

**Press Information Bureau
Government of India**

Shri Dharmendra Pradhan launches four-year Bachelor of Science in Electronic Systems of IIT Madras

The course will be taught in Online Mode & Admission is possible without JEE through an in-built 4-week qualifier process

It will meet the significant, growing demand for skilled graduates in electronics & embedded manufacturing sector in India

The Course aligns with the India Semiconductor Mission to make India a global hub for electronics manufacturing and design

New Delhi, 6th March 2023

Shri. Dharmendra Pradhan, Union Education and Skill Development Minister, Government of India, launched the four-year online Bachelor of Science (BS) in Electronic Systems of IIT Madras (<https://study.iitm.ac.in/es/>). The key objective of the program is to meet the significant and growing demand for skilled graduates in the electronics and embedded manufacturing sector in India. The program also features multiple exit and the students can get a Foundational Level Certificate, Diploma or the BS degree. The program aligns with the India Semiconductor Mission to make India a global hub for electronics manufacturing and design. This is the second online BS program from IIT Madras following BS Degree in Data Science and Applications, which has more than 17,000 students studying currently.



The BS in Electronic Systems was launched in the presence of Shri K Sanjay Murthy, Secretary, Higher Education, Government of India, (who joined virtually), Dr. Pawan K. Goenka, Chairman, Board of Governors, IIT Madras (virtually), Prof. V. Kamakoti, Director, IIT Madras, Program Coordinators, BS in Electronic Systems, IIT Madras, Industry leaders and other faculty members.

Addressing the launch event, Shri Pradhan said that the launch of online course for Bachelor in Science in Electronic Systems by IIT Madras is a great initiative that will enhance accessibility to quality higher education and provide enormous opportunities to our Yuva Shakti to keep pace with 21st century knowledge, skills and jobs. He congratulated IIT Madras for this course in line with all the recommendations of National Education Policy 2020: quality, affordability, equity, employability, multiple entry-exit. He expressed his confidence that more institutions will come up with such programmes for realising Prime Minister's Shri Narendra Modi's vision of 'Vikasit Bharat'.



The Minister further said that in this era of innovation and research when we are coming up with initiatives like Digital University, this new-age course will give further impetus to enhancing the reach of quality and affordable education till the last mile as well as boosting employability. In addition to the certificate, diploma, degree level programme for the online BS course launched today, he also suggested IIT Madras family to design a most basic module for all those who aspire to equip themselves with relevant skills of the digital and electronics ecosystem. India should not only remain a consumer of technology but also build its own manpower. This online

course by IIT Madras will serve the dual purpose of improving competencies of our existing workforce and preparing the workforce of the future, he added.

To accomplish the mission of making IIT education more accessible to all, the fee for the BS in Electronic Systems programme has been kept affordable with additional scholarships being provided to students belonging to SC/ST/PwD categories and those with family incomes of less than Rs. 5 Lakh Per Annum, ensuring inclusivity.

Students graduating from this program can find job opportunities in industries such as Automotive, Semiconductor, and Defence, among others, for positions like:

- Electronic System Designer
- Embedded System Developer
- Electronic Hardware Specialist
- System Testing Engineer
- Electronics Research Engineer

The Graduates can also pursue higher studies in their area of interest.

Congratulating IIT Madras for developing this unique program, Dr. Pawan K. Goenka, Chairman, Board of Governors, IIT Madras, said, “This BS Program was first announced in 2020 and was launched with the BS in Data Sciences. It is a very successful program with 17,000 students currently enrolled. What makes it a unique program is that it makes IIT education accessible to a very wide range of people who otherwise may not be able to come to an IIT to get that kind of education. And, it is very flexible in terms of where you want to exit. One does not have to commit for four years. Once you sign up, they can exit after 1 year, 2 years or 4 years. To the best of my knowledge, this is the only program that we have in whole of India, which gives that kind of flexibility and accessibility to the students. It creates a new template on how higher education can be made accessible to a wide mass of potential students in India and that really is a very good design. The Board of Governors was very happy to approve this initiative by IIT Madras, he added.



Highlighting the unique aspects of the BS in Electronic Systems program, Prof. V. Kamakoti, said that with the growing prominence of electronics in the current world scenario, for example, mobility solutions including mobile phones and electric vehicles replacing conventional mechanical vehicles, education of electronics fundamentals at scale becomes crucial both for Research and Development and capacity building to meet the industry demand. Keeping this in mind, IIT Madras is launching this BS course which we expect to help meet the need of our nation and aspirations of the student.

Highlighting the need for such courses, Prof. Bobby George, Faculty, Department of Electrical Engineering, IIT Madras, and Coordinator, BS in Electronic Systems program, IIT Madras said that there is a high demand for a skilled and knowledgeable workforce in electronic systems. Keeping this in mind, the program has been designed in consultation with industry leaders in this domain. The graduates of this program will have strong fundamentals and industry-ready skills ensuring high employability.

Students who are in Class XII in 2023 can apply and secure admission and join the program after they successfully clear Class XII. Students pursuing any other academic program currently (as permitted under current UGC regulations) or working professionals can also apply and upskill themselves in this area.

The program comprises a mix of theory and laboratory courses that will be taught by IIT Madras faculty and experts in the industry. As part of the courses, students will be provided with recorded video lectures, reading materials, weekly assessments, tutorials and interactive doubt-clearing sessions, all of which can be done online. The laboratory courses require the students to be mandatorily present in-person at IIT Madras for about two weeks every semester.

Further details about the program can be obtained from the course website - <https://study.iitm.ac.in/es/>.

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