



গড়গাঁও মহাবিদ্যালয়
GARGAON COLLEGE

Gargaon College, Sivasagar, Assam

Certificate Course in Geo-informatics

By

Department of Geography

Course Objective: The basic objective of this course is enhancing the ability of learner in latest GIS and remote sensing. The course is designed to deliver both theoretical knowledge and practical training of GIS (Geographic Information System), remote sensing and GPS in different fields.

Course content:

Unit	Content
Unit 1: Fundamentals of Geographic Information System	<ol style="list-style-type: none"> 1. Introduction to GIS; Components of GIS 2. Raster and vector data, spatial and non spatial data and data base management system (DBMS) 3. Raster and vector data Formats
Unit 2: Fundamentals of Remote sensing and Global positioning system	<ol style="list-style-type: none"> 1. History of remote sensing 2. principles of remote sensing , type of remote sensing, EMR, atmospheric window, platforms and sensors 3. Concept of resolution; Spatial, temporal, spectral and radiometric resolution 4. Global positioning system; history of GPS, segments and functioning of GPS 5. Application of GPS in different areas
Unit 3: Practical of GIS/Remote sensing	<ol style="list-style-type: none"> 1. Geo-referencing & Projection 2. Digitization : Vector data creation using QGIS and Google earth 3. Editing , Data insertion, Labelling , Designing vector data for map layout 4. Integration of GPS and Excel data with QGIS 5. Generation of DEM from topographical sheet , SRTM, CartoDEM and Google earth 6. Extraction of drainage basin and streams using Carto DEM and SRTM data 7. Downloading , subset, merge of different satellite data /imageries 8. Land use land cover classification using satellite image/Remote sensing data 9. Calculation and computation of NDVI, NDBI and LST Using Different satellite imageries.
Unit 4: Project /Dissertation	Project/dissertation (every student/candidate have to carry out a small project based on the topic assign by the course coordinator and same has to submitted in both hard and soft copy format to the department).

Course Outcome

The learner after the course will be able to handle different type of data base for creation of final map outputs. The learner will be acquaint/ engage themselves with different type of practical work leading to solve day to day activities.

Scope of the Course: the Geospatial technology has diverse field of application ranging from forestry, land use, urban planning, water resources, and disaster risk reduction to mineral resource exploration. Thus the learner after the course would have ample scope of work in Town and country planning organization (TCPO), National Institute of Rural Development & Panchayati Raj (NIRD-PR), District and State Disaster Management Authority, Assam Remote Sensing Application Centre (ARSEC), Rain forest Research Institute (RFRI), National Atlas and Thematic Mapping Organization (NATMO), Central water Commission (CWC) and Different academic and Research Institutions etc.

Course Curriculum

1	Course Duration	1 Months (4 weeks) , the course is designed for a total 30 hours
2	Mode of the Course	Offline (Lab based)
3	Intake Capacity	30
4	Course fee	Rs 250/-
5	Structure of the Course	Theory & Practical
6	Eligibility criteria	Candidate having 10+2 in any discipline from a recognised college/ school are eligible to apply for this programme

Total students enrolled in Certificate Course against total number of students in the Department of Geography, Gargaon College

Sl. No	Year	Total Students in the Department	Total Students in Certificate Course	Ratio of Total students against total enrolled in Certificate course
1	2022	150	47	3.2
2	2023	155	-	

(Dr. D.K.Deka)
HoD, Geography

Dr. Dilip Kumar Deka
Associate Professor & HoD
Dept. of Geography
Gargaon College

Flyer

About the Course

Geoinformatics is the backbone of modern era of map making and spatial analysis. It merges GIS, remote sensing and GPS technology and enables learners to enhance their understanding and skills in the field of spatial science.

A one month certificate (add-on) course offered by Gargaon College becomes an initiative to upgrade the theoretical and practical skills of the learners in the following spheres.

- Conceptual part of Geographical Information System (GIS), remote sensing and GPS (Global Positioning System)
- Hands of exercises using open source GIS software:QGIS
- Integration of Google Earth, satellite images and ground-based surveys for map making and spatial analysis

Future Prospects

Students after successful completion of course would have ample scope in the following Departments.

- District Disaster Management Authority (DDMA).
- National Institute of Rural Development (NIRD)
- Oil India Limited
- Research institutions / Consultancies firms

Department of Geography
Gargaon College
Simaluguri, Sivasagar
Add-on
Certificate Course
On
Geoinformatics
Approved by
Dibrugarh University

Course Duration: 1 month (30 hours)
Special classes (Theory/practical) by Experts

Eligibility Criteria: 10+2 (Any Stream)

Intake Capacity
40 seats (on first come first serve basis)

Course Fee- Rs. 250 only

Tentative month of Admission
April, 2022

Register using the Following link
<https://forms.gle/fjGWzxLLgQ1vSRFL6>

For Details Contact

Course Coordinator
Dr. Rituraj Neog
Department of Geography
Contact No.8638163523
Email:geographygargaonclg21@gmail.com

**List of Student admitted to the Certificate Course in Geo-informatics, Department of
Geography, Gargaon College**

Sl.No	Name	Semester	College/ Institution
1	Dipankar Dutta	6th	Gargaon college
2	Papu Panging	6th	Gargaon College
3	Abhijit Sonowal	6th	Gargaon college
4	Nayana Bor Gohain	6th	Gargaon College , Simaluguri
5	Jikmik rupali junak	6th	Gargaon college
6	Kaustav Moni Gogoi	6th	Gargaon college
7	Jugasmita gogoi	6th	Gargaon college
8	Lupashree Gogoi	6th	Gargaon College
9	Jikmik rupali junak	6th	Gargaon college
10	Kalyan Jyoti Saikia	6th	Gargaon College
11	Nilutpal Borthakur	6th	Gargaon college
12	Ujjwal Bezbaruah	6th	Gargaon college
13	Trina Arandhara	6th	Gargaon College
14	Abhijeet Gogoi	6th	Gargaon College
15	Pronobjyoti Dihingia	6th	Gargaon College
16	Nitu Borah	6th	Gargaon College
17	Pronobjyoti Dihingia	6th	Gargaon College
18	Ayoushmita Devi	6th	Gorgaon college
19	Tanushree Devi Kashyap	6th	Gorgaon college
20	Parchi Borgohain	6th	Gargaon college, Simoluguri
21	Anshuman Hazarika	6th	Gargaon college
22	Junmoni Manki	6th	Gargaon college
23	Sony Begum	6th	GARGAON COLLEGE
24	Ruksana Hazarika	6th	Gargaon college
25	Sony Begum	6th	GARGAON COLLEGE
26	Gargi phukon	6th	Gargaon college , simaluguri
27	Debojit Borah	6th	Gargaon College
28	Bitupon sahu	6th	Gargaon college
29	Kabita Baruah	6th	Gargaon college
30	Achyut Krishna Arandhara	6th	Gargaon College
31	Jitukon gogoi	6th	Gargaon college
32	Dipak mech	6th	Gargaon collage
33	Deepa Phukon	6th	Gargaon College
35	Mayuri bhattacharjee	6th	Gargaon college , simaluguri
36	Banjusna hati boruah	2nd	Gargaon college
37	Prity Sonowal	2nd	Gargaon college

38	Kaustav Moni Gogoi	6th	Gargaon college
39	Banashree Sonowal	6th	Gargaon college
40	Parishmita Gogoi	2nd	Gargaon college
41	Pinki Saikia	2nd	Gargaon college
42	Anusmrita Dutta	2nd	Gargaon college
43	Neha Borah	6th	Gargaon collage
44	Anusmrita dutta	2nd	Gargaon college
46	Raphija Moran	2nd	Gargaon college
47	Jenishmita Saikia	2nd	Gargaon College



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