

## Engineering Technology Articulation Guide

Washtenaw Community College – Any Associate Degree with MTA

Wayne State University - Bachelor of Science in Engineering Technology: Mechanical Engineering Technology, Electrical/Electronic Engineering Technology or Electromechanical Engineering Technology

Catalog Year 2020-2021

### WCC Degree and Michigan Transfer Agreement (MTA)

#### Requirements

|  |           |
|--|-----------|
| English Composition (see MTA requirements) | 3         |
| English Composition or Speech (MTA)        | 3         |
| *MTH 180 Precalculus                       | 5         |
| *CEM 101 Intro to Chemistry                | 3         |
| *PHY 111 General Physics (satisfies MTA)   | 4         |
| Social Science (see MTA requirements)      | 3         |
| Social Science (see MTA requirements)      | 3         |
| *PHL 205 Ethics                            | 3         |
| Humanities (see MTA requirements)          | 3         |
| <b>Subtotal</b>                            | <b>30</b> |

*\*meets MTA requirements AND required for WSU degree program (prerequisites may be required per internal placement exam).*

#### Additional WSU Requirements

|   |           |
|---|-----------|
| MTH 191 Calculus                        | 5         |
| ENG 208 <u>or</u> 209 Technical Writing | 3         |
| PHY 122 General Physics II              | 4         |
| ELE 111 Electrical Fundamentals         | 4         |
| <b>Subtotal</b>                         | <b>16</b> |

#### Lower Division Requirements

\*\*Any combination of technical courses or credits under the subject of ASV, ABR, CMG, CON, CPS, EGT, ELE, FLP, FMA, HVA, MEC, MTT, MST, NCT, ROB, or WAF

**Subtotal 21**

*\*\*Courses can be used to earn certificate(s) or associate degree.*

#### Free Electives (up to max. 76 transfer credit)

|   |            |
|---|------------|
| Any 100-level or above course (see advisor) | 0-9        |
| <b>Subtotal</b>                             | <b>0-9</b> |

Potential Electives (see advisor):

|   |   |
|---|---|
| MEC 101 Blueprint Reading for Manufacturing | 2 |
| MEC 100 Materials and Processes             | 3 |

#### Transfer to WSU as:

|                                   |           |
|-----------------------------------|-----------|
| MTA-English Composition           | 3         |
| MTA-English Composition or Speech | 3         |
| MAT 1800 Elementary Functions     | 3         |
| CHM 1020 General Chemistry        | 4         |
| PHY 2130/1 General Physics + Lab  | 4         |
| MTA-Social Science                | 3         |
| MTA-Social Science                | 3         |
| PHI 1120 Professional Ethics      | 3         |
| MTA-Humanities and Fine Arts      | 3         |
| <b>Transfer Subtotal</b>          | <b>30</b> |

#### Transfer to WSU as:

|  |           |
|--|-----------|
| ET/MAT 3430 Applied Calculus           | 5         |
| ENG 3050 Technical Writing             | 3         |
| PHY 2140/2141 Physics for Life Science | 4         |
| EET 2000 Electrical Principals         | 4         |
| <b>Transfer Subtotal</b>               | <b>16</b> |

#### Transfers to WSU as:

Lower Division Technical Elective - 21 credits minimum for WSU degree requirement

**Transfer Subtotal 21**

#### Transfer to WSU as:

|                          |            |
|--------------------------|------------|
| Free Electives           | 0-9        |
| <b>Transfer Subtotal</b> | <b>0-9</b> |

#### Transfer to WSU as:

|                               |   |
|-------------------------------|---|
| ET 2140 Computer Graphics     | 2 |
| ET 2200 Engineering Materials | 3 |

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### Engineering Technology

Engineering technologists (ET) create the objects we depend on, from smartphones to suspension bridges and everything in between. While traditional engineers work mainly in the conceptual stage of product development, ET graduates are hands-on, building and implementing new technologies in testing labs and in the field. They can apply their abilities in using technical equipment, selling technical products, serving as manufacturers' technical representatives, supervising construction projects and manufacturing processes, and more. A degree in engineering technology will give you marketable skills in this practical, applied science.

Bachelor of Science in Electronic/Electrical Engineering Technology (BSMCT) Program is accredited by the Engineering Technology Accreditation Commission of ABET, <http://www.abet.org>.

### AGRADE Program

AGRADE is Wayne State University's Accelerated Graduate Enrollment program. It is designed to provide our top students with a jump-start on graduate school. Students, in conjunction with their undergraduate and graduate advisors, develop a plan of work that counts up to 16 credits of coursework toward both the B.S. and M.S. degrees.

|  |              |
|--|--------------|
| Michigan Transfer Agreement (MTA)                | 30           |
| Additional WSU Requirements                      | 16           |
| Associate Major/Lower Division Electives         | 21           |
| Free Electives (see Advisor for recommendations) | <u>3-9</u>   |
| <b>Total Transferable Credits from WCC</b>       | <b>70-76</b> |

|   |            |
|---|------------|
| WSU Degree Requirements (min. 48)       | <u>54</u>  |
| <b>Total BS Degree Total (min. 124)</b> | <b>124</b> |

**MSET Degree** **21**

### Accelerated Graduate Enrollment

*Eligible student with cumulative GPA of 3.4 or above can apply up to 16 credits to the Master of Science in Engineering Technology (MSET).*

**Total BS and MSET Degrees (min. 147)** **151**

### Bachelor in Engineering Technology - Electrical/Electronic Engineering Technology Requirements

#### Math/Science/Degree Requirements

|                                      |          |
|--------------------------------------|----------|
| ET 2160 Computer Applications for ET | 2        |
| ET 3450 Appl Calc & Diff Equations   | 4        |
| <b>Subtotal</b>                      | <b>6</b> |

#### Electrical/Electronic Engineering Technology Core

|  |           |
|--|-----------|
| ET 3850 Reliability & Engineering Statistics | 3         |
| ET 3870 Engineering Economic Analysis        | 3         |
| *ET 5870 Engineering Project Management      | 3         |
| EET 2100 Principles of Digital Design        | 3         |
| EET 2720 Microprocessor Fundamentals         | 3         |
| EET 3100 Adv Digital Design                  | 3         |
| EET 3150 Network Analysis                    | 4         |
| EET 3180 Analog Electronics                  | 4         |
| EET 3500 Electrical Machines/Power Systems   | 3         |
| EET 3720 Mico & Programming Controllers      | 3         |
| EET 3300 Applied Signal Processing           | 3         |
| EET 4200 Control Systems                     | 4         |
| *EET Upper Division Technical Electives      | 6         |
| ET 4999 Senior Project                       | 3         |
| <b>Subtotal</b>                              | <b>48</b> |

\*can be used toward MSET degree (must see WSU advisor)