

➤ इस दस्तावेज़ में शामिल हैं:

- **एम्प्लॉयबिलिटी स्किल - I** के मॉडल पाठ्यक्रम और **NoS (120 घंटे)**  
(सभी एक वर्ष और दो वर्षीय सीटीएस ट्रेडों के पहले वर्ष के लिए)
- **एम्प्लॉयबिलिटी स्किल - II** के मॉडल पाठ्यक्रम और **NoS (60 घंटे)**  
(सभी दो वर्षीय सीटीएस ट्रेडों के दूसरे वर्ष के लिए)
- **एम्प्लॉयबिलिटी स्किल - III** के मॉडल पाठ्यक्रम और **NoS (60 घंटे)**  
(सभी छह महीनों के सीटीएस ट्रेडों के लिए)
- **“आर्टिफिशियल इंटेलिजेंस (एआई) के परिचय”** के लिए माइक्रो क्रेडेंशियल  
(7.5 घंटे) (सभी एक वर्ष ,दो वर्षीय के पहले वर्ष और सभी छह महीनों सीटीएस ट्रेडों के लिए)

**This document consists of:**

- Model Curriculum & NoS of **Employability Skills - I (120 Hours)**  
(for all one year and 1<sup>st</sup> year of two-year CTS trades)
- Model Curriculum & NoS of **Employability Skills - II (60 Hours)**  
(for second year of all Two-year CTS trades)
- Model Curriculum & NoS of **Employability Skills - III (60 Hours)**  
(Common for all six months CTS trades)
- Micro Credential for Introduction to Artificial Intelligence (AI)  
(7.5 Hours) (for all one year ,1<sup>st</sup> year of two-year and six months CTS trades)

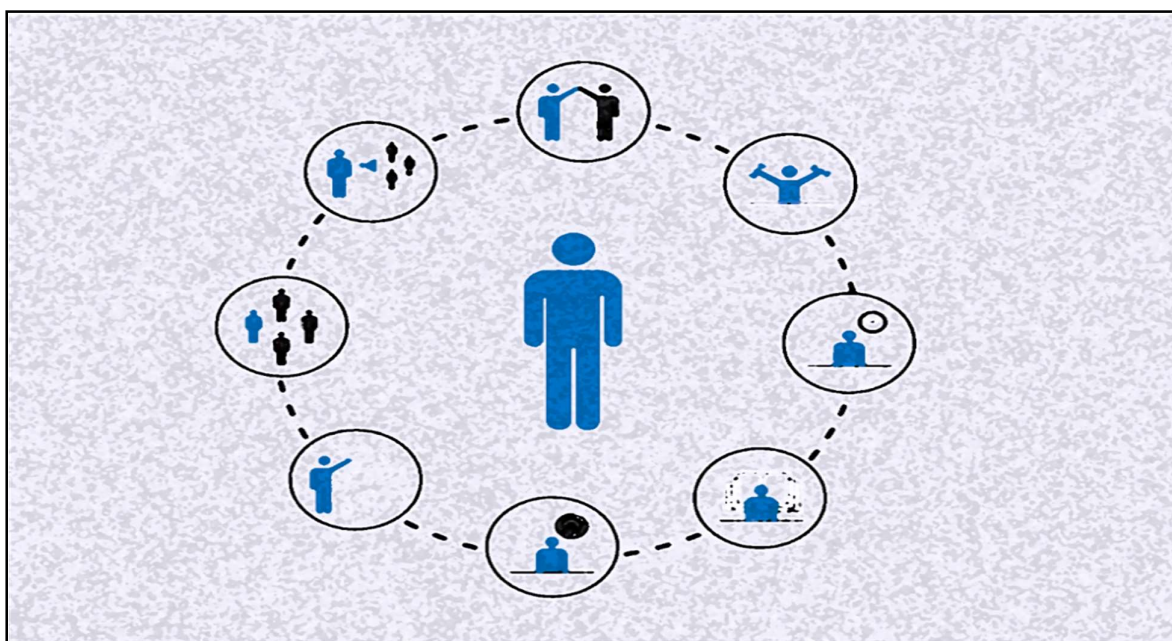


GOVERNMENT OF INDIA  
MINISTRY OF SKILL DEVELOPMENT & ENTREPRENEURSHIP  
DIRECTORATE GENERAL OF TRAINING

**COMPETENCY BASED CURRICULUM**

# **EMPLOYABILITY SKILLS**

**FOR CRAFTSMEN TRAINING SCHEME (CTS)**



**Revised in 2023**

Developed By

**CENTRAL STAFF TRAINING AND RESEARCH INSTITUTE**

EN-81, Sector - V, Salt Lake Kolkata – 700091

[www.cstaricalcutta.gov.in](http://www.cstaricalcutta.gov.in)

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## RATIONALE

Employability skills play an important role in one's career. Professional skills are a person's skill set and ability to perform a certain type of activity or task. Employability skills are a person's ability to interact effectively with co-workers and customers. Hard skills are mainly applicable at the work place. Employability skills are applicable both at workplace and outside the work place. Employability skills complement the hard skills which are occupational requirement of a job. It also complements many other activities even outside the work place. Presently employability skills are increasingly sought out by employers in addition to standard qualification. There are instances of professions where employability skills proved to be more important, on a long-term basis than occupational skills. Employability skills refer to behavior, communication, IT Skill, work ethics etc. which makes a person suitable to effectively work in a team. Studies suggest that employability skills are equally important indication of job performance as hard skills. The competency level of the worker increases with the Employability skills and takes him to the next level.

Recognizing this importance of soft skills, the DGT during its 38<sup>th</sup> Meeting held on 31<sup>st</sup> May, 2011 recommended introduction of subject "Employability Skills" replacing "Social Studies" in ITI curricula. Government of India accepted the above recommendation and introduced the subject "Employability Skills" in ITI curricula in place of "Social Studies" from the August, 2012 session.

In the 16<sup>th</sup> National Skills Qualifications Committee (NSQC) of NCVET held on 24<sup>th</sup> February, 2022, It was decided to revamp the present employability skills and should cater to the dynamic industry needs by imparting the trainees with adequate employability skills (ES) like skills like digital skills, online payment, communication, entrepreneurship, marketing etc. Accordingly, Employability Skills syllabus of 60 hrs. duration for all six months trades and 120 Hrs. duration for all one year and first year of two-year CTS trades is designed in collaboration with National Skill Development Corporation (NSDC).

## GENERAL INFORMATION

<b>1. Name of the subject</b>	<b>EMPLOYABILITY SKILLS</b>
<b>2. Applicability</b>	<ul style="list-style-type: none"> <li>• CTS - Mandatory for all trades</li> </ul>
<b>3. Hours of Instruction</b>	<ul style="list-style-type: none"> <li>• 60 Hrs. for all CTS trades of six months duration</li> <li>• 120 Hrs. in 1<sup>st</sup> year for all one and two-year CTS trades</li> <li>• 60 hrs. advance module in 2<sup>nd</sup> year for 2 years trades only.</li> </ul>
<b>4. Examination</b>	<ul style="list-style-type: none"> <li>• The examination for the subject will be held at the end of course / each year</li> </ul>
<b>5. Instructor Qualification</b>	<p>MBA/ BBA /any Graduate / Diploma in any discipline with Two years' experience with short term ToT course in Employability Skills from DGT institutes. (Must have studied English/ Communication Skills and Basic Computer at 12th / Diploma level and above).</p> <p style="text-align: center;"><b>OR</b></p> <p>Existing Social Studies Instructors in ITIs with short term ToT course in Employability Skills from DGT institutes.</p>

## EMPLOYABILITY SKILLS –I (120 Hrs.)

### Common for all One-year and 1<sup>st</sup> year of Two-year trades

#### Model Curriculum

##### Module Summary:

S. No	Module Name	Duration (hours)	Assessment Marks (in percentage)
1.	Introduction to Employability Skills	3	4
2.	Constitutional values - Citizenship	3	6
3.	Becoming a Professional in the 21 <sup>st</sup> Century	5	10
4.	Basic English Skills	20	10
5.	Career Development & Goal Setting	4	6
6.	Communication Skills	10	10
7.	Diversity & Inclusion	5	6
8.	Financial and Legal Literacy	10	10
9.	Essential Digital Skills	20	10
10.	Entrepreneurship	15	10
11.	Customer Service	10	6
12.	Getting Ready for Apprenticeship & Jobs	15	12
	<b>Total</b>	<b>120</b>	<b>100</b>

#### Key Learning Outcomes

##### **Introduction to Employability Skills      Duration: 3 Hours**

After completing this programme, participants will be able to:

1. Outline the importance of Employability Skills for the current job market and future of work
2. List different learning and employability related GOI and private portals and their usage
3. Research and prepare a note on different industries, trends, required skills and the available opportunities

##### **Constitutional values - Citizenship      Duration: 3 Hours**

4. Explain the constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. that are required to be followed to become a responsible citizen
5. Discuss the role of personal values and ethics such as honesty, integrity, caring and respecting others, etc. in personal and social development
6. Identify and practice different environmentally sustainable practices

##### **Becoming a Professional in the 21st Century      Duration: 5 Hours**

7. Discuss relevant 21st century skills required for employment
8. Highlight the importance of practicing 21st century skills like Self-Awareness, Behavior Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn etc. in personal or professional life
9. Create a pathway for adopting a continuous learning mindset for personal and professional development

##### **Basic English Skills      Duration: 20 Hours**

10. Use appropriate grammar and sentences while interacting with others
11. Read English text with appropriate articulation
12. Role play a situation on how to talk appropriately to a customer in English, over the phone or in person
13. Write a brief note/paragraph / letter/e -mail using correct English

##### **Career Development & Goal Setting      Duration: 5 Hours**

14. Create a career development plan
15. Identify well-defined short- and long-term goals

#### **Communication Skills      Duration: 10 Hours**

16. Demonstrate how to communicate effectively using verbal and nonverbal communication etiquette
17. Write a brief note/paragraph on a familiar topic
18. Explain the importance of communication etiquette including active listening for effective communication
19. Role play a situation on how to work collaboratively with others in a team

#### **Diversity and Inclusion      Duration: 5 Hours**

20. Exhibit how to behave, communicate, and conduct oneself appropriately with all genders and PwD
21. Discuss the POSH Act and its significance

#### **Financial and Legal Literacy      Duration: 10 Hours**

22. Discuss various financial institutions, products, and services
23. Demonstrate how to conduct offline and online financial transactions, safely and securely and check passbook/statement
24. Explain the common components of salary such as Basic, PF, Allowances (HRA, TA, DA, etc.), tax deductions
25. Calculate income and expenditure for budgeting
26. Discuss the legal rights, laws, and aids

#### **Essential Digital Skills      Duration: 20 Hours**

27. Describe the role of digital technology in day-to-day life and the workplace
28. Demonstrate how to operate digital devices and use the associated applications and features, safely and securely
29. Demonstrate how to connect devices securely to internet using different means
30. Follow the dos and don'ts of cyber security to protect against cyber crimes
31. Discuss the significance of displaying responsible online behavior while using various social media platforms
32. Create an e-mail id and follow e- mail etiquette to exchange e -mails
33. Show how to create documents, spreadsheets and presentations using appropriate applications
34. utilize virtual collaboration tools to work effectively

#### **Entrepreneurship      Duration: 14 Hours**

35. Describe the types of entrepreneurship and enterprises
36. Discuss the process of identifying opportunities for potential business and relevant regulatory and statutory requirements
37. Describe the 4Ps of Marketing-Product, Price, Place and Promotion and apply them as per requirement
38. Create a sample business plan, for the selected business opportunity
39. Discuss various sources of funding and identify associated financial and legal risks with its mitigation plan

#### **Customer Service      Duration: 5 Hours**

40. Describe different types of customers
41. Role play a situation on how to identify customer needs and respond to them in a professional manner
42. Explain various tools used to collect customer feedback
43. Discuss the significance of maintaining hygiene and dressing appropriately

#### **Getting ready for apprenticeship & Jobs      Duration: 20 Hours**

44. Draft a professional Curriculum Vitae (CV)
45. Use various offline and online job search sources such as employment exchanges, recruitment agencies, and job portals respectively
46. Demonstrate how to apply to identified job openings using offline /online methods as per requirement
47. Discuss how to prepare for an interview
48. Role play a mock interview
49. List the steps for searching and registering for apprenticeship opportunities

LIST OF TOOLS & EQUIPMENT FOR EMPLOYABILITY SKILLS- I		
S No.	Name of the Equipment	Quantity
1.	Computer (PC) with latest configurations – and Internet connection with standard operating system and standard word processor and worksheet software (Licensed) (all software should either be latest version or one/two version below)	As required
2.	UPS	As required
3.	Scanner cum Printer	As required
4.	Computer Tables	As required
5.	Computer Chairs	As required
6.	LCD Projector	As required
7.	White Board 1200mm x 900mm	As required
<i>Note: Above Tools &amp; Equipment not required, if Computer LAB is available in the institute.</i>		



# Employability Skills I – NOS (120 hours)

## Description

This unit is about employability skills, Constitutional values, becoming a professional in the 21st Century, digital, financial, and legal literacy, diversity and Inclusion, English and communication skills, customer service, entrepreneurship, and apprenticeship, getting ready for jobs and career development.

## Performance Criteria (PC)

### Introduction to Employability Skills

**To be competent, the individual must be able to:**

1. understand the significance of employability skills in meeting the current job market requirement and future of work.
2. identify and explore learning and employability relevant portals
3. research about the different industries, job market trends, latest skills required and the available opportunities.

### Constitutional values – Citizenship

4. recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. for personal growth and the nation's progress
5. follow personal values and ethics such as honesty, integrity, caring and respecting others, etc.
6. follow and promote environmentally sustainable practices

### Becoming a Professional in the 21<sup>st</sup> Century

7. recognize the significance of 21<sup>st</sup> Century Skills for employment
8. practice the 21<sup>st</sup> Century Skills such as Self-Awareness, Behavior Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn etc. in personal and professional life
9. adopt a continuous learning mindset for personal and professional development

### Basic English Skills

10. use English as a medium of formal and informal communication while dealing with topics of everyday conversation in different contexts
11. speak over the phone in English, in an audible manner, using appropriate greetings, opening, and closing statements both on personal and work front
12. read and understand routine information, instructions, emails, letters etc. written in English
13. write short messages, notes, letters, e-mails etc., using accurate English

### Career Development & Goal Setting

14. identify career goals based on the skills, interests, knowledge, and personal attributes
15. prepare a career development plan with short- and long-term goals.

### Communication Skills

16. follow verbal and non-verbal communication etiquette while communicating in professional and public settings
17. use active listening techniques for effective communication
18. communicate in writing using appropriate style and format based on formal or informal requirements
19. work collaboratively with others in a team

### Diversity and Inclusion

20. ensure personal behavior, conduct, and use appropriate communication by taking gender into consideration
21. empathize with a PwD and aid a PwD, if asked
22. escalate any issues related to sexual harassment at the workplace in accordance with the POSH Act

### Financial and Legal Literacy

23. identify and select reliable institutions for various financial products and services such as bank account, debit and credit cards, loans, insurance etc.
24. carry out offline and online financial transactions, safely and securely, using various methods and check the entries in the passbook
25. identify common components of salary and compute income, expenses, taxes, investments etc.
26. identify relevant rights and laws and use legal aids to fight against legal exploitation

### Essential Digital Skills

27. operate digital devices and use their features and applications securely and safely
28. carry out basic internet operations by connecting to the internet safely and securely, using the mobile data or other available networks through Bluetooth, Wi-Fi, etc.
29. display responsible online behavior while using various social media platforms
30. create a personal email account, send and process received messages as per requirement
31. carry out basic procedures in documents, spreadsheets and presentations using respective and appropriate applications
32. utilize virtual collaboration tools to work effectively

### **Entrepreneurship**

33. identify different types of Entrepreneurship and Enterprises
34. use research and networking skills to identify and assess opportunities for potential business
35. develop a business plan and a work model, considering the 4Ps of Marketing- Product, Price, Place and Promotion
36. identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity

### **Customer Service**

37. identify different types of customers
38. identify and respond to customer requests and needs in a professional manner
39. use appropriate tools to collect customer feedback
40. follow appropriate hygiene and grooming standards.

### **Getting ready for apprenticeship & Jobs**

41. create a professional Curriculum vitae (Résumé)
42. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively
43. apply to identified job openings using offline /online methods as per requirement
44. answer questions politely, with clarity and confidence, during recruitment and selection
45. identify apprenticeship opportunities and register for it as per guidelines and requirements

## **Knowledge and Understanding (KU)**

### **The individual on the job needs to know and understand:**

1. need for employability skills
2. different learning and employability related portals
3. various constitutional and personal values
4. different environmentally sustainable practices and their importance
5. 21<sup>st</sup>-century skills and their importance
6. how to use English language for effective verbal (face to face and telephonic) and written communication in a formal and informal set-up
7. importance of career development and setting long- and short-term goals
8. Do's and don'ts of effective communication
9. POSH Act
10. inclusivity and its importance
11. different types of disabilities and appropriate verbal and non-verbal communication and behavior towards PwD
12. different types of financial institutes, products, and services
13. components of salary and how to compute income and expenditure
14. importance of maintaining safety and security in offline and online financial transactions
15. different legal rights and laws
16. different types of digital devices and the procedure to operate them safely and securely
17. how to create and operate an e- mail account
18. use of applications such as word processors, spreadsheets etc.
19. different types of Enterprises and ways to identify business opportunities
20. types and needs of customers
21. how to apply for a job and prepare for an interview
22. apprenticeship scheme and the process of registering on apprenticeship portal

## **Generic Skills (GS)**

**User/individual on the job needs to know how to:**

1. read and write different types of documents/instructions/correspondence in English and other languages
2. communicate effectively using appropriate language in formal and informal settings
3. behave politely and appropriately with all to maintain effective work relationship
4. how to work in a virtual mode, using various technological platforms
5. perform calculations efficiently
6. solve problems effectively
7. pay attention to details
8. manage time efficiently
9. maintain hygiene and sanitization to avoid infection

## EMPLOYABILITY SKILLS –II (60 Hrs.)

### Common for all 2<sup>nd</sup> year of Two-year trades

#### Model Curriculum

##### Module Summary:

S. No	Module Name	Duration (hours)	Assessment Marks (in percentage)
1.	Basic Career Skills	8	14
2.	Future Work Skills	12	22
3.	Engagement Activity 1: Family Engagement	2	-
4.	Entrepreneurial Skills	12	22
5.	Internet Skills	10	20
6.	Engagement Activity 2: Alumni Engagement	2	
7.	Professional Skills	12	22
8.	Engagement Activity 2: HR Interaction	2	-
	<b>Total</b>	<b>60</b>	<b>100</b>

#### Key Learning Outcomes

##### Basic Career Skills      Duration: 8 Hours

Learners refresh the most important & relevant topics from Year 1 with focus on application-based learning through RPL (Recollection of Prior Learning)

- 1) Learners will be able to build a resume, cover letter & a job application
- 2) Learners will be able to use basic English Skills to communicate in Formal Situations
- 3) Learners will be able to use basic English Skills to communicate in Informal Situations
- 4) Learners will be able to demonstrate workplace etiquette, effective teamwork in real-life situations.

##### Topics -

- a) Applying for a job with updated documents:
  1. Building & reviewing resume
  2. Cover letter
  3. Application
- b) Communication in English - Informal Communication (Topics include Gender, Life Skills, Financial Literacy)
- c) Communication in English - Formal Communication in Industry scenario
- d) 21st Century ES Skills: Workplace etiquette, effective teamwork.

##### Future Work Skills      Duration: 12 Hours

- 1) Learners will be able to list out the essential skills required for the Future Workplace, using online & offline modes to collect information
- 2) Learners will be able to use their knowledge of platform & gig economy to identify jobs relevant to them
- 3) Learners will be able to identify self-employment opportunities relevant to them
- 4) Learners identify and solve for challenges in migrating for work opportunities
- 5) Learners explore the SDIP platform to identify potential international job opportunities available to them

- 6) Learners will be able to differentiate workplace practices that align/misalign with green mindset

#### **Topics -**

- a) Introduction to Future Work Skills
- b) Platform & Gig Economy
- c) Self Employment Plan  
(includes types of jobs students can explore outside their trade jobs)
- d) Migrating for work - Inter-state or International, success stories, safety practices  
(Success Stories)
- e) SDIP - Explore International jobs
- f) Green Mindset

#### **Engagement Activity 1: Family Engagement      Duration: 2 Hours**

- 1) Family members gain awareness of the career aspirations, job opportunities available for the
- 2) learners and develop an encouraging mindset  
Learners get a more conducive environment for career development

#### **Entrepreneurial Skills      Duration: 12 Hours**

- 1) Learners will be able to identify the stages of the design thinking process
- 2) Learners will be able to apply design thinking principles to solve a real-life problem
- 3) Learners will be able to apply design thinking principles to identify a potential business idea
- 4) Learners will be able to build and present a comprehensive business plan including marketing, finance, scale up, accounting, reflecting entrepreneurial mindset.

#### **Topics -**

- a) Design Thinking
- b) Build a business plan/self employment plan
- c) Present a business plan/self employment plan

#### **Internet Skills      Duration: 10 Hours**

- 1) Learners will be able to use the internet to find, sort & present information on a given topic and reflect on their self-learning process
- 2) Learners will be able to use the internet to explore key job portals, identify and apply for potential jobs
- 3) Learners will be able to apply for jobs by attaching their resume, cover letter & other relevant documents via email
- 4) Learners will be able to identify how to use social media tools such as WhatsApp, YouTube, Instagram etc to build **alternate** career paths

#### **Topics -**

- a) Using internet for self learning
- b) Using internet for job search
- c) Sending email with attachments
- d) Digital skills for alternate career

#### **Engagement Activity 2: Alumni Engagement      Duration: 2 Hours**

- 1) Learners gain deeper insights about the workplace, its challenges and new ideas to solve for the problems
- 2) Learners feel a greater sense of motivation and confidence towards their career

#### **Professional Skills      Duration: 12 Hours**

- 1) Learners will be able to demonstrate people skills, personality skills, thinking skills required in various workplace scenarios
- 2) Learners will be able to state the importance of CPD for their career growth
- 3) Learners are able to identify relevant online courses for upskilling/continuous learning.

- 4) Personality Skills: Adaptability, Flexibility, Growth Mindset  
Thinking Skills: Creative Thinking, Negotitation & Decision Making, Future Thinking

**Topics -**

- a) People Skills - peer, leader and team skills
- b) Personality Skills
- c) Thinking Skills - Future thinking, creative thinking etc
- d) CPD for Career Growth

**Engagement Activity 2: HR Interaction      Duration: 2 Hours**

- 1) Learners will be able to resolve their workplace and career related queries
- 2) Learners feel a greater sense of motivation and confidence towards their career

# Employability Skills II – NOS (60 hours)

## Description

This NOS unit is about carrying out operations about learners applying basic and advanced Employability Skills concepts in real life situations to become a successful 21st century professional

## Scope

The scope covers the following:

- plan and prepare advance employability skills activities
- carry out the work to plan and prepare the learners to build key knowledge and skills for career development in the 21st century using advanced employability skills
- documenting the record

## Elements and Performance Criteria

### *plan and prepare the advanced employability skills activities*

To be competent, the user/individual on the job must be able to:

- PC1.** identify the advanced employability skills activities
- PC2.** prepare schedule to plan and prepare the learners to build key knowledge and skills for career development in the 21st century using advanced employability skills
- PC3.** arrange required class room, multimedia computer, white board and LCD projector

### *carry out the work to plan and prepare the learners to build key knowledge and skills for career development in the 21st century using advanced employability skills*

To be competent, the user/individual on the job must be able to:

- PC4.** follow the safety precautions while handling computer and LCD projectors
- PC5.** prepare learners will be able to build a resume, write a cover letter & a job application
- PC6.** plan and prepare use basic english skills to communicate in formal situations
- PC7.** plan and prepare use basic english skills to communicate in informal situations
- PC8.** practice to demonstrate workplace etiquette, effective teamwork in real-life situations
- PC9.** plan and prepare to use their knowledge of platform & gig economy to identify jobs relevant to them
- PC10.** plan and prepare to identify self-employment opportunities relevant to them
- PC11.** plan and prepare to identify and solve for challenges in migrating for work opportunities
- PC12.** plan and prepare to explore the SDIP platform to identify potential international job opportunities available to them
- PC13.** plan and prepare to differentiate workplace practices that align/misalign with green mindset
- PC14.** plan and prepare to identify the stages of the design thinking process
- PC15.** prepare to apply design thinking principles to solve a real-life problem and identify a potential business idea
- PC16.** practice to build and present a comprehensive business plan including marketing, finance, scale up, accounting, reflecting entrepreneurial mindset.
- PC17.** carry out the work to use the internet to find, sort & present information on a given topic and reflect on their self-learning process

- PC18.** prepare and practice to use the internet to explore key job portals, identify and apply for potential jobs
- PC19.** plan and prepare to apply for jobs by attaching their resume, cover letter & other relevant documents via email
- PC20.** prepare and practice to identify how to use social media tools such as WhatsApp, you tube, Instagram etc to build alternate career paths
- PC21.** prepare to demonstrate people skills, personality skills, thinking skills required in various workplace scenarios

### ***documenting the record***

To be competent, the user/individual on the job must be able to:

- PC22.** execute the advance employability skills
- PC23.** record the plan and prepare the learners to build key knowledge and skills for career development in the 21st century using advanced employability skills activities
- PC24.** ensure plan and prepare the learners to build key knowledge and skills for career development in the 21st century using advanced employability skills as per the check list

### **Knowledge and Understanding (KU)**

The individual on the job needs to know and understand:

- KU1.** basic knowledge of need for advance employability skills
- KU2.** basic theory of process to be followed to apply to a job - writing resume, cover letter & application form
- KU3.** basic knowledge of identify & differentiate between formal and informal situations.
- KU4.** basic theory about choosing the right language necessary in different situation.
- KU5.** basic knowledge of list acceptable and unacceptable behaviors at workplace
- KU6.** basic theory of learners will be able to list out the essential skills required for the future workplace, using basic internet search skills
- KU7.** basic knowledge about differentiate platform, gig & self employment opportunities
- KU8.** basic knowledge to identifying platforms/application that provide relevant job opportunities
- KU9.** basic theory about able to outline the pros & cons of migrating for work
- KU10.** basic theory about able to describe the objective of the sdip portal.
- KU11.** basic theory about learners describe what is green mindset.
- KU12.** basic theory about able to outline the framework of a business plan
- KU13.** basic theory about able to locate/find the information on the internet
- KU14.** basic theory about list the steps involved in sending an email.
- KU15.** basic theory about different types of enterprises and ways to identify business opportunities
- KU16.** basic knowledge about can list different social media platforms and describe its usefulness.
- KU17.** basic knowledge of learners will be able to recognize the importance of people skills in the workplace.
- KU18.** learners will be able to state the importance of continued professional development.

### **Generic Skills (GS)**

User/individual on the job needs to know how to:

- GS1.** read and write different types of documents/instructions/correspondence in English and other languages



- GS2.** career mindset
- GS3.** develop a mindset to differentiate a job and a career to build a sustainable career
- GS4.** demonstrate digital fluency in personal & professional context
- GS5.** demonstrate skills required to thrive in a 21st century work culture

LIST OF TOOLS & EQUIPMENT FOR EMPLOYABILITY SKILLS - II		
S no.	Name of the Equipment	Quantity
1.	Computer (PC) with latest configurations – and Internet connection with standard operating system and standard word processor and worksheet software (Licensed) (all softwares should either be latest version or one/two version below)	01 computer for two trainees
2.	UPS	As required
3.	Scanner cum Printer	1 no.
4.	Computer Tables	As required
5.	Computer Chairs	01 no. for each trainee
6.	LCD Projector	1 no.
7.	White Board 1200mm x 900mm	1 no.
<i>Note: Above Tools &amp; Equipment not required, if Computer LAB is available in the institute.</i>		

## EMPLOYABILITY SKILLS –III (60 Hrs.)

### Common for all 06 Months Trades

#### Model Curriculum

#### Module Summary:

S. No	Module Name	Duration (hours)	Assessment Marks
1.	Introduction to Employability Skills	1.5	2
2.	Constitutional values - Citizenship	1.5	2
3.	Becoming a Professional in the 21st Century	2.5	6
4.	Basic English Skills	10	6
5.	Career Development & Goal Setting	2	3
6.	Communication Skills	5	4
7.	Diversity & Inclusion	2.5	2
8.	Financial and Legal Literacy	5	5
9.	Essential Digital Skills	10	8
10.	Entrepreneurship	7	4
11.	Customer Service	5	3
12.	Getting Ready for Apprenticeship & Jobs	8	5
	<b>Total</b>	<b>60</b>	<b>50</b>

#### Key Learning Outcomes

##### **Introduction to Employability Skills**      **Duration: 1.5 Hours**

After completing this programme, participants will be able to:

1. Discuss the Employability Skills required for jobs in various industries
2. List different learning and employability related GOI and private portals and their usage

##### **Constitutional values - Citizenship**      **Duration: 1.5 Hours**

3. Explain the constitutional values, including civic rights and duties, citizenship, responsibility towards society and personal values and ethics such as honesty, integrity, caring and respecting others that are required to become a responsible citizen
4. Show how to practice different environmentally sustainable practices.

##### **Becoming a Professional in the 21st Century**      **Duration: 2.5 Hours**

5. Discuss importance of relevant 21st century skills.
6. Exhibit 21st century skills like Self-Awareness, Behavior Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn etc. in personal or professional life.
7. Describe the benefits of continuous learning.

##### **Basic English Skills**      **Duration: 10 Hours**

8. Show how to use basic English sentences for everyday conversation in different contexts, in person and over the telephone
9. Read and interpret text written in basic English
10. Write a short note/paragraph / letter/e -mail using basic English

**Career Development & Goal Setting    Duration: 2 Hours**

11. Create a career development plan with well-defined short- and long-term goals

**Communication Skills    Duration: 5 Hours**

12. Demonstrate how to communicate effectively using verbal and nonverbal communication etiquette.
13. Explain the importance of active listening for effective communication
14. Discuss the significance of working collaboratively with others in a team

**Diversity & Inclusion    Duration: 2.5 Hours**

15. Demonstrate how to behave, communicate, and conduct oneself appropriately with all genders and PwD
16. Discuss the significance of escalating sexual harassment issues as per POSH act.

**Financial and Legal Literacy    Duration: 5 Hours**

17. Outline the importance of selecting the right financial institution, product, and service
18. Demonstrate how to carry out offline and online financial transactions, safely and securely
19. List the common components of salary and compute income, expenditure, taxes, investments etc.
20. Discuss the legal rights, laws, and aids

**Essential Digital Skills    Duration: 10 Hours**

21. Describe the role of digital technology in today's life
22. Demonstrate how to operate digital devices and use the associated applications and features, safely and securely
23. Discuss the significance of displaying responsible online behavior while browsing, using various social media platforms, e-mails, etc., safely and securely
24. Create sample word documents, excel sheets and presentations using basic features
25. utilize virtual collaboration tools to work effectively

**Entrepreneurship    Duration: 7 Hours**

26. Explain the types of entrepreneurship and enterprises
27. Discuss how to identify opportunities for potential business, sources of funding and associated financial and legal risks with its mitigation plan
28. Describe the 4Ps of Marketing-Product, Price, Place and Promotion and apply them as per requirement
29. Create a sample business plan, for the selected business opportunity

**Customer Service    Duration: 5 Hours**

30. Describe the significance of analyzing different types and needs of customers
31. Explain the significance of identifying customer needs and responding to them in a professional manner.
32. Discuss the significance of maintaining hygiene and dressing appropriately

**Getting Ready for apprenticeship & Jobs    Duration: 8 Hours**

33. Create a professional Curriculum Vitae (CV)
34. Use various offline and online job search sources such as employment exchanges, recruitment agencies, and job portals respectively
35. Discuss the significance of maintaining hygiene and confidence during an interview
36. Perform a mock interview
37. List the steps for searching and registering for apprenticeship opportunities

LIST OF TOOLS & EQUIPMENT FOR EMPLOYABILITY SKILLS - III		
S No.	Name of the Equipment	Quantity
1.	Computer (PC) with latest configurations – and Internet connection with standard operating system and standard word processor and worksheet software (Licensed) (all software should either be latest version or one/two version below)	As required
2.	UPS	As required
3.	Scanner cum Printer	As required
4.	Computer Tables	As required
5.	Computer Chairs	As required
6.	LCD Projector	As required
7.	White Board 1200mm x 900mm	As required
<i>Note: Above Tools &amp; Equipment not required, if Computer LAB is available in the institute.</i>		

## Employability Skills III – NOS (60 hours)

**Target audience:** As per 16<sup>th</sup> NSQC MoM, 60 hours ES to be included for level 3, 4, 5 and above

### Description

This unit is about employability skills, Constitutional values, becoming a professional in the 21st Century, digital, financial, and legal literacy, diversity and Inclusion, English and communication skills, customer service, entrepreneurship, and apprenticeship, getting ready for jobs and career development.

### Performance Criteria (PC)

#### Introduction to Employability Skills

To be competent, the individual must be able to:

1. Identify employability skills required for jobs in various industries
2. identify and explore learning and employability portals

#### Constitutional values – Citizenship

3. recognize the significance of constitutional values, including civic rights and duties, citizenship, responsibility towards society etc. and personal values and ethics such as honesty, integrity, caring and respecting others, etc.

4. follow environmentally sustainable practices

### **Becoming a Professional in the 21st Century**

5. recognize the significance of 21st Century Skills for employment
6. practice the 21st Century Skills such as Self-Awareness, Behavior Skills, time management, critical and adaptive thinking, problem-solving, creative thinking, social and cultural awareness, emotional awareness, learning to learn for continuous learning etc. in personal and professional life

### **Basic English Skills**

7. use basic English for everyday conversation in different contexts, in person and over the telephone
8. read and understand routine information, notes, instructions, mails, letters etc. written in English
9. write short messages, notes, letters, e-mails etc. in English

### **Career Development & Goal Setting**

10. understand the difference between job and career
11. prepare a career development plan with short- and long-term goals, based on aptitude

### **Communication Skills**

12. follow verbal and non-verbal communication etiquette and active listening techniques in various settings
13. work collaboratively with others in a team

### **Diversity & Inclusion**

14. communicate and behave appropriately with all genders and PwD
15. escalate any issues related to sexual harassment at workplace according to POSH Act

### **Financial and Legal Literacy**

16. select financial institutions, products and services as per requirement
17. carry out offline and online financial transactions, safely and securely
18. identify common components of salary and compute income, expenses, taxes, investments etc
19. identify relevant rights and laws and use legal aids to fight against legal exploitation

### **Essential Digital Skills**

20. operate digital devices and carry out basic internet operations securely and safely
21. use e- mail and social media platforms and virtual collaboration tools to work effectively
22. use basic features of word processor, spreadsheets, and presentations

### **Entrepreneurship**

23. identify different types of Entrepreneurship and Enterprises and assess opportunities for potential business through research
24. develop a business plan and a work model, considering the 4Ps of Marketing Product, Price, Place and Promotion
25. identify sources of funding, anticipate, and mitigate any financial/ legal hurdles for the potential business opportunity

### **Customer Service**

26. identify different types of customers
27. identify and respond to customer requests and needs in a professional manner.
28. follow appropriate hygiene and grooming standards

### **Getting ready for apprenticeship & Jobs**

29. create a professional Curriculum vitae (Résumé)
30. search for suitable jobs using reliable offline and online sources such as Employment exchange, recruitment agencies, newspapers etc. and job portals, respectively
31. apply to identified job openings using offline /online methods as per requirement

32. answer questions politely, with clarity and confidence, during recruitment and selection
33. identify apprenticeship opportunities and register for it as per guidelines and requirements

### **Knowledge and Understanding (KU)**

#### **The individual on the job needs to know and understand:**

1. need for employability skills and different learning and employability related portals
2. various constitutional and personal values
3. different environmentally sustainable practices and their importance
4. 21st century skills and their importance
5. how to use English language for effective verbal (face to face and telephonic) and written communication in formal and informal set up
6. importance of career development and setting long- and short-term goals
7. about effective communication
8. POSH Act
9. Gender sensitivity and inclusivity
10. different types of financial institutes, products, and services
11. how to compute income and expenditure
12. importance of maintaining safety and security in offline and online financial transactions
13. different legal rights and laws
14. different types of digital devices and the procedure to operate them safely and securely
15. how to create and operate an e- mail account and use applications such as word processors, spreadsheets etc.
16. how to identify business opportunities
17. types and needs of customers
18. how to apply for a job and prepare for an interview
19. apprenticeship scheme and the process of registering on apprenticeship portal

### **Generic Skills (GS)**

#### **User/individual on the job needs to know how to:**

1. read and write different types of documents/instructions/correspondence
2. communicate effectively using appropriate language in formal and informal settings
3. behave politely and appropriately with all
4. how to work in a virtual mode
5. perform calculations efficiently
6. solve problems effectively
7. pay attention to details
8. manage time efficiently
9. maintain hygiene and sanitization to avoid infection

\*\*\*\*\*



GOVERNMENT OF INDIA  
MINISTRY OF SKILL DEVELOPMENT & ENTREPRENEURSHIP  
DIRECTORATE GENERAL OF TRAINING

## COMPETENCY BASED CURRICULUM

### CERTIFICATE COURSE ON **Introduction to Artificial Intelligence (AI)**



NSQF LEVEL- 3.5

# Introduction to Artificial Intelligence (AI)

**Duration: 7.5 Hours**

**NSQF LEVEL- 3.5**

**(Version: 1.0)**

**Designed in 2024**

**Developed By**

**Ministry of Skill Development and Entrepreneurship**

Directorate General of Training

**&**

**CENTRAL STAFF TRAINING AND RESEARCH INSTITUTE**

EN-81, Sector-V, Salt Lake City,  
Kolkata – 700 091

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## 1. COURSE INFORMATION

### 1.1 GENERAL

The National Programme on Artificial Intelligence (NPAI) Skilling Framework report by NCVET provides a comprehensive plan for AI skill development in India, detailing the AI skill gap, current skill status, and sector-specific job role analysis. It emphasises ethical AI and suggests a skilling model across various sectors. The report categorises skilling into three categories:

- AI for All
- AI for Many
- AI for Few

Referring to the framework and knowledge progression, a curriculum framework for the 7.5 hours course tailored to the 'AI for All' category has been prepared. This course aims to augment the existing 120-hour employability skills curriculum with fundamental AI knowledge. It lists three key knowledge areas the report recommends, broken down into objectives, outcomes, and topics.

### 1.2 COURSE STRUCTURE

Table below depicts the distribution of training hours across various course elements:

S No.	Course Element	Notional Training Hours
1.	Professional Skill & Knowledge (Trade Practical & Theory)	7.5
	<b>Total</b>	<b>7.5</b>

### 1.3 ASSESSMENT & CERTIFICATION

The trainee will be tested for his skill, knowledge and attitude through summative assessment at the end of the course as notified by the DGT from time to time.

The All-India Trade Test will be conducted by Controller of examinations, DGT as per the guidelines. The pattern and marking structure are being notified by DGT from time to time. The learning outcome and assessment criteria will be basis for setting question papers for final assessment.

## 2. GENERAL INFORMATION

<b>Name of the Trade</b>	Introduction to Artificial Intelligence (AI)
<b>NOS Covered</b>	SSC/N9525
<b>NSQF Level</b>	3.5
<b>Duration of Craftsmen Training</b>	7.5 Hours
<b>Entry Qualification</b>	Perusing NTC/NAC
<b>Instructors Qualification</b>	<p>MBA/BBA/Any Graduate/Diploma in any discipline with Two years' experience with short term ToT Course in Employability Skills with micro credential of AI for All. (Must have studied English/ Communication Skills and Basic Computer at 12th / Diploma level and above)</p> <p>OR</p> <p>Existing Social Studies Instructors in ITIs with short term ToT Course in Employability Skills.</p>
<b>List of Tools and Equipment</b>	As per Annexure – I

### 3. LEARNING OUTCOME

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*Learning outcomes are a reflection of total competencies of a trainee and assessment will be carried out as per the assessment criteria.*

#### LEARNING OUTCOMES

1. Gain a basic understanding of AI, its history, principles, and types. (NOS: SSC/N9525)
2. Explore the use of AI and Generative AI tools in creating various digital content and in Education. (NOS: SSC/N9525)
3. Understand the ethical considerations and responsible use of AI. (NOS: SSC/N9525)

Duration	Reference Learning outcome	Professional Skill & Knowledge
0.5 Hour	Gain a basic understanding of AI, its history, principles, and types.	<b>Introduction to AI</b> <ul style="list-style-type: none"> <li>Understanding of AI: definition and scope.</li> <li>Historical context for AI's evolution.</li> <li>Benefits of using AI</li> </ul>
0.5 Hour		<b>Types of AI</b> <ul style="list-style-type: none"> <li>Narrow (or Weak) AI, which is designed for specific tasks.</li> <li>General (or Strong) AI, which has broader, human-like cognitive abilities.</li> <li>Real-world examples and comparisons will be used to illustrate these concepts.</li> </ul>
1.5 Hour		<b>Different forms of data, data sources and data sets</b> <ul style="list-style-type: none"> <li>Various forms of data (structured vs. unstructured),</li> <li>the multitude of sources from which data can be harvested (including public datasets and real-time data streams)</li> <li>The significance of datasets in training AI models. Understanding these elements is crucial for grasping how AI systems interpret, analyse, and learn from information.</li> <li>Concept of big data</li> </ul>
1.0 Hour		<b>Overview of Machine Learning and Deep Learning</b> <ul style="list-style-type: none"> <li>Introduction to ML</li> <li>Supervised Learning</li> <li>Unsupervised Learning</li> <li>Reinforcement Learning</li> <li>Concept of Deep learning.</li> </ul>
2.5 Hour	Explore the use of AI and Generative AI tools in creating various digital content and in Education.	<b>Generative AI; AI Tools for Images, Audio, Video and text</b> <ul style="list-style-type: none"> <li>Difference between AI and Generative AI</li> <li>Prompt Writing Techniques</li> <li>Use of AI tools for Images, Audio, Video, text and other office applications.</li> <li>Use of AI in Education.</li> </ul>
0.5 Hour	Understand the ethical considerations and responsible use of AI.	<b>Ethical Considerations in AI; AI Bias and Privacy</b> <ul style="list-style-type: none"> <li>Threats of AI.</li> <li>Social Impacts and ethical use of AI.</li> </ul>
0.5 Hour		<b>Ethical Dilemmas in AI; Case Studies</b> Focusing on real-world scenarios and case studies, this topic explores various ethical dilemmas posed by AI technology.
0.5 Hour	Review key concepts through an MCQ test and Q&A	

## 6. ASSESSMENT CRITERIA

LEARNING OUTCOME	ASSESSMENT CRITERIA
1. Gain a basic understanding of AI, its history, principles, and types. (NOS: SSC/N9525)	Identify key historical milestones in AI.
	Differentiate between Narrow AI and General AI.
	Identify types of data and data sources and explain the significance of data.
	Explain the basics of machine learning and deep learning.
2. Explore the use of AI and Generative AI tools in creating various digital content and in Education. (NOS: SSC/N9525)	Describe the functionality of specific AI tools for creating images, music, documents.
	Illustrate the use of AI in education.
3. Understand the ethical considerations and responsible use of AI. (NOS: SSC/N9525)	Identify common ethical challenges in AI such as bias and privacy.
	Propose solutions for ethical dilemmas in AI usage.

LIST OF TOOLS & EQUIPMENT			
Introduction to Artificial Intelligence (AI)			
S No.	Name of the Tools and Equipment	Specification	Quantity
1.	Desktop Computer	CPU: 32/64 Bit, 7 <sup>th</sup> Generation or higher, i3 or latest processor, Speed: 3 GHz or Higher. RAM: 8 GB or higher, 1TB HDD OR 240 GB SDD. with USB Mouse, USB Keyboard and Monitor (as available in the market). Or all in one PC (with same configuration as above) And Licensed preinstalled Operating System.	20 Nos.
2.	Anti-Virus	Latest	As required
3.	Scanner cum Printer	A4 Size Laser	1 no.
4.	AI/Generative AI tools	Any opensource/ Cloud based	As required
5.	Computer Tables		As required
6.	Computer Chairs		As required
7.	LCD Projector		1 no.
8.	White Board 1200mm x 900mm		1 no.

**NOTE: If Above Tools, Equipment's are available in the IT Lab running on the ITI the same may be utilized.**

The DGT sincerely acknowledges contributions of the Industries, State Directorates, Trade Experts, Domain Experts and all others who contributed in designing/ revising the curriculum. Special acknowledgement is extended by DGT to the following expert members who had contributed immensely in this curriculum.

<b>List of members attended the Trade Committee Meeting for designing of Artificial Intelligence (AI) For All syllabus under Micro Credential held on 08.05.2024 at CSTARI, Kolkata.</b>			
<b>Sl. No.</b>	<b>Name and Designation (Shri/Smt./Kumari)</b>	<b>Organization with Address</b>	<b>Remarks</b>
1.	Sunil Kumar Gupta, DDG (ER)	CSTARI, Kolkata	Chairman
2.	Gautam Ch. Saha, JD/HOD	CSTARI, Kolkata	Member
3.	Brindaban Das, DD/HOO	CSTARI, Kolkata	Member
4.	Anurag	STQC, Kolkata	Member
5.	Ashok Bandyopadhyay, Director	C-DAC, Kolkata	Member
6.	Niladri Roy	TCS, Kolkata	Member
7.	Reema Nandi	Accenture, Kolkata	Member
8.	Avishek Paul, Asst. Professor	Techno India	Member
9.	Amit Kumar Mandal, Asst. Professor	Bengal Institute of Technology (A unit of Techno India Group)	Member
10.	Pradip Mukhopadhyay, Sr. Advisor	Former M D WEBEL, Sr. Advisor, MAKAUT	Member
11.	Manohar Sadashiv Desai, Technical Head	Skill Bahn LLP, Thane, Maharashtra	Member
12.	Kotresh H B, Partnership Specialist	Quest Alliance	Member
13.	Soorya Menon, EdTech Specialist	Quest Alliance	Member
14.	Akshay Sanjay Mulik, Software Developer	Grok Learning Pvt. Ltd., Mumbai, Maharashtra	Member
15.	Snehasish Bandyopadhyay, AD	DGT, New Delhi	Member
16.	Akhilesh Pandey, AD	CSTARI, Kolkata	Member
17.	Sk. Altaf Hossain, AD	CSTARI, Kolkata	Member
18.	P. K. Bairagi, T.O.	CSTARI, Kolkata	Member
19.	KVS Narayana, T.O.	CSTARI, Kolkata	Member
20.	B K Nigam, T.O.	CSTARI, Kolkata	Member
21.	Nirmalya Biswas, PA to Director	CSTARI, Kolkata	Member
22.	Pradip Biswas, Jr.D/M	CSTARI, Kolkata	Member
23.	Jinendran PK	CSTARI, Kolkata	Member





**Directorate General of Training**

**MSDE(DGT)-19/02/2023-CD (E58176)**  
**Government of India**  
**Directorate General of Training (DGT)**  
**Ministry of Skill Development & Entrepreneurship (MSDE)**

**Kaushal Bhawan, Chanakyapuri**  
**New Delhi – 110023**

**Dated: 14<sup>th</sup> February 2025**

**To**

- (i) The Commissioners/Directors, dealing with Craftsmen Training Scheme (CTS) of all States/ UTs.
- (ii) Regional Directors, All RDSDEs.
- (iii) Principals, All NSTIs/NSTI(W) & IToTs.

**Sub:** Introduction of new courses/ revision of existing courses under the Craftsmen Training System (CTS) in ITIs/NSTIs/IToTs (Govt. & Pvt.) from the Session 2024-25 Onwards – **Reg.**

**Madam/Sir,**

With India's increasing emphasis on building a strong skill development ecosystem, the Directorate General of Training (DGT) has been taking proactive steps to develop a structured framework for skill development programs. These include introduction of new courses (both long-term and short-term), revision of existing curricula, alignment of courses with NCrF, mandatory 150 hrs OJT/project work etc. These measures aim to equip trainees with industry-relevant competencies, ensuring they are well-prepared for the evolving job market.

In line with these initiatives, DGT has developed following new courses (both long term and short-term courses), revised existing courses under Craftsmen Training Scheme (CTS) and Craft Instructor Training Scheme (CITS):

**1. New Courses Introduced:**

In alignment with emerging technological advancements and industry demands, the Directorate General of Training (DGT) has developed new-age/future skill courses under the Craftsmen Training System (CTS). These courses aim to provide skill training in the IT & ITeS and Environmental Science sectors.

Sl. No.	Sector	Name of Course	Entry Qualification	Duration	NSQF Level	Year of NSQF Approval
1.	IT & ITeS	Industrial Internet of Things (IIoT) Technician	10th Passed	2 Years	4.0	2024
2.	Environmental Science	Green Hydrogen Production Technician	10th Passed	1 Year	3.5	2024

The complete list of CTS trades along with their detailed curricula can be accessed at <https://dgt.gov.in/CTS> . Additionally, the list of New Age/Future Skills courses under CTS is provided in the annexure.

**2. Revised Courses:**

The DGT has updated the following existing courses under the CTS to align with evolving industry demands:

Sl. No.	New Name of the Trade	Old Name of the Trade	Duration	NSQF Level
1.	Virtual Analysis and Designer - FEM (Finite Element Method)	Basic Designer and Virtual Verifier	Two Years	4.0
2.	Engineering Design Technician	Artisan Using Advanced Tool	One Year	3.5
3.	CNC Machining Technician	Advanced CNC Machining Technician	Two Years	4.0
4.	Additive Manufacturing (3D Printing) Technician		One Year	3.5
5.	Industrial Robotics & Digital Manufacturing Technician		One Year	3.5
6.	Manufacturing Process Control and Automation Technician		One Year	3.5
7.	Mechanic Electric Vehicle		Two Years	4.0
8.	Industrial Automotive Manufacturing Technician		Two Years	4.0
9.	Aeronautical Structure and Equipment Fitter		Two Years	4.0

**3. Additional 240-Hour Short-Term Courses:**

To enhance opportunities for CTS and Craft Instructor Training Scheme (CITS) students, 240 hours have been provisioned to enable trainees to either opt for add-on short-term courses or pursue a 10th/12th class certificate alongside their ITI certification. To enable the implementation of these add-on short-term courses, the DGT had empowered State Skill Development & Entrepreneurship Committees (vide letter MSDE(DGT)-19/03(02)/2022-CD dated 15th August 2022 and 16th June 2023) to offer Short-Term Training (STT) courses in ITIs from the academic session 2022-23 onwards

These newly developed short-term courses, approved by NCVET, are now available for implementation from the academic session 2024-25 onwards:

Sl. No.	Sector	Name of Short-Term Course	Entry Qualification	Duration	NSQF Level	Year of NSQF Approval
1.	Electronics	Fundamentals of IoT Applications and Maintenance	10th Passed	240 Hrs	3.5	2024
2.	Electronics	Fundamentals of Semiconductor Technology	10th Passed	240 Hrs	3.5	2024
3.	IT & ITeS	Basics of Cybersecurity	10th Passed	240 Hrs	3.5	2024
4.	IT & ITeS	Basics of Generative Artificial Intelligence (AI)	10th Passed	240 Hrs	3.5	2024
5.	IT & ITeS	Basics of IT Skills	10th Passed	240 Hrs	3.5	2024
6.	Capital Goods	Fundamentals of Computer-Aided Manufacturing (CAM)	10th Passed	240 Hrs	3.5	2024



7.	Capital Goods	Fundamentals of CNC Programming and Operation	10th Passed	240 Hrs	3.5	2024
8.	Capital Goods	Fundamentals of HVAC	10th Passed	240 Hrs	3.5	2024
9.	Capital Goods	Introduction to Industry 4.0	10th Passed	240 Hrs	3.5	2024
10.	Capital Goods	Basics of Repair and Maintenance of Metal Cutting Machines	10th Passed	240 Hrs	3.5	2024

#### 4. Micro-Credential Course on Artificial Intelligence (AI)


To equip ITI trainees with skills for future and familiarize with Artificial Intelligence, a micro-credential course titled "Introduction to Artificial Intelligence (AI)" has been integrated into the Employability Skills curriculum which includes basic understanding of AI, use of Generative AI tools and ethical considerations for responsible use of AI. The course duration is 7.5 hours, and updated Employability Skills books are available on the Bharat Skills Portal: <https://bharatskills.gov.in/>.

Sl. No.	Sector	Name of Micro-Credential Course	Entry Qualification	Duration	NSQF Level	Year of NSQF Approval
1.	IT & ITeS	Introduction to Artificial Intelligence (AI)	10th Passed	7.5 hrs	3.5	2024

Therefore, State Directorates/UTs/NSTIs are requested to introduce these NSQF-compliant courses in the ITIs/ NSTIs/ IToTs of your respective States/UTs and promote awareness among trainees.

RDSDEs are requested to collaborate with State Directorates/ UTs to facilitate this implementation effectively.

This issues with the approval of competent authority.

  
 (G. C. Ramamurthy)  
 Director  
 CD Section, DGT

#### Copy to (for information):

1. Sr. PPS to Secretary, MSDE
2. PSO to DG(T), DGT, MSDE
3. DDG (South Zone)
4. DDG (East Zone)
5. DDG, HQ, New Delhi
6. Director TC, DGT (HQ), New Delhi to include the above trades for affiliation of ITIs

7. Director IT & TT Cell DGT (HQ), New Delhi – For information, uploading in the portal and supportive assessment tools.
8. Director CFI, DGT (HQ), New Delhi – For implementation in NSTIs.
9. Director NIMI, Chennai – For information & for content development and question bank please.
10. Director CSTARI, Kolkata – For information and records.
11. Joint Director, Apprenticeship Section, MSDE – for information and records.

**Annexure I**

**List of New Age / Future Skills Courses Under CTS**

Sr.No.	Name of Trade	Duration	NSQF Level
1.	5G Network Technician	One year	4.5
2.	Additive Manufacturing (3D Printing) Technician	Two Year	3.5
3.	Aeronautical Structure and Equipment Fitter	Two Year	4
4.	Artificial Intelligence Programming assistant	One year	3.5
5.	CNC machining Technician	Two Year	4
6.	Computer Aided Manufacturing (CAM) Programmer	One year	3.5
7.	Cyber Security Assistant	One year	3.5
8.	Data Annotation Assistant	One year	3.5
9.	Drone Pilot (Junior)	Six Month	3
10.	Drone Technician	Six Months	3
11.	Engineering Design Technician	One year	3.5
12.	Fiber to Home Technician	Six months	3
13.	Geo Informatics Assistant	One year	3.5
14.	Green Hydrogen Production Technician	One Year	3.5
15.	Industrial Internet of Things (IIoT) Technician	Two Years	4.0
16.	Industrial Robotics and Digital Manufacturing	One year	3.5
17.	Information Technology	Two Year	4
18.	Internet of Things Technician (Smart Agriculture)	One year	3.5
19.	Internet of Things Technician (Smart City)	One year	3.5
20.	Internet of Things Technician (Smart Healthcare)	One year	3.5
21.	Manufacturing Process Control & Automation	One year	3.5
22.	Mechanic Electric Vehicle	Two Year	4

Sr.No.	Name of Trade	Duration	NSQF Level
23.	Multimedia, Animation & Special Effects	One year	3.5
24.	Semiconductor Technician	One Year	4.5
25.	Small Hydro Power Plant Technician	Two Year	4
26.	Smartphone Technician Cum App Tester	6 Months	3.5
27.	Software Testing Assistant	One year	4.5
28.	Solar Technician (Electrical)	One year	3.5
29.	Technician Mechatronics	Two Year	4
30.	Virtual Analysis and Designer - FEM (Finite Element Method)	Two Year	4
31.	Wind Plant Technician	Two Year	4

\*\*\*