## SAMPLE 4-YEAR PLAN: MECHANICAL AND MANUFACTURING ENGINEERING B.S.

## **Northern Kentucky University**

This is **one way** a student can complete this program in four years if the student requires no remedial courses. MAJOR: Mechanical and Manufacturing Engineering Technology

FIRST YEAR	Fall Semester		Spring Semester	
	EGT 116 Introduction to Industrial Materials and Processes	3	EGT 265 Manufacturing Processes and Metrology	3
	EGT 161 DC Circuit Analysis	3	Drafting and Design	3
	MAT 119 Pre-Calculus Mathematics	3	CMST 101 Public Speaking	3
	ENG 101 College Writing <sup>1</sup>	3	CHE 120 General Chemistry I and CHE 120L General Chemistry I Laboratory	4
	Gen Ed: Self and Society	3		3
	TÓTAL	15	TOTAL	16
SUMMER	EGT 211 Quality Control	3	EGT 318 Introduction to Nanotechnology	3
SECOND YEAR	Fall Semester		Spring Semester	
	PHY 211 General Physics with Laboratory I	5	MAT 227 Calculus B	3
	MAT 128 Calculus A	3	EGT 320 Robotic Systems and Material Handling	3
	INF 120 Elementary Programming	3		3
	EGT 261 Engineering Materials	3		3
	EGT elective <sup>3,4</sup>	3		3
	TOTAL	17	TOTAL	15
THIRD YEAR	Fall Semester		Spring Semester	
	EGT 310 Project Management and Problem Solving	3		5
	EGT 300 Statistics and Strength of Materials	3	EGT 340 Applied Dynamics	3
	EGT 365 CNC and Manufacturing Process Planning	3	EGT 423 Planning and Design of Industrial Facilities <sup>5</sup>	3
	EGT elective or Gen Ed: Self and Society <sup>3</sup>	3	EGT elective <sup>3</sup>	3
	EGT 301 Cooperative Education in Engineering Technology	3	PHI 200 Ethics	3
	TOTAL	15	TOTAL	17
FOURTH YEAR	Fall Semester		Spring Semester	
	EGT 361 Fluid Power	3	EGT 465 Automated Manufacturing Systems <sup>5</sup>	3
	EGT 380 Machine Design	3	EGT 417 Senior Design in Technology	3

Technology		Heat Transfer	
Gen Ed: Non-Culture and	3	Gen Ed: Culture and Creativity	3
Creativity			
TOTAL	12	TOTAL	12
		GRAND TOTAL OF CREDITS	125

<sup>1</sup> Qualified students (ENG ACT ≥26) should take ENG 151H instead of ENG 101 and EGT 291W.

<sup>2</sup> It is not possible in four years to fulfill all MMET degree requirements without taking summer school or overloads or both, due to accreditation requirements. EGT 211 and EGT 318 are offered *only* in the summer.

<sup>3</sup> Students must have one of the following concentrations (Design or Quality) plus two optional courses, in consultation with their advisor: EGT 412 and EGT 462; or EGT 321 and EGT 341. Two of the following: EGT 260, EGT 280, EGT 386, EGT 405, and EGT 411.

<sup>4</sup> EGT 321 and EGT 341 are offered in fall and spring 2014/15 and alternate years.

<sup>5</sup> EGT 423 is offered in spring of odd-numbered years. EGT 465 is offered in spring of even-numbered years. Shaded credits are part of the general education requirements.

Note: currently, due to increased enrollments, all required courses for the program are offered every year.