INDUSTRIAL ENGINEERING TECHNOLOGY (IET)

IET 101: Manufacturing Materials, Processes, and Laboratory
3 Credits
Mechanical properties of materials; primary processing methods used in manufacturing; ferrous and nonferrous metals; important plastic plus ceramic materials; dimensional verification and measurements; mechanical properties evaluation; laboratory methods; statistical interpretation of data.

IET 109: Inspection and Quality Control
3 Credits
Inspection methods and procedures and their application to control and acceptance sampling based on statistical methods.
**Prerequisite:** MATH 082

IET 215: Production Design
2 Credits
The study of manufacturing processes for the purpose of part creation and/or part feature creation using both current and advanced technologies.
**Prerequisite:** IET 101 or MET 105

IET 216: Production Design Laboratory
2 Credits
Laboratory methods in production design including conventional and advanced manufacturing processes, computer applications, and automation/robotics.
**Prerequisite:** or concurrent: IET 215

IET 297: Special Topics
1-9 Credits/Maximum of 9
Formal courses given infrequently to explore, in depth, a comparatively narrow subject which may be topical or of special interest.

IET 308: Statistical Quality Control
3 Credits
Fundamentals of probability and statistics, introduction to quality control fundamentals, control charts, acceptance sampling.

IET 311: Elements of Metallurgy
3 Credits
Introduction to metallurgical concepts, metallurgical testing, phase diagram studies, heat treating concepts, ferrous and nonferrous systems.
**Prerequisite:** ET 322

IET 321: Manufacturing Processes
3 Credits
Manufacturing processes for producing metal, plastic, and ceramic items. Primary emphasis is placed on machine tool processes.

IET 333: Engineering Economics for Technologists
2 Credits
Fundamentals of engineering economics; equivalence and rate of return analysis; replacement models; depreciation and tax considerations; and economic decision making for technologists.
**Prerequisite:** MATH 022 and MATH 026 or MATH 040 or MATH 041

IET 402: Production Management
3 Credits
Principles and practices of managing the manufacturing operations of companies. Topics include management structure, physical plant, quality control, work sampling.
**Prerequisite:** IET 321