GOVERNMENT OF INDIA
MINISTRY OF EDUCATION
DEPARTMENT OF HIGHER EDUCATION

LOK SABHA
UNSTARRED QUESTION NO. 532
ANSWERED ON 24.07.2023

Initiating New Programmes and Courses in Engineering and Technology

532. DR. M.P. ABDUSSAMAD SAMADANI:

Will the Minister of **EDUCATION** be pleased to state:

(a) whether the Government has reviewed the progress of the proposal by AICTE for Technical institutes regarding initiating new programmes and courses in Engineering and Technology in emerging areas as per the national perspective plan prepared by the experts;
(b) if so, the details of new courses initiated; and
(c) whether the Government has a new plan to improve the quality of engineering education and enhance the employability of students of technical institutes?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF EDUCATION
(DR. SUBHAS SARKAR)

(a) to (b): Yes, Sir. A Committee was formed under the Chairmanship of Shri BVR Mohan Reddy, Chairman Board of Governors, IIT Hyderabad to make short term and medium term perspective plan for engineering education which recommended courses on Artificial Intelligence (AI), Internet of Things (IoT), Block chain, Robotics, Quantum Computing, Data Sciences, Cyber Security, 3D Printing & Design and other emerging technological areas to be included in the UG/PG Program in Engineering. Accordingly, All India Council for Technical Education (AICTE) has given approval to B-Tech Courses in Data Science, Artificial Intelligence, Very Large-Scale Integration (VLSI), logistics and advance communication technology and elective courses relating to new emerging technologies which will open new avenues for employment to engineering students as per requirement of industries. Further, to boost studies in emerging areas, students pursuing courses in core engineering areas like Civil, Mechanical, and Electronics, AICTE, have now allowed students pursuing these programmes flexibility to also pursue minor degree in any emerging area.

In order to prepare a long term strategy and roadmap to develop a sustainable semiconductor and display system in India by creation of talent pool in semiconductor domain, a series of

steps have been taken by AICTE. AICTE submitted a “Roadmap for Capacity Building in the Semiconductor Domain” document highlighting the current scenario of curricula and manpower availability and the way forward. Based on the document, a committee was constitution in collaboration with Ministry of Electronics and Information Technology to prepare model curricula for UG- Electronics Engineering (VLSI design & Technology), Diploma (IC Manufacturing) and Minor Degree in VLSI design & technology.

(c): The National Education Policy, 2020 envisages multidisciplinary approach to technical education and focuses on preparing professionals in cutting-edge areas that are fast gaining prominence for enhancing the employability of the youth.In line with this, the regulatory body of technical education, AICTE is implementing a number of initiatives such as Revision of Curriculum, Examination Reforms, Induction Program, Student Internship, Teacher Training Policy, Mandatory Accreditation, Hackathons etc. Further, to promote quality education, various schemes are being implemented by the Government such as Prime Minister Research Fellowship (PMRF), Start-up India Initiative for Higher Education Institutions (SIIHEI), Impacting Research Innovation and Technology (IMPRINT), Scheme for Transformational and Advanced Research in Sciences (STARS), Institution’s Innovation Council, Idea Development, Evaluation & Application (IDEA) Labs, etc.

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