



**INDUSTRIAL MAINTENANCE ENGINEERING  
Degree Program**

Career Curriculum 00ELT3012  
Associate in Applied Science  
Minimum Hrs. 69  
Major Code: 1.2 150612C

**FIRST YEAR – FALL SEMESTER**

Dept. No.		Hrs.	Gr.
ELT 102	Basic Electricity and Wiring	4	—
ELT 111	Digital Electronics	6	—
MAT 113	Introduction to Contemporary Mathematics OR MAT 106 Technical Mathematics OR MAT 111 Pre-Calculus OR MAT 120 Elementary Statistics	3-5	—
MFT 103	Industrial Robots & PLCs	3	—
		<u>16-18</u>	

**FIRST YEAR – SPRING SEMESTER**

Dept. No.		Hrs.	Gr.
ELT 103	Applied DC/AC Circuits	4	—
ELT 150	Applied Solid State Electronics	4	—
MFT 201	PLC Manufacturing Systems	3	—
PHY 155	College Physics I	5	—
PSY 132	General Psychology	3	—
		<u>19</u>	

**OPTIONAL**

**FIRST YEAR – SUMMER SEMESTER**

Dept. No.		Hrs.	Gr.
ATI 200	Applied Technologies Internship	1-3	—

<sup>1</sup> Requires a grade of "C" or higher.

<sup>2</sup> Electives:

- CPS 176 Introduction to Computer Programming 4
- DRT 185 Computer Graphics 1 2
- ELT 200 Introduction to Microprocessors 5
- ELT 236 Introduction to Fiber Optics 3

**SECOND YEAR – FALL SEMESTER**

Dept. No.		Hrs.	Gr.
CIS 207	Computer Applications	3	—
ELT 151	Applied Solid State Circuits	4	—
ENG 101	English Composition I <sup>1</sup> OR ENG 113 Professional Technical Writing <sup>1</sup>	3	—
IDM 210	Hydraulics & Pneumatics	4	—
SPE 115	Speech	3	—
		<u>17</u>	

**SECOND YEAR – SPRING SEMESTER**

Dept. No.		Hrs.	Gr.
ELT 220	Linear Integrated Circuits	5	—
ELT 224	Power Distribution and Motors	3	—
IDM 120	Safety & Environmental Management	2	—
MAC 180	Blue Print Reading Technical Electives <sup>2</sup>	3	—
		<u>18-19</u>	

Fall only courses:

Spring only courses:

- |         |         |
|---------|---------|
| ELT 102 | ELT 103 |
| ELT 111 | ELT 150 |
| ELT 151 | ELT 224 |
| IDM 210 | IDM 120 |
| MFT 103 | MFT 201 |

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).

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.

*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.*

**Effective Date: Fall 2010**

**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.