



## Mechanical Engineering Program Agreement

Western Michigan University  
Bachelor of Science in Engineering, (B.S.E.)

Kalamazoo Valley Community College  
Engineering, Associate of Science (A.S.)

Catalog Year 2023 - 2024

<b>I. KALAMAZOO VALLEY COURSES for GENERAL EDUCATION/Michigan Transfer Agreement (MTA) (30 credits minimum)</b>		
See attached Kalamazoo Valley MTA guide for specific courses from KVCC that will fulfill the MTA requirements		
Kalamazoo Valley Course	WMU (Western Essential Studies) Equivalent	Transfer Credit Hours
English Composition – ENG 110 or ENG 160, and one of the following COM 113, COM 210, ENG 111, ENG, 112, ENG 127, ENG, 227, ENG 260	IEE 1020 and varies	6
Humanities - 2 courses from different subject areas	Varies	6
Mathematics – MATH 160	MATH 1220	5
Science –CHM 120, PHY 221	CHEM 1100/10, PHYS 2050/60	9
Social Sciences – 2 courses from different subject areas	Varies	6
<b>KALAMAZOO VALLEY MTA CREDIT HOURS</b>		<b>32 CREDIT HOURS</b>

<b>II. KALAMAZOO VALLEY COURSES – (30 credits)</b>		
Kalamazoo Valley Course	WMU Equivalent	Transfer Credit Hours
PSI 100, PSI 101, PSI 102, or PSI 126	PSCI 1000, PSCI 2000, PSCI 2020, or PSCI Credit	3
WPE	Varies	2
CIS 150	CIS Credit	3
EDMT 130	EDMM 1420	4
MATH 162	MATH 1230	5
CIS 209	CS 1200	3
MATH 260	MATH 2720	5
PHY 222	PHYS 2070/80	5
<b>SECTION II KALAMAZOO VALLEY CREDIT HOURS</b>		<b>30 CREDIT HOURS</b>
<b>TOTAL KALAMAZOO VALLEY CREDIT HOURS</b>		<b>62 CREDIT HOURS</b>

<b>III. WMU COURSES REQUIRED FOR PROGRAM DEGREE (60 credits)</b>		
WMU Course	WMU Course Title	WMU Credit Hours
MATH 3740	Differential Equations	4
CHEM 1120/30	Chemistry II	4
ME 2615	Intro to Mechanical Engineering	3

ME 2320	Thermodynamics	3
ME 2560	Statics	3
ME 2500	Material Science	3
ME 2570	Mechanics of Materials	3
ECE 2100	Circuit Analysis	4
ME 2580	Dynamics	3
ME 3560	Fluid Mechanics	3
ME 3580	Mechanism Analysis	3
ME 3620	Engineering Experimentation	3
ME 3650	Machine Design	3
ME 3350	Instrumentation	3
ME 3600	Control Systems	3
ME 4310	Heat Transfer	3
ME 4320	Thermodynamics II	3
ECE 2110	Machine and Electronic Circuits	3
ME 4790	Mechanical Eng. Project Planning	1
ME 4800 <sup>NP</sup>	Mechanical Eng. Project	3
ME Design Electives		6
ME Elective		9
WES Global Perspectives		3
<b>WMU Elective Credits to Reach 60</b>		
Varies	Varies	
<b>TOTAL CREDIT HOURS</b>		<b>79 CREDIT HOURS AT WMU</b>

<b>TOTAL CREDITS (I –III)</b>	
62 Kalamazoo Valley Credits	
79 WMU Credits	
<b>141 Total Credits</b>	

Minimum credits required for Kalamazoo Valley associate degree: 62      Minimum credits required at WMU: 60      Total required credits: 122

† Professional level courses that require acceptance into the WMU program

<sup>GP</sup> WES level 3 courses satisfying Global Perspective

<sup>NP</sup> WES level 3 courses satisfying National Perspective

**Advising Notes**

Kalamazoo Valley Student Development Services      269-488-4040      [development@kvcc.edu](mailto:development@kvcc.edu)

WMU Academic Advisor      269-276-3270      [kyle.m.manninen@wmich.edu](mailto:kyle.m.manninen@wmich.edu)

**Program Agreement**

This agreement shall commence as of Nov 6<sup>th</sup>, 2023. This program agreement shall abide by all language of the Institutional Agreement between Kalamazoo Valley Community College and Western Michigan University.

**Signatures**

**Kalamazoo Valley Community College**

**Western Michigan University**

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Dr. Mark Dunneback Dean of Instruction  
Business & Technical Careers  
Kalamazoo Valley Community College

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William Liou, Chair, Mechanical & Aerospace Engineering  
Western Michigan University

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Dr. Paige Eagan Provost & Vice-President for  
Instruction & Student Services  
Kalamazoo Valley Community College

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Steve Butt, Dean, College of Engineering & Applied  
Sciences  
Western Michigan University