

### OFFICE OF THE PRINCIPAL

Government Polytechnic Mahasamund (C.G.) Village-Barondabazar, Distt-Mahasamund (C.G.) 493445

Phone/Fax: 07723-224818 No/ATAL\_FDP/2024/ 964 Website: www.polymsmd.ac.in

*E-mail : <u>gpolymah@gmail.com</u>* Mahasamund Dated: **03** /09/2024

Subject- Invitation letter to participate in AICTE Training and Learning (ATAL) FDP on Advancements in Robotics (AiR-2024) conducted at Government Polytechnic, Mahasamund from 14/10/2024 to 19/10/2024

**Respected Sir**,

We are delighted to invite you as a participant for the AICTE Training and Learning (ATAL) Faculty Development Program on Advancements in Robotics (AiR-2024) conducted at Government Polytechnic, Mahasamund from 14/10/2024 to 19/10/2024. The event is to be held on offline mode. Faculty member/PG students from science background can apply. There are no registration fees. You can register from link given below. You are requested to attend and kindly circulate to your institute. (Brochure is attached)

**Registration link:** 

https://atalacademy.aicte-india.org/signup

Best Regards 08

Er. Chandrika Vishwakarma Principal Government Polytechnic mahasamund Chhattisgarh, India

### WHO CAN APPLY?

Faculty members of the AICTE approved institutions, Research scholars, PG Scholars, Industry professionals.

# **REGISTRATION FEES**

There is no registration fee is charged for the participants.

### **SELECTION & CERTIFICATION**

• Seats are limited (Max. 50) & Selection will be done based on first-come-first serve basis and the confirmed participants will be notified on receipt of registration form.

•The Certificates shall be issued by ATAL Academy to those participants who have attended the program with minimum 80% attendance & scored minimum 70% marks in the Assessment.

### **GUIDLINES**

•Faculty development program comprises of 14 sessions.

•Session time will be from 09:30 AM to 05:30 PM.

• One compulsory assessment test will be conducted at the end of program.

### **HOW TO APPLY?**

All the participants are requested to register using the link of **AICTE ATAL** portal:

https://atalacademy.aicte-india.org/signup

## **ORGANIZING COMMITTEE**

## PATRON

Er. Chandrika Vishwakarma, Principal Govt. Polytechnic Mahasamund (C.G.)

### **CHAIRPERSON**

**Dr. Shobha Maliwal Head of Department** Govt. Polytechnic Mahasamund (C.G.)

## COORDINATOR

Dr. Veenu Chandraker Lecturer Govt. Polytechnic Mahasamund (C.G.)

## **CO- COORDINATOR**

Mr. Hemant Kumar Mahobiya Lecturer Govt. Polytechnic Mahasamund (C.G.)

### CONTACT

Dr. Veenu Chandraker Mob: 9165716721 Mr. Hemant Kr Mahobiya Mob: 9098122866 Email: <u>ncgpm2007@gmail.com</u> One Week Faculty Development Program

on

## ADVANCEMENTS IN ROBOTICS (AiR-2024)

14- OCT-2024 to 19-OCT-2024



Sponsored by : AICTE Training and Learning (ATAL) Academy





Organised by: Department of Mechanical Engineering



Government Polytechnic Mahasamund (C.G.) Baronda Bazaar Mahasamund (C.G.) 493445

#### **ABOUT THE INSTITUTE**

Government Polytechnic Mahasamund (GPM) is one of the pro-eminent institute of Technical Education in Chhattisgarh, located in Mahasamund, C.G., India. It was established in the year 2007. The institute is emerging as the only Technical institute in Mahasamund. The institute is currently offering four courses in diploma (Civil, Computer Science, Electrical & Mechanical Engg.) with intake capacity of 30 in each stream. GPM is approved by All India Council of Technical Education (AICTE) and affiliated by Chhattisgarh Swami Vivekanand Technical University, Bhilai. The institute plays an important role in the educational, cultural and economic growth of the region.

#### **ABOUT THE DEPARTMENT**

Mechanical engineering is one of the core & broadest engineering disciplines in the institute and offers Diploma in Mechanical Engineering. It was established in the year 2007 with intake capacity of 30. The strength of the department is the highly qualified faculty which guides the students during the programme. A mechanical engineer designs, develops, operates and maintains systems required for all what happens in industry whether in a power plant, space & nuclear establishment, steel plant, military establishments or automobile industry, etc.



#### **ABOUT AICTE ATAL ACADEMY**

AICTE Training and Learning (ATAL) Academy is established with the vision "To empower faculty to achieve goals of Higher Education such as access, equity and quality". AICTE is committed for development of quality technical education in the country by initiating various schemes launched by Govt. of India, Ministry of Human Resource Development. Council understand that there is a need to train the young generation in skill sector and having faculty & technicians to be trained in their respective disciplines. Training is required for increasing the knowledge and skills of students to make them more employable to acquire global competencies.

#### **COURSE CONTENT**

- Introduction to AI & Robotics.
- Advances in Robotics.
- Advancements & Applications of AI in Robotics.
- Enhancing autonomous system & Human-Robot interaction.
- Industry 4.0 & Robotics Applications towards sustainable development.
- Role of robotics application toward green manufacturing.
- Role of robotics in agriculture.
- Pure Hexagonal context free grammars generating Hexagonal Pattern
- The Emerging role of Artificial Intelligence in Society.
- Hands on training:
  - Robotics Operating System.
  - Understanding of robotics components.
- Wire robot using DPDT switch.
- Obstacle avoiding robot using ultrasonic sensor.
- Floor cleaning robot using bluetooth etc.

### **OBJECTIVE**

The main objective of faculty development program on ADVANCEMENTS IN ROBOTICS (AiR-2024) is to bring Academicians, Research Scholars, and Industry Experts of matching interests on a common platform to network and have scientific discussions on the latest developments in the fields of "Robotics" and its up-to-date application in mechanical and production industries. Present FDP will have keynote lectures, presentation by Academicians from NIT, Raipur, Directorate of Technical Education Chhattisgarh, GGU Bilaspur, BIT Durg, MSME Durg and Industry Professionals during the event. Such interactions will facilitate better understanding about technological developments all across the globe amongst the peers. This FDP will certainly ignite the minds of researchers for understanding more interdisciplinary collaborative research for upgradation of technology.

#### **EXPECTED OUTCOME**

The course will provide :

- Improved understanding and knowledge of robotics and AI concept, techniques and tools.
- An overview of the anticipated advancements in robotics and explores their implications on various aspects of society.
- Help to identify future research needs in the interdisciplinary emerging field.

#### **RESOURCE PERSONS**

- Dr. Rajesh Doriya NIT, Raipur (C.G.)
- Dr. Jagpal Singh Bal CGDTE, Raipur (C.G.)
- Dr. Ganesh P. Shukla GGU, Bilaspur (C.G.)
- Dr. Pawan Kumar Patnaik BIT Durg (C.G.)

<Letter Head of institution>

#### To Whomsoever It May Concern

This letter is to express No Objection on Dr/Mr./Mrs/Miss ...... in attending AICTE Training and Learning (ATAL) FDP on Advancements in Robotics (AiR-2024) conducted at Government Polytechnic, Mahasamund from 14/10/2024 to 19/10/2024. This certificate is issued as per requirement of AICTE for successful conduction of ATAL Faculty Development Program.

Yours Sincerely, HOI/Principal <Seal & Sign>