

# Applied Physics (Evangel) and Electrical Engineering (Drury) Dual Degree

The Applied Physics/Electrical 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 Electrical Engineering from Drury.

## Freshman year

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

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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

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## Sophomore year

Semester 1	Cr
MATH 310 Probability and Statistical Inference	3
CHEM 111 General Chemistry I	5
CPSC 111 Introduction to Computer Science	3
EGRA 200 Circuits I	3
EGRE 230 Digital Logic & Verilog	3

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Semester 2	Cr
MATH 431 Differential Equations	3
EGRE 205 Circuits II	3
EGRE 235 Embedded Systems	3
BIBL 115 Old Testament	3
EXER 101 Lifetime Health Awareness	1
PHIL 218 Ethics	3

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## Junior year

Semester 1	Cr
MATH 233 Calculus III	4
EGRE 310 Signals & Systems	3
EGRE 350 Electronics I	3
Short Course - take 4	2
ENGL 111 Composition	3
ICST 454 Global Cultures & Compassion	3

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Semester 2	Cr
EGRA 320 Control Systems I	3
EGRA 360 Junior Design	2
EGRE 355 Electronics II	3
Short Course - take 4	2
BIBL 116 New Testament	3
ENGL 205 Effective Communication	3

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## Senior year

Semester 1	Cr
PHYS 412 Electromagnetism	3
EGRA 460 Capstone Design I	3
EGRE XXX Elective	3
Short Course - take 2	1
PSYC 112 Introduction to Psychology	3
Historical Inquiry Option	3

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Semester 2	Cr
EGRA 465 Capstone Design II	3
EGRE 410 Communications Systems	3
EGRE XXX Elective	3
Short Course - take 2	1
Artistic Expression Option	3
THEO 320 Pentecost	3

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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		<b>Wellness Proficiency</b>	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. WPR = Writing Proficiency Required: ENGL 111 or ACT English $\geq 26$			**ENGL/COMM 205 or 341; ENGL 211, 212, or 236 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	
CPSC 111 Introduction to Computer Science	3		MATH 232 Calculus II	4	
PHYS 231 Engineering Physics I	5		MATH 233 Calculus III	4	
PHYS 232 Engineering Physics II	5		MATH 310 Probability and Statistical Inference	3	
PHYS 412 Electromagnetism	3		MATH 431 Differential Equations	3	

## Engineering Requirements

	Cr	<input checked="" type="checkbox"/>		Cr	<input checked="" type="checkbox"/>
EGRA 123 MATLAB I	1.5		EGRE 205 Circuits II	3	
EGRA 124 MATLAB II	1.5		EGRE 230 Digital Logic and Verilog	3	
EGRA 130 Introduction to Microcontrollers	2		EGRE 235 Embedded Systems	3	
EGRA 140 Graphic Comm. & Basic Making	2		EGRE 310 Signals & Systems	3	
EGRA 160 Introduction to Design	2		EGRE 350 Electronics I	3	
EGRA 200 Circuits I	3		EGRE 355 Electronics II	3	
EGRA 320 Control Systems I	3		EGRE 410 Communications Systems	3	
EGRA 360 Junior Design	2		EGRE Elective	3	
EGRA 460 Capstone Design I	3		EGRE Elective	3	
EGRA 465 Capstone Design II	3		Short Course - take 12 (0.5 credits each)	6	

**Minimum total credits to graduate    124**