QMM 552: Applied Statistical Process Control and Experimental Design
3 Credits
Concepts and techniques of statistical process control and the design of experiments.
**Prerequisite:** QMM 851

QMM 561: Manufacturing Systems Planning and Control I
3 Credits
Systems, components and configurations, flow of material and information in a manufacturing system.
**Prerequisite:** admission to the QMM program

QMM 562: Manufacturing Systems Planning and Control II
3 Credits
Flow of material and information in a manufacturing system; emphasis on systems integration.
**Prerequisite:** QMM 561

QMM 581: Manufacturing Processes of Materials
3 Credits
Characteristics of materials with respect to their properties and associated choices of processing to create a range of products.
**Prerequisite:** admission to the QMM program

QMM 582: Manufacturing and Supply Chain Strategy
3 Credits
Strategic decision context of manufacturing and its supply chains with linkage to corporate and business strategy.
**Prerequisite:** enrollment in the QMM program

QMM 593: Field Experience in Manufacturing
1-2 Credits/Maximum of 2
Experiential learning through the firsthand study of manufacturing plants and by interacting with manufacturing leaders.
**Prerequisite:** admission to the Quality and Manufacturing Management (QMM) Program

QMM 596: Individual Studies
1-9 Credits/Maximum of 9
Creative projects, including nonthesis research, that are supervised on an individual basis and which fall outside the scope of formal courses.

QMM 597: Special Topics
1-9 Credits/Maximum of 9
Formal courses given on a topical or special interest subject which may be offered infrequently; several different topics may be taught in one year or semester.

QMM 851: Quality Management
3 Credits
Concepts of design, assessment, and improvement of quality systems; customer needs analysis, identification of opportunities for application of measurement techniques.
**Prerequisite:** admission to the QMM program

QMM 871: Design Practice for Manufacturing I
3 Credits
Contemporary concepts in design and design practice with emphasis on engineering, business, and human strategic issues.
**Prerequisite:** or concurrent: QMM 491 or QMM 492

QMM 872: Design Practice for Manufacturing II
3 Credits
Contemporary concepts in design and design practice with emphasis on logistics, risk, design and manufacturing readiness, and production.
**Prerequisite:** QMM 871

QMM 891: Communication and Leadership Skills for Manufacturing Managers
1-3 Credits/Maximum of 3
Applied principles of managerial, visual, and written communication that support the needs of manufacturing leaders.
**Prerequisite:** admission to the QMM Program