



याजना तथा वास्तुकला विद्यालय, विजयवाड़ा
School of Planning and Architecture, Vijayawada
An Institute of National Importance, Ministry of Education, Govt. of India

Department of Planning,
Lecture Plan, Odd Semester, AY 2025-26

Name of Course: **Bachelor of Planning**

Subject Name	Surveying (PLN116)
Year & Sem	I Year I Semester
Course Duration:	19 August 2026 – 04 November 2026
Course Coordinator:	Mr. Jayakaran V, Assistant Professor, Department of Planning.
Number of Credits:	03
Subject Category:	Core Theory Subjects
Total Periods/Week:	03
Internal Assessment	50 (minimum pass marks 50%)
End Evaluation	50 (minimum pass marks 50%)
Total Marks	100 (to be converted to CGPA credit pattern as per regulations)
Total No. of Internal Assessment & Mode	1) Assignment I-15 Marks (Submission) 2) Mid Semester Assessment (Written Exam) 3) Assignment II-15 Marks (Laboratory Based Exercise)

Subject Objective: *To acquire proficiency in basics of Geoinformatics covering the topics related to Surveying, Total Station, and GPS technologies.*

Week	Lecture / Session Topic (Teaching-Learning Objective aimed)	Session Mode (Optional)	References / Suggested Readings/Remarks
Week 1 (24-28 Aug)	Unit-I Fundamentals of Surveying: Definitions, classifications, use, objectives and basic principles of surveying; Classifications of measurements and units, concepts of scales, maps and plan and use of conventional symbols	Lecture & Discussion	Dr. B.C. Punmia, Ashok K. Jain & Arun K. Jain, 'Surveying Volume-I' Laxmi Publication. 2016. (BOOK) Duggal, S K (2017), Surveying, McGraw Hill Education (India) Private Limited, New Delhi.
Week 2 (31 Aug-04 Sep)	Chain and Compass Surveying.	Lecture & Discussion	C. Venkatramaiah, 'Textbook of Surveying'. Universities Press. 1994. (BOOK)
Week 3 (07-11 Sep)	Plane table surveying and Computations of areas, Levelling and Contouring.	Lecture/ Discussion/ Field Work	



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Week 4 (12-20 Sep)	Field Trip		
Week 5 (21 - 25 Sep)	Unit-II Fundamentals of Conventional Surveying Definition, principals. applications, advantages and limitations of Conventional surveying. Introduction to chain surveying and its uses. Instruments used in chain surveying.	Lecture & Discussion	Dr. B.C. Punmia, Ashok K. Jain & Arun K. Jain 'Surveying Volume-I' Laxmi Publication. 2016. (BOOK) Duggal, S K (2017), Surveying, McGraw Hill Education (India) Private Limited, New Delhi. C. Venkatramaiah, 'Textbook of Surveying'. Universities Press. 1994. (BOOK)
Week 6 (28 Sep-02 Oct)	Survey framework: survey stations, survey lines, base line, tie line and check line, Steps involved in chain surveying.	Lecture & Discussion	
Week 8 (05-09 Oct)	Unit – III Chain surveying and Plan Preparation: Selection of survey stations and survey layout. Ranging and chaining of survey lines, Measurement of offsets and field recording, Use of tie lines and check lines for accuracy,	Lecture/ Discussion/ Field Work	
Week 9 (12-16 Oct)	Plotting chain survey data and preparation of survey plans.	Field Work	
Week 10 (19 -23 Oct)	Plotting chain survey data and preparation of survey plans.	Field Work	
Week 11 (26-30 Oct)	Internal Assessment – II Time Bound Closed Book Test (20 Marks) (Mid Semester Assessment)		
Week 12 (02-06 Nov)	Unit – IV Contemporary Surveying Methods: Digital Planimeter, Total Station	Lecture & Discussion	Dr. B.C. Punmia, Ashok K. Jain & Arun K. Jain, 'Surveying Volume-III (Higher Surveying)' Laxmi Publication. 2017.(BOOK)
Week 13 (09-13 Nov)	Global Positioning System and Differential Global Positioning System	Lecture & Discussion	
Week 14 (16-20 Nov)	Unit – V Application in Urban and Regional Planning: Laboratory Exercises	Field Work	
Week 15 (23-27 Nov)	Application in Urban and Regional Planning: Laboratory Exercises	Field Work	
Week 16 (30 Nov-04 Dec)	Application in Urban and Regional Planning: Laboratory Exercises	Field Work	



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Details of Internal Assessments

Tentative Date/Week of the Assessment	Mode of Assessment	Marks of the Assessment
Week 3	Assignment I - Submission	15
Week 11	Time Bound Closed Book Test	20
Week 15	Assignment II - Laboratory Based Exercise	15

Note:

1. Any other closed holidays as declared by SPAV shall supersede the above lecture plan. Holidays shown above may alter as per Notice from time to time.
2. Assessment Sessions may be re-scheduled, with prior intimation.
3. Reading lists provided is not exhaustive and is subject to addition – students are advised to follow progression of class to keep abreast of the new reading lists, if any.