

Mechanical Engineering

Engineering – 84 credits		Typical OSU Offerings	hr	gr	tm
	ME 101 Intro to Mechanical Engineering	F	3		
R	ENGR 112 Engineering Orientation II	F,W,S	3		
(R)	ENGR 201 Electrical Fundamentals	F,W,S	3		
	ENGR 202 Electrical Fundamentals II	W,S	3		
R	ENGR 211 Statics	F,W,S	3		
R	ENGR 212 Dynamics	F,W,S	3		
(R)	ENGR 213 Strength of Materials	F,W,S	3		
(R)	ENGR 248 3-D Modeling	F,W,S	3		
	ENGR 321 Materials Science	F,W	4		
	ENGR 322 Mechanical Properties of Materials	W,S	3		
	ENGR 391 Engr Economy & Project Management	F,W,S	3		
(R)	ME 250 Intro to Manufacturing Processes	F,W,S	1		
	ME 311 Intro to Thermal-Fluid Sciences	F,W	4		
	ME 312 Thermodynamics	W,S	4		
	ME 316 Mechanics of Materials	F	3		
	ME 317 Intermediate Dynamics	W	4		
	ME 331 Introductory Fluid Mechanics	W,S	4		
	ME 332 Heat Transfer	F,S	4		
	ME 373 Mechanical Engineering Methods	W	3		
	ME 382 Introduction to Design	F	4		
	ME 383 Mechanical Component Design	W	4		
	ME 418 Senior Design Project (WIC)	F	4		
	ME 419 Senior Design Project (WIC)	W	4		
	ME 430 Systems Dynamics and Control	F,W	4		
	ME 451 Mechanical Laboratory	F,S	4		
Engineering Electives – (15 credits minimum)					
	Sr. Lab		4		
	Design		3 or 4		
	Design or Analysis		3 or 4		
	Analysis		3 or 4		
Science – 46 credits					
R	MTH 251 Differential Calculus	F,W,S,S u	4		
R	MTH 252 Integral Calculus	F,W,S,S u	4		
R	MTH 306 Matrix & Power Series Methods	F,W,S,S u	4		
R	MTH 254 Vector Calculus I	F,W,S,S u	4		
R	MTH 256 Applied Differential Equations	F,W,S,S u	4		
	ST 314 Statistics for Engineers with Calculus	F,W,S,S u	3		
R	PH 211 General Physics with Calculus	F,S,Su	4		
R	PH 212 General Physics with Calculus	F,W	4		
R	PH 213 General Physics with Calculus	W,S	4		
R	CH 201 Chemistry for Engineering Majors	F	3		
	CH 202 Chemistry for Engineering Majors	W	3		
	CH 205 Chemistry 202 Lab (F2002 or after)	W	1		
*	Biology Science	F,W,S, Su	4		

Skills – 12 credits		Typical OSU Offerings	hr	gr	tm
Baccalaureate Core (other than Math and Science)					
R	WR 121 Composition	F,W,S, Su	3		
	WR 327 Technical Writing	F,W,S, Su	3		
R	COMM 111 or COMM 114 Speech/Argument. Discourse	F,W,S, Su	3		
*	HHS 231 Lifetime Fitness for Health Lecture (NFM 232)	F,W,S, Su	2		
*	PAC (Physical Activity Course)	F,W,S, Su	1		
	WIC – Satisfied by ME 418 & 419				
Perspectives – 16 credits Must be from OSU approved BAC list of perspective courses. No more than 2 courses from any 1 dept. may be used by a student to satisfy the Perspective category.					
*	Western Culture	F,W,S, Su	3		
*	Cultural Diversity	F,W,S, Su	3		
*	Literature & the Arts	F,W,S, Su	3		
*	ECON 201 or 202 – Satisfies SPI	F,W,S, Su	4		
*	Difference, Power, and Discrimination	F,W,S, Su	3		
Synthesis – 6 credits Must be taken from two different departments from the OSU approved BAC list of synthesis courses.					
*	Contemporary Global Issues	F,W,S, Su	3 or 4		
*	Science, Technology & Society	F,W,S, Su	3 or 4		
Other courses that may be required – Check with your advisor					
	MTH 341 Linear Algebra I	F,W,S, Su	3		
H.S. Foreign Language Requirement Met? If no, list college courses below.					
			Yes	No	
	3 month+ Internship / where				

MINIMUM CREDITS REQUIRED 180

Other Requirements

- C grade minimum in all courses except HHS 231/241, Biology, Perspectives, Synthesis, and Non-Engineering Free Electives
- No S/U grades except HHS 231, PAC, Biology, Perspective, Synthesis and Non-Engineering Free Electives
- Satisfy Baccalaureate Core requirements
- 45 hrs. after senior standing
- 2.25 or greater engineering pro-school cumulative GPA
- See MIME advising guide, COE policy and rules, and Oregon State University catalog for other graduation requirements.

* These courses may be taken S/U

R- Designated Courses for admission to the professional program.

(R)- Courses that are pre-requisites for important ME Junior level classes. Time to complete program may be delayed unless these courses are completed in advance of starting ME Junior year.

Mechanical Engineering

TYPICAL CURRICULUM FOR PRE-MECHANICAL ENGINEERING	TYPICALLY OFFERED	CREDITS		
		FALL	WINTER	SPRING
Freshman Year				
ME 101-- Introduction to Mechanical Engineering	F	3		
ENGR 112-- Programming/MATLAB	ALL			3
ENGR 248-- Engineering Graphics and 3-D Modeling-Pro-E***3	F,W,S		3	
CH 201—***1***CH202***3 CH205(lab) Chemistry for Engineering Majors	F,W	3	3,1	
MTH 251, MTH 252, MTH 254, Differential Calculus, Integral Calculus, Vector Calculus I ***1	ALL	4	4	4
PH 211, General Physics with Calculus***1	F,S			4
COMM 111 or 114 Public Speaking or Argument/Critical Discourse***1	ALL (Take any term)	3	3	3
HHS 231 & PAC Lifetime Health and Fitness	ALL (Take any term)	3	3	3
WR 121 English Composition ***1	ALL	A-G (3)	H-N (3)	O-Z (3)
Perspectives***2	ALL		3	3
Possible Credit Hours per Term		13	17	17
			TOTAL=47	
Sophomore Year				
MTH 306, Matrix and Power Series Methods***1, MTH 256 Applied Differential Equations***1	ALL (Take any term)	4	4	
PH 212, PH 213 General Physics with Calculus***1	F,W/W,S	4	4	
ENGR 211 Statics***1	ALL	3		
ENGR 212 Dynamics***1	ALL			3
ENGR 213 Strength of Materials***3	ALL		3	
ENGR 201***3, ENGR 202***3 Electrical Fundamentals	ALL/W,S		3	3
ST 314 Statistics for Engineers***3	ALL			3
WR 327 Technical Writing	ALL			3
ENGR 391 Engineering Economy & Project Management	F,S			3
Biological Science	ALL	4		
ME 250 Intro to Manufacturing Processes	ALL (Take any term)		1	
Possible Credit Hours per Term		15	15	15
			TOTAL=45	
PROFESSIONAL MECHANICAL ENGINEERING (FOR NON-CO-OP)				
Junior Year				
ME 316 Mechanics of Materials	F	3		
ME 317 Intermediate Dynamics	W		4	
ME 311, ME 312 Introduction to Thermal-Fluid Sciences, Thermodynamics	W,S/S,F	4		4
ENGR 321, ENGR 322 Materials Science, Mechanical Properties of Materials	F, W/W,S	4		3
ME 382, ME 383 Introduction to Design, Mechanical Component Design	F/W	4	4	
ME 373 Mechanical Engineering Methods	W		3	
ME 451 Mechanical Laboratory	F,S			4
ME 331, 332 Introductory Fluid Mechanics/Heat Transfer			4	4
Possible Credit Hours per Term		15	15	15
			TOTAL=45	
Senior Year				
ME 430 Systems Dynamics and Control	F,W	4		
ME 418, ME 419 Senior Design Project (Writing Intensive Course)	F,W	4	4	
Approved Laboratory Course (ME 452, 453, 414, & 454)	W, S		4	
Restricted ME Design & Analysis Electives	ALL	4, 3	4	
EC 201/202	ALL		4	
Perspectives***2	ALL			3
Difference, Power and Discrimination	ALL			3
Synthesis***2	ALL			3, 3
Possible Credit Hours per Term		15	16	12
			TOTAL=43	

***1 Required for entry into the Professional Program.

***2 These courses must be selected to satisfy the requirements of the Baccalaureate Core.

***3 Prerequisites for several upper division courses. These are recommended for completion prior to entry into the Professional Program.

NOTE: Above is only a typical schedule for students who wish to complete the program in four years. Many students choose to complete minors, foreign exchanges, MECOP, or work while attending school and, therefore, may take longer than four years to complete the program.