

ELECTRONICS COMMUNICATIONS



Pathway: Advanced Transportation & Manufacturing
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Award Title	Academic Plan	Award Type	GE Units	Required Course Units	Major Elective Units	Major Units
Electronics Communications*	T002902C	A.S.	21*	44	-	44
Electronics Communications	T021841D	C		44	-	44

At least 60 degree applicable units are required to earn an Associate degree.
 *This Associate Degree is eligible for a reduction of General Education requirements from 21 to 18 units; please consult with a counselor for more details.
 These programs are Financial Aid Eligible.

PROGRAM OVERVIEW

This program covers, circuit analysis of several complete FM systems. By completing the certificate and/or degree, students will be able to pass the Federal Communications Commission (FCC) Examination. In addition, by fulfilling the program requirements, students are proficient in the operation of AM/FM Transmitters and can trouble shoot AM/FM Receivers as well as install C Band, K/U Band, and digital satellites systems (DSS). Students will also have an understating of cordless phones, microwave receivers/transmitters, and cell phone systems

PROGRAM LEARNING OUTCOMES (PLOs)

Upon completion of the **Degree/Certificate** program, students are able to:

- Read electronic symbols and schematic diagrams.
- Perform mathematical calculations and measurements related to electronics circuit analysis.
- Troubleshoot and construct electronics communication devices, such as semiconductors devices and digital circuits, utilizing electronics communications, microcomputer, and/or cabling theory.

USEFUL LATTC LINKS:

College Catalog: <http://college.lattc.edu/catalog/>
 Financial Aid Office: <http://college.lattc.edu/financialaid/>
 Counseling Department: <http://college.lattc.edu/counseling/>
 General Education Information: <http://college.lattc.edu/catalog>
 Advanced Transportation & Manufacturing Pathway:
<http://pathways.lattc.edu/catalog-programs/atm1/>

To register: <http://college.lattc.edu/student/new-students/register-now/>

For additional information consult a LATTC college counselor.

ELECTRONICS COMMUNICATIONS

Associate in Science Degree

Major Units: 44

Requirements for the Associate in Science degree in Electronics Communications may be met by completing 44 units of Required Courses with a "C" or better along with General Education units. Information on the General Education unit requirements may be found in the catalog under Graduation Requirements.

REQUIRED COURSES

SEMESTER I		UNITS
ETNTLGY 150	Soldering Surface Mount Technology	3
ETNTLGY 151	DC Theory and Circuit Fundamentals	3
ETNTLGY 152	DC Theory and Circuit Fundamentals Lab	2
ETNTLGY 153	Applied DC Calculations	1
ETNTLGY 254	Computer Applications for Electronics Technology	3

SEMESTER II		UNITS
ETNTLGY 154	AC Theory and Circuit Fundamentals	3
ETNTLGY 155	AC Theory and Circuit Fundamentals Lab	2
ETNTLGY 156	Applied AC Calculations	1
ETNTLGY 255	Computer-Based Electronics I	1
PHYSICS 011	Introductory Physics	4

SEMESTER III		UNITS
ETNTLGY 157	Semiconductors Devices and Applications	3
ETNTLGY 158	Semiconductors Devices and Electronics Laboratory	3
ETNTLGY 159	Digital Circuits and Applications	3
ETNTLGY 160	Digital Circuits and Applications Lab	2

SEMESTER IV		UNITS
ETNTLGY 161	F.C.C. Radio Operator License	3
ETNTLGY 162	Introduction to Electronics Communications	3
ETNTLGY 163	Introduction to Electronics Communications Lab	3
ECONMT 142	Basic Programmable Logic Controls (PLC)	1

SUPPLEMENTARY ELECTIVES		UNITS
ETNTLGY 252	Networking Cabling Specialist	3
ETNTLGY 253	Fiber Optics	3
MICROTK 077	Cisco Networking Academy-Semester I	3
MICROTK 160	I.T. Essentials Application Software Fundamentals	2
MICROTK 162	I.T. Essentials Networking Personal Computers	4
MICROTK 164	I.T. Essentials Microcomputer Theory and Servicing	5

ELECTRONICS COMMUNICATIONS

Certificate of Achievement

Major Units: 44

A Certificate of Achievement in Electronics Communications may be earned by completing 44 units of Required Courses listed under the Associate degree in Electronics Communications with a "C" or better in each course.

NOTE: Students are required to provide basic hand tools, Transportation Technology uniform and personal safety equipment.