



DEPARTMENT OF GEOGRAPHY

EGRA SARADA SHASHI BHUSAN COLLEGE

(Reaccredited by NAAC with - 'B' Grade with a CGPA of 2.32)

P.O.+P.S. - Egra, Dist. - Purba Medinipur, West Bengal, Pin - 721429



College Website : www.egrassbcollege.ac.in

College E-mail : info@egrassbcollege.ac.in

College Phone No.: 03220-244073/245557

Departmental E-mail(s):

geographydept12345@gmail.com

geography@egrassbcollege.ac.in

egrassbgeodept@gmail.com

Departmental Phone No.: 03220-245110

REPORT ON

SIX-MONTH CERTIFICATE COURSE ON AMIN SURVEY

*Organized by Department of Geography
Egra S.S.B. College, Egra, Purba Medinipur, Pin-721429*

- Title of the Course: Amin Survey
- Nature of the Course: Theory & Practical Classes
- Total Contact Hours: 51 hours
- Total Credits: 5
- Opening of registration process: 2nd January, 2023
- Closing of Registration Process: 19th January 2023
- Mode of Registration: Offline
- Date for Commencement of the Course: 20th January 2023
- Closing date of the course: 30th June 2023
- Duration: 6 Months
- Total No of Students Enrolled: 20 Students
- Registration Fees: Nil

Course Coordinator:

Dr. Dipak Bisai, Associate Professor, Dept. of Geography, Egra SSB College

Internal Faculty/Surveyor/Expert involved:

Mr. Prosenjit Murmu, Assistant Professor & Head, Dept. of Geography, Egra SSB College

Mr. Srikrishna Paul, SACT-II, Dept. of Geography, Egra SSB College

Mr. Soutik Kr. Das Mahapatra, SACT-II, Dept. of Geography, Egra SSB College

Mr. Ranjit Jana, SACT-II, Dept. of Geography, Egra SSB College

Mr. Debasish Das Mahapatra, SACT-I, Dept. of Geography, Egra SSB College

External Faculty/Surveyor/Expert involved:

Mr. Ramkrishna Bera, Surveyor

Objectives of the Course:

1. Offering a Certificate in Amin Survey Course that equips students with basic knowledge and skills in surveying techniques.
2. Preparing them for entry level positions as surveying assistant or Amin.
3. Ensuring that our Amin Survey tanning remains up to date with practical based quality of the participants.
4. Supporting students in their professional development by providing them with resources guidance and opportunity as surveyor.

Outcome of the Course:

Surveying is the means of determining the relative position of points and the relative distances for geographical space. It is very important in the field of Civil Engineering. We can find uses of surveying in all civil engineering projects. The objectives of surveying may vary depending on the type of project. After the completion of the course, the participants get knowledge and confidence to do the survey work in practical field. All internal faculty and one external guest faculty had entirely emphasis on this matter and our students are quite confident for this work. Any candidate can put their professional carrier by this supports.

EGRA SARADA SHASHI BHUSAN COLLEGE

(AFFILIATED TO VIDYANAGAR UNIVERSITY)



P.O. + P.S. – EGRA, DIST. - PURBA MEDINIPUR, PIN -721429, WEST BENGAL

REACCREDITED BY NAAC WITH 'B' GRADE WITH A CGPA OF 2.32

DRAFT SYLLABUS FOR

CERTIFICATE COURSE IN AMIN SURVEY

(A VENTURE OF SKILL DEVELOPMENT)

ORGANIZE BY

DEPARTMENT OF GEOGRAPHY

Course Name	AMIN SURVEY
Occupation	Bhumi Sahayak / Junior Amin / Amin (Apprentice)
Job Description	<ol style="list-style-type: none"> 1. Cadastral survey of a village using required survey instruments. 2. Boundary demarcation of plots applying land department procedures. 3. Survey of a proposed industrial site using Theodolite or other survey instruments. 4. Conducting project work on land acquisition of a proposed road/ industrial project. 5. Supervision of any construction or renovation work of Municipality / Corporation / Panchayat at execution stage (specifically project consists boundary demarcation, land acquisition if any etc.) 6. Preparation of contour of an area using leveling instruments. 7. To acquired knowledge on different official work related to land acquisition or boundary demarcation or cadastral survey in which land rules, regulation, land laws and conventional procedure of cadastral survey follows under state government land department
Trainees' Entry Qualification	Class 8 Pass + ITI (2 yrs.) with 2 years' experience, OR Class 10 Pass + ITI (1Yr) after class 10 with 1 year experience, OR Class 10 Pass + ITI (2 yrs.) after class 10, OR Class 10 Pass with 2 years' experience, OR Class 10 Pass and pursuing continuous regular schooling, OR 3 years diploma after class 10 or Class 12 Pass with 6 months experience.

Structure of Course:

Module No.	Outcome	Theory (Hrs.)	Practical (Hrs.)	Total (Hrs.)
1	Describe the responsibility of an AMIN	15	20	35
2	Perform Basic Technical Drafting Work, Conduct Leveling using dumpy level, leveling staff etc.	20	50	70
3	Measure distance by Chain & Tapes, Conduct closed Traverse survey with chain & Compass.	20	50	70
4	Perform Basic Surveying work.	20	50	70
5	Demonstrate Land Surveys (Revenue Survey) – area Measurement.	25	50	75
	Total	100	220	320

SYLLABUS

Module No. 1: AMIN

Outcomes: Describe the responsibility of an AMIN

Theory Content:

- 1.1. Introduction/Definition,
- 1.2. Responsibility of an AMIN,
- 1.3. Introduction to Mouza Map.
- 1.4. Agency under an AMIN recruited,
- 1.5. AMIN as Entrepreneur.

Practical Content:

1. Study of various rules and regulations related to Land Survey (cadastral survey) of various Govt. agencies.
2. Study of Mouza Map.

Module No. 2: Basic Technical Drafting Work

Outcomes: Perform Basic Technical Drafting Work

Theory Content:

- 2.1 Drawing Instruments,
- 2.2 Types of line.
- 2.3 Scale-plane and diagonal scale, R.F,
- 2.4 Geometrical construction (Polygon),
- 2.5 Orthographic projection - plan, elevation, side view of any object or structure.
- 2.6 Symbols used in Amin survey.

Practical Content:

1. Scale; Types of scale used in civil engineering drafting work.
2. R.F
3. Conversion of plot length into actual length in the field.
4. Draw plan, elevation, side view and sectional view of civil engineering objects.
5. Draw different symbols used in Amin survey

Module No. 3: Measurement of Distance

Outcomes: Measure distance by Chain & Tapes

Theory Content:

- 3.1 Direct measurement: Pacing, odometer, chaining.
- 3.2 Instruments for measuring distance: General concept of metric surveying chain, Gunter's chain, Revenue chain, Engineers' chain
- 3.3 Tapes- General concept of different Tapes i.e., Cloth or linen tape, metric woven metallic tape, metric steel tape, invar tape, synthetic tapes etc.
- 3.4 Instruments for marking station: General concept of pegs, ranging rods, offset rod, laths whites, plumb bob etc.
- 3.5 Ranging out survey lines- Procedure of direct and indirect ranging using ranging rod and line ranger.
- 3.6 Chaining a line
- 3.7 Errors in length due to incorrect chaining.
- 3.8 Electronic distance measurement (EDM).

Practical Content:

1. Demonstration of instruments for direct measurement like, odometer, chains, Electronic Measuring Wheels, Digital Tape Measures etc.
2. Demonstration and use of ranging rod, arrow, pegs, Cloth or linen tape, metric woven metallic tape, metric steel tape, invar tape, synthetic tapes etc.
3. Chaining a line by chain and tape.
4. Handling of electronic instruments for measuring distance.

Module No. 4: Basic Surveying

Outcomes: Perform Basic Surveying work.

Theory Content:

- 4.1. **Definition of plane Surveying,**
- 4.2. **Classification of Surveying based on** 1) nature of field: land surveys, marine or navigation surveys (only definition), astronomical surveys (only definition) 2) methods employed 3) instrument use,
- 4.3. **Sub-division of land surveys:** Topographical surveys, Cadastral surveys, City surveys and Engineering surveys,

- 4.4. **Sub division of engineering survey:** Reconnaissance surveys, preliminary surveys, and location surveys.
- 4.5. **Methods of locating a point:** Rectangular coordinates, Polar coordinates. control point.
- 4.6. **Measurements:** Linear and Angular measurements,
- 4.7. **Units of measurement-** Basic units of length, Basic units of area, Basic units of volume, conversion of basic units.
- 4.8. **Working of the surveyor:** Field work, office work, care and adjustments of instruments
- 4.9. Principles of chain and compass surveying
 - i) Instruments for setting out right angles: Setting right angle by tape.
 - ii) Classification of traverse: closed traverse, open traverse.
 - iii) The prismatic compass; method of using prismatic compass. Surveyor compass
 - iv) Bearings of lines; true meridians; magnetic meridian; arbitrary meridian; designation of bearing (WCB, RB); fore bearing, back bearing; calculation of included angle; local attraction;
 - v) Traversing with the chain and compass.
 - vi) Plotting of traverse.

Practical Content:

1. Identification of different type of instruments and accessories used in field surveying.
2. Storage of all the instruments and tools related to Surveying.
3. Maintenance of all the instruments and tools related to surveying.

Module No. 5: Land Surveys (Revenue Surveys)

Outcomes: Demonstrate Land Surveys (Revenue Survey) – area measurement.

Theory Content:

- 5.1 Objective of land surveys
- 5.2 preliminary principle of land surveys.
- 5.3 Name of Government agency conducting land surveys.
- 5.4 Definition of cadastral survey.
- 5.5 Purpose/aim/use/objective of cadastral survey.

5.6 Terms related to Cadastral Survey- Quadrilateral, Shikmi line, Partal Line , Goda, Chanda, Dhai, Khaka,Thoka line, Trijunction Pillar, Alamat Khatian,Khanapuri, Bhujarat, J.L Number, RS Map, C.S Map, L.R Map, Parcha.

5.7 General principles of measurement of an area of regular and irregular boundary

- i) Using instruments (Acre Comb, Planimeter, Digital Planimeter etc.)
- ii) Mathematical calculation (division into squares, the mid-ordinate rule, the average ordinate rule, the trapezoidal rule and Simpson's rule.)

5.8 Balancing of error in area measurement. (Ground measurement and Sheet measurement)

5.9 Definition and Objective of traverse.

5.10 Classification of traverse: closed, open traverse

5.11 Methods of traverse based on instrument use: (A) By Chain and compass, (B) By theodolite.

5.12 : Field work: Reconnaissance; marking stations; reference sketches; running survey lines.

5.13 Cross staff survey:

- Objective;
- General principles: i) right angled triangle method ii) trapezoid method.
- instrument: i) Cross staff ii) chain / tape iii) ranging rods iv) plumb bob v) Peg vi) arrow
- offsets

Practical Content:

1. Conducting Cadastral Survey of a small area.
2. Finding area of a plot from Mouza map using Acre Comb, Planimeter, Digital Planimeter and Mathematical relations.
3. Balancing of error in area measurement.

List of Tools, Equipment & materials needed for 20 Trainees:**A. Essential**

Sl. No	Instrument / Equipment	Number
1	Metric Chain (20m and 30m)	2 no's each
2	Engineering Chain	1
3	Gunter Chain	2
4	Tape (5m, 15m, 30m)	5 no's each
5	Cross staff	5
6	Prismatic Compass	5
7	Auto Level with accessories	5
8	Dumpy Level with accessories	2
8	Levelling Staff	5
9	Transit Vernier Theodolite with accessories	5
10	Acre comb	5
11	Planimeter	5
12	Ranging Rod	10
13	Wooden mallet	5
14	Wooden peg	50
15	Arrow	20
16	Sample Cadastral Map	1
17	Offset rod	5
18	Optical square	5
19	Leaser distance measure	3

B. Desirable

Sl. No	Instrument / Equipment	Number
1	Digital Theodolite with all accessories	1 set
2	Digital Planimeter	1
3	Total Station with all accessories	1 set



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geographydept12345@gmail.com

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egrassbgeodept@gmail.com

Departmental Phone No.: 03220-245110

CERTIFICATE COURSE: AMIN SURVEY
SYLLABUS DISTRIBUTION

Sl. No.	Faculty	Allotment
1	Dr. Dipak Bisai	Module: 4
2	Mr. Prosenjit Murmu	Module: 2
3	Mr. Srikrishna Paul	Module: 3
4	Mr. Soutik Das Mahapatra	Module: 1
5	Mr. Ramkrishna Bera	Module: 5

Course-Co-Ordinator



H.O.D.

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Dept. of Geography
Egra S.S.B. College

EGRA SARADA SHASHI BHUSAN COLLEGE

ESTD. : 1968



(Reaccredited by NAAC with – 'B' Grade with a CGPA of 2.32)

Post – Egra : Dist – PurbaMedinipur (West Bengal) : Pin – 721429.

President : Mr. Tarun Kumar Maity, MLA, W. B.

Principal : Dr. Dipak Kumar Tamili.

Website - www.egrassbcollege.ac.in : E-mail – info@egrassbcollege.ac.in

☎ – 03220-244073 / 245557 : Fax – 03220245867.

Class Schedule for

Six-Month Certificate Course in Amin Survey

(January 2023 – June 2023)

Day	Time
Tuesday	2.15 pm – 5.15 pm
Wednesday	2.15 pm – 5.15 pm
Thursday	2.15 pm – 5.15 pm
Friday	2.15 pm – 5.15 pm

Faculty

Dr. Dipak Bisai, Associate Professor & Course-Coordinator

Mr. Prosenjit Murmu, Assistant Professor & Head

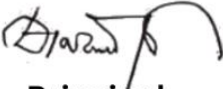
Mr. Srikrishna Paul, State Aided College Teacher

Mr. Soutik Kr. Das Mahapatra, State Aided College Teacher

Mrs. Sharmita Ghorai, State Aided College Teacher

Note: The class schedule is inevitably subject to change.




Principal

Principal
EGRA S. S. B. COLLEGE
P. O : Egra, Purba Medinipur
West Bengal

PHOTOGRAPHS

EGRA SARADA SHASHI BHUSAN COLLEGE
EGRA, PURBA MEDINIPUR, WEST BENGAL, PIN-721429

SIX-MONTH CERTIFICATE COURSE
ON
AMIN SURVEY
A Venture of Skill Development

ORGANIZED BY
DEPARTMENT OF GEOGRAPHY
JANUARY 2023 - JUNE 2023

Mr. Prosenjit Murmu
Head & Assistant Professor
Dept. of Geography
Egra S.S.B. College

Dr. Dipak Bisai
Course Coordinator
Associate Professor
Dept. of Geography
Egra S.S.B. College

Dr. Dipak Kr. Tamili
Principal
Egra S.S.B. College



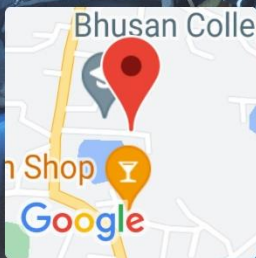


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 WG6P+7G, Kasaba, Egra, West Bengal 721429, India
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-51.8 m 13% 1013 hpa 153.0 μT

GPS Map Camera

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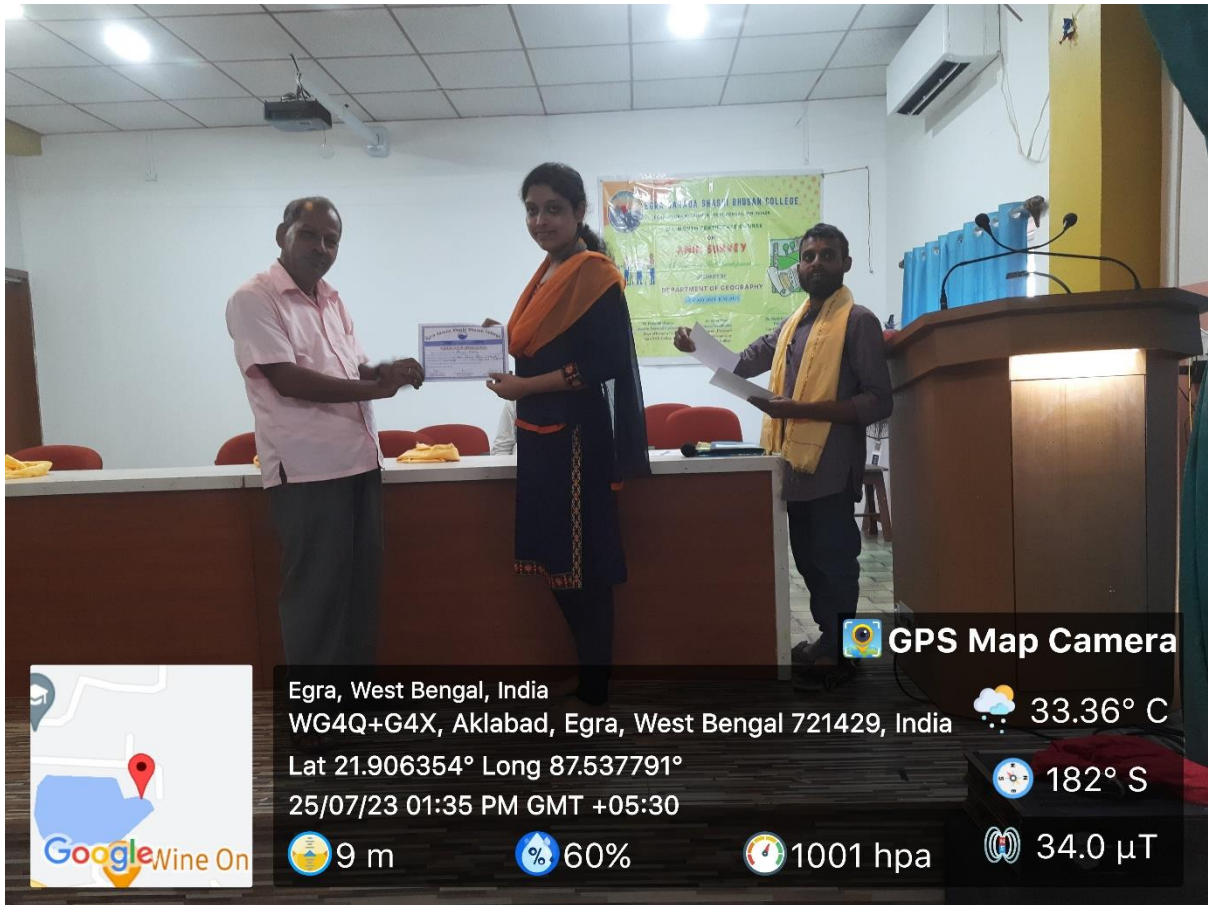


Egra, West Bengal, India
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 Lat 21.906479° Long 87.537658°
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-51.8 m 13% 1013 hpa 221.0 μT

GPS Map Camera


28.53° C
 360° N



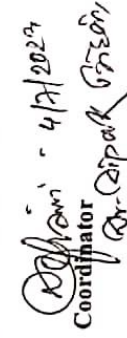
LIST OF PARTICIPANTS

EGRA SARADA SHASHI BHUSAN COLLEGE
DEPARTMENT OF GEOGRAPHY
SIX-MONTH CERTIFICATE COURSE IN AMIN SURVEY (JANUARY 23-JUNE-23)
LIST OF PARTICIPANTS

Sl. No.	Name	Gender	Date of Birth	Father's Name	Mother's Name	Aadhaar No.	Email Address	Mobile No.
1	Pritish Nayak	Male	29-05-2002	Pratul Kumar Navak	Lina Nayak	258932115182	nprtitish79@gmail.com	7602176528
2	Syeda Jasmin Parveen	Female	04-09-2002	Syed Jahed Ali	Nagma Bibi	450850765667	jasminjahed@gmail.com	6297490210
3	Prabir Das	Male	09-11-2002	Ashutosh Das	Bharati Das	395866219449	das001104@gmail.com	8927087616
4	Subham Chanda	Male	01-04-2000	Sanjib Chanda	Kabita Chanda	8473-2344-5483	chandasubham191099@gmail.com	8145052623
5	Shreya Mishra	Female	11-09-2002	Ranjit Mishra	Puspanjali Mishra	8168 4125 8247	shreyamishra721429@gmail.com	8926292783
6	Soumyadip Pradhan	Male	07-09-2003	Srimanta Pradhan	Mousumi Pradhan	752614158000	pradhanip222@gmail.com	7477591724
7	Mamata Das	Female	02-05-2003	Nabakumar Das	Lata Das	411667416647	mamatadas994583@gmail.com	7076369107
8	Biswajit Barik	Male	21-11-2001	Gopal Barik	Anjali Barik	468313626627	nakulbarik9@gmail.com	6295583161
9	Megha Pradhan	Female	28-05-2004	Srikanta Pradhan	Pritilata Pradhan	382222130512	meghapradhan6660@gmail.com	8710078114
10	Aparna Pahari	Female	15-08-2001	Satyabrata Pahari	Ranjita Pahari	679448968758	aparnapahari5@gmail.com	9002153056
11	Atasi Das	Female	18-12-2004	Tapas Das	Tapasi Das	236281400369	tapasdasba7@gmail.com	9733100959
12	Priyanka Rakshit	Female	28-06-2002	Rajendra Rakshit	Purnima Rakshit	311331875465	pryanakarakshit065@gmail.com	9547424964
13	Saheli Das	Female	23-11-2002	Asthis Das	Snigdha Das	5571 2427 7174	sahelidas1823@gmail.com	9609658834
14	Chandan Das Adhikari	Male	04-05-1985	Nityananda Das Adhikari	Minati Das Adhikari	703398235089	chandandasadhikari5@gmail.com	8926439769
15	Meghrath Pandit	Male	16-04-1988	Sudhan Pandit	Budhia Pandit	615713653789	mpandit1688@gmail.com	9153189883
16	Rathindra Nath Jana	Male	04-01-1987	Parameshwar Jana	Pravati Jana	857322018454	janarathindra87@gmail.com	9614517566
17	Swapan Kumar Maity	Male	25-09-1978	Late-Tarakeswar Maity	Basanti Maity	455660812415	swapan.maity8@gmail.com	8967279989



 H. O. D.
 Dept. of Geography
 Egra S. S. B. College




 Coordinator
 Dr. Dipak Ghosh

EGRA SARADA SHASHI-BHUSAN COLLEGE
DEPARTMENT OF GEOGRAPHY
SIX-MONTH CERTIFICATE COURSE IN AMIN SURVEY (JANUARY 23-JUNE, 2023)

LIST OF PARTICIPANTA

SL. NO	Name	Gender	Date of Birth	Father's Name	Mother's Name	Aadhaar No	E mail Address	Mobile No
18	Basanta Jana	Male	08-02-1979	Late Hemanta Jana	Late Kananbala Jana	249180357728	basantajana79@gmail.com	9800361983
19	Tapasjal Das	Male	31-10-1978	Late Bankim Chandra Das	Santilata Das	524229846869	laltapas@gmail.com	8250784176
20	Chandan Mishra	Male	20-04-1979	Late Biswabandhu Mishra	Gitanjali Mishra	827596101330	chandangitanjali@gmail.com	9932780476


 Signature of HOD.
 H. O. D.
 Dept. of Geography
 Egra S. S. B. College


 Signature of Coordinator