

Bachelor of Science in Engineering with an Emphasis in Robotics

Within the table we have identified preferred courses from Maricopa Community Colleges that will be applicable towards Grand Canyon University's Bachelor of Science in Engineering with an Emphasis in Robotics. The following will be used in evaluating official transcripts and is recommended to maximize transfer credits:

**Maricopa Community Colleges
Pre-Engineering Pathway**

POSSIBLE TRANSFER CREDIT SUMMARY			
	# GCU Credits Required	# Maricopa Credits Applied	GCU Credits Remaining
I. General Education	35.00	27.00	8.00
II. Major Courses	88.00	28.00	60.00
III. Elective Requirements	5.00	5.00	0.00
TOTAL	128.00	60.00	68.00

I. MARICOPA GENERAL EDUCATION					
Maricopa Course Code	Maricopa Transfer Credits	# Credits Required	GCU Course Code	GCU Course Title	Applied Semester Credits
ENG101 OR 107	FIRST-YEAR COMPOSITION	3	ENG-105	ENGLISH COMPOSITION I	3
ENG102 OR 108	FIRST-YEAR COMPOSITION	3	ENG-106	ENGLISH COMPOSITION II	3
	Literacy & Critical Inquiry	0		Elective Transfer - LD	0
MAT187	PRECALCULUS	5	MAT-261	PRE-CALCULUS	5
	Humanities, Arts & Design OR Social-Behavioral Sciences	3		Global Awareness Transfer - LD	3
CHM151	GENERAL CHEMISTRY I	3	CHM-113	GENERAL CHEMISTRY I	3
CHM151LL	GENERAL CHEMISTRY I LABORATORY	1	CHM-113L	GENERAL CHEMISTRY I LAB	1
MAT206	ELEMENTS OF STATISTICS	3	MAT-274	PROBABILITY AND STATISTICS	3
CHM152	GENERAL CHEMISTRY I	3	CHM-115	GENERAL CHEMISTRY II	3
CHM152LL	GENERAL CHEMISTRY I LABORATORY	1	CHM-115L	GENERAL CHEMISTRY II LAB	1
PHY115 OR PHY-121	UNIVERSITY PHYSICS I OR UNIVERSITY PHYSICS I: MECHANIC	4	PHY-121 AND PHY-121L	UNIVERSITY PHYSICS I (LECTURE & LAB)	4
PHY116 OR PHY-131	UNIVERSITY PHYSICS II OR UNIVERSITY PHYSICS II: ELECTRICITY AND MAGNETISM	4	PHY-122 AND PHY-122L	UNIVERSITY PHYSICS II (LECTURE & LAB)	4
MAT220/221 AND MAT230/231 AND MAT240/241	CALCULUS WITH ANALYTIC GEOMETRY I AND CALCULUS WITH ANALYTIC GEOMETRY II AND CALCULUS WITH ANALYTIC GEOMETRY III	9	MAT-262 AND MAT-264	CALCULUS FOR SCIENCE AND ENGINEERING I AND CALCULUS FOR SCIENCE AND ENGINEERING II	9
MAT276/277	MODERN DIFFERENTIAL EQUATIONS	3	MAT-364	DIFFERENTIAL EQUATIONS FOR SCIENCE AND ENGINEERING	3
GCU PROGRAM SPECIFIC:					
ECE211 AND ECE212	ENGINEERING MECHANICS- STATICS AND ENGINEERING MECHANICS- DYNAMICS	6	ESG-360	STATICS AND DYNAMICS & LAB	6
ECE216 AND ECE216LL	COMPUTER-AIDED ENGINEERING AND COMPUTER-AIDED ENGINEERING LABORATORY	3	ESG-250	COMPUTER AIDED ENGINEERING & LAB	3
CSC/EEE220	PROGRAMMING FOR COMPUTER ENGINEERING	3	CST-211	PROGRAMMING AND ENGINEERING & LAB	3
	Any Elective course	3		Elective Transfer - LD	3
TOTAL		60.00			60.00

II. GCU REMAINING GENERAL EDUCATION REQUIREMENTS		
GCU Course Code	GCU Course Title	# Credits Remaining
UNV-103/303	UNIVERSITY SUCCESS	4.0
CWV-101/301	CHRISTIAN WORLDVIEW	4.0
TOTAL		8.0

III. GCU REMAINING MAJOR REQUIREMENTS		
GCU Course Code	GCU Course Title	# Credits Remaining
STG-390	PROFESSIONALISM IN SCIENCE AND TECHNOLOGY: COMMUNICATIONS, CONDUCT AND ETHICS	4
STG-110	TEAM INNOVATION EXPERIENCE	3
STG-110L	TEAM INNOVATION EXPERIENCE LAB	1
ESG-202	ELECTRICAL & ELECTRONICS CIRCUITS	3
ESG-202L	ELECTRICAL & ELECTRONICS CIRCUITS LAB	1
STG-330	THERMODYNAMICS & LAB	4
MEE-340	STRUCTURE AND PROPERTY OF MATERIALS	3
MEE-340L	STRUCTURE AND PROPERTY OF MATERIALS LAB	1
MEE-460	MECHANICAL INSTRUMENTATION AND DEVICES & LAB	4
MAT-345	APPLIED LINEAR ALGEBRA I	4
ESG-330	INTRODUCTION TO ROBOTICS	4
ESG-451	CAPSTONE PROJECT I	2
MEE-471	PRINCIPLES OF MECHANICAL DESIGN I	2
ESG-455	DYNAMIC SYSTEMS & LAB	4
ESG-430	ADVANCED ROBOTICS & LAB	4
ESG-452	CAPSTONE PROJECT II	2
MEE-472	PRINCIPLES OF MECHANICAL DESIGN II	2
ESG-435	CONTROL SYSTEMS AND ROBOTICS & LAB	4
ESG-462	CURRENT TRENDS IN BIOMEDICAL ENGINEERING & LAB	4
SELECT 4 CREDITS:		4
STG-350	ELECTROMAGNETIC FIELDS & OPTICS (3)	
STG-350L	ELECTROMAGNETIC FIELDS & OPTICS LAB (1)	
STG-345	TRANSPORT PHENOMENA & LAB (4)	
TOTAL		60.0

Notes
<p>o Students interested in attending GCU may request a pre-evaluation of their transfer credits through the LOPES Specialist. The LOPES Specialist will review all previous college transcripts to determine how the credits will be applied to the potential student's desired program of study. To find out more information on how to request a pre-evaluation please visit our website at https://www.gcu.edu/admissions/college-transfer-center/transfer-credits.php.</p> <p>o *Traditional campus students who have transferred in a minimum of 24 college level credits and have a 3.0 GPA or higher can waive the University Foundations course, UNV-303.</p> <p>o Students who complete a transfer-oriented associate degree (Associate of Arts or Associate of Science) may fulfill Grand Canyon University's General Education requirements. See GCU University Policy Handbook or speak to a GCU enrollment counselor for more details.</p> <p>o Students may transfer a maximum of 90 semester credit hours, no more than 84 credits of which can be lower-division.</p> <p>o Students must earn and/or transfer a minimum of 36 semester credits in upper division (300 or above) courses.</p> <p>o Students must earn and/or transfer a minimum of 120 semester credits in order to earn a Bachelor degree.</p> <p>o All Grand Canyon University programs follow a Program of Study, which can be changed by the University at any time. All Programs of Study are subject to the terms, conditions, and policies outlined in the University's enrollment application and the University Policy Handbook.</p>

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