mass Transfer (Heat Transfer)
ME 430 – 4 cr	Systems Dynamics and Control
ENGR 322 – 4 cr	Mechanical Properties of Materials
ENGR 390 – 3 cr	Engineering Economy
ENGR 407 – 1 cr	MECOP Engineering Seminar
ST 314 – 3 cr	Introduction to Statistics for Engineers

**Deviations must be approved by MECOP Advisor

Note: Additional courses are required and must be taken at the appropriate times to insure timely graduation. Each MECOP student is required to develop an individualized course plan of study until graduation.