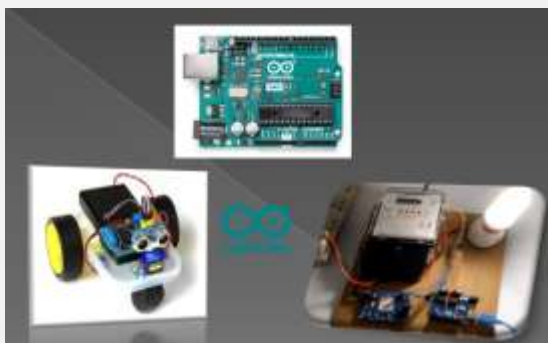


One Week Online Faculty Development
Programme
on
ARDUINO

26th July 2021 to 1st August 2021



Organized by

National Institute of Technology
Silchar, Assam <http://www.nits.ac.in>

in association with



About the Institute

National Institute of Technology, Silchar is one of the 31 National Institutes of Technology of India and was established in 1967 as a Regional Engineering College in Assam. In 2002, it was upgraded to the status of National Institute of Technology and was declared as Institute of National Importance under the National Institutes of Technology Act, 2007. NIT Silchar is a fully residential campus situated on the banks of river Barak and on a sprawling campus spread over 625 acres of land surrounded by scenic tea gardens on the outskirts of Silchar. NIT Silchar has secured **46th rank** in Engineering and **94th rank** under Overall Category in NIRF 2020.

The Institute aims to produce skilled and trained industry-ready professionals through imparting quality technical education and acts as the center of excellence for engineering and scientific research. Tremendous hard work, confidence and faith of all the stakeholders and well-wishers of the Institute encourage us to strive towards the zenith of academic excellence.

The research conducive green campus encourages the young minds to develop attributes and knowledge

beyond the constraints of traditional classroom teaching and learning. The flexibility in the design of management and engineering education in the institute incubates global trends and helps to meet future demands, ensuring better Institute-Industry partnership both at local and global levels. NITS has been able to create a niche of its own and become the most preferred institute in the eastern region of the country. It stands as a humble spectacle where tradition meets vogue, aspiration meets inspiration and regional excellence defines global benchmarks.

COMMITTEE

Chief Patron

Prof. Sivaji Bandyopadhyay
Director, NIT Silchar

Convener

Dr. Agnimitra Biswas
Spoken-Tutorial Coordinator, NIT Silchar

Coordinators

Dr. Alfa Bisoi, NIT Silchar
Dr. Asha Rani M.A., NIT Silchar
Dr. Suprava Jena, NIT Silchar

Important Dates

Last date: 23.07.2021

Confirmation by E-mail: 24.07.2021

FDP Dates: 26.07.2021 to 01.08.2021

About Spoken Tutorial

IIT Bombay has conducted many large-scale teacher training workshops under the Train 10,000 Teachers (T10KT) programme, sponsored by the National Mission on Education through ICT (NMEICT), MHRD, Govt. of India, and trained over 2,00,000 teachers. Another successful technology developed at IIT Bombay is Spoken Tutorial, using which about 50 lakh students have been trained on various ICT topics. This method was very effective.

The Spoken Tutorial project is also implemented successfully at IIT Bombay, with funding from NMEICT, MHRD. It is now proposed to offer the highly effective Spoken Tutorial based ICT training to a large number of teachers, across the country, through the T10KT methodology.

Arduino boards are less expensive compared to other microcontrollers platform. The Arduino programming environment is easy to use for beginners. The Arduino programming environment is easy to use for beginners. For advanced users, the language can be expanded through C++ libraries and AVR-GCC programming language can be added to Arduino programs. Spoken Tutorial course content will cover, basic and intermediate level of course for Arduino, which is helpful for circuit designers to make their own version of the module.

About the FDP

Arduino is an open-source electronics platform used for building electronics projects. Arduino consists of both a physical programmable circuit board or microcontroller and a software IDE (Integrated Development Environment) that runs on the computer. It is used to write and upload computer code to the physical board. This course will be helpful to build small Mechatronics, Robotics and electronics component. Spoken Tutorial FDP will cover, basic and intermediate level of course for Arduino with 100% active learning, so, teachers who undergo this training will be able to start using Arduino immediately after the workshop.

Program Contents

Following topics will be covered for Teachers in this workshop:

- Overview of Arduino and basic operations
- Assembly programming through Arduino
- Seven segment display
- Pulse Width Modulation
- Analog to Digital Conversion
- Wireless Connectivity to Arduino
- Digital logic design with Arduino
- Digital logic design with Arduino
- AVR-GCC programming through Arduino
- Interfacing LCD through AVR-GCC programming

Course material

Content of the courses will be shared via link after registration. The course can be downloaded and can be completed in self paced mode.

Certification

E-certificate will be provided to all the registered participants after completing the course and taking the online test

Eligibility

This program is open to Faculty members.

Registration

Registration fee: Nil for Spoken Tutorial Resources Centres/associates.

Registration Fee: Rs. 590 for others

For registration, please visit the following link: https://spoken-tutorial.org/training/list_events/ongoing/?state=4&foss=85

Contact details

Dr. Alfa Bisoi

Assistant Professor, Dept. of ME, NIT Silchar
Email: alfabisoi@mech.nits.ac.in
Mob: +91 8249355270

Dr. Asha Rani M.A.,

Assistant Professor, Dept. of EE, NIT Silchar
Email: asharani@ee.nits.ac.in
Mob: +91 8075692305

Dr. Suprava Jena,

Assistant Professor, Dept. of CE, NIT Silchar
Email: suprava@civil.nits.ac.in
Mob: +91 7008534828