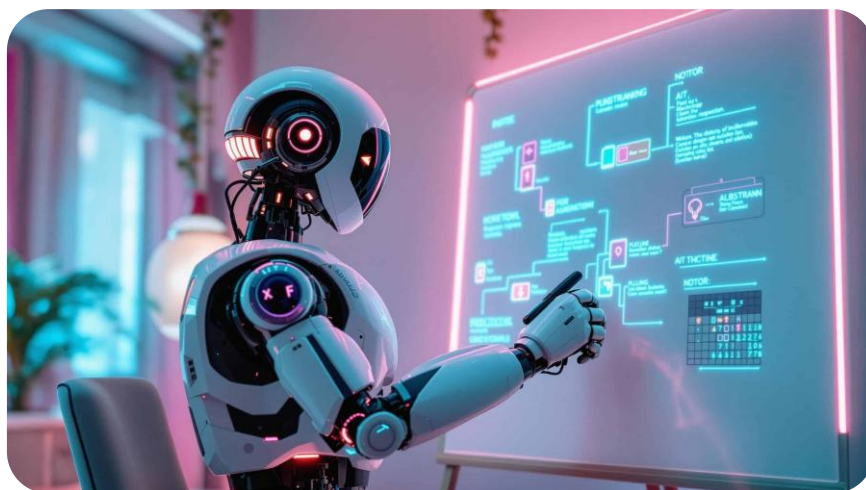




GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT & ENTREPRENEURSHIP
DIRECTORATE GENERAL OF TRAINING

COMPETENCY BASED CURRICULUM
CERTIFICATE COURSE ON

ARTIFICIAL INTELLIGENCE & DIGITAL PRODUCTIVITY SKILLS



NSQF LEVEL- 3.5

SECTOR – IT & ITES

ARTIFICIAL INTELLIGENCE & DIGITAL PRODUCTIVITY SKILLS

Duration: 240 Hours

NSQF LEVEL- 3.5
(Version: 1.0)

Designed in 2025

Developed By

Ministry of Skill Development and Entrepreneurship
Directorate General of Training
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1. COURSE INFORMATION

1.1 GENERAL

This course has been developed for CTS/CITS trainees to take up optional courses while study for technical and behavioural upgradation of trainees to meet industry related job roles. During the 240-hour duration of the Artificial Intelligence & Digital Productivity Skills course, a candidate is trained in professional skills and knowledge related to job roles. The Broad components covered during the course are given below:

During the course, trainees will master AI-powered digital productivity and security skills, including secure network setup, phishing detection, cyber hygiene, multi-factor authentication, office tools with AI companion, prompt engineering, Generative AI for text and images, advanced Excel analysis, building dashboards with AI visuals, chatbot creation using chatbot building platforms, and office AI workflow integration equipping them with the essential digital intelligence and workplace readiness demanded in today's professional world.

1.2 COURSE STRUCTURE

Table below depicts the distribution of training hours across various course elements during a period of 6 weeks: -

S No.	Course Element	Notional Training Hours
1.	Professional Skill (Trade Practical)	160
2.	Professional Knowledge (Trade Theory)	80
	Total	240

1.3 ASSESSMENT & CERTIFICATION

The trainee will be tested for his skill, knowledge, and attitude during the period of course through assessment at the end of the course through skill testing at Training Center & CBT through examination conducted by DGT.

The minimum pass percentage for skill test is 60% and for theory will be 33% as in main CTS examination.

2. JOB ROLE

Brief description of Job roles:

This course prepares trainees to become AI-ready digital workplace professionals by mastering secure device & network setup, cyber hygiene, phishing defence, Generative AI, prompt engineering, office tools with AI integration, data analytics tools, AI visuals, and custom chatbot development with chatbot building tools. After completion, trainees will be fully equipped to drive productivity, automation, data-driven decisions, and secure collaboration in any modern organization.

Suitable Job Roles after Completion of the Course:

1. **AI-Powered Productivity Specialist / Modern Workplace Specialist:** Leverages AI companions and Generative AI tools daily to automate documents, reports, presentations, spreadsheets, meeting summaries, and email workflows, helping teams save time and work smarter and more efficiently.
2. **Digital Transformation Associate / Automation Coordinator:** Identifies repetitive tasks across departments and automates them using Smart Agents, Data analysis tools, and AI tools. Builds end-to-end business processes (reports -> dashboards -> presentations -> automated emails) powered by AI, improving speed and accuracy.
3. **Data Analyst – AI Enhanced (Junior/Associate Level):** Uses data analysis tools with AI integration to clean data, perform what-if analysis, generate insights, and create interactive performance dashboards for management and educational institutions.
4. **AI Chatbot & Virtual Assistant Developer (Entry Level):** Designs, builds, tests, and deploys no-code/low-code chatbots using suitable AI based chatbot building platforms and integrates them with communication tools and websites to provide 24x7 student/staff helpdesk, FAQ support and internal process guidance.

Reference NCO-2015:

- i) 2522.0201 - Security Analyst
- ii) 3513.0200 - Computer Security Specialist

3. GENERAL INFORMATION

Name of the Trade	ARTIFICIAL INTELLIGENCE & DIGITAL PRODUCTIVITY SKILLS
Reference NCO – 2015	2522.0201, 3513.0200
NSQF Level	3.5
Duration of Craftsmen Training	240 Hours
Entry Qualification	10 th Class passed and pursuing/ passed out COPA, DBSA, CHNM, ICTSM, Software Testing Assistant, IT, DTPO, MASE under CTS OR CSA, CHNM, DTPO, IT, MASE under CITS Candidates
Unit Strength (No. of Student), Space & Power Norms	Same as COPA / IT / CHNM / ICTSM / DBSA / DTPO / MASE under CTS OR CSA / CHNM / IT / DTPO under CITS.
Instructors Qualification	B.Voc/Degree in Computer Science/ Information Technology from AITCE/UGC Recognized University with one year experience in the relevant field. OR Post Graduate in Computer Science /Computer Application / IT from UGC Recognized University or NIELIT B Level with one-year experience in the relevant field. OR Bachelor's in computer science / computer application / IT OR PGDCA from UGC recognized University or NIELIT A Level with two-year experience in the relevant field. OR 03 years Diploma in Computer Science / IT from recognized Board/ Institute or relevant Advanced Diploma (Vocational) (ADIT) from DGT with two-year experience in the relevant field. OR NTC/NAC in AIPA/COPA/IT/ITES trade with three years' experience in the relevant field.
List of Tools and Equipment	As per Annexure – I

4. LEARNING OUTCOME

Learning outcomes reflect the total competencies of a trainee, and assessment will be carried out as per the assessment criteria.

4.1 LEARNING OUTCOMES

1. Demonstrate essential digital literacy skills and use intelligent computing tools to enhance personal and professional productivity.
2. Apply cybersecurity best practices to protect personal and organizational data from digital threats.
3. Explain core AI concepts and use generative AI tools and Agentic AI frameworks effectively for content creation, analysis, and workplace efficiency.
4. Use AI Tools to streamline communication, collaboration, boost creativity and workflow automation.
5. Analyse, clean and visualize data using advanced spreadsheet features to support data-driven decision-making.
6. Build and publish interactive dashboards with data analytics tools using AI-enhanced insights and visualizations.
7. Design, build and deploy conversational AI chatbots for real-world business scenarios.
8. Synthesize knowledge from all modules to design, develop and present an ethical, responsible and transparent end-to-end AI-powered productivity solution for real-world scenarios.

5. SYLLABUS

SYLLABUS – ARTIFICIAL INTELLIGENCE & DIGITAL PRODUCTIVITY SKILLS			
Duration: 240 Hours			
Duration Weeks	Reference Learning outcome	Professional Skills (Trade Practical)	Professional Knowledge (Trade Theory)
Professional skills 10 Hrs. Professional Knowledge 05 Hrs.	1. Demonstrate essential digital literacy skills and use intelligent computing tools to enhance personal and professional productivity.	1. Setting up network connections and troubleshooting. 2. Exploring browser with AI companion for web summaries. 3. Drafting and sending AI-assisted emails. 4. Creating a personal digital checklist for device setup. 5. Hands-on with suitable web browser with AI companion and Windows utilities.	• Digital literacy vs. digital intelligence - AI's role in bridging the digital divide. • Computer components & smart device management using AI diagnostics. • Exploring AI features in web browser with AI companion for productivity and search optimization. • Understanding basic digital ethics and online professionalism.
Professional skills 10 Hrs. Professional Knowledge 05 Hrs.	2. Apply cybersecurity best practices to protect personal and organizational data from digital threats.	2. Simulate phishing detection scenarios. 3. Practice identifying fake websites and emails. 4. Configure multi-factor authentication and privacy settings. 5. Create a Digital Safety & Privacy Plan. 6. Conduct a small "Cyber Hygiene" audit.	• Understanding cybersecurity fundamentals and AI-assisted threat detection. • Safe browsing, password hygiene, and data privacy. • Recognizing social engineering, phishing, and identity theft. • Cyber laws and responsible online behaviour. • Role of AI in cyber threat monitoring and digital protection.

Professional skills 10 Hrs. Professional Knowledge 10 Hrs.	3. Explain core AI concepts and use generative AI tools and Agentic AI frameworks effectively for content creation, analysis, and workplace efficiency.	7. Generate digital art and images using Generative AI. 8. Translate and summarize text with AI tool. 9. Create a chatbot conversation in using AI companion platform. 10. Practice prompt engineering for Generative AI in different AI tools.	• Understanding AI, ML, and Generative AI with real-world use cases. • AI in daily life and workplace automation. • Basics of NLP, LLMs, Computer Vision & Chatbots. • Introduction to Prompt Engineering for AI tools. • Concept of image generation and creativity using AI. • Hands-on with AI tools suitable for text generation, image generation, design creation etc.
Professional skills are 50 Hrs. Professional Knowledge 20 Hrs.	4. Use AI Tools to streamline communication, collaboration, boost creativity and workflow automation.	11. Create AI-assisted documents using AI integrated document tools for summarizing, rewriting, and formatting. 12. Design presentations with AI integrated presentation tool and AI layouts. 13. Build spreadsheets using AI integrated spreadsheet tool for insights and automation. 14. Automate meeting scheduling in AI integrated communication tools. 15. Record and summarize meetings using AI integrated meeting tools. 16. Co-author shared documents and manage AI-based tasks. 17. Build a workflow automation script for weekly reporting.	• Office tools fundamentals with AI integration. • Using Office integrated AI tools for text generation, slide design, and data analysis. • Collaboration tools and real-time editing in office tools automation using AI tools. • Prompt engineering for productivity automation. • Cross-app integration between office tools like document tool, presentation tool, spreadsheet tool and communication tool. • Predictive analysis and insights using spreadsheet tool with AI companion. • Mini Project: AI-Enhanced Business Workflow.

		18. Mini Project – Integrated Office Workflow with AI companion.	
Professional skills 20 Hrs. Professional Knowledge 10 Hrs.	5. Analyse, clean and visualize data using advanced spreadsheet features to support data-driven decision-making.	19. Perform what-if analysis and Solver tasks. 20. Build AI-driven dashboards. 21. Automate data validation. 22. Create finance reports using AI tool. 23. Integrate AI companion tool for data interpretation.	- Advanced formulas and data validation. Scenario Manager, Goal Seek, Solver Add-in. - Creating dashboards and charts with AI-driven visuals. - Accounting & financial functions using spreadsheet tool. - Using AI and Automation Add-ins in office tools. - AI Smart Data Analysis and insights automation.
Professional skills 30 Hrs. Professional Knowledge 15 Hrs.	6. Build and publish interactive dashboards with data analytics tools using AI-enhanced insights and visualizations.	24. Import and clean datasets using Query tool. 25. Create interactive visuals and slicers. 26. Use AI visuals like Q&A and Key Influencers. 27. Design and publish dashboards. 28. Mini Project - Student Performance Dashboard.	- Introduction to UI and no code-based data analytic tool and its installation. - Importing data (Excel, CSV). Using Query tool for data cleaning. - Visualization design (charts, maps, slicers). - AI visuals: Q&A, Key Influencers, decomposition Tree.
Professional skills 10 Hrs. Professional Knowledge 05 Hrs.	7. Design, build and deploy conversational AI chatbots for real-world business scenarios.	29. Create a chatbot using a chatbot building platform. 30. Integrate bot with meeting tools. 31. Configure authentication and permissions. 32. Publish and test deployment. 33. Mini Project – Student Helpdesk Bot.	- Building chatbots using chatbot building platform. - Designing flows & connecting meeting tools/Web channels. - Setting up authentication, publishing & monitoring bots.

Professional skills 20 Hrs. Professional Knowledge 10 Hrs.	8. Synthesize knowledge from all modules to design, develop and present an ethical, responsible and transparent end-to-end AI-powered productivity solution for real-world scenarios.	34. End-to-end project integrating all office tools with AI companion. 35. Create a dashboard, report, and presentation. 36. Automate insights and outputs via AI companion tool. 37. Present project findings to peers.	- Integrate office tool, data analytics tool, etc via AI companion tool. - Develop a business, education, or social impact use case that ensures compliance with responsible AI practices. - Example: <i>AI Data Analytics Dashboard + Copilot Automation + Presentation Storyboard.</i>
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6. ASSESSMENT CRITERIA

LEARNING OUTCOME	ASSESSMENT CRITERIA
1. Demonstrate essential digital literacy skills and use intelligent computing tools to enhance personal and professional productivity.	- Correctly sets up and troubleshoots network connections and device settings. - Effectively uses AI browser companions for web research and summaries. - Drafts professional emails and documents with AI assistance. - Demonstrates use of Windows utilities and AI tools to improve daily productivity.
2. Apply cybersecurity best practices to protect personal and organizational data from digital threats.	- Accurately identifying phishing emails and fake websites in simulated scenarios (minimum 90% accuracy). - Configures multi-factor authentication and privacy settings on devices/accounts. - Conducts and documents for a basic cyber hygiene audit.
3. Explain core AI concepts and use generative AI tools and Agentic AI frameworks effectively for content creation, analysis, and workplace efficiency.	- Clearly explains AI, ML, Generative AI, NLP, LLMs, and prompt engineering with examples. - Generates high-quality text, images, and creative content using at least two Generative AI tools. - Applies effective prompt engineering techniques to achieve desired outputs.
4. Use AI Tools to streamline communication, collaboration, boost creativity and workflow automation.	- Use AI integrated office tools to create, summarize, rewrite, format, and automate tasks. - Designs professional presentations with AI-suggested layouts and content. - Successfully builds at least one workflow automation (e.g., weekly report generation).
5. Analyse, clean and visualize data using advanced spreadsheet features to support data-driven decision-making.	- Performs data cleaning and transformation using a query tool. - Applies advanced formulas, what-if analysis (Goal Seek, Solver, Scenario Manager), and AI driven insights. - Creates dynamic charts, automated financial reports, and validates data accurately. - Interprets results and provides actionable business recommendations.
6. Build and publish interactive dashboards with data analytics tools using AI-enhanced insights and visualizations.	- Imports and transforms data from multiple sources using a query tool. - Creates visually appealing dashboards with slicers, charts, and maps. - Effectively uses at least three AI visuals (Q&A, Key Influencers, Decomposition Tree).

7. Design, build and deploy conversational AI chatbots for real-world business scenarios.	• Builds a functional chatbot using a chatbot building platform with logical flows and topics. • Integrates authentication, variables, and external data calls where required. • Successfully publishes and integrates the bot with meeting tools or web channels.
8. Synthesize knowledge from all modules to design, develop and present an ethical, responsible and transparent end-to-end AI-powered productivity solution for real-world scenarios.	• Identifies a genuine productivity challenge and proposes a complete AI-driven solution. • Delivers a working prototype with automated workflow, dashboard/report, and presentation. • Clearly demonstrates ethical AI practices (bias check, data privacy, transparency, citations). • Presents the project professionally with a clear explanation of tools used, results achieved, and future scope.

ANNEXURE-I

LIST OF TOOLS & EQUIPMENT			
Sr No.	Name of the Tools and Equipment	Specification	Quantity
Same as COPA / IT / CHNM / ICTSM / DBSA / DTPO / MASE under CTS OR CSA / CHNM / IT / DTPO under CITS.			
Additional Tools & Equipment Required			
1.	Operating System	Windows 10 or later / macOS 12+	As Required
2.	AI integrated Office tools	Applications: Word processing, Spread Sheet, Presentation, email, collaborative tool (With AI Tool access)	As Required
3.	Data & Visualization Tools	Spread Sheet, Visualization tool like Power BI Desktop (free version), etc.	As Required
4.	AI Tools	AI Tool (Word processing, Spread Sheet, Presentation), Creative AI Tools for generating Image, Animation, video, etc.	As Required
5.	Automation & Cloud Tools	Tools like Power Automate, Copilot Studio, Azure etc. Free Account	As Required
6.	Browser	Latest version of Microsoft Edge, Chrome, or Firefox (for Azure and Copilot access) etc.	As Required

ANNEXURE-II

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.

List of members attended the Trade Committee Meeting for designing of 'Artificial Intelligence & Digital Productivity Skills' syllabus under Short Term Courses held on 02.12.2025 at New Delhi			
Sl. No.	Name and Designation (Shri/Smt./Kumari)	Organization with Address	Remarks
1.	T. RAGULAN, Director	CSTARI, Kolkata	Chairman
2.	KANIKA S, (Head of HR) Lead HR-Hub India	Advanced Medical Solution	Member
3.	HARSH VARDHAN, Practice Head (AI)	Cloud Analogy	Member
4.	KAUSHELENDRA SISODIA, Director	Uniconverge Technologies	Member
5.	AMIT GUPTA, CTO	Gennext IT	Member
6.	AKHILESH PANDEY, Asst. Director	CSTARI, Kolkata	Member
7.	K V S NARAYANA, Training Officer	CSTARI, Kolkata	Member
8.	B K NIGAM, Training Officer	CSTARI, Kolkata	Member
9.	RITIKA SETHI, Sr. Manager	Edunet Foundation	Member
10.	PRAFULLA KUMAR BAIRAGI, Training Officer	CSTARI, Kolkata	Member
11.	ASHISH ARORA, Sr. Director	Edunet Foundation	Member
12.	NITIN TYAGI, Sr. Placement Manager	Edunet Foundation	Member
13.	NAMAN BHATIA, TRG & Placement Co-Ordinator	DTTE, HQ	Member
14.	SYED NAMRA, Director	Edunet Foundation	Member
15.	VAIBHAV OSTWAL, Vice President	Edunet Foundation	Member
16.	PUNEET SETHI, SR. MANAGER	Quen Corp Ltd.	Member
17.	DANISH AGARWAL, Dy. Director	IT Cell, DGT	Member
18.	DEEPIKA GOEL, Consultant	IT Cell	Member

19.	Dr. JOYDEEP ROY CHOUDHARY, Director	Technomedia Software Solutions Pvt. Ltd.	Member
20.	SK. ALTAF HOSSAIN, Training Officer	CSTARI, Kolkata	Member
21.	DR. PRATIK J MHATRE, R & D	Grok Learning Pvt. Ltd.	Member
22.	KARAN BHOYAR	Alot and Robotics Engineer	Member
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24.	BHARTI SAWHNEY, Asst. Director	DGT, HQ	Member
25.	REEMA NANDI, Associate Manager	Accenture Solutions Pvt. Ltd. Kolkata	Member
26.	UDAY BHOLE, CEO	ScienTech Technologies Pvt. Ltd.	Member
27.	AMIT KUMAR MANDAL, Assistant Professor	Techno Bengal Institute of Technology, Kolkata	Member