

INSTITUTE	FACULTY OF TECHNOLOGY
PROGRAM	BACHELOR OF TECHNOLOGY (CIVIL ENGINEERING)
SEMESTER	6
COURSE TITLE	TENDER AND CONTRACT MANAGEMENT
COURSE CODE	01CI0621
COURSE CREDITS	4

Objective:

- 1 To understand the importance of specifications, its types and drafting general specifications for civil works.
- 2 To prepare comprehensive tender documents and analyze bids.
- 3 To understand the tendering, contracting and bidding process in civil engineering projects.
- 4 To understand the types of contract and its application in construction projects.

Course Outcomes: After completion of this course, student will be able to:

- 1 Interpret the types of contracts and contracting terminologies involved in the projects, disputes and arbitration process.
- 2 Analyze the types of tenders and various terms associated with tender
- 3 Prepare general specifications for civil works
- 4 Practice the Bidding and Tendering Process for a project.

Pre-requisite of course:NA

Teaching and Examination Scheme

Theory Hours	Tutorial Hours	Practical Hours	ESE	IA	CSE	Viva	Term Work
3	1	0	50	30	20	25	25

Contents : Unit	Topics	Contact Hours
1	Introduction to Contract Introduction: Definition and legal issues in contract, Essential requirement of a contract, Characteristics of a good contract, Legal enforceability of contract, termination of contracts, Stake holders in construction contracts, Overview of Activities in Contract Management., Conditions of Contracts: General conditions & special conditions, Contract conditions for payments, Time delay, Scope changes, Extra claims, Termination of contracts, subcontracting. Disputes and Arbitration, Legal requirements of a valid contract	8

Contents : Unit	Topics	Contact Hours
2	Construction Contracts Type of construction contracts: Lump sum contracts, Fixed price contracts, Percentage rate contracts, Cost plus contracts, Target contracts, Design-Build contracts, Turn-key contracts, BOT contracts. Parties to a Contract, Contract Formation,, Common contract divisions: Notice to proceed, rights and duties and responsibilities of various parties, Contract Duration and Price.	10
3	Tendering Introduction: Types and Process of tendering, Tender notice, Bid security, Prequalification process, Bidding strategy, Tender submission and evaluation, Tender rejection, Security deposits, Contract agreement & contract documents, Performance Parameters: Delays, penalties and liquidated damages, Suspension and Termination of Tender.	12
4	Specification Introduction: Definition, Objectives and importance of specification, Principles of drafting specifications, Types of Specification: Drafting general specifications and detailed specifications for various civil work items, Specification of materials, specification of works.	12
Total Hours		42

Suggested List of Experiments:

Contents : Unit	Topics	Contact Hours
1	Tutorial-1 Collection of details regarding Expression of Interest (EOI), Requests for Quotation (RFQ) and Requests for Proposals (RFP)	2
2	Tutorial-2 Bill of Quantity Preparation (BOQ)	3
3	Tutorial-3 Drafting detailed specifications of different types of building works (Excavation, foundations, superstructure and finishing)	3
4	Tutorial-4 Preparation of Tender Notice: Tendering process Security and performance bonds Risk assessments of contractual provisions Arbitration/dispute resolution	3
5	Tutorial-5 Preparation of Preliminary Contract document Lumpsum Contract Item rate Contract Cost plus percentage contract	3
Total Hours		14

Textbook :

- 1 Civil Engineering Contracts and Estimates , B. S. Patil, Universities Press, 2009
- 2 The Indian Contract Act (9 of 1872), 1872, Bare Act- , Professional Book Publishers., 2006

Textbook :

- 3 The Arbitration and Conciliation Act, Act, The Arbitration and Conciliation Act, 2006
- 4 Law of contract Part I and Part II, Dr. R.K. Bangia, Allahabad Law Agency., 2005

References:

- 1 Construction Contracts - Law and Management, Construction Contracts - Law and Management, John Murdoch & Will Hughes, Taylor & Francis Group, 2016

Suggested Theory Distribution:

The suggested theory distribution as per Bloom's taxonomy is as follows. This distribution serves as guidelines for teachers and students to achieve effective teaching-learning process

Distribution of Theory for course delivery					
Remember / Knowledge	Understand	Apply	Analyze	Evaluate	Higher order Thinking / Creative
20.00	30.00	20.00	15.00	10.00	5.00

Instructional Method:

- 1 At the start of course, the course delivery pattern, prerequisite of the subject will be discussed
- 2 Lectures will be taken in class room with the use of multi-media presentations, white board– mix of both.
- 3 Attendance is compulsory in lectures and laboratory which carries a 5% component of the overall evaluation.
- 4 Minimum two internal exams will be conducted and average of two will be considered as a part of 15% overall evaluation
- 5 Assignments based on course content will be given to the students at the end of each unit/topic and will be evaluated at regular interval. It carries a weightage of 5%.
- 6 Surprise tests/Quizzes will be conducted which carries 5% component of the overall evaluation.

Supplementary Resources:

- 1 <https://eprocure.gov.in/eprocure/app>
- 2 https://onlinecourses.nptel.ac.in/noc22_1w06/preview