

Course Abbreviation	Program Student Learning Outcomes	The ability to identify, formulate and solve manufacturing process problems. Once identified, convert knowledge into actual process capability. Understanding the impact of multiple operational groups on Advanced Manufacturing process.	The ability to create and conduct experiments, analyze and interpret data as well as understand process flow, global quality expectations and other basic manufacturing techniques	The ability and skills required to adapt and adjust to rapidly emerging technologies	The ability to work independently and contribute the project's goal in team based activities
	Course Level Learning Competencies				
ETS113	Identifying the major contributors to operational waste	I	I/R		I
	Learning major operational roles and impact including quality	I	I	I	
	Complete a project which reflects a real-world application.	I/R	I		R
	Successfully work within teams to create problem solutions.	R	R		R
EST140	Introduction to basic criteria necessary for minimal safety standards	I	I		
	Ergonomics, work station creation, physical characteristics of work places	I	I	I	I
	Chemical identification and management				
	Equipment use - Lockout / Tagout, etc.	I			R
	Completion and Understanding of criteria necessary to satisfy OSHA standards	R	R	R	
Achievement of OSHA 30 Certificate	R	R	R		
EST141	Understanding the role of Quality in Adv. Mfg.	I	I	I	I
	Learn to use the components of the quality tool belt	I	I	I	I
	Selection of operational system based on business analysis / need	R	R	R	I
	Understand variety of Quality operational approaches; As, ISO, GMP, FDA,	R	E	R	