

GUJARAT TECHNOLOGICAL UNIVERSITY, AHMEDABAD, GUJARAT

COURSE CURRICULUM
COURSE TITLE: ENTREPRENEURSHIP DEVELOPMENT
(Code: 3340001)

Diploma Programme in which this course is offered	Semester in which offered
Bio-Medical ,Ceramic ,Plastic engineering	4 th Semester

1. RATIONALE

Entrepreneur creates new business establishments or transforms old business establishments thus they work as engines of growth and play an important role in the development of economy. Our fast growing economy provides ample opportunities for diploma engineers to become successful entrepreneur. As entrepreneurship requires distinct skill set which could not be developed while teaching technical subjects a separate course has been introduced for the same. This course aims at developing competencies in the polytechnic students for becoming a successful entrepreneur. After successfully completing this course some students may develop qualities of a successful entrepreneur and can set up their own manufacturing industry/ service industry/ business/ to become self employed. Thus they can generate wealth and share profits of the company to the share holders and provide employment to others. Thus it is an important course for all to learn.

2. COMPETENCIES

The course content should be taught and curriculum should be implemented with the aim to develop required skills in the students so that they are able to acquire following competency:

- **Foster need for excellence orientation along with skill set for an entrepreneur.**
- **Identify a business opportunity and plan for its establishment.**

3. COURSE OUTCOMES:

The theory should be taught and practical should be carried out in such a manner that students are able to acquire required learning out comes in cognitive, psychomotor and affective domain to demonstrate following course outcomes.

- i. Appreciate role of intrapreneurs and entrepreneurs in society.
- ii. Develop passion, creativity, initiative, independent decision making, calculated risk taking, assertiveness, persuasion, persistence, information seeking, commitment to work contract.
- iii. Innovate, prototypes or ideas by applying theory into practice.
- iv. Explain process of setting up of service unit/industry.
- v. Describe about support institutions and schemes.
- vi. Develop and complete a comprehensive business plan.

4. TEACHING AND EXAMINATION SCHEME

Teaching Scheme (In Hours)			Total Credits (L+T+P)	Examination Scheme				
L	T	P		Theory Marks		Practical Marks		Total Marks
3	0	0	C	ESE	PA	ESE	PA	
			3	70	30	00	00	

Legends: L - Lecture; T - Tutorial/Teacher Guided Student Activity; P - Practical; C - Credit; ESE - End Semester Examination; PA - Progressive Assessment

5. DETAILED COURSE CONTENTS

Unit	Major Learning Outcomes (in cognitive domain)	Topics and Sub-topics
Unit – I Entrepreneurship Development - Concept & Scope	1a. Define intrapreneur/ entrepreneur. 1a1. Appreciate benefits of becoming an intrapreneur/ entrepreneur 1b. Identify various avenues of entrepreneurship. 1c. Develop qualities of intrapreneur/ entrepreneur.	1.1 Charms of becoming an intrapreneur/ entrepreneur. 1.2 Entrepreneurship : scope in local and global Market. Steps in setting up of a business. 1.3 Traits of successful intrapreneur/ entrepreneur.
Unit – II Facility Planning	2a. Describe the importance of Product selection 2a1 Select a business opportunity. 2b Explain product life cycle 2b 1. Identify appropriate process for manufacturing/ delivery. 2c. Locate suitable place for setting up industry/ service unit. 2d. Estimate the capacity of a plant	2.1 Selection of Product/ Service, core competence, product life cycle, new product development process, mortality curve, creativity and innovation in product modification/development. 2.2 Process selection: Technology life cycle, forms and cost of transformation, factors affecting process selection. 2.3 Factors affecting selection of location for an industry. Importance of material handling and its relevance with facility location. 2.4 Calculate capacity of plant and its relation with economies of scale. Including flexibility in capacity.
Unit – III Support agencies for MSME	3a. Differentiate between MSM Enterprises & ancillary industries . 3b. Describe role of support agencies 3b1. Analyse different entrepreneurship, technical, marketing and financial support agencies.	3.1 Categorisation of MSME, ancillary industries 3.2 Support agencies for entrepreneurship guidance, training, registration. 3.3 Support agencies for technical consultation, technology transfer and quality control. 3.4 Support agencies for marketing and finance.
Unit – IV Managing critical resources	4a. List sources of finance 4a1 Describe type of finance sources 4a2 Explain methods of cost control 4a1. Compare suitability of financial institutes for an industry/ service unit. 4b. Apply MRP/JIT in production and services. 4c. Utilise time efficiently. 4d. Develop MIS.	4.1 Managing finance: Sources of finance- types, advantages and disadvantages, methods of cost control & importance, managing working capital. 4.2 Materials Management: MRP, JIT 4.3 Time management: art of managing time 4.4 Information system: Developing suitable information systems.

Unit	Major Learning Outcomes (in cognitive domain)	Topics and Sub-topics
Unit– V Project planning	5. Prepare business plan and project reports	5.1 Preparation of business plan and techno economic feasibility study. 5.2 Breakeven point, return on investment and return on sales.
Unit –VI Managing enterprise	6. List the steps to execute Marketing and supply chain plans .	6.1 Identifying a USP, developing a marketing plan, 6.2 Developing supply chain, planning for initial orders
Unit –VII Risk Management	7. Manage risk in business 7a1. Describe planning for calculated risk	7.1 Planning for calculated risk taking, initiation with low cost projects 7.2 Integrated futuristic planning, angel investors, and role of incubation centres.

6. SUGGESTED SPECIFICATION TABLE WITH HOURS & MARKS (THEORY)

Unit	Unit Title	Teaching Hours	Distribution of Theory Marks			
			R Level	U Level	A Level	Total Marks
I	Entrepreneurship Dev. Concept & Scope	07	2	4	6	12
II	Facility Planning	07	4	4	2	10
III	Support agencies for MSME	06	2	4	6	12
IV	Managing critical resources	08	2	3	7	12
V	Project planning	06	0	5	5	10
VI	Managing enterprise	05	0	4	4	08
VII	Risk Management	03	0	3	3	06
Total		42	10	27	33	70

Legends: R = Remember; U = Understand; A = Apply and above levels (Bloom's revised 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.

7. SUGGESTED LIST OF EXERCISES/PRACTICAL

-----Not applicable-----

8. SUGGESTED LIST OF STUDENT ACTIVITIES

Following is the list of proposed activities, students should prepare a portfolio of the completed activities for future use:

- Develop two products from household waste (attach photographs).
- Download product development and innovative films from internet.
- Prepare a collage for "Traits of successful entrepreneurs."
- Invite entrepreneurs, industry officials, bankers for interaction.
- Identify your hobbies and interests and convert them into business idea.
- Convert your project work into business.

- vii. Choose a product and design a unique selling proposition, brand name, logo, advertisement (print, radio, television), jingle, packing, packaging, label for it.
- viii. Develop your own website. Share your strengths and weakness on it. Declare your time bound goals and monitor them on the website.
- ix. Choose any advertisement and analyse its good and bad points.
- x. Decide any product and analyse its good and bad features.
- xi. Select any product and prepare its cost sheet.
- xii. Choose any product and study its supply chain.
- xiii. Arrange brainstorming sessions for improvement of any product.
- xiv. Study schemes for entrepreneurship promotion of any bank.
- xv. Visit industrial exhibitions, trade fairs and observe nitty-gritty of business.
- xvi. Open a savings account and build your own capital.
- xvii. Organise industrial visit and suggest modifications for process improvement.
- xviii. Interview at least four entrepreneurs or businessman and identify
 - a. Charms of entrepreneurship and Traits of successful entrepreneurs.
- xix. Analyse case studies of any two successful entrepreneurs.
- xx. Perform a survey and identify local resources available for setting up of an enterprise.
- xxi. Engage in marketing of products.
- xxii. Carry out a demand supply gap analysis for a particular product.
- xxiii. Organise a prototype development competition.
- xxiv. Arrange fairs, events in the institute and try for sponsorships.
- xxv. Select any performance criteria and continuously compete with yourself.
- xxvi. On any performance criteria continuously compete with others.
- xxvii. Foresee your dream and make a long term plan for its accomplishment.
- xxviii. Dream for something unique.
- xxix. Read articles, books on creativity.
- xxx. Using morphological analysis technique, reduce cost or increase quality of a product.
- xxxi. Conduct a market survey for a project. Collect data on machinery specifications, price, output/hr, power consumption, manpower requirement, wages, raw material requirement, specification, price, competitor's product price, features, dealer commissions, marketing mix etc.
- xxxii. Prepare a business plan and organize a business plan competition.
- xxxiii. Select a social cause, set objectives, plan and work for its accomplishment.
- xxxiv. Video graph as many as possible from the above and upload on your website, YouTube, facebook etc.

9. SPECIAL INSTRUCTIONAL STRATEGIES

- i.** Instructors should emphasise more on deductive learning.
- ii.** Students should learn to recognise, create, shape opportunities, and lead teams for providing economic-social value to society.
- iii.** Business simulations should be used to enhance behavioural traits of successful intrapreneurs and entrepreneurs amongst students.
- iv.** Emphasis should be on creating entrepreneurial society rather than only setting up of enterprise.
- v.** They must be encouraged to surf on net and collect as much information as possible.
- vi.** Each student should complete minimum twenty activities from the suggested list. Minimum possible guidance should be given for the suggested activities.

- vii. Students should be promoted to use creative ideas, pool their own resources, finish their presentation, communication and team skills.
- viii. Alumni should be frequently invited for experience sharing, guiding and rewarding students.
- ix. Display must be arranged for models, collages, business plans and other contributions so that they motivate others.

10. SUGGESTED LEARNING RESOURCES

A. List of Books:

S. No.	Title of Books	Author	Publication
1	Entrepreneurship	Robert D. Hisrich	McGraw-Hill
2	Entrepreneurship and Small Business Management	S.S. Khanka	Sultanchand and Sons
3	Organisational Behaviour	A K Chitale	PHI Learning
4	Managerial Practices	Nishith Dubey	Shiva Publication
5	Entrepreneurship Development Small Business Entrepreneurship	Poornima Charantimath	Pearson Education India
6	Entrepreneurship Development	S Anil Kumar	New Age International Publishers
7	Entrepreneurship Development	Nishith Dubey	PHI Learning
8	The Entrepreneurial Instinct	Monica Mehta	McGraw-Hill
9	Jugaad Innovation	Navi Radjou,	Random House India
10	Product Design & Manufacturing	A K Chitale	PHI Learning
11	Product Policy & Brand Management	Ravi Gupta	PHI Learning
12	Materials Management	R C Gupta	PHI Learning

B. List of Major Equipment/Materials

-----Not applicable-----

C. List of Software/Learning Website

niesbud.nic.in/	www.entrepreneur.com	https://www.nabard.org/
ecell.in/nec	nenonline.org	businesstoday.intoday.in
www.ediindia.org	www.isb.edu/node/3461	www.entrepreneur.com/businessplan
www.nstedb.com	www.tataises.com	www.dcmsme.gov.in/
www.nimsme.org	www.kvic.org.in/	msme.gov.in/
http://www.du.ac.in/fileadmin/DU/Academics/course_material/EP_01.pdf		
http://users.ipfw.edu/todorovz/teaching/eee-lectureslides.htm		
xa.yimg.com/kq/groups/20603649/2012869496/.../Entrepreneurship		
ocw.mit.edu › ... › Managing Innovation and Entrepreneurship		
ww.smallbusinessbc.ca/starting-a-business/how-write-a-business-plan		

11. COURSE CURRICULUM DEVELOPMENT COMMITTEE**Faculty Members from Polytechnics**

- **Prof Niyaz A Mansuri**, Lecturer in Mechanical Engineering, GP, Gandhi nagar

Coordinator and Faculty Member from Nitttr Bhopal

- **Dr. Nishith Dubey**, Professor, Department of Vocational and Entrepreneurship Education