

## **ENG ME 583 Product Management**

### **2008-2009 Catalog Data:**

**ENG ME 583 Product Management** Prereq: graduate standing or consent of instructor. Planning and execution of the process of bringing new tangible and intangible products to market. Review of the new product development process. Establishment of the new product specification. Setting of financial expectations. Formation and dynamics of the product implementation team. Organization of the new product introduction project including matrixed management and financial control. Contingency planning and risk management. Taught through case-studies, case-based discussions, and lectures. 4 cr.

**Class/Lab Schedule:** 4 lecture hours per week

**Status in the Curriculum:** Elective

**Textbook(s) and/or Other Required Material:** Reading packet consisting, primarily, of Harvard Business School cases, supplemented by articles from the contemporary press.

**Coordinator:** William Hauser, Adjunct Assistant Professor, Mechanical Engineering

### **Prerequisites by topic:**

1. Graduate standing or consent of the instructor

### **Goals:**

Provide students with a contemporary perspective on project management for the introduction of new products and processes. Examine issues critical to the success of a new product launch: goals and resources of the manufacturer; identity of the customer; benefits conveyed; the nature of competition; dimensions of innovation and the resulting risks and potential, the ability to achieve target cost and price. Examine the management of a product over its life cycle, including product maturity and end-of-life environmental issues.

### **Course Learning Outcomes:**

As an outcome of completing this course, students will:

- i. Gain an understanding of contemporary perspectives on management of the product portfolio, including development and introduction of new products
- ii. Gain an understanding of how financial, technical, and competitive concerns affect the realization of new products in a variety of industries and organizational settings.
- iii. Gain experience and confidence in oral defense of technical and business proposals.
- iv. Gain facility in producing concise, fact-filled, and clear reports.

**Course Learning Outcomes mapped to Program Outcomes:**

<b>Program:</b>	a	b	c	d	e	f	g	h	i	j	k	l	m	n
<b>Course:</b>	i	iv	ii	i, ii		i, ii	iii, iv	i, ii	i	i, ii	ii, iii, iv			
<b>Emphasis:</b>	3	5	3	4		1	5	4	4	4	2			

**Topics:**

1. Nature of the product management task
2. Dimensions of innovation – what makes a new product new?
3. How technology affects opportunity and risk
4. The product life cycle
5. Understanding how customers value products
6. How competition shapes product strategy
7. Use of technology to penetrate markets
8. Effects of regulation, as illustrated in medical devices
9. Product portfolio planning
10. Recognition and management of risk
11. Integration of concepts

**Contribution of Course to Meeting the Professional Component:**

Engineering topics                      60%  
General Education                      40%

**Status of Continuous Improvement Review of this Course:**

**Prepared by:** William Hauser

**Date:** 4/3/2009