



John A. Logan College

Associate in Applied Science Toward a Degree in Mechatronics Engineering Technology

Career Curriculum 00ELT3012

Minimum Hours: 68

Major Code: 1.2 150612C

Effective Date: Fall 2021

FIRST YEAR – FALL SEMESTER

Dept.	No.		Hrs.	Grade
ORI	100	College 101	1	_____
ELT	102	Basic Electricity and Wiring	4	_____
ELT	111	Digital Electronics I	3	_____
MAT	111	Pre-Calculus	5	_____
MFT	103	Industrial Robots & PLCs	3	_____
ENG	101	English Composition I ² OR ENG 113 Professional Technical Writing ²	3 19	_____

NOTES AND INFORMATION

¹Although this class is recommended, it is not required for graduation from this program and therefore is ineligible for Title IV financial aid funding.

² Requires a grade of "C" or higher.

Fall only courses: Spring only courses:

ELT 102	ELT 214	ELT 103	IDM 120
ELT 111		ELT 104	MFT 201
ELT 151		ELT 150	ELT 218
IDM 210		ELT 224	
MFT 103		ELT 220	

FIRST YEAR – SPRING SEMESTER

Dept.	No.		Hrs.	Grade
ELT	103	Applied DC/AC Circuits	4	_____
ELT	104	Introduction to VFDs	2	_____
ELT	112	Digital Electronics II	3	_____
ELT	150	Applied Solid State Electronics	3	_____
MFT	201	PLC Manufacturing Systems	3	_____
PSY	132	General Psychology	3 18	_____

The Industrial Maintenance Engineering AAS Degree (00ELT3012) is an ICCB approved extension of the Electronics Technology AAS Degree (00ELT3010) and is the parent program to:

- Industrial PLC Systems Certificate (00ELT3013)

The minimum general education component for the Associate in Applied Science degree requires satisfactory completion of at least 15 semester credits of coursework distributed over the disciplines of Communications, Mathematics, Arts and Humanities, Physical and Life Sciences, and Social and Behavioral Sciences. The curriculum guide for each Associate in Applied Science degree program will spell out the course requirements or options available for satisfying the general education component. With appropriate justification and in consultation with your academic advisor, a request to substitute a course for one recommended in this guide may be granted with the appropriate approvals from the Department Chair, Dean for Instruction and Vice-President for Instruction. However, no substitutions are allowed in Groups I-III (General Education Component; GECC) of the curriculum guide (see the Associate in Applied Science general degree requirements worksheet in the John A. Logan College Catalog).

OPTIONAL

FIRST YEAR – SUMMER SEMESTER

Dept.	No.		Hrs.	Grade
INT	101	Internship ¹	1-4	_____

Students planning to transfer and pursue a baccalaureate degree should, when given a choice, enroll in the general education course that is IAI GECC approved and articulated with participating Illinois institutions.

SECOND YEAR – FALL SEMESTER

Dept.	No.		Hrs.	Grade
ELT	151	Applied Solid State Circuits	3	_____
ELT	214	A+ Preparation IT Technician	3	_____
IDM	210	Hydraulics & Pneumatics	3	_____
PHY	155	College Physics I	5 14	_____

Career Opportunities: Industrial Maintenance Engineering technicians solve technical problems in research and development, manufacturing, sales, construction, inspection, and maintenance. In manufacturing, the Industrial Maintenance Engineering technician many assist engineers and scientists, especially in research and development. Duties many include quality control, inspecting products and processes, conducting tests, repairing and maintaining of industrial equipment or collecting data.

SECOND YEAR – SPRING SEMESTER

Dept.	No.		Hrs.	Grade
ELT	218	Introduction to Network Technologies	3	_____
ELT	220	Linear Integrated Circuits	3	_____
ELT	224	Power Distribution and Motors	3	_____
IDM	120	Safety & Environmental Management	2	_____
MAC	180	Blue Print Reading	3	_____
COM	115	Speech OR COM 116 Interpersonal Communication	3 17	_____

John A. Logan College reserves the right to modify this curriculum guide as needed. Please verify with your academic advisor the accuracy and time lines of this document.