

RENEWABLE ENERGY TECHNICIAN W/ SOLAR THERMAL EMPHASIS



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Award Title	Award Type	Grad. Plan	Required Course Units	Major Elective Units	Total Major Units
Renewable Energy Technician with Emphasis in Solar Thermal	A.S.	Plan B	38	4	42
Solar Thermal Installation and Maintenance Technician	C		30	-	30

At least 60 degree applicable units (42 total major units and Plan B units) are required to earn an Associate degree.

For additional related certificates, refer to programs under Energy Systems Technology Fundamentals.

PROGRAM OVERVIEW

LATTC offers a series of courses for individuals interested in working in the new, emerging renewable energy and energy efficiency industry. This degree program includes courses that enable individuals to: (1) have the requisite knowledge and skills to obtain employment in the energy/utility sector, (2) be prepared to obtain solar thermal installation and maintenance entry-level occupations, and (3) obtain skills and expertise to pursue other renewable energy and/or energy efficiency occupations.

By fulfilling the program requirements, students have the necessary knowledge and skills for a career in residential and commercial solar thermal and renewable energy-related occupations.

PROGRAM LEARNING OUTCOMES (PLOs)

Upon completion of the Degree program, students will be able to:

- Use hand and power tools to perform solar thermal installations & maintenance work.
- Demonstrate sustainable industry principles and practices.
- Perform calculations & measurements required for solar thermal work.
- Work independently & interdependently to safely accomplish shared professional outcomes.

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Associate in Science Degree Major Units: 42

Requirements for the Associate in Science degree in Renewable Energy Technician with Emphasis in Solar Thermal may be met by completing 38 units of Required Courses and 4 units of Major Electives with a "C" or better along with general education courses meeting Plan B graduation requirements. Information on the Plan B requirements may be found in the catalog under Graduation/Transfer Requirements.

REQUIRED COURSES

SEMESTER I

	UNITS	Completed Semester/Yr
ECONMT 115 Fundamentals of D.C. Electricity	3	<input type="checkbox"/> _____
ECONMT 116 Hand Tools and Wiring Practices	2	<input type="checkbox"/> _____
ECONMT 119 Applied Electrical Calculations & Measurement	3	<input type="checkbox"/> _____
- or - ECONMT 173 Electrical Mathematics	3	<input type="checkbox"/> _____
- or - MATH115 or higher Elementary Algebra	5	<input type="checkbox"/> _____

SEMESTER II

	UNITS	Completed Semester/Yr
REF A/C 105 Solar Thermal Theory	3	<input type="checkbox"/> _____
ECONMT 129 Fundamentals of Alternating Current	3	<input type="checkbox"/> _____
ECONMT 100 Occupational Safety	2	<input type="checkbox"/> _____
CRPNTRY 111A Construction I	3	<input type="checkbox"/> _____

SEMESTER III

	UNITS	Completed Semester/Yr
REF A/C 100 Project Management	3	<input type="checkbox"/> _____
ECONMT 110 Renewable Energy Systems	3	<input type="checkbox"/> _____
CRPNTRY 111B Construction I	2	<input type="checkbox"/> _____
BLDGCTQ 010 Energy and Utility Industry Careers	3	<input type="checkbox"/> _____
REF A/C 110 Solar Thermal Practices	2	<input type="checkbox"/> _____
REF A/C 165 Thermal Heat Storage	4	<input type="checkbox"/> _____



SOLAR THERMAL INSTALLATION AND MAINTENANCE TECHNICIAN

Certificate of Achievement Units: 30

A Certificate of Achievement in Solar Thermal Installation and Maintenance may be earned by successfully completing a minimum of 30 units from the required courses listed below with a "C" or better grade in each course. Upon successful completion of this program a student will have the basic knowledge and skills for employment in the solar thermal area of the energy industry at the entry level. (State Control Number #31082).

PROGRAM OVERVIEW:

Program outcomes include; the use of hand and power tools to perform entry level laborer work within the solar thermal energy sector, demonstration of sustainable industry principles and practices, perform calculations & measurements commiserate to entry level laborer work within the utility energy sector, and work independently & interdependently to safely accomplish shared professional outcomes. Skills gained from the program prepare a student for employment with contractors, individual facilities management companies, and other private or public agencies doing energy efficient building or performing solar thermal energy upgrade retro-fitting on existing residential and commercial buildings.

Recommended sequence of courses for the Solar Thermal Installation and Maintenance Technician Certificate of Achievement.

USEFUL LINKS

LATTC Catalog
<http://college.lattc.edu/catalog/>

LATTC Financial Aid Office
<http://college.lattc.edu/financialaid/>

LATTC Counseling Department
<http://college.lattc.edu/counseling/>

Graduation Plan A
<http://college.lattc.edu/catalog>

Graduation Plan B
<http://college.lattc.edu/catalog>

Construction, Maintenance & Utilities Department
<http://college.lattc.edu/cdm>

		UNITS	Completed	Semester/Yr
SEMESTER I				
ECONMT 119	Applied Electrical Calc & Measurement	3	<input type="checkbox"/>	_____
or ECONMT 173	Electrical Mathematics	3	<input type="checkbox"/>	_____
or MATH 115 or higher	Elementary Algebra	5	<input type="checkbox"/>	_____
ECONMT 115	Fundamentals of D.C. Electricity	3	<input type="checkbox"/>	_____
SEMESTER II				
CRPNTRY 111A	Construction I	3	<input type="checkbox"/>	_____
REF A/C 105	Solar Thermal Theory	3	<input type="checkbox"/>	_____
REF A/C 110	Solar Thermal Practices	2	<input type="checkbox"/>	_____
ECONMT 129	Fundamentals of Alternating Current	3	<input type="checkbox"/>	_____
SEMESTER III				
CRPNTRY 111B	Construction I	2	<input type="checkbox"/>	_____
REF A/C 165	Thermal Heat Storage	4	<input type="checkbox"/>	_____
ECONMT 100	OSHA Safety Standards	2	<input type="checkbox"/>	_____
BLDGCTQ 010	Energy and Utility Industry Careers	3	<input type="checkbox"/>	_____
ECONMT 116	Hand Tools and Wiring Practices	2	<input type="checkbox"/>	_____

You can enroll in these classes by logging on to the Student Information System at <https://college.lattc.edu/register>

For additional information consult a LATTC college counselor.