



Individual Program Transfer Articulation Agreement

Between the Maine Community College System acting by and through

Southern Maine Community College

And the University of Maine System acting by and through

The University of Maine

For Transfer From

Associate in Applied Science in Electrical Engineering Technologies

To

Bachelor of Science in Electrical Engineering Technology

This Transfer Articulation Agreement is governed by the general Transfer Articulation Agreement Memorandum of Understanding between Southern Maine Community College (SMCC) and the University of Maine (UMaine). Current students and graduates who have been enrolled in or earned the identified degree from SMCC and are admissible to the University shall be eligible for credit evaluation under the terms of this agreement.

Admissions requirements: Successful Completion of the Associate in Applied Science in Electrical Engineering Technologies

Scholarships and Financial Aid dates: Applying before June 1<sup>st</sup> for a fall entry allows students to be considered for transfer merit awards, June 1<sup>st</sup> is also the on-time FAFSA filing date for fall transfers.

**Side by Side Course Equivalency Table as May 2023**

Identifies how courses in the Associate in Applied Science in Electrical Engineering Technologies at SMCC transfer UMaine when the required grade is earned in each course, minimum C- (C for English Composition) for transfer credit.

| <b>SMCC General Education Requirements:</b> |                              | <b>Cr</b> | <b>UMaine Transfer Equivalent:</b> |   | <b>Cr</b> |
|---|------------------------------|-----------|------------------------------------|---|-----------|
| ENGL 100                                    | English Composition@         | 3         | ENG 101                            | English Composition – Meets degree & English Gen Ed requirement   | 3         |
| ENGL 115                                    | Introduction to Literature@  | 3         | ENG 100X                           | English Elective - West Cult Trad Gen Ed requirement  | 3         |
| FIGS 100                                    | Student Success              | 1         | FYS 100X                           | First Year Seminar Elective - Elective  | 1         |
| MATH 140                                    | College Algebra <sup>1</sup> | 3         | MAT 111                            | Math for College Algebra - Free Elective  | 3         |
| MATH 146                                    | Introduction to Trigonometry | 1         | MAT 100X                           | Math Elective – 1 credit Free Elective<br>-When combined with MATH 190 Pre-Calculus both courses transfer to UMaine as MAT122 Pre-Calculus for 4 credits - without MATH 190 – 1 credit elective | 0 or 1    |

| <b>SMCC General Education Requirements:</b> |  |           | <b>UMaine Transfer Equivalent:</b> |   | <b>Cr</b>    |
|---|--|-----------|------------------------------------|---|--------------|
| PHYS 150                                    | College Physics I & Lab@ -   | 4         | PHY 111                            | General Physics I – Lab Science Gen Ed requirement – Free Elective - use to replace credits lost when 3 credit courses transfer in place of 4 credit courses at UMaine. | 4            |
| Fine Arts or Humanities                     | Select a course that also meets one of UMaine's HVSC Artistic & Creative Gen Ed requirement@ | 3         | Gen Ed                             | Select an SMCC course that meets UM Artistic & Creative Gen Ed  | 3            |
| Social Science                              | Select a course that also meets one of UMaine's HVSC Cultural Diversity Electives@           | 3         | Gen Ed                             | Select an SMCC course that meets UM Cultural Diversity Gen Ed requirement   | 3            |
| <b>Credits</b>                              |  | <b>21</b> | <b>Credits</b>                     |   | <b>20/21</b> |

| <b>SMCC Major Required Courses:</b> |  |           | <b>UMaine Transfer Equivalent:</b> |   | <b>Cr</b> |
|-------------------------------------|--|-----------|------------------------------------|---|-----------|
| AEDD 105                            | CAD Graphics                                       | 3         | SVT 121                            | CAD for Survey Engineering – will substitute for EET 115 but does not meet the Artistic Gen Ed requirement.   | 3         |
| ELEC 101                            | Intro to Electrical Engin. Tech.                   | 3         | EET 100                            | Intro to EE Tech  | 3         |
| ELEC 110                            | DC Circuits  | 3         | EET 111                            | Circuit Analysis I  | 3         |
| ELEC 120                            | Digital Electronics                                | 3         | EET 275                            | Digital Communications  | 3         |
| ELEC 130                            | Programmable Logic Controllers                     | 3         | EET 276                            | Programmable Login Computers  | 3         |
| ELEC 140                            | AC Circuits  | 3         | EET 312                            | Circuit Analysis II   | 3         |
| ELEC 170                            | Three-Phase Circuits<br>(When taken with ELEC 215) | 3         | EET 300X                           | Electrical Engineering Technology Elective – when taken with ELEC 215 Electrical Machinery – free elective - 2 credits to help offset 3 to 4 credit loss. | 2         |
| ELEC 175                            | Wiring Practices                                   | 3         | EET 100X                           | Electrical Engineering Technology Elective – free elective  | 3         |
| ELEC 215                            | Electrical Machinery<br>(When taken with ELEC 170) | 3         | EET 321                            | Electro-Mechanical Energy Conversion- when taken with ELEC 170 Three-Phase Circuits.  | 4         |
| ELEC 230                            | Electronics I                                      | 3         | EET 241                            | Analog Circuit Fundamentals I   | 3         |
| ELEC 235                            | Electronics II                                     | 3         | EET 342                            | Advanced Analog Circuit Design -  | 3         |
| ELEC 240                            | Fluid Power Systems                                | 3         | EET 200X                           | Electrical Engineering Technology Elective – used as a Technical Elective   | 3         |
| ELEC 250                            | National Electrical Code                           | 3         | EET 200X                           | Electrical Engineering Technology Free elective   | 3         |
| ELEC 260                            | Motor Controls & Automation                        | 3         | EET 200X                           | Electrical Engineering Technology Elective – used as a Technical Elective   | 3         |
| ELEC 265                            | Renewable Energy Sources                           | 3         | EET 460                            | Renewable Energy & Elec Production  | 3         |
| <b>Credits</b>                      |  | <b>45</b> | <b>Credits</b>                     |   | <b>45</b> |

A minimum grade of C- (or C for English Composition) is required for transfer credit to be awarded.

@ Satisfies a UMaine General Education Requirement.

1 – College Algebra is a pre-requisite for Pre-calculus at UMaine, College Algebra is not included in the UM EET program.

### Special Notes:

Students are encouraged to take MATH 190 Pre-Calculus at SMCC in the summer between their first and second semester at SMCC and to take MAT 260 Calculus I at SMCC the summer before they start their program at UMaine to preserve the course sequencing in this agreement. Students waiting to take Pre-Calculus and Calculus I at UMaine can expect to take additional time to complete the UMaine degree.

| Additional Courses at SMCC         |               | Cr        | UMaine Transfer Equivalent:   |   | Cr        |
|------------------------------------|---------------|-----------|-------------------------------|---|-----------|
| MATH 190                           | Pre-Calculus@ | 3         | MAT 100X                      | Mathematics Elective – 3 credits free elective - if taken with MATH 146 Trigonometry will transfer as MAT 122 Pre-Calculus for 4 credits– meets Quant Literacy Gen Ed Requirement | 4         |
| MATH 260                           | Calculus I@   | 4         | MAT 126                       | Calculus I- – meets Quant Literacy Gen Ed Requirement   | 4         |
| <b>Credits</b>                     |               | <b>7</b>  | <b>Credits</b>                |   | <b>8</b>  |
| <b>Total Credits taken at SMCC</b> |               | <b>73</b> | <b>Total Transfer Credits</b> |   | <b>69</b> |

For an up to date list of how SMCC courses transfer to UMaine and which courses at SMCC can be used to meet UM General Education Requirements, please consult the UMS Online Transfer Equivalency Tool that can be found at [mainestreet.maine.edu](http://mainestreet.maine.edu)

Courses taken at SMCC in which the student did not earn the required grade to satisfy either transfer credit or degree requirements would need to be retaken at either UMaine or SMCC in order to earn the grade needed to count toward the degree at UMaine. Once enrolled at UMaine, the student would need to seek permission from his or her advisor and complete a domestic study away form to alert Student Records if the student plans to take any subsequent courses at SMCC.

#### **Suggested course sequence for the last 4 semesters at UMaine as of May 2023**

For those who have earned SMCC's Associate in Applied Science in Electrical Engineering Technologies and have taken MATH 190 and MATH 260 at SMCC in addition to the AAS degree requirements - courses may vary for students who transfer before earning their associate degree or who do not complete Pre-Calculus and Calculus I prior to starting at UMaine.

#### **Electrical Engineering Technology Option**

| Semester 5     |                    | Cr        | Semester 6     |                                      | Cr        |
|----------------|--------------------|-----------|----------------|--------------------------------------|-----------|
| PHY 107        | Technical Physics@ | 4         | PHY 108        | Technical Physics II@                | 4         |
| MAT 127        | Calculus II@       | 4         | EET 350        | Senior Design Project I              | 1         |
| TECH           | Technical Elective | 3         | ENG 317        | Business & Technical Writing         | 3         |
| CMJ 103        | Public Speaking@   | 3         | EET 174        | Intro to Microcontrollers            | 4         |
|                |                    |           | STS 132        | Principles of Statistical Inference@ | 3         |
| <b>Credits</b> |                    | <b>14</b> | <b>Credits</b> |                                      | <b>15</b> |

| Semester 7 |                                 |           | Cr | Semester 8 |                                 |           | Cr |
|------------|---------------------------------|-----------|----|------------|---------------------------------|-----------|----|
| EET 324    | Network Analysis & Applications | 4         |    | EET 325    | Design & Applic of Control Syst | 4         |    |
| EET 422    | Power System Analysis           | 4         |    | EET 486    | Project Management              | 3         |    |
| EET 451    | Senior Design Project II        | 2         |    | EET 452    | Senior Design Project III       | 1         |    |
| MET 433    | Thermodynamics                  | 3         |    | EET 484    | Engineering Economics           | 3         |    |
| EET 405    | Fund of Engineering Exam Prep   | 4         |    | EET TECH   | EET Technical Elective          | 3         |    |
|            | <b>Credits</b>                  | <b>17</b> |    |            | <b>Credits</b>                  | <b>14</b> |    |
|            | <b>Total UMaine credits</b>     | <b>55</b> |    |            |                                 |           |    |

\*General Education Requirement courses do not have to be taken in the order shown. Student may also choose to meet general education requirements by taking additional courses at SMCC that have been identified as meeting UMaine's general education requirements or if offered, they may choose to take them during May term, Summer session or January term at UMaine.

### Degree Requirement Notes:

Total minimum degree credit hours required for the Bachelor of Science in Electrical Engineering Technology is **120 credits** consisting of specific degree requirements, specific elective requirements, and general education requirements.

Students must see their advisor for approval of all electives. A list of approved courses that meet technical electives are available in 119 Boardman Hall. See current catalog for a list of approved IT electives. General electives do not have to be taken in the order shown. Courses that meet the General Education elective requirements can be viewed on MaineStreet. CHE 350 or STS 332 may be substituted for STS 132. EET 484 meets the Ethics and Human Values/Social Context requirements. EET 405 meets the Population and Environment requirement.

Please note that the BS in Electrical Engineering Technology also offers an Information Engineering Technology Option, an Electromechanical Engineering Technology Option, and a Power Concentration Option. Students wishing to pursue any of the available options should contact an academic advisor in the Electrical Engineering Technology program as soon as possible to discuss how the required courses at UMaine will change to meet the option requirements.

*Transfer students will be accorded the same standards and criteria for admission to a major degree sequence as UMaine students. All applicants accepted to UMaine's baccalaureate programs must fulfill the graduation requirements as identified in UMaine's academic catalog. For up to date degree information please check UMaine's online catalog at <http://catalog.umaine.edu/>. The most recent transfer credit equivalency information is available through the online transfer equivalency listing located at <https://peportal.maine.edu/>. See appendix A for complete degree requirements.*



**Contacts/designee at each campus for more information:**

**Southern Maine Community College**

Margaret Fahey  
Associate Dean for Curriculum  
Design and Articulation  
[mfahey@smccme.edu](mailto:mfahey@smccme.edu)  
207.741.5833

**University of Maine:**

Sharon Oliver  
Director of Transfer Admission  
[smoliver@maine.edu](mailto:smoliver@maine.edu)  
207.581.1561

Karyn Soltis-Habeck  
Assoc Dir of Transfer, Non-Traditional & Veteran Adm  
[karyn.soltis@maine.edu](mailto:karyn.soltis@maine.edu)  
207. 581.1568

**Articulation Implementation and Agreement Review**

The Chief Academic Officer designee of the collaborating institutions shall be responsible for implementing this agreement, for identifying and incorporating any changes into subsequent agreements, and for conducting a periodic review of this agreement.



Appendix A

**UMaine Bachelor of Science Degree Electrical Engineering Technology  
Electrical Engineering Technology Option May 2023**

**First Semester**

**Second Semester**

| UMaine  |                                |           | Cr      |                           |           |
|---------|--------------------------------|-----------|---------|---------------------------|-----------|
| EET 100 | Intro to Elec Engineering Tech | 4         | EET 111 | Circuit Analysis I        | 4         |
| ENG 101 | College Composition            | 3         | EET 115 | Creative Design Using CAD | 3         |
| MAT 122 | Pre-Calculus                   | 4         | MAT 126 | Calculus I                | 4         |
| PHY 107 | Technical Physics I            | 4         | PHY 108 | Technical Physics II      | 4         |
|         |                                | <b>15</b> |         |                           | <b>15</b> |

**Third Semester**

**Fourth Semester**

| UMaine  |                                |           | Cr      |                           |           |
|---------|--------------------------------|-----------|---------|---------------------------|-----------|
| EET 241 | Analog Circuit Fundamentals    | 4         | CMJ 103 | Public Speaking           | 3         |
| EET 275 | Digital Communications         | 4         | EET 274 | Intro to Microcontrollers | 4         |
| EET 276 | Programmable Logic Controllers | 4         | EET 342 | Adv Analog Circuit Design | 4         |
| MAT 127 | Calculus II                    | 4         | TECH    | Technical Elective        | 3         |
|         |                                | <b>16</b> |         |                           | <b>14</b> |

**Fifth Semester**

**Sixth Semester**

| UMaine  |  |           | Cr      |                                      |           |
|---------|--|-----------|---------|--------------------------------------|-----------|
| EET 312 | Circuit Analysis II                              | 4         | EET 321 | Electro-Mechanical Energy Conversion | 4         |
| EET 324 | Network Analysis & Applications                  | 4         | EET 325 | Design & Applic of Control Systems   | 4         |
| ENG 317 | Business & Technical Writing                     | 3         | EET 350 | Senior Design Project I              | 1         |
| STS 132 | Principles of Statistical Inference <sup>1</sup> | 3         | EET 486 | Project Management                   | 3         |
|         |  |           | TECH    | Technical Elective                   | 3         |
|         |  | <b>14</b> |         |                                      | <b>15</b> |

**Seventh Semester**

**Eighth Semester**

| UMaine  |   |           | Cr  |                                      |           |
|---------|---|-----------|---|--------------------------------------|-----------|
| EET 422 | Power System Analysis                           | 4         | EET 452   | Senior Design Project III            | 1         |
| EET 451 | Senior Design Project II                        | 2         | EET 484   | Engineering Economics <sup>2</sup>   | 3         |
| MET 433 | Thermodynamics                                  | 3         | GEN ED  | Cultural Diversity Elective          | 3         |
| EET 460 | Renewable Energy & Elec Production <sup>3</sup> | 4         | GEN ED  | Western Cultural Traditions Elective | 3         |
| EET 405 | Fund of Engineering Exam Prep                   | 3         | EET TECH  | EET Technical Elective               | 3         |
|         |   |           | TECH  | Technical Elective                   | 3         |
|         |   |           | Fund of Engineering Exam (passing not required) |                                      |           |
|         |   | <b>16</b> |   |                                      | <b>16</b> |

Minimum Program Credits required for the degree: 120 credits.

Students must see their advisor for approval of all electives.

A list of approved courses that meet technical electives are available in 119 Boardman Hall. See current catalog for a list of approved IT electives.

General electives do not have to be taken in the order shown. Courses that meet the General Education elective requirements can be viewed on MaineStreet.

<sup>1</sup> CHE 350 or STS 332 may be substituted for STS 132.

<sup>2</sup>EET 484 meets the Ethics and Human Values/Social Context requirements.

<sup>3</sup>EET 405 meets the Population and Environment requirement.

SMCC and UMaine: AAS Electrical Engineering Technologies /BS Electrical Engineering Technology