ISRO Disaster Management Support (DMS)

Capacity Building (CB) Programme

ISRO's Disaster Management Support (DMS) programme has been actively supporting central and state governments by providing operational services during pre-disaster and post-disaster phases, including experimental forecasts using space systems. Capacity Building (CB) in space technology for disaster management under the ISRO DMS programme has been identified as a key element to motivate participants to develop innovative method, tools, data products, and services in the field of disaster management using space technology. The DMS-CB programme is a unique effort funded by ISRO, initiated to fulfill the CB requirements in the country.

CORE COMMITTEE

Course Director

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Registration Link: https://rb.gy/djflmk

(Last date of registration: 15th July 2024)

One Week Advance Course
on
Space Technology for Early Warning and Monitoring of Extreme Weather Events and Hydro-met Disasters

Sponsored by

ISRO Disaster Management Support Programme

Duration of the Course
2nd – 6th September 2024

Organized by

Knowledge Partner

Hope Foundation's

International Institute of Information Technology (I²IT),

Hinjawadi, Pune - 411057

(Maharashtra), INDIA

ABOUT I²IT

International Institute of Information Technology (I²IT), Pune was established by Late Shri P. P. Chhabria, Founder President, Hope Foundation and Research Centre, Pune (www.hfrcpune.org) and Founder Chairman of Finolex Group of Companies, a well-known philanthropist, and former President of the Mahratta Chamber of Commerce, Industries and Agriculture (MCCIA). As a world-class academy imparting high-end education in Engineering and Technology, the Institute strives to meet the growing needs of the industry. The Institute equips students to accept challenges in the areas of Information Technology, Engineering, and other niche areas of expertise. I²IT has always practiced 'Innovation and Leadership' as its mantra to bring groundbreaking ideas and provide a solid foundation for learning. With the vision and mission of providing quality education, the Institute campus, constructed by world-renowned architects, features its uniquely designed dome as its temple of learning.

ABOUT COURSE

Space technologies have revolutionized our ability to predict, monitor, and respond to extreme weather events and hydro-meteorological disasters. This course provides a comprehensive overview of how satellite-based systems are utilized for early warning, monitoring, and mitigating extreme weather events and hydro-meteorological disasters. Participants will gain insights into the latest advancements in real-time monitoring and Early Warning Systems (EWS), AI/ML techniques for disaster nowcasting and forecasting, and global and national Disaster Risk Reduction (DRR) frameworks that enhance preparedness and resilience to these events.

ABOUT CoE Geoinformatics

The Center of Excellence in Geoinformatics at I²IT promotes excellence in geospatial research, education, and applications by fostering interdisciplinary collaboration, conducting cutting-edge research, engaging with industry partners and providing specialized training programs. The center aims to leverage geospatial technologies to address complex challenges and contribute to sustainable development goals.

WHO CAN APPLY?

Faculty members of Universities/colleges and other academic and research institutions, scientists, administrators, professional engineers, and young researchers (M.Tech/ME, PhD students) from government and private organizations are encouraged to apply. Professionals from government organizations will also benefit from the proposed course.

LIMITED SEATS

Seats are limited to **25 (twenty-five)** participants on a first-come, first-served basis. **TA/DA will be paid to the selected participants of the course as per the approved norms.**

SELECTION OF PARTICIPANTS

Selection of participants will be based on their work experience or current status of their research. Applicants should attach a note on their work experience / status of research along with a copy of their ID card / registration details.

PROGRAMME OUTCOMES

❖ Understand the characteristics and impacts of extreme space weather events and hydro-meteorological disasters.

❖ Gain knowledge of the key components and functionalities of end-to-end real-time Monitoring and early warning systems.

❖ Acquire skills in utilizing AI/ML techniques for disaster nowcasting and forecasting, including data preprocessing, model selection, validation methods, and uncertainty quantification

❖ Design and develop mapping portals for visualizing and analyzing spatial information related to disaster monitoring.

❖ Utilize global GNSS datasets for monitoring and mitigating extreme space weather events.

IMPORTANT INFORMATION

Last date of registration   : July 15, 2024
Date of notification of selection: August 20, 2024
Mode of Conduct   : In-Person (Offline)
No. of Seats   : 25
Registration Fees   : Nil