

Applied Physics (Evangel) and Mechanical Engineering (Drury) Dual Degree

The Applied Physics and Mechanical Engineering Dual Degree Program is a partnership between Evangel and Drury University. Students take general education and core science courses at Evangel and engineering courses at Drury. Upon graduation, students are awarded two degrees, one in Applied Physics from Evangel and one in Mechanical Engineering from Drury.

Freshman year

Semester 1	Cr
MATH 231 Calculus I ¹	4
PHYS 231 Engineering Physics I	5
EGRA 130 Introduction to Microcontrollers	2
EGRA 140 Graphical Communications & Basic Making	2
BIBL 111 Essential Christianity	3
GSCI 100 University Seminar	1
	17

Semester 2	Cr
MATH 232 Calculus II	4
PHYS 232 Engineering Physics II	5
EGRA 123 MATLAB I	1.5
EGRA 124 MATLAB II	1.5
EGRA 160 Introduction to Design	2
MATH 210 Statistics	3
	17

Sophomore year

Semester 1	Cr
MATH 331 Linear Algebra ²	3
CHEM 111 General Chemistry I	5
ENGL 111 Composition	3
EGRA 200 Circuits I	3
EGRM 220 Statics & Mechanics of Materials I	3
	17

Semester 2	Cr
MATH 431 Differential Equations	3
EGRM 230 Thermodynamics	3
EGRM 240 Materials & Manufacturing	3
ENGL 205 Effective Communication	3
EXER 101 Lifetime Health Awareness	1
PHIL 218 Ethics	3
	16

Junior year

Semester 1	Cr
MATH 233 Calculus III ³	4
EGRM 320 Statics & Mechanics of Materials II	3
EGRM 325 Dynamics	3
Short Course - take 4	2
ICST 454 Global Cultures & Compassion	3
BIBL 115 Old Testament	3
	18

Semester 2	Cr
EGRA 360 Junior Design	2
EGRM 330 Fluid Mechanics	3
EGRM 350 Measurement Systems	3
Short Course - take 4	2
BIBL 116 New Testament	3
PSYC 112 Introduction to Psychology	3
	16

Senior year

Semester 1	Cr
EGRA 460 Capstone Design I	3
EGRA 320 Control Systems I	3
EGRM XXX Elective	3
EGRM 420 Materials & Machine Comp. Des.	3
Short Course - take 2	1
Historical Inquiry Option	3
	16

Semester 2	Cr
EGRA 465 Capstone Design II	3
EGRM 420 Heat Transfer	3
EGRM XXX Elective	3
Short Course - take 2	1
Artistic Expression Option	3
THEO 320 Pentecost	3
	16

Total minimum to graduate 124

Graduation requires an overall GPA of at least 2.0.

The listing above only represents a suggested course sequencing as required to graduate with this major. The student is ultimately responsible for their own degree program. An academic advisor is assigned to the student for guidance in these matters, but the responsibility for meeting the requirements belongs to the student.

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University Writing Proficiency and Placement Information

Writing Proficiency earned by . . . circle one: ENGL 111 ACT/SAT/CLT (Score:) AP CLEP IB

ACT English \geq 26 or SAT Writing/Language (W/L) \geq 33, CLT Writing/Grammar (W/G) \geq 32: Student is proficient. Enroll in Effective Communication option. Refer to each term's "Core Options" document for available choices.

If transfer student has ENGL 111 composition only, enroll in a 200-level Effective Communication course.

If transfer student has a 200-level (or above) composition course, check for Speech course. If no Speech listed, enroll in COMM 211.

If transfer student has a 200-level composition course AND a Speech course, he or she is proficient.

If student has no test scores, enroll in ENGL 102.

ACT English = 24-25, SAT W/L 31-32, CLT W/G 30-31: take Writing Step-Up Exam in first semester.

ACT English 20-23, SAT W/L 28-30, CLT W/G 24-29: ENGL 111	3		Wellness Proficiency	Cr	<input checked="" type="checkbox"/>
ACT English 16-19, SAT W/L 23-27, CLT W/G 19-23: ENGL 102	2		EXER 101 Lifetime Health Awareness	1	
ACT English \leq 15, SAT W/L \leq 22, CLT W/G \leq 18: ENGL 100	1				

Core Curriculum Requirements

	Cr	<input checked="" type="checkbox"/>		Cr	<input checked="" type="checkbox"/>
GSCI 100 University Seminar	1		Effective Communication Option (WPR)**	3	
BIBL 111 Essential Christianity	3		MATH 210 Statistics	3	
BIBL 115 Old Testament Literature	3		Historical Inquiry: GOVT 170 or HIST 111/112	3	
BIBL 116 New Testament Literature	3		Artistic Expression Option*	3	
BIBL 360-370 Book Study (WPR)*	3	NA	Behavioral and Social Sciences Option*	3	NA
THEO 320 Pentecost	3		Humanities Option: PHIL 218 Ethics	3	
ICST 454 Global Cultures & Compassion*	3		Relationships: PSYC 112 Intro to Psychology	3	
Natural Science without Lab Option*	3	NA	Christian Stewardship: FIN 138 Personal Finance	3	NA
Natural Science with Lab Option*	4	NA	Reading and Imagination: ENGL 123*	3	NA
*Refer to each term's "Core Options" document for available choices.			**ENGL/COMM 205 or 341; ENGL 211, 212, or 236		
WPR = Writing Proficiency Required: ENGL 111 or ACT English \geq 26			If student has ENGL 201 in transfer, enroll in COMM 211.		

Math/Science Requirements

	Cr	<input checked="" type="checkbox"/>		Cr	<input checked="" type="checkbox"/>
CHEM 111 General Chemistry I	5		MATH 231 Calculus I	4	
PHYS 231 Engineering Physics I	5		MATH 232 Calculus II	4	
PHYS 232 Engineering Physics II	5		MATH 233 Calculus III	4	
MATH 331 Linear Algebra	3		MATH 431 Differential Equations	3	

Engineering Requirements

	Cr	<input checked="" type="checkbox"/>		Cr	<input checked="" type="checkbox"/>
EGRA 123 MATLAB I	1.5		EGRM 220 Statics & Mechanics of Materials I	3	
EGRA 124 MATLAB II	1.5		EGRM 230 Thermodynamics	3	
EGRA 130 Introduction to Microcontrollers	2		EGRM 240 Materials & Manufacturing	3	
EGRA 140 Graphical Comm. & Basic Making	2		EGRM 320 Statics & Mechanics of Materials II	3	
EGRA 160 Introduction to Design	2		EGRM 325 Dynamics	3	
EGRA 200 Circuits I	3		EGRM 330 Fluid Mechanics	3	
EGRA 320 Control Systems I	3		EGRM 350 Measurement Systems	3	
EGRA 360 Junior Design	2		EGRM 420 Materials & Machine Comp. Des.	3	
EGRA 460 Capstone Design I	3		EGRM 430 Heat Transfer	3	
EGRA 465 Capstone Design II	3		EGRM XXX Elective	3	
Short Course - take 12 (0.5 credits each)	6		EGRM XXX Elective	3	

Minimum total credits to graduate 124