NIRMA UNIVERSITY

Institute:	School of Engineering, Institute of Technology
Name of Programme:	M. Tech. in Civil Engineering (Construction Technology and Management)
Course Code:	6CL253
Course Title:	Computer Applications in Construction Project Management
Course Type:	(☑ Core/☐ Value Added Course/ ☐ Departmental Elective/ ☐ Institute Elective/ ☐ University Elective/(☐ Open Elective ☐ Any other)
Year of Introduction:	2022-23

L	T	Practical component				C
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Course Learning Outcomes (CLOs):

At the end of the course, the students will be able to –
1. make use of software for planning, monitoring and controlling construction projects   (BL3)   ☑
2. appraise the use of software for resource allocation.   (BL5)

Syllabus: **Laboratory hours: 60**

Syllabus

Students will be given exposure to various management software for planning, monitoring and controlling construction projects.

Suggested Readings/ References:
- Calin M. Popescu, Chotchai Charoenngam, *Project Planning, Scheduling and Control in Construction: An Encyclopedia of terms and Applications*, Wiley.
- Chitkara, K.K. *Construction Project Management: Planning, Scheduling and Control*, McGraw-Hill Publishing Company.
- Chris Hendrickson and Tung Au, *Project Management for Construction - Fundamental Concepts for Owners, Engineers, Architects and Builders*, Prentice Hall.
- Halpin, D. W., *Financial and Cost Concepts for Construction Management*, John Wiley & Sons.
- Willis, E. M., *Scheduling Construction Projects*, John Wiley & Sons.
- Jha K.N., *Construction Project Management: Theory and Practice*, Pearson

Suggested List of Experiments:	Laboratory work based on above syllabus with minimum 06 exercises to be incorporated. These may comprise of exposure to various computer applications for construction management as given below:

- Creating network
- Resource planning
- Resource allocation
- Cost estimation
- Updating project
- Creating building information model

Suggested Case List:	-