

## Bachelor of Science in Engineering (Manufacturing)

Examples of course transfer equivalencies at  
Kellogg Community College:

Kellogg Community College	Western Michigan University
CHEM 110, 110L, Gen Chemistry I	CHEM 1100, 1110, Gen Chemistry and Lab
CP 101, C++ Programming	CS 1040, Comp. Programming
COMM 207, Public Speaking	COM 1040, Public Speaking
ENGL 151 and 152, Fresh Comp or ENGL 153, Tech Eng	IME 1020, Tech Communications
DRAF 101, Eng. Graphics	IME 1420, Engineering Graphics
ENTE 215, Material Science	MFE 3300, Manufacturing Materials
MATH 141, Calculus I	MATH 1220, Calculus I
MATH 142, Calculus II	MATH 1230, Calculus II
MATH 241, Calculus III	MATH 2720, Vector Calc.
MATH 242, Diff Eqns	MATH 3740, Lin Alge- bra and Diff Eqns
PHYS 241, Statics*	ME 2560, Eng Statics
ENTE 220, Static/ Strength Materials*	ME 2560, Eng Statics or ME 2570, Mech of Mtrls
PHYS 201, 201L, General Physics I	PHYS 2050, 2060 Mechanics and Heat, Lab
PHYS 202, 202L, General Physics II	PHYS 2070, 2080 Electricity and Light, Lab

\* Students should take one or the other of PHYS 241 and ENTE 220, but not both.



## WMU Program Curriculum

### Foundational and Pre-Engineering Curriculum (38 hours)

MATH 1220	Calculus I (4)
MATH 1230	Calculus II (4)
MATH 2720	Vector and Multivariate Calculus (4)
MATH 3740	Linear Algebra & Differential Eqns. (4)
CHEM 1100	General and Inorganic Chemistry (3)
CHEM 1110	General Chemistry Lab (1)
CS 1040	C Programming (2)
PHYS 2050	Mechanics and Heat (4)
PHYS 2060	Mechanics and Heat Lab (1)
PHYS 2070	Electricity and Light (4)
PHYS 2080	Electricity and Light Lab (1)
IME 1020	Technical Communications (3)
MFE 1200	Engineering Design and Verification (3)

### Manufacturing Engineering Curriculum (76 hours)

PHIL 2200	Critical Reasoning (3)
PHIL 3160	Ethics in Engineering and Tech (3)
ME 2560	Engineering Statics (3)
ME 2580	Engineering Dynamics (3)
COM 1040	Public Speaking (3)
ECE 2120	Electronic Circuits and Systems (3)
ECE 3120	Fund. of Electronics and Machines (3)
IME 1420	Engineering Graphics
IME 1500	Introduction to Manufacturing (3)
IME 2610	Engineering Statistics (3)
IME 3100	Engineering Economy (3)
IME 3160	Report Preparation (3)
ME 2570	Mechanics of Materials (3)
MFE 2200	Principles of NC/CNC Machining (3)
MFE 3300	Manufacturing Materials (4)
MFE 3400	Design for People at Work (3)
MFE 3600	Computer Control of Man. Process (3)
MFE 4200	Advanced Manufacturing Processes (4)
MFE 4240	Tool Design (3)
MFE 4300	Manufacturing Material II (4)
MFE 4400	Production Engineering (3)
MFE 4420	Quality Assurance (3)
MFE 4440	Simulation of Industrial Operations (3)
MFE 4800	Senior Design I (2)
MFE 4820	Senior Design II (2)

### General University Requirements (14 hours)

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