# **Program Agreement**

# Western Michigan University (WMU) Bachelor of Science in Mechanical Engineering

## Kellogg Community College (KCC) Associate of Science

### Catalog Year 2018-2019

### I. KCC Courses (70 credits)

Semester	KCC Course	WMU Equivalent	Credit Hours	
Fall/Semester 1	MATH 141	MATH 1220	5	
Fall/Semester 1	CHEM 110	CHEM 1110 and CHEM 1110	4	
Fall/Semester 1	ENGL 151	ENGL 1050	3	
Fall/Semester 1	DRAF 101	EDMM 1420	4	
Spring/Semester 2	MATH 142	MATH 1230	5	
Spring/Semester 2	CHEM 111	CHEM 1120 and CHEM 1130	4	
Spring/Semester 2	ENGL 152	ENGL CR	3	
Spring/Semester 2	PEHL 101, PEHL 113, PEHL 119, PEHL 125, PEHL 131, or PEHL 140	PEGN 1700, PEGN 1720, PEGN 1710, PEGN 1730, or HPHE 1110	2	
Summer/ Semester 3	ART 212, ART 213, or LITE 205	ART 2200, ART 2210, or ENGL 3120	3	
Summer/ Semester 3	ECON 201 ECON 2020		3	
Fall/Semester 4	MATH 241	MATH 2720	4	
Fall/Semester 4	PHYS 221	PHYS 2050 and PHYS 2060	5	
Fall/Semester 4	CP 101	CS 1110	3	
Fall/Semester 4	ART 212, ART 213, or LITE 205	ART 2200, ART 2210, or ENGL 3120	3	
Spring/Semester 5	MATH 242	MATH 3740 PHYS 2070 and PHYS	4	
Spring/Semester 5	Spring/Semester 5 PHYS 222		5	
Spring/Semester 5	PHYS 241 or ENGR 256	ME 2560	3	
Spring/Semester 5	HIST 201 or HIST 202	HIST 3020 or HIST 3030	3	
Summer/Semester 6	PHYS 243 or ENGR 258	ME 2580	3	
	FYS 101	FYE CR	1	

This plan satisfies MTA requirements as well as KCC general education and graduation requirements for fall 2018. This plan assumes students begin in Calculus 1. Students also must be willing to take the summer courses as listed to attempt to graduate in four years.

### II. WMU Courses (64 credits)

Semester	WMU Course	WMU Title	Credit Hours
Fall	ME 2615	Introduction to Mechanical Engineering	3
Fall	ME 2320	Thermodynamics	3
Fall	ECE 2100	Circuit Analysis	4

Fall	ME 3620	Theory of Engineering Experimentation	3
Fall	ME 2570	Mechanics of Materials	3
Spring	ME 3560	Fluid Mechanics	3
Spring	ME 3600	Control Systems	3
Spring	ME 4320	Thermodynamics II	3
Spring	ME 2500	Materials Science for Engineers	3
Spring	ME 3350	Instrumentation	3
Summer	ME 4310	Heat Transfer	3
Fall	ME 3650	Machine Design I	3
Fall	ME 3580	Mechanism Analysis	3
Fall	Design Elective	Choose an elective with your advisor	3
Fall	ME Elective	Choose an elective with your advisor	3
Fall	ME 4790	Mechanical and Aerospace Engineering Project Planning	1
Fall	IEE 3090	Engineering Economy for Mechanical Engineers	2
Spring	ECE 2110	Machines and Electronic Circuits	3
Spring	ME 4800	Mechanical and Aerospace Engineering Project	3
Spring	Design Elective	Choose an elective with your advisor	3
Spring	ME Elective	Choose an elective with your advisor	3
Spring	ME Elective	Choose an elective with your advisor	3

WMU elective courses must include two courses with a laboratory experience and two design electives.

#### **Total Credits**

70 KCC credits

64 WMU credits

134 Total Credits

#### **Advising Notes**

KCC Contact:Academic Advisor269-965-4124advising@kellogg.eduWMU Contact:WMU Academic Advisor269-387-4156lenore.yaeger@wmich.edu

#### **Program Agreement**

This agreement shall commence as of May 1, 2018. This program agreement shall abide by all language of the Institutional Agreement between Kellogg Community College and Western Michigan University.