GOVERNMENT OF INDIA
MINISTRY OF SKILL DEVELOPMENT AND ENTREPRENEURSHIP
LOK SABHA
UNSTARRED QUESTION NO. 2499
ANSWERED ON 03.08.2026

CURRICULUM IN ITIs

2499 SHRI DAGGUMALLA PRASADA RAO:

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

(a) whether the Government has reviewed or evaluated the curriculum of Industrial Training Institute (ITIs) across the country, State/UT-wise;

(b) the details of evaluations undertaken, consultations held, stakeholders involved and key findings;

(c) the number of revisions in the curriculum made and timelines of the next planned revisions;

(d) the measures taken by the Government to encourage female enrolment in ITIs;

(e) whether the Government has taken any steps to modernize and diversify ITI courses to align with emerging industry needs, such as electronics and semiconductors; and

(f) the manner in which the mechanism adopted by the Government to assess labour market demand while introducing or revising courses and outcomes achieved?

ANSWER

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

(SHRI JAYANT CHAUDHARY)

(a). The Directorate General of Training (DGT) under the Ministry of Skill Development & Entrepreneurship (MSDE) offers vocational training programmes in 170 NSQF-compliant courses through a network of Industrial Training Institutes (ITIs) under the Craftsmen Training Scheme (CTS) across the country. All the courses offered through ITIs are aligned with the National Skills Qualification Framework (NSQF) and approved by the National Council for Vocational Education and Training (NCVET). Curriculum revisions are carried out on a need basis in response to technological advancements, evolving occupational standards, and industry requirements or periodically, once every three years in accordance with NCVET guidelines.

(b). The curriculum review and revision process is a continuous and need-based exercise aimed at ensuring alignment with technological advancements and evolving industry requirements. The evaluation involves assessment of existing curricula with respect to emerging technologies, changing occupational standards, industry demand, employability trends, apprenticeship requirements, training outcomes, and feedback received during implementation.

The curriculum revision process involves extensive consultations with stakeholders including State Governments/UT Administrations, industry representatives, Sector Skill Councils (SSCs), National Skill Training Institutes (NSTIs), subject matter experts, academia, employers, implementing agencies and other concerned Ministries/Departments, wherever required.

Based on the evaluation and stakeholder consultations, curricula are revised to incorporate new technologies, Industry 4.0 applications, Artificial Intelligence (AI), Internet of Things (IoT),

automation, green and renewable energy technologies, electric mobility, digital skills, entrepreneurship, workplace safety, environmental sustainability and outcome-based learning.

(c). Earlier, the curricula under the Craftsmen Training Scheme (CTS) were revised once every five years. After introduction of NEP 2020 and in accordance with NCrF guidelines, the curricula are being revised once in every three years. Presently, the curricula of 40 CTS courses have been revised. The revision of the remaining curricula will be undertaken on a demand basis, in consultation with all relevant stakeholders, taking into account technological advancements and industry requirements.

(d). DGT has taken following initiatives to encourage female enrolment in ITIs:

i. Female candidates are eligible for admission to all NSQF-compliant courses under the Craftsmen Training Scheme (CTS) offered through ITIs, including 32 New age/ Future skill courses, based on the prescribed entry qualifications. Out of the 170 courses, seven (07) courses, namely Dress Making, Sewing Technology, Surface Ornamentation Techniques (Embroidery), Computer Aided Embroidery & Designing, Fashion Design and Technology, Cosmetology, and Spa Therapy, are women-centric under CTS.
ii. Government of India approved 30% reservation of seats for women candidates in all ITIs (Govt. & Private) in all courses and these seats could be filled based on the general reservation policy of each of the State/UTs.

(e). DGT has developed 32 New-Age courses/ Future Skill Courses for addressing the growing industry needs of the future ready job-roles in areas of Artificial Intelligence, Mechatronics, Electric Vehicles (EV), Industrial Robotics, Advanced Manufacturing, Internet of Things, Electronics, Semiconductor, Green Hydrogen & Renewable Energy and other emerging technologies. In addition, new short-term, industry-oriented courses have also been developed to provide flexible upskilling and reskilling opportunities in response to changing industry demand and future workforce requirements. A list of these new-age courses under the Craftsmen Training Scheme (CTS) is at **Annexure-I.**

(f). The assessment of labour market demand for the introduction of new courses and revision of existing courses is undertaken through skill gap studies and continuous consultations with industries, Sector Skill Councils, District Skill Committees, employers, industry associations, State Governments, training institutions, and domain experts. Inputs on industry requirements, technological advancements, occupational standards, placement trends, apprenticeship opportunities, and emerging skill needs are duly considered during curriculum development and revision. This consultative mechanism ensures that the courses remain industry-relevant, enhance employability, and align with the evolving needs of the economy.

Annexure-I

ANNEXURE REFERRED TO IN REPLY TO PART (E) OF LOK SABHA UNSTARRED QUESTION NO. 2499 ANSWERED ON 03.08.2026.

List of New Age / Future Skills Courses under Craftsmen Training Scheme (CTS)

Sl. No.	Name of course	Duration	NSQF Level
1.	5G Network Technician	One year	4.5
2.	Additive Manufacturing (3D Printing) Technician	Two Year	3.5
3.	Aeronautical Structure and Equipment Fitter	Two Year	4
4.	Artificial Intelligence Programming assistant	One year	3.5
5.	CNC machining Technician	Two Year	4
6.	Computer Aided Manufacturing (CAM) Programmer	One year	3.5
7.	Cyber Security Assistant	One year	3.5
8.	Data Annotation Assistant	One year	3.5
9.	Drone Pilot (Junior)	Six Month	3
10.	Drone Technician	Six Months	3
11.	Engineering Design Technician	One year	3.5
12.	Fiber to Home Technician	Six months	3
13.	Geo Informatics Assistant	One year	3.5
14.	Green Hydrogen Production Technician	One Year	3.5
15.	Industrial Internet of Things (IIoT) Technician	Two Years	4.0
16.	Industrial Robotics and Digital Manufacturing	One year	3.5
17.	Information Technology	Two Year	4
18.	Internet of Things Technician (Smart Agriculture)	One year	3.5
19.	Internet of Things Technician (Smart City)	One year	3.5
20.	Internet of Things Technician (Smart Healthcare)	One year	3.5
21.	Manufacturing Process Control & Automation	One year	3.5
22.	Mechanic Electric Vehicle	Two Year	4
23.	Multimedia, Animation & Special Effects	One year	3.5
24.	Semiconductor Technician	One Year	4.5
25.	Small Hydro Power Plant Technician	Two Year	4
26.	Smartphone Technician Cum App Tester	6 Months	3.5
27.	Software Testing Assistant	One year	4.5
28.	Solar Technician (Electrical)	One year	3.5
29.	Technician Mechatronics	Two Year	4
30.	Virtual Analysis and Designer - FEM (Finite Element Method)	Two Year	4
31.	Wind Plant Technician	Two Year	4
32.	Nuclear Power Plant Technician	Two Year	4

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