

Gateway **S.M.A.R.T.** Plan

Associate of Applied Science: Manufacturing Engineering Technology &

Gateway2NKU Pathway for Manufacturing Engineering Technology Bachelor's Program

The GTW-2-NKU Pathway for Manufacturing Engineering Technology Bachelor's Program is specific in terms of technical electives and general education courses. It also includes the needed courses to be "Gen. Ed. Certified" for the Bachelor program. Note: There may be course changes with future curriculum revisions that may affect a change in course requirements listed on this sheet.

Pre-requisite Courses

Introduction to Business, Circuits I, College Algebra, Trigonometry and Machine Tools - A are pre-requisites

Semester 1 Courses	Cr	Grade	Offered
ELT 110 Circuits I (pre-req for MFG 135) **	5		Fall/Spring
BAS 160 Introduction to Business (pre-req for BAS 289) **	3		All
General Education course-MAT 150 College Algebra (pre-req for STA 220, MAT 155 & ELT 201) **	3		All
General Education course - ENG 101 Writing I	3		All
Computer/Digital Literacy Course (CIT 105/OST 105) or Competency demonstrated by exam	0-3		All
Semester 2 Courses	Cr	Grade	Offered
MFG 135 Fundamentals of Mechatronics (Fall-days / Spring-evenings) **	6		Fall/Spring
BAS 289 Operations Management (offered online only)	3		Online
General Education course - MAT 155 Trigonometry (pre-req for ELT 201) **	3		Fall/Spring
General Education course - Natural Science (recommend PHY 201/202 College Physics I)	3		All
Semester 3 Courses	Cr	Grade	Offered
ELT 201 Statics and Strength of Materials (Fall-evenings / Spring-days) **	4		Fall/Spring
Technical Elective course-CMM 110 Fundamentals of Machine Tools-A (recommend before CMM 130)**	3		Fall/Spring
Technical Elective course - WLD 152 Basic Welding B	5		Fall/Spring
General Education course - Heritage or Humanities	3		All
General Education course - STA 220 Statistics (recommend before QMS 101) **	3		Fall/Spring
Semester 4 Courses	Cr	Grade	Offered
MFG 175 Lean Manufacturing	2		Online
IET 1304 Problem Solving	1		Online
QMS 101 Introduction to Quality Systems (offered online only)	3		Online
Technical Elective course - CMM 132 CAD/CAM	3		Fall/Spring
Technical Elective course - CMM 130 Manual Programming	3		Fall/Spring
General Education course - Social/Behavioral Science (recommend SOC 101)	3		All
General Education course - COM 181 Basic Public Speaking (or COM 252)	3		All
Semester 5 Courses	Cr	Grade	Offered
General Education course - ENG 102 Writing II	3		All
General Education course - Natural Science - CHE 170/175 General College Chemistry	5		All
General Education course - Social/Behavioral Science - Cultural Pluralism	3		All
General Education course - Arts & Humanities (Heritage / Culture & Creativity)	3		All
Optional Courses	Cr	Grade	Offered
FPX 100/101 Fluid Power & Fluid Power Lab	5		Fall/Spring
CIT 120 Computational Thinking	3		Fall/Spring
General Education course - MAT 175 Calculus I	5		Fall/Spring

Notes

** Critical path - missing these courses during the semester indicated may delay your program completion.

Progression in the Manufacturing Engineering Technology program is contingent upon achievement of a grade of C or greater in each technical course (including those selected as technical electives) and maintenance of a 2.0 cumulative GPA or above (on a 4.0 scale).

Updated 6/2/17

