

Advanced Manufacturing Technology – Quality Engineering
Associate in Applied Science
M.A.P.

| Semester | Suggested Courses | | Semester(s) Offered* | Credit Hours |
|--|------------------------------|---|----------------------|--------------|
| Semester 1 15 credit hours | WKO 120 | Ready to Work I | Fall | 2 |
| | WKO 121 | Ready to Work II | Fall | 2 |
| | AUT 102 | Lean Manufacturing and Industrial Safety | Fall | 3 |
| | AUT 144 | Manufacturing Systems, Methods and Processes | Fall | 3 |
| | MTH 108 <i>or</i> MTH 116 | Quantitative Reasoning <i>or</i> Mathematical Applications | Fall, Spring, Summer | 3 |
| | ORI 101 | Orientation to College | Fall, Spring, Summer | 2 |
| Semester 2 14 credit hours | LGT 108 | Introduction to Logistics | Spring | 3 |
| | LGT 112 | Warehouse Operations Applications | Spring | 3 |
| | AUT 155 | Metrology | Spring | 3 |
| | AUT 200 | Total Productive Maintenance | Spring | 2 |
| | ENG 101 | English Composition I | Fall, Spring, Summer | 3 |
| Semester 3 15 credit hours | AUT 104 | Blueprint Reading for Manufacturing | Fall | 3 |
| | ADM 165 | Quality Engineering I: Quality History and Statistics | Fall | 3 |
| | ADM 166 | Quality Engineering II: Variation and Reliability | Fall | 3 |
| | CNC 215 <i>or</i> CNC 216 | Quality Control and Assurance <i>or</i> Quality Control II | Fall Summer | 3 |
| | SPH 106 <i>or</i> SPH 107 | Fundamentals of Oral Communication <i>or</i> Fundamentals of Public Speaking | Fall, Spring, Summer | 3 |
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| Semester 4 18-19 credit hours AMT AAS Achieved | ADM 170 | Quality Engineering III: Process Quality | Spring | 3 |
| | ADM 180 | Quality Engineering IV: Quality Auditing/AIAG Core | Spring | 3 |
| | ADM 210 | Lean Six Sigma | Spring | 3 |
| | Area II | Fine Arts or Humanities | Fall, Spring, Summer | 3 |
| | Area III | Math or Natural Science Elective | Fall, Spring, Summer | 3-4 |
| | Area IV | History or Social/Behavioral Science | Fall, Spring, Summer | 3 |
| Total Hours | | | | 62-63 |

*Course(s) may be offered in additional semesters but are only assured to run in semester(s) indicated. It is ***highly*** recommended for course(s) to be completed in the semester(s) indicated.

Part-time students and full-time students desiring to begin the AMT program of study during a spring or summer semester should consult with an academic advisor to establish an alternate degree completion pathway.

Area II – Area IV Options

| Area II | |
|---------------------------------|--------------------------------|
| <u>Humanities and Fine Arts</u> | |
| Art 100 | Art Appreciation |
| ART 203 | Art History I |
| ART 204 | Art History II |
| ENG 251 | American Literature I |
| ENG 252 | American Literature II |
| ENG 261 | English Literature I |
| ENG 262 | English Literature II |
| ENG 271 | World Literature I |
| ENG 272 | World Literature II |
| HUM 298 | Directed Studies in Humanities |
| MUS 101 | Music Appreciation |
| PHL 206 | Ethics and Society |
| REL 100 | History of World Religions |
| REL 151 | Survey of Old Testament |
| REL 152 | Survey of New Testament |
| SPA 101 | Introduction to Spanish I |
| SPA 102 | Introduction to Spanish II |
| THR 120 | Theatre Appreciation |

| Area III | |
|--------------------------------|---|
| <u>Math or Natural Science</u> | |
| AST 220 | Introduction to Astronomy |
| BIO 101 or | Introduction to Biology I or |
| BIO 103 | Principles of Biology I |
| BIO 102 or | Introduction to Biology II or |
| BIO 104 | Principles of Biology II |
| CHM 104 or | Introduction to Inorganic Chemistry or |
| CHM 111 | College Chemistry I |
| CHM 105 or | Introduction to Organic Chemistry or |
| CHM 112 | College Chemistry II |
| CHM 221 | Organic Chemistry I |
| CHM 222 | Organic Chemistry II |
| GEO 101 | Principles of Physical Geography I |
| GEO 102 | Principles of Physical Geography II |
| MTH 100 | Intermediate College Algebra |
| MTH 110 | Finite Mathematics |
| MTH 112 | Precalculus Algebra |
| MTH 113 | Precalculus Trigonometry |
| MTH 115 | Precalculus Algebra & Trigonometry |
| MTH 120 | Calculus and Its Applications |
| MTH 125 | Calculus I |
| MTH 126 | Calculus II |
| MTH 227 | Calculus III |
| MTH 237 | Linear Algebra |
| MTH 238 | Applied Differential Equations I |
| MTH 265 | Elementary Statistics |
| PHS 111 | Physical Science I |
| PHS 112 | Physical Science II |
| PHY 201 | General Physics I -Trig Based |
| PHY 202 | General Physics II-Trig Based |
| PHY 213 | General Physics with Calculus I |
| PHY 214 | General Physics with Calculus II |

| Area IV | |
|---|-----------------------------------|
| <u>History, Social, and Behavioral Sciences</u> | |
| ANT 200 | Introduction to Anthropology |
| ANT 220 | Cultural Anthropology |
| ECO 231 | Principles of Macroeconomics |
| ECO 232 | Principles of Microeconomics |
| GEO 100 | World Regional Geography |
| HIS 101 | Western Civilization I |
| HIS 102 | Western Civilization II |
| HIS 201 | United States History I |
| HIS 202 | United States History II |
| POL 200 | Introduction to Political Science |
| POL 211 | American National Government |
| PSY 200 | General Psychology |
| PSY 210 | Human Growth & Development |
| SOC 200 | Introduction to Sociology |
| SOC 210 | Social Problems |