Advanced Manufacturing – Associate in Applied Science (ADMA.AAS)

The Advanced Manufacturing – Associate in Applied Science degree prepares students for careers in the manufacturing field. Students that enter this field can expect employment in the areas and job titles such as: welding, mechanical design, production management, process management, project management, system technicians, machinery repair, maintenance technicians, and machine tool design.

Minimum credits: 61
Minimum cumulative GPA: 2.0
Minimum grade in all courses: 2.0
Minimum Jackson College credits: 15

GENERAL EDUCATION REQUIREMENTS (20 CREDITS)

GEO 1: Write clearly, concisely and intelligibly (3 credits)

Take the following:
ENG   131   Writing Experience I

GEO 2: Recognize the importance of equity and inclusion in a diverse society (3 credits)**

Choose one of the following:
HUM   131   Cultural Connections

GEO 3: Demonstrate computational skills and mathematical reasoning (4 credits)

Take the following:
MAT   130   Quantitative Reasoning or higher

GEO 4: Demonstrate scientific reasoning (4 credits)**

Take the following:
PHY   131   Conceptual Physics

GEO 5: Understand human behavior and social systems, and the principles which govern them (3-4 credits)**

Take the following:
PSY   140   Introduction to Psychology

GEO 6: Identify artistic, linguistic, and theoretical perspectives across the human experience (3 credits)**

Choose one of the following:

ART   111   Art History: Prehistoric to 1400
ART   112   Art History: Renaissance to Present

CERTIFIED PRODUCTION TECHNICIAN CORE (16 CREDITS)

Take the following:

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

INDUSTRIAL SYSTEMS CORE (22 CREDITS)

Take the following:

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