

Maharashtra State Board of Technical Education, Mumbai

TEACHING PLAN (TP)

Academic Year: 2026-27 (ODD)

Date: 10/08/2026

Institute Code and Name: 0078- K. K. Wagh Polytechnic, Nashik

Semester : Fifth

Programme and Code: Chemical Engineering (CH)

Course Index: 503

Course and Code: Entrepreneurship Development and Startups (315002)

Name of Faculty: Dr. P. S. Bhandari

Class: TYCH

INDUSTRY EXPECTED OUTCOME

Entrepreneurship and Startups are introduced in this curriculum to develop the entrepreneurial traits among the students before they enter into professional life. Exposing and interacting with entrepreneurship and startups eco-system, students will develop an entrepreneurial mind set. The innovative thinking with risk-taking ability along with other traits will be inculcated in the students through micro-projects and training. This exposure will be instrumental in orienting the students in transforming them to become job generators after completion of Diploma in Engineering.

COURSE LEVEL LEARNING OUTCOMES (COS)

CO503.1 Identify one's entrepreneurial traits.

CO503.2 Use information collected from stakeholder for establishing/setting up/founding starts up.

CO503.3 Use support systems available for Starts up.

CO503.4: Prepare project plans to manage the enterprise effectively.

TEACHING-LEARNING & ASSESSMENT SCHEME

Course Code	Course Title	Abbreviation	Course Category	Learning Scheme				Credits	Paper Duration	Assessment Scheme										Total Marks
				Actual Contact Hrs/Week			NLH			Theory				Based on LL & TSL Practical				Based on SL		
				CL	TL	LL				FA-TH	SA-TH	Total		FA-PR		SA-PR		SLA		
Max	Max	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min							
315002	Entrepreneurship Development and Startups	ENDS	AEC	01	02	-	-	03	1	-	-	-	-	50	20	25@	10	-	-	75

Abbreviations: CL- Classroom Learning, TL- Tutorial Learning, LL-Laboratory Learning, SLH-Self Learning Hours, NLH-Notional Learning Hours, FA - Formative Assessment, SA-Summative assessment, IKS-Indian Knowledge System, SLA-Self Learning Assessment Legends: @ Internal Assessment, # External Assessment, *# On Line Examination, @\$ Internal Online Examination

● **THEORY LEARNING OUTCOME (TLO)**

TLO No.	Title of TLO
TLO 1.1	Compare advantages and disadvantages of Entrepreneurship
TLO 1.2	Identify entrepreneurial traits through self-analysis
TLO 1.3	Compare risk associated with different type of enterprise
TLO 2.1	Explain Important factors essential for selection of product/service and selection of process
TLO 2.2	Suggest suitable place for setting up the specified enterprise on the basis of given data/circumstances with justification.
TLO 2.3	Suggest steps for the selection process of an enterprise for the specified product or service with justification.
TLO 2.4	Plan a market study /survey for the specified enterprise
TLO 3.1	Explain categorization of MSME on the basis of turnover and investment
TLO 3.2	Describe support system provided by central and state government agencies
TLO 3.3	State various schemes of government agencies for promotion of entrepreneurship
TLO3.4	Describe help provided by the non-governmental agencies for the specified product/service
TLO3.5	Compute breakeven point, ROI and ROS for the specified business enterprise, stating the assumptions made
TLO 4.1	Explain key elements for the given business plan with respect to their purpose/size.
TLO 4.2	Justify USP of the given product/ service from a marketing point of view.
TLO 4.3	Formulate business policy for the given product/service.
TLO 4.4	Choose relevant negotiation techniques for the given product/ service with justification.
TLO 4.5	Identify risks that you may encounter for the given type of business/enterprise with justification.
TLO 4.6	Describe role of the incubation centre and accelerators for the given product/service.

SUGGESTED CO'S - PO'S MATRIX FORM

Course Outcomes (COs)	Programme Outcomes (POs)							Programme Specific Outcomes (PSOs)	
	PO1 Basic and Discipline Specific Knowledge	PO2 Problem Analysis	PO3 Design/ Development of Solutions	PO4 Engineering Tools	PO5 Engineering Practices for Society, Sustainability and Environment	PO6 Project Management	PO7 Life Long Learning	PSO1	PSO2
CO1	2	2	2	-	-	3	2	-	-
CO2	2	2	2	2	-	3	2	-	-
CO3	2	2	2	2	-	3	2	-	-
CO4	2	2	2	2	-	3	2	03	03
Legends :- High:03, Medium:02, Low:01, No Mapping: - *PSOs are to be formulated at institute level									

Chap No. (Allotted Hrs.)	CO Mention only Number	TLO Mention only Number	Unit Name and Learning Content Title/ Details	No. of Lecture	Plan (From- To)	Actual Execution (From- To)	Teaching method/ Media	Remark
Unit - I Introduction to Entrepreneurship Development								
1	CO1	TLO 1.1	1.1Entrepreneurship as a career – charms, advantages, disadvantages, scope- local and global	01	22/08/26 to 05/09/26		Chalk and blackboard/ Guest Lecture/ppt. case studies	
		TLO 1.2	1.2Traits of successful entrepreneurs: consistency, creativity, initiative, independent decision making, assertiveness, persuasion, persistence, information seeking, handling business communication, commitment to work contract, calculated risk taking, learning from failure.	02				
		TLO 1.3	1.3 Types of enterprises and their features: Mfg., Service and Trading	01				1 additional lecture for revision
Unit - II Startup Selection Process								
2	CO2	TLO 2.1	2.1Product/Service selection: Process, core competence, product/service life cycle, new product/ service development process, mortality curve, creativity and innovation in product/ service modification / development	01	05/09/26 to 19/09/26		Chalk and blackboard/ Guest Lecture/ppt. case studies	
		TLO 2.2	2.2 Process selection: Technology life cycle, forms and cost of transformation, factors affecting process selection, location for an industry, material handling.	01				
		TLO 2.3	2.3 Market study procedures: questionnaire design, sampling, market survey, data analysis	01				
		TLO 2.4	2.4 Getting information from concerned stakeholders such as Maharashtra Centre for Entrepreneurship Development[MCED], National Institute for Micro, Small and Medium Enterprises [NI-MSME], Prime Minister Employment Generation Program [PMEGP],	02				1 Extra lecture for revision

Chap No. (Allotted Hrs.)	CO Mention only Number	TLO Mention only Number	Unit Name and Learning Content Title/ Details	No. of Lecture	Plan (From- To)	Actual Execution (From- To)	Teaching method/ Media	Remark
			Directorate of Industries[DI], Khadi Village Industries Commission[KVIC]					
Unit - III Support System for Startup								
3	CO3	TLO 3.1	3.1 Categorization of MSME, ancillary industries	01	03/10/26 to 03/10/26		Chalk and blackboard/ /ppt./case studies	
		TLO 3.2	3.2 Support systems- government agencies: MCED, NI MSME, PMEGP,DI, KVIC					
		TLO 3.3	3.3 Support agencies for entrepreneurship guidance, training, registration, technical consultation, technology transfer and quality control, marketing and finance.	01				
		TLO 3.4	3.4 Breakeven point, return on investment (ROI) and return on sales (ROS).					
Unit - IV Managing Enterprise								
4	CO4	TLO 4.1	4.1 Techno commercial Feasibility study, feasibility report preparation and evaluation criteria	01	10/10/26 to 17/10/26		Chalk and blackboard/ Guest Lecture/ppt. case studies/Visit to Incubator/ industry	
		TLO 4.2	4.2 Ownership, Capital, Budgeting, Matching entrepreneur with the project.					
		TLO 4.3	4.3 Unique Selling Proposition [U.S.P.]: Identification, developing a marketing plan.	01				
		TLO 4.4	4.4 Preparing strategies of handling business: policy making, negotiation and bargaining techniques					
		TLO 4.5	4.5 Risk Management: Planning for calculated risk taking, initiation with low cost projects, integrated futuristic planning, definition of startup cycle, ecosystem , angel investors, venture capitalist	01				1 Extra
		TLO 4.6	4.6 Incubation centers and accelerators : Role and procedure					

ASSESSMENT METHODOLOGIES/TOOLS

A. Formative assessment (Assessment for Learning) (FA-PR)

Continuous assessment based on process and product related performance indicators. Each practical will be assessed considering: 60% for process and 40% for product

B. Summative Assessment (Assessment of Learning (SA-PR) -Term End Exam

SUGGESTED LEARNING MATERIALS / BOOKS

Sr. No.	Author	Title of Book	Publication
1	Dr. Nishith Dubey, Aditya Vyas, Annu Soman , Anupam Singh	Un- boxing Entrepreneurship your self help guide to setup a successful business	Indira Publishing House ISBN 2023,978-93-93577-70-2
2	Gujral, Raman	Reading Material of Entrepreneurship Awareness Camp	Entrepreneurship Development Institute of India (EDII), GOI, 2016 Ahmedabad
3	Chitale, A K	Product Design and Manufacturing	PHI Learning, New Delhi, 2014; ISBN: 9788120348738
4	Charantimath, Poornima	Entrepreneurship Development Small Business Entrepreneurship	Pearson Education India, New Delhi; ISBN: 9788131762264
5	Khanka, S.S.	Entrepreneurship and Small Business Management	S.Chand and Sons, New Delhi, ISBN: 978-93-5161-094-6

LEARNING WEBSITES & PORTALS

Sr. No	Link / Portal	Description
1	http://www.mced.nic.in/allproduct.aspx	MCED Product and Plan Details
2	http://niesbud.nic.in/Publication.html	The National Institute for Entrepreneurship and Small Business Development Publications
3	http://niesbud.nic.in/docs/1standardized.pdf	Courses : The National Institute for Entrepreneurship and Small Business Development
4	https://www.nabard.org/Tenders.aspx?cid=501andid=24	NABARD - Information Centre
5	http://www.startupindia.gov.in/pdf/file.php?title=Startup%20India%20Action%20Planandtype=Actionandq=Action%20Plan.pdfandcontent_type=Actionandsubmenupoint=action	Start Up India
6	http://www.ediindia.org/institute.html	About - EDII
7	http://www.nstedb.com/training/training.htm	NSTEDB - Training

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