



GOVERNMENT POLYTECHNIC KANDHAMAL, PHULBANI

## Lesson Plan

**Subject Name:** ENTREPRENEURSHIP and MANAGEMENT & SMART TECHNOLOGY (L-T-P = 4-0-0)

**Subject Code:** TH-1

**Semester:** 5<sup>th</sup>, **Branch:** Mechanical Engineering

**Academic Calendar:** Winter 2025

**Name of the Faculty:** Dr Dillip Kumar Panigrahi, Lecturer in Mechanical, Govt. Polytechnic Kandhamal, Phulbani

SI No.	Date	Topics to be Covered as per Lesson Plan	Points / Contents to be Discussed (in detail)
1 <sup>st</sup> Week	14-07-2025 to 19-07-2025	➤ Entrepreneurship	➤ Introduction, Course outcomes, Reference books for subject. ➤ Concept/Meaning of Entrepreneurship ➤ Need of Entrepreneurship ➤ Characteristics, Qualities and Types of entrepreneurs, Functions
2 <sup>nd</sup> Week	21-07-2025 to 26-07-2025	➤ Entrepreneurship	➤ Barriers in entrepreneurship ➤ Entrepreneurs V/S Manager ➤ Forms of Business Ownership: Solo proprietorship, partnership forms and others ➤ Types of Industries, concept of Start-ups
3 <sup>rd</sup> Week	28-07-2025 to 02-08-2025	➤ Entrepreneurship	➤ Entrepreneurial support agencies at National, State, District Level (Sources): DIC, NSIC, OSIC, SIDBI, NABARD, Commercial Banks, KVIC etc. ➤ Technology Business Incubators (TBI) and Science and Technology Entrepreneur Parks. ➤ Business Planning ➤ SSI, Ancillary Units



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4 <sup>th</sup> Week	04-08-2025 to 09-08-2025	➤ Market Survey and Opportunity Identification (Business Planning)	➤ Tiny Units, Service sector Units ➤ Time schedule plan, Agencies to be contacted for project implementation ➤ Assessment of Demand and Supply
5 <sup>th</sup> Week	11-08-2025 to 16-08-2025	➤ Market Survey and Opportunity Identification (Business Planning)	➤ Potential areas of Growth ➤ Identifying Business Opportunity ➤ Final Product Selection.
	15-08-2025	<b>Independence Day/Janmastami</b>	
6 <sup>th</sup> Week	18-08-2025 to 23-08-2025	➤ Project report Preparation	➤ Preliminary project report ➤ Detailed project report, Techno economic Feasibility ➤ Project Viability
7 <sup>th</sup> Week	25-08-2025 to 30-08-2025	➤ Management Principles	➤ Definitions of management ➤ Principles of management
	27-08-2025	<b>Ganesh Puja</b>	
	28-08-2025	<b>Nuakhai</b>	
8 <sup>th</sup> Week	01-09-2025 to 06-09-2025	➤ Management Principles	➤ Functions of management (planning, organising, staffing, directing and controlling etc.) ➤ Level of Management in an Organisation
	05-09-2025	<b>Birthday of Prophet Muhammad</b>	
9 <sup>th</sup> Week	08-09-2025 to 13-09-2025	➤ Functional Areas of Management	➤ a) Production management Functions, Activities Productivity Quality control Production Planning and control ➤ b) Inventory Management Need for Inventory management Models/Techniques of Inventory management
10 <sup>th</sup> Week	15-09-2025 to 20-09-2025	➤ Functional Areas of Management	➤ c) Financial Management Functions of Financial management Management of Working capital Costing (only concept) Break even Analysis



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			Brief idea about Accounting Terminologies: Book Keeping, Journal entry, Petty Cash book, P&L Accounts, Balance Sheets (only Concepts)
11 <sup>th</sup> Week	22-09-2025 to 27-09-2025	➤ Functional Areas of Management	➤ d) Marketing Management Concept of Marketing and Marketing Management Marketing Techniques (only concepts) Concept of 4P s (Price, Place, Product, Promotion) ➤ e) Human Resource Management Functions of Personnel Management Manpower Planning, Recruitment, Sources of manpower, Selection process, Method of Testing, Methods of Training & Development, Payment of Wages
12 <sup>th</sup> Week	29-09-2025 to 02-10-2025	<b>PUJA VACATION</b>	
	03-10-2025 to 04-10-2025	➤ Leadership and Motivation	➤ a) Leadership Definition and Need/Importance Qualities and functions of a leader Manager Vs Leader Style of Leadership (Autocratic, Democratic, Participative)
13 <sup>th</sup> Week	06-10-2025 to 11-10-2025	➤ Leadership and Motivation	➤ b) Motivation Definition and characteristics Importance of motivation Factors affecting motivation Theories of motivation (Maslow) Methods of Improving Motivation Importance of Communication in Business Types and Barriers of Communication
	07-10-2025	<b>Kumar Purnima</b>	
14 <sup>th</sup> Week	13-10-2025 to 18-10-2025	➤ Work Culture, TQM & Safety	➤ Human relationship and Performance in Organization ➤ Relations with Peers, Superiors and Subordinates ➤ TQM concepts: Quality Policy, Quality Management, Quality system



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15 <sup>th</sup> Week	20-10-2025 to 25-10-2025	<ul style="list-style-type: none"><li>➤ Work Culture, TQM &amp; Safety</li><li>➤ Legislation</li></ul>	<ul style="list-style-type: none"><li>➤ Accidents and Safety, Cause, preventive measures, General Safety Rules, Personal Protection Equipment (PPE)</li><li>➤ Intellectual Property Rights (IPR), Patents, Trademarks, Copyrights</li></ul>
	21-10-2025	<b>Diwali</b>	
16 <sup>th</sup> Week	27-10-2025 to 01-11-2025	<ul style="list-style-type: none"><li>➤ Legislation</li></ul>	<ul style="list-style-type: none"><li>➤ Features of Factories Act 1948 with Amendment (only salient points)</li><li>➤ Features of Payment of Wages Act 1936 (only salient points)</li></ul>
17 <sup>th</sup> Week	03-11-2025 to 08-11-2025	<ul style="list-style-type: none"><li>➤ Smart Technology</li></ul>	<ul style="list-style-type: none"><li>➤ Concept of IOT, How IOT works</li><li>➤ Components of IOT, Characteristics of IOT, Categories of IOT</li><li>➤ Applications of IOT- Smart Cities, Smart Transportation, Smart Home.</li></ul>
	05-11-2025	<b>Rahas Purnima</b>	
18 <sup>th</sup> Week	10-11-2025 to 15-11-2025	<ul style="list-style-type: none"><li>➤ Smart Technology</li></ul>	<ul style="list-style-type: none"><li>➤ Applications of IOT- Smart Healthcare, Smart Industry, Smart Agriculture, Smart Energy Management etc.</li></ul>
19 <sup>th</sup> Week	17-11-2025 to 22-11-2025	Revision	

### REFERENCES:

1. Entrepreneurship Development and Management by R.K Singhal, Katson Books., New Delhi
2. Entrepreneurship Development and Management by U Saroj and V Mahendiratta, Abhishek Publications, Chandigarh
3. Entrepreneurship Development and Management by Vasant Desai, Himalaya Pub. House
4. Industrial Engineering and Management by O.P Khanna, Dhanpat Rai and Sons
5. Industrial Engineering and Management by Banga and Sharma, Khanna Publications
6. Internet of Things by Jeeva Jose, Khanna Publications, New Delhi
7. Online Resource on Startups and other concepts
8. <https://www.fundable.com/learn/resources/guides/startup>

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