

# EGR/ME

ORAL ROBERTS UNIVERSITY  
 Engineering, Computer Science, Physics & Mathematics Department  
 DEGREE: Bachelor of Science in Engineering  
 MAJOR: ENGINEERING--Mechanical Concentration (EGR/ME)

DEGREE PLAN SHEET 2011-2012  
 TOTAL HOURS REQUIRED 137  
 Hours in Major 41  
 Hours in Concentration 40  
 Hours in General Education 56

Name \_\_\_\_\_  
 ID \_\_\_\_\_ Date \_\_\_\_\_  
 Telephone \_\_\_\_\_ Email \_\_\_\_\_  
 Advisor \_\_\_\_\_

SEMESTER TAKEN	COURSE CODE	COURSE TITLE	CREDIT HOURS	SEMESTER TAKEN	COURSE CODE	COURSE TITLE	CREDIT HOURS
<u>FRESHMAN Semester 1</u>				<u>FRESHMAN Semester 2</u>			
_____	COMP 102 *	Reading/Writing in Liberal Arts	3	_____	HUM 101	Humanities: Humanitas	3
_____	THE 103	Spirit-Empowered Living	3	_____	COM 101	Oral Communication	3
_____	MAT 201 **	Calculus I	4	_____	MAT 202	Calculus II	4
_____	CHE 111	General Chemistry I	3	_____	PHY 111 **	Physics I	3
_____	CHE 111	General Chemistry I Lab	1	_____	PHY 111 **	Physics I Lab	1
_____	EGR 100	Engineering/Physics Seminar	0	_____	EGR 100	Engineering /Physics Seminar	0
_____	EGR 101	Introduction to Engineering	2	_____	EGR 140	Engineering Graphics	2
_____	GEN 099	Whole Person Assessment	0	_____	HPE 002	Health Fitness II	1
_____	PRF 070	Swimming Proficiency	0				17
_____	HPE 001	Health Fitness I	1				
			<u>17</u>				

<u>SOPHOMORE Semester 3</u>				<u>SOPHOMORE Semester 4</u>			
_____	BLIT 110	Survey of Old Testament Literature	3	_____	BLIT 120	Survey of New Testament Literature	3
_____	MAT 321	Calculus Functions of Several Variables	4	_____	MAT 211	Differential Equations	3
_____	PHY 112	Physics II	3	_____	EGR 100	Engineering/Physics Seminar	0
_____	PHY 112	Physics II Lab	1	_____	EGR 210	Network Analysis I	3
_____	EGR 100	Engineering/Physics Seminar	0	_____	EGR 210	Network Analysis I Lab	1
_____	EGR 221	Mechanics I: Statics	3	_____	EGR 222	Mechanics II: Dynamics	3
_____	EGR 252	Engineering Computational Methods	3	_____	EGR 231	Heat and Thermodynamics	3
_____	HPE _____ ^	HPE Activity	0.5	_____	HPE _____ ^	HPE Activity	0.5
			<u>17.5</u>				<u>16.5</u>

SUMMER

\_\_\_\_\_ HUM \_\_\_\_\_ +++ Humanities Options 3

<u>JUNIOR Semester 5</u>				<u>JUNIOR Semester 6</u>			
_____	_____	Social Sciences Elective	3	_____	COMP 303	Critical Reading and Writing	3
_____	HUM _____ +++	Humanities Options	3	_____	HUM _____ +++	Humanities Options	3
_____	ME 321	Mechanics of Materials	3	_____	MAT _____	Math Elective (Upper Division)	3
_____	ME 331	Applied Thermodynamics	3	_____	ME 381	Principles of Design	3
_____	EGR 100	Engineering/Physics Seminar	0	_____	ME 433	Heat Transfer	3
_____	EGR 330	Control Systems	3	_____	ME 444	Experimental Methods	3
_____	HPE _____ ^	HPE Activity	0.5	_____	EGR 100	Engineering/Physics Seminar	0
			<u>15.5</u>	_____	HPE _____ ^	HPE Activity	0.5
							<u>18.5</u>

<u>SENIOR Semester 7</u>				<u>SENIOR Semester 8</u>			
_____	HIS 101	American History	3	_____	GOV 101	American Government	3
_____	EE 321	Electronic I	3	_____	_____ ++	Technical Elective	3
_____	EE 321	Electronic I Lab	1	_____	ME 441	Fluid Mechanics	3
_____	ME 447	Finite Element Method	3	_____	EGR 100	Engineering/Physics Seminar	0
_____	ME 461	Manufacturing Processes	3	_____	_____ ++	Technical Elective	3
_____	EGR 100	Engineering/Physics Seminar	0	_____	EGR 499	Senior Design & Research II	2
_____	EGR 461	Engineering Management & Economy	2	_____	HPE _____ ^	HPE Activity	0.5
_____	EGR 498	Senior Design and Research I	2				14.5
_____	HPE _____ ^	HPE Activity	0.5				
			<u>17.5</u>				

**KEY**

- \* If the student is required to enroll in COMP 101 then COMP 102 must be taken before Semester 6 and one of the other General Education courses will be taken by correspondence or summer school.
- \*\* Students who need Precalculus in Semester I should take Calculus I in the spring and Physics I in the summer.
- + BUS 201 Principles of Economics I (recommended), PSY 201 Principles of Psychology, SOC 101 Introduction in Sociology, FIN 244 Personal Financial Planning , SOC 201 Marriage and Family, MUS 208 Music in World Cultures, SWK 202 Introduction to Social Work, or SOC 323 Child and Family in the Social Context.
- ++ EGR 321 Design of Control Systems, ME 371 Theory of Machines and Mechanisms, or ME 450 Special Topics
- +++ See list of Humanities (HUM) options on the back.
- ^ HPE courses are 1 credit hour each, but students can petition to take it for .5 credits. Course work remains the same.

