



MANUFACTURING TECHNOLOGY CAREER PATHWAY MAP

✓	RECOMMENDED COURSE SEQUENCE	General Ed. Area shown on page 2	SEMESTERS OFFERED	MY PLAN (Semester and Year)	CREDIT HOURS
☐	1. MCHN 1300 Beginning Machine Shop		F		3
☐	2. OSH 1320 Industrial Safety		F, SP		3
☐	3. DFTG 1325 Blueprint Reading and Sketching		F, SP		3
☐	4. ELPT 1311 Basic Electrical Theory		F		3
☐	5. ENGL 1301 Composition I		F,Sp,Su		3
					15 hours
☐	6. MCHN 1343 Machine Shop Mathematics		Sp		3
☐	7. MCHN 1320 Precision Tools and Measurement		Sp		3
☐	8. Group 1 Elective		Sp		3
☐	9. HYDR 1345 Hydraulics and Pneumatics		Sp		3
☐	10. SPCH 1315 Public Speaking*	GE AC %	F, Sp, Su		3
					30 hours
☐	11. Electives - 2 from Group 2		F		6
☐	12. PHYS 1405 Elementary Physics I**	GE NS&M @	F		4
☐	13. SOCI 1301 Introduction to Psychology*	GE S&B \$	F, Sp, Su		3
☐	14. PHIL 1301 Introduction to Philosophy*	GE H&FA !	F, Sp, Su		3
					46 Hours
☐	15. INMT 2488 Internship		Sp		4
☐	16. Electives – 2 Additional from Group 1 or 2		Sp		6
☐	17. MFGT 1404 Automated Manufacturing		Sp		4
	*** [ASSOCIATE OF APPLIED SCIENCE DEGREE EARNED] ***				60 hours
	NOTE: Check with the Office of Financial Aid as aid may not be available beyond degree completion and/or 60 hours.				
	Group 1 Electives -MCHN 1338- Basic Machine Shop I, INTC 1353-Analog Controls II, PFPB-1308- Basic Pipefitting Skills**				
	Group 2 Electives -MCHN 2303- (CNC) Machine Controls, MCHN 2334- Operation of CNC Machining Centers, INMT 2303- Pumps, Compressors & Mechanical Drives, ELPT 2319- Programmable Logic Controllers I, INCR 1302- Physics of Instrumentation **				

READ ALL NOTES CAREFULLY:

- a) Courses in **bold** have a pre-requisite (previous course required). [See Catalog](#)
- b) Courses in *italics* can be taken in any order.
- c) ENGL 1301 and the first MATH class may require a co-requisite and/or developmental course depending on TSI Scores.

- d) Refer to [KC Catalog](#) for Field of Study and Degree Requirements.

- * Refer to list of General Ed. Courses and KC Catalog for all possible options.

- ** [Required for degree plan]

CAREER OPPORTUNITIES

The program prepares students for careers in Manufacturing with a focus on mechanical, electrical, machining and automation.

ADVANCED DEGREES/CREDENTIAL OPPORTUNITIES:

The University of Texas at Tyler, Bachelor of Science (BS) in Industrial Technology

LINKS TO COLLEGES AND PROFESSIONAL ORGANIZATIONS:

<https://www.uttyler.edu/academics/programs/industrial-technology-bs.php>

CONTACT INFORMATION (Click link for [KC Digital Map](#))

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Manufacturing Certificate – Machining

✓	RECOMMENDED COURSE SEQUENCE	SEMESTERS OFFERED	MY PLAN (Semester and Year)	CREDIT HOURS
☐	1. OSH 1320 Industrial Safety	F, SP		3
☐	2. DFTG 1325 Blueprint Reading and Sketching	F, SP		3
☐	3. MCHN 1343 Machine Shop Mathematics	F		3
☐	4. MCHN 1320 Precision Tools and Measurement	F		3
				<i>12 hours</i>
☐	5. MCHN 1338 Basic Machine Shop I	Sp		3
☐	6. MCHN 2334 Operation of CNC Machining Centers	Sp		3
				<i>6 hours</i>
	*** MANUFACTURING CERTIFICATE – MACHINING EARNED *** NOTE: Check with the Office of Financial Aid to verify assistance with this certificate.			<i>18 hours</i>

Manufacturing Certificate – Mechanical / Electrical

✓	RECOMMENDED COURSE SEQUENCE	SEMESTERS OFFERED	MY PLAN (Semester and Year)	CREDIT HOURS
☐	1. OSH 1320 Industrial Safety	F		3
☐	2. DFTG 1325 Blueprint Reading and Sketching	F		3
☐	3. ELPT 1311 Basic Electrical Theory	F		3
☐	4. Certificate-Approved Elective *	F		3
				<i>12 hours</i>
☐	5. Certificate-Approved Elective (not previously taken) *	Sp		3
☐	6. Certificate-Approved Elective (not previously taken) *	Sp		3
				<i>6 hours</i>
	*** MANUFACTURING CERTIFICATE – MECHANICAL / ELECTRICAL EARNED *** NOTE: Check with the Office of Financial Aid to verify assistance with this certificate.			<i>18 hours</i>

* Certificate-Approved Electives:

- INTC 1353-Analog Controls II
- PFPB 1308-Basic Pipefitting Skills
- HYDR 1345-Hydraulics and Pneumatics
- INMT 2303-Pumps, Compressors & Mechanical Drives
- ELPT 2319-Programmable Logic Controllers I
- INCR 1302-Physics of Instrumentation

Kilgore College Composite List of General Education Courses

I Humanities and Fine Arts

[ARTS 1301 \(T\) - Art Appreciation](#)
[ARTS 1303 \(T\) - Art History I](#)
[ARTS 1304 \(T\) - Art History II](#)
[DANC 2303 \(T\) - Dance Appreciation](#)
[DRAM 1310 \(T\) - Theatre Appreciation](#)
DRAM 2361 - History of the Theatre I
DRAM 2362 - History of the Theatre II
[DRAM 2366 \(T\) - Film Appreciation](#)
[ENGL 1302 \(T\) - Composition II](#)
[ENGL 2322 \(T\) - British Literature I](#)
[ENGL 2323 \(T\) - British Literature II](#)
[ENGL 2326 \(T\) - American Literature](#)
[ENGL 2332 \(T\) - World Literature I](#)
[ENGL 2333 \(T\) - World Literature II](#)
[HIST 1301 \(T\) - United States History I](#)
[HIST 1302 \(T\) - United States History II](#)
[HIST 2311 \(T\) - Western Civilization I](#)
[HIST 2312 \(T\) - Western Civilization II](#)
[HIST 2321 \(T\) - World Civilizations I](#)
[HIST 2322 \(T\) - World Civilizations II](#)
[MUSI 1306 \(T\) - Music Appreciation](#)
[PHIL 1301 \(T\) - Introduction to Philosophy](#)
[PHIL 2306 \(T\) - Introduction to Ethics](#)

\$ Social and Behavioral Sciences

[CRIJ 1301 \(T\) - Introduction to Criminal Justice](#)
[ECON 2301 \(T\) - Principles of Macroeconomics](#)
[ECON 2302 \(T\) - Principles of Microeconomics](#)
[GEOG 1303 \(T\) - World Regional Geography](#)
[GOVT 2305 \(T\) - Federal Government](#)
[GOVT 2306 \(T\) - Texas Government](#)
[HIST 1301 \(T\) - United States History I](#)
[HIST 1302 \(T\) - United States History II](#)
[PSYC 2301 \(T\) - General Psychology](#)
[PSYC 2314 \(T\) - Lifespan Growth and Development](#)
[SOCI 1301 \(T\) - Introductory Sociology](#)
[SOCI 1306 \(T\) - Social Problems](#)
[SOCI 2301 \(T\) - Marriage and the Family](#)
[TECA 1354 \(T\) - Child Growth and Development](#)

@ Natural Sciences and Mathematics

[BIOL 1406 \(T\) - Biology for Science Majors I](#)
[BIOL 1407 \(T\) - Biology for Science Majors II](#)
[BIOL 1408 \(T\) - Biology for Non-Science Majors I](#)
[BIOL 1409 \(T\) - Biology for Non-Science Majors II](#)
[BIOL 2401 \(T\) - Human Anatomy and Physiology I](#)
[BIOL 2402 \(T\) - Human Anatomy and Physiology II](#)
[BIOL 2406 \(T\) - Environmental Biology](#)
[CHEM 1405 \(T\) - Introductory Chemistry I \(lecture + lab\)](#)
[CHEM 1406 \(T\) - Introductory Chemistry I \(lecture + lab, allied health emphasis\)](#)
[CHEM 1411 \(T\) - General Chemistry I \(lecture + lab\)](#)
[CHEM 1412 \(T\) - General Chemistry II \(lecture + lab\)](#)
[ENVR 1401 \(T\) - Environmental Science I](#)
[GEOL 1301 \(T\) - Earth Sciences for Non-Science Majors I \(lecture\)](#)
[GEOL 1403 \(T\) - Physical Geology \(lecture + lab\)](#)
[GEOL 1404 \(T\) - Historical Geology \(lecture + lab\)](#)
[GEOL 1405 \(T\) - Environmental Science \(lecture + lab\)](#)
[MATH 1314 \(T\) - College Algebra](#)
MATH 1316 - Plane Trigonometry
[MATH 1324 \(T\) - Mathematics for Business and Social Sciences](#)
[MATH 1325 \(T\) - Calculus for Business and Social Sciences](#)
[MATH 1332 \(T\) - Contemporary Mathematics](#)
[MATH 1342 \(T\) - Elementary Statistical Methods](#)
[MATH 1350 \(T\) - Mathematics for Teachers I](#)
[MATH 1351 \(T\) - Mathematics for Teachers II](#)
[MATH 2412 \(T\) - Pre-Calculus Math](#)
[MATH 2413 \(T\) - Calculus I](#)
[MATH 2414 \(T\) - Calculus II](#)
[MATH 2415 \(T\) - Calculus III](#)
[PHYS 1303 \(T\) - Stars and Galaxies \(lecture\)](#)
[PHYS 1401 \(T\) - College Physics I](#)
[PHYS 1402 \(T\) - College Physics II](#)
PHYS 1403 - Stars and Galaxies
[PHYS 1404 \(T\) - Solar System](#)
[PHYS 1405 \(T\) - Elementary Physics I](#)
[PHYS 2425 \(T\) - University Physics I](#)
[PHYS 2426 \(T\) - University Physics II](#)

% Additional Course

An additional course from the lists above or [SPCH 1315](#) or [SPCH 1318](#) or [EDUC 1300](#) or [ENGL 2311](#) or [BCIS 1305](#)