

**National Geospatial Programme,
Department of Science and Technology
(DST),
Govt. of India**

The Department of Science and Technology (DST) has identified Geodesy as a pivotal domain crucial for national development. As a result, DST has launched the National Centre for Geodesy (NCG) at IIT Kanpur with the objective of cultivating highly skilled technical professionals and advancing geodetic infrastructure. NCG's mission is to foster a proficient workforce and provide cutting-edge facilities within the local context. Functioning as the primary hub at IIT Kanpur, NCG extends its reach by establishing Regional Centres of Geodesy (RCGs) at other institutes. The Institute of Remote Sensing (IRS) serves as an RCG, actively engaging in the organization of training and research programs in Geodesy to cater to the evolving infrastructure needs essential for nation-building.



Course coordinator

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Course co-coordinator

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RCG Staff

1. Dr. R. Nambi Manavalan,
Research Associate
2. Mr. T. Dhivahar,
Junior Research Fellow
2. Mr. B. Kailasanathan,
Skilled Employee

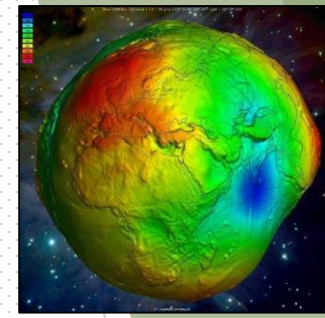
Website

<https://irs.annauniv.edu/irs/>

Registration Link

<https://forms.gle/wfRujbpa5nHz8ENBA>

(Last date of registration: 5th March 2024)



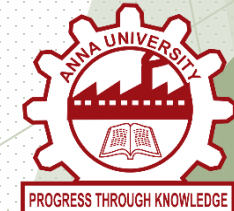
**Three-day course
on
Fundamentals of Geodesy
Sponsored by**



**National Geospatial Programme (NGP),
Department of Science & Technology,
Govt. of India**

18th to 20th March 2024

Organized by



**Regional Centre for Geodesy (RCG),
Institute of Remote Sensing,
Anna University Chennai,
Tamil Nadu**

About Anna University

Anna University blossomed to its present status from a humble beginning in 1794, as the first 'Survey School' in the country to produce land surveyors. This University was named after Late Dr.C.N.Annadurai, former Chief Minister of Tamil Nadu. It offers higher education in Engineering, Technology, Architecture and Applied Sciences relevant to the current and projected needs of the society. Besides promoting research and disseminating knowledge gained therefrom, it fosters cooperation between the academic and industrial communities.

Anna University offers 29 UG and 90 PG Programmes in various disciplines in the University Departments and 41 UG and 57 PG programmes in Affiliated Institutions. About 16007 students are pursuing their degree programme in the University Departments and about 7,21,276 students are pursuing their degree programme in the Affiliated institutions. Anna University is proud of having 14023 Ph.D. scholars on roll in Science, Engineering and Technology.

About IRS

The Institute of Remote Sensing (IRS) was established in 1982 by Anna University with the funds provided by the Government of Tamil Nadu. IRS is also functioning as State Remote Sensing Application Centre for the Government of Tamil Nadu. Over the years, the infrastructural facilities have been gradually built-up using development grants mainly from Ministry of Human Resources Development, University Grants Commission, Federal Republic of Germany, Government of India and Department of Agriculture of Government of Tamil Nadu. At present, the Institute is rated as one of the best in the country in the areas of Remote Sensing, Geographical Information System and Large Scale Mapping. The Institute functions as an autonomous unit of Anna University, governed by an executive committee headed by the Vice- Chancellor and other members from premier research institutions, Govt. organization and Industries. As an externally assisted project, Federal Republic of Germany has provided assistance worth 7 million DM towards equipment, exchange of staff and for conducting a 4-year engineering Under-Graduate program, B.E. (Geoinformatics).

Objectives of RCG

- Organizing outreach activities
- Capacity building
- Conducting state-of-the-art R&D activities
- Acting as the Regional Resource Centre for extensive support (laboratory, equipment, training, library, SW, etc.) to students, researchers and state government departments

About this Course

This three-day program is meticulously crafted to provide a valuable learning opportunity for budding researchers aiming to bolster their grasp of the theoretical underpinnings and processing methodologies of Geodesy. Serving as a dynamic platform, the course will facilitate the exchange of insights, needs, and obstacles encountered in applying and advancing Geodesy. By nurturing a basic understanding of Geodesy among emerging scholars, this foundational course endeavours to help the research scholars realize the effectiveness of using geodetic techniques in Earth studies, environmental monitoring, agriculture, and to bolster forthcoming initiatives in geodetic research.

Course Contents

- Importance of having knowledge about various Geodetic surveying techniques
- Scope of geodetic measurements
- Differences between an ellipsoid & a geoid
- Status of Indian geodetic data
- Advantages of GNSS
- Absolute & relative GPS measurements
- Differential reduction techniques
- GPS Augmentation
- Strategies of minimizing errors
- Reference Station Services
- Functioning of CORS network
- Relationship between geodesy & other disciplines
- Advanced coordinate measuring technologies
- Application of Satellite altimetry in determining ocean dynamism
- Applications of gravity data interpretations
- Utility of Total Station equipment with practical sessions
- Utility of RTK GNSS receives with hands-on training sessions

Target Audience

Research scholars or Faculty members affiliated with the Department of Civil Engineering at any academic institution could get benefitted from this course depending upon their level of exposure in this technology area.

Seat Limitation

Seats are limited to **20 (Twenty)** participants on first come first serve basis. Selection of participants will be based on their work experience and/or present status of their research with a copy of the Registration certificate/ID card.

Important Information

Last date of registration : March 5, 2024

Date of notification of selection: March 11, 2024

Mode of Conduct: Offline

No. of Seats: 20

Registration Fees: Nil

