Vocational Education

Secondary Level
(Grade 9th to 12th)

Bhartiya Shiksha Board

1. Aims of Objectives

The Bhartiya Shiksha Board(BSB) aims to produce:

1. A true Bharatiya takes deep pride in our beliefs, traditions, culture, and languages.
2. Responsible and productive citizens.
3. Self-confident, self-reliant individuals strongly committed to upholding high moral values.
4. Integrated personalities.
5. Conscious and compassionate human beings.
6. Ardent learners and rational thinkers.
7. Individuals who are physically, mentally, intellectually, emotionally, and spiritually fit.
8. Innovative and enterprising individuals.

The school curriculum is designed with the learner at the center. Four types of programs have been developed for the holistic development of humans as conscious beings:

1. Academic Programs for Intellectual Development.
2. Cultural Education Programs for Aesthetic Development.
3. Social Education Programs for Social Development.
4. Self-development programs for physical well-being and spiritual growth.

In line with the board's aim of fostering the holistic development of students, the objectives of vocational education have been determined as follows:

1. To expand and strengthen Vocational Education & Skill Development (VE&SD) and Pre-vocational Education as envisaged in NEP(National Education Policy) 2020 and NCF(National Curriculum Framework) 2023.
2. To provide a vision for balanced education by integrating Ancient Indian Knowledge while developing globally demanded skills of the 21st century and beyond.
3. To enhance students' appreciation of skills and foster respect for gender and labour, promoting the values as integral to different occupations.
4. To revamp the perception of vocational education in society and address existing gaps in promoting skills education programs.
5. To promote inclusive, interoperable, interdisciplinary, and learning outcome-based courses.
6. Emphasis on experiential learning over traditional methods of learning.
7. The capacity-building of teachers to adapt to new pedagogical needs aligns with vocational area-specific requirements.
8. Developing Indigenous entrepreneurial capacities in youth and encouraging them to adopt a local-to-global approach towards reviving our rich heritage crafts.
9. Creating an industry interface and developing a roadmap to link schools with local industries, artisans, entrepreneurs etc.
10. To provide state-of-the-art, globally demanded courses through collaboration with national and international institutions.

Mahatma Gandhi's concept of "Bunyadi Shiksha" is central to BSB's framework for vocational education and skill development. This framework integrates the modern digital world with the traditions of the 64 Kalayien (arts) and 16 Vidyaein (knowledge), where Vidya refers to literary study and Kala to professional activity. In the Vedic era, students were prepared for life by learning various skills in Gurukuls (ancient schools). The BSB seeks to revive this heritage of ancient Indian knowledge by introducing some of these Vidya and Kala as vocational courses. This allows students to gain knowledge of India's rich ancient heritage while simultaneously acquiring mainstream education. In doing so, the Board aligns with the guidelines and principles outlined in NEP 2020 and the National Curriculum Framework (NCF) 2023, fostering global citizens rooted in Indian ethos and values.

At the secondary level choosing any one Vocational Skill subject will help students in identifying their interests and develop the skills and mindset required to become skilled workers or entrepreneurs. At the board level, as we aim to prepare students for the workforce trained with globally recognized skills, we have planned to offer programs in five fields: Information Technology/ Electronics, Commerce/Business, Agriculture(Agribusiness & Agritechnology), Tourism and Environment; all the courses under these identified categories will have life skills, IKS(Indian Knowledge System), and SEL(Social Emotional Learning) based additional modules apart from subject-specific skill modules. The following sections provide the course-wise details of the vocational courses we are offering:

1. 'O' - Level IT Course

CONTENTS

The Bharatiya Shiksha Board has signed a MoU with the National Institute of Electronics & Information

Technology - NIELIT to collaborate on IT and engineering-based vocational education. This partnership aims to implement NSQF (National Skills Qualifications Framework)-based education in affiliated schools, enhancing skill development and vocational training for students. As part of this initiative, the 'O' Level IT course has been introduced at the secondary level in schools.

1. Course Curriculum Structure:

This course has two parts: **Part A**- IT-based modules equip students with fundamental knowledge and hands-on experience in Information Technology as per the NIELIT syllabus. Part A trains students with fundamental knowledge and experiential learning in Information Technology as per the NIELIT 'O'Level syllabus, covering essential topics such as programming, databases, web development, and software tools. The IT modules prepare students to effectively use digital technologies for communication, problem-solving, critical thinking, and the workplace requirements of basic computer competencies, thus preparing them for the demands of the modern workforce.

The objective of the course is to equip students with the necessary skills for the following job roles:

Part A- IT Modules:

M1. Information Technology Tools and Network Basics
M2. Web Designing & Publishing
M3. Programming and Problem Solving through Python
M4. Internet of Things and its Applications

Part B is based on Traverse Skills, which includes modules on Entrepreneurship, Life Skills, and the Indian Knowledge System(IKS). Part B prepares students holistically for future endeavours. This course instills entrepreneurial skills through hands-on learning experiences and creates innovative thinking in students to identify opportunities around them that lead an idea to venture. This module will introduce them to real-world applications of their learnings, guiding them to prepare business plans and prepare them for future leadership roles. The life skills modules cover essential skills like decision-making, critical thinking, emotional intelligence, adaptability, and resilience. These skills training prepare students to navigate through personal day-to-day challenges, competitive work environments, and social pressures effectively. And also exposes students to the Indian culturally rich heritage and values through the IKS course.

Part B - Additional Modules:

vi. Entrepreneurship Development
vii. Life Skills

viii. IKS

Following is the consolidated table of 'O'-Level-IT Course Structure:

S.NO	Course Name		Level	Module Marks (60% of Theory Marks + 40% of Practical Marks)					Period (Hours) (Approved by NSQF + Transverse Skills+ Entrepreneurial Skills)				
				Theory	Practical	Internal	Assignment	**Total**	Theory	Practical	Project	Emp. Skills	**Total (Hours)**
1.	**'O'- Level 'IT'**		**4**	**350**	**180**	**10**	**10**	**550**	**262 (192 + 70)**	**308 (288 + 20)**	**60**	**–**	**630 (540 + 90)**
	9th	Part A: Information Technology Tools and Network Basics		60	40	–	–	100	48	72	15	–	135
		Part B: Life Skills, Entrepreneurial Skills & IKS		25	-	-	-	25	10	-	-	-	10
	10th	Part A: Web Designing & Publishing		60	40	–	–	100	48	72	15	–	135
		Part B: Life Skills, Entrepreneurial Skills & IKS		25	-	-	-	25	10	-	-	-	10
	11th	Part A: Programming and Problem Solving through Python		60	40	–	–	100	48	72	15	–	135
		Part B: Life Skills, Entrepreneurial Skills & IKS		30	-	5	5	50	20	10	-	-	30
	12th	Part A: Internet of Things and its Applications		60	40	–	–	100	48	72	15	–	135
		Part B: Life Skills, Entrepreneurial Skills & IKS		30	10	5	5	50	30	10	-	-	40

2. Guidelines for School IT Teachers:

The following guidelines to implement course structure & course integration syllabus for schools aim to create a holistic learning environment for students:

a. Syllabus Structure:

- **NIELIT O-Level IT Syllabus**: The teachers have to cover all the modules of Part A by following the official NIELIT syllabus rigorously covering all prescribed modules and ensuring students are well-prepared for online assessments.
- **Entrepreneurship:** This course emphasizes practical application, problem-solving, and real-world relevance. The course aims to develop the entrepreneurial skills needed to become a job creator rather than a job seeker.
- **Life Skills**: The focus is on developing essential life skills. The course covers practical application, and problem-solving in real-world relevance.
- **IKS**: This course educates students to know the Indian arts and skills. Learn why it is important to learn some of the 64 *kalāyien* and 16 *Vidyaein* are relevant to modern vocational education, such as cooking, music, or painting. The idea is to provide opportunities for learners to learn about the rich Indian heritage by blending traditional knowledge with modern techniques and utilizing the knowledge to identify opportunities, trends, and consumer preferences at the national and international levels.

b. Teaching Methodologies

- Teachers can combine traditional teaching methods with digital tools in **a Blended Learning** environment.
- Students may be assigned projects integrating IT skills with entrepreneurship, IKS, and life skills. Such **Project-based learning** should encourage creativity, problem-solving, and collaboration.
- **Interactive Sessions:** can be organized for students to make learning engaging and relevant, which will also help teachers assess students' progress.
- **Lab Sessions:** Students must be given proper lab-based practicals wherever necessary to be included as per the prescribed syllabus.

c. Assessment & Evaluation

- **Internal Assessments:**
    - **Life Skills, Entrepreneurial Skills, and IKS Modules:** Conduct regular internal assessments through projects, presentations, and practical tasks. Focus on evaluating the application of skills in real-life scenarios. Assessing project work and group discussions can also integrate traditional knowledge with IT concepts.
- **Online Exam (O-Level IT):** Students are prepared for online exams for the O-Level IT syllabus. Regular mock tests and practice sessions can be conducted to familiarize students with the online exam format and build their confidence.

d. Certification Process

- **Completion Criteria**: Students must complete all modules, including the internal assessments for Life Skills, Entrepreneurial Skills, and IKS, and pass all 4 online exams of the O-Level IT syllabus.
- **Awarding Certificate**: The students will be awarded the joint BSB-NIELIT O-Level certificate under Vocational Education only after they have cleared all four online O-Level IT papers and also obtained the class XII exams.

***e*. Guidelines for Conducting Classes:**

- The IT teachers of respective schools will conduct the classes for Part A of the IT portion of the course. In addition, online virtual content, including both text and video lectures, has been provided to students on the LMS portal of NIELIT for easy access and self-paced learning.

- Part B of the course will be delivered through virtual mode, with guest lectures organized by the board. These sessions will be conducted online, providing expert insights and guidance to the students.

3. Part A of 'O'-Level IT Course Syllabus

Part A of the 'O'-Level IT Course Syllabus consists of four compulsory theory modules, four practical and one project. The structure of the part A syllabus is indicated below: -

Module Code	Module	Learning Hours (Theory)	Learning Hours (Practical/ Tutorials/ Project)	Total Learning Hours

M1-R5.1	Information Technology Tools and Network Basics	48	72	120
M2-R5.1	Web Designing & Publishing	48	72	120
M3-R5.1	Programming and Problem Solving through Python	48	72	120
M4-R5.1	Internet of Things and its Applications	48	72	120
MPR-1 to MPR-4	Practical based on M1-R5.1, M2- R5.1 ,M3-R5.1 and M4-R5.1			
PJ1-R5.1	Project		60	60
	Total	192	328	540

3.1 Part A- Detailed Syllabus of Information Technology Tools and Network Basics (M1-R5.1)

3.1.1 Duration

120 Hours - (Theory: 48hrs + Practical: 72 hrs)

3.2.2. Outline of Module

Module Unit	Duration (Theory) in Hours	Duration (Practical) in Hours	Learning Outcome
1. Introduction to Computer	4	6	After completion of this unit module, the Learner will be able to ● Identify computers, and IT gadgets and explain their evolution and applications. ● Get familiar with various input, output, and hardware components of a computer along with storage devices. ● Get familiar with various types of software, utilities used for computers and mobile apps.

2. Introduction to the Operating System	4	6	After learning this unit, Learner will be: ● Well-acquainted with the Operating System and its applications for both desktop and mobile devices. ● Able to identify various desktop screen components and modify various properties, date, time etc. ● Able to add and remove new programs and features, and manage files and folders. ● Well-versed with printing and know various types of file extensions.
3. Word Processing	6	9	After completion of this unit, Learner will have in-depth knowledge of ● Word Processing, their usage, details of word processing screen. ● Opening, saving, and printing a document including pdf files. ● Document creation, formatting of text, paragraph, and whole document. ● Inserting Header and Footer on the document. ● Finding text on a Word document and correcting spellings.

			● Inserting and manipulating tables, enhancing tables using borders and shading features. ● Preparing copies of document labels etc. for sending various recipients using Mail Merge.
4. Spreadsheet	8	12	After completion of this unit, Learner

			will have good hands-on practice on: ● Basic Knowledge of Spreadsheet Processing, their usage, details of Spreadsheet screen. ● Opening, saving and printing a Spreadsheet. ● Spreadsheet creation, inserting and editing data in cells, sorting and filtering of data. ● Inserting and deleting rows/columns. ● Applying basic formulas and functions. ● Preparing chart to represent the information in a pictorial form.
5. Presentation	6	9	After completion of this unit, Learner will have good hands- on practice on: ● Basic Knowledge of presentations. ● Opening/saving a presentation and printing of slides and handouts. ● Manipulating slides to enhance the look of the slides as well as a whole presentation by inserting a picture, objects, multimedia formatting etc. ● Running a slide show with various transitions.
6. Introduction to Internet and WWW	6	9	After completion of this unit, Learner will be able to:

			● Gather knowledge of various types of networks and topologies. ● Get an overview of the Internet, its applications, and various browsers available to access the Internet. ● Connect to the Internet using various modes of connections/devices available. ● Get knowledge of device identification on local networks as well as on the Internet for both Desktop and Mobile Devices. ● Search Information on the Internet on various topics. ● Download and print web pages.
7. E-mail, Social Networking and e-Governance Services	6	9	After completion of this unit, Learner will be able to: ● Create an email account, compose an email, reply to an email, and send the email along with attachments ● Get familiar with Social Networking, Instant Messaging, and Blogs. ● Get familiar with e-Governance Services, e-Commerce, and Mobile Apps.
8. Digital Financial Tools and Applications	4	6	After completion of this unit, Learner will be able to: ● Know the Digital Financial Tools. ● Get Knowledge of the Internet Banking Modes. ● Use the Digital Locker and will be able to store documents in the Digital Locker.
9. Overview of Future Skills & Cyber Security	4	6	After completion of this unit, the Learner will be familiar with the: ● Latest trends and technologies in upcoming fields in IECT. ● Need of Cyber Security and will be able to secure their PC and Mobile devices by using basic security

			features.

3.2.1 Marks Distribution

Module Unit	Written Marks (Max.)
1. Introduction to Computer, Introduction to Operating System	10
2. Word Processing	20
3. Spreadsheet	20
4. Presentation	20
5. Introduction to Internet and WWW, E-mail, Social Networking and e-Governance Services	20
6. Digital Financial Tools and Applications, Overview of Future Skills & Cyber Security	10
7. Total	100

3.3 Syllabus of Web Designing and Publishing (M2-R5.1)

3.3.1 Duration

120 Hours - (Theory: 48hrs + Practical: 72 hrs.)

3.3.2 Outline of Module

Module Unit	Duration (Theory) in Hours	Duration (Practical) in Hours	Learning Outcome
Introduction to Web Design	2	3	After completing this unit, the Learner will be able to: ● Know the types of websites. ● Know the role of front-end and back-end applications. ● Understand the concept of client-side scripting and server-side scripting

Editors	2	3	After completing this unit, the learner will be able to: ● Use different editors available for writing code. ● Understand the working of editors.
HTML Basics	10	15	After completing this unit, the Learner will be able to: ● develop a static website using ● different HTML Controls.
Cascading Style Sheets (CSS)	10	15	After completing this unit, Learner will be able to understand the ● Purpose of CSS. ● Role of CSS in websites. ● Roles of effects in Website.
CSS Framework	6	9	After completing this unit Learners will be able to, ● use CSS Framework to develop websites effectively.
JavaScript and Angular JS	10	15	After completing this unit, the Learner will be able to: ● Apply client-side scripting. ● Adding validations and checks on forms (web pages).
Photo Editor	6	9	After completing this unit, the Learner will be able to:
			● images and embed in web pages.
Web Publishing and Browsing	2	3	The Learner will finally be able to: ● publish the web

			sites.

3.3.3 Marks Distribution

Module Unit	Written Marks (Max.)
1 Introduction to Web Design and Editors, HTML Basics	25
2 Cascading Style Sheets (CSS)	20
3 CSS Framework	15
4 JavaScript and Angular Js	20
5 Photo Editor, Web Publishing and Browsing	20
6 Total	100

3.4 Syllabus of Programming and Problem Solving Through Python Language (M3-R5.1)

3.4.1 Duration

120 Hours - (Theory: 48hrs + Practical: 72 hrs)

3.4.2 Outline of Module

Module Unit	Duration (Theory) in Hours	Duration (Practical) in Hours	Learning Outcome
1. Introduction to Programming	2	3	After completion of this unit module, the Learner will be able to ● Understand the concept of Programming. ● Understand the Evolution of Programming.
2. Algorithm and Flowcharts to solve problems	6	9	After completion of this unit module, the Learner will be able to ● Understand the concepts and purposes of algorithms and flowcharts. ● Use algorithms and flowcharts to solve problems independent of language. ● Gain knowledge of different constructs of algorithms and flowcharts.

3. Introduction to Python	2	3	After completion of this unit module, the candidate will be able to ● Understand features of Python that make it one of the most popular languages in the industry. ● Understand the structure of the Python problem. ● Understand the areas where Python is used.
4. Operators, Expressions and	10	15	After completion of this unit module Learner will be able to:
Python Statements			● Use the basic operators and expressions available in Python in developing programs. ● Discuss and use various Python statements like conditional constructs, and looping constructs in writing Python programs.
5. Sequence data types	6	9	After completion of this unit module, the learner will be able to: ● Define the various built-in Sequence datatypes and their use ● Discuss the concept of mutable and immutable objects
6. Functions	10	15	After completion of this unit of the module, the learner will be able to: ● Apply the in-built functions available in Python to solve different problems. ● Use the modular approach using user-defined functions.
7. File Processing	6	9	After completion of this unit module the learner will be able to: ● Working with files and reading /writing onto files.
8. Modules	2	3	After completion of this unit module, the Learner will be able to ● Discuss the concept of modules and importing, loading, and reloading of modules in programs.

9. NumPy Basics	4	6	After completion of this unit module, the Learner will be able to ● Working on NumPy array manipulation to access data and sub-arrays and to split, reshape, join arrays, etc.
Total	48	72	

3.4.3 Marks Distribution

Module Unit	Written Marks (Max.)
1. Introduction to Programming, Algorithms, and Flowcharts to solve problems	20
2. Introduction to Python, Operators, Expressions and Python Statements, Sequence data types	30
3. Functions, File Processing, Modules	40
4. NumPy Basics	10
5. Total	100

3.5 Syllabus of Internet of Things and its Applications (M4-R5.1)

3.5.1 Duration

120 Hours - (Theory: 48hrs + Practical: 72 hrs)

3.5.2 Outline of Module

Module Unit	Duration (Theory) in Hours	Duration (Practical) in Hours	Learning Outcome
1. Introduction to IoT – Applications/ Devices, Protocols and Communication Model	4	6	After completion of this unit module, the Learner will be able to ● Describe various IoT Applications, protocols, architecture, etc. ● Discuss the characteristics of IoT devices. ● Know about Physical Design/Logical Design, Functional blocks of IoT, and Communication Models.

2. Things and Connections	4	6	After completing this unit, Learner will be able to understand ● Closed loop/ feedback loop system. ● The use of sensors, actuators, and controllers in the IoT process flow. ● TCP/IP Versus OSI models. ● Wired and wireless connectivity.
3. Sensors, Actuators and Microcontrollers	8	12	After completing this unit, Learner will be able to understand ● The role of Sensors, and transducers in measuring physical quantities. ● Working and characteristics of actuators. ● Role and use of microcontrollers in building various electronic devices.
4. Building IoT Applications	20	30	After completing this unit, Learner will be able to understand ● Working on microcontroller and hardware prototyping Arduino platform. ● The role of 'C' language in building IoT applications. ● Built-in Data-type, operators-expressions ● Conditional statements and loops. ● Arrays, functions. ● Digital, analog pins of Arduino. ● Interfacing sensors, actuator. ● Using the ArduBlock GUI tool.

5. Security and Future of IoT Ecosystem	4	6	After completing this unit, Learner will be able to understand ● Need for security in IoT. ● Various basic concepts of security. ● Security levels. ● Need of powerful CPU for Future IoT ecosystem.
6. Soft skills-Personality Development	8	12	After completing this unit, Learner will be able to understand ● Role of positive personality and determinants of personality. ● Self-esteem. ● Communication and writing skills.

3.5.3 Marks Distribution

Module Unit	Written Marks (Max.)
1. Introduction to IoT – Applications/Devices, Protocols and Communication Model	10
2. Things and Connections	10
3. Sensors, Actuators and Microcontrollers	15
4. Building IoT Applications	40
5. Security and Future of IoT Ecosystem	5
6. Soft skills-Personality Development	20
Total	100

3.6 Details of Part A-'O' Level IT Course related to Practical, Projects, Examinations

3.6.1 Duration of the Course

For BSB enrolled students the duration of Part A and Part B of the course is 540 learning hours and the minimum period to cover contents is I year for candidates undergoing 'O' Level after 10+2 and six months for candidates undergoing 'O' Level after Graduation.

3.6.2 Practical

The students have to devote 60% of the total time allotted to each module of the course for the practical sessions. Practical assignments have been worked out for each theory module. The Practical examinations will be based on the syllabi M1-R5.1, M2-R5.1, M3-R5.1, and M4-R5.1 modules of 'O' Level course.

3.6.3 Project

In the Part A-'O Level (IT), a project is an important component. The project is carried out by the student under the guidance and support of faculty and management of the Institute / Organization where the student is undergoing training. It is felt that such a project provides an opportunity for the student to apply his / her knowledge and skills to real-life problems (including oral and written communication skills). The project should be given utmost importance and priority both by the students as well as the institution faculty/management with respect to its identification, planning, and implementation.

3.6.4 Objective of the Project

The objective of the project is to give the students additional hands-on experience in solving a real-life problem by applying knowledge and skills gained on completion of theory papers in a course at a given Level. It provides an opportunity for students to develop written and communication skills. The project also helps the students to realize the importance of resource and time management, ownership of tasks towards deliverables, innovation, and efficiency in task management apart from presentation skills. It also provides a good opportunity for students to build, enhance, and sustain high levels of professional conduct and performance and evolves a problem-solving frame of mind in the students. It is also felt that taking up the project by a student prepares him/her for a job in industry and elsewhere.

3.6.5 Project Submission

The student undergoing the course 'O' level (IT) course has to submit a project in order to be 'O' Level certified. The project should be original and of real-life value. The project should not be a copy of existing material from any other source.

The Learners (Students) are expected to carry out a project successfully and submit the project certificate in the prescribed format from the head of the institute running the accredited course or the organization of which the learner is an employee. The Proforma of the Project Completion Certificate is given on the next page.

3.6.6 Credit Scheme for 'O' Level (IT) Under DOEACC Scheme

Credit calculation based on NCVET guidelines i.e. 1 credit of 30 hrs (both theory & practical) is as under -

Sr. No.	Module Code	Module Name	No. of Lecture Theory Hours	No. of Tutorial/ Practical /Project Hours	Total Credits
			(A)	(B)	(C= (A) + (B)/30)
1.	M1-R5.1	Information Technology Tools and Network Basics	48	72	4
2.	M2-R5.1	Web Designing & Publishing	48	72	4

3.	M3-R5.1	Programming and Problem Solving through Python	48	72	4
4.	M4-R5.1	Internet of Things and its Application	48	72	4
5.	PJ1-R5.1	Project		60	2
Total Credits					**18**

3.6.7 Examination Pattern

a. The examination pattern of each module/paper is tabulated below:

Examination	Duration	Mode of Examination	No. of Questions	Pattern of Question	Max. Marks	Min. Pass Marks	Weightage in Final Total per paper/Module
Theory	2 Hours	Online / OMR	100	MCQ	100	33%	60%
Practical & Viva	3 Hours	Lab Session / Online	3/4	Demonstration	80	33%	40%
				Viva	20		
Minimum Pass Percentage is 50% of total weightage (Theory + Practical) in each module							

b. Minimum and Maximum Marks Matrix is as under:

Sr.No.	Title of Component and Identification	Theory Marks		Practical Marks		Module Marks (60% of Theory Marks+ 40% of Practical Marks)	
		Min	Max	Min	Max	Min	Max
1	**M1-R5.1**: Information Technology Tools and Network Basics	33	100	33	100	50	100
2	**M2-R5.1**: Web Designing & Publishing	33	100	33	100	50	100
3	**M3-R5.1**: Programming and Problem Solving through Python	33	100	33	100	50	100

4	**M4-R5.1**: Internet of Things and its Applications	33	100	33	100	50	100
6	**PJ1-R5.1**: Project	Project completion certificate is required to qualify 'O' Level-IT					
	Maximum Marks in the level					400	

c. The qualification matrix for each module/paper is:

Theory	Practical	Result	Re-appear
Pass (Qualifying 33% criteria)	Pass (Qualifying 33% criteria)	Pass (Qualifying 50% criteria)	NA
Pass (Qualifying 33% criteria)	Pass (Qualifying 33% criteria)	Fail (Not qualifying 50% criteria)	Need to re-appear in both theory and practical.
Pass (Qualifying 33% criteria)	Fail (Not qualifying 33% criteria)	Qualifying 50% criteria, but Fail	-do-
Fail (Not qualifying 33% criteria)	Pass (Qualifying 33% criteria)	Qualifying 50% criteria, but Fail	-do-
Fail (Not qualifying 33% criteria)	Fail (Not qualifying 33% criteria)	Fail	-do-
Absent (Zero marks would be awarded)	Pass / Fail (as per 33% qualifying criteria)	Fail	-do-
Pass/Fail (as per 33% qualifying criteria)	Absent (Zero marks would be awarded)	Fail	-do

d. The marks will be translated into grades while communicating results to the candidates. No rounding takes place in the calculation of grades. The gradation structure is as given-

Pass Percentage	Grade
Failed (<50)	F
>= 50% to < 55%	D
>= 55% to < 65%	C
>= 65% to < 75%	B
>= 75% to < 85%	A

>=85%	S

3.6.8 Practical Examination Scheme

The Practical Examination will be conducted by the NIELIT in reputed Institutions for all candidates. The accredited institutes are obliged to facilitate the conduct of Practical Examinations and arrange infrastructure, and support of its faculty and staff for the conduct of Practical Examination at their Centre. The practical examination scheme is as follows.

Number of Practical Examination	Four
Duration of Practical Examination	Three-hour duration including viva voce
Max. Marks	100 = 80(Practical) + 20(Viva Voce)
Date(s)	The date (s) for the practical examination will be announced on the NIELIT website.

Only the practical fees, as decided from time to time by NIELIT, are payable. Institutes are not permitted to charge any additional fees from candidates for separately facilitating the practical examination.

4. Part B. Detail Syllabus of Additional Modules

Part B-4.1 Entrepreneurship Development Modules:

The Secondary Level Entrepreneurship Development Course aims to introduce students to the fundamentals of entrepreneurship and equip them with the skills needed to start and manage their own businesses. It is designed to foster entrepreneurial thinking and provide practical knowledge that can be applied in real-world scenarios.

S.NO	Class	Chapter No.	Module/ Chapter	Chapter Objectives/ Learning Outcome	Theory (Hours)	Practical/ Activities (Hours)	Marks Project (50)+ Class Assignments/Activities (50) (Max Marks 100)		Pedagogy
1.	9th	**1.**	**Introduction**	This chapter will help learners to: ▪ Understand the concepts of business,	(5)	(1) Prepare a list of 10 Indian Business Organisations	50	50	Lecture & Activity through

				profession, and employment ▪ Know the characteristics of entrepreneurship ▪ Realize the significance of Entrepreneurship for India					Virtual Mode
2.	10th	**1.**	**Entrepreneur**	This chapter will help learners to: ▪ Understand the meaning and features of an entrepreneur ▪ Identify the key Qualities of an Entrepreneur. ▪ Recognize the different types of entrepreneurs	(6)	(1) Think of an Indian Entrepreneur and identify his/her key qualities	10	10	
		2.	**Support system for entrepreneurs in India**	This chapter will help learners to: Get aware of various schemes of state & central Government for startup and entrepreneurship development	(5)	(1) Identify one Government scheme and explain its benefits and eligibility criteria	20	20	
		3.	**Business idea: generation, assessment and market research**	This chapter will help learners to: ● Discuss how to think of a business idea and evaluate it ● Conduct market research to validate business ideas	(4)	(2) Identify a problem, think of a product/ service and prepare a questionnaire for market survey	20	20	
3.	11th	**1.**	**Role and Responsibilities of Entrepreneur**	This chapter will help learner to: ▪ Realize the role of Entrepreneurs in Economic Development ▪ Understand the responsibilities of Entrepreneurs	(5)	(1) Identify an Indian company and explain its contribution towards society	50	50	Lecture & Activity through Virtual Mode
4.	12th	**1.**	**Entrepreneurial Opportunities**	This chapter will help learner to: ● Discuss the need assessment and business idea generation ● Know the steps in business idea	(4)	(2) Identify a problem faced by you/ society and think of a product/ service to solve it	15	15	

				generation ● Describe the role of Creativity and Innovation in entrepreneurship					
		2.	**Support system for entrepreneurs in India**	This chapter will help learner to: ● Discuss the various schemes of state & central Government for start-up and entrepreneurship development	(5)	(1) Identify one Government scheme and explain its benefits and eligibility criteria	15	15	
		3.	**Business idea: generation, assessment and market research**	This chapter will help learner to: ● Discuss the business idea and evaluate it ● Conduct market research to validate business ideas	(4)	(2) Identify a problem, think of a product/ service and prepare a questionnaire for market survey	20	20	

Part B-4.2 Life Skills Module

The Life Skills module for secondary-level students focuses on developing essential personal and professional skills. It covers self-awareness, effective communication, critical thinking, time management, teamwork, adaptability, financial literacy, and health and well-being. The module aims to equip students with practical skills to navigate daily challenges, make informed decisions, and succeed in their future endeavors.

S.No.	Class	Course Name	Chapters	Learning Outcome	Hours	No. of Periods	Marks Project(50) + Class Assignments/Activities(50) (Max Marks 100)		Pedagogy
1.	9th	Introduction to Life Skills	An overview of life skills and their importance	*This chapter will help learners to:* ● discuss life skills in day-to-day situations ● differentiate between the categories of life skills	1	2	15	15	Lecture & Activity through Virtual Mode

				● identify characteristics of life skills ● demonstrate the implications of life skills.				
			2. Different types of life skills	*This chapter will help learners to:* ● Discuss the different types of life skills. ● Demonstrate life skills in real-life scenarios.	1	2	15	15
			3. Examples of Life Skills in daily life	*This chapter will help learners to:* ● Explore various life skills essential for navigating daily life's challenges and responsibilities. ● Develop life skills in navigating the complexities of daily life.	1	2	20	15
2.	10th	Key Life Skills for Vocational Education	1. Introduction to the concept of life skills and their significance in vocational settings.	*This chapter will help learners to:* ● Create well-rounded professionals in vocational fields. ● Learns to effectively handle challenges and opportunities in various aspects of life.	1.5	2	10	10
			2. Personal life skills	*This chapter will help learners to:* ● Explore the	1.5	2	10	10

				importance of personal life skills: ● Discuss self-awareness and management. ● Apply emotional intelligence in a real-life scenario.					
			3. Social life skills	*This chapter will help learners to:* ● Explore the importance of personal life skills. ● Learn communication skills ● Develop teamwork and conflict resolution in real-life scenarios.	1.5	2	10	10	Lecture & Activity through Virtual Mode
			4. Vocational life skills	*This chapter will help learners to:* ● Explore the relevance of vocational life skills. ● Learn Industry-specific knowledge and professionalism. ● Identify different vocational sector-specific technical skills requirements.	1.5	2	20	20	
3.	11th	**Social-Emotional Learning (SEL) in VE**	1. Introduction of Social-Emotional Learning (SEL)	*This chapter will help learners to:* ● Define Social-Emotional Learning (SEL).	2	4	20	20	

				● Discuss the importance of SEL in personal development and well-being.					
			2. Overview of the key components of SEL:	*This chapter will help learners to:* ● Explore the key components of SEL. ● Discuss social awareness. ● Describe relationship skills and responsible decision-making.	2	4	15	15	
			3. How SEL enhances the ability to succeed in vocational settings and throughout careers.	*This chapter will help learner to:* ● Learning SEL skills contribute to success in specific vocational careers. ● Use SEL Competencies in the Vocational Journey	2	4	15	15	
4.	12th	**Career Readiness and SEL**	1. Social-Emotional Learning for Career Readiness	*This chapter will help learners to:* ● Discuss the key components of career readiness. ● Explore SEL enhances career readiness prerequisites.	1	2	10	10	
			2. Self-Exploration and Career Planning	*This chapter will help learners to:* ● Describe self-assessment and exercises to identify interests, values, strengths, and career preferences. ● Explore the potential career pathways based on personal attributes and aspirations. ● Introduce to career planning strategies. ● Creating action plans for suitable career options.	2	4	15	15	

			3. Reflection and Future Planning	*This chapter will help learners to:* ● Reflect on personal growth, learning experiences, and career aspirations. ● Learn to set short-term and long-term goals for future career goals.	2	4	10	10	
			4. Why life skills are essential for success in career, and life	*This chapter will help learners to:* ● Discuss life skills that are crucial for students' success in their careers and life in general. ● Identify the essentials for workplace success. ● Explain interpersonal communication, problem-solving, time management, and adaptability to changing work environments. ● Analyse life skills contribute to personal well-being, mental health, and overall quality of life. ● Learn to cope with challenges, build resilience, and pursue meaningful goals.	1	2	15	15	Lecture & Activity through Virtual Mode
				Total		**20**	**36**		

Part B- 4.3 Indian Knowledge Systems

The Indian Knowledge Systems (IKS) module for secondary-level vocational education explores traditional and contemporary knowledge relevant to various vocational fields. It integrates ancient Indian wisdom with modern practices, emphasizing skills and techniques rooted in cultural heritage. The module aims to provide students with a deeper understanding of India's diverse knowledge systems, enhancing their vocational skills and fostering a connection between traditional knowledge and contemporary applications.

S.No.	Class	Module/Unit	Learning Outcome	Theory(Hrs)	Practical/Activities(Hrs)	No.of Periods (Hrs.)	Marks Project(50) + Class Assignments/Activities(50) (Max Marks 100)		Pedagogy
1.	9th	Bridging the Indian Ancient Wisdom and Vocational Education	*This chapter will help learners to:* ● Identify the 64 *kalāyien* (arts) mentioned in ancient Indian texts and recognize their historical significance. ● Describe a few examples of these ancient arts and how they were practiced in the past. ● Explain how some of the 64 *kalāyien* are relevant to modern vocational education, such as cooking, music, or painting. ● Appreciate the value of ancient Indian arts and skills in preserving cultural heritage. ● Express why it is important to learn and preserve traditional arts alongside modern vocational skills.	1	1	4	50	50	Lecture & Activity through Virtual Mode

2.	11th	Vocational Pathways: Learning from Vedic and Modern Knowledge Systems	*This chapter will help learners to:* ● Explore Vedic-era vocational practices (such as traditional craftsmanship, agriculture, healthcare, architecture, and trade). ● Compare the Vedic practices with modern vocational skills in the same fields (e.g., technology-enhanced agriculture, modern healthcare, and architecture). ● Identify how vedic skills have influenced or transformed into modern vocational practices. ● Exploring ethical considerations in technology ● Analyze the tools and techniques used in Vedic times for vocational tasks and compare them with modern technological advancements in the same fields. ● Discuss the role of innovation in improving efficiency from Vedic times to modern times. ● Exploring Sustainability and	2	2	6	50	50	Lecture & Activity through Virtual Mode

			Ethics practices, and harmony with nature, and comparing this with modern vocational education's focus on sustainability, technology, and global challenges. • Discuss incorporating traditional knowledge into modern vocational careers.						

4.4 Pedagogy Hours and minimum & maximum marks matrix for **Part B** is as under:

Sr.No.	**Title of Modules**	**Pedagogy** (Class-wise Total Hours)				**Marks** Project(50) + Class Assignments/Activities(50) (Max Marks 100)	
		9th	**10th**	**11th**	**12th**	**Min**	**Max**
1	**Entrepreneureship Development**	6	19	6	18	33	100
2	**Life Skills**	9	14	18	18	33	100
3	**IKS**	2	-	4	-	33	100

4.5. The internal marks will be translated into grades while communicating results to the candidates. No rounding takes place in the calculation of grades. The gradation structure is as given-

Pass Percentage	**Grade**

Failed (<50)	F
>= 50% to < 55%	D
>= 55% to < 65%	C
>= 65% to < 75%	B
>= 75% to < 85%	A
>=85%	S

For any queries regarding the syllabus/curriculum, please contact: Dr. Nidhi Gusain at 9810202568