

GOVERNMENT OF INDIA
MINISTRY OF EDUCATION
DEPARTMENT OF HIGHER EDUCATION

RAJYA SABHA
UNSTARRED QUESTION NO. 1158
ANSWERED ON 29.07.2026

Alignment of academic with employment opportunities

1158. Shri S.R. Sivalingam:

Will the Minister of EDUCATION be pleased to state:

- (a) the details of assessments regarding the need for universities to prepare students for cross-sector careers beyond degree-specific pathways;
- (b) the findings indicating that employers increasingly value transferable skills, including problem-solving, adaptability and interdisciplinary knowledge;
- (c) the measures proposed to be taken by Government to promote flexible curricula, skill-based learning and industry collaboration within higher education institutions;
- (d) the structural gaps assessed relating to alignment between academic programmes and emerging employment opportunities; and
- (e) the long-term framework envisaged to enable students to transition across diverse professional domains?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF EDUCATION
(DR. SUKANTA MAJUMDAR)

(a) to (e): The National Education Policy (NEP), 2020 promotes holistic, multidisciplinary and flexible higher education, enabling students to acquire knowledge and skills beyond a single discipline and pursue diverse educational and professional pathways. It emphasizes the importance of industry-academic connect and promotes research and innovation by setting up start-up incubation centres; centres in frontier areas of research; greater industry-academic linkages; and interdisciplinary research including humanities and social sciences. The National Credit Framework (NCrF), National Higher Education Qualifications Framework (NHEQF), Academic Bank of Credits (ABC) and Multiple Entry and Multiple Exit provisions provide a framework for integration, accumulation and transfer of academic, vocational and experiential learning.

To strengthen the linkage between academic learning and Job requirements, higher education curricula provide for outcome-based education, skill-based modules, project-based learning, internships and industry interaction. University Grants Commission (UGC) and All India Council for Technical Education (AICTE) have issued Guidelines for Apprenticeship Embedded Degree Programme (AEDP) to be offered by Higher Education Institutions and Technical Institutions to provide practical exposure during the course of study expected with the aim to enhance competences of the graduates and the employment thereof. UGC and AICTE follow assessment process for the apprenticeship component involving industry/establishment, academia and HEIs.

National Apprenticeship Training Scheme (NATS) aims at providing on-the-job training and skilling of Indian youth. It is implemented by the Department of Higher Education, Ministry of Education through four regional Boards of Apprenticeship Training/Practical Training (BoATs/BoPT) located at Mumbai, Kanpur, Chennai and Kolkata. During last five years (2021-2022 to 2025-2026) approximately 17.22 lakh apprentices have been engaged under NATS. During this period, the Ministry of Education released ₹2892.75 crore towards stipend support to apprentices. The NATS 2.0 portal has been introduced as a technology-enabled platform for registration and management of apprenticeship training, including digital processing of apprenticeship contracts, monitoring of training and stipend-related processes and improved tracking of apprentices and establishments. Under NATS, till date ~457 MOUs have been signed with HEIs for AEDP implementation. Further more than 75000 apprentices have benefited from the AI Apprenticeship Programme.

AICTE has undertaken a comprehensive evaluation of Technical Education curricula in most of the emerging areas and core engineering courses along with pedagogical practices to ensure alignment with evolving industry requirements. This evaluation has focused on shifting emphasis from degree-centric learning to skills, adaptability, hands-on exposure and industry relevance. Model curricula is developed in consultation with leading academicians (from Institutes of National importance), industry experts, public organizations and research institutions. These curricula embed experiential learning, internships, multidisciplinary exposure and emerging technology competencies to meet current and future workforce needs. The model curriculum reduces credit requirements to allow for more flexibility and includes "Value-added" courses focused on employability. A key outcome of the evaluation is the requirement for mandatory internships (industrial/social) for students, providing direct exposure to real-world working environments. A dedicated portal connects students directly with industry partners for internship. AICTE has also launched Project PRACTICE in September 2025 that aims to shift focus from theoretical rote learning to hands-on project-based learning and industry-connected, skill-based training in AICTE approved institutions from tier-2/tier-3 cities. Further, AICTE has initiated several key reforms to integrate work-based learning, project portfolios and AI-relevant competencies into campus programmes. The key reforms include integration of Emerging and AI-Relevant Technologies in curricula, inclusion of courses and electives on Artificial Intelligence, Machine Learning, Robotics, Cyber-Physical Systems, in alignment with industry engagement.

The University Grant Commission (UGC) has supported skill-based education through Community Colleges, B.Voc. Degree Programmes and Deen Dayal Upadhyay Centres for Knowledge Acquisition and Upgradation of Skilled Human Abilities and Livelihood.

Employability skills modules have been included as a part of job roles/SWAYAM in the curriculum which include Communication Skills, Self-Management Skills, Information and Communication Technology (ICT) Skills, Entrepreneurship Skills and Green Skills. To support skill development, the SWAYAM Plus portal has also been launched, focusing on upskilling and reskilling the workforce. More than 500 courses have been developed curated from 89 industry partners across 17 sectors and offered on emerging areas such as AI, Data Analyst etc.
