

**SAMANTA CHANDRASEKHAR INSTITUTE
OF TECHNOLOGY & MANAGEMENT**
SEMILIGUDA-764 036, KORAPUT

DEPT. OF CIVIL ENGINEERING
(DIPLOMA)

LESSON PLAN AND PROGRESS REGISTER

(To be maintained by all members of the teaching staff)

SESSION 2023-2024 (EVEN SEMESTER)
(SUMMER) 4th Semester

NAME SRUTISHA PANDA
DESIGNATION LECTURER
DEPT. CIVIL ENGINEERING

Srutisha Panda
SIGNATURE

BIO-DATA OF THE TEACHER / FACULTY

Name Smitika Panda
Designation Lecturer Dept. Civil Engineering
Date of Birth 05.05.1995

Date of entry into service at any other organisation _____

Name of initial college _____

Date of joining at SCITM (Ref. No. & Date) 01.02.2023

Date of placement in present grade 01.02.2023

Educational qualification M. Tech (Geotechnical Engineering)

Degree	University	Year
M. TECH	OUTR	2022
B. TECH	CUTM	2016

University Regd. No.: _____

Date of completion of M.Tech. / M.E.: 03.09.2022

Present Scale of Pay: _____

(AICTE/State/Management)

Date of last Increment: _____

Research Activities: _____

(a) Project being Pursued/Research Conducted: _____

(b) No. of Ph.D., scholars produced: _____

(c) No. of Scholars registered at present: _____

Publications: _____

(a) No. of Books Published: _____

(b) No. of Research Papers Published: _____

(c) Other Publications: _____

Any other Information: _____

Permanent Address: At. Saraswati Nagar, Semilignda, Near

Nandapur road, koraput odisha PIN- 764036

Present Residential / Postal Address At. Saraswati Nagar, Semilignda,

PIN- 764036 Telephone No. 8093762815

Signature of H.O.D.

Smitika Panda
Signature of the Teacher/Faculty

Signature of the Admn. Officer/Registrar

This Lesson Plan and Progress Register is to be submitted to the Director for verification and counter signature twice in every semester. The H.O.D. must verify and sign this Register before submission.

COURSES ALLOTTED

FOR DIFFERENT BRANCHES & SEMESTER (Degree/Diploma/+2 Science)

Semester

Course No.

Course Title

 4^{th}

TH. 3

LAND SURVEY-1

N.B. : Submission of Annual Lesson Plan-cum-Progress Register and performance Report for Assessment are responsibility of each faculty member.

LESSON PLAN

Degree/Diploma/+2 Science
(Theory/Pract/Lab/Workshop)

Semester 4th Semester Branch Civil Engineering

Month & Date	Course No. & Title	Brief note of the topics to be covered	No. of Classes Required
16th JANUARY 2024	TH 3 LAND SURVEY-1	1- INTRODUCTION TO SURVEYING, LINEAR MEASUREMENTS:	1
17-01-24	↑	1.1 Surveying Aims and objectives	1
do	↓	1.2 Principles of Survey- plane Surveying - Geodetic Surveying- Instrumental Surveying.	
19-01-24		1.3 Precision and accuracy of measurements, instruments	
22-01-24		used for measurement of distance, Types of tapes and	2
24-01-24		Chains	
do		1.4 Errors and mistakes in linear measurement - classification, Sources of error and remedies	1
25-01-24	do	1.5 Corrections to measured lengths due to- incorrect length,	2
29-01-24		temperature variation, pull, sag, numerical problems	
do		applying corrections.	
30-01-24		2- CHAINING AND CHAIN SURVEYING 2.1 Equipment and accessories for chaining	1
do		2.2 Ranging - Purpose, signaling, direct and indirect ranging.	1
1-02-24		Line ranges - features and use, error due to incorrect ranging	
do		2.3 Methods of chaining - chaining on flat ground, chaining on sloping ground-	

LESSON PLAN

Degree/Diploma/+2 Science
(Theory/Pract/Lab/Workshop)

Semester 4th Semester Branch Civil Engineering

Month & Date	Course No. & Title	Brief note of the topics to be covered	No. of Classes Required
02-02-24	TH 3 LAND SURVEY-1	Stepping method, clinometer - features and use, slope correction	1
05-02-24	↑	2.4 Setting perpendicular with chain and tape, chaining	1
do	↑	across different types of obstacles - Numerical problems on chaining across obstacles.	1
06-02-24	↓	2.5 Purpose of chain surveying.	1
do	↑	Its principles, concept of field book, selection of survey	1
do	↓	Stations, base line, tie lines, check lines.	1
08-02-24	do	2.7 offsets - Necessity, Perpendicular and oblique offsets,	1
do	↑	Instruments for setting offsets - cross staff, Optical	1
do	↓	Square	1
09-02-24	↑	2.8 Errors in chain Surveying -	1
do	↓	Compensating and accumulative errors causes and	1
do	↑	remedies, Precautions to be taken during chain Surveying	1
10-02-24	↓	3. ANGULAR MEASUREMENT AND COMPASS SURVEYING:	1
do	↑	3.1 Measurement of angles with chain, tape and compass	1
do	↓	3.2 Compass - Types, features, parts, merits and demerits, testing and adjustment of compass	1
12-02-24	↓	3.3 Designation of angles - concept of meridians - Magnetic,	1

LESSON PLAN

Degree/Diploma/~~1st~~ 2nd Science
(Theory/Pract/Lab/Workshop)

Semester 4th Semester Branch Civil Engineering

Month & Date	Course No. & Title	Brief note of the topics to be covered	No. of Classes Required
13-02-24	TH 3 LAND SURVEY-1	True, arbitrary, concept of bearing - whole circle bearing, Quadrantal bearing, Reduced bearing.	2
15-02-24	↑	Suitability of application, numerical problems on conversion of bearings	
16-02-24		3.4 Use of compass - setting in field - centering, leveling,	2
17-02-24		taking readings, concepts of fore bearing, Back Bearing,	
↑ do ↓		Numerical problems on computation of interior and exterior angles from bearing.	
19-02-24		3.5 Effects of earth's magnetism - dip of needle, magnetic	2
20-02-24		declination, variation in declination, numerical problems on application of	
↑ do ↓		correction for declination	
22-02-24	do	3.6 Errors in angle measurement with compass - sources and remedies.	1
23-02-24		3.7 Principles of traversing - open and closed traverse, Methods	1
↑ do ↓		of traversing.	
24-02-24		3.8 Local attraction - causes, detection, errors, corrections, Numerical	1
↑ do ↓		problems of application of correction due to local	
26-02-24		attraction.	
↑ do ↓		3.9 Errors in Compass surveying - sources and remedies.	1
		plotting of traverse - check of closing error in closed and open traverse, Bowditch's correction, Gales tables	

LESSON PLAN

Degree/Diploma/+2 Science
(Theory/Pract/Lab/Workshop)

Semester 4th Semester Branch Civil Engineering

Month & Date	Course No. & Title	Brief note of the topics to be covered	No. of Classes Required
27-02-24	TH-3 LAND SURVEY-1	4-MAP READING CADASTRAL MAPS AND NOMENCLATURE:-	1
27-02-24	↑	4.1 Study of direction, scale, Grid Reference and Grid Square	
29-02-24		Study of Signs and Symbols 4.2 Cadastral Map Preparation	
1-03-24		Methodology 4.3 Unique Identification number of parcel	1
2-03-24		4.4 Position of existing Control points and its types	1
4-03-24		4.5 Adjacent Boundaries and features, Topology creation and verification.	1
6-03-24		5. PLANE TABLE SURVEYING: 5.1 Objectives, principles and use of plane table Surveying.	1
7-03-24	do	5.2 Instrument and accessories used in plane table surveying	1
9-03-24 11-03-24		5.3 Methods of plane table surveying (1) Radiation (2) Intersection (3) Traversing, (4) Resection.	2
12-03-24		5.4 Statements of Two Point and Three point problem.	1
13-03-24 14-03-24		Errors in plane table Surveying and their corrections, precaution in plane table Surveying	2
15-03-24		6. THEODOLITE SURVEYING AND TRAVERSING: 6.1 Purpose and definition of theodolite surveying	1
16-03-24		6.2 Transit theodolite - Description of features, component parts.	3
18-03-24		Fundamental axes of a theodolite concept of vernier, reading a	
19-03-24	↓	vernier, Temporary adjustment of theodolite.	

LESSON PLAN

Degree/Diploma/+2 Science
(Theory/Pract/Lab/Workshop)

Semester 4th Semester Branch Civil Engineering

Month & Date	Course No. & Title	Brief note of the topics to be covered	No. of Classes Required
21-03-24	TH-3 LAND SURVEY-1	6.3 Concept of traversing- Measurement of horizontal and vertical angles	1
22-03-24	↑	6.4 Measurement of magnetic bearings, deflection angle, direct angle,	2
23-03-24		setting out angles, prolonging a straight line with theodolite,	
do		Errors in Theodolite observations,	
28-03-24		6.5 Measurement (Methods of theodolite traversing with -	2
do		inclined angle method, deflection angle method, bearing	
30-03-24		method, Plotting the traverse by coordinate method, Checks for	
do		open and closed traverse.	
02-04-24	do	6.6 Traverse computation - consecutive coordinates, latitude and departure,	2
4-04-24		Gale's Traverse table, Numerical problems on omitted measurement	
do		of lengths & bearings.	
05-04-24		6.7 Closing errors - adjustment of angular errors, adjustment of	2
06-04-24		bearings, numerical problems.	
08-04-24		6.8 Balancing of traverse - Bowditch's method, Transit method, graphical	2
09-04-24		method, axis method, calculation of area of closed traverse.	

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Degree/Diploma/+2 Science
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Semester 4th Semester Branch Civil Engineering

Month & Date	Course No. & Title	Brief note of the topics to be covered	No. of Classes Required
11-4-24	TH-3 LAND SURVEY-I	7- LEVELLING AND CONTOURING:- 7.1 Definition and Purpose and	2
12-14-24	↑	Types of levelling - concepts of level surface, Horizontal surface,	
do		Vertical surface, datum, R.L., B.M.	
13-14-24		7.2 Instruments used for levelling, concepts of line of collimat-	2
15-14-24		ion, axis of bubble tube, axis of telescope, Vertical axis.	
16-14-24		7.3 Levelling staff - Temporary adjacent of level, taking	2
18-14-24	do	reading with level, concept of bench mark, BS, IS, FS,	
do		CP, HI	
19-14-24		7.4 Field data entry - Level book-height of collimation method	3
20-14-24		and Rise and Fall method, Comparison, Numerical problems	
22-14-24		on reduction of levels applying both methods, Arithmetic checks	
23-14-24		7.5 Effects of curvature and refraction, numerical problems	2
24-14-24		on application of correction	
26-14-24		7.6 Reciprocal levelling - principles, methods, numerical problems	2
27-14-24		precise leveling.	

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Degree/Diploma/+2 Science
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Semester 4th Semester Branch Civil Engineering

Month & Date	Course No. & Title	Brief note of the topics to be covered	No. of Classes Required
29-04-24	TH-5 LAND SURVEY	7.7 Errors in levelling and precautions, Permanent	1
do	↑	and temporary adjustments of different types of levels.	
30-05-24		7.8 Definitions, concepts and characteristics of contours	1
1-05-24		7.9 Methods of contouring, plotting contour maps,	1
↑		Interpretation of contour maps, toposheets.	
do		7.10 Use of contour maps on civil engineering projects-	2
2-05-24		drawing cross-sections from contour maps, locating	
3-05-24	do	proposed routes of roads/railway/canal on a	
↑		contour map, computation of volume of earthwork	
do		from contour map for simple structure.	1
4-05-24		7.11 Map Interpretation: Interpret Human and Economic	
↑		Activities (i.e., Settlement, Communication, Land use etc.)	
do		Interpret physical Landforms (i.e., Relief, Drainage Pattern etc.), Problem Solving and	
6-05-24		Decision making.	1
		8-COMPUTATION OF AREA & VOLUME	
		8.1 Determination of areas, computation of areas from plans	1

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Degree/Diploma/+2 Science
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Semester 4th Semester Branch Oil Engineering

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SESSION 2023-2024 (EVEN SEMESTER)
4th SEMESTER

NAME: SRUTISHA PANDA
DESIGNATION: LECTURER
DEPT.: CIVIL ENGINEERING

Srutisha Panda
SIGNATURE

BIO-DATA OF THE TEACHER / FACULTY

Name Smitisha Panda

Designation Lecturer

Dept. Civil Engineering

Date of Birth 02.02.1995

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B.Tech	SCITM	2016

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Date of completion of M.Tech. / M.E. 05.09.2022

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Nandapur road, Boraput Odisha PIN- 764036

Present Residential / Postal Address At. Saraswati Nagar, Semilignada,
PIN- 764036 Telephone No. 8173762815

Counter Signature of H.O.D.

Smitisha Panda
Signature of the Teacher/Faculty

Signature of the Admn. Officer/Registrar

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COURSES ALLOTTED

FOR DIFFERENT BRANCHES & SEMESTER (Degree/Diploma/+2 Science)

[illegible]

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LESSON PLAN

Degree/Diploma/~~2~~ Science
(Theory/Pract/Lab/Workshop)

Semester 1st Semester Branch Civil Engineering

Month & Date	Course No. & Title	Brief note of the topics to be covered	No. of Classes Required
16-01-24	TH. 4 HIGHWAY ENGINEERING	1 INTRODUCTION 1.1 Importance of Highway transp. ance, organizations like Indian road congress, Ministry of surface Transport, Central Road Research Institute.	01
↑ do ↓	↑		
17-01-24 18-01-24		1.2 Functions of Indian Road Congress 1.3 IRC classification of roads	02
19-01-24 20-01-24		1.4 Organization of state highway department	02
22-01-24		2. ROAD GEOMETRICS 2.1 Glossary of terms used in geometric and their importance, right of way, formation width, road margin, road shoulder, carriage way, side slopes, kerbs, formation level, camber and gradient.	10
↑ do ↓	do		
3-02-24 5-02-24		2.2 Design and average running speed, stopping and passing sight distance	05
↑ do ↓			
06-02-24 10-02-24		2.3 Necessity of curves, horizontal and vertical curves including transition curves and super elevation, Methods of providing super elevation	05
↑ do ↓			
12-02-24 to 24-02-24			
26-02-24	↓	3. Road Materials 3.1 Difference types of road material	1

LESSON PLAN

Degree/Diploma/+2 Science
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Semester 4th Semester Branch Civil Engineering

Month & Date	Course No. & Title	Brief note of the topics to be covered	No. of Classes Required
27-02-24	TH 4 HIGHWAY ENGINEERING	In use: soil, aggregates, and binders	01
28-02-24	↑	3.2 Function of soil as highway Subgrade	02
29-02-24 12-03-24		3.3 California Bearing Ratio: methods of finding CBR values	03
do ↓		In the laboratory and at site and their significance	
04-03-24		3.4 Testing aggregates: Abrasion test, impact test, crushing	02
05-03-24		Strength test, water absorption test and Soundness test.	
07-03-24		4. Road Pavements	
09-03-24	do	4.1 Road Pavement: Flexible and Rigid pavement, their merits and demerits, typical cross-sections, functions of various components.	02
↑ do ↓			
11-03-24		4.2 Flexible Pavements Sub-grade preparation.	
to 14-03-24		Setting out alignment of road, setting out bench marks, control	
↑		pigs for embankment and cutting, borrow pits, marking	04
do		profile of embankment, construction of embankment, compaction.	
		Stabilization, preparation of Subgrade, methods of checking	
		camber, gradient and alignment as per recommendations	
↓	↓	of IRC, equipment used for Subgrade.	

LESSON PLAN

Degree/Diploma/ +2 Science
(Theory/Pract/Lab/Workshop)

Semester 4th Semester Branch Civil Engineering

Month & Date	Course No. & Title	Brief note of the topics to be covered	No. of Classes Required
15-03-24	TH. 4 HIGHWAY ENGINEERING	4.3 Sub base course: Necessity of Subbase, stabilized	03
16-03-24	↑	Subbase, purpose of stabilization (no designs)	
18-03-24		Types of STABILIZATION • Mechanical stabilization	
↑ do ↓		• Lime stabilization • Cement stabilization • Fly ash stabilization	
19-03-24		4.4 Base Course: Preparation of base course, Brick	02
20-03-24	do	soling, stone soling and metalling, Water Bound macadam and	
↑		wet-mix macadam, Bituminous constructions: Different types	
do ↓		4.5 Surfacing: • Surface dressing	01
21-03-24		(i) Premix carpet (ii) Semi dense carpet	
↑ do ↓		• Bituminous Concrete • Grouting	
22-03-24		4.6 Rigid Pavements: Concept of Concrete roads as per IRC specifications.	01
↑ do ↓			
23-03-24		5. Hill Roads 5.1 Introduction: Typical cross-sections showing all details of a typical hill road in cut, partly in cutting and partly in filling	02
↑ do ↓	↓		

LESSON PLAN

Degree/Diploma/+2 Science
(Theory/Pract/Lab/Workshop)

Semester 4th Semester Branch Civil Engineering

Month & Date	Course No. & Title	Brief note of the topics to be covered	No. of Classes Required
27-03-24 to	TH-4 HIGHWAY ENGINEERING	5.2 Breast walls: Retaining walls, different types of berms	03
30-03-24	↑	6 Road Drainage: 6.1 Necessity of road drainage work, cross drainage works	03
02-04-24		6.2 Surface and sub-surface drains	
to		and storm water drains. Location, spacing and typical details	06
06-04-24		of side drains, side ditches for surface drainage, interce-	
↑ do		pting drains, pipe drains in hillroads, details of drains in cutting embankment, typical cross sections.	
08-04-24	do	7 Road Maintenance. 7.1 Common types of road failure - their causes and remedies	02
09-04-24		7.2 Maintenance of bituminous road such as patch work and resurfacing	
↑ do ↓		7.3 Maintenance of concrete roads - filling cracks, repairing joints, maintenance of shoulder (berm), maintenance of traffic control devices.	
10-04-24			02
12-04-24			
↑ do ↓			01
13-04-24		7.4 Basic concept of traffic study. Traffic Safety and traffic control signal	
↑ do ↓	✓		

LESSON PLAN

Degree/Diploma/+2 Science
(Theory/Pract/Lab/Workshop)Semester 4th Semester Branch Civil Engineering[illegible]

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LESSON PLAN AND PROGRESS REGISTER

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SESSION 2023-2024 (EVEN SEMESTER)
(SUMMER) 6th Semester

NAME SRUTISHA PANDA
DESIGNATION LECTURER
DEPT CIVIL ENGINEERING

Smita K. Panda
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COURSES ALLOTTED

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Semester	Course No.	Course Title
----------	------------	--------------

6th Semester

Th. 1

LAND SURVEY-II

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LESSON PLAN

Degree/Diploma/+2 Science
(Theory/Pract/Lab/Workshop)

Semester 6th Semester Branch Civil Engineering

Month & Date	Course No. & Title	Brief note of the topics to be covered	No. of Classes Required
16-01-24 to 18-01-24	TH-1 LAND SURVEY-II	TACHEOMETRY: 1.1 Principles stadia constants determination	3
19-01-24 to 22-01-24	do	1.2 Stadia tacheometry with staff held vertical and with line of collimation horizontal or inclined numerical problems.	3
do			
24-01-24 to 27-01-24		1.3 Distances of staff stations - numerical problems	3
29-01-24 to 30-01-24		2- CURVES: 2.1 - Compound, reverse and transition curve. Purpose and use of different types of curves in field	2
do			
31-01-24	do	2.2 Elements of circular curves, numerical problems	1
1-02-24		2.3 Preparation of curve table for setting out	1
2-02-24 to 3-02-24		2.4 Setting out of circular curve by chain and tape and by instrument angular methods (i) offsets from long chord, (ii) Successive bisection of arc, (iii) offsets from tangents (iv) offsets from chord produced.	2
do		(v) Rankine's method of tangent angles (No derivation)	

LESSON PLAN

Degree/Diploma/+2 Science
(Theory/Pract/Lab/Workshop)

Semester 6th Semester Branch Civil Engineering

Month & Date	Course No. & Title	Brief note of the topics to be covered	No. of Classes Required
5-02-24	TH 1	2.5 obstacles in curve ranging -	2
6-02-24	LAND SURVEY-2	point of intersection inaccessible	
07-02-24	↑	3. BASICS ON SCALE AND BASICS OF MAPS	
07-02-24		3.1 Fractional or Ratio scale, Linear scale, Graphical scale	01
08-02-24		3.2 What is Map, Map Scale and Map projections	02
08-02-24		3.3 How Maps convey location and Extent	01
09-02-24		3.4 How Maps convey character - existing of features	01
10-02-24		3.5 How maps convey Spatial Relationship	01
12-02-24	do	3.6 Classification of Maps	
12-02-24		3.6.1 Physical Map	
13-02-24		3.6.2 Topographic Map	
13-02-24		3.6.3 Road Map	03
13-02-24		3.6.4 Political Map	
15-02-24		3.6.5 Economic and Resources map	
15-02-24		3.6.6 Thematic Map	
↑			
do		3.6.7 Climate Map	
↓			
16-02-24		4. SURVEY OF INDIA MAP SERIES:	
17-02-24		4.1 Open series map	1
17-02-24		4.2 Defence Series map	
19-02-24		4.3 Map Nomenclature	2
20-02-24		4.3.1 Quadrangle Name	
20-02-24		4.3.2 Latitude, Longitude, UTM	1

LESSON PLAN

Degree/Diploma/⁺2 Science
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Semester		Branch	Civil Engineering	
Sl. No.	Course Name & Title	Brief note of the topics to be covered		No. of Classes Required
01-12-24	4.3.1	4.3.3 Contour Lines	}	2
02-12-24	4.3.2	4.3.4 Magnetic declination		
03-12-24		4.3.5 Public land Survey system	}	2
04-12-24		4.3.6 Field notes		
05-12-24		5 Basics of Aerial Photography	}	1
06-12-24		PHOTOGRAMMETRY, DEM AND ORTHO IMAGE GENERATION		
07-12-24		5.1 Aerial photography	}	2
08-12-24		5.1.1 Film, Focal length, Scale		
09-12-24		5.1.2 Types of Aerial Photography (oblique, straight)	}	
10-12-24		5.2 Photogrammetry		1
11-12-24		5.2.1 Classification of photogrammetry	}	1
12-12-24		5.2.2 Aerial Photogrammetry		
13-12-24		5.2.3 Terrestrial Photogrammetry	}	3
14-12-24		5.3 Photogrammetry Process.		
15-12-24		5.3.1 Acquisition of Imagery using aerial and satellite platform	}	2
16-12-24		5.3.2 Control Survey		
17-12-24		5.3.3 Geometric Distortion in Imagery	}	
18-12-24		5.3.4 Application of Imagery and its support data		
19-12-24		Stereoscopic Measurement	}	1
20-12-24		19.1.1 X parallax		
21-12-24		19.2.2 Y- parallax	}	
22-12-24				

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Semester 6th Semester Branch Civil Engineering

Month & Date	Course No. & Title	Brief note of the topics to be covered	No. of Classes Required
13-03-24	TH-1 LAND SURVEY-2	5.4 ATM/DEM GENERATION 5.5 Ortho Image Generation	1
14-03-24		6. MODERN SURVEYING METHODS: 6.1 Principles, features and	3
16-03-24		Use of (i) Micro-optic theodolite, digital theodolite	
18-03-24		6.2 Working Principles of a Total station (Set up and	7
23-03-24		Use of total station to measure angles, distances,	
do		of points under survey from total station and	
do		the co-ordinates (x, y and z) or northing, easting and	
do		elevation) of surveyed points relative to Total	
do	do	station position using tachymetry and triangulation.	
27-03-24		7. BASICS ON GPS & DGPS AND ETS: 7.1- GPS: Global Positioning	1
28-03-24		7.1.1 Working principle of GPS, GPS signals.	1
30-03-24		7.1.2 Errors of GPS, Positioning Methods.	1
2-03-24		7.2 DGPS- Differential Global Positioning System	1
3-03-24		7.2.1 Base station Setup 7.2.2 Rover GPS Set up	1
4-03-24		7.2.3 Download, Post-Process and Export GPS data	1

LESSON PLAN

Degree/Diploma/2nd Science
(Theory/Pract/Lab/Workshop)

Semester 6th Semester Branch Civil Engineering

Month & Date	Course No. & Title	Brief note of the topics to be covered	No. of Classes Required
5-04-24	M-1 LAND SURVEY-2	7.2.4 Sequence to download GPS data from flashcards	} 1
do	↑	7.2.5 Sequence to Post-Process GPS data	
6-04-24		7.2.6 Sequence to export post process GPS data	} 1
do		7.2.7 Sequence to export GPS Time tags to file	
8-04-24		7.3 ETS, Electronic Total station	} 1
do		7.3.1 Distance measurement	
do		7.3.2 Angle Measurement.	
		7.3.3 Levelling.	} 1
9-04-24		7.3.4 Determining position.	
do		7.3.5 Reference networks	
do		7.3.6 Errors and Accuracy	} 2
10-04-24	do	8- BASICS OF GIS AND MAP PREPARATION USING GIS	
12-04-24		8.1 Components of GIS, Integration of spatial and Attribute Information	
x		8.2 Three views of Information System	} 2
13-04-24		8.2.1 Database or Table view,	
15-04-24		Map view or Model view	
do		8.3 Spatial Data model	} 2
16-04-24		8.4 Attribute Data management and Metadata Concept	
18-04-24		8.5 Prepare data and add to Arc map.	

Degree/Diploma/+2 Science
(Theory/Pract/Lab/Workshop)

Civil Engineer,

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