

# HACKATHON 2020

27th FEBRUARY  
2020



ORGANISED BY CENTRE FOR INNOVATION, INCUBATION AND ENTREPRENEURSHIP  
NATIONAL INSTITUTE OF TECHNOLOGY MEGHALAYA  
IN



ASSOCIATION WITH STATE COUNCIL OF SCIENCE, TECHNOLOGY AND ENVIRONMENT, MEGHALAYA

## AIM OF THE HACKATHON

To address the following prime focused areas of the state of Meghalaya :

1. Soil and water conservation
2. Water supply and sanitation
3. Farming

## ABOUT NIT MEGHALAYA

The National Institute of Technology (NIT) Meghalaya (established in 2010 under the NIT Act 2007 as an Institute of National Importance) is one among the 31 NITs in India. NIT Meghalaya is ranked 67th position by NIRF, 56th position by Business World and 28th position under Top 35 Engineering Colleges by India Today in 2019. The Institute is presently operating from a temporary campus at Laitumkhrah, Shillong, India. Its permanent campus is under development at Cherrapunjee. The institute has five Engineering Department as Mechanical, Civil, Electrical, Electronics & Communication and Computer Science & Engineering, three basic science Departments along with one Social Science Department.

**REGISTRATION : RS. 500  
(FOODING WILL BE PROVIDED)**

**VENUE: NIT MEGHALAYA**

## IMPORTANT DATES

Last Date of Registration : 15th February, 2020

## PRIZE AMOUNT

**Winners of each individual prime focused area will be awarded as follows:**

**First Prize: Rs. 20,000/-**

**Second Prize: Rs. 10,000/-**

**THE PRIME FOCUS OF THIS HACKATHON IS SOLVING OF THE FOLLOWING ISSUES -**

### 1. SOIL AND WATER CONSERVATION

- Soil and water conservation measures.
- Development of low-cost and affordable model of rainwater harvesting structures- Rainwater harvesting to supplement water requirements needs construction of structures comprising among other things a gutter area (rooftop). The structure is not easily affordable for the common man.
- Evolving low cost energy saving devices/methods - Firewood is still the predominant source of fuel energy for domestic purposes and charcoal burning for commercial purposes caused intense soil erosion in the District.

### 2. WATER SUPPLY AND SANITATION

- Wastewater treatment systems.
- Village level solid and liquid waste collection, treatment and disposal management.
- Use of geographic information system (GIS) techniques for data representation (real world objects such as roads, water sources, pipeline networks, land use etc. with digital data).
- Network modeling with network values such as pipe diameter, length etc. to represent the flow of water more accurately.

### 3. FARMING

- Development of low-cost and affordable environment friendly pesticides, fertilizers and other chemicals from organic resources for intensive cultivation. The development of these technologies will effectively help us to curtail the harmful effects of using pesticides in the farming process.
- Development of low-cost drilling technology to address the issue of water shortage in areas of Meghalaya bordering Assam and Bangladesh.
- Technology development to address the effect of global warming in farming .
- Development of low cost and easy to maintain materials for conduit for improvement of the irrigation system, which will serve as an alternative to GI pipes, GO pipes, PVC pipes and bamboo.
- Development of technology to reduce heavy soil erosion during cultivation process.
- Quality monitoring system for drinking water.



## ABOUT SHILLONG

Shillong is the capital city of Meghalaya and the district headquarter of East Khasi Hills. It is the only hill station (situated 1491 m above sea level) in the country that is accessible from all sides. Over the years the mesmerising beauty of Shillong has wooed tourist across the globe. Some of the notable sight seeing spots around Shillong city are:

- Elephant Falls
- Shillong Peak
- Lady Hydari Park
- Ward's Lake
- Laitumkhrah Cathedral
- Golf Course
- State Museum
- Don Bosco Museum
- Bishop Beadan Falls
- Barapani Lake



## ORGANISING COMMITTEE

### PATRON

Prof. B. B. Biswal, Director, NIT Meghalaya

### ADVISORY COMMITTEE

Prof. Ayon Bhattacharjee, Dean (RC)  
Prof. Gayadhar Panda, Dean (AA)  
Dr. Atanu Banerjee, Dean (SW)  
Dr. Deba Kumar Sarma, Dean (PD)  
Dr. M. Longshithung Patton, HOD, CE  
Dr. Supriyo Das, HOD, EE  
Dr R.N. Mahapatra, HOD, ME  
Dr. Rangababu P., HOD, EC  
Dr. Yogita, HOD, CS  
Dr. Atanu Singha Roy, HOD, CY  
Dr. Manideepa SAHA, HOD, MA  
Dr. Arpita Nath, HOD, PH  
Dr. P.S. Mangang, HOD, HS  
Mr. Augustus Shemphang Suting, SCSTE, Meghalaya

### CONVENOR

Dr. Ch V Rama Rao

### COORDINATOR

Dr. Shubhankar Majumdar  
Dr. Soumen Moulik  
Dr. Abhishek Sarkhel

### CO-COORDINATOR

Dr. Pallekonda Ramesh Babu  
Dr. Sanjoy Debbarma  
Dr. Gitish K. Dutta  
Dr. Smrutirekha Sahoo



## HOW TO REACH US

### SHILLONG BY AIR

To reach Shillong by air one will have to take a flight to Gopinath Bordoloi International Airport, Guwahati, Assam. From there one can reach Shillong in Four hours in a hired taxi (Rs.2000/- per car, approx.) / Shared taxi ( Rs.500/- per passenger, approx.). There is also an airport at Shillong. At present, Indigo operates with ATR on this Airport from Kolkata.

### SHILLONG BY RAIL

The nearest railway station is Guwahati Railway Station. From the Railway station, one can travel by bus or shared taxi ( Rs.150/- to Rs.300/- per passenger) to Shillong. It takes about four hours to reach Shillong.

### REACHING THE VENUE

After reaching Shillong, one can hire local taxi to reach the venues at Police Bazar and European Ward.

### REACHING THE CAMPUS

After reaching Shillong, one can hire local taxi to reach the campus at Bijni Complex, Laitumkhrah.



## CONTACT US

For any query,  
Please contact

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