

1. DETAILS OF THE COURSE

1.1. Date and Venue

- 10 - 22 November 2025
- Global Conference Hall, Bhaskaracharya National Institute for Space Applications and Geo-Informatics (BISAG-N)

1.2. Brunei Darussalam Representatives

- a) Rafidah binti Haji Berudin (Senior Surveyor)
- b) Serina Alyssa binti Udan (Chief Survey Technician)

1.3. Organiser

Bhaskaracharya National Institute for Space Applications and Geo-Informatics (BISAG-N), Ministry of Electronics and Information Technology (MeitY), Government of India

1.4. Participant Profile

- Mid-level and senior officials of government bodies from various countries, especially those working for:
 - Urban planning and infrastructure development
 - Disaster management and emergency services
 - e-Governance and public administration
 - Logistics, transportation and supply chain management
 - Environment and natural resources management
- Employees involved in public services and IT professionals of government departments, interested to transform public administration services using geo-Informatics solutions

1.5. Overall Program and Schedule

The course covers:

- **Introduction of geo-informatics and space technology:** To provide a solid foundation of geo spatial technologies and their role in modern public administration and logistics.
- **Enhancement of practical skills:** To equip participants with hands-on skills in data management, spatial analysis and visualization techniques.
- **Develop understanding of standards and interoperability:** To highlight the importance of standards and interoperability in successful Geo-Informatics System (GIS) implementation.
- **Technology integration in public services and logistics:** To experience the adoption of the real-world applications related to urban planning, disaster management and logistics optimization.
- **Exposure to emerging technologies:** To inform use of cutting-edge innovations such as AI/ML, IoT and drones for spatial analysis and monitoring.
- **Provision of practical implementation tools:** Offer workshop-based, solution-oriented activities to design geo-spatial solutions for real-world issues using sample data of respected countries and area interest.

Indian Technical and Economic Cooperation (ITEC) Course on the Application of Geo-Informatics and Space Technology in Public Administration and Logistics

Date	Session Type	Session Plans
Monday, 10 November 2025	Inaugural Session	
	Session 1.1	Digital Transformation in India
	Session 1.2	Introduction to Geo-spatial Technology
	Session 1.3	Spatial Data Models and Coordinate Systems (with Practical Session)
	Study / Cultural Tour	Visit to SATCOM Facility
Tuesday, 11 November 2025	Session 2.1	Basics of Remote Sensing Earth Observation Systems
	Session 2.2	Spatial Analysis – Vector & Raster
	Session 2.3	Data Management and Visualisation
	Open Discussion	Summarising days session
Wednesday, 12 November 2025	Session 3.1	Cartography and Map Layout (with hands on session)
	Session 3.2	Spatial Resolution & Satellite Image Interpretation
	Study / Cultural Tour	Visit to Dandi Kutir (Salt Mount) Museum
Thursday, 13 November 2025	Session 4.1	Image Classification Techniques
	Session 4.2	Invitee Lecture
	Session 4.3	Practical for Image Classification Techniques
	Open Discussion	Summarising days session
	Study / Cultural Tour	Visit to Swaminarayan Akshardham Temple
Friday 14 November 2025	Session 5.1	Digital Elevation Model (DEM) and its applications
	Session 5.2	AI and ML based Applications
	Session 5.3	Practical Session for DEM, Ortho-rectification and 3D Analysis
	Study / Cultural Tour	Visit to Adalaj Stepwell
Saturday 15 November 2025	Study / Cultural Tour	Visit to Indroda Nature Park and Science City
Monday 17 November 2025	Session 8.1	Understanding Different Urban Planning Practices
	Session 8.2	Analysing Urban Planning Strategies and Monitoring Techniques
	Session 8.3	Development of Mobile Application (Android / iOS), its application in mapping of Urban Assets / Utilities
	Session 9.1	Multi-modal Transport Strategies Development
Tuesday 18 November 2025	Open Discussion	Cybersecurity, e-Governance
	Session 9.2	Understanding PM Gati-Shakti National Master Plan (NMP)

Date	Session Type	Session Plans
		Security for Cloud
	Study / Cultural Tour	Study / Cultural Tour Visit to Gandhi Ashram and Sabarmati Riverfront
Wednesday 19 November 2025	Session 10.1	Geo-AI Applications in Disaster Management
	Session 10.2	Practical exercise on Geo-AI for Disaster Management
	Study / Cultural Tour	Visit to IIT Gandhinagar
Thursday 20 November 2025	Session 11.1	Introduction to GNSS & GPS
	Session 11.2	Practical for Logistic Management and Transportation Modes
	Study / Cultural Tour	Visit to National Forensic Sciences University (NFSU) and Gujarat National Law University
Friday 21 November 2025	Session 12.1	Cadastral Mapping System in India
	Session 12.2	Practical session on digitisation of cadastral data
	Study / Cultural Tour	Visit to Narendra Modi Stadium
Saturday 22 November 2025		<ul style="list-style-type: none"> ▪ Experience sharing by candidates ▪ Address by Director General, BISAG-N ▪ Valedictory Address by MeitY, Secretary ▪ Certificate Distribution ▪ Vote of Thanks by Shri Rajesh Patel, Director, BISAG-N

2. EVALUATION OF THE COURSE

- The course is comprehensive and reached its objectives of basic GIS and satellite technology.
- As it covers a variety of professional background, we recommend that this course to be attended by other departments under the Ministry of Development to gain insights and knowledge on GIS, its impacts on everyday tasks and the advancement of satellite technology in enhancing work efficiency.
- Digital India is a great innovation and initiative by the Government of India to ensure the digitisation and digitalisation of administrative processes is transparent and the welfare of its citizens are taken care of, with the emphasis of the use of open-source software and resources.
- The lecturers / instructors of BISAG-N were very helpful and provided assistance throughout the practical sessions and open to any questions from the participants.
- Participants from various countries / regions provided valuable insights to unique issues and solutions, and provided opportunities for networking.

- The study / cultural visits were perfectly chosen to showcase Gandhinagar's history and the impact of cultural preservation in the country's development.

3. CONCLUSION

The course successfully equipped participants with foundational knowledge and practical skills in geo-spatial technologies, satellite systems and emerging tools such as AI for decision support. It enabled participants to analyse geospatial data for informed planning and management areas in areas including natural resources, infrastructure development, disaster management and public services, while emphasising international standards, open-source solutions and data governance. The course met its objectives and is recommended for wider participation across government departments to enhance efficiency, transparency and technology-driven public administration.

4. ACKNOWLEDGEMENT

- **The Government of Brunei Darussalam** through the Ministry of Development for the approval and support to attend the course.
- **The Government of India** for sponsoring the participants and giving the opportunity to learn about the development and use of geo-informatics and space technology such as the use of satellite technology, Geographical Information System (GIS), Artificial Intelligence (AI), Internet of Things (IoT) and drones used by the Indian state in public administration management (to support policy preparation, disaster management and the environment) and logistical information (such as measurement information and infrastructure development).
- **High Commission of India in Brunei Darussalam** for providing assistance during the course registration processes and supporting visa application as well as flight arrangements.
- **Bhaskaracharya National Institute for Space Applications and Geo-Informatics (BISAG-N)**, Ministry of Electronics and Information Technology (MeitY) for their hospitality and organising the course very comprehensively.

Indian Technical and Economic Cooperation (ITEC) Course on the Application of Geo-Informatics and Space Technology in Public Administration and Logistics

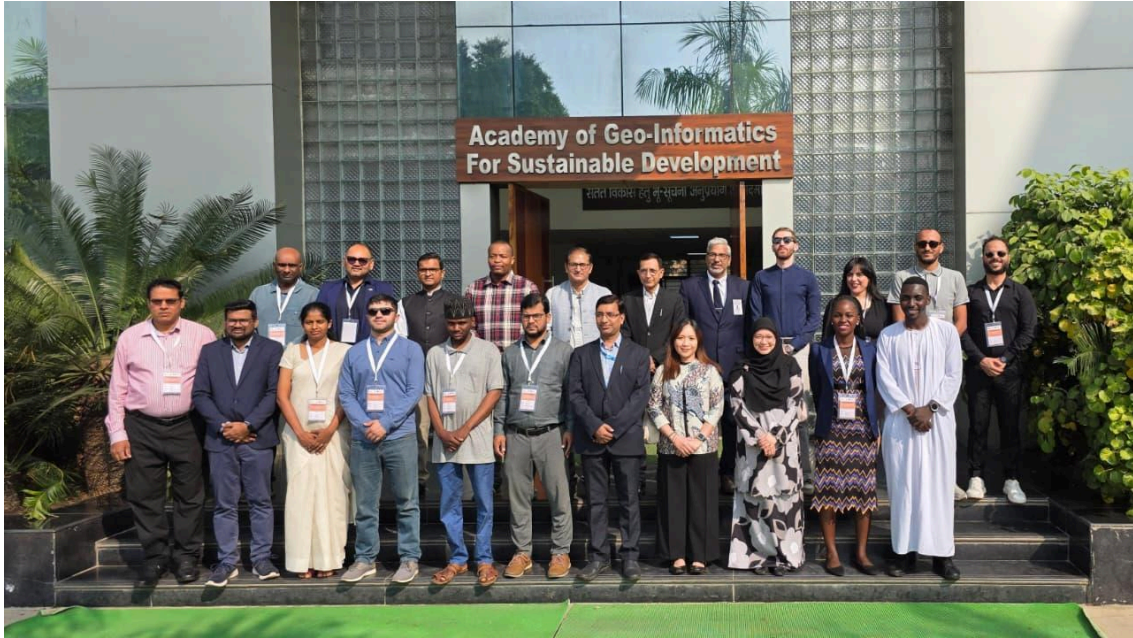


Figure 1: *Course Participants in a Group Photo with BISAG-N Officials*