

## ENGINEERING MANAGEMENT (EMGT)

### Courses

#### **EMGT 1990. Special Topics. 1-18 Credits.**

See Schedule of Course for specific titles.

#### **EMGT 1991. Internship. 1-3 Credits.**

On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

#### **EMGT 1993. Independent Study. 1-18 Credits.**

A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

#### **EMGT 2041. Engineering Economics. 3 Credits.**

Fundamental concepts and applied techniques in the economic aspects of engineering alternatives. Economic dimensions for sustainable practice, including basic financial decision making, methods to evaluate business and engineering assets, analysis of project cash flows, life cycle analysis, and replacement decisions. Prerequisites: MATH 1248; minimum Junior standing. Catamount Core: SU.

#### **EMGT 2990. Special Topics. 1-18 Credits.**

Specialized or experimental course offered as resources permit.

#### **EMGT 2991. Internship. 1-18 Credits.**

On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

#### **EMGT 2993. Independent Study. 1-18 Credits.**

A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion. Prerequisite: Senior standing in Engineering Management.

#### **EMGT 2994. Teaching Assistantship. 1-3 Credits.**

Undergraduate student service as a teaching assistant, usually in an introductory-level course in the discipline, for which credit is awarded. Offered at department discretion.

#### **EMGT 2995. Undergraduate Research. 1-18 Credits.**

Undergraduate student work on individual or small team research projects under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

#### **EMGT 3051. Engineering Project Management. 3 Credits.**

Principles of project management on designing, building/manufacturing engineering facilities, processes, products and structures; metrics for managing quality, schedule, and financial performance of projects; services and product procurement; project financial management; legal and insurance aspects. Prerequisites: Minimum Junior standing.

#### **EMGT 3071. Optimizn for Industr Decisions. 3 Credits.**

Students build optimization models for a wide range of business and engineering decisions. Provides a sound conceptual understanding of mathematical optimization and techniques used for solving real-world problems, especially in engineering design, manufacturing operations and supply chain management. Prerequisites: MATH 2248; MATH 2522 or MATH 2544.

#### **EMGT 3091. Industrial Sys Modeling & Sim. 3 Credits.**

Covers the fundamental concepts and techniques of modeling systems in manufacturing and business processes, including assembly lines, inventory systems, and organizational process flows. Covers fundamentals of queueing theory, system analysis, model construction, and interpretation and analysis of model reports. Prerequisites: MATH 1248 or MATH 1242; STAT 1410, STAT 2430 OR STAT 2510.

#### **EMGT 3990. Special Topics. 1-18 Credits.**

See Schedule of Course for specific titles.

#### **EMGT 3991. Internship. 1-18 Credits.**

On-site supervised work experience combined with a structured academic learning plan directed by a faculty member or a faculty-staff team in which a faculty member is the instructor of record, for which academic credit is awarded. Offered at department discretion.

#### **EMGT 3993. Independent Study. 1-18 Credits.**

A course which is tailored to fit the interests of a specific student, which occurs outside the traditional classroom/laboratory setting under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.

#### **EMGT 3994. Teaching Assistantship. 1-3 Credits.**

Undergraduate student service as a teaching assistant, usually in an introductory-level course in the discipline, for which credit is awarded. Offered at department discretion.

#### **EMGT 3995. Undergraduate Research. 1-18 Credits.**

Undergraduate student work on individual or small team research projects under the supervision of a faculty member, for which credit is awarded. Offered at department discretion.