ENGINEERING MANAGEMENT
(ENGMT)

ENGMT 501: Engineering Management Science
3 Credits
Mathematical models involving optimization, simulation and forecasting
to provide quantitative solutions to engineering management problems;
scheduling, distribution, inventory control.

ENGMT 510: Economics and Financial Studies for Engineers
3 Credits
Economic feasibility of projects, systems and products. Project budgets,
estimation, return on investment, supply and demand, and earned value
management.

ENGMT 511: Engineering for Energy and the Environment
3 Credits
Engineering analysis of new technologies with environmental
consideration leading to alternative energy sources and sustainable
development.

ENGMT 530: Engineering Law
3 Credits
Overview of the legal system and legal issues applied to engineering:
contracts, bidding, proposals, torts, professional liability, the intellectual
property.

ENGMT 539: Engineering Management Strategy
3 Credits
Project- and discussion-based capstone to the engineering management
program.

Prerequisite: 27 credits in the engineering management program

ENGMT 597: Special Topics
1-9 Credits/Maximum of 9
Formal courses given on a topical or special interest subject which may
be offered infrequently.

ENGMT 841: Application of Statistics in Quality and Continuous Improvement in Engineering
3 Credits/Maximum of 999
Application of quality tools to improve products and processes including
lean processes and six sigma principles. ENGMT 841 is about learning
to apply sophisticated statistical tools for the continuous improvement
of products and processes in the manufacturing and service industries.
Students will learn how to identify defects (nonconformation to
specifications) and provide appropriate solutions that will not only
eliminate defects, but also improve the performance. They will be able
to take samples from the population, apply appropriate statistical tools
and relate the sample characteristics to the population. Students will also
apply various control charts to identify the variations in the process and
be able to separate the common and special cause variations. Students
will be expected to apply the various phases of LEAN and Six Sigma
methodologies to a project that will identify various nonvalue added
activities and improve the product or process performance.

ENGMT 897: Special Topics
1-9 Credits/Maximum of 9
Formal courses given on a topical or special interest subject which may
be offered infrequently.