



# জাহাঙ্গীরনগর বিশ্ববিদ্যালয়

সাভার, ঢাকা-১৩৪২

## Master of Science (MSc) in Remote Sensing and GIS Amended Admission Announcement Regular Masters Program, Academic Session 2021-2022

Jahangirnagar University has started the first postgraduate level program on Remote Sensing and GIS in Bangladesh aiming to science-policy integration towards sustainability and resilience through technical partnerships with national and international agencies. Jahangirnagar University, in this connection, is pleased to announce admission of first batch of students for Master of Science (MSc) degree (36 credit hours-1 year) in the 2021-2022 academic session. Students are entitled to receive all services as regular residential students of the university. International students are also encouraged to apply.

### Date to Remember

Application Opens	:	09 August, 2021
Application Ends	:	18 August, 2021
Admission Test (Online)	:	22 August, 2021 at 11AM-12PM
Viva-Voce (Online)	:	25,26 August, 2021
Publication of Final Result	:	29 August, 2021
Admission from Merit List	:	05-10 September, 2021
Admission from Waiting List	:	15-18 September, 2021

### 1. Key Features of the Program

- Degree Awarded : **Master of Science (MSc) in Remote Sensing and GIS**
- Course Duration : One year (Two Semesters- Six Month duration semester)
- Total Credit : 36
- Class Time** : Regular (**Sunday-Thursday**)
- Faculty Members : Highly qualified faculty members with strong teaching and research background.
- Environment : Fully furnished class rooms equipped with multimedia & Wi-Fi facilities.

### 2. Admission Requirements

A candidate must possess at least a CGPA of 3.00 on a scale of 4.00 or 55% marks equivalent in 4 years bachelor degree from disciplines such as: Civil Engineering, Geography, Environmental Sciences, Architecture, Land Management, Disaster Management, Geology, Forestry, Oceanography, Urban and Regional Planning, Ecology, Soil Science, Agriculture (Agronomy, Agri. Engineering, Agroforestry & Environment), IIT, EEE, CSE, Physics, Mathematics, Statistics, Archeology etc. The age limit of the candidates must be below thirty (Age will be counted against the admission announcement date).

### **3. Admission Test**

The MCQ (Multiple Choice Questions) based one hour admission test will be held online. The test will include subjects such as Bangla (10), English (10), General Knowledge (35), Science 35 (Math 10, Physics 10, ICT 15). Total marks in MCQ examination will be 90 and 0.25 marks will be deducted for each wrong answer. All candidates will have to appear in a Viva Voce (10 marks). Jahangirnagar University authority reserves all the rights to change any matter related to admission test/admission process/policy.

### **5. Application Procedure**

Application can be done only in Online.

#### **Online Application Process**

- a. First, visit the website [irs.iitju.edu.bd](http://irs.iitju.edu.bd) and read the instruction carefully.
- b. Click **Online Application** and then fill up the online application form.

After successfully completing the application form, you will get a **Bill No.** through SMS to your given mobile number. Please keep the Bill No. safely.

Now make a payment of **Tk. 1,000/-** as application fee from your agent's **Dutch Bangla**

**biller ID 2920** Mobile Banking account to the process is as **Follows:**

- c. Using your/agent's Dutch Bangla Mobile Banking Account, dial \*322#
- d. From the menu appeared, select Bill Pay
  - i. If you want to make payment using your own ROCKET account, then select **Self**.
  - ii. If you want to make payment using agent's ROCKET account, then select Other and then Enter Payer Mobile No. Enter 0 as (Other)
- e. Enter **2920** as **Biller ID**
- f. Enter your **Bill Number** (which was sent to you via SMS)
- g. Enter **1000** as Amount
- h. Enter your/agent's mobile banking **PIN**
- i. Collect **Txnid** (TRANSACTION ID) from the return SMS

To download Admit Card, visit the website [irs.iitju.edu.bd](http://irs.iitju.edu.bd) again.

- j. Click Admit Card Download.
- k. Log in with your Bill No. and **Txnid** (Transaction ID).
- l. Upload your scanned signature (300 by 80 pixel) and passport size photograph (300 by 300 pixel).
- m. After submission, download/print your admit card.

Keep your Admit Card safely and bring it on the day of admission test.

## 6. The Program

The Master's Degree will be extended over a period of one year divided into two consecutive semesters (Six month each). The first semester courses will be compulsory for all the students. In the second semester, students will have to choose three courses including two lab courses from the list of courses offered and should perform research works/thesis. The students in this semester may visit partner national and international institutions in reference to his work for limited durations and the terms and conditions in this regard will be determined by the academic supervisor/supervisors and the partnership agreements signed between the institutions. However, the title of the degree to be conferred will be as follows.

### **“Master of Science (MSc) in Remote Sensing and GIS”**

- After completion of a particular semester, there will be a minimum of 2 weeks transition time to start the next semester. All necessary preparations to start a new semester should be finished during this transition time.
- The duration of a semester will be of 20 weeks.
- A semester will be segmented into class-weeks, preparatory leave and semester-end examination.
- For 3 credit course, 3 lectures have to be offered in a week with a total of 36 lectures. Time distribution for completing a semester will be as follows.

	<b>Segment</b>	<b>Period</b>	<b>Length</b>
i.	Class-weeks	1 <sup>st</sup> week – 15 <sup>th</sup> week	15 weeks
ii.	Preparatory leave before the semester-end examination	16 <sup>th</sup> week and 17 <sup>th</sup> week	02 weeks
iii.	Semester end examination	18 <sup>th</sup> week – 20 <sup>th</sup> week	03 weeks
Total			20 weeks

- The students of MSc in Remote Sensing and GIS will have to complete 36 Credits.
- Each course shall carry 100 marks.
- A candidate for Master's Degree must complete all the requirements for the degree within the calendar year from the date of his/her first admission.

## SCHEDULE OF COURSES

No.	Item	Class Hours	Credits	Ma	Remark
<b>Semester I: Compulsory Courses</b>					
IRS-501	Principles of Remote Sensing	48	3	100	All compulsory courses
IRS -502	Fundamentals of Geographic Information Systems	48	3	100	
IRS -503	Introduction to Earth and Environmental Systems	48	3	100	
IRS -504	Mathematics in Remote Sensing	48	3	100	
IRS -505	Research Methodology	48	3	100	
IRS -506	Fundamental of Electronics	48	3	100	
IRS -507	VIVA		1		
<b>First Semester credit hours</b>			<b>19</b>		
<b>Semester II: Optional Courses and Research Works/ Thesis</b>					
IRS -508	Statistics in Remote Sensing	48	3		Students will have to choose three courses including two lab courses
IRS -509	Programming	48	3		
IRS -510	Advanced Geographic Information Systems (Lab)	48	3		
IRS -511	Advanced Remote Sensing (Lab)	48	3		
IRS -512	Data Mining for Remote Sensing	48	3		
IRS -513	Advanced Electronics (Lab)	48	3		
<b>Research work/Thesis</b>					
IRS-514-A	Research Proposal and Field Work		3		Compulsory
IRS-514-B	Thesis		3		
IRS-514-C	Final defense (VIVA)		2		
<b>2<sup>nd</sup> Semester credit hours</b>			<b>17</b>		
<b>Total credit hours</b>			<b>36</b>		

### 7. Course Assessment

Assessment of a student in a course shall be based on marks obtained in the course-end examination, class assessments and attendance. For theoretical courses, at least two tutorials have to be taken. The distribution of marks for each theoretical course will be as follows.

Components	Weight [Marks]
Class Attendance	10
Mid-Term Examinations	20
Case Study/Assignment/ Presentation/Quiz Test /Class Test	20
Final Examinations	50
<b>Total</b>	<b>100</b>

## **8. Assessment of the thesis**

- After completion of the 28 credit hours course work in first two semesters, the students will have to conduct and submit a thesis of 8 credit hours on the approved title in partial fulfillment of the requirements for the degree of Master of Science (MSc) in Remote Sensing and GIS.
- Research work for a thesis shall be carried out under the supervision of a full-time faculty member of the Institute. After receiving a written application from each student, the academic committee (AC) shall finalize the placement of students for thesis and nominate supervisor. A co-supervisor from outside the Institute/University may be appointed. The tentative research proposal of the thesis and the supervisor and co-supervisor (if any) shall be approved by the AC before the completion of course work requirements of the student concerned.
- The student shall make a proposal presentation in the 2<sup>nd</sup> semester in order to obtain the approval of the research topic.
- For assessment, two external expert members (nominated by AC) will evaluate the thesis.
- Every student shall submit to the Institute with the approval letter from his/her supervisor (Attachment 1) for submission, a number of typewritten copies of his/her thesis in the approved format on or before a date to be fixed by the AC.
- The student shall certify (Attachment 2) that the research work was done by his/her and that the same work has not been submitted elsewhere for any degree or award (except for publication).
- Every student submitting a thesis report shall be required to appear at an oral examination, on a date or dates fixed by the AC and must satisfy the examiners that he/she is capable of intelligently applying the results of this research to the solution of problem, in undertaking independent work, and also afford evidence of satisfactory knowledge related to the theory and technique used in his research work.

## **9. Semester end Examination**

- The duration of the course end examinations shall be 3 hours for each three-credit-hours theoretical course.
- In the course end examination for theoretical courses, there should be a choice of questions to be answered e.g. 5 questions out of 7 questions.

The total numerical marks obtained by a student in each theoretical course will be converted into letter grades. There shall be 11 letter grades that may be assigned to evaluate course-performances and other works. The letter grades and corresponding grade points are as follows.

<b>Numerical Grade (% of Marks)</b>	<b>Letter Grade</b>	<b>Grade Point</b>
80% and above	A+	4.00
75% to less than 80%	A	3.75
70% to less than 75%	A-	3.50
65% to less than 70%	B+	3.25
60% to less than 65%	B	3.00
55% to less than 60%	B-	2.75
50% to less than 55%	C+	2.50
45% to less than 50%	C	2.25
40% to less than 45%	D	2.00
Less than 40%	F	0.00
Incomplete	I	0.00

#### **10. Earned Credits/Qualifying Marks/Repetitions or improvements**

- The courses in which a student will obtain “D” or a higher grade shall only be counted as credits earned by him/her. Other grades shall not be counted for Grade Point Average (GPA).
- If a student obtains “F” grade in any course in any semester, s/he shall have to repeat the course, provided that s/he gets at least 2.75 GPA in that semester. Maximums allowed “F” grades in a particular semester are two. If a student gets more than 2 “F” grades in the same semester, s/he needs to repeat the whole semester.
- If a student obtains a grade higher than “F” in a course and also obtains 2.75 GPA in that semester, s/he shall not be allowed to repeat that course for the purpose of grade improvement.
- A student shall withdraw a course within two working weeks of the commencement of the semester; otherwise, his/her grade in that course shall be recorded as ‘F’.

#### **11. Calculation of GPA**

Grade Point Average (GPA) is the weighted average of the grade points obtained in all the courses passed by a student. For example, if a student passes five courses in a semester having credits of C1, C2, C3, C4, and C5 and his/her grade points in these courses are G1, G2, G3, G4, and G5, respectively, then,

$$GPA = \frac{\sum_{i=1}^5 C_i G_i}{\sum_{i=1}^5 C_i}$$

### A numerical example

Suppose a student has passed five courses in a semester and obtained the following grades:

Course Code	Credit	Letter Grade	Grade Points
IRS 501	3	A+	4.00
IRS 502	3	C+	2.75
IRS 503	3	D	3.50
IRS 504	3	B	3.00
IRS 505	3	B	3.00

Then his/her GPA for the semester will be computed as follows:

$$GPA = \frac{((3 \times 4.00) + (3 \times 2.75) + (3 \times 3.50) + (3 \times 3.00) + (3 \times 3.00))}{(3 + 3 + 3 + 3 + 3)}$$
$$= 3.25$$

Cumulative Grade Point Average (CGPA) is calculated by averaging the GPAs secured in two successive semesters. Total credit in each semester will be used as weights for the calculation as shown in the following example:

Semester	GPA	Credit
1st Year 1st Semester	4.0	19
1st Year 2nd Semester	3.0	17

$$CGPA = \frac{(4.00 \times 19) + (3.00 \times 17)}{36} = 3.47$$

### **12. Class Attendance**

A student must have 60% class attendance to qualify to sit for the mid term and semester final examination. The basis for awarding marks for class attendance will be as follows:

Class Attendance	Allocated Marks
90% and above	100%
85% to less than 90%	90%
80% to less than 85%	80%
75% to less than 80%	70%
70% to less than 75%	60%
65% to less than 70%	50%
60% to less than 65%	40%
Less than 60%	0%

### **13. Irregular Examination**

A student who fails to fulfill the degree requirements within two consecutive semesters from the date of his/her enrolment in the program will be treated as an irregular student.

### **14. Time limit**

No student shall be permitted to continue as a Master of Science (MSc) Degree candidate

beyond the end of three academic years of his/her first admission into the Master's program.

#### **15. The degree to be Awarded**

A student who has secured a minimum CGPA of 2.50 after successful completion semesters will be awarded a degree of Master of Science (MSc) Degree (12 months) in Remote Sensing and GIS.

#### **16. Year of Degree Awarded**

The results of a candidate for one-year Master of Science (MSc) Degree shall be awarded in the year in which s/he fulfills the requirements for the degree.

#### **17. Conducting Examinations and Examination Offence**

Ordinance Pertaining to Rules for Conducting Examinations and Examinations Offences and Discipline 2003 of Jahangirnagar University will be followed in conducting examinations and dealing with examination offenses.

#### **19. Residential Facility (Hall Attachment)**

Students will get residential facility as per the university rules in the student's dormitory.

#### **20. Resolving Special Issues**

Any case which is not covered or clearly mentioned in this ordinance will be dealt on the basis of Examination Ordinance of Jahangirnagar University