### **GUJARAT TECHNOLOGICAL UNIVERSITY**

# MECHANICAL ENGINEERING (19) ENTERPRENEURSHIP SUBJECT CODE: 2181923 B.E. 8<sup>TH</sup> SEMESTER

**Type of course**: Under Graduate

Prerequisite: NIL

**Rationale:** Students will develop skills for evaluating, articulating, refining, and pitching a new product or service offering, either as a start-up business or a new initiative within an existing firm. This course is appropriate for all students interested in innovation and design as necessary components of new businesses today. The aims to acquaint the students with challenges of starting new ventures and enable then to investigate, understand and internalize the process of setting up a business.

## **Teaching and Examination Scheme:**

Teaching Scheme			Credits	Examination Marks.				Total		
L	T	P	C	Theory Marks		Practical Marks		Marks		
				ESE	PA (M)		PA (V)		PA	
				(E)	PA	ALA	ESE	OEP	(I)	
3	2	0	5	70	20	10	30	0	20	150

# **Content:**

Sr.	Content	Total	%
No.		Hours	Weightage
1	Entrepreneurship: Concept, knowledge and skills requirement; characteristic of successful entrepreneurs; role of entrepreneurship in economic development; entrepreneurship process; factors impacting emergence of entrepreneurship; managerial vs. entrepreneurial approach and emergence of entrepreneurship.	10	20
2	Starting the venture: generating business idea – sources of new ideas, methods of generating ideas, creative problem solving, opportunity recognition; environmental scanning, competitor and industry analysis; feasibility study: market feasibility, technical/operational feasibility, financial feasibility; drawing business plan; preparing project report; presenting business plan to investors.	12	30
3	Functional plans: marketing plan – marketing research for the new venture, steps in preparing marketing plan, contingency planning; organizational plan: form of ownership, designing organization structure, job design, manpower planning; Financial plan: cash budget, working capital, Performa income statement Performa cash flow, perform balance sheet, break even analysis.	12	30
4	Sources of finance: debt or equity financing, commercial banks, venture capital; financial institutions supporting entrepreneurs; legal issues: intellectual property rights patents, trade marks, copy rights, trade secrets,	10	20

licensing; franching.			
To	tal	44	100

#### **Suggested Specification table with Marks (Theory):**

Distribution of Theory Marks							
R Level	U Level	A Level	N Level	E Level	C Level		
5	10	20	20	5	10		

Legends: R: Remembrance; U: Understanding; A: Application, N: Analyze and E: Evaluate C: Create and above Levels (Revised Bloom's Taxonomy)

Note: This specification table shall be treated as a general guideline for students and teachers. The actual distribution of marks in the question paper may vary slightly from above table.

#### **Reference Books:**

- 1. Entrepreneurship, Hisrich, Robert D., Michael Peters and Dean Shepherded, , Tata McGraw Hill, ND
- 2. Entrepreneurship, , Brace R., and R., Duane Ireland, , Pearson Prentice Hall, New Jersy (USA).
- 3. Entrepreneurship, Lall, Madhurima, and Shikha Sahai, , Excel Book, New Delhi.
- 4. Entrepreneurship Development and Small Business Enterprises, Charantimath, Poornima, Pearson Education, New Delhi.

#### **Course Outcome:**

After learning the course the students should be able to:

- 1. Understand Entrepreneurship.
- 2. Understand Business Models and Planning for Business.
- 3. Understand Operations and Management in business

### **List of Experiments:**

Tutorials based on above syllabus.

# **Major Equipment:**

Not mandatory

### List of Open Source Software/learning website:

- 1. http://www.nptel.ac.in
- 2. http://www.ocw.mit.edu

**ACTIVE LEARNING ASSIGNMENTS:** Preparation of power-point slides, which include videos, animations, pictures, graphics for better understanding theory and practical work – The faculty will allocate chapters/ parts of chapters to groups of students so that the entire syllabus to be covered. The power-point slides should be put up on the web-site of the College/ Institute, along with the names of the students of the group, the name of the faculty, Department and College on the first slide. The best three works should submit to GTU.