

Advanced Manufacturing – Associate in Applied Science (ADMA.AAS) at Jackson College to Bachelor of Science in Mechanical Engineering at Wayne State University

General Education (24 Credits)

Course	Credits
ENG 131 Writing Experience I	3
HUM 131 Cultural Connections	3
MAT 151 Calculus I	4
PHY 131 Conceptual Physics	4
PSY 140 Intro to Psychology	4
ART 112 Art History: Renaissance to Present	3
SEM 140 Seminar in Life Pathways	3

MTA/WSU Requirements (18 Credits)

ENG 232 Tech & Business Writing	3
CEM 141 General Chemistry	5
PHY 251 Modern University Physics	4
Approved Humanities/Fine Arts (See MTA)	3
Approved Social Science (See MTA)	3

Certified Production Technician Core (16 Credits)

Course	Credits
MFG 135 Industrial Safety	3
MFG 136 Blueprint Reading and Precision Measurement	3
MFG 137 Production Processes and Fabrication	4
ELT 106 Basic Electricity and Fluid Systems	3
CAD 152 SolidWorks I	3

Industrial Systems Core (25 Credits)

Course	Credits
CAD 172 SolidWorks II	3
CAD 252 SolidWorks III	3
ELT 220 Industrial Motion Control	3
ELT 260 Basic Programmable Controllers	4
ELT 261 Advanced PLC	2
MFG 211 Robotics Operation and Programming	3
MFG 216 Robotics Applications and Machine Vision	3
MFG 262 Introduction to IIOT, Industrial Internet of Things	4

Expected WSU Mechanical Engineering Pathway Courses (21 Credits)

*If courses are not completed at JC, students may not meet requirements and/or acceptance into desired program

Course	Credits
PHY-252-Modern University Physics II	5
MAT-154-Calculus II	5
MAT-251-Calculus III	4
MAT-254-Differential Equations	4