



MANUFACTURING TECHNOLOGY
Computer Information Systems Concentration
Degree Program

Career Curriculum
 Associate in Applied Science
 Minimum Hrs. 70
 Major Code: 1.2 150411C

FIRST YEAR – FALL SEMESTER

Dept. No.	Hrs.	Gr.
CIS 101 Introduction to Computers	3	___
CIS 102 Programming I	3	___
DRT 185 Computer Graphics I	2	___
IND 121 Manufacturing Processes I	2	___
MAC 180 Blueprint Reading	3	___
MAT 106 Technical Math OR	4	___
MAT 107 Technical Math with Applications	17	___

SECOND YEAR – FALL SEMESTER

Dept. No.	Hrs.	Gr.
CIS 103 Network Administration	3	___
CIS 230 Operating Systems	3	___
ELT 102 Industrial Electricity	4	___
ENG 113 Professional Technical Writing ¹ OR ENG 101 English Composition I ¹	3	___
MAC 159 CAM Operations	2	___
MFT 103 Industrial Robots and PLCs	3	___
	18	___

FIRST YEAR – SPRING SEMESTER

Dept. No.	Hrs.	Gr.
CIS 104 Spreadsheet Design	3	___
CIS 120 Database Management	3	___
MAC 154 Introduction to CNC	2	___
MFT 101 Production Technology	3	___
PSC 131 American Government OR HIS 201 United States History I OR HIS 202 United States History II	3	___
PSY 132 General Psychology OR PSY 128 Human Relations	2-3 16-17	___

SECOND YEAR – SPRING SEMESTER

Dept. No.	Hrs.	Gr.
CIS 220 Advanced Spreadsheet Design	3	___
CIS 225 Advanced Database Management	3	___
IND 122 CAD/CAM Operations	2	___
MFT 110 Statistical Process Control	2	___
MFT 201 PLC Manufacturing Systems	3	___
PHY 121 Technical Physics	3	___
SPE 115 Speech	3	___
	19	___

Optional

- ATI 200 Applied Technologies Internship 1-3
- IDM 210 Hydraulics and Pneumatics 4

¹ Requires a grade of "C" or higher.

*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: Spring, 2006

Additional Information:

Manufacturing Technology is the study of all of the technologies used to operate a manufacturing business and to increase overall efficiency and productivity in manufacturing. The concern is for how the product is manufactured, distributed, documented, and supported. The following are included in the study of Manufacturing Technology: industrial robots, CAD, CAM, CAD-CAM, PLCs, materials handling, storage and retrieval, payroll, invoicing, receiving, bid specs, production scheduling, record keeping, order entry, and inventory control.

Both two-year associate degree and certificate programs are offered. The degree programs are designed to prepare men and women for a variety of positions in manufacturing. The student will be exposed to the total manufacturing environment, including computer-aided design (CAD), computer-aided manufacturing (CAM), and manufacturing resource planning (MRP). Students will be exposed to a broad knowledge of the basic aspects of manufacturing including these: CAD/CAM, industrial electricity, industrial robots, PLCs, material handling systems, storage and retrieval systems, quality control, production control, manufacturing control, and computer machine tool set-up and operation. Students will design and manufacture a product on an integrated CIM cell. The graduate of this program will be qualified (depending on his or her concentration) for an entry level position as a CAD operator or draftsman, robot programmer, shop floor manager, computer-aided machine tool operator, CAD/CAM operator, electronics technician, or CNC operator/programmer.