ENGR 8056 ANALYSIS OF ENGINEERING MANAGEMENT (3 credits)
General concepts and principles of engineering management applied to cases. (Cross-listed ENGR 4050).
Prerequisite(s)/Corequisite(s): CONE 2060.

ENGR 8076 PROJECT MANAGEMENT (3 credits)
Project development, role of the project manager, project selection, project planning, budgeting and cost estimation, project scheduling, and project termination. (Cross-listed with ENGR 4070)

ENGR 8100 ERGONOMICS (3 credits)
Introduction to the principles of ergonomics. Information processing, human output and control, workplace design and environmental conditions. Not open to students with credit in ISMG 3150.

ENGR 8156 COGNITIVE ERGONOMICS (3 credits)
Human factors affecting work. Focus on humans: energy requirements, lighting, noise, monotony and fatigue, learning, simulations versus sequential tasks. Experimental evaluation of concepts. (Cross-listed with ENGR 4150)

ENGR 8166 PHYSICAL ERGONOMICS (3 credits)
Human performance in work. Human response to various environmental and task-related variables with emphasis on physical and physiological effects. (Cross-listed with ENGR 4160)
Prerequisite(s)/Corequisite(s): ENGR 4300 or permission

ENGR 8176 OCCUPATIONAL SAFETY HYGIENE ENGINEERING (3 credits)
Introduction to occupational hygiene engineering with emphasis on workplace environmental quality. Heat, illumination, noise, and ventilation. (Cross-listed with ENGR 4170)
Prerequisite(s)/Corequisite(s): Senior standing or permission.

ENGR 8230 RELIABILITY ENGINEERING (3 credits)

ENGR 8306 APPLIED STATISTICS AND QUALITY CONTROL (3 credits)
Systematic analysis of processes through the use of statistical analysis, methods, and procedures; statistical process control, sampling, regression, ANOVA, quality control, and design of experiments. Use of software for performing a statistical analysis. (Cross-listed with ENGR 4300).
Prerequisite(s)/Corequisite(s): MENG 3210.

ENGR 8310 STOCHASTIC PROCESSES (3 credits)

ENGR 8406 DISCRETE EVENT SIMULATION MODELING (3 credits)
Development of simulation models of discrete systems. Model development, Monte Carlo techniques, random number generators, and output analysis. (Cross-listed with ENGR 4400)
Prerequisite(s)/Corequisite(s): CONE 2060, MENG 3210 and CIST 1400 or CSCI 1620 or CSCI 2240 or permission

ENGR 8606 PACKAGING ENGINEERING (3 credits)
Investigation of packaging processes, materials, equipment and design. Container design, material handling, storage, packing and environmental regulations, and material selection. (Cross-listed with ENGR 4600)
Prerequisite(s)/Corequisite(s): CONE 2060, MENG 3210, MENG 3730

ENGR 8616 RFID SYSTEMS IN THE SUPPLY CHAIN (3 credits)
Foundations of Radio Frequency Identification Systems (RFID). The fundamentals of how RFID components of tag, transponder, and antennae are utilized to create RFID systems. Best practices for implementation of RFID systems in common supply operations. (Cross-listed with ENGR 4610)