

Curriculum of Diploma Programme

in

Modern Office Practice



**Department of Science,
Technology and Technical Education (DSTTE),
Govt. of Bihar**

**State Board of Technical Education
(SBTE), Bihar**

Semester – V

Teaching & Learning Scheme

Course Codes	Category of Course	Course Titles	Teaching & Learning Scheme (Hours/Week)					
			Classroom Instruction (CI)		Lab Instruction (LI)	Notional Hours (TW+ SL)	Total Hours (CI+LI+TW+SL)	Total Credits (C)
			L	T				
2426501	PCC	Human Resource Management	03	-	-	02	05	04
2426502	PCC	Fundamental of Insurance	03	-	-	02	05	04
2426503	PCC	Commercial & Industrial Law	03	-	-	04	07	05
2426504	PCC	Office Equipment Services & Office Automation	03	-	04	02	09	06
2426505	PCC	Shorthand English	03	-	-	-	03	03
2400505	NRC	Entrepreneurship Development & Start-ups (Common for All Programmes)	-	-	04	02	06	03
2426506	PSI	Summer Internship- II (After 4th Sem) / Industrial Training (Common for all programmes)	-	-	02	04	06	03
2426507	PSI	Minor Project (Common for all programmes)	-	-	02	02	04	02
Total			15	-	12	18	45	30

Note: Prefix will be added to Course Code if applicable (T for Theory Paper, P for Practical Paper and S for Term Work)

Legend:

CI: Classroom Instruction (Includes different instructional/implementation strategies i.e. Lecture (L), Tutorial (T), Case method, Demonstrations, Video demonstration, Problem based learning etc. to deliver theoretical concepts)

LI: Laboratory Instruction (Includes experiments/practical performances /problem-based experiences in laboratory, workshop, field or other locations using different instructional/Implementation strategies)

Notional Hours: Hours of engagement by learners, other than the contact hours for ensuring learning.

TW: Term work (includes assignments, seminars, micro projects, industrial visits, any other student activities etc.)

SL: Self Learning, MOOCs, spoken tutorials, online educational resources etc.

C: Credits = (1 x CI hours) + (0.5 x LI hours) + (0.5 x Notional hours)

Note: TW and SL have to be planned by the teacher and performed by the learner under the continuous guidance and feedback of teacher to ensure outcome of learning.

Semester - V Assessment Scheme

Course Codes	Category of Course	Course Titles	Assessment Scheme (Marks)						Total Marks (TA+TWA+LA)
			Theory Assessment (TA)		Term work & Self-Learning Assessment (TWA)		Lab Assessment(LA)		
			Progressive Theory Assessment	End Theory Assessment	Internal	External	Progressive Lab Assessment	End Laboratory Assessment	
2426501	PCC	Human Resource Management	30	70	20	30	-	-	150
2426502	PCC	Fundamental of Insurance	30	70	20	30	-	-	150
2426503	PCC	Commercial & Industrial Law	30	70	20	30	-	-	150
2426504	PCC	Office Equipment Services & Office Automation	30	70	20	30	20	30	200
2426505	PCC	Shorthand English	30	70	-	-	-	-	100
2400505	NRC	Entrepreneurship Development & Start-ups (Common for All Programmes)	-	-	20	30	20	30	100
2426506	PSI	Summer Internship- II (After 4th Sem) / Industrial Training (Common for all programmes)	-	-	20	30	20	30	100
2426507	PSI	Minor Project (Common for all programmes)			10	15	10	15	50
Total			150	350	130	195	70	105	1000

Note: Prefix will be added to Course Code if applicable (T for Theory Paper, P for Practical Paper and S for Term Work)

Legend:

- PTA: Progressive Theory Assessment in class room (includes class test, mid-term test and quiz using online/offline modes)
- PLA: Progressive Laboratory Assessment (includes process and product assessment using rating Scales and rubrics)
- TWA: Term work & Self Learning Assessment (Includes assessment related to student performance in assignments, seminars, micro projects, industrial visits, self-learning, any other student activities etc.

Note:

- ETA & ELA are to be carried out at the end of the term/ semester.
- Term Work is to be done by the students under the guidance of internal faculty but its assessment will be done **internally (40%)** as well as **externally (60%)**. Assessment related to planning and execution of Term Work activities like assignment, micro project, seminar, and self-learning is to be done by internal faculty (Internal Assessment) whereas assessment of output/product/ presentation related to these activities will be carried out by external faculty/expert (External Assessment). However, criteria of internal as well as external assessment may vary as per the requirement of respective course. For valid and reliable assessment, the internal faculty should prepare checklist & rubrics for these activities.

A)	Course Code	: 2426501 (T2426501/S2426501)
B)	Course Title	: Human Resource Management
C)	Rationale	:

Human Resource Management is increasingly getting integrated with the strategic management at corporate level. At corporate sector Human Resource Management and development has assumed great importance. Human Resource Management has become a driving force in success of an enterprise.

The Management of human resource is a very complicated and challenging task for those who are involved with successful running of an organization. This subject gives considerable knowledge of various aspects of "Personnel Management" i.e. Administration, Training & Development Accounting etc.

D) Course Outcomes (COs): After the completion of the course, teachers are expected to ensure the accomplishment of the following course outcomes by the learners. For this, the learners are expected to perform various activities related to three learning domains (Cognitive, Psychomotor, and Affective) in the classroom/ laboratory/ workshop/ field/ industry.

After completion of the course, the students will be able to-

- CO-1** Able to understand Human Resource planning and its benefits,
- CO-2** Explain forecast of man power sources of Recruitment and process of placement.
- CO-3** To get knowledge regarding promotion transfer separation & absenteeism.
- CO-4** Develop concept regarding Training development and education comparative study of different types of training methods.
- CO-5** Identify the need for Human Resources accounting.

E) Suggested Course Articulation Matrix (CAM):

Course Outcomes (COs)	Programme Outcomes(POs)							Programme Specific Outcomes* (PSOs)	
	PO-1 Basic and Discipline Specific Knowledge	PO-2 Problem Analysis	PO-3 Design/ Development of Solutions	PO-4 Engineering Tools	PO-5 Engineering Practices for Society, Sustainability and Environment	PO-6 Project Management	PO-7 Life Long Learning	PSO-1	PSO-2
CO-1	3	2	-	1	-	1	-		
CO-2	2	2	2	1	1	-	-		
CO-3	2	3	1	1	1	1	1		
CO-4	2	2	1	1	-	-	-		
CO-5	3	3	2	-	1	-	1		

Legend: High (3), Medium (2), Low (1) and No mapping (-)

* PSOs will be developed by respective programme coordinator at institute level. As per latest NBA guidelines, formulating PSOs is optional

F) Teaching & Learning Scheme:

Course Code	Course Title	Scheme of Study (Hours/Week)					
		Classroom Instruction (CI)		Lab Instruction (LI)	Notional Hours (TW+ SL)	Total Hours (CI+LI+TW+SL)	Total Credits (C)
		L	T				
2426501	Human Resource Management	03	-	-	02	05	04

Legend:

CI: Classroom Instruction (Includes different instructional/implementation strategies i.e. Lecture (L), Tutorial (T), Case method, Demonstrations, Video demonstration, Problem-based learning, etc. to deliver theoretical concepts)

LI: Laboratory Instruction (Includes experiments/practical performances /problem-based experiences in laboratory, workshop, field, or other locations using different instructional/Implementation strategies)

Notional Hours: Hours of engagement by learners, other than the contact hours for ensuring learning.

TW: Term Work (includes assignments, seminars, micro-projects, industrial visits, any other student activities, etc.)

SL: Self Learning, MOOCs, spoken tutorials, online educational resources, etc.

C: Credits = (1 x CI hours) + (0.5 x LI hours) + (0.5 x Notional hours)

Note: TW and SL have to be planned by the teacher and performed by the learner under the continuous guidance and feedback of the teacher to ensure the outcome of learning.

G) Assessment Scheme:

Course Code	Course Title	Assessment Scheme (Marks)						Total Marks (TA+TWA+LA)
		Theory Assessment (TA)		Term Work & Self-Learning Assessment (TWA)		Lab Assessment (LA)		
		Progressive Theory Assessment (PTA)	End Theory Assessment (ETA)	Internal	External	Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)	
2426501	Human Resource Management	30	70	20	30	-	-	150

Legend:

PTA: Progressive Theory Assessment in the classroom (includes class test, mid-term test, and quiz using online/offline modes)

PLA: Progressive Laboratory Assessment (includes process and product assessment using rating Scales and rubrics)

TWA: Term work & Self Learning Assessment (Includes assessment related to student performance in assignments, seminars, micro-projects, industrial visits, self-learning, any other student activities, etc.)

Note:

- ETA & ELA are to be carried out at the end of the term/ semester.
- Term Work is to be done by the students under the guidance of internal faculty but its assessment will be done **internally (40%)** as well as **externally (60%)**. Assessment related to planning and execution of Term Work activities like assignments, micro-projects, seminars, and self-learning is to be done by internal faculty (Internal Assessment) whereas assessment of output/product/presentation related to these activities will be carried out by external faculty/expert (External Assessment). However, criteria for internal as well as external assessment may vary as per the requirement of the respective course. For valid and reliable assessment, the internal faculty should prepare a checklist & rubrics for these activities.

H) Course Curriculum Detailing: This course curriculum detailing depicts learning outcomes at course level and session level and their attainment by the students through Classroom Instruction (CI), Laboratory Instruction (LI), Term Work (TW), and Self Learning (SL). Students are expected to demonstrate the attainment of Theory Session Outcomes (TSOs) and Lab Session Outcomes (LSOs) leading to the attainment of Course Outcomes (COs) upon the completion of the course. While curriculum detailing, NEP 2020-related reforms like Green skills, Sustainability, Multidisciplinary aspects, Society connect, Indian Knowledge System (IKS), and others must be integrated appropriately.

I) Theory Session Outcomes (TSOs) and Units: T2426501

Major Theory Session Outcomes (TSOs)	Units	Relevant COs Number(s)
TSO 1a. Define Manpower Planning. TSO 1b. Write the benefits of Manpower Planning. TSO 1c. Write the process of MBO.	Unit-1.0 Human Resource Planning 1.1 Manpower Planning _ benefits. 1.2 Process; MBO	CO1
TSO 2a, Define Recruitment & Selection TSO 2b. Explain Manpower requirement forecast? TSO 2c. Explain techniques of Recruitment.	Unit-2.0 Recruitment and Selection Process, Recruitment Policy 2.1 Forecast of Manpower Requirement. 2.2- Source of Recruitment. 2.3-Techniques of Recruitment	CO2
TSO 3a. Define Promotion transfer, Separation Absenteeism? TSO 3b. Explain purpose of promotion? TSO 3c. Explain purpose of Transfer? TSO 3d. Explain measures of Control absenteeism?	UNIT - 03 Promotion, Transfers, Separation 3.1 - Turnover, tardiness, monotony, fatigue, Causes and ways to minimize horizontal and vertical promotion. 3.2 Purpose of Promotion, Promotion Policy. 3.3 Purpose of Transfer, Transfer Policy. 3.4 Separation. 3.5 Absenteeism - Measures for Control of Absenteeism.	CO3
TSO 4a. Define training, education and development TSO 4b. Explain difference between training & development? TSO 4c. What are the methods & technique of training?	Unit-4.0 Employee Training and Development 4.1-Three Terms: Training, Development and Education. 4.2 Definition between Training and Development 4.3-Training methods and technique, On the job training, In-house training, Short term and Long term training.	CO4
TSO 5a. Write the need for HRS accounting? TSO 5b. What are the objectives of HRS accounting? TSO 5c Define objectives of HRS audit? TSO5d. Explain areas of HRS audit?	Unit-5.0 Human Resource Accounting and Audit 5.1- Need for Human Resource Accounting -present. 5.2- Practice and Consequence. 5.3- Objectives of HRA (Human Resource 5.4-Objective-Areas of Human Resources Audit.	

Note: One major TSO may require more than one Theory session/Period.

H) Suggested Laboratory (Practical) Session Outcomes (LSOs) and List of Practical: NA

I) Suggested Term Work and Self-Learning: S2426501 Some sample suggested assignments, micro projects, and other activities are mentioned here for reference.

a. Assignments: Questions/Problems/Numerical/Exercises to be provided by the course teacher in line with the targeted COs.

1. Prepare an assignment on functions of Human resource department.
2. Discuss scope and objectives of Human Resource Management.
3. Describe the areas of Human Resource Audit?
4. Explain the meaning characteristics and objectives of Research?
5. Prepare an assignment on Exit policy of Government of India?
6. Explain the effects of Excess manpower in a company?

b. Other Activities

1. Seminar Topics:

Procedure of voluntary retirement scheme (VRS).

Explain Merits and demerits of VRS.

Policy of Government of India regarding rehabilitation of VRS.

Explain different methods of performances appraisal system.

Visits:

Visits to establishment section of GWP, Patna.

Administrative office of any government department.

Administrative section in Bank.

J) Suggested Course Evaluation Matrix: The course teacher has to decide and use the appropriate assessment strategy and its weightage in theory, laboratory, and Term Work for ensuring CO attainment. The response/performance of each student in each of these designed activities is to be used to calculate **CO attainment**.

COs	Course Evaluation Matrix						
	Theory Assessment (TA)**		Term Work Assessment (TWA)			Lab Assessment (LA)#	
	Progressive Theory Assessment (PTA) Class/Mid Sem Test	End Theory Assessment (ETA)	Term Work & Self Learning Assessment			Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)
			Assignments	Micro Projects	Other Activities*		
CO-1	20%	20%	15%	20%	10%	-	-
CO-2	15%	20%	20%	20%	15%	-	-
CO-3	20%	15%	15%	20%	25%	-	-
CO-4	20%	20%	25%	20%	25%	-	-
CO-5	25%	25%	25%	20%	25%	-	-
Total Marks	30	70	20	20	10	-	-
			50				

Legend:

*: Other Activities include self-learning, seminar, visits, surveys, product development, software development, etc.

**:

Mentioned under point- (N) #: Mentioned under point-(O)

Note:

- The percentage given are approximate
- In the case of Micro Projects and End Laboratory Assessment (ELA), the achieved marks will be equally divided among all those COs mapped with total experiments.
- For CO attainment calculation indirect assessment tools like course exit survey need to be used which comprises questions related to the achievement of each COs.

J) Suggested Specification Table for End Semester Theory Assessment: The specification table represents the reflection of sample representation of assessment of the cognitive domain of the full course.

Unit Title and Number	Total Classroom Instruction (CI) Hours	Relevant COs Number(s)	Total Marks	ETA (Marks)		
				Remember (R)	Understanding (U)	Application & above (A)
Unit-1.0 Human Resource Planning	08	CO1	12	4	4	4
Unit-2.0 Recruitment and Selection Process, Recruitment Policy	10	CO2	14	4	8	2
Unit-3.0 Promotion, Transfers, Separation, Absenteeism	08	CO3	12	4	4	4
Unit-4.0 Employee Training and Development	10	CO4	14	4	6	4
Unit-5.0 Human Resource Accounting and Audit	12	CO5	18	4	6	8
Total	48	-	70	20	28	22

Note: Similar table can also be used to design class/mid-term/ internal question paper for progressive assessment.

K) Suggested Assessment Table for Laboratory (Practical): (Not Applicable)

L) Suggested Instructional/Implementation Strategies: Different Instructional/ Implementation Strategies may be appropriately selected, as per the requirement of the content/outcome. Some of them are Improved Lecture, Tutorials, Case Methods, Group Discussions, Industrial visits, Industrial Training, Field Trips, Portfolio Based, Learning, Role Play, Live Demonstrations in Classrooms, Labs, Field Information and Communications Technology (ICT)Based Teaching Learning, Blended or flipped mode, Brainstorming, Expert Session, Video Clippings, Use of Open Educational Resources (OER), MOOCs etc.

M) Suggested Learning Resources:

(a) Books:

S. No.	Titles	Author(s)
1.	Personnel Management Text Cases	C.B. Mamoria and S.V. Gaikar
2.	Principles and Practice of Management	J.M. Prasad
3.	Principles of Management	P.C. Tripathy & P. N. Reddy
4.	Business organization Management and Administration	Yogendra Prasad Verma

(b) Online Educational Resources:

<https://in.indeed.com/>

<https://in.adp.com>

<https://www.techtarget.com>

<https://en.wikipedia.org>

<https://www.timechampo.io>

Note: Teachers are requested to check the creative commons license status/ financial implications of the suggested, online educational resources before use by the students.

- A) **Course Code:** 2426502 (T2426502/S2426502)
 B) **Course Title** Fundamental of Insurance
 C) **Rationale:**

A Diploma holder technician in Secretarial practice or modern office practice has to come across many activities where the knowledge of in insurance is required for efficient performance of their duties.

- . The student will be able to define & understand the different activity of insurance
- . Understand primary function of insurance Co.
- . Develop the knowledge of insurance and precedent prevalent

After completion of the Course, the student should be able to:

CO-1: Explain the concept of Insurance.

CO -2: Explain different theory of insurance

CO-3: Identify and explain insurance organization.

Co- 4: Explain the types of insurance policies.

Co-5: Describe knowledge on life insurance, general insurance and marine insurance.

D) Suggested Course Articulation Matrix (CAM):

Course Outcomes (Cos)	Program Outcomes (POs)							Program specific outcomes (POs)	
	PO-1 Basic and Discipline specific knowledge	PO-2 Problem analysis	PO-3 Professionalism	PO-4 Problem solving	PO-5 Digital working skill	PO-6 Awareness about ethical practice	PO-7 Life long learning	PSO-1	PSO-2
CO-1	3	2	-	1	-	1	-		
CO-2	2	2	2	1	1	-	-		
CO-3	2	3	1	1	1	1	1		
CO-4	2	2	1	1	-	-	-		
CO-5	3	3	2	-	1	-	1		

Legend-High(3), Medium (2), Low(1)and No mapping(-)

* PSOs will be developed by respective programme coordinator at institute level. As per latest NBA guidelines, formulating PSOs Is optional.

E) Teaching and Learning Scheme:

Course code	Course Title	Scheme of study (hours/week)					
		Classroom instruction (CI)		Lab Instruction (LI)	National Hours (TW+SL)	Total hours (CI+LI+TW+SL)	Total credits (c)
		L	T				
2426502	Fundamental of Insurance	03	-	-	02	05	04

Note: Prefix will be added to course code if applicable (T for theory paper, p for practical paper and S for term work)

Legend:

CI: Classroom Instruction (includes different instructional/ implementation strategies lecture (L), Tutorial (T), case method, Demonstrations, video demonstration, problem based learning etc. to deliver theoretical concepts)

LI: Laboratory instruction (includes experiments/ practical performances / problem based experiences in laboratory. Workshop, field or other locations using different instructional \implementation strategies.

National hours: Hours of engagement by learns, other than the contact hours for ensuring learning.

TW: Term Work (Include assignments, seminars, micro projects, industrial visits, any other student activities etc.)

SL: Self learning MOOCs, spoken tutorials, online educational resources etc.)

C: Credits = (1x CI hours) + (0.5 x LI hours) + (0.5 x notional hours)

NOTE: Be planned by the teacher and performed by the learner under the continuous guidance and feedback of teacher to ensure outcome off learning.

F) Assessment scheme:

Course code	Course Title	Assessment Scheme (Marks)						Total marks TA+TWA+LA)
		Theory Assessment (TA)		Term Work & Self-Learning Assessment (TWA)		Lab Assessment (LA)		
		Progressive theory Assessment (PTA)	End theory Assessment (ETA)	Internal	External	Progressive lab Assessment (PLA)	End Laboratory Assessment (ELA)	
2426502	Fundamental of Insurance	30	70	20	30	-	-	150

Note: Prefix will be added to course code if applicable (T for theory paper , P for practical paper and S for Term Work)

Legend:

PTA: Progressive theory assessment in class room (includes class test, mid-term test and quiz using online \offline modes)

PLA: Progressive laboratory assessment (includes process and product assessment using rating scales and rubrics)

TWA: Term work & self-learning assessment (includes assessment related to student performance in assessments seminars micro projects, industrial visits, self – learning any other student activities etc.)

G) Theory session outcomes (TSO) and Units: T2426502

Major Theory session outcomes (TSO)	Unit	Relevant Cos number
TSO1a. Define Insurance explain its meaning and Characteristics? TSO 1b. Discuss the origin of insurance? TSO 1c. What is the need and importance of insurance in modern business and society? TSO 1d. Explain the different types of insurance with examples? TSO 1e. Differentiate between Government insurance and private insurance?	UNIT-1 INSURENCE 1.1 Introduction 1.2 Origin 1.3 Need 1.4 Types (Govt. sector & private sector) 1.5 Importance	CO1
TSO 2a. Explain the importance of insurance of insurance in business and society? TSO 2b. Define the theory of insurance. Discuss its main features? TSO 2c. What do you understand by contract law of insurance? TSO 2d. Describe the different theories of insurance? TSO 2e. Different between a simple contract and an insurance contract?	UNIT-2 THEORY OF INSURENCE 2.1 Theory of Insurance 2.2 Different theories 2.3 Simple contract law and Warranties 2.4 Indemnity difference between simple contract and insurance contract	CO2
TSO 3a. What is life insurance? TSO 3b. Explain the essential of a life insurance contract? TSO 3c. Define fire insurance. what are the essentials of a fire insurance contract? TSO 3d. How is the calculation of premium done in life insurance? explain the use of mortality table? TSO 3e. What is life insurance policy? Explain the	UNIT 3– LIFE INSURENCE 3.1. Essentials of life insurance 3.2 Contract procedure of purchase of life insurance policy	CO3

TSO 4a. Explain the insurance policies? TSO 4b. Explain types of insurances policies? TSO 4c. Explain Term policy? TSO 4d. Explain group insurances? TSO 4e. Explain money back policy? TSO 4f. Explain Annuity?	UNIT 4 - TYPES OF INSURANCE POLICY 4.1 Whole life policies 4.2 Endowment policies 4.3 Term policy 4.4 Group insurance 4.5 Money back policy 4.6 Annuity	CO4
TSO 5a. Explain Marine insurances? TSO 5b. Explain essentials of marine contract? TSO 5c. Explain the Warranties kinds of Marine policies? TSO 5d. Explain motor fidelity? TSO 5e. Explain different personal accident and group insurances? TSO 5f. Explain the functions of Insurances Agent?	UNIT 5-MARINE INSURENCE 5.1 Essential of marine contract 5.2 Warranties of kinds of marine policies with their conditions. 5.3 Miscellaneous insurance -motor insurance, Fidelity personal accident insurance. 5.4 Meaning of Insurance Agent	CO5

Note:

- Separate passing is must for progressive and end semester assessment for both theory and practical.
- ETA & ELA are to be carried out at the end of the term / semester.
- Term work is to be done by the students under the guidance of internal faculty but its assessment will be done internally (40%) as well as externally (60%). assessment related to planning and execution of Term Work activities like assessment, micro project, and seminar and self – learning is to be done by internal faculty (internal assessment) Whereas assessment of output / product / presentation related to these activities will be carries out by external faculty /expert (External Assessment). However, criteria of internal as well as external assessment may vary as per the requirement of respective course. For valid and reliable assessment, the internal faculty should prepare checklist & rubrics for these activities.

H) Course Curriculum Detailing: This course curriculum detailing depicts learning outcomes at course level and session level and their attainment by the students through Class room instruction (CI), laboratory instruction (LI), Term Work (TW) And self-Learning (SL). Students are expected to demonstrate the attainment off Theory Session Outcome (TSOs) and Lab Session Outcome (LSOs) Leading to attainment of cost outcomes (COs) upon the completion of the course. While Curriculum detailing NEP 2020 related reforms like green skills, Sustainability, multidisciplinary aspects, society connect Indian Knowledge system (IKS) and others must be integrated appropriately.

I) Suggested Term Work and Self learning: S2426502 Some sample suggested assignments, micro project and other activities are mentioned here for reference.

a. Assignments: Questions/ Problems/Numerical/Exercise to be provided by the course teacher in line with targeted COs.

1. Prepare an assignment origin of insurance
2. Prepare an assignment about the different theory of insurances
3. Prepare an assignment on basic calculation of premium for different scheme by using mortality table.
4. Prepare an assignment of warranties given under marine policies.
5. Prepare an assignment on Term policy.
6. Prepare an assignment on Fire insurances.

b Other Activities**Seminar Activities.**

- a. Seminar on importance of insurance in business of society
- b. Seminar on the difference between simple contract and insurance contract
- c. Seminar on essentials of life insurance contract procedure of purchase a life insurance policy.
- d. Seminar on doctrine of indemnity and how it is applied in insurance contract

2. Visit

- Visit to Local office of life insurance office.
- Visit to insurance department of government offices.
- Visit to Motor insurance policy offices (private & government)
- Visit to Fire insurance department.
- Visit to Marine insurance department.
- Visit to Accident insurances department.

3 Self-learning topics:**J) Suggested Course Evaluation Matrix:**

The course teacher has to decide and use appropriate assessment strategy and its weightage in theory, laboratory and Term Work for ensuring CO attainment. The response/performance of each student in each of these designed activities is to be used to calculate **CO attainment**.

COs	Course Evaluation Matrix						
	Theory Assessment(TA)**		Term Work Assessment(TWA)			Lab Assessment(LA)#	
	Progressive Theory Assessment(PTA) Class/Mid Sem Test	End Theory Assessment(ETA)	Term Work & Self Learning Assessment			Progressive Lab Assessment(PLA)	End Laboratory Assessment (ELA)
			Assignment	Micro Projects	Other Activities		
CO-1	25%	25%	20%	20%	10%	-	
CO-2	20%	20%	10%	20%	15%		
CO-3	20%	20%	15%	15%	25%		
CO-4	25%	25%	20%	15%	20%		
CO-5	15%	15%	25%	20%	20%		
Total Marks	30	70	20	20	10		
			50				

Legend: *: Other Activities includes self-learning, seminar, visits, surveys, product development, software development etc.

*: Mentioned under point-(N)

#: Mentioned under point-(O)

Note:

- The percentage given are approximate.
- In case of Micro Projects and End Laboratory Assessment(ELA), The achieved marks will be equally divided in all those Cos mapped with total experiments.
- For CO attainment calculation indirect assessment tools like course exits survey need to be used which comprises of question related to achievements of each Cos.

RECOMMENDED BOOKS

sl.	Books title	Author (s)
1	PRINCIPLE OF INSURANCE AND RISK MANAGEMEN	S.I GUPTA
2	INSURANCE AND RISK MANAGEMENT	D.R. GUPTA .
3	PRINCIPLES AND PRACTICE OF INSURANCE	G.S PANDA – KALYANI PUBLISHERS.

Online classes

- <http://www.classcentral.com>
- <http://www.books.google.com>
- <http://www.taxmann.com>
- <http://www.scribd.com>
- <http://www.kitabmahalpublishers.com>
- <http://www.kamrajcollege.com>

- A) Course Code** : 2426503 (T2426503/ S2426503)
B) Course Title : Commercial & Industrial Law
C) Rationale :

This course provides strong foundation in management concepts. It ensures equitable compensation, benefits, and workplace rights, empowering employees to advocate for their financial well-being.

Commercial law is an on area of legal study and practice that deals with conflicts related to selling and purchasing goods, products and service.

The main responsibilities of employees to personally do the work they were hired to do their work carefully and seriously cases. Completing assigned tasks and meeting deadlines. This is the most fundamental responsibility of any employee.

Employees are accountable for fulfilling their designated tasks. They have to deliver results that contribute to the organizational whole.

After completion of the Course, the student should be able to:

Co-1: A contract is an agreement that is enforceable by law. A contract is only legally enforceable.

Co-2: It defines important terms like factory. Worker and Manufacturing process.

Co-3: It provide workers and their dependents relief for harm by accident that results in either death or disability.

Co-4: It prevent illegal strikes and lockouts. Reach out to workers who have been laid off, unfairly terminated, etc.

Co-5: The payment of wages act of 1936 governs how wages are paid to employees.

D) Suggested Course Articulation Matrix (CAM):

Course Outcomes (Cos)	Program Outcomes (POs)							Program specific outcomes (POs)	
	PO-1 Basic and Discipline specific knowledge	PO-2 Problem analysis	PO-3 Professionalism	PO-4 Problem solving	PO-5 Digital working skill	PO-6 Awareness about ethical practice	PO-7 Life long learning	PSO-1	PSO-2
CO-1	3	2	-	1	-	1	-		
CO-2	2	2	2	1	1	-	-		
CO-3	2	3	1	1	1	1	1		
CO-4	2	2	1	1	-	-	-		
CO-5	3	3	2	-	1	-	1		

Legend-High(3), Medium (2), Low(1)and No mapping(-)

* PSOs will be developed by respective programme coordinator at institute level. As per latest NBA guidelines, formulating PSOs Is Optional.

E) Teaching and Learning Scheme:

Course code	Course Title	Scheme of study (hours/week)					
		Classroom instruction (CI)		Lab Instruction (LI)	National Hours (TW+SL)	Total hours (CI+LI+TW+SL)	Total credits (c)
		L	T				
20426503	Commercial & Industrial Law	03	-	-	04	07	05

Note: Prefix will be added to course code if applicable (T for theory paper, p for practical paper and S for term work)

Legend:

CI: Classroom Instruction (includes different instructional/ implementation strategies lecture (L), Tutorial (T), case method, Demonstrations, video demonstration, problem based learning etc. to deliver theoretical concepts)

LI: Laboratory instruction (includes experiments/ practical performances / problem based experiences in laboratory. Workshop, field or other locations using different instructional \implementation strategies.

National hours: Hours of engagement by learns, other than the contact hours for ensuring learning.

TW: Term Work (Include assignments, seminars, micro projects, industrial visits, any other student activities etc.)

SL: Self learning MOOCs, spoken tutorials, online educational resources etc.)

C : Credits = (1x CI hours) + (0.5 x LI hours) + (0.5 x notional hours)

NOTE:

Be planned by the teacher and performed by the learner under the continuous guidance and feedback of teacher to ensure outcome off learning.

F) Assessment scheme:

Course code	Course Title	Assessment Scheme (Marks)						Total marks (TA+TWA+LA)
		Theory Assessment(TA)		Term Work & Self-Learning Assessment (TWA)		Lab Assessment (LA)		
		Progressive theory Assessment t (PTA)	End theory Assessment (ETA)	Internal	External	Progressive lab Assessment t (PLA)	End Laboratory Assessment (ELA)	
2426503	Commercial & Industrial Law	30	70	20	30	-	-	150

Note: Prefix will be added to course code if applicable (T for theory paper, P for practical paper and S for Term Work)

Legend:

PTA: Progressive theory assessment in class room (includes class test, mid-term test and quiz using online \offline modes)

PLA: Pprogressive laboratory assessment (includes process and product assessment using rating scales and rubrics)

TWA: Term work &self-learning assessment (includes assessment related to student performance in assessments seminars micro projects, industrial visits, self – learning, any other student activities etc.)

Note:

- . Separate passing is must for progressive and end semester assessment for both theory and practical.
 - . ETA & ELA are to be carried out at the end of the term / semester.
 - . Term work is to be done by the students under the guidance of internal faculty but its assessment will be done internally (40%) as well as externally (60%). assessment related to planning and execution of Term Work activities like assessment, micro project, and seminar and self – learning is to be done by internal faculty (internal assessment) Whereas assessment of output / product / presentation related to these activities will be carries out by external faculty /expert (External Assessment). However, criteria of internal as well as external assessment may very as per the requirement of respective course. For valid and reliable assessment, the internal faculty should prepare checklist & rubrics for these activities.
- 1) Course Curriculum Detailing: This course curriculum detailing depicts learning outcomes at course level and session level and their attainment by the students through Class room instruction (CI, laboratory instruction (LI), Term Work (TW) And self-Learning (SL). Students are expected to demonstrate the attainment off Theory Session Outcome (TSOs) and Lab Session Outcome (LSOs) Leading to attainment of cost outcomes (COs) upon the completion of the course. While Curriculum detailing NEP 2020 related reforms like green skills, Sustainability, multidisciplinary aspects, society connect Indian Knowledge system (IKS) and others must be integrated appropriately.

G) Theory session outcomes (TSO) and Units: T2426503

Major Theory session outcomes (TSO)	Unit	Relevant COS number
TSO Q. What are the essential terms of a contract? Q. What is the offer and acceptance? Q. What is the formal definition of consideration? Q. What is the difference between void and void agreement? Q. What is the capacity of parties in detail? Q. What is the meaning of free consent? Q. What is the concept of performance contracting? Q. What is the law of agency?	UNIT-1 Law of Contract 1.1 definitions of essential elements of a contract. 1.2 offer and expectance. 1.3 Consideration. 1.4 Void and void agreement 1.5 Capacity of party 1.6 free consent 1.7 Performance of contracts. 1.8 Termination of contract. 1.9 and immunity and guarantee 1.10 Bailment and pledge 1.11 Law of agency	CO1
Q what is the definition of a factory. Q what are the object and application of the act. Q What are the provisions safety to health and safety of worker under the factories act 1948 discuss?	Unit-2 Factories act 2.1 Definitions under the factories act. 2.2 Objects and application of the act. 2.3 provision relation to health safety and welfare of the worker. 2.4 Provisions relation to working hours holidays Annual leave etc.	CO2
Q what do you mean by workmen's and compensation. Q what are the scope and objective of workman compensation? Q what are the rules regarding distribution.	UNIT 3-Workmen's and compensation act. 3.1. Definition 3.2 scope 3.3 Rules regarding workmen's and compensation	CO3
Q what do you mean by industrial dispute. Q what is strike locate lockout layout and Retrenchments.	Unit 4- Industrial Disputes Act. 4.1 Definitions. 4.2 Referring of disputes stickers and lock outs lay off and Retrenchments.	CO4
Q what is the maximum wage in payment of wage act 1936 Q what is fixing of minimum rates of wages.?	Unit 5-Maximum Wage act and payment of wage act 5.1 Definition 5.2 Fixation of minimum wage rate working hour and rate of clams wage 5.3 Objective, Scope, and Rules regarding payment of wages .	CO5

H) Suggested Term Work and Self learning: S2426503 Some sample suggested assignments, micro project and other activities are mentioned here for reference.

A Assignments: Questions/ Problems/Numerical/Exercise to be provided by the course teacher in line with targeted COs.

7. Prepare an assignment of meaning and importance of Contract's Law
8. Prepare an assignment of provision given under factories
9. Prepare an assignment of the scope and objective of workmen's and compensation.
10. Discusses under workmen's compensation disputes act.
11. Prepare an assignment on Industrial distributors act.
12. Explain the Maximum wage act and minimum wages.

B Other Activities

1. **Seminar Activities.**

- e. Seminar on essential elements of a contract.
- f. Seminar on void and void agreement
- g. Seminar on Law of agency and payment of wage act.
- h. Seminar on Objects and application of the act.
- i. Rule regarding workmen's and compensation.
- j. Seminar on fixation of minimum wage rate working hour and rate of claims wage.

2. **Visit**

- g. Visit to strategic planning.
- h. Visit to leadership and management styles
- i. Visit to Organizational structure.
- j. Visit to operational management marketing and sales strategic
- k. Visit to innovational and technology.

4 Self-learning topics:

➤ **Suggested Course Evaluation Matrix:**

The course teacher has to decide and use appropriate assessment strategy and its weightage in theory, laboratory and Term Work for ensuring CO attainment. The response/performance of each student in each of these designed activities is to be used to calculate **CO attainment**.

COs	Course Evaluation Matrix						
	Theory Assessment(TA)**		Term Work Assessment(TWA)			Lab Assessment(LA)#	
	Progressive Theory Assessment(PTA) Class/Mid Sem Test	End Theory Assessment(ETA)	Term Work & Self Learning Assessment			Progressive Lab Assessment(PLA)	End Laboratory Assessment (ELA)
			Assignment	Micro Projects	Other Activities		
CO-1	25%	25%	20%	20%	10%	-	
CO-2	20%	20%	10%	20%	15%		
CO-3	20%	20%	15%	15%	25%		
CO-4	25%	25%	20%	15%	20%		
CO-5	15%	15%	25%	20%	20%		
Total Marks	30	70	20	20	10		
			50				

Legend*: Other Activities includes self-learning, seminar, visits, surveys, product development, software

development etc.

***:** Mentioned under point-(N)

#: Mentioned under point-(O)

Note:

- The percentage given are approximate.
- In case of Micro Projects and End Laboratory Assessment(ELA), The achieved marks will be equally divided in all those Cos mapped with total experiments.
- For CO attainment calculation indirect assessment tools like course exits survey need to be used which comprises of question related to achievements of each Cos.

RECOMMENDED BOOKS

1	Commercial and industrial Law	N.D Kapoor
2	Commercial and industrial Law	Das Gupta
3	Commercial Law	M.C. Sen & mehta

Online classes

<http://www.classcentral.com>

<http://www.books.google.com>

<http://www.taxmann.com>

<http://www.scribd.com>

<http://www.kitabmahalpublishers.com>

<http://www.kamrajcollege.com>

A) Course Code :2426504(T2426504/P2426504/S2426504)

B) Course Title : Office equipment services & Office automation

C) Rational

As an office now attends to clients from all parts of globe, it has to keep pace with technological developments taking place in office operations. Today, a modern office has mechanized its routine and monotonous activities. Machines and equipment have become integral part of a modern office. Besides performing routine office functions, some machines are also used for safety and security of office operations and data. Various office equipment like computer, photocopies, binding machine, lamination machine, franking machine, cctv etc. have become necessity for survival and growth of business houses.

D) Course Outcome (Cos)

After the completion of the course, teachers are expected to ensure the accomplishment of following course outcome by the learners. for this learner are expected to perform various activities related to three learning domains (cognitive, psychomotor& Affective) in classrooms/laboratory/workshop/field/industries.

Upon completion of this course, student will be able to:

Co-1 Lists various office equipment and machine including their function advantage and disadvantage.

Co-2 Understand the basis of communication system and services.

Co-3 To provides for the collection transport, and delivery of letters throughout a country.

Co-4 Auxiliary learning is a method to improve the ability of the primary tasks to generalise to unseen data.

Co-5 To provide an in- depth training in use of office automation interest and internet tools.

E) Suggested Course Articulation Matrix (CAM):

Course Outcomes (Cos)	Program Outcomes (POs)							Program specific outcomes (POs)	
	PO-1 Basic and Discipline specific knowledge	PO-2 Problem analysis	PO-3 Professionalism	PO-4 Problem solving	PO-5 Digital working skill	PO-6 Awareness about ethical practice	PO-7 Lifelong learning	PSO-1	PSO-2
CO-1	3	2	-	1	-	1	-		
CO-2	2	2	2	1	1	-	-		
CO-3	2	3	1	1	1	1	1		
CO-4	2	2	1	1	-	-	-		
CO-5	3	3	2	-	1	-	1		

Legend-High (3), Medium (2), Low(1)and No mapping(-)

* PSOs will be developed by respective programme coordinator at institute level. As per latest NBA guidelines, formulating PSOs is optional.

(External assessment). However, criteria of internal as well as external assessment may vary as per the requirement of respective course. For valid and reliable assessment, the internal faculty should prepare checklist & rubrics for these activities.

I) Course Curriculum Detailing: This course curriculum detailing depicts learning outcomes at course level and session level and their attainment by the students through Class room instruction (CI), laboratory instruction (LI), Term Work (TW) And self-Learning (SL). Students are expected to demonstrate the attainment of Theory Session Outcome (TSOs) and Lab Session Outcome (LSOs) Leading to attainment of cost outcomes (COs) upon the completion of the course. While Curriculum detailing NEP 2020 related reforms like green skills, Sustainability, multidisciplinary aspects, society connect Indian Knowledge system (IKS) and others must be integrated appropriately.

A) Teaching and Learning Scheme:

Course code	Course Title	Scheme of study (hours/week)					
		Classroom instruction (CI)		Lab Instruction (LI)	National Hours (TW+SL)	Total hours (LI+TW+SL)	Total credits (c)
		L	T				
2426504	Office equipment services office automation	03	-	04	02	09	06

Note

to course code if applicable (T for theory paper, for practical paper, s for term work) legend

CI: Classroom instruction (includes different instruction / implementations strategies (L), Tutorial (T) case method demonstrations video demonstration problem based learning etc. to deliver theoretical concepts)

LI: Laboratory instruction (including experiments/ practical performance/problem based experience in laboratory. Workshop, field or other location using different instruction \ implementation strategies.

National hours: Hours of engagement by learners, other than the contact hours for ensuring learning.

TW: Term work (include assignment, seminars, micro project, industrial visit, any other student activities etc.)

SL: Self- learning MOOCs, spoken tutorial, online educational resources etc.)

C: Credits = (1*CL hours) + (0.5* national hours)

NOTE: Be planned by the teacher and performed by the learner under the continues guidance and feedback of teacher to ensure outcome off learning

H) Assessment scheme:

Course code	Course Title	Assessment Scheme (Marks)						Total marks (TA+TWA+LA)
		Theory Assessment(TA)		Term Work & Self-Learning Assessment (TWA)		Lab Assessment (LA)		
		Progressiv e theory Assessment t (PTA)	End theory Assessment t (ETA)	Intern al	External	Progressive lab Assessment (PLA)	End Laboratory Assessment (ELA)	
2426504	Office equipment services & Office automation	30	70	20	30	20	30	200

NOTE: Prefix will be added to course code if applicable (t for theory paper for practical paper and s for term work) legend :PTA: Progressive theory assessments in class room (includes class test, mid-term test and quiz using online\offline modes)PLA: Progressive laboratory assessment (includes process and product assessment using rating scales and rubrics)

TWA: Term work & self-learning assessment (includes assessment related to student performance in assessment seminar micro projects, industrial visits ,self-learning any other students activities etc.)NOTE: Separate passing is must for progressive and end semester assessment for both theory and practical ETA & ELA are to be carried out at the end of the term \semester.

Note- Separate passing is must for progressive and end semester assessment for both theory and practical.

ETA & ELA are be to carried out at the end of term/ semester.

Term work is to be done by the students under the guidance of internal faculty but its assessment will be done by internally (40%) as well as externally (60%). Assessment related to planning and execution to term work activities like assessment, micro project, seminar and self-learning is to be done by internal faculty (internal assessment) where assessment of output /product. Presentation related to these activities will be carried out by external faculty/expert

F) Theory session outcomes (TSO) and Units: T2426504

Major theory session outcomes (TSOS)	UNITS	Relevant Cos Numbers
a. What are the principle of selecting furniture b. How do you categorize office furniture c. what are the advantage and disadvantage of office machine d. what is the meaning and importance of mechanization of office of work e. What are the different types of office machines and their uses	UNIT-1 office equipment and machine 1.1 Basic principle of selecting furniture 1.2 Office furniture viz. desk\ table, chair and miscellaneous. 1.3 Office machine and its advantage and disadvantages 1.4 Mechanization of office work 1.5 Types of office machines and their uses	CO1
a. What are the advantages and disadvantage and trailed mailing service in an office b. What are the steps to be followed for handling inward mail c. What is internal oral and written communication d. what is external communication cation? And what is it used for ?	UNIT-2 Mail service, communication and telecommunication 2.1 Mailing department centralization of mail service handling of inward mail and outward mail 2.2 Internal communication like oral and written communication 2.3 External communication	CO2
<u>a.</u> What is the meaning of register letter and it is used for? b. What does a under certificate of posting mean? c. How to type foreign letters? d. what is business parcel service?	Unit-3 Postal service 3.1 Letters, registered letters, under certification of posting, foreign letters, procerus, business reply service and telegrams.	CO3
a. What are media input device? b. What does an optical character reader do? c. What is the graphics table and its uses? d. What is a dictation system and its types. e. What is the transcription of the word system? f. What is a graphic plotters and what is the uses of a duplicator? g. Difference between printer machines and electronics copiers. h. What is collating machine & building machine i. What is facsimile & telex system	Unit-4 Office automation Auxiliary wp equipment 4.1 Introduction, Media input devices, Optical character reader, Graphics table. 4.2 Transcription system, Micrographics equipment and Graphic plotters 4.3 Duplicators, Scanner, Photocopying machines 4.4 Facsimile system, Teleconferencing and Tele – text	CO4

j. How is fax different from email? k. What are the three types of teleconferences? l. Differences between voice mail & video message m. How does a paging services work? n. What is Dictaphone used for? o. EPBX stand FOR?	4.5 Voice – mail, Video – text, Dicta phone, Telephone, EPBX	
a. What are the four types of communication b. what are the essential elements in transmitting a message? c. What is the automex message switcher d. What is the SFI engine? e. What is nodal equipment? f. Why do we need electronic devices? g. What are the types of automation h. What are the problems faced in the workplace? i. What are the convential data processing methods? j. What is office information system? n. How do you switch between plain text and html email view? o. How do you export emails to a file or database? p. Can you change print settings, such as paper size or orientation? q. How do you Track email replies or responses? r. How do you use email analytics to track engagement metrics?	<u>UNIT – 05 Electronic message transmission</u> 5.1 Types of communication 5.2 Elements of messages transmission system 5.3 Automex message switcher 5.4 SFT system 5.5 Nodal hardware 5.6 Need for electronic devices 5.7 Office automation 5.8 Problems of the present office 5.9 Conventional data processing methods 5.10 office information system	CO5

I) Suggested Laboratory (Practical) Session Outcomes (LSos0) and list of practical: P2426504

Practical/Lab outcomes (LSOs)	S no	UNITS	Relevant Cos Numbers
a. Explain mail message system b. Classify message distribution c. prepare voice mail d. Perform transmission of taxed picture. e. Prepare a video text	1	UNIT-1 Computer mail message system 1.1 Introduction 1.2 Message distribution 1.3 Voice mail 1.4 Transmission of text and picture 1.5 Video text	CO1
a. Explain capabilities of WP system. b. Write the process of input and output concept. c. classifies hard ware and software d. Prepare evaluation of word processing.	2	UNIT-2 Electronic message transmission 2.1 Capabilities of WP system 2.2 Input Process Output Process Concept 2.3 Hardware and soft ware 2.4 Evaluation of word Processing	CO2
a. What is creating a data base? b. Insert data into the present table? c. What is basic data table? d. What is the purpose of the form? e. Write a query to display the top 5 bestselling product? f. What type of Report do you want to create (e.g. sales, inventory, customer)? g. Difference between the Reports and running report?	3	UNIT-3 Ms Access 3.1 Creating a date base 3.2 Creating a parent table – basic data table 3.4 Creating Form 3.5 Query – Extracting data form sing table 3.6 Creating and Running reports.	CO3
a. what is the purpose of creating the email? b. Who will be using this email id? c. Do you want to create a username with a combination of letters and numbers? d. How do you want to structure the email (e.g. Formal, informal, persuasive)? e. How can you ensure email delivery and Receipt? f. What are the best practice for email password security? g. What type of file do you want to attach (e.g. document, image, video) h. what if the maximum size of attachment to send? i. which search engine or database is best suited for your search? j. what keyboards or phrases should you use to search for the desired information? k. Are there any restrictions or limitations on downloading the information? l. How do you search for and download academic papers or research articles? m. How do you search for specific emails in your inbox?	4	UNIT-4 Internet 4.1 Creating of an E-mail id 4.2 Composing and sending a E-mail 4.3 Sending the E-mail with attachment 4.4 Searching for detail and downloading 4.5 Checking, viewing and saving the mail and taking printout	CO4

J) Suggested Tem Work and Self Learning: S2426504**a. Assignment:**

- 1.) Prepare an assignment of function of office equipment services
- 2.) Discuss need of electronic in an electronic office
- 3.) Describe the areas of office Automation.
- 4.) Explain The meaning characteristics and objectives of equipment?
- 5.) Prepare an assignment on auxiliary of learning India.
- 6.) Explain effects of modern office management

Other Activities**b. Seminar Topic:**

- Applications of Basic principle of selecting furniture, equipment and machine
- Applications of office machines and their uses.
- Applications of internal communications like oral, written and external communications.
- Applications of letters, and postal services.
- Applications of mail services, Inward and outward mail.
- Applications of modern office
- Applications of electronic message transmission.
- Applications of Automex message switcher.
- Application of Auxiliary equipment.
- Application of electronic tasks and office Automation.

c. visits: visiting following places would provide student an opportunity to see the application of various branches of mathematics in different fields. This will also help student to comprehend the career opportunities available in the field of mathematics.

- Visit to a science museum.
- Visit to a mathematics research institute.
- Visit to a Data science center.
- Visit to a mathematics department of a college or university.
- Visit to a software company.
- Visit to a space agency.
- Visit to a Gaming studio.
- Visit to Science library.
- Visit to a planetarium.
- Participation in mathematics competition.

d. suggested course Evaluation Matrix: The course teacher has to decide and use appropriate assessment strategy and its weightage in theory, laboratory and Term work for ensuring CO attainment. The response/performance of each student in each of these designed activates is to be used to calculate **CO attainment**.

COs	Course Evaluation Matrix						
	Theory Assessment(TA)**		Term Work Assessment(TWA)			Lab Assessment(LA)#	
	Progressive Theory Assessment(PT A) Class/Mid Sem Test	End Theory Assessment(ET A)	Term Work & Self Learning Assessment			Progressive Lab Assessment(PL A)	End Laboratory Assessment(EL A)
			Assignments	Micro Projects	Other Activities		
CO-1	20%	20%	15%	20%	10%	20%	20%
CO-2	15%	20%	20%	20%	15%	10%	20%
CO-3	15%	15%	15%	15%	25%	15%	20%
CO-4	20%	15%	20%	15%	20%	15%	20%
CO-5	20%	20%	20%	20%	20%	40%	20%
Total Marks	30	70	20	20	10	20%	30%
			50				

Legend:

*: Other Activities includes self-learning, seminar, visits, surveys, product development, software development etc.

∗: Mentioned under point-(N)

#: Mentioned under point-(O)

Note

- The percentage given are approximate.
- In case of Micro Projects and End Laboratory Assessment(ELA), The achieved marks will be equally divided in all those Cos mapped with total experiments.
- For CO attainment calculation indirect assessment tools like course exits survey need to be used which comprises of question related to achievements of each Cos.

➤ **Suggested Specification table for End Semester Theory Assessment:** Specification Table represents the reflection of sample representation of assessment of cognitive domain of full course.

Unit Title and Number	Total Classroom Instructions(CI) Hours	Relevant Cos Number(s)	Total Marks	ETA(Marks)		
				Remember(R)	Understanding(U)	Application and above(A)
Unit-1. Office equipment and machine	8	CO1	10	3	3	4
Unit-2 mail service, communication and telecommunication	8	CO2	10	3	2	5
Unit-3. Postal service	8	CO3	10	5	2	3
Unit-4. Office automation Auxiliary wp equipment	12	CO4	20	5	6	9
Unit-5. Electronic message transmission	12	CO5	20	5	6	10
Total	48		70	21	19	31
Total	48	-	70	21	19	31

Subject- Office equipment services office automation

S.n.	Name of the books	Authors	Publisher
1	Office Automation tools	Gupta A.K.	S. Chand Publishing
2	Office Automation -concepts and tools	Kenneth C. Laudon	Pearson Education
3	Office Automation – A user driven method	Guptnath Tridevi	Book Rivers
4	Office Automation – A Guide	Oke, Jayant	Nirali Prakashan Pune
5	Office Automation- A user driven method	Jawadekar, W.S.	Tata Mc Graw Hill
6	Office Equipmen (managementstudies):cordell,s.j	S.A. Kelkar	PHI Learning Pvt.
7	Office management and Equipment	Rn Gupta	S.Chand PUBLISHING

Online Link Of MIS :-

- <https://ebookbou.adu.bd>
- <https://www.flipkart.com>
- <https://www.springer.com>
- <https://notionpress.com>
- <https://www.flipkart.com>
- <https://www.vr1publication.com>

- A) Course Code : 2426505 (T2426505)
 B) Course Title : Shorthand English
 C) Pre- requisite Course (s) : Language skill, Typing

D) RATIONALE

The performance of the personnel working in modern offices depends, to a large extent, on the proficiency with which they can take dictation. Many of the confidential matters have to be written in shorthand before final communication is sent to different quarters/ parties. It is necessary that students acquire an accurate and good speed of shorthand so that they are able to perform in the modern offices effectively. Through a series of courses on stenography these skills can be imparted to the students. Hence the introduction of the subject in the curriculum of Modern Office Practice.

The main **aim of diploma holders is to perform Stenographer/ Executive assistant/ Secretarial duties** on behalf of the boss. Therefore, one must be well conversant with relevant sources of information and be alert and active with detailed knowledge to perform assignment as per direction of the office.

- E) **Course Outcomes (COs):** After the completion of the course, teachers are expected to ensure the accomplishment of following course outcome by the learners for this , the learners are expected to perform various activates related to three learning domains (Cognitive, Psycho motor and affective) in classroom/ laboratory/ office .

After completion of the Course, the student should be able to:

- CO1 = Explain the importance of Shorthand.
- CO2 = Describe Consonants strokes.
- CO3 = Vowel and Grammalogues
- CO4 =Acquaint student with transcription.
- CO5 = Prepare the students more thoroughly for shorthand dictation and transcription by way of applying simple and logical shorthand principles.

F) Suggested Course Articulation Matrix (CAM):

Course Outcomes (Cos)	Program Outcomes (POs)							Program specific outcomes (POs)	
	PO-1 Basic and Discipline specific knowledge	PO-2 Problem analysis	PO-3 Professionalism	PO-4 Problem solving	PO-5 Digital working skill	PO-6 Awareness about ethical practice	PO-7 Life long learning	PSO-1	PSO-2
CO-1	3	2	-	1	-	1	-		
CO-2	2	2	2	1	1	-	-		
CO-3	2	3	1	1	1	1	1		
CO-4	2	2	1	1	-	-	-		
CO-5	3	3	2	-	1	-	1		

Legend-High(3), Medium (2), Low(1)and No mapping(-)

* PSOs will be developed by respective programme coordinator at institute level. As per latest NBA guidelines, formulating PSOs is optional.

G) Teaching and Learning Scheme:

Course code	Course Title	Scheme of study (hours/week)					
		Classroom instruction (CI)		Lab Instruction (LI)	National Hours (TW+SL)	Total hours (LI+TW+SL)	Total credits (c)
		L	T				
2426505	Shorthand English	03	-	-	-	03	03

Note: Prefix will be added to course code if applicable (T for theory paper, p for practical paper and S for term work)

Legend:

CI: Classroom Instruction (includes different instructional/ implementation strategies lecture (L), Tutorial (T), case method, Demonstrations, video demonstration, problem based learning etc. to deliver theoretical concepts)

LI: Laboratory instruction (includes experiments/ practical performances / problem based experiences in laboratory.

Workshop, field or other locations using different instructional \implementation strategies.

National hours: Hours of engagement by learns, other than the contact hours for ensuring learning.

TW: Term Work (Include assignments, seminars, micro projects, industrial visits, any other student activities etc.)

SL: Self learning MOOCs, spoken tutorials, online educational resources etc.)

C: Credits = (1x CI hours) + (0.5 x LI hours) + (0.5 x notional hours)

NOTE:

Be planned by the teacher and performed by the learner under the continuous guidance and feedback of teacher to ensure outcome off learning.

H Assessment scheme:

Course code	Course Title	Assessment Scheme (Marks)						Total marks (TA+TWA+LA)
		Theory Assessment(TA)		Term Work & Self-Learning Assessment (TWA)		Lab Assessment (LA)		
		Progressive theory Assessment (PTA)	End theory Assessment (ETA)	Internal	External	Progressive lab Assessment (PLA)	End Laboratory Assessment (ELA)	
2426505	Shorthand English	30	70	-	-	-	-	100

Note: Prefix will be added to course code if applicable (T for theory paper, P for practical paper and S for Term Work)

Legend:

PTA: Progressive theory assessment in class room (includes class test, mid-term test and quiz using online \offline modes)

PLA: P progressive laboratory assessment (includes process and product assessment using rating scales and rubrics)

TWA: Term work & self-learning assessment (includes assessment related to student performance in assessments seminars micro projects, industrial visits, self – learning, any other student activities etc.)

Note:

- . Separate passing is must for progressive and end semester assessment for both theory and practical.
- . ETA & ELA are to be carried out at the end of the term / semester.

. Term work is to be done by the students under the guidance of internal faculty but its assessment will be done internally (40%) as well as externally (60%) . assessment related to planning and execution of Term Work activities like assessment, micro project, and seminar and self – learning is to be done by internal faculty (internal assessment) Whereas assessment of output / product / presentation related to these activities will be carries out by external faculty /expert (External Assessment). However, criteria of internal as well as external assessment may vary as per the requirement of respective course. For valid and reliable assessment, the internal faculty should prepare checklist & rubrics for these activities.

Course Curriculum Detailing: This course curriculum detailing depicts learning outcomes at course level and session level and their attainment by the students through Class room instruction (CI), laboratory instruction (LI), Term Work (TW) And self-Learning (SL). Students are expected to demonstrate the attainment off Theory Session Outcome (TSOs) and Lab Session Outcome (LSOs) Leading to attainment of cost outcomes (COs) upon the completion of the course. While Curriculum detailing NEP 2020 related reforms like green skills, Sustainability, multidisciplinary aspects, society connect Indian Knowledge system (IKS) and others must be integrated appropriately.

I) Theory Session Outcomes (TSOs) and Units: T2426505

<u>Major Theory session outcomes (TSO)</u>	<u>Unit</u>	<u>Relevant COS number</u>
1 write a short notes History of shorthand. 2 what do you understand by shorthand? 3 Write the importance of shorthand in our life 4 Explain the sitting posture essential for shorthand. 5 Write the name of essential element using shorthand writing 6 Write the good qualities of a shorthand writer 7 What is a shorthand writer called?	Unit-1- Introduction of shorthand 1.1 History of short hand 1.2 Meaning and importance 1.3 Sitting Posture and Essential elements 1.4 Good qualities of a shorthand writer	C01
1 What do you understand by Consonants? write the all consonants in shorthand. 2 Do the Classify of consonants in shorthand. 3 Write the slander length of a strokes. 4 Write the pairs of consonants with direction. 5 Write the type of consonants with example. 6 Explain the joining of strokes. With suitable example.	Unit-2 Consonants and their Joining 2.1 Meaning of Consonants 2.2 Classification of Consonants 2.3 Length of Strokes 2.4 Pairs of Consonants 2.5 Types of Strokes 2.6 Formation of Consonants Joining of Strokes	C02
1. Define vowel in shorthand. 2. write all sign of short vowel in shorthand. 3. What do you mean by Intervening vowel? 4. What do you mean by Grammalogues and Punctuation Signs? Explain with example. 5. what do you understand by Grammalogues and Logogram? 6. what is Punctuation signs 7. Discus between Diphthongs and trip hones	Unit-3 VOWELS, DIPHTHONGS, TRIPHONES, GRAMMALOGUES AND PUNCTUATION SIGNS AND TICK 'THE' 3.1 Meaning of vowel 3.2 Places of Vowels 3.3 Intervening Vowels 3.4 Grammalogues and Punctuation Signs 3.5 Meaning and types of Diphthongs, and Trip hones. 3.6 Method of using diphthongs and trip hones	C03
1. Define Upward and Downward forms of Consonants 'R' and 'H' 2. Explain the qualities of a good phraseogram 3. what do you understand by Phreseography? 4. Write the good Qualities of a good Phreseography 5. Why phreseography is essentail for written shorthand? 6 explain the Rules of Prefixes and Suffixes	Unit – 4: ALTERNATIVE FORMS OF 'R' AND 'H', ABBREVIATED 'W', PHRASEOGRAPHY, Prefixes and Suffixes 4.1 Upward and Downward forms of Consonants 'R' and 'H' 4.2 Meaning of Phraseography 4.3 Qualities of a good Phraseogram Essential for written shorthand 4.4 Rules of Prefixes and Suffixes	C04
1 What do you understand by Large circle? of 'SW' 'SS' and 'SZ'? 2 Explain the Loop St and Str? Write the good Qualities of a good Phraseology 3 Write the Initial Hooks to straight strokes and curves. 4 What do you understand by N and F/V hooks or Final hooks?	Unit- 5: Circle S and 'Z', Hook and Loop, Halving and doubling Principle 5.1 Large circle of 'SW' 'SS' and 'SZ', 5.2 ST and STR loops Initial 5.3 Hooks to straight strokes and curves. 5.4 Circles and loops preceding, initial hooks. 5.5 N and F/V hooks or Final hooks 5.6 Rules of Halving and doubling Principle	C05

J Suggested Term Work and Self learning: : some sample suggested assignments, micro project and other activities are mentioned here for reference.

A Assignments: Questions/ Problems/Numerical/Exercise to be provided by the course teacher in line with targeted COs.

13. Prepare an assignment on Shorthand and Importance of shorthand.
14. Explain consonants with all symbols and direction.
15. Explain vowel in shorthand Write the types of vowels.
16. Explain grammalogues with example.
17. Prepare an assignment on using tools for shorthand writing.

B Micro Project

1. Prepare a chart for consonants
2. prepare a project for how to be a good stenographer.
3. Prepare a comparative study on shorthand and computer typing.
4. Prepare a list of using shorthand tools.
5. Prepare an assignment on good and bad posture during shorthand writing.
6. Prepare an assignment on the History of the shorthand.

C Other Activities

3. **Seminar Activities**

- k. Seminar on Accuracy and Speed.
- l. The study on how to make shorthand writing is more effective.
- m. Study about Importance of shorthand.
- n. Study about basic scope of shorthand.
- o. Study on the structure of shorthand.

2. **Visit**

- l. Visit to office.
- m. Visit to secretariat
- n. Visit to Nearby retailer's market.
- o. Visit to different Bank

5 **Self-learning topics:**

- a Speech writing
- b News report writing
- c Shorthand transcription and typing will be done in computer.

➤ **Suggested Course Evaluation Matrix:**

The course teacher has to decide and use appropriate assessment strategy and its weightage in theory, laboratory and Term Work for ensuring CO attainment. The response/performance of each student in each of these designed activities is to be used to calculate **CO attainment**.

Course Evaluation Matrix							
COs	Theory Assessment(TA)**		Term Work Assessment(TWA)			Lab Assessment(LA)#	
	Progressive Theory Assessment(PTA)Class/Mid Sem Test	End Theory Assessment(ETA)	Term Work & Self Learning Assessment			Progressive Lab Assessment(PLA)	End Laboratory Assessment(ELA)
			Assignment	Micro Projects	Other Activities		
CO-1	20%	20%	-	-	-	-	-
CO-2	10%	20%	-	-	-	-	-
CO-3	15%	15%	-	-	-	-	-
CO-4	20%	15%	-	-	-	-	-
CO-5	25%	20%	-	-	-	-	-
Total Marks	30	70	-	-	-	-	-

Legend:* Other Activities includes self-learning, seminar, visits, surveys, product development, software development etc.

***:** Mentioned under point-(N)

#: Mentioned under point-(O)

Note:

- The percentage given are approximate.
- In case of Micro Projects and End Laboratory Assessment(ELA), The achieved marks will be equally divided in all those Cos mapped with total experiments.
- For CO attainment calculation indirect assessment tools like course exits survey need to be used which comprises of question related to achievements of each Cos.

K Suggested Assessment Table for Laboratory (Practical) Matrix: NA

1 RECOMMENDED BOOKS

1. Pitman shorthand Instructor & Key Publisher Sir Issac Pitman
2. Pitman Shorthand – New Course For A.H.Wheeler & Ci. (P)Ltd. Road Allahabad Sir Issac Pitman
3. Pitman Shorthand Writing Exercises & Examination tests New- Era – Edition For For A.H.Wheeler & Ci. (P)Ltd.
Road Allahabad
4. Shorthand Made Easy For O.P. Kuthiala

Online classes

1 <http://stenoindia.com/>

2 <https://www.pitman-training.com/>

- A) **Course Code** : 2400505(P2400505/S2400505)
- B) **Course Title** : Entrepreneurship Development & Start-ups
(Common for all Programmes)
- C) **Pre-requisite Course(s)** :
- D) **Rationale** :

A fast-growing economy provides ample opportunities for diploma engineers to succeed in entrepreneurship and start-ups. Start-up ecosystem and Entrepreneurship Development skills are fully developed providing many opportunities to the youths. Diploma engineers can be their own masters and provide jobs to others by starting their service-industry / assembly/ marketing/ consultancy/ manufacturing enterprises. Entrepreneurship requires a distinct set of skills that will be developed in this course. This course aims at developing competencies in the diploma engineer for becoming an entrepreneur, a successful entrepreneur, or a startup Co-Founder. After successfully completing this course student who develop the qualities of a successful entrepreneur can establish their own manufacturing industry/business startup or be self-employed. Those who prefer jobs can become entrepreneurs and share profits with their company.

- E) **Course Outcomes (COs):** After the completion of the course, teachers are expected to ensure the accomplishment of the following course outcomes by the learners. For this, the learners are expected to perform various activities related to three learning domains (Cognitive, Psychomotor, and Affective) in the classroom/laboratory/workshop/field/industry.

After completion of the course, the students will be able to-

CO-1 Demonstrate traits of a successful entrepreneur/ entrepreneur/ start-up co-founder.

CO-2 Innovate products and services using creativity and innovation techniques.

CO-3 Manage critical resources from support institutions.

CO-4 Prepare sustainable small business plans.

- F) **Suggested Course Articulation Matrix (CAM):**

Course Outcomes (COs)	Programme Outcomes (POs)							Programme Specific Outcomes* (PSOs)	
	PO-1 Basic and Discipline Specific Knowledge	PO-2 Problem Analysis	PO-3 Design/ Development of Solutions	PO-4 Engineering Tools	PO-5 Engineering Practices for Society, Sustainability and Environment	PO-6 Project Management	PO-7 Life Long Learning	PSO-1	PSO-2
CO-1	3	-	-	-	2	3	2		
CO-2	3	2	3	-	2	3	2		
CO-3	3	3	3	-	2	3	2		
CO-4	3	3	-	-	2	3	2		

Legend: High (3), Medium (2), Low (1) and No mapping (-)

* PSOs will be developed by respective programme coordinator at institute level. As per latest NBA guidelines, formulating PSOs is optional

G) Teaching & Learning Scheme:

Course Code	Course Title	Scheme of Study (Hours/Week)					
		Classroom Instruction (CI)		Lab Instruction (LI)	Notional Hours (TW+ SL)	Total Hours (CI+LI+TW+SL)	Total Credits (C)
		L	T				
2400505	Entrepreneurship Development & Startups	-	-	04	02	06	03

Legend:

CI: Classroom Instruction (Includes different instructional/implementation strategies i.e. Lecture (L), Tutorial (T), Case method, Demonstrations, Video demonstration, Problem based learning etc. to deliver theoretical concepts)

LI: Laboratory Instruction (Includes experiments/practical performances /problem-based experiences in laboratory, workshop, field or other locations using different instructional/Implementation strategies)

Notional Hours: Hours of engagement by learners, other than the contact hours for ensuring learning.

TW: Term Work (includes assignments, seminars, micro projects, industrial visits, any other student activities etc.)

SL: Self Learning, MOOCs, spoken tutorials, online educational resources etc.

C: Credits = (1 x CI hours) + (0.5 x LI hours) + (0.5 x Notional hours)

Note: TW and SL have to be planned by the teacher and performed by the learner under the continuous guidance and feedback of teacher to ensure outcome of learning.

H) Assessment Scheme:

Course Code	Course Title	Assessment Scheme (Marks)						Total Marks (TA+TWA+LA)
		Theory Assessment (TA)		Term Work & Self-Learning Assessment (TWA)		Lab Assessment (LA)		
		Progressive Theory Assessment (PTA)	End Theory Assessment (ETA)	Internal	External	Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)	
2400505	Entrepreneurship Development & Startups	-	-	20	30	20	30	100

Legend:

PTA: Progressive Theory Assessment in class room (includes class test, mid-term test and quiz using online/offline modes)

PLA: Progressive Laboratory Assessment (includes process and product assessment using rating Scales and rubrics)

TWA: Term work & Self Learning Assessment (Includes assessment related to student performance in assignments, seminars, micro projects, industrial visits, self-learning, any other student activities etc.)

Note:

- ETA & ELA are to be carried out at the end of the term/ semester.
- Term Work is to be done by the students under the guidance of internal faculty but its assessment will be done **internally (40%)** as well as **externally (60%)**. Assessment related to planning and execution of Term Work activities like assignment, micro project, seminar and self-learning is to be done by internal faculty (Internal Assessment) whereas assessment of output/product/ presentation related to these activities will be carried out by external faculty/expert (External Assessment). However, criteria of internal as well as external assessment may vary as per the requirement of respective course. For valid and reliable assessment, the internal faculty should prepare checklist & rubrics for these activities.

- I) Course Curriculum Detailing:** This course curriculum detailing depicts learning outcomes at course level and session level and their attainment by the students through Classroom Instruction (CI), Laboratory Instruction (LI), Term Work (TW) and Self Learning (SL). Students are expected to demonstrate the attainment of Theory Session Outcomes (TSOs) and Lab Session Outcomes (LSOs) leading to attainment of Course Outcomes (COs) upon the completion of the course. While curriculum detailing, NEP 2020 related reforms like Green skills,

Sustainability, Multidisciplinary aspects, Society connect, Indian Knowledge System (IKS) and others must be integrated appropriately.

J) Theory Session Outcomes (TSOs) and Units: (Not Applicable)

K) Suggested Laboratory (Practical) Session Outcomes (LSOs) and List of Practical: P2400505

Practical/Lab Session Outcomes (LSOs)		S. No.	Laboratory Experiment / Practical Titles	Relevant Cos Number(s)
LSO1.1	Identify the skills of a Successful Entrepreneur.	1.	Profile summary (about 500 words) of a successful entrepreneur indicating milestone achievements.	CO1
LSO1.2	Determine the charms of entrepreneurship and start-ups	2.	Discussion session with your institute's pass-out students who are successful entrepreneurs.	CO1
LSO1.3	Perform strength, weakness, opportunity, and threat analysis.	3.	SWOT analysis to arrive at your business idea of a product/service.	CO1
LSO1.4	Develop sales & marketing skills	4.	Sale of products to different customers	CO1
LSO2.1	Use creativity and put up a stall in a funfair and write a report of profit/loss.	5.	Creativity and Innovation in Business	CO2
LSO2.2	Innovate a point of sale for a product.	6.	Exhibition cum sale of products prepared out of waste.	CO2
LSO2.3	Generate different business opportunities.	7.	Business ideas (product/service) for intrapreneurial and entrepreneurial opportunities through brainstorming.	CO2
LSO1.5	Discover entrepreneurial potential.	8.	Self-assessment test to discover entrepreneurial traits.	CO1
LSO2.4	Classify domain-specific industries on business parameters.	9.	Survey industries (your stream), and grade them according to the level of scale of production, investment, turnover, and pollution to prepare a report on it.	CO2
LSO3.1	Identify entrepreneurship support institutions beneficial for the enterprise.	10.	Compile the information from the government agencies that will help you set up your business enterprise.	CO3
LSO3.2	Select a suitable funding scheme for the enterprise.	11.	Visit a bank / financial institution to enquire about various funding schemes for small-scale enterprises.	CO3
LSO3.3	Analyze the assessment procedure of bank loans.	12.	Collect loan application forms of nationalized banks / other financial institutions.	CO3
LSO3.4	Compute the financial needs of the business enterprise	13.	Compile the information from financial agencies that will help you set up your business enterprise.	CO3
LSO2.5	Select a business opportunity.	14.	Identify the business opportunity suitable for you.	CO2
LSO3.5	Carry-out market survey for a product.	15.	Market Survey for an Enterprise	CO3
LSO4.1	Find out rates of industrial lands and buildings in different industrial areas.	16.	Industrial land and building for Entrepreneurship.	CO4
LSO4.2	Craft a vision statement and enabling mission statements for your chosen enterprise.	17.	Vision statement and mission statement for a Startup.	CO4
LSO4.3	Select a suitable name and brand for the business enterprise.	18.	Branding for a product and a Company.	CO4

Practical/Lab Session Outcomes (LSOs)		S. No.	Laboratory Experiment / Practical Titles	Relevant Cos Number(s)
LSO4.4	Design a logo, letterhead, and visiting card for the business.	19.	Marketing communication for business.	CO4
LSO4.5	Prepare a techno-feasibility report	20.	A techno-feasibility report of a chosen product/service.	CO4
LSO4.6	Prepare a business plan for the enterprise.	21.	Business plan for the enterprise.	CO4
LSO4.7	Develop a website for the business	22.	Online Marketing for Business.	CO4
LSO3.6	Prepare a set of short-term, medium, and long-term goals for starting a chosen small-scale enterprise.	23.	Goal setting for an enterprise.	CO3
LSO3.7	Prepare an advertising campaign for your chosen product/service.	24.	Marketing management for an enterprise.	CO3
LSO3.8	Establish a supply chain network for the enterprise.	25.	Supply Chain Management	CO3
LSO3.9	Establish a Market intelligence mechanism.	26.	Market Intelligence for Entrepreneurship	CO3
LSO4.8	Compile information about various insurance schemes covering different risk factors.	27.	Risks in business	CO4
LSO4.9	Calculate the breakeven point for the business idea chosen by you.	28.	Breakeven point for a business	CO4

L) Suggested Term Work and Self-Learning: S2400505 Some sample suggested assignments, micro-projects, and other activities are mentioned here for reference.

a. **Assignments:** Questions/ Problems/ Numerical/ Exercises to be provided by the course teacher inline with the targeted COs.

- i. Prepare a list of successful Entrepreneurs in the city.
- ii. Prepare a list of startups in the city.
- iii. Prepare a list of the nearest incubators.
- iv. Prepare a list of Angel Investors and Venture Capitalists.

- i. Choose any product and study its supply chain.
- ii. Arrange brainstorming sessions for improvement of any product.
- iii. Choose any advertisement and analyse its good and bad points.
- iv. Visit industrial exhibitions, trade fairs and observe nitty-gritty of business.
- v. Study schemes for entrepreneurship promotion of any bank.

b. Micro Projects:

- i. Interview successful entrepreneurs and startup co-founders in the city and innovate their products/services, pricing, packaging, advertisements, propositions, etc.
- ii. Identify different entrepreneurship support institutions in the city.
- iii. Prepare a collage for specific entrepreneurship development institutions.
- iv. Conduct a market survey for a specific product idea.

c. Other Activities:

1. Seminar Topics:

- Charms of entrepreneurship.
- Challenges of entrepreneurship.

- Startup ecosystem in India.
- One district one product scheme
- Setting up of a business.
- Market study of specified business.
- Prepare a business plan for your chosen small scale enterprise.
- Business opportunity suitable for you.

2. **Visits:** Visit DIC, MSME, NSIC, NABARD, KVIC, IDBI, SBI, State Consultancy Organization, Industrial Development Center, Trade Exhibitions, Export Fairs, Trade Shows, etc. Visit nearby tool room/industry and learn to prepare budget of that industry. Also learn to grow low scale business and marketing. Prepare list of advertisement to grow business.

3. Self-Learning Topics:

- Achievement Motivation.
- Need for achievement.
- Calculated risk.
- CSR (Corporate Social Responsibility)
- MSME Development Institute.
- Marketing their business.
- Growing their business.
- Financial management.
- Dealing with the pressure and stress

M) Suggested Course Evaluation Matrix: The course teacher has to decide and use appropriate assessment strategy and its weightage in theory, laboratory and Term Work for ensuring CO attainment. The response/performance of each student in each of these designed activities is to be used to calculate **CO attainment**.

COs	Course Evaluation Matrix						
	Theory Assessment (TA)**		Term Work Assessment (TWA)			Lab Assessment (LA)#	
	Progressive Theory Assessment (PTA) Class/Mid Sem Test	End Theory Assessment (ETA)	Term Work & Self Learning Assessment			Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)
			Assignments	Micro Projects	Other Activities*		
CO-1	-	-	30%	-	-	30%	25%
CO-2	-	-	10%	33%	-	10%	25%
CO-3	-	-	30%	33%	50%	30%	25%
CO-4	-	-	30%	34%	50%	30%	25%
Total Marks	-	-	20	20	10	20	30
			50				

Legend:

*: Other Activities include self- learning, seminar, visits, surveys, product development, software development etc.

** : Mentioned under point- (N)

: Mentioned under point-(O)

Note:

- The percentage given are approximate
- In case of Micro Projects and End Laboratory Assessment (ELA), the achieved marks will be equally divided in all those COs mapped with total experiments.
- For CO attainment calculation indirect assessment tools like course exit survey need to be used which comprises of questions related to achievement of each COs.

N) Suggested Specification Table for End Semester Theory Assessment: (NOT APPLICABLE)

O) Suggested Assessment Table for Laboratory (Practical):

S. No.	Laboratory Practical Titles	Relevant Cos Number (s)	PLA/ELA		
			Performance		Viva-Voce (%)
			PRA* (%)	PDA** (%)	
1.	Profile summary (about 500 words) of a successful entrepreneur indicating milestone achievements.	CO1	50	40	10
2.	Discussion session with your institute's pass-out students who are successful entrepreneurs.	CO1	50	40	10
3.	SWOT analysis to arrive at your business idea of a product/service.	CO1	50	40	10
4.	Sale of products to different customers	CO1	50	40	10
5.	Creativity and Innovation in Business	CO2	50	40	10
6.	Exhibition cum sale of products prepared out of waste.	CO2	50	40	10
7.	Business ideas (product/service) for intrapreneurial and entrepreneurial opportunities through brainstorming.	CO2	50	40	10
8.	Self-assessment test to discover entrepreneurial traits.	CO1	50	40	10
9.	Survey industries (your stream), and grade them according to the level of scale of production, investment, turnover, and pollution to prepare a report on it.	CO2	50	40	10
10.	Compile the information from the government agencies that will help you set up your business enterprise.	CO3	50	40	10
11.	Visit a bank / financial institution to enquire about various funding schemes for small-scale enterprises.	CO3	50	40	10
12.	Collect loan application forms of nationalized banks / other financial institutions.	CO3	50	40	10
13.	Compile the information from financial agencies that will help you set up your business enterprise.	CO3	50	40	10
14.	Identify the business opportunity suitable for you.	CO2	50	40	10
15.	Market Survey for an Enterprise	CO3	50	40	10
16.	Industrial land and building for Entrepreneurship.	CO4	50	40	10
17.	Vision statement and mission statement for a Startup.	CO4	50	40	10
18.	Branding for a product and a Company.	CO4	50	40	10
19.	Marketing communication for business.	CO4	50	40	10
20.	A techno-feasibility report of a chosen product/service.	CO4	50	40	10
21.	Business plan for the enterprise.	CO4	50	40	10
22.	Online Marketing for Business.	CO4	50	40	10
23.	Goal setting for an enterprise.	CO3	50	40	10

S. No.	Laboratory Practical Titles	Relevant Cos Number (s)	PLA/ELA		
			Performance		Viva-Voce (%)
			PRA* (%)	PDA** (%)	
24.	Marketing management for an enterprise.	CO3	50	40	10
25.	Supply Chain Management	CO3	50	40	10
26.	Market Intelligence for Entrepreneurship	CO3	50	40	10
27.	Risks in business	CO4	50	40	10
28.	Breakeven point for a business	CO4	50	40	10

Legend:

PRA*: Process Assessment

PDA**: Product Assessment

Note: This table can be used for both end semester as well as progressive assessment of practical. Rubrics need to be prepared by the course teacher for each experiment/practical to assess the student performance.

P) Suggested Instructional/Implementation Strategies: Different Instructional/ Implementation Strategies may be appropriately selected, as per the requirement of the content/outcome. Some of them are Improved Lecture, Tutorial, Case Method, Group Discussion, Industrial visits, Industrial Training, Field Trips, Portfolio Based, Learning, Role Play, Live Demonstrations in Classrooms, Lab, Field Information and Communications Technology (ICT)Based Teaching Learning, Blended or flipped mode, Brainstorming, Expert Session, Video Clippings, Use of Open Educational Resources (OER), MOOCs etc.

Q) List of Major Laboratory Equipment, Tools and Software: (Not Applicable)

R) Suggested Learning Resources:

(a) Books:

S. No.	Titles	Author(s)	Publisher and Edition with ISBN
1.	Entrepreneurial Development	Khanka S.S. (2006)	S. Chand Publishing, 20068121918014,
2.	Un-Boxing Entrepreneurship Your self-help guide to setup a successful business	Dr. Nishith Dubey Aditya Vyas, AnnuSoman, AnupamSingh, CharulChaturvedi, Praveen Shukla	Indra Publishing House, 2023, ISBN- 978-93-93577-70-2
3.	Skill Development and Entrepreneurship in India	Rameshwari Pandya	Ingram 2016, 8177084186
4.	Production and Operations Management	SV Deshmukh, A K Chitale and Nishith, Rajaram Dubey,	Archers & Elevators Publishing House, Bangalore ISBN 9789386501197
5.	Entrepreneurship Development	Sapna Jarial	New India Publishing Agency- Nipa 2022, 9395319240
6.	The Entrepreneurial Instinct: How Everyone Has the Innate Ability to Start a Successful Small Business	Monica Mehta	Tata McGraw Hill Education, New Delhi, 2012, ISBN 978-0-07-179742-9

S. No.	Titles	Author(s)	Publisher and Edition with ISBN
7.	The Learn Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses	Eric Ries	Penguin UK ISBN-978-0670921607
8.	Entrepreneurship and Start-ups	Ekta Sharma	FPH
9.	The Innovator's Dilemma: The Revolutionary Book That Will Change the Way You Do Business	Clayton M. Christensen	Harvard business ISBN: 978-142219602

(b) Online Educational Resources:

1. Coir Board <http://coirboard.gov.in/>
2. National Institute for Micro, Small and Medium Enterprises (ni-msme) <https://www.nimsme.org/>
3. MSME / Udyam Registration <https://udyamregistration.gov.in/Government-India/Ministry-MSME-registration.htm>
4. CHAMPIONS <https://champions.gov.in/Government-India/Ministry-MSME-Portal-handholding/msme-problem-complaint-welcome.htm>
5. Prime Minister Employment Generation Programme and Other Credit Support Schemes <https://msme.gov.in/prime-minister-employment-generation-programme-and-other-credit-support-schemes>
6. Marketing Promotion Schemes <https://msme.gov.in/marketing-promotion-schemes>
7. Start-up India <https://www.startupindia.gov.in/>
8. DPIIT Recognition <https://www.startupindia.gov.in/content/sih/en/startup-scheme.html>
9. Startup India Seed Fund Scheme <https://seedfund.startupindia.gov.in/>
10. STARTUP INDIA INVESTOR CONNECT <https://investorconnect.startupindia.gov.in/>
11. Startup Funding <https://www.startupindia.gov.in/content/sih/en/funding.html>
12. Women Entrepreneurship in India https://www.startupindia.gov.in/content/sih/en/women_entrepreneurs.html
13. Incubators <https://www.startupindia.gov.in/content/sih/en/incubator-framework.html>
14. Start-up Mentors <https://www.startupindia.gov.in/content/sih/en/search.html?roles=Mentor&page=0>
15. NEN <https://nen.org/>
16. TIE <https://tie.org/>
17. MoE Innovation Cell <https://www.mic.gov.in/>
18. <https://youtu.be/8iKsZZYv90k>
19. <https://youtu.be/Tzzfd6168jk>
20. <https://youtu.be/9-O15gDqebg>

Note: Teachers are requested to check the creative commons license status/ financial implications of the suggested, online educational resources before use by the students.

(c) Others: -

- A) **Course Code** : 2426506(P2426506/S2426506)
- B) **Course Title** : Summer Internship -II / Industrial training
- C) **Pre- requisite Course(s)** :
- D) **Rationale** :

With the advancement in technology and skill requirements of industry 4.0, we need to prepare our young Indian technical talent to meet the present demand. Our diploma pass outs are either supposed to work as supervisor in the industries or start their own enterprise, hence upon the completion of diploma programme, they need to be adequately equipped with knowledge, skills and attitude required by the world of work in their relevant field. To attain this, students need to be sent for internship, industrial visit and industrial training during the course of study. One or two mandatory internships are placed in the programme structure to equip the students with practical knowledge, problem solving attitude and also provide the exposure to real time industrial environments. It also helps the students to understand the industrial requirements, develop expertise through hands on experience and take up project work relevant to industry. With these provisions of industrial exposures relevant practical and professional skills are developed in the students and as a result they are readily employed and widely accepted by industries, even sometimes during such trainings itself. In the context of above after having gone through the summer internship-I (after the second semester), the summer internship-II/ industrial training is planned after the completion of fourth semester.

- E) **Course Outcomes (COs):** After the completion of the course, teachers are expected to ensure the accomplishment of following course outcomes by the learners. For this, the learners are expected to perform various activities related to three learning domains (Cognitive, Psychomotor and Affective) in classroom/laboratory/workshop/field/ industry.

After completion of the course, the students will be able to-

- CO-1** Develop the comprehensive view of industry 4.0 elements and 21st century skills requirements in the relevant diploma engineering programme through Summer Internship-II.
- CO-2** Outline the importance of industrial training and Internship for gaining direct practical skills on their relevant domain area of industrial equipment, automation, machinery, processes, product, management, operations, software development etc.
- CO-3** Use the knowledge and skills gained during industrial training or world of work.

F) Suggested Course Articulation Matrix (CAM):

Course Outcomes (COs)	Programme Outcomes(POs)							Programme Specific Outcomes* (PSOs)	
	PO-1 Basic and Discipline Specific Knowledge	PO-2 Problem Analysis	PO-3 Design/ Development of Solutions	PO-4 Engineering Tools	PO-5 Engineering Practices for Society, Sustainability and Environment	PO-6 Project Management	PO-7 Life Long Learning	PSO-1	PSO-2
CO-1	2	-	-	3	-	2	1		
CO-2	-	-	-	3	-	2	1		
CO-3	3	2	2	3	-	2	1		

Legend: High (3), Medium (2), Low (1) and No mapping (-)

* PSOs will be developed by respective programme coordinator at institute level. As per latest NBA guidelines, formulating PSOs is optional

G) Teaching & Learning Scheme:

Course Code	Course Title	Scheme of Study (Hours/Week)					
		Classroom Instruction (CI)		Lab Instruction (LI)	Notional Hours (TW+ SL)	Total Hours (CI+LI+TW+SL)	Total Credits (C)
		L	T				
2426506	Summer Internship - II	-	-	02	04	06	03

Legend:

CI: Classroom Instruction (Includes different instructional/implementation strategies i.e. Lecture (L), Tutorial (T), Case method, Demonstrations, Video demonstration, Problem based learning etc. to deliver theoretical concepts)

LI: Laboratory Instruction (Includes experiments/practical performances /problem-based experiences in laboratory, workshop, field or other locations using different instructional/Implementation strategies)

Notional Hours: Hours of engagement by learners, other than the contact hours for ensuring learning.

TW: Term Work (includes assignments, seminars, micro projects, industrial visits, any other student activities etc.)

SL: Self Learning, MOOCs, spoken tutorials, online educational resources etc.

C: Credits = (1 x CI hours) + (0.5 x LI hours) + (0.5 x Notional hours)

Note: TW and SL have to be planned by the teacher and performed by the learner under the continuous guidance and feedback of teacher to ensure outcome of learning.

H) Assessment Scheme:

Course Code	Course Title	Assessment Scheme (Marks)						Total Marks (TA+TWA+LA)
		Theory Assessment (TA)		Term Work & Self-Learning Assessment (TWA)		Lab Assessment (LA)		
		Progressive Theory Assessment (PTA)	End Theory Assessment (ETA)	Internal	External	Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)	
2426506	Summer Internship - II	-	-	20	30	20	30	100

Legend:

PTA: Progressive Theory Assessment in class room (includes class test, mid-term test and quiz using online/offline modes)

PLA: Progressive Laboratory Assessment (includes process and product assessment using rating Scales and rubrics)

TWA: Term work & Self Learning Assessment (Includes assessment related to student performance in assignments, seminars, micro projects, industrial visits, self-learning, any other student activities etc.)

Note:

- ETA & ELA are to be carried out at the end of the term/ semester.
- Term Work is to be done by the students under the guidance of internal faculty but its assessment will be done **internally (40%)** as well as **externally (60%)**. Assessment related to planning and execution of Term Work activities like assignment, micro project, seminar and self-learning is to be done by internal faculty (Internal Assessment) whereas assessment of output/product/presentation related to these activities will be carried out by external faculty/expert (External Assessment). However, criteria of internal as well as external assessment may vary as per the requirement of respective course. For valid and reliable assessment, the internal faculty should prepare checklist & rubrics for these activities.

I) Guidelines to Teachers for Implementation & Assessment of Industrial Internship/Training:**1. Rationale:**

During implementation of the curriculum, industrial exposure in the form of industrial internship/training is very important for developing and reinforcing many concepts and principles and also to get exposure of industrial environment, working culture, latest developments in relevant field, layout, management, culture, hierarchy, discipline, safety norms, different department/sections, quality control/assurance in processes, services and products, demonstration and operation of specific equipment/machinery, rules and procedures and many other aspects of the industries, where diploma holders are going to work. Students also get exposed to the different kinds of problems which can be brought into the institutional laboratories or workshop. Organizing industrial training of students is essentially required to enhance the prospects of employability, after undergoing industrial training, students get the direct exposure to the world of work in their relevant field. They get hands on experience in the industries.

Planning before Industrial internship/training is essentially required to be done for effective implementation of the same.

2. Planning for industrial internship/training:

Following points need to be planned and briefed by the teachers to the students before proceeding for industrial training. Student should take into consideration these points and carry the relevant format/data/log book with them.

- Analyze curriculum analysis and identify curricular gaps and topics which need industrial intervention;
- Objectives /Purposes of the industrial internship/training
- Outcomes targeted before proceeding to industrial internship/training.
- Pre-requisite knowledge or skills required to be developed in the students in the form of demonstration or classroom sessions.
- Identification and planning for demonstration of any equipment or experiments, concepts, under the content beyond syllabus.
- Preparation of database of nearby relevant industries.
- Good rapport needs to be developed and maintained with the industries by the teachers, so that the students are ultimately benefitted by the industrial internship/training.
- Industrial policy of the state also needs to be taken care of while planning of industrial training
- For assessing the students on various dimensions of industrial internship/training, assessment rubric may be prepared by the implementing teachers in advance.
- Make arrangements for student insurance during the industry internship/training
- Prepare instructions to be followed by students in the industries.
- Following formats need to be developed by the teachers and briefed to the students before proceeding to industrial internship/training –
 - Formats of observations on layout, ambience, and work culture to be developed, and briefed to the students.
 - Formats of outcome attainment, related to observation on relevant technical area also need to be developed by the teachers and briefed to the students.
 - Formats and contents of report writing and presentation.
 - Formats and contents on assessment of industrial training.
 - Continuous observation formats on many points such as behavioral aspects related to soft skills development such as initiativeness, observation, notes taking skills, inquisitiveness, obedience, sincerity, follow the instructions, positive attitude and many other aspects.

Formats of Assessment Rubric on different parameters of both behavioral aspects and technical aspects of the programme.

3. Major outcomes expected to be attained and assessed:

Outcomes expected from the industrial internship/training should be clearly defined and briefed to the students. Evaluation criteria for assessing students, need to be prepared for different outcomes set, during the planning stage. The list of major outcomes expected to be attained are –

- Development and reinforcement of Basic knowledge
- Development and reinforcement of Engineering knowledge through reinforcement of concepts or principles.
- Gaining Engineering Knowledge i.e operations, performance, maintenance, demonstrations of specific skills relevant to the content of the programme.
- Experiment and practice – Development of experimental practical skills and technical skills relevant to the course programme.
- Development of learning to learn skills and lifelong teaching skills for latest advancement in technology.
- Outcome attainment through content beyond syllabus
- Development of positive attitude, professional ethics and etiquettes.
- Development of skills for individual and team work during performance and otherwise.
- Maintaining Business Secrecy
- Development of Communication Skills
- Ability to follow the instructions
- Ability to follow the safety precautions
- Ability to supervise the task
- Ability to coordinate with subordinates and higher ups
- Development of Interpersonal skills
- Environmental Consciousness and Sustainability
- Development of Observational Skills
- Development of Self-discipline and Integrity
- Development of Time Management habits
- Development of generic skills such as pro-activeness, commitment
- Development of Problem-Solving abilities
- Achievement of target
- Concern for Environment, Sustainability Society
- Communication ability
- Industrial System and its development
- Safety Awareness
- Systematic Operations and Productions
- Quality control
- Management of work place and work force
- Development of positive attitude
- Work culture/Quality Culture
- Development of Professional Ethics
- Industrial Management
- Systematic planning, Implementation & Evaluation
- Use of engineering tools, techniques, software's and Procedures
- Development of Lifelong learning skills

It is important to note that outcomes attained during industrial visit are at the awareness level only.

4. Actions to be taken by the Students and Teachers:

Students are sent to Industrial training after briefing on various aspects. During industrial training, observational skills in students are required to a great extent -

- Students need to be alert, meticulous and record the data, as briefed to them before the industrial training.
- Record of observations on safety precaution to be followed, any special point during performance and handling of equipment, performance on technical aspects and other related aspects need to be taken care of.
- Continuous observation, monitoring and assessment on various behavioral and performance of technical aspects of each student need to be critically observed and recorded by the teachers using different assessment tools.

5. Post Training Assessment:

The students need to be assessed on report writing, presentation and interpretation of data recorded, on various dimensions, planned and performed, after the industrial training. The actions are required to be taken for assessment during report writing, analysis, interpretation, presentation of data and its assessment.

J) Initiatives by Govt. of India and other Agencies for Industrial Internship/ Training/Visit for Skills Development:**1. Initiatives by Govt. of India, GOI**

a. Initiatives by Ministry of Skills Development and Entrepreneurship: Many efforts are initiated by different agencies in this direction as per our Prime Minister's Skills Development Mission. Make in India, Skills India etc are such initiatives taken by ministry for the benefit of the students. The Ministry is responsible for co-ordination of all Skill Development efforts across the country, removal of disconnect between demand and supply of skilled manpower, building the vocational and technical training framework, skill up-gradation, building of new skills and innovative thinking not only for existing jobs but also jobs that are to be created. The Ministry aims to skill on a large scale with speed and high standards in order to achieve its vision of a 'Skilled India'.

b. Initiatives by Ministry of Education, Govt. of India

i. Ministry of Education, Government of India is providing students a platform to inculcate a culture of product innovation and a mind-set of problem solving to solve some of pressing problems solving to solve some of pressing problems we face in our daily lives through Smart India Hackathon (SIH) 2019.

SIH 2023 brings the next generation evolution by inclusion of new methodology to inculcate the culture of startup and innovation ecosystem across different age groups i.e. are as follows: -

- SIH Junior (Jr) School students from 6th to 12th class will be able to showcase their talent and generate out-of-the-box open innovation ideas.
- SIH Senior (Sr) Regular Students of HEI's pursuing "Graduate/Post-Graduate/Ph.D." will be able to showcase their talent and generate out-of-the-box open innovation ideas

ii. Internshala: Internshala is India's largest internship and training platform where more than 80,000 companies look for interns in various profiles (Engineering, management, media, arts etc.) AICTE has also partnered with Internshala for providing internship opportunities to every student in AICTE approved colleges. This facility is created to provide a platform for hands on experience to our future technicians on the relevant industries. With this experience, they are updated with the latest advances in their field of work.

Government of India through, AICTE is engaged in promoting the concept of industrial training through its various scheme, such as Internshala. The teachers now have the responsibility to understand in depth and implement such schemes in the institution for the benefit of students. At institute level also, there is need to develop policy for sending the students for industrial training.

c. Initiatives by All India Council for Technical Education (AICTE)

All India Council for Technical Education (AICTE) has been actively promoting various schemes to enhance internship, industrial training, and industrial visit opportunities for students pursuing technical education. These schemes aim to provide practical exposure, industry-relevant skills, and hands-on experience to students enrolled in AICTE-approved institutions. Since the schemes are reviewed continuously, the latest update can be referred through AICTE website.

- i. **AICTE Training and Learning (ATAL) Academy:** The ATAL Academy provides opportunities for faculty and students to participate in various skill development programs, including internships and industrial training, to enhance their technical knowledge and expertise.
- ii. **AICTE Doctoral Fellowship Scheme:** This scheme offers financial support to full-time Ph.D. scholars to undertake internships, research visits, or collaborative work with industry and research organizations in India and abroad.
- iii. **Margdarshan Scheme:** The Margdarshan Scheme encourages faculty members to interact with industries and update their technical knowledge, which, in turn, benefits the students through better industry exposure and guidance. The National Education Policy (NEP) 2020 has also stressed on accreditation and it forms one of the four pillars for benchmarking and ensuring quality. The creation of National Accreditation Council as envisaged under NEP is thus only a matter of time after the suitable legislation is enacted. As per the NEP, accreditation shall be the sole driver for all future educational restructuring and changes. Hence it has become much more essential for an institute to strive and obtain accreditation for their programmes. This Margdarshan Initiative was last revised in May 2022. While the scheme has progressed, a need was felt to undertake a review and amplify the guidelines based on the feedback from the environment and other developments.
- iv. **AICTE Training and Learning (ATAL) FDP Internship:** Under this scheme, faculty members have the opportunity to undergo internships at reputed industries to gain practical insights and update their teaching methodologies.
- v. **AICTE Internship Policy:** AICTE has laid down an Internship Policy to encourage students to undertake internships as part of their academic curriculum. This policy aims to enhance their employability and bridge the gap between industry and academia.
- vi. **AICTE-MODROBS (Modernization and Removal of Obsolescence) Scheme:** The MODROBS scheme supports the modernization of laboratories and workshops in technical institutions to enhance students' hands-on training experience. The scheme aims to modernize and remove obsolescence in the Laboratories / Workshops / Computing facilities (Libraries are excluded), so as to enhance the functional efficiency of Technical Institutions for Teaching, Training and Research purposes. It also supports new innovations in Class Room and Laboratory / Teaching Technology, development of Lab Instructional Material and appropriate Technology to ensure that the practical work and project work to be carried out by students is contemporary and suited to the needs of the Industry.
- vii. **AICTE Vocational Education Programs:** AICTE supports vocational education programs that incorporate practical training, internships, and apprenticeships to make students industry-ready.
- viii. **Industrial Visits and Training by Institutions:** While not a specific AICTE scheme, AICTE-approved institutions often organize industrial visits and training programs as part of their curriculum to provide practical exposure to students.

d. Initiatives by Ministry of Labour and Employment, Govt. of India

Ministry of Labour and Employment, Government of India launched a National ICT based job portal known as National Career Service (NCS) portal to connect the opportunities with the aspirations of youth. This portal facilitates registration of job seekers, job providers, and skill providers. Career counsellors, etc. The portal provides job matching services in a highly transparent and user-friendly manner. These facilities along with career counselling content are delivered by the portal through multiple channels like career centres, mobile devices, CSCs, etc.

The portal provides information on over 3000 career options from 53 key industry sectors. Job seekers also have access to industry trends in a user-friendly way. The NCS portal links job-seekers, employers, counsellors and training providers all through Aadhaar-based authentication. Registration to NCS portal is online and free of charge. The salient feature of NCS portal includes the following:

- Career counselling and Guidance
 - Enabling Skill Development
 - Empowering Job Seekers to find the right job
 - Enabling employers to pick the right talent
 - Enhancing capabilities of students through training
- Information's related to Job Fairs/Placements

Employment Exchanges Mission Mode Project (EE - MMP)

The Employment Exchange Mission Mode project is one of the 31 Mission Mode Projects under National e-Governance Plan (Ne-GP). Budget of INR 148.70 crore has been approved for 12th Five Year Plan for this project in December, 2013. The aim of EE-MMP is to provide career options and facilitate informed choice to the job seekers by providing a national platform for interface between stakeholders for responsive, transparent and efficient career services in order to meet the skill needs of a dynamic economy. The objective of EE-MMP is to take up process

Re-engineering and convert NES (National Employment Service) into NCS (National Career Service).

National Career Service (NCS)

NCS is proposed to have variety of services like information about skill development courses, apprenticeship, internship, career counseling, etc. along with all employment related services. It is expected that the NCS would be accessible to all stakeholders, based on partnerships and would provide larger number of services supported by call centers/helpdesk and through network of new nodes like CSC (common service centers), etc.

The main stakeholders for the NCS would include:

- Unemployed candidates seeking jobs
- Students seeking career counseling
- Candidates seeking vocational / occupational guidance
- Illiterate, under-privileged sections of society, blue-collar workers seeking placements and guidance
- Person with different abilities (PWDs), ex-servicemen, veterans / senior citizens, etc.
- Employers seeking suitable candidates

e. Initiatives by Telecom Sector Skill Council (TSSC)

TSSC has taken a step towards fulfilling the emerging requirements of the industry by partnering with key stakeholders in order to bring the latest content to the forefront. TSSC have got into partnership with All India Council for Technical Education (AICTE) for summer internship programme and various other MNCs to impart

Skilling in new emerging technologies. Some of the prime courses in new emerging technologies being offered by TSSC in addition to TSSC Qualification packs are as under:

- Artificial Intelligence & Data Science
- Cyber Security
- Internet of Things
- Android
- AR/VR

In addition to this certain course on life skills/soft skills, employability related skills are also planned for the students such as

- Problem solving and analytic
- Communication skills
- Lifelong learning
- Behavioural Skills
- Professional Behavioural etc.

The main objectives of TSSC are as follows

- Bridge the gap and enhance employability of our students
- Training young minds towards 21st Century skills assisting industry cross-sector
- Meet the needs of school leavers and graduates, employers, government educational institutions and society.
- Address the need for quality, skill training for human resources to complement the large goal of accomplishing the include growth.
- Address the limited capacity of skills development facilities in India
- To develop extensive placement linkages with employers in all sectors to provide gainful entry-level employment opportunities to youth undergoing the skill training.
- Industry participation in developing the skill training solutions to address critical skill gaps by standardization of training content, delivery and assessment process o improve overall competitiveness of the industry.
- Set up a comprehensive pan- India Labour Market Information System (LMIS) i.e. preparing a web-based compendium of job roles and skill types to assist in planning for re-skilling, delivery of training and employability.
- Undertake occupational mapping and skill gap analysis i.e. identification of skill development needs based on LMIS and emerging technologies.
- Rationalize and maintain a skill inventory.
- Create a skill development plan in coordination with Electronic and IT sector skill councils.
- Review and identify emerging skill gaps by trend analysis.
- Develop National Occupational Standards (NOS) that feature skill competency standards and qualifications.
- Refine the existing curricula to align it with NOS, obtain approval from an industry led body of experts and facilitate building of delivery capacity.
- Plan and institutionalise an effective system for training of trainers.

- Steer the affiliation and accreditation processes to enable quality assurance in training in par with international standards. Steer the affiliation and accreditation processes to enable quality assurance in training in par with international standards.
- Create an assessment framework to award tamper proof certifications to trainees.
- Promote academies of excellence by nurturing state of vocational training.
- Manage resources efficiently to achieve results and value for money.

2. Initiatives by other agencies

a. Initiatives by Engineering Council of India (ECI)

(ECI has also taken initiatives to organize series of interactive workshops to update and apprise the students about the products and services being offered by respective corporate house. This interaction will definitely bring the institute and industry closer and help in planning for effective implementation of industrial training.

b. Others

Many public sector and private organizations are also contributing to the course of quality improvement in technical education system by way of arranging industrial visit of providing industrial training to the students as a part of their corporate social responsibility and also for the growth of technical education system of the country.

K) Assessment Rubric for Internship, Industrial Visit & Industrial Training: Assessment Rubric for Internship, Industrial visit and industrial training should be prepared based on the objectives set and type of industries where internship/visit or training has been planned. Specific criteria of performance/assessment before, during and after the internship, industrial visit and industrial training should be identified by the implementing teachers for designing the rubric. For objective, valid and reliable assessment of Industrial Training, Industrial Visit and Internship, different tools of assessment such as a checklist, rating scale, assessment rubric, observation schedule, portfolio assessment, incidental records etc. need to be prepared by teachers. Even the students may be encouraged to adopt self-assessment techniques using the assessment rubrics.

L) CO-PO, PSO Mapping: Based on the requirement of programme, objectives set and type of internship, industrial visit and industrial training placed at different semesters, CO-PO, PSO mapping need to be done. This mapping will vary at different semesters for same programme. Implementing teachers play very important role in developing the CO-PO, PSO matrix.

M) References:

- **AICTE Internship Policy: Guidelines & Procedures (Nelson Mandela Marg, Vasant Kunj, New Delhi-110070)**- <https://aicte-india.org/sites/default/files/AICTE%20Internship%20Policy.pdf>
- **AICTE Internship Policy Guidelines & Procedures**- <https://www.aicte-india.org/sites/default/files/Aicte%20Internship%20Policy-%2002.04.2019.pdf>
- **AICTE Quality Initiatives In Technical Education**- <https://www.aicteindia.org/sites/default/files/AICTE%20QUALITY%20INITIATIVES%20IN%20TECHNICAL%20EDUCATION.pdf>
- **AICTE Internship Portal**- <https://internship.aicte-india.org/>

- **Industrial Visit-** <https://www.dsu.edu.in/commerce-management/scms-industrial-visit>
- **AICTE Idea (Idea Development)-** https://idealnet.aicte-india.org/assets/data/scheme_doc.pdf
- **AICTE Initiative-** <https://aicte-india.org/initiatives>
- **Draft Guidelines for Research Internship with Faculty and Researchers at Higher Education Institutions/Research Institutions-** https://www.ugc.gov.in/pdfnews/1887287_Rsearch-Internship-Guidelines-120522.pdf
- **AICTE internship 2022: Everything you need to know-** <https://ischoolconnect.com/blog/aicte-internship-everything-you-need-to-know/>
- **Industrial Visits Policy and Analysis-** <https://www.sgg.ac.in/home/page/Industrial-Visits-Policy-and-Analysis>
- **Field Visit and Industrial Visit Policy 2023 (Valid till May 2026)-** <https://www.bitsathy.ac.in/wp-content/uploads/Field-Visit-and-Industrial-Visit-Policy.pdf>
- **Industry Interaction Initiatives-** <https://sjbit.edu.in/industry-interaction-initiatives-ise/>
- **Internship Policy: Guidelines and Procedures 2021-22 Onwards-** <https://scetngp.com/wp-content/uploads/2023/04/Internships-Training.pdf>
- **Industrial Training Policy (Through Internship)-** https://vignaniit.edu.in/naac/criteria6/6.2.2%20Attachments/211229_Industrial%20Training%20policy.pdf
- **UG Internship/Industrial Training/Project Work Guidelines (w.e.f. Academic Session 2020-21)-** https://nitkkr.ac.in/wp-content/uploads/2021/09/UG-Internship-Guidelines_final-08042021.pdf
- **Internship Policy-** <https://iar.ac.in/wp-content/uploads/2022/02/IAR-Internship-Policy.pdf>
- **Industry Institute Interaction Policy-** http://www.gcekarad.ac.in/Placement/III_Policy_2021_Main.pdf
- **Internship Policy August 2021-** <https://ksrct.ac.in/wp-content/uploads/2022/12/Internship-Policy.pdf>
- **Summer Internship Programme (Sip) Policy: Guidelines & Procedures-** <https://www.ipeindia.org/wp-content/uploads/2021/12/SIP-Guidelines-EDITED-21st-MAR-2021-Inline with- AICTE-Internship-Policy-2019-1.pdf>
- **Internship Policy: Guidelines and Procedures with Effect from Academic Year 2020-2021-** <https://www.kitcoek.in/documents/academics/internship-policy/kit-internship-policy-2020.pdf>
- **Internship / Industrial Training-** <https://www.dkte.ac.in/placement/internship>
- **Ministry of Commerce and Industry (DPIIT Internship Scheme)-** <https://www.myscheme.gov.in/schemes/dpiit-is>

- A) **Course Code** : 2426507(P2426507/S2426507)
- B) **Course Title** : Minor Project
- C) **Pre-requisite Course(s)** :
- D) **Rationale** :

Project work plays a very important role in engineering education in developing core technical skills, soft skills and a higher level of cognitive, psychomotor and affective domain skills. It encourages the critical thinking process in the students. Project work is normally done when students have acquired sufficient knowledge, skills and attitude and are able to integrate all these, entirely in a new situation or task to solve the problems of the industries/real world. Project work also develops many soft skills like confidence, communication skills, creative ability, inquisitiveness, learning to learn skills, lifelong learning skills, problem-solving skills, management skills, positive attitude, ethics etc.

In diploma programme of state of Bihar, minor project is being carried out at 5th semester where all aspects of project planning will be dealt in detail.

- E) **Course Outcomes (COs):** After the completion of the course, teachers are expected to ensure the accomplishment of following course outcomes by the learners. For this, the learners are expected to perform various activities related to three learning domains (Cognitive, Psychomotor and Affective) in classroom/ laboratory/ workshop/ field/ industry.

After completion of the course, the students will be able to-

- CO-1** Identify a real-world problem in the form of a project to be developed.
- CO-2** Perform literature survey related to the identified area/problem.
- CO-3** Identify preliminary resource requirements (Equipment, Tools, Software, Manpower, Services)
- CO-4** Prepare project synopsis for the identified problem/project title within stipulated time period.

- F) **Suggested Course Articulation Matrix (CAM):**

Course Outcomes (COs)	Programme Outcomes (POs)							Programme Specific Outcomes* (PSOs)	
	PO-1 Basic and Discipline Specific Knowledge	PO-2 Problem Analysis	PO-3 Design/ Development of Solutions	PO-4 Engineering Tools	PO-5 Engineering Practices for Society, Sustainability and Environment	PO-6 Project Management	PO-7 Life Long Learning	PSO-1	PSO-2
CO-1	3	2	-	-	-	-	1		
CO-2	3	2	-	-	-	2	1		
CO-3	3	2	-	2	-	2	1		
CO-4	3	-	-	-	-	3	1		

Legend: High (3), Medium (2), Low (1) and No mapping (-)

* PSOs will be developed by respective programme coordinator at institute level. As per latest NBA guidelines, formulating PSOs is optional

G) Teaching & Learning Scheme:

Course Code	Course Title	Scheme of Study (Hours/Week)					
		Classroom Instruction (CI)		Lab Instruction (LI)	Notional Hours (TW+ SL)	Total Hours (CI+LI+TW+SL)	Total Credits (C)
		L	T				
2426507	Minor Project	-	-	02	02	04	02

Legend:

CI: Classroom Instruction (Includes different instructional/implementation strategies i.e. Lecture (L), Tutorial (T), Case method, Demonstrations, Video demonstration, Problem based learning etc. to deliver theoretical concepts)

LI: Laboratory Instruction (Includes experiments/practical performances /problem-based experiences in laboratory, workshop, field or other locations using different instructional/Implementation strategies)

Notional Hours: Hours of engagement by learners, other than the contact hours for ensuring learning.

TW: Term Work (includes assignments, seminars, micro projects, industrial visits, any other student activities etc.)

SL: Self Learning, MOOCs, spoken tutorials, online educational resources etc.

C: Credits = (1 x CI hours) + (0.5 x LI hours) + (0.5 x Notional hours)

Note: TW and SL have to be planned by the teacher and performed by the learner under the continuous guidance and feedback of teacher to ensure outcome of learning.

H) Assessment Scheme:

Course Code	Course Title	Assessment Scheme (Marks)						Total Marks (TA+TWA+LA)
		Theory Assessment (TA)		Term Work & Self-Learning Assessment (TWA)		Lab Assessment (LA)		
		Progressive Theory Assessment (PTA)	End Theory Assessment (ETA)	Internal	External	Progressive Lab Assessment (PLA)	End Laboratory Assessment (ELA)	
2426507	Minor Project	-	-	10	15	10	15	50

Legend:

PTA: Progressive Theory Assessment in class room (includes class test, mid-term test and quiz using online/offline modes)

PLA: Progressive Laboratory Assessment (includes process and product assessment using rating Scales and rubrics)

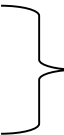
TWA: Term work & Self Learning Assessment (Includes assessment related to student performance in assignments, seminars, micro projects, industrial visits, self-learning, any other student activities etc.)

Note:

- ETA & ELA are to be carried out at the end of the term/ semester.
- Term Work is to be done by the students under the guidance of internal faculty but its assessment will be done **internally (40%)** as well as **externally (60%)**. Assessment related to planning and execution of Term Work activities like assignment, micro project, seminar and self-learning is to be done by internal faculty (Internal Assessment) whereas assessment of output/product/ presentation related to these activities will be carried out by external faculty/expert (External Assessment). However, criteria of internal as well as external assessment may vary as per the requirement of respective course. For valid and reliable assessment, the internal faculty should prepare checklist & rubrics for these activities.

I) Suggested Implementation Plan of Minor Project:

Suggested implementation plan of minor project along with guidelines to teachers and students are mentioned below. For effective implementation of the project work in totality, different steps are to be carried out at different stages of the comprehensive project work.

- Project Planning.  **(Minor Project)**
 - Design, development and execution of the project.
 - Quality of report writing and presentation.
- 
- (Major Project)**

In this semester, under the minor project work, the students are guided and monitored to undertake Project planning steps as mentioned below. While, the remaining steps of project implementation will be carried out during major project work in next the semester.

1.0 Guidelines to Students for Implementation of Minor Project.

Students are guided to undergo following steps under the minor project. Teacher are advised to guide the students on each and every step.

- 1.1 Identification of Area/Problem and Project Titles
- 1.2 Literature Survey
- 1.3 Identification of Outcomes of the Project
- 1.4 Identification of the recourses required.
- 1.5 Preparation of Synopsis
- 1.6 Presentation of Synopsis

1.1 Identification of Project Titles and Allocation Methodology:

Though the teachers and students, both are involved in identification of project titles, but the prime responsibility of identification of project titles goes to the respective teachers involved in implementing the course or programme. Teachers are fully aware of course/programme curriculum and they are also aware of related industrial problems hence, they try to explore the possibility of identification of project titles through these problems.

These small industrial problems in the form of project titles may be brought into the laboratories or workshop of institutions of a specific programme, which are equipped with all necessary facilities and resources to carry out the project work. These labs or workshop can function as miniature industry to solve the industrial problems in the form of simulated industrial projects. These projects may be integrated problem of courses or programme.

Criteria for Identification of Project Titles.

The identification of problem statement must be based on the following criteria:

- Environmental Considerations
- Simulated/Automated Industry's/ Improvised Process
- Application or Utility in the World of Work.
- Relevance to the Curriculum
- Mapping of Outcomes of Project with Pos and PSOs (if applicable)
- Feasibility of Implementation of the Project

1.2 Literature Survey:

Literature survey on the project title needs to be done through journals, websites, open source technologies available, discussion with the practicing engineers/industry persons and other relevant sources available.

1.3 Outcomes of the Project:

The project guide should ensure that the project outcomes are written properly as clear, specific, measurable and attainable statements. The outcomes formulated will decide the overall scope or course of action, depth and breadth of the project and implementation plan.

1.4 Identification of the recourses required:

Students under the guidance of teacher should try to identify all the resources required for the completion of the project like equipment, devices, experimental test rig, software, computer, persons to be contacted, suppliers, funds, availability of internal/external lab. The sample size has to be delimited and decided as per the time limit allotted, feasibility and many other considerations.

1.5 Preparation of Synopsis:

The students at the end of the semester are expected to submit 'Project Synopsis' after interaction with guide, as per the guidelines and format provided.

1.6 Presentation of Synopsis:

After developing the synopsis, student(s) should prepare a Power Point Presentation and present the same in front of examiner, guide and audience. Quality of presentation of data need to be ensured using the following criteria through Rubric-

- Clarity in Communication and Presentation
- Voice Audibility
- Use of Media and Methods
- Satisfying the Queries of Audience
- Attainment of Outcomes

2.0 Guidelines to Teachers for Implementation of the Minor Project:

The teacher alongwith the students should identify the different types of project title(s) as per need of the client as mentioned below:

- Prototype Development
- Experimentation Type
- Software Development Type
- Solving Industrial Problem Type
- Market Survey Type
- Feasibility Study Type
- Simulation Based
- Application Type

- Product Type
- Research Type
- Review Type

The project must be feasible. The guide allocated for each project are responsible for the quality of student's work, on different criteria including the synopsis writing which can be monitored on continual basis.

The guide must ensure that the feasibility of the project, the availability of resources/ software technology, sufficiency of time, finance and requirements during each and every step or activity of project work in advance.

J) Assessment of the Minor Project:

Continual Monitoring and feedback mechanism should be developed by the guide. An assessment plan on weekly progress/updates, action taken on different criteria and sub-criteria of the project work is suggested below. Path-breaking teachers who think out of the box are required to guide, monitor and evaluate the project work.

For objective, valid and reliable assessment, different tools of assessment such as a checklist, rating scale, assessment rubric, observation schedule, portfolio assessment, incidental records etc. need to be prepared. Even the students may be encouraged to adopt self-assessment techniques using the assessment rubrics.

The students need to be assessed continuously based on the below mentioned assessment criteria at project planning stage. The Project guide must prepare detailed rubric(s) for each criteria to have valid and reliable assessment.

Assessment Scheme for Minor Project

S. No.	Suggested Assessment Criteria	Suggested Weightage (%)
1.	Identification of Area/Problem Statement	10
2.	Literature Survey	20
3.	Formulation of Project Title	10
4.	Clarity in Formulation of Outcomes of The Project	10
5.	Preparation of Synopsis	30
6.	Presentation of Synopsis	20
	Total	100
