

| GANPAT UNIVERSITY | | | | | | | | | |
|--|--|------------------------|---------------------|--------------|-------------------------------------|--|-------------------|-----------|-------|
| FACULTY OF ENGINEERING & TECHNOLOGY | | | | | | | | | |
| Programme | | Bachelor of Technology | | | Branch/Spe c | | Civil Engineering | | |
| Semester | | VII | | | Version | | 2.0.0.0 | | |
| Effective from Academic Year | | | 2025-26 | | Effective for the batch Admitted in | | | July 2022 | |
| Subject code | | 2CI7107 | | Subject Name | | Professional Practice in Construction | | | |
| Teaching scheme | | | | | Examination scheme (Marks) | | | | |
| (Per week) | Lecture(D T) | | Practical(La b.) | | Tot al | | CE | SEE | Total |
| | L | TU | P | TW | | | | | |
| Credit | 04 | 00 | 01 | 00 | 05 | Theory | 40 | 60 | 100 |
| Hours | 04 | 00 | 02 | 00 | 06 | Practical | 30 | 20 | 050 |
| Pre-requisites: | | | | | | | | | |
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| Learning Outcome: / Objectives of the Course: | | | | | | | | | |
| <ol style="list-style-type: none"> Students will learn to organize professional firms, manage construction contracts, and understand legal aspects, payments, and bookkeeping. The course covers tendering processes, contract types, arbitration, easement concepts, property valuation methods, and project planning. Students will apply network analysis techniques, time estimation, and resource management, focusing on inventory control, quality, and safety in construction projects. | | | | | | | | | |
| Theory syllabus | | | | | | | | | |
| Unit | Content | | | | | | | | Hrs |
| 1. | Office Practices Organizational set up and working of professional firms. Procedure of running firms, and construction contracts. Legal aspects and professional charges. Mode of Measurement and payments of executed works and bookkeeping. Store and procedure of keeping records of store | | | | | | | | 6 |
| 2. | Tendering and Contracting Types of tenders and contracts. Tender and tendering processes. Types, scopes, and principles of contracting. Contract documents and condition of contract. Execution of work and reorganisation of improper work. Extension of work period. Liquidated damages and contract breach. Mode of payments. Duties and liabilities of contract. E-tendering and its basics. | | | | | | | | 16 |
| 3. | Arbitration & Easement Types and purpose of arbitration. Powers and duties of arbitrator. Arbitration in building contract. Easement and its characteristics. | | | | | | | | 4 |
| 4. | Valuation and Methods of Valuation Introduction to valuation, market value, freehold & leasehold, sinking fund. Methods to find out depreciation of properties. | | | | | | | | 4 |
| 5. | Project Planning Terminology, construction industries and functions, formation of construction team. Project types and practices. Planning philosophy of projects, types of construction. Project initiation and project organization. | | | | | | | | 5 |
| 6. | Construction Network Analysis Details of bar chart and milestone, Network elements and development of network. Time estimation of construction projects. CPM and PERT approaches, CPM updating and relevant network examples resources planning, smoothing, and levelling. Network crashing. | | | | | | | | 15 |

