

ENGM 525 Concept to Commercialization

Course Description

The objective of this course is to develop an understanding of the fundamental management concepts, tools and steps involved in successfully setting up and financing high tech start-ups. The course examines how highly successful tech entrepreneurs have developed technology, and considers the role of intellectual property protection, new product development, commercialization and business plan preparation.

Course Learning Outcomes

By the end of the course, students will be able to:

1. Demonstrate critical knowledge and understanding of core and specialized theories and practices in concept to commercialization
2. Apply core and specialized theories from concept development to commercialization
3. Utilize analytical thinking and evaluation techniques to effectively manage technology transfer processes
4. Demonstrate professional-level written or oral communication skills, including the ability to present effectively with varying levels of knowledge.
5. Work professionally, taking significant responsibility for both individual and group tasks in addressing complex problems.

Learning Resources

Bruce R. Barringer, R. Duane Ireland, "Entrepreneurship: Successfully Launching New Ventures"
Publisher: Pearson Education, Edition: 7th Edition, Year: 2023. ISBN: 9780138091828

Michael E. Gerber "The E-Myth Revisited: Why Most Small Businesses Don't Work and What to Do About It" Publisher: HarperCollins, Edition: 1995. ISBN: 9780887307287

Course Content

1. Introduction to Concept to Commercialization
2. Understanding High-Tech Entrepreneurship
3. Opportunity Identification & Feasibility Analysis
4. Industry and Competitor Analysis
5. Business Model and Business Plan Preparation
6. Legal & Ethical Foundations
7. Financing High-Tech Start-ups
8. Marketing for High-Tech Products
9. Building and Managing Start-up Teams
10. Technology Commercialization