Associate in Applied Science
Toward a Degree in
Mechatronics Engineering Technology

JALC
www.jalc.edu

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	Precalculus	5	_____
MFT	103	Industrial Robots & PLCs	3	_____
			16	

FIRST YEAR – SPRING SEMESTER

Dept.	No.		Hrs.	Grade
ELT	103	Applied DC/AC Circuits	4	_____
ELT	112	Digital Electronics II	3	_____
ELT	150	Applied Solid State Electronics	3	_____
MFT	201	PLC Manufacturing Systems	3	_____
MAT	131	Calculus I	5	_____
			18	

SECOND YEAR – FALL SEMESTER

Dept.	No.		Hrs.	Grade
ELT	151	Applied Solid State Circuits	3	_____
ELT	214	Fundamentals of Computing Hardware	3	_____
IDM	210	Hydraulics & Pneumatics	3	_____
PHY	155	College Physics I	5	_____
ENG	101	English Composition 1[2] OR ENG 113	3	_____
		Professional Technical Writing[2]	17	

SECOND YEAR – SPRING SEMESTER

Dept.	No.		Hrs.	Grade
COM	115	Speech OR COM 116 Interpersonal Communication	3	_____
EGR	101	Engineering Graphics	3	_____
ELT	104	Introduction to VFDs	2	_____
ELT	210	Supporting Computer Operating Systems	3	_____
ELT	218	Introduction to Network Technologies	3	_____
ELT	224	Power Distribution and Motors	3	_____
			17	

NOTES AND INFORMATION

[2] Requires a grade of "C" or higher.

Fall only courses:	Spring only courses:	
ELT 111	ELT 103	ELT 218
ELT 151	ELT 104	ELT 224
ELT 214	ELT 112	MFT 201
IDM 210	ELT 150	
MFT 103	ELT 210	

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 may assist engineers and scientists, especially in research and development. Duties many include quality control, inspecting products and processes, conducting tests, repairing, and maintaining industrial equipment or collecting data.

JALC ELT Programs are education members of:

◆IEEE
Institute of Electrical and Electronics Engineers
445 Hoes Lane
Piscataway, NJ 08854

acm Association for Computing Machinery
Association for Computing Machinery
1601 Broadway, 10th Floor
New York, NY 10019-7434

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