

Northwest Louisiana Technical College

Industrial Manufacturing Technology

About the Program: The purpose of this program is to provide specialized classroom instruction and practical shop experience to prepare students for employment in a variety of jobs in the industrial manufacturing field. This program consists of a core set of courses and four concentration areas from which the student can choose to make up the diploma.

Degrees/Certificates

Technical Diploma (TD)

Certificate of Technical Studies (CTS)

CIP 15.0613

Optional prep course is CPTR 1002 (Computer Literacy & Applications)

CURRICULUM

Course No.	Course Title	Lecture	Lab	Total Credit Hrs.	Total Clock Hrs.
CORE COURSES:					
ORNT 1000	Freshman Seminar	1	0	1	15
IMFG 1100	Introduction to Manufacturing	3	0	3	45
IMFG 1120	Tools and Equipment Used in Manufacturing	1	3	4	135
IMFG 1200	Automation	1	3	4	120
IMFG 1300	Introduction to Fabrication, Process Technology, & Machining	1	3	4	135
	CTS – Certification for Manufacturing (C4M)			16	450
AUTOMATION AND CONTROLS CONCENTRATION: (Core + the following)					
IMFG 1140	Hydraulics Applications	0	3	3	90
IMFG 1130	Pneumatics Applications	0	2	2	90
IMFG 1215	Basic Electronics	2	2	4	90
IMFG 1220	Digital Electronics	1	2	3	105
	CTS- INDUSTRIAL ELECTRONICS TECHNICIAN			28	825
IMFG 1230	Introduction to Programming	1	2	3	105
IMFG 1235	Motor Controls	0	3	3	105
IMFG 1250	Advanced PLC Applications	0	3	3	105
	Elective or Co-op	0	3	3	90
	Elective or Co-op	0	3	3	90
JOBS 2450	Job Seeking Skills	2	0	2	30
	TD – Industrial Manufacturing Technology Automation and Controls Concentration			45	1350
MILLWRIGHT CONCENTRATION: (Core + the following)					
IMFG 1320	Millwright I	3	0	3	45
IMFG 1321	Millwright I Lab	0	2	2	90
IMFG 1420	Millwright II	2	0	2	60
IMFG 1421	Millwright II Lab	0	3	3	105
IMFG 1130	Pneumatics Applications	0	2	2	90

	CTS – MILLWRIGHT APPRENTICE			28	840
IMFG 1325	Pipefitting	0	2	2	60
IMFG 1140	Hydraulics Applications	0	3	3	90
IMFG 1210	Material Handling	1	1	2	60
IMFG 1315	Welding	0	2	2	90
	Elective or Co-op	0	3	3	90
	Elective or Co-op	0	3	3	90
JOBS 2450	Job Seeking Skills	2	0	2	30
	TD – Industrial Manufacturing Technology Millwright Concentration			45	1350
MACHINE TOOL TECHNOLOGY CONCENTRATION: (Core + the following)					
IMFG 1110	Shop Mathematics	2	1	3	75
IMFG 1310	Machine Shop I	3	3	6	150
IMFG 1340	Basic Lathe	0	3	3	135
IMFG 1440	Basic Mill	0	3	3	135
	CTS-CNC OPERATOR			31	945
IMFG 1410	Machine Shop II	3	3	6	150
IMFG 2710	CNC	1	2	3	135
	Elective or Co-op	0	3	3	90
JOBS 2450	Job Seeking Skills	2	0	2	30
	TD – Industrial Manufacturing Technology Machine Tool Technology Concentration			45	1350
INDUSTRIAL INSTRUMENTATION & ELECTRICAL CONCENTRATION: (Core + the following)					
INST 1110	Introduction to Industrial Instrumentation	1	2	3	75
IIET 1433	Wiring/Electrical Blueprint Interpretation	2	1	3	90
IIET 1214	Basic Electronics	1	2	3	90
ELMT 2520	National Electrical Code	0	2	2	90
	CTS – Instrumentation/Electrical Technician			27	795
IIET 2123	Understanding Programmable Controllers	1	2	3	90
IMFG 1235	Motor Controls	0	3	3	105
INST 1330	Pressure and Level Measurement	1	3	4	150
IIET 1413	Flow and Final Control	2	1	3	90
IIET 2733	Introduction to Temperature & Analytical Processes	2	1	3	90
JOBS 2450	Job Seeking Skills	2	0	2	30
	TD – Industrial Manufacturing Technology Industrial Instrumentation & Electrical Technician Concentration			45	1350