Program Name: Mechanical Engineering Technology (MET)	OBJECTIVES: Students will be able to do the following:	EGT 101 Fundamentals of Engineering Technology	EGT 136 Statics	EGT 231 Mechanics of Materials	EGT 234 Machine Design	EGT 235 Fluid Power	EGT 150 Introduction to CNC Programing
Program Outcome #1	**Apply Engineering tools and principles to solve modern engineering problems.**	*Apply mathematical models to identify and quantify experimental data used in mechanical systems.*	*Apply the concepts of structure analysis to design mechanical components.*	*Apply the concepts of stress analysis, theories of failure and material science to analyze, design and/or select commonly used mechanical components.*	*Apply the concepts of stress analysis, theories of failure and material science to analyze, design and/or select commonly used machine components.*	*Apply mathematical concepts.*	*Utilize the Haas controller to verify trigonometry calculations.*
Program Outcome #2	Maintain and troubleshoot basic mechanical systems.			*Utilize techniques, skills and modern engineering tools, such as MTS testing machine, necessary for modern engineering practice.*	*Utilize techniques, skills and modern engineering tools, such as CAD/CAE software, necessary for modern engineering practice.*	*Transfer theoretical knowledge into practical applications.*	*Understand the relationship between speed and feed calculations for cutting tools.*
Program Outcome #3	Effectively work in teams and communicate proper engineering practices as it relates to mechanical systems and designs.	*Develop effective communication (in written and oral form) skills utilized in engineering practices.*	*Effectively communicate engineering practices as it relates to structural analysis.*	*Effectively communicate engineering practices as it relates to structural analysis.*	*Effectively communicate engineering practices as it relates to machine design projects.*	*Use effective communication skills.*	

Program Outcome							
Program Outcome #4	Apply for internships, entry level positions at engineering firms or manufacturing facilities.						
Program Outcome #5	Design, build and create mechanical parts according to current industry standards.		*Demonstrate the application of mechanical engineering design theory to identify and quantify machine elements in the design of commonly used mechanical systems.*	*Demonstrate the application of mechanical engineering design theory to identify and quantify machine elements in the design of commonly used mechanical systems.*		*Demonstrate the ability to think critically.*	*Create basic CNC programs, using G and M codes.*
Program Outcome #6	UTILIZE software to develop, run and troubleshoot various technical tasks.	*Utilize software programming skills and modern engineering software, such as Microsoft Excel, and MATLAB in modern engineering practices.*		*UTILIZE techniques, skills and modern engineering tools, such as MTS testing machine, necessary for modern engineering practice.*	*Utilize techniques, skills and modern engineering tools, such as CAD/CAE software, necessary for modern engineering practice.*		*Edit and modify existing CNC programs.*
Program Outcome #7	Transfer to an applied Engineering Technology / Manufacturing baccalaureate degree major.						

Curriculum Map Template