

GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT AND ENTREPRENEURSHIP
RAJYA SABHA
STARRED QUESTION NO. *204
ANSWERED ON 11.03.2026

SKILLING INITIATIVES FOR ARTIFICIAL INTELLIGENCE (AI) AND EMERGING TECHNOLOGIES

*204. SHRI RAJINDER GUPTA:

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

- (a) the number of candidates trained in Artificial Intelligence (AI), semiconductor manufacturing, robotics and other advanced digital skills in last three years, skill-wise and year-wise;
- (b) the certification and placement outcomes of such training programmes, including placement percentages and sector-wise employment;
- (c) the details of industry partnerships and collaborations entered into for the design and delivery of future-skills training;
- (d) the State-wise/UT-wise distribution of training centres offering such programmes; and
- (e) the roadmap proposed by Government for scaling up future-skills training, including measures to ensure quality, industry relevance and equitable regional access?

ANSWER

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

(SHRI JAYANT CHAUDHARY)

(a) to (e): A statement is laid on the Table of the House.

STATEMENT REFERRED IN REPLY TO PART (a) to (e) OF RAJYA SABHA STARRED QUESTION NO. *204 ANSWERED ON 11.03.2026 REGARDING 'SKILLING INITIATIVES FOR ARTIFICIAL INTELLIGENCE (AI) AND EMERGING TECHNOLOGIES'

(a) & (b): Under the Government of India's Skill India Mission (SIM), the Ministry of Skill Development and Entrepreneurship (MSDE) delivers skill, re-skill and up-skill training through an extensive network of skill development centres under various schemes, viz. Pradhan Mantri Kaushal Vikas Yojana (PMKVY), Jan Shikshan Sansthan (JSS), National Apprenticeship Promotion Scheme (NAPS) and Craftsman Training Scheme (CTS) through Industrial Training Institutes (ITIs), to all the sections of the society across the country. The SIM aims at enabling youth of India to get future ready and equipped with industry relevant skills.

The details of the candidates trained and certified in the new-age /future-skills job roles under various schemes of MSDE during the last three years is given at **Annexure-I**.

Amongst the schemes of MSDE, placements were tracked under the Short-Term Training component of PMKVY in the first three versions (PMKVY 1.0, PMKVY 2.0 and PMKVY 3.0) implemented from 2015-16 to 2021-22. Under PMKVY 4.0, the focus is on empowering our trained candidates to choose their varied career path and they are suitably oriented for the same. Skill India Digital Hub (SIDH) provides wide range of courses for skill training and facilitates access to jobs and apprenticeship opportunities for the trained candidates are available on SIDH portal. Further, Kaushal Melas and PM National Apprenticeship Melas (PMNAMs) have been organized to facilitate the placements opportunities to the certified candidates. Under JSS, Livelihood Cell has been set up to orient the candidates for entrepreneurship and livelihood promotion.

(c): To ensure active engagement, participation and partnership with industries for the design and delivery of future-skills training, MSDE has inter-alia taken the following steps:

- National Council for Vocational Education and Training (NCVET) has been set up as an overarching regulator establishing regulations and standards to ensure quality in the Technical and Vocational Education and Training (TVET) space. NCVET recognises the industry bodies as the Awarding Bodies (Abs) and/or Assessment Agencies (AAs).
- The Awarding Bodies are expected to develop the qualifications as per the industry demand and map them with the identified occupations as per the National Classification of Occupations, 2015 and obtain industry validations. NCVET has approved 9026 qualifications as per the industry requirements, out of which 2599 qualifications are valid and active, and 6427 qualifications are archived.
- Directorate General of Training (DGT) is implementing Flexi MoU Scheme and Dual System of Training (DST) in collaboration with industries to provide training to ITI students in real industrial environment.
- DGT has signed MoU with IT Tech companies like IBM, CISCO, Microsoft, AWS, Autodesk etc. to ensure industry linkages for the institutes at the state and regional levels. These partnerships facilitate the provision of technical and professional skills training in modern technologies.
- Under PMKVY, the new age/future skills job-roles have been specially aligned with Industry 4.0 requirements in areas like AI/ML, Robotics, Mechatronics, Drone Technology, etc. for upcoming market demand and industry requirements.
- DGT has introduced new age /future skills courses under CTS to provide training in emerging areas such as 5G Network Technician, Artificial Intelligence Programming assistant, Cyber Security Assistant, Drone Technician etc.
- Two (02) Indian Institute of Skills (IIS) have been established at Ahmedabad and Mumbai, in Public Private Partnership (PPP) mode, with an aim to align industry-ready workforce to emerging economic opportunities.

- 36 Sector Skill Councils (SSCs), led by industry leaders in the respective sectors, have been set up which are mandated to identify the skill development needs of respective sectors as well as to determine skill competency standards.

(d): Schemes of MSDE are demand driven and the training centres under these schemes are set up or engaged on need basis. The details of the training centres offering future skills job roles under the schemes of MSDE are at **Annexure-II**.

Further, to enhance the overall quality and relevance of vocational training in the country, MSDE has launched Pradhan Mantri Skilling and Employability Transformation through Upgraded ITIs (PM SETU) scheme which *inter-alia* aims to upgrade 1,000 Government ITIs (200 Hub ITIs and 800 Spoke ITIs) in a Hub and Spoke model, wherein upgradation includes smart classrooms, modern labs, digital content, and new courses aligned to industry needs. Also, it aims to augment capacity of five NSTIs located in Bhubaneswar, Chennai, Hyderabad, Kanpur, and Ludhiana, including setting-up sector-specific National Centres of Excellence for skilling, with focus on advanced training of trainers with global partnership.

(e): National Council for Vocational Education & Training (NCVET) has developed the National Programme on Artificial Intelligence (NPAI) Skilling Framework, which outlines the national roadmap, structure and guidelines for skilling in AI, data science and emerging technologies serves as the foundational document for developing standardized, industry-aligned courses and curricula.

PMKVY has introduced specialised short-term and advanced modules focused on AI, Robotics and new age technologies. With the aim to meet industry demand, drive digital transformation, and build workforce readiness for Industry 4.0 and the green transition.

Under CTS, the training in new age courses, including Artificial Intelligence, Industrial Robotics and climate-friendly technology for skilling and upskilling of youth of the country is provided through a network of Industrial Training Institutes (ITIs) and National Skill Training Institutes (NSTIs).

ANNEXURES REFERRED TO IN REPLY TO PARTS (a), (b) & (d) OF RAJYA SABHA STARRED QUESTION NO. *204 ANSWERED ON 11.03.2026 REGARDING ‘SKILLING INITIATIVES FOR ARTIFICIAL INTELLIGENCE (AI) AND EMERGING TECHNOLOGIES’

Annexure-I

(a) Details of candidates trained and certified in new-age/future skill job roles under PMKVY 4.0:

Sector Name	2023-24		2024-25		2025-26*	
	Trained	Certified	Trained	Certified	Trained	Certified
Aerospace and Aviation	-	-	150	8	45	150
Agriculture	2,695	1,539	45,078	29,807	90	786
Automotive	1,011	184	57,805	38,925	1,166	7,506
Electronics and Hardware	3,873	1,266	123,749	80,932	5,320	14,151
Furniture and Fittings	3,939	2,156	1,759	975	675	281
Gems and Jewellery	97	73	38	37	-	-
Green Jobs	350	-	9,293	6,123	1,160	2,466
Healthcare	826	93	34,616	10,539	4,229	19,758
Hydrocarbon	-	-	793	600	-	116
Information Technology	-	-	216	-	60	9
IT-ITeS	690	120	65,140	27,175	17,741	27,245
Life Sciences	-	-	8,845	4,205	828	2,441
Logistics	3,911	3,323	13,057	8,609	2,087	2,449
Media and Entertainment	-	-	12,470	112	1,665	5,547
Rubber	30	2	1,320	1,016	-	169
Telecom	1,860	576	57,975	35,226	5,824	9,465
Tourism & Hospitality	-	-	15,502	6,573	1,960	6,363

* Data as on 31.12.2025.

(b) Details of candidates trained in new-age/future- skill trades under NAPS during the last three years:

Sector/Course Name	2022-23	2023-24	2024-25
IT/ITeS (Digital)	94,441	89,238	87,914
Artificial Intelligence (AI) related courses	-	184	838
Robotics	599	1,428	1,158

(c) Details of candidates enrolled in new-age courses under CTS for last three sessions (2022-23 to 2024-25) :

Trade Name	Session 2022-23	Session 2023-24	Session 2024-25
Additive Manufacturing (3D Printing) Technician	86	159	135
Aeronautical Structure and Equipment Fitter	39	80	84
Artificial Intelligence Programming Assistant	-	-	381
Advance CNC Machining Technician	1568	3277	3761
Computer Aided Manufacturing (CAM) Programmer	-	-	192
Drone Pilot (Junior)	-	363	188
Drone Technician	-	275	270
Engineering Design Technician	28	27	819

Fiber to Home Technician	8	18	-
Geo Informatics Assistant	23	109	113
Industrial Robotics and Digital Manufacturing	956	3624	4548
Information Technology	562	798	662
Internet of Things Technician (Smart Agriculture)	97	140	198
Internet of Things Technician (Smart City)	86	351	370
Internet of Things Technician (Smart Healthcare)	127	220	284
Manufacturing Process Control & Automation	72	1417	2996
Mechanic Electric Vehicle	2823	4318	4934
Multimedia, Animation & Special Effects	370	446	349
Small Hydro Power Plant Technician	-	-	8
Smartphone Technician Cum App Tester	292	355	290
Software Testing Assistant	-	74	124
Solar Technician (Electrical)	1054	2280	2734
Technician Mechatronics	342	317	404
Virtual Analysis and Designer - FEM (Finite Element Method)	78	572	1056

Annexure-II

Details of the training centres that have offered training in new-age/future- skills courses under the schemes of MSDE:

State	PMKVY Training Centres	NAPS Establishments	ITIs (Govt & Pvt)
Andaman And Nicobar Islands	1	5	2
Andhra Pradesh	56	143	1
Arunachal Pradesh	11	3	2
Assam	74	549	5
Bihar	150	156	22
Chandigarh	1	40	1
Chhattisgarh	32	62	5
Delhi	13	432	6
Goa	-	180	3
Gujarat	46	4154	14
Haryana	92	2761	3
Himachal Pradesh	43	202	11
Jammu And Kashmir	75	63	9
Jharkhand	17	77	21
Karnataka	186	516	152
Kerala	38	523	5
Ladakh	-	8	1
Lakshadweep	-	1	-
Madhya Pradesh	384	315	12
Maharashtra	129	1852	100
Manipur	3	4	1
Meghalaya	4	7	1
Mizoram	7	3	-
Nagaland	7	1	-
Odisha	45	134	34
Puducherry	7	107	1
Punjab	155	155	2
Rajasthan	503	160	13
Sikkim	3	29	-
Tamil Nadu	173	475	79
Telangana	43	291	72
DD & DNH	2	33	1
Tripura	14	11	-
Uttar Pradesh	668	1593	148
Uttarakhand	41	114	6
West Bengal	46	240	22
