



Post Graduate Diploma in Geoinformatics

Conducted Jointly by

Geoinformatics and Remote Sensing Cell

Department of Science and Technology and Biotechnology

Government of West Bengal

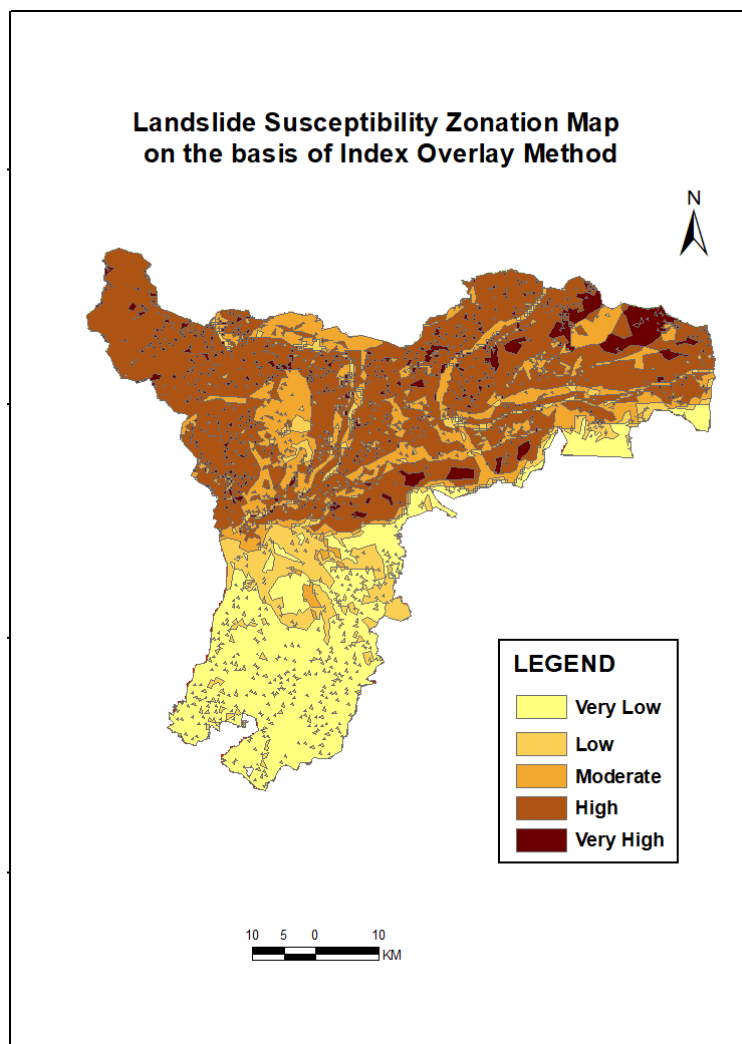
through

West Bengal State Council of Science & Technology

and



Maulana Abul Kalam Azad university of Technolgy



Prepared by the students of PG Diploma in Geoinformatics Course

Importance of Geoinformatics

In recent years the application of Geographical Information System (GIS) with input from Remote Sensing (RS) is becoming an essential tool for planners and decision makers. The use of GIS as a tool for integrating several themes, apparently uncorrelated at times, to arrive at a fruitful decision or for creating a model for an would be scenario or visualize “what happens if” situation has been helping decision makers to meet a challenge in solving many problems like flood mapping, rural development, watershed modeling and management, finding drinking water resources, development of new roads in hilly terrain, disaster management etc.

Geoinformatics & Remote Sensing Cell

The Geoinformatics & Remote Sensing Cell, Science and Technology and Biotechnology, Government of West Bengal has established its credential as a pioneer organization in generating RS & GIS database for spatial information in various scales for land, water resources as well as various applications for developmental planning activities. The Department has also undertaken several projects at National and State level to meet the needs of the various National level and State level Stakeholders. It has an energetic group of young specialists in the field of GIS and Remote Sensing and also has a large archive of data and satellite imageries.

Opportunities

There is a growing need to have trained manpower to deal with the GIS and spatial data collection, assimilation and analysis. Besides many Industries, Government and private organizations are recruiting persons with knowledge in Geoinformatics in various fields like urban planning, watershed management, forestry, water resource management. Geoinformatics & RS Cell, Science and Technology and Biotechnology, Government of West Bengal implements number of projects on RS & GIS. PG Diploma in Geoinformatics is a desirable qualification for recruitment of project scientists for these projects however essential qualifications may vary from project to project.

About Course

Keeping this in view, Department of Science and Technology and Biotechnology , Government of West Bengal is offering one year PG Diploma Course in Geoinformatics since 2008 for human resource development in this field. The Course has been upgraded into a Combined One Year PG Diploma/ Two Years M.Tech. in Geoinformatics course in collaboration with MAKAUT since last year i.e 2019.The course covers use of state-of-the-art technologies in application fields of Remote Sensing, GIS and GPS.

Students are provided intensive hands-on training on various aspects GIS, Digital Image Processing software, together with GPS, DGPS and Digital Photogrammetry etc. The applications of programming languages, Database Management Systems, Web Technology in Geoinformatics are important components of the course.

Course Content (Duration 1 year)

First Semester (6 months)

1. Principles of Remote Sensing and Photogrammetry
2. Principles of Geographic Information Systems (GIS)
3. Basics of Global Navigation Satellite System (GNSS) and Cartography & Digital Mapping
4. Mathematical Methods and Scientific Computing for Geospatial Data Analysis
5. Recent Trends in Geoinformatics: Machine Learning and Big Data)
6. Audit Course
7. Remote Sensing and Photogrammetry Lab
8. GIS Lab
9. Basics of GNSS, Cartography & Digital Mapping Lab
10. Web Technology Lab
11. Programming Lab

Second Semester (6 months)

- | | |
|---|---|
| 12. Spatial Data Modeling | 18. Database Analysis Lab |
| 13. Satellite Image Processing | 19. Satellite Image Processing Lab |
| 14. Program Elective I – Applications of Geoinformatics/
Advanced Remote Sensing Techniques | 20. Laboratory 4 (Based on Elective I) |
| 15. Program Elective II –
Geoinformatics in Disaster Management /
Geoinformatics in Water Resources Management/
Geoinformatics in Agriculture/
Geoinformatics in Urban planning/
Geoinformatics in Geotechnical Engineering/
Geoinformatics in Environmental Management | 21. Laboratory 4 (Based on Elective II) |
| 16. Audit Course 1 | 22. Project Work |
| 17. Audit Course 2 | |

Course Fee

Per Semester course fee is Rs. 22,500/- and the total course fee for the two-Semester course is Rs. 45,000/-

Qualification & Eligibility Criteria

1. Students with a Master's degree from a recognized university/institute in Physics, Mathematics, Geology, Geophysics, Geography, Agriculture, Atmospheric Science, RS&GIS, Environmental Science, Botany, Forestry, Marine Science, Computer Application, Bachelor's degree from a recognized university/institute in Civil Engineering, Computer Science, Information Technology, Mining Engineering, Surveying, Architecture, Regional Planning, Electronics and Communication or equivalent will be considered for admission to the one year PG Diploma course in Geoinformatics.
2. A student should secure at least a minimum of 55% (50% for SC/ST) marks in the Master's level or in the Bachelor's degree in engineering and with at least two first classes/ divisions or 60% (55% for SC/ST) in the master's/ pre-master's level of examinations.

Admission Procedure

1. The selection will be made on the basis of weightage of marks on Admission Test (60%) and Academic Background (40%).
2. The Admission Test will be held **Online** for 60 marks. The Question Paper of MCQ type will be divided into four groups covering basic knowledge on Remote Sensing & GIS, Physics, Earth Sciences and Mathematics, and students have to answer from any three groups.

Advertisement, Information Brochure & Application Form

1. Advertisement for admission into this course will be made through one daily Newspaper and in the Departmental website www.wbdstbt.in.
2. Information Brochure along with application form may be downloaded from the Departmental website www.wbdstbt.in. Filled-in Application Form with attested copies of all testimonials should be submitted as a single PDF file through email **to the mail id: wbscst.rstrg@gmail.com**.
3. Candidates appearing in the qualifying examination in 2020 may also apply. In such a circumstance, last published result of the qualifying degree will be considered for calculation of academic score for admission. Admission will be made provisional for candidates appearing in the final examination in the year of admission. In case, mark-sheet of the qualifying examination is not submitted by the end of December of the ongoing academic session, or the candidate fails to secure the qualifying marks for the admission, the admission will be cancelled without any refund of fees.

4. Reservations of seats -- as per rule.
5. In all cases the decision of the Competent Authority of this Department will be final.

Cancellation of candidature

Submission of false / incorrect information or suppression of facts will summarily lead to cancellation of candidature at any stage even being selected/ admitted. At any stage, if a Candidate is found to be not eligible, his/ her Candidature may be cancelled.

Sessions & Classes for Session 2020-21

1. The academic session will start following the academic calendar decided by the state government.
2. In normal situation the theoretical classes will be held tentatively from 11:00 AM to 2:00 PM and the lab classes will be held from 2:30 PM to 5:30 PM. The course will be organized online till normalcy is restored.

Important Dates

Last Date of receipt of filled-in Application Form	: 23 rd November, 2020 by 4:00 pm
Admission Test	: 25 th Nov., 2020 from 12:30 pm
Tentative date of publication of Result	: 4 th December, 2020
Admission from Merit List	: By 8 th December, 2020
Admission from Waiting List	: By 11 th December, 2020
Commencement of Classes	: By 14 st December, 2020

Names of selected candidates will be displayed in the Departmental website only. No individual letters will be sent.

The filled in application form must reach through email to the email id: wbscst.rstrg@gmail.com on or before 23rd November, 2020.

For any query, send email to: wbscst.rstrg@gmail.com

Note:

Self-Attested photocopies of mark sheets of Class X, Class XII, Graduation, Post-Graduation (if available) are to be enclosed (appearing candidates should submit the last published result of the qualifying examination). Originals are to be produced at the time of joining. Application form completed in all respects should be submitted before the last date of submission of forms as specified. Notwithstanding anything expressed in this Brochure or in application form, the decision of the Competent Authority on all matters of admission will be treated as final.

*Admission Test: All applicants will be allowed to appear in the admission Test. However if any candidate does not have minimum eligibility criteria he/ she will not be considered during preparation of merit list.

Important Points at a glance:

- Last date for applying is 23rd November, 2020 BY 4:00 PM
- No application fees
- All applicants will be allowed to appear for the Online Admission Test. In case candidate who has appeared for exam is found not having adequate academic qualification as mentioned in the eligibility criteria will be summarily rejected.
- The online exam details (link) will be shared in the website in due course.
- Please retain a copy of the admit card with you as it might be required to be uploaded during the exam.

Geoinformatics and Remote Sensing Cell
Department of Science and Technology and Biotechnology
Government of West Bengal
P.G. Diploma in Geoinformatics

Form No.

Received on

APPLICATION FORM FOR ADMISSION

Session: 2020 - 21

Last date for receipt of filled in application form: by 23rd November, 2020

1. Name of the candidate:

2. Name of Father/Mother/Guardian:

3. Date of Birth:

4. Gender : Male Female Others

5. Caste: General/SC/ST/OBC-A/OBC-B

6. Educational Qualifications

Examination	Council/ University	Year of passing	Subjects	Percentage/ Grade *

- (i) Attach extra sheet, if necessary.
(ii) Enclose self attested copies of mark sheets of examinations passed.

7. Give details about Mathematics background: (Mention studied up to what level)

8. Previous courses on RS/GIS attended at any other organization:

9. Why are you interested in this course? (Within 50 words)

10. Address for communication

City: _____ Pin: _____ State: _____

Phone: _____ Email: _____



11. Declaration: I hereby declare that all the information given by me in this application is true and correct to the best of my knowledge and belief. I also note that if any of the above statements are found to be incorrect or false or any information or particulars have been suppressed or omitted there from, I am liable to be disqualified. In the event of information being found incorrect or misleading, my candidature shall be liable to cancellation at any time and I shall not be entitled to get refund of any fee paid by me.

Signature of Candidate: _____ Date: _____ Place : _____

12. Undertaking by the Candidate:

I shall comply with the West Bengal State Council of Science & Technology (Council) rules, standards and instructions for student behaviour as notified from time to time. I hereby waive and release all claims against the Council representatives at a time when I am not under the direct supervision of the Council or its representatives or arising out of my failure to remain under such supervision or to comply with such rules, standards and instructions, and I agree to indemnify the Council and its representatives against any consequences thereof. I agree that the Council shall have the right to enforce appropriate standards of conduct and that it may at any time terminate my participation in the Council's programme for failure to maintain these standards or for any actions or conduct which the Council considers to be incompatible with the interest, harmony, comfort and welfare of other students. All reference herein to the parents of the applicant shall include the legal guardian or other adult responsible for the applicant. I agree that in case of any legal dispute concerning admission procedures, the same shall be subject to exclusive jurisdiction of Courts at Kolkata, This agreement shall take effect from the time I am accepted by and confirmed in enrollment in the Course.

Signature of Candidate: _____ Date: _____ Place : _____

13. Declaration by the Parent /Guardian:

I certify that I am the parent or legal guardian of the above applicant and that I have read the foregoing agreement. I hereby guarantee to the Council payment of all fees and other sums due at any time to the Council by the applicant. I agree that in case of any legal dispute concerning admission procedures, the same shall be subject to exclusive Jurisdiction of Courts at Kolkata.

Signature of Parent/ Legal Guardian: _____ Date: _____ Place: _____

Occupation of Signatory: _____ Relationship with the candidate: _____

Place: _____ Date: _____

Notwithstanding anything expressed in the Brochure or in application form, the decision of the competent authority of this Department on all matters of admission will be treated as final.

Applicants are requested to follow our website regularly regarding information about Admission Test, List of Selected Candidates, Waiting List Candidates and any kind of Information.

-----FOR OFFICE USE ONLY-----

Admit Card
PG DIPLOMA IN GEOINFORMATICS
Geoinformatics and Remote Sensing Cell
Department of Science and Technology and Biotechnology
Govt. of West Bengal

Applicant's Copy

Admission Test

Name of the Candidate : _____

Father's/ Guardian's Name: _____

Address: _____

Date of Birth: _____ (dd/mm/year)

Date & Time of Test: 25th November, 2020, 12:30 PM - 2:00 PM

Paste your
passport size
photograph and
sign across it
(do not sign
across the face)

Signature of the Candidate

- Note: 1. Candidates are requested to fill in the Admit Card and submit one copy with the Application Form and keep one copy with him/her
2. The applicant's copy of the admit card is to be retained by the applicant and the Office copy of the admit card is to be sent with the application form.
3. Candidates are requested to keep the Admit Card along with any original photo I/D card during the Admission Test.
4. All applicants are allowed to appear in the admission test. However, selection of candidates will be done from the eligible candidates only.

Office Copy

Admit Card
PG DIPLOMA IN GEOINFORMATICS
Geoinformatics and Remote Sensing Cell
Department of Science and Technology and Biotechnology
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