

Associate of Technology (A.T.)
Applied Engineering & Technology (AETE)
Concentration: Advanced Manufacturing Technology

DEPARTMENTAL REQUIREMENTS (60 credits)

ADVISOR NOTES

Required Core Courses

(30 credits)

| Grade | Course No. | Title | Cr |
|-------|------------|---|------------------|
| | AENG 130 | Production Materials & Processes | 3 |
| | AENG 241 | Drafting Communications | 3 |
| | AENG 261 | Electronic Systems | 3 |
| | AENG 271 | Processing Nonmetallic Materials (<i>prereq AENG 130</i>) | 3 |
| | AENG 281 | Metallic Materials & Production Methods (<i>prereq AENG 130</i>) | 3 |
| | AENG 325 | Power Conversion & Control (<i>prereq AENG 120 or 261</i>) | 3 |
| | AENG 342 | Computer-Aided Engineering Drawing (<i>prereq AENG 241</i>) | 3 |
| | OSEH 120 | Safety, Health & Environmental Issues | 3 |
| | AENG ____ | Select ONE from AENG 375 or 376 • AENG 375 Polymer & Ceramic Technology (<i>prereq AENG 271</i>) • AENG 376 Wood Technology (<i>prereq AENG 271</i>) | 3 |
| | AENG ____ | Select ONE from AENG 300, 382, 425 or 448: • AENG 300 Co-op • AENG 382 Automated Mfg (<i>prereq AENG 130; and 241; and 271 or 281 or 342</i>) • AENG 425 Industrial Robotic Systems (<i>prereq AENG 325</i>) • AENG 448 Machine Tool Design (<i>prereq AENG 342</i>) | 3 3 3 3 |

Required Related – Science & Math (7-8 credits)

(Fulfills two G2 courses)

| Grade | Course No. | Title | Cr |
|-------|------------|--|------------------|
| | PHYS ____ | Select ONE from PHYS 103, 104 or 131: • PHYS 103 Elements of Physics • PHYS 104 Applied Physics • PHYS 131 Physics I | 4 4 4 |
| | MATH ____ | Select ONE from MATH 130, 151, 160 or 161: • MATH 130 Elements of Statistics (<i>prereq: See Web Schedule or Undergrad Catalog</i>) • MATH 151 Calc for Mgmt, Life (<i>prereq C- or higher in MATH 101 or MPT 151</i>) • MATH 160 Precalculus (<i>prereq C- or higher in MATH 101 or MPT 160</i>) • MATH 161 Calculus I (<i>prereq C- or higher in MATH 160 or MPT 161</i>) | 3 4 4 4 |

GENERAL EDUCATION REQUIREMENTS (27 credits min. – Note: 6 credits of Gen Ed are fulfilled by Required Related Courses)

G1 – HUMANITIES & FINE ARTS [*ART, COMM/THEATRE, ENGL, FOREIGN LANG/HUMN, MUSI, PHIL*] (6 credits)

| Grade | Course No. | Title | Cr |
|-------|------------|-------|----|
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G2 – SCIENCE & MATH *These credits are fulfilled by Required Related Math & Science* (6 credits)

G3 – SOCIAL SCIENCES [*AFAM, ANTH, BUAD, GEOG, GOVT, HIST, INTL, PSYC, SOCY, SOWK/GERT, WSTUJ*] (6 credits)

| Grade | Course No. | Title | Cr |
|-------|------------|-------|----|
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Additional General Education Requirements

(9 credits)

| Grade | Course No. | Title | Cr |
|-------|------------|-------|----|
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|--|-----------|---|---|
| | COMM 100 | Fundamentals of Speech (<i>minimum of "C-" required</i>) | 3 |
| | ENGL 110 | English Composition (<i>minimum of "C-" required</i>) | 3 |
| | ENGL ____ | Select <i>ONE</i> from: <ul style="list-style-type: none"> • ENGL 312 Technical Writing • ENGL 316 Business Writing • ENGL 318 Web Writing • ENGL 319 Science Writing | 3 |

FREE ELECTIVE (1-3 credits) – needed to meet 60 credit minimum; depends on credit value of science & math courses selected

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