

Activity: Research based workshop


Activity date: 6/5/2023

Report date: 6/5/2023

A Research activity was conducted under the MoU between University Of Science and Technology, Meghalaya (USTM) and Pragjyotish College. Both the MOU partners collaborated to organise a workshop on **Introduction to Robotics and its Applications** at USTM dated 6/5/2023.

The invitation letter and the detailed summary report with photographs and student participation certificate are given below:

Invitation Letter



Department of Computer Science & Electronics
University of Science & Technology Meghalaya
(Accredited 'A' Grade by NAAC)

Ref: USTM/CSE/Letter/ WS/2023/58 Date: 04/05/ 2023

To
Dr. Masih Saikia
HoD, Department of Computer Science
Pragjyotish College, Guwahati, Assam

Sub: Kind Invitation for the workshop on **Introduction to Robotics and its Applications** at USTM.

Dear Sir,

Greetings from the Department of Computer Science & Electronics, University of Science & Technology Meghalaya!!


The University of Science and Technology, Meghalaya (USTM) had been established under the provisions of the University of Science and Technology, Meghalaya Act (No.6 of 2008). We are the first private university in NE accredited 'A' grade by NAAC in the first cycle and also ranked by NIRF.


The department is going to conduct a workshop on **Introduction to Robotics and its Applications, on 6th May, 2023.**

Sir, since your college is a prestigious and renowned institution in the North east and having a MoU with us, it would be my great pleasure to invite your collaboration in conduction of the event. Therefore, you are requested to motivate your students to join in the training programme from 11.00 am onwards on the day.

Date: 6th May, 2023 from 11.00 am
Venue: Dept of Computer Science & Electronics
Requested Participants: 20 students from UG
Refreshment will be provided from our university

Your kind acceptance and presence on the event will encourage us.

Thanking you,
Regards,

Dr. Bhairab Sarma
Head, Department of Computer Sc. & Electronics
University of Science & Technology Meghalaya



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Summary Report with Photographs and Certificate:

REPORT ON ONE DAYWORKSHOP ON ROBOTICS & ITS APPLICATIONS

Department of Computer Science & Electronics, University Of Science & Technology Meghalaya (USTM), In Collaboration with Assam Technologies and Department of Computer Science Pragjyotish College, Guwahati, Assam organized a one-day workshop on "INTRODUCTION TO ROBOTICS & ITS APPLICATIONS" on 6th May, 2023 (10 am - 4 pm). The USTM and Pragjyotish College arrange the various kinds of Workshops on continuous basis to enhance student's practical & technical skill and to make them compatible with industry.

The workshop was aimed to acquire basic knowledge on Robotics and Automation including robot classification, design and selection, analysis and applications in industry. Almost 22 undergraduate students from Pragjyotish College have participated in the workshop along with another 30 students from USTM.



Session-1 (Morning) [10 am- 12 noon] :

- Explained about robotics and its application in our day-to-day life.
- Explained the basic components of robotics, classification of robots and their applications
- Developed the programs i.e., Software part in The process of designing Robot.



Session-2 (Afternoon) [1 pm- 3 pm] :

- It was all about hardware part in the process of designing a robot.



Conclusion of the Workshop :

Gained basic knowledge on Application and designing basic structure of Robot.



Workshop Outcomes :

- Introduction to Robotics & Robotics Systems.
- Understand basic components of robotics, classification of robots and their applications
- Understand about various types of sensory devices their working and applications
- Apply basic transformations related to the movement of manipulator
- Understanding how Arduino, Raspberry Pi and microcontroller are involved in Robotics.
- Design a robot mechanism to meet kinematics requirements and to write simple programs





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Kling Road, 9th Mile,
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Dr. Masih Saikia
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