

GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT AND ENTREPRENEURSHIP
RAJYA SABHA
UNSTARRED QUESTION NO. 2844
ANSWERED ON 12.08.2026

INTEGRATION OF ARTIFICIAL INTELLIGENCE INTO THE SKILL DEVELOPMENT ECOSYSTEM

2844. SHRI SUJEET KUMAR:

Will the Minister of SKILL DEVELOPMENT AND ENTREPRENEURSHIP be pleased to state:

- (a) the steps taken to integrate Artificial Intelligence (AI) into the national skilling ecosystem through the Skill India Digital Hub, National Centres of Excellence for Skilling and the ITI Upgradation Scheme;
- (b) whether Ministry proposes a national framework for AI-based skill mapping and workforce profiling, including for informal sector;
- (c) the number of AI, machine learning and data science qualifications notified under National Skill Qualification Framework (NSQF) and the candidates trained, certified and placed during the last three years, State-wise/UT-wise, including Odisha; and
- (d) the measures taken and the roadmap envisaged to expand AI-enabled skilling in aspirational districts, tribal areas and rural regions?

ANSWER

THE MINISTER OF STATE (INDEPENDENT CHARGE) IN THE MINISTRY OF SKILL DEVELOPMENT AND ENTREPRENEURSHIP

(SHRI JAYANT CHAUDHARY)

(a) The Government has systematically integrated Artificial Intelligence (AI) into the national skilling ecosystem through the following measures:

Skill India Digital Hub (SIDH)

Skill India Digital Hub (SIDH) has been launched as a unified Digital Public Infrastructure (DPI) and serves as the core platform for technology-driven skilling. Under SIDH, the Ministry launched the Skilling for AI Readiness (SOAR) programme on 22.07.2025 to promote AI literacy and prepare learners for an AI-enabled future. The programme initially comprised four fully online, self-paced, NSQF-aligned and credit-linked foundational learner courses – AI to be Aware, AI to Acquire, AI to Aspire, and AI for Educators. The programme was subsequently expanded to include 50 AI and AI application-oriented qualifications covering AI for jobs, workplace productivity, sector-specific applications, inclusivity, and contextualised AI applications for the unorganised sector. As on 06.08.2026, a total of 5,17,477 learners have enrolled and 1,00,664 learners have been certified under the SOAR courses available on SIDH.

Under Pradhan Mantri Kaushal Vikas Yojana (PMKVY) 4.0, emphasis has been placed on industry-aligned and future-ready skills, including Artificial Intelligence (AI), Machine Learning, Data Science, Internet of

Things (IoT), Cyber Security, Cloud Computing, Semiconductors, Drones, Electric Vehicles (EVs), Green Hydrogen, Robotics, AR/VR and 5G Technologies. The scheme framework incorporates demand-driven skilling, enhanced industry participation, mandatory On-the-Job Training (OJT) in applicable job roles, promotion of apprenticeship opportunities, and strengthened digital monitoring mechanisms through the Skill India ecosystem. As per SIDH reports up to 30.06.2026, under PMKVY 4.0, 5,44,383 candidates have been trained/oriented and 3,73,766 candidates certified in future-skills job roles.

The National Apprenticeship Promotion Scheme (NAPS) promotes apprenticeship training through industry-led, on-the-job learning, including in emerging and future-ready sectors such as Artificial Intelligence (AI), Machine Learning, Robotics, Cyber Security, Data Analytics and Green Jobs. Apprenticeship opportunities are also available in AI, Machine Learning, Semiconductors, Electric Vehicles, Drones, Renewable Energy and other technology-driven areas through participation of industry and Sector Skill Councils. Under NAPS, 3,175 apprentices have been engaged and 855 apprentices certified in AI and Machine Learning-related job roles during the last three years.

ITI Upgradation Scheme

Directorate General of Training (DGT) implements the Craftsmen Training Scheme (CTS) through a network of Industrial Training Institutes (ITIs), under which craftsmen training is provided in 170 NSQF-aligned trades. At present, there are 13,856 ITIs in the country, comprising 3,328 Government ITIs and 10,528 Private ITIs.

DGT has introduced Artificial Intelligence (AI) into vocational training by developing the Artificial Intelligence Programming Assistant (AIPA) course of one-year duration, a 240-hour Generative AI course, and a 7.5-hour AI micro-credential for trainees in ITIs. The compulsory Employability Skills curriculum has also been revised to include modules on Artificial Intelligence (AI) and Green Skills. The AIPA course under the Craftsmen Training Scheme (CTS) is being conducted at 23 National Skill Training Institutes (NSTIs) across the country.

The Cabinet has approved the Pradhan Mantri Skilling and Employability Transformation through Upgraded ITIs (PM-SETU) scheme at an estimated cost of ₹60,000 crore (Central Share: ₹30,000 crore, State Share: ₹20,000 crore and Industry Share: ₹10,000 crore) for upgradation of 1,000 ITIs through hub-and-spoke arrangements in collaboration with State Governments and industry. Under this scheme, an industry-led Special Purpose Vehicle (SPV) is provided the necessary autonomy to propose modifications in the curriculum by introducing new courses and upgrading existing courses as per industry requirements, including in emerging areas such as Artificial Intelligence (AI), cybersecurity, cloud computing, data analytics, robotics, the Internet of Things (IoT), and other Industry 4.0 technologies.

Further, the Ministry has issued 'Guidelines for Empanelment of Centre of Excellence – Skills (CoE-Skills) and Vocational Training Centres (VTC)', which provide for advanced, technology-enabled training delivery — including Artificial Intelligence (AI)-enabled infrastructure, digital learning tools and emerging technology labs across identified sectors — to support future-ready and industry-aligned skill training.

(b) The National Programme on Artificial Intelligence (NPAI) Skilling Framework, notified by the Ministry of Skill Development and Entrepreneurship (MSDE) on 25.09.2023, provides a national framework for AI

skilling through a three-tiered approach comprising AI for All, AI for Many and AI for the Few. The framework envisages structured AI learning pathways, aligned with industry requirements, to support AI-enabled skilling, workforce development and lifelong learning, including for diverse learner groups and sectors of the economy.

(c) At present, there are 119 NSQF-aligned and NSQC-approved qualifications related to Artificial Intelligence (AI), Machine Learning (ML) and Data Science. These include the four foundational AI learning courses and 50 AI and AI application-oriented NSQF-aligned courses launched under the Skilling for AI Readiness (SOAR) programme. The courses are delivered through the Skill India Digital Hub (SIDH) by NCVET-recognised Awarding Bodies. As per the SOAR Dashboard on SIDH, as on 06.08.2026, 5,17,477 learners have enrolled and 1,00,664 learners have successfully completed and been certified under the SOAR programme.

From Data available on Skill India Digital Hub, the State-wise/UT-wise details of candidates trained/oriented and certified in AI, Machine Learning and Data Science-related job roles under PMKVY 4.0, enrolment in New Age Courses under the Craftsmen Training Scheme (CTS) during the last three years, and apprentices engaged and certified in AI and Machine Learning-related job roles under the National Apprenticeship Promotion Scheme (NAPS), including Odisha, are at **Annexure-I**.

(d) The Government has undertaken several measures to ensure effective access to digital skilling platforms, including the Skill India Digital Hub (SIDH), for citizens across rural, remote and aspirational districts. SIDH serves as a one-stop digital platform for accessing skilling, certification, apprenticeship and employment-related opportunities through a single interface.

As per Skill India Digital Hub (SIDH) reports up to 30.06.2026, under PMKVY 4.0, 3,730 candidates have been trained/oriented and 2,651 candidates certified in AI-related job roles in Aspirational Districts, and 3,435 candidates have been trained/oriented and 2,331 candidates certified in AI-related job roles in Tribal Districts.

ANNEXURE REFERRED TO IN REPLY TO PART (C) OF RAJYA SABHA UNSTARRED QUESTION NO. 2844 ANSWERED ON 12.08.2026 REGARDING 'INTEGRATION OF ARTIFICIAL INTELLIGENCE INTO THE SKILL DEVELOPMENT ECOSYSTEM'

State-wise/UT-wise details of candidates trained/oriented and certified in AI, Machine Learning and Data Science-related job roles under PMKVY 4.0; enrolment in ITIs/NSTIs under CTS in New Age Courses (last three years); and apprentices engaged and certified in AI & Machine Learning-related job roles under NAPS (Based on Data available on Skill India Digital Hub)

State/UT	PMKVY 4.0 Trained/ Oriented	PMKVY 4.0 Certified	CTS New Age Courses Enrolment (3 years)	NAPS Apprentices Engaged (AI & ML) (3 years)	NAPS Apprentices Certified (AI & ML) (3 years)
Andaman And Nicobar Islands	-	-	105	-	-
Andhra Pradesh	2,363	1,205	5	11	0
Arunachal Pradesh	49	-	21	-	-
Assam	583	246	281	-	-
Bihar	2,352	1,676	1134	1	0
Chandigarh	50	48	116	4	0
Chhattisgarh	-	-	292	-	-
Delhi	144	23	467	6	0
Goa	-	-	125	1	0
Gujarat	602	314	700	213	4
Haryana	1,064	676	293	196	148
Himachal Pradesh	241	143	423	-	0
Jammu And Kashmir	2,012	1,304	420	-	0
Jharkhand	48	35	1346	1	0
Karnataka	12,757	10,240	15834	1,414	129
Kerala	609	208	836	14	0
Ladakh	-	-	54	-	-
Madhya Pradesh	1,271	959	768	6	1
Maharashtra	1,422	538	4548	344	22
Manipur	40	-	20	-	-
Meghalaya	35	-	41	-	-
Mizoram	60	-	0	-	-
Odisha	763	138	4584	1	0
Puducherry	151	55	27	-	-
Punjab	758	441	187	21	0
Rajasthan	1,209	704	908	2	0
Sikkim	50	47	0	1	0
Tamil Nadu	3,316	2,157	20599	72	21
Telangana	3,461	2,110	15329	827	527

The Dadra And Nagar Haveli And Daman And Diu	40	-	21	1	0
Tripura	316	186	24	-	1
Uttar Pradesh	2,912	1,631	14585	24	1
Uttarakhand	809	539	220	7	1
West Bengal	334	32	2082	8	1
Total	39,821	25,655	86395	3,175	855
