TCMT - TECHNICAL MANAGEMENT

TCMT 610 Engineering Personal Leadership
Credits 2. 2 Lecture Hours. Development of cognitive, emotional, behavioral capabilities; identification and exploration of Emotional Intelligence (EQ) competencies; focuses on both the art and science of emotional EQ. Prerequisite: Admission to the Master of Engineering Technical Management program.

TCMT 612 Technical Management Decision Making
Credits 3. 3 Lecture Hours. Key business concepts, practical processes and analytical tools to make value-driven decisions; focuses on leadership between managerial decisions and the performance of business enterprises; introduction to business strategy, financial principles, organization processes and people skills mangers must weigh when making executable judgement calls; analytical tools to evaluate decisions and communicate desired outcomes with different professionals; use of business cases and real-world projects to help master practical knowledge and apply immediately. Prerequisite: Admission to the Master of Engineering Technical Management program.

TCMT 613 Technical Project Management
Credits 3. 3 Lecture Hours. Introduction to project management; emphasis on technical skills needed to manage complex projects and soft skills needed to communicate and manage the project team within a corporate structure. Prerequisite: Admission to the Master of Engineering Technical Management program.

TCMT 619 Personal Leadership Coaching
Credit 1. 1 Lecture Hour. Engage in experiential learning, work one-on-one with a professional coach and develop a comprehensive leadership development plan based on the findings and insights from individual EQ-i 2.0 assessment report; series of interactive and reflective one-on-one sessions to understand personal emotional competencies and identify areas of improvement. Prerequisites: TCMT 610.

TCMT 623 Financial Decision Making
Credits 3. 3 Lecture Hours. Addresses application of financial concepts in engineering decision making; exploration of analysis of labor and material expenses, accounting methods and forecasting; combines scenario discussions, reflections, group exercises, and practical application learning. Prerequisite: Admission to the Master of Engineering Technical Management program.

TCMT 624 Managing Technical Teams
Credits 3. 3 Lecture Hours. Offers background, tools and basic understanding into the skills, traits, expectations and interactions of a manager or leader of a technical or professional team; compilation of tacit knowledge; focuses on eight key elements central and fundamental to successful technical leadership and management; introduction to a series of case examples or scenarios and appropriate readings and discussions to support concepts. Prerequisite: Admission to the Master of Engineering Technical Management program.

TCMT 630 Organizational Leadership for Senior Technical Leaders
Credits 2. 2 Lecture Hours. Exploration of key components and skills necessary to make transition from industry technical management to C-level management; combination of lectures, scenarios, reflections and practical application of learning beyond the classroom. Prerequisites: Admission to the Master of Engineering Technical Management program.

TCMT 631 Capstone I
Credits 3. 3 Lecture Hours. Addresses managing individual or collaborative engineering programs in complex dynamic business environments; provides tools and techniques to execute projects, programs and product enhancement initiatives that yield desired business results; learn through deductive, inductive and abductive analytical methods how to document and manage engineering program activities. Prerequisite: Admission to the Master of Engineering Technical Management program.

TCMT 634 Value Chain Management
Credits 3. 3 Lecture Hours. Selected topics for the quantitative management an optimal operation of a supply-chain; emphasis on the interdependencies among supply-chain processes, integration of engineering, operational and financial metrics, supply-chain capability and asset management. Prerequisite: Admission to the Master of Engineering Technical Management program.

TCMT 636 Persuasive Communications for Technical Managers
Credit 1. 1 Lecture Hour. Emphasis on the importance of effective communication with a focus on executive interactions, working with senior and mid-level managers, and communication with team members or direct report employees; study of tools, techniques and practice in these approaches. Prerequisites: Admission to the Master of Engineering Technical Management program.

TCMT 639 Team Leadership Coaching
Credit 1. 1 Lecture Hour. Develop individual emotional intelligence and lead emotionally intelligent teams; deliver and receive feedback from team members on how to develop individual emotional intelligence in a team context and support behaviors for building trust, team identity and team efficacy. Prerequisites: TCMT 610; TCMT 619; admission to the Master of Engineering Technical Management program.

TCMT 641 Capstone II
Credits 3. 3 Lecture Hours. Research project for firm or the Global Supply Chain Laboratory under the guidance of the instructor, other faculty and researchers in the lab; development of a problem statement, proposal, mid-term update, final report, and presentation for management. Prerequisite: Admission to the Master of Engineering Technical Management program.
TCMT 643 Contract and Risk Management

Credits 3. 3 Lecture Hours. Basic legal issues and terms commonly encountered by engineering businesses of all sizes; greater overall understanding of the company itself and allow technical professionals to more knowledgeably, efficiently and effectively lead their business; overview of relevant legal aspects of managing an engineering company with emphasis on contracts and intellectual property management; understanding of contract terms and clauses; identification and mitigation of areas of potential legal liability through contract negotiation; how to manage and commercialize intellectual property.

Prerequisite: Admission to the Master of Engineering Technical Management program.

TCMT 689 Special Topics In...

Credits 1 to 4. 1 to 4 Other Hours. Selected topics in an identified area of engineering technical management. May be repeated for credit. Prerequisite: Admission to the Master of Engineering Technical Management program.