



Customer Energy Specialist A.A.S.

Career Community: Electrical and Manufacturing

Curriculum Code: 1022

Effective: Fall 2025 – Summer 2030

Purpose of the Major

This curriculum is designed to give students the technical knowledge and customer relations skills to determine customer energy needs in the negotiation, design, installation, and application of utility facilities. They negotiate barriers in order to supply energy from the road or nearest energy supply center to the outside of a building under construction. Customer energy specialists are employed by utility companies, governmental agencies, heating and cooling contractors, the construction industry, and engineering and architectural firms. Not all courses in this program transfer to all colleges. Students planning to transfer should see an academic advisor before enrolling in any course.

Milestone

In addition to the required General Education courses in Math and English, completion of BUSN 118 and ELTE 110 with a 2.0 or higher is a key component for success in completing this program. Knowledge obtained in these courses is the foundation for learning in other required courses. Students are encouraged to contact their faculty if they need additional assistance with learning the concepts presented in these courses.

Additional Information

If students have already completed DCTM 102 with a grade of 2.0 or higher, that will satisfy the TECH 102 requirement. Either of these classes will fulfill the prerequisite for ELTE 110 and ELTE 111.

Contact Information

For further information, including career options, course substitutions and waivers, etc., contact the Electrical Technology Program at the West Campus Building, Room M127, telephone number 517-483-1570 or Student Services West Campus, West Campus Building, Room M106, telephone number 517-267-5452.

Major Required Courses—*A minimum grade of 2.0 is required for General Education courses.*

Course Code	Course Title	Credit / Billing Hours
ACAD 100	First-Year Experience	1 / 1
ACCG 101	Accounting Info for Management	3 / 3
BUSN 118	Introduction to Business	3 / 3
CITA 110	Intro to Microsoft Office	3 / 3

Course Code	Course Title	Credit / Billing Hours
COMM 110 or COMM 120 or COMM 130 or COMM 200 or COMM 240 or COMM 260 or ENGL 122 or ENGL 132	Communication in the Workplace Dynamics of Communication Fundamentals Public Speaking Small Group Communication Interpersonal Communication Nonverbal Communication Composition II Honors Composition II	3 / 3 3 / 3 3 / 3 3 / 3 3 / 3 3 / 3 4 / 4 4 / 4
DCTM 101	Drafting/Intro to CAD	3 / 4
ELTE 110	Practical Electricity	4 / 6
ELTE 121 or MATH 115 or MATH 119 or MATH 120 or MATH 126	Electrical Mathematics Technical Mathematics Math – Applications for Living College Algebra Precalculus	5 / 6 4 / 4 4 / 4 4 / 4 5 / 5
ENGL 121 or ENGL 124 or ENGL 127 or ENGL 131	Composition I Technical Writing Business Writing Honors Composition I	4 / 4 3 / 3 3 / 3 4 / 4
LEGL 215	Business Law-Basic Principles	3 / 3
MGMT 150	Managing Customer Relations	3 / 3
MKTG 200	Principles of Marketing	3 / 3
TECH 102	General Industry Safety	2 / 3

Notes:

ACAD 100 may be waived when students meet one of the following College-approved waiver criteria:

- Completion of 12 college-level credits with minimum grades of 2.0 shown on the LCC transcript (including transfer, if applicable), or
- Employment in the field of, or a field related to, the degree being sought

Students wishing to waive ACAD 100 should contact their advisor.

Students considering future transfer, choose MATH 119, MATH 120, or MATH 126.

Major Required Courses, Limited Choice - *Select 15 credits*

Course Code	Course Title	Credit / Billing Hours
CIVL 120	Surveying	4 / 6
ELTE 111	Intro to Industrial Automation	4 / 6

Course Code	Course Title	Credit / Billing Hours
ELTE 141	National Electrical Code I	4 / 4
GSCI 100	Intro to Geospatial Tech	3 / 3
GSCI 210	Global Positioning Systems	3 / 4
METD 100	Basic Mechanical Drafting	3 / 4

Major Required Courses, Limited Choice – Humanities and Fine Arts or Social Sciences or Applied Social Sciences - Select one as recommended or select one from [LCC General Education Applied Degrees](#): Humanities and Fine Arts or Social Sciences or Applied Social Sciences. A minimum grade of 2.0 is required for General Education courses.

Course Code	Course Title	Credit / Billing Hours
GEOG 200	World Regional Geography	4 / 4
MGMT 234	Diversity in the Workplace	3 / 3
SOCL 120	Introduction to Sociology	4 / 4

Note: Students considering future transfer, choose GEOG 200 or SOCL 120.

Major Required Courses, Limited Choice – Natural Sciences or Applied Sciences and Technology Lab - Select one lab course as recommended or select one from [LCC General Education Applied Degrees](#): Natural Sciences or Applied Sciences and Technology Lab. A minimum grade of 2.0 is required for General Education courses.

Course Code	Course Title	Credit / Billing Hours
BIOL 120	Environmental Science	4 / 6
CHEM 151 and CHEM 161	General Chemistry Lecture I General Chemistry Lab I	5 / 7
METM 190	Metallurgy and Heat Treatment	4 / 6
PHYS 120	The Art of Physics	4 / 5
PHYS 200	Intro to Applied Physics	4 / 5
PHYS 221	Introductory Physics I	4 / 6

General Education - Applied Degrees

- English Composition or Applied English
Major Required Courses meet this requirement.
- English Composition (second course)/Communication or Applied Communication
Major Required Courses meet this requirement.
- Humanities and Fine Arts or Social Sciences or Applied Social Sciences
Major Required Limited Choice Courses meet this requirement.
- Mathematics or Applied Mathematics
Major Required Courses meet this requirement.
- Natural Sciences Lab or Applied Science and Technology Lab
Major Required Limited Choice Courses meet this requirement.

Additional Credits

After completing the course and credit requirements as noted on this pathway, students who fall short of the 60-credit minimum required for an Associate Degree may select any course(s) needed to reach 60 credits, except those courses noted in number 7 in the [Institutional Requirements for Associate Degrees](#). Students are encouraged to use Degree Works and meet with an Advisor to ensure all requirements are met and for course recommendations.

Minimum Total Credit Hours

60 credits / 69 billing hours

Recommended Course Sequence

Semester I
ACAD 100
BUSN 118 – Milestone course
CITA 110
ENGL 121 or ENGL 124 or ENGL 127 or ENGL 131
TECH 102
Limited Choice

Semester II
ACCG 101
ELTE 121 or MATH 115 or MATH 119 or MATH 120 or MATH 126
ELTE 110 – Milestone course
Limited Choice

Semester III
DCTM 101
LEGL 215
MGMT 150
MKTG 200
Limited Choice – Natural Sciences Lab or Applied Sciences and Technology Lab

Semester IV
COMM 110 or COMM 120 or COMM 130 or COMM 200 or COMM 240 or COMM 260 or ENGL 122 or ENGL 132
Limited Choice
Limited Choice
Limited Choice – Humanities and Fine Arts or Social Sciences or Applied Social Sciences

LCC makes every effort to limit revisions to the pathways during their effective timeframe. However, the College reserves the right to update certificate and degree titles, and make course changes as needed, without prior notice. The College also reserves the right to discontinue programs when warranted.