

GOVERNMENT OF INDIA  
MINISTRY OF SKILL DEVELOPMENT AND ENTREPRENEURSHIP  
**RAJYA SABHA**  
**UNSTARRED QUESTION NO. 2045**  
ANSWERED ON 17.12.2025

**CAPACITY BUILDING FOR DATA CENTRE OPERATIONS**

2045# SHRI CHUNNILAL GARASIYA:

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

- (a) the details of the projected talent gap in roles related to data centre operations, maintenance and AI/machine learning workload management by the year 2030;
- (b) whether dedicated skill development programmes have been designed and launched for data centre technicians, engineers and operations teams, if so, the details thereof; and
- (c) whether industry partnerships are incorporating apprenticeship opportunities into operational units and if so, the details thereof?

**ANSWER**

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

(SHRI JAYANT CHAUDHARY)

(a): Skill Gap studies are conducted by Sector Skill Councils (SSCs) from time to time, which provide information on the skills needed and the skill gaps in various sectors. Such studies guide the interventions of the Government aimed at preparing the workforce as per the industry needs. Further, District Skill Development Plans (DSDPs) formulated by District Skill Committees (DSCs) identifies sectors with employment opportunities as well as the associated demand for skilling in the district, and map the available facilities for Skill Training. Skill Development Programmes of the Government are designed and implemented to bridge identified skill gaps across sectors. As per Nasscom's Digital Talent Demand and Supply Analysis 2023, the tech industry in India currently employs over 54 lakh people, with digital accounting for approx 37% of the industry's workforce. Among all digital tech jobs, the AI & Big Data Analytics jobs exhibit the most significant demand-supply gap of approx 50%.

(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 Sikhshan 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 like digital technical skills.

The details of the candidates trained under various schemes of MSDE in the IT-ITes sector, including Data Centers, AI/ML, Cyber Security, etc., are given as under:

| PMKVY<br>(Since inception<br>to 31.10.2025) | NAPS<br>(Since 2018-19<br>to 31.10.2025) | CTS (ITIs)<br>(2018-19<br>to 2024-25) |
|---|--|---------------------------------------|
| 7,25,517                                    | 4,35,915                                 | 7,55,736                              |

MSDE has launched the Skill India Digital Hub (SIDH), a unified digital platform aimed at enhancing skill development in youths across the country by providing access to industry-relevant courses, job opportunities, and entrepreneurship support. SIDH offers extensive arrays of courses including the courses for digital skills. Further, the FutureSkills Prime (FSP) platform of MeitY offer various courses in IT & ITeS sector including Data Analytics, AI/ML, Cyber Security, etc.

(c): With an aim to augment employability of students/learners, MSDE and Mo Education provide apprenticeship through National Apprenticeship Promotion Scheme (NAPS) and National Apprenticeship Training Scheme (NATS) respectively, for the on-the-job training and skilling of Indian youth. The apprenticeship training is provided to fresh graduates, diploma holders and degree apprentices under NATS, while the apprenticeship training is provided to the other candidates under NAPS.

Also, the Apprenticeship Embedded Degree/Diploma Programs are provided by Higher Education Institutions (HEIs) for practical exposure during the course of study with the aim to enhance competencies of the graduates.

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