

Guru Nanak Dev Engineering College, Ludhiana
Department of Information Technology
B. Tech (IT) Scheme 2018

Subject Code: PEIT-127

Subject Name: Engineering Entrepreneurship

Programme: B.Tech.	L: 3 T: 1 P: 0
Semester: 8 (Choice- I)	Teaching Hours: 36 Hours
Theory/Practical: Theory	Credits: 4
Internal Marks: 40	Percentage of Numerical/Design Problems: 0%
External Marks: 60	Duration of End Semester Exam(ESE): 3hours
Total Marks: 100	Elective Status: Professional Elective-IV

On Completion of the course, the student will have the ability to:

CO#	Course Outcomes
1.	Inculcate various entrepreneurship skills to students.
2.	Impart knowledge about industry structure and how to start up a company
3.	Analyze how to generate and exploit new opportunities
4.	Locate domestic and international opportunities
5.	Understand various sources of capital for business.
6.	Identify and understand and differentiate various legal issues for the entrepreneur such as patents, law suits, copy rights etc.

Prerequisites: None

Additional Material Allowed in ESE: Scientific Calculator

Detailed Contents:

Part-A

Entrepreneurship and the Entrepreneurial Mind-Set: The nature of entrepreneurship, entrepreneur's thinking, the intention to act entrepreneurially, Entrepreneur background and characteristics, Role models and support systems, sustainable entrepreneurship, corporate Entrepreneurship, establishing corporate entrepreneurship in organization [3L]

Generating And Exploiting New Entry Opportunities And Business Ideas: new entry, generation of new entry of opportunity, risk reduction strategies for new entry exploitation. ideas from trend analysis, trends, sources of new ideas, methods of generating ideas, creative problem solving, creativity and entrepreneurship, innovation, entrepreneurial innovation, opportunity recognition, product planning and development process, e-commerce and business startup.[5L]

Identifying and Analyzing Domestic and International Opportunities: Opportunity recognition and the opportunity assessment plan, information sources, sources of information for start-up entrepreneurs in India, technical consultancy organizations, government policies for small scale enterprises, Nature of international entrepreneurship, the importance of international business to the firm, international versus domestic entrepreneurship. [5L]

Protecting the Idea and Other Legal Issues for the Entrepreneur: Intellectual property, need for a lawyer, selection of a lawyer, legal issues in setting up the organization, patents, business methods patents, startup without a patent, trademarks, copyrights, trade secrets and noncompetition agreements, licensing, product safety and liability, insurance, Sarbanes-Oxley act, Contracts. [4L]

The Business Plan: Planning as part of the business operation, writing the business plan, scope and values of the business plan, evaluation of the plan, presenting the plan, information needs, financial information needs, using the internet as a resource tool, using and implementing the business plan, reasons of business plan failure. [2L]

The Marketing Plan: Industry Analysis, Marketing research for the new venture, difference between a business plan and a marketing plan. Preparing the marketing plan, characteristics of a marketing plan, the marketing mix, steps in preparing the marketing plan. [2L]

PART - B

The Organizational Plan: Developing the management team, legal forms of business, tax attributes of forms of business, the limited liability company versus the S-corporation, designing the organization, building the management team and a successful organization culture, the role of a board of directors, the board of advisors. [3L]

The Financial Plan: Operating and capital budgets, forecasting sales, pro forma income statements, pro forma cash flow statement, pro forma balance sheet, break-even analysis, pro forma sources and applications of funds statement, software packages. [3L]

Sources of Capital: An overview, personal funds, family and friends, commercial banks, role of Government Agencies in small-business financing, research and development limited partnerships, Government grants, Private placement, bootstrap financing, financing the business, informal risk-capital market, venture capital, valuing your company, going public. [4L]

Management of Enterprises: Objectives and functions of management, scientific management, general and strategic management; introduction to human resource management: planning, job analysis, training, recruitment and selection, etc.; marketing and organizational dimension of enterprises; enterprise financing : raising and managing capital, shares, debentures and bonds. [4L]

Case Studies: Case studies related to successful entrepreneurs [5L]

Text Books:

1. Robert D. Hsrich, Mathew J. Manimala, Michael P. Peters and Dean A. Shepherd, "Entrepreneurship", 9/e, McGraw Hill Education, 2014.
2. Thomas H. Byers, Richard C. Dorf, Andrew J. Melson, "Technology Ventures: From idea to Enterprise", 4/e McGraw Hill, 2014.
3. Saini, J. S., 'Entrepreneurial Development Programmes and Practices', Deep & Deep Publications (P), Ltd, 2008.

Reference Books:

1. Kenji Uchino, "Entrepreneurship for Engineers", CRC Press, 2009.
2. Vasant Desai, "Entrepreneurship Development", PHI, 2011.
3. Anjan Rai Chaudhri, "Managing New Ventures: Concepts and Cases On Entrepreneurship", PHI, 2010.