

Transfer Guide between Maricopa Community Colleges and Grand Canyon University



Associate in Applied Science in Engineering Technology - Mechanical/Aerospace (Aeronautics) Emphasis – Bachelor of Science in Mechanical Engineering Technology Chandler-Gilbert, Estrella Mountain, Glendale & South Mountain; Major Code: [3228](#)

Within the table we have identified courses from Maricopa Community Colleges that will be applicable towards Grand Canyon University's Bachelor of Science in Mechanical Engineering Technology. The following will be used in evaluating official transcripts.

Maricopa Community Colleges Associate in Applied Science in Electric Engineering Technology – Mechanical/Aerospace (Aeronautics) Emphasis		Grand Canyon University Bachelor of Science in Mechanical Engineering Technology	
Course Code and Title	Credits	Course Code and Title	Applied Semester Credits
***See GCU Course Equivalency Guide(s) at https://www.gcu.edu/admissions/college-transfer-center.php.			
PROGRAM PREREQUISITES: 0-17 CREDITS			
CHM130 FUNDAMENTAL CHEMISTRY (3) AND CHM130LL FUNDAMENTAL CHEMISTRY LABORATORY (1)	0-4	CHM-101/101L: INTRODUCTION TO GENERAL, ORGANIC, AND BIOCHEMISTRY (LECTURE & LAB)	0-4
MAT120/121/122 INTERMEDIATE ALGEBRA	0-5	MAT-134: APPLICATIONS OF ALGEBRA AND GENERAL EDUCATION: CRITICAL THINKING (0-1)	0-5
PHY111 GENERAL PHYSICS I	0-4	PHY-111/111L: GENERAL PHYSICS I (LECTURE & LAB) (MAJOR)	0-4
PHY112 GENERAL PHYSICS II	0-4	PHY-112/112L: GENERAL PHYSICS II (LECTURE & LAB) (MAJOR)	0-4
SELECT ONE (1) COURSE:			
MAT187 PRECALCULUS	0-5	MAT-250: COLLEGE ALGEBRA AND TRIGONOMETRY AND GENERAL EDUCATION: CRITICAL THINKING (1)	0-5
MAT150/151/152 COLLEGE ALGEBRA/FUNCTIONS	0-5	MAT-154: APPLICATIONS OF COLLEGE ALGEBRA AND GENERAL EDUCATION: CRITICAL THINKING (0-1)	0-5
MAT182 PLANE TRIGONOMETRY OR HIGHER MATHEMATICS COURSE	0-3	GENERAL EDUCATION: CRITICAL THINKING***	0-3
GENERAL EDUCATION REQUIREMENTS: 15-18 CREDITS			
ENG101 FIRST-YEAR COMPOSITION OR ENG107 FIRST-YEAR COMPOSITION FOR ESL <i>(prerequisite placement must be met)</i>	3	ENG-105: ENGLISH COMPOSITION I	3
ENG102 FIRST-YEAR COMPOSITION OR ENG108 FIRST-YEAR COMPOSITION FOR ESL <i>(prerequisite placement must be met)</i>	3	ENG-106: ENGLISH COMPOSITION II	3
COM100 INTRODUCTION TO HUMAN COMMUNICATION OR COM110 INTERPERSONAL COMMUNICATION OR COM230 SMALL GROUP COMMUNICATION	3	COM-100: FUNDAMENTALS OF COMMUNICATION OR GENERAL EDUCATION: EFFECTIVE COMMUNICATION OR COM-222: SMALL GROUP COMMUNICATION	3
CRE101 COLLEGE CRITICAL READING OR CRE111 CRITICAL READING FOR BUSINESS AND INDUSTRY OR EQUIVALENT BY ASSESSMENT	0-3	GENERAL ELECTIVE	0-3
MATHEMATICS	0	MET BY MATHEMATICS REQUIRED COURSES	0
HUMANITIES AND FINE ARTS – SELECT FROM APPROVED AAS GENERAL EDUCATION COURSE LIST: https://goo.gl/h4CXhN	3	GENERAL EDUCATION: GLOBAL AWARENESS***	3
SOCIAL AND BEHAVIORAL SCIENCES – SELECT FROM APPROVED AAS GENERAL EDUCATION COURSE LIST: https://goo.gl/h4CXhN	3	GENERAL EDUCATION: GLOBAL AWARENESS***	3

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Course Code and Title	Credits	Course Code and Title	Applied Semester Credits
NATURAL SCIENCES	0	MET BY PHYSICS REQUIRED COURSES	0
REQUIRED COURSES: 32-38 CREDITS			
ECE102/ECE102AA ENGINEERING ANALYSIS TOOLS AND TECHNIQUES	2	GENERAL EDUCATION: CRITICAL THINKING	2
ECE103/ECE103AB ENGINEERING PROBLEM SOLVING AND DESIGN	2	GENERAL EDUCATION: CRITICAL THINKING	2
EEE202 CIRCUITS AND DEVICES	5	GENERAL ELECTIVE	5
MAT220/221 CALCULUS WITH ANALYTIC GEOMETRY I	4-5	MAT-252: CALCULUS AND ANALYTIC GEOMETRY I (4) AND GENERAL EDUCATION: CRITICAL THINKING (0-1) (MAJOR)	4-5
MAT230/231 CALCULUS WITH ANALYTIC GEOMETRY II	4-5	MAT-253: CALCULUS AND ANALYTICAL GEOMETRY II (4) AND GENERAL EDUCATION: CRITICAL THINKING (0-1)	4-5
MAT240/241 CALCULUS WITH ANALYTIC GEOMETRY III	4-5	MAT-254: CALCULUS AND ANALYTICAL GEOMETRY III (4) AND GENERAL EDUCATION: CRITICAL THINKING (0-1)	4-5
MAT276/277 MODERN DIFFERENTIAL EQUATIONS	3-4	MAT-364: DIFFERENTIAL EQUATIONS FOR SCIENCE AND ENGINEERING	3-4
PHY115 UNIVERSITY PHYSICS I (5) OR PHY121 UNIVERSITY PHYSICS I: MECHANICS (4)	4-5	PHY-121/121L: UNIVERSITY PHYSICS I (LECTURE & LAB) (4) AND GENERAL EDUCATION: CRITICAL THINKING (0-1)	4-5
PHY116 UNIVERSITY PHYSICS II (5) OR PHY131 UNIVERSITY PHYSICS II: ELECTRICITY AND MAGNETISM (4)	4-5	PHY-122/122L: UNIVERSITY PHYSICS II (LECTURE & LAB) (4) AND GENERAL EDUCATION: CRITICAL THINKING (0-1)	4-5
RESTRICTED ELECTIVES: 16-20 CREDITS			
CHM151 GENERAL CHEMISTRY I (3) AND CHM151LL GENERAL CHEMISTRY I LABORATORY (1)	4	CHM-113/113L: GENERAL CHEMISTRY I (LECTURE & LAB) (MAJOR)	4
CSC/EEE220 PROGRAMMING FOR COMPUTER ENGINEERING	3	CST-211: PROGRAMMING AND ENGINEERING & LAB (MAJOR)	3
ECE211 ENGINEERING MECHANICS-STATICS	3	MET-212: STATIC ANALYSIS OF MECHANICAL SYSTEMS & LAB (MAJOR)	3
ECE212 ENGINEERING MECHANICS-DYNAMICS	3	MET-213: DYNAMIC ANALYSIS OF MECHANICAL SYSTEMS & LAB (MAJOR)	3
ECE215 MECHANICS OF MATERIALS	3	MET-203: STRENGTH OF MATERIALS & LAB (MAJOR) OR MEE-352: SOLID MECHANICS & LAB	3
ECE216 COMPUTER-AIDED ENGINEERING (2) AND ECE216LL COMPUTER-AIDED ENGINEERING LABORATORY (1)	3	ESG-250: COMPUTER AIDED ENGINEERING & LAB (MAJOR)	3
Minimum Number of Credits Required for Associate in Applied Science in Electrics Engineering Technology – Mechanical/Aerospace (Aeronautics) Emphasis at Maricopa Community College			63-76
Total Credits Applied Towards Grand Canyon University’s Bachelor of Science in Mechanical Engineering Technology			52-56

The following table outlines the remaining courses required to fulfill the Bachelor of Science in Mechanical Engineering Technology program requirements at Grand Canyon University.

Course Code	Bachelor of Science in Mechanical Engineering Technology	Semester Credits
GENERAL EDUCATION: 4 - 8 CREDITS		
UNV-103/303*	UNIVERSITY SUCCESS	0-4
CWV-101/301	CHRISTIAN WORLDVIEW	4
PROGRAM MAJOR: 68 CREDITS		
STG-390	PROFESSIONALISM IN SCIENCE AND TECHNOLOGY – COMMUNICATIONS, CONDUCT AND ETHICS	4
MAT-261	PRE-CALCULUS	4

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Course Code	Bachelor of Science in Mechanical Engineering Technology	Semester Credits
STG-110/110L	TEAM INNOVATION EXPERIENCE (LECTURE & LAB)	4
CST-111	INTRODUCTION TO COMPUTER SCIENCE AND INFORMATION TECHNOLOGY	4
MAT-274	PROBABILITY AND STATISTICS	4
ETG-222	EXPERIMENTAL METHODS	4
EET-202/EET-202L	APPLIED CIRCUITS I (LECTURE & LAB)	4
MET-275	COMPUTERIZED DESIGN AND MANUFACTURING TOOLS IN MET & LAB	4
MET-302	PRINCIPLES OF DESIGN I & LAB	4
MET-308	FLUID/THERMAL TRANSPORT & LAB	4
ETG-410	CONTROL AND INSTRUMENTATION & LAB	4
ETG-498	SENIOR PROJECT I	2
ETG-420	QUALITY CONTROL	2
MET-315	MATERIAL AND PROCESSES & LAB	4
MET-402	PRINCIPLES OF DESIGN II & LAB	4
ETG-499	SENIOR PROJECT II	2
STG-460/460L	SURVEY OF MANUFACTURING TECHNIQUES (LECTURE & LAB)	6
MET-418	HEAT AND POWER GENERATION & LAB	4
	SELECT ONE (1) COURSE:	
MET-312	METROLOGY AND CNC MACHINING & LAB	4
CST-211	PROGRAMMING FOR ENGINEERING & LAB	0
STG-403	INTERNSHIP I	4
	Elective credits if needed to reach 128 credit minimum for Bachelor's degree	0
Total Credits Completed at Grand Canyon University		72-76
Transfer Credits from the Associate of Applied Science in Electrics Engineering Technology - Mechanical/Aerospace (Aeronautics) Emphasis – Maricopa Community Colleges		52-56 semester credits
Remaining Credits Required at Grand Canyon University		72-76 semester credits
Total Credit Hours Needed to Complete Bachelor of Science in Mechanical Engineering Technology at Grand Canyon University		128 credits

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 <http://www.gcu.edu/Transfer-Center/Pre-Evaluation-Request.php>

* 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.

** 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 Policy Handbook or speak to a GCU enrollment counselor for more details.

- Students may transfer a maximum of 90 semester credits, no more than 84 credits of which can be lower-division.
- Students must earn and/or transfer a minimum of 36 semester credits in upper division (300 or above) courses.
- Students must earn and/or transfer a minimum of 120 semester credits in order to earn a Bachelor degree.
- 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](#).

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