

<b>Semester</b>	8			
<b>Course Code:</b>	MA5820			
<b>Course Name:</b>	Engineer as an Entrepreneur			
<b>Credit Value</b>	3 (Notional hours: 150)			
<b>Pre-requisites</b>	None			
<b>Core /Optional</b>	Optional			
<b>Hourly Breakdown</b>	Lecture (hrs)	Small-Group Discussions (hrs)	Assignments (hrs)	Independent Learning (hrs)
	24	12	18	96

**Aim(s):** To inspire and provide tools to start engineering ventures by recognising opportunities and overcoming challenges.

**Intended Learning Outcomes:**

On completion of the course, students should be able to:

- **explain** the value of generating ideas and converting them into business opportunities.
- **analyze** the financial and technological feasibility of a new venture.
- **explain** the role of leadership and marketing in new ventures.
- **explain** the applicable laws for business ventures and intellectual property.
- **develop** a business plan for a new venture.

**Course content:**

- **Introduction to Entrepreneurship:** Role of an entrepreneur in creating jobs and wealth; risks and rewards of starting a business.
- **Idea Generation and Feasibility Analysis:** The idea to market process; market and competitive analysis; idea generation and creativity; technology to lower barriers; sustainability and green businesses.
- **Financial Analysis:** Raising capital; venture capital; loans etc.; financial analysis and projections; cash management; duties and taxation
- **Technology Strategy:** Developing or adopting technology; acquiring technology; diffusion of technology.
- **Leadership and Management:** Providing leadership, developing an organisational structure and culture; developing human resources, and delegating authority.
- **Marketing, Operations Sales and Distribution:** Manufacturing or sourcing strategy; advertising and publicity; sales and distribution; online sales; retail sales; intermediaries.
- **Legal Framework for a Business:** Sole proprietorships; partnerships and limited liability companies; registering a company; memorandum and articles of association; labour and industrial law.
- **Management of Intellectual Property:** Forms of intellectual property; patents and its impact on the diffusion of technology.

- **Writing a Business Plan:** Reasons for writing a business plan; outline of the plan; presenting the business plan to investors.
- **Group Project:** Develop a business plan for a new venture.

**Teaching/Learning Methods:**

Lectures  
Student Based Activities

**Assessment Strategy**

Continuous Assessments 50%		Final Assessment 50%		
Small Group Activities	30%	<b>Theory</b> 50%	<b>Practical</b> -	<b>Other</b> -
Group Project	20%			

**Recommended Reading:**

- Allen, K. (2015). *Launching New Ventures: An Entrepreneurial Approach*. Cengage Learning.
- Barringer, B. R. (2015). *Preparing Effective Business Plans* (2<sup>nd</sup> edition). Pearson Press.
- Barringer, B. R. and Ireland, R. D. (2012). *Entrepreneurship* (4<sup>th</sup> Edition). Pearson.
- Evans, V. (2015). *Writing a Business Plan* (2<sup>nd</sup> Edition). Pearson.