

COURSE NAME : ELECTRICAL ENGINEERING GROUP
COURSE CODE : EE/EP
SEMESTER : FIFTH
SUBJECT TITLE : INDUSTRIAL PROJECT AND ENTREPRENEURSHIP DEVELOPMENT
SUBJECT CODE : --

Teaching and Examination Scheme:

Teaching Scheme			Examination Scheme						
TH	TU	PR	PAPER HRS	TH	TEST	PR	OR	TW	TOTAL
01	01	02	--	--	--	--	--	25@	25

Notes:

- 1. One theory and one tutorial hour are for Entrepreneurship Development (EDP).**
- 2. Twenty-five marks for term work are for report prepared under EDP.**
- 3. Two clock hours for industrial project**

Contents:

PART A) Industrial Project

Following activities related to project are required to be dealt with, during this semester

1. Form project batches & allot project guide to each batch. (Max. 4 students per batch)
2. Each project batch should select topic / problem / work by consulting the guide & / or industry. Topic / Problem / work should be approved by Head of department.
3. Each project batch should prepare action plan of project activities & submit the same to respective guide .
4. At the end of semester, each project batch should submit the action plan and abstract of the project along with list of materials required if project involves fabrication or other facilities required in other kinds of project.
5. Action Plan should be part of the project report.
6. Actual work of project should be done in sixth semester.

Group	Projects
01	(1) Design of Illumination Scheme (Up to 20 KW) for Hospital / Shopping Mall / Cinema Theatre / Commercial Complex / Educational Institute / Industrial Complex. (2) Design of Rural Electrification Scheme for small Village, Colony. (3) Case Studies Related to Industries – Operation / Maintenance / Repair and Fault Finding. (Refer Guideline Document). (4) Energy Conservation and Audit. (5) Substation Model (Scaled) (6) Wind Turbine Model (Scaled) (7) Pole Mounted Substation Model (Scaled)
02	(1) Rewinding of Three Phase/Single Phase Induction Motor. (2) Rewinding of Single Phase Transformer. (3) Fabrication of Inverter up to 1000 VA. (4) Fabrication of Battery Charger. (5) Fabrication of Small Wind Energy System for Battery Charging. (6) Fabrication of Solar Panel System for Battery Charging. (7) Microprocessor/ Micro controller Based Projects. (8) PC Based Projects. (9) Simulation Projects.
03	Seminar on any relevant latest technical topic based on latest research, recent trends, new methods and developments in the field of Electrical Engineering / Power Electronics.

Part B: Entrepreneurship Development

Rationale:

Globalization, liberalization & privatization along with revolution in Information Technology, have thrown up new opportunities that are transforming lives of the masses. Talented and enterprising personalities are exploring such opportunities & translating opportunities into business ventures such as- BPO, Contract Manufacturing, Trading, Service sectors etc. The student community also needs to explore the emerging opportunities. It is therefore necessary to inculcate the entrepreneurial values during their educational tenure. This will help the younger generation in changing their attitude and take the challenging growth oriented tasks instead of waiting for white-collar jobs. The educational institutions should also demonstrate their uniqueness in the creation of

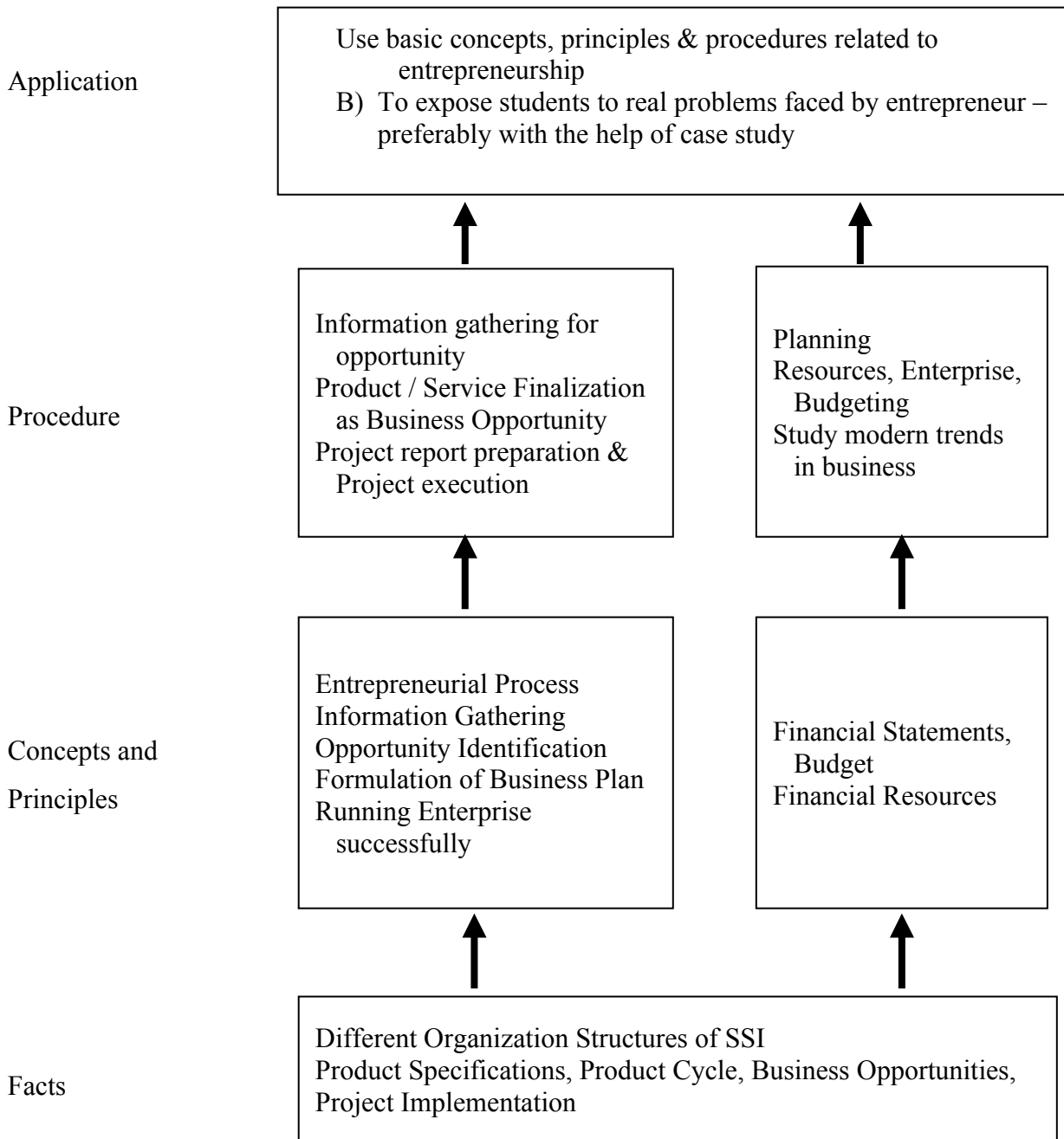
enterprising personalities in their colleges. This subject will help in developing the awareness and interest in entrepreneurship and create employment for others.

Objectives:

Students will be able to

- 1) Identify entrepreneurship opportunity.
- 2) Acquire entrepreneurial values and attitude.
- 3) Use the information to prepare project report for business venture.
- 4) Develop awareness about enterprise management.

Learning Structure:



Contents: Theory

Chapter	Name of the Topic	Hours
01	<p>Entrepreneurship, Creativity & Opportunities</p> <p>1.1) Concept, Classification & Characteristics of Entrepreneur</p> <p>1.2) Creativity and Risk taking. 1.2.1) Concept of Creativity & Qualities of Creative person. 1.2.2) Risk Situation, Types of risk & risk takers.</p> <p>1.3) Business Reforms. 1.3.1) Process of Liberalization. 1.3.2) Reform Policies. 1.3.3) Impact of Liberalization. 1.3.4) Emerging high growth areas.</p> <p>1.4) Business Idea Methods and techniques to generate business idea.</p> <p>1.5) Transforming Ideas in to opportunities transformation involves Assessment of idea & Feasibility of opportunity</p> <p>1.6) SWOT Analysis</p>	03
02	<p>Information And Support Systems</p> <p>2.1) Information Needed and Their Sources: Information related to project, Information related to support system, Information related to procedures and formalities</p> <p>2.2) Support Systems</p> <p>1) Small Scale Business Planning, Requirements.</p> <p>2) Govt. & Institutional Agencies, Formalities</p> <p>3) Statutory Requirements and Agencies.</p>	02
03	<p>Market Assessment</p> <p>3.1) Marketing -Concept and Importance</p> <p>3.2) Market Identification, Survey Key components</p> <p>3.3) Market Assessment</p>	02

04	<p>Business Finance & Accounts</p> <p>Business Finance 4.1) Cost of Project 1) Sources of Finance 2) Assessment of working capital 3) Product costing 4) Profitability 5) Break Even Analysis 6) Financial Ratios and Significance</p> <p>Business Account 4.2) Accounting Principles, Methodology 1) Book Keeping 2) Financial Statements 3) Concept of Audit</p>	03
05	<p>Business Plan & Project Report 5.1) Business plan steps involved from concept to commissioning Activity Recourses, Time, Cost</p> <p>5.2) Project Report 1) Meaning and Importance 2) Components of project report/profile (Give list)</p> <p>5.3) Project Appraisal 1) Meaning and definition 2) Technical, Economic feasibility 3) Cost benefit Analysis</p>	03
06	<p>Enterprise Management And Modern Trends 6.1) Enterprise Management: 1) Essential roles of Entrepreneur in managing enterprise 2) Product Cycle: Concept and importance 3) Probable Causes Of Sickness 4) Quality Assurance: Importance of Quality, Importance of testing</p> <p>6.2) E-Commerce: Concept and Process 6.3) Global Entrepreneur 6.3.1 Assess yourself-are you an entrepreneur? 6.3.2 Prepare project report and study its feasibility.</p>	03
TOTAL		16

Learning Resources:

1) Books:

Sr.No	Author	Title	Publisher
1	J.S. Saini B.S.Rathore	Entrepreneurship Theory and Practice	Wheeler Publisher New Delhi
2	--	TTTI, Bhopal / Chandigadh	--
1	E. Gorden K.Natrajan	Entrepreneurship Development	Himalaya Publishing. Mumbai
2	Prepared by Colombo plan staff college for Technician Education.	Entrepreneurship Development	Tata Mc Graw Hill Publishing co. ltd. New Delhi.
3	J.B.Patel D.G.Allampally	A Manual on How to Prepare a Project Report	EDI STUDY MATERIAL Ahmadabad (Near Village Bhat , Via Ahmadabad Airport & Indira Bridge), P.O. Bhat 382428 , Gujrat,India P.H. (079) 3969163, 3969153 E-mail : ediindia@sancharnet.in/olpe@ediindia.org ediindia.org Website : http://www.ediindia.org
4	J.B.Patel S.S.Modi	A Manual on Business Opportunity Identification & Selection	
5	S.B.Sareen H. Anil Kumar	National Derectory of Entrepreneur Motivator & Resource Persons.	
6	Gautam Jain Debmuni Gupta	New Initiatives in Entrepreneurship Education & Training	
7	P.C.Jain	A Handbook of New Enterpreneurs	
8	D.N.Awasthi , Jose Sebastian	Evaluation of Enterpreneurship Development Programmes	
9	V.G.Patel	The Seven Business Crisis & How to Beat Them.	

2) Video Cassettes:

No	Subject	Source
1	Five success Stories of First Generation Entrepreneurs	EDI STUDY MATERIAL Ahmadabad (Near Village Bhat , Via Ahmadabad Airport & Indira Bridge), P.O. Bhat 382428 , Gujrat,India P.H. (079) 3969163, 3969153 E-mail : ediindia@sancharnet.in/olpe@ediindia.org Website : http://www.ediindia.org
2	Assessing Entrepreneurial Competencies	
3	Business Opportunity Selection and Guidance	
4	Planning for completion & Growth	
5	Problem solving-An Entrepreneur skill	

Glossary:

Industrial Terms

Terms related to finance, materials, purchase, sales and taxes.

Components of Project Report:

1. Project Summary (One page summary of entire project)
2. Introduction (Promoters, Market Scope/ requirement)
3. Project Concept & Product (Details of product)
4. Promoters (Details of all Promoters- Qualifications, Experience, Financial strength)
5. Manufacturing Process & Technology
6. Plant & Machinery Required
7. Location & Infrastructure required
8. Manpower (Skilled, unskilled)
9. Raw materials, Consumables & Utilities
10. Working Capital Requirement (Assumptions, requirements)
11. Market (Survey, Demand & Supply)
12. Cost of Project, Source of Finance
13. Projected Profitability & Break Even Analysis
14. Conclusion.