Technology and Innovation Management (TIM)

710 Competing Through Innovation (1.5)
For graduate students only. Prerequisites: Foundation course sequence or concurrent enrollment in foundation courses. The global innovation economy requires that companies continually innovate at all phases of the business cycle to create sustainable competitive advantage through their products, services and operating processes. This course examines the complete innovation system and provides an overview of the key conceptual frameworks and analytic tools for developing and implementing innovation strategies. Available as an elective in the MBA program.

720 Accelerating New Product Development (3)
For graduate students only. Prerequisites: Foundation course sequence and TIM 710. This course examines the processes organizations use to increase R and D effectiveness and the rate of new product introduction. Emphasis is on the organization processes and leadership used to effectively integrate all key functional areas of the organization. Special emphasis is given to the interactive roles played by technologists (scientists, engineers) and marketers in identifying and translating market opportunities and knowledge breakthroughs into successful products. The course explores numerous methodologies to identify and manage potential problems in those processes.

730 Leading Innovators (1.5)
For graduate students only. Prerequisites: Foundation course sequence and TIM 710. This course focuses on strategies and theories for leading and supporting innovators within organizations. Through case studies and experiential exercises, the course explores such topics as characteristics of technical professionals and teams, inhibitors to innovation, emergent collaboration, tailoring of reward and recognition systems that allow for learning from failures, creating receptive organizational cultures, and organizational environments that foster innovation.

740 Optimizing Organizational Learning (3)
For graduate students only. Prerequisites: Foundation course sequence and TIM 710. This course explores how organizations acquire, create, share and leverage what they know to create sustainable competitive advantage in their markets. Their stock of knowledge represents intellectual capital that must be effectively managed. Knowledge management processes and systems are discussed based upon case studies and research of best practices in leading companies. The course also intensively focuses on the international and domestic laws governing intellectual property.

745 Forecasting for Technology Companies (1.5)
Prerequisites: Foundation course sequence and TIM 710. This course covers quantitative and qualitative techniques for effective forecasting in technology companies. We use spreadsheet tools to build, analyze and solve models to enable effective technology forecasting by managers, business analysts and consultants. Quantitative techniques include correlational, regression, moving-average, exponential smothering and seasonal models, as well as technology...
trend models such as Pearl-Reed, Fisher-Pry and Gompertz curves. Qualitative techniques include Delphi, and modified Delphi for new product forecasting.

750 Surveying New Technologies (1.5)
For graduate students only. Prerequisites: Foundation course sequence and TIM 710. Companies once considered the leading edge of new technologies often are severely affected by “disruptive technologies” that fundamentally change their markets. This course provides the concepts and tools needed to assess the impact of emerging new technologies across several scientific and technical fields. Emphasis is on understanding how companies competitively react and transform themselves in response.

760 Managing Large Technology Programs (1.5)
For graduate students only. Prerequisites: foundation course sequence, TIM 710 and ITM 614. This course augments the project management concepts and tools introduced in ITM 614. Its focus is on the management of multiple projects that comprise a large technology program such as the introduction of a new aircraft, facility or process. Case studies, readings and guest lecturers provide an overview of the sophisticated techniques and management designs used to effectively manage risk, financial exposure and human resource constraints. Advanced features of Microsoft Project are utilized in course assignments.

770 Designing for Quality and Performance (1.5)
For graduate students only. Prerequisites: Foundation course sequence and TIM 710. Companies in mature markets must be able to excel at innovation in operations to realize sustainable competitive advantage. This course investigates concepts, tools and techniques from the field of operations management for achieving significant differentiation through operational excellence and delivering services and products that achieve superior results. Students study organizational successes and failures, identify critical success factors, and survey technologies needed to develop and implement innovative operations strategies.

800a and 800b Assessing Innovative Capacity and Performance (1.5 each, 3 total)
For graduate students only. Prerequisites: Foundation course sequence, TIM 710 and ITM 614. TIM 800a and 800b are completed sequentially over the last two semesters of the program. TIM 800a is a prerequisite for TIM 800b. This capstone course provides an integrative, hands-on team experience with an actual company in assessing its strategic capacity for innovation, and specific ways to improve its overall competitive performance. Concepts and tools from all program courses are available for application in this assessment.

Theatre (THR)

101 Theatre Improvisation and Creativity (3) (A)
Introduces creative dramatics as a means for development of the basic skills required in actor training. Students will become familiar with sound and movement, transformation, exploration of sensory awareness, and creativity as it pertains to character development.

175 Ethical Questions and Modern Drama (4) (A)
Cross-listed with ENG 175. This course deals with significant modern plays in which the conflict centers on ethical questions across a broad range of university subjects: business, science, politics, relations with and responsibilities to others. Classroom sessions and papers will address the plays first as works of literature, but will go on to discuss and debate the ethical issues involved.

200 Voice and Body for the Actor (3) (A)
Teaches the fundamentals of stage movement and the use of voice in performance. Increases awareness of the physical self, helping students master the physicalization of emotion and physical character building. (*spring semester)