



**SWARNANDHRA
COLLEGE OF ENGINEERING & TECHNOLOGY
(AUTONOMOUS)**

Accredited by National Board of Accreditation, AICTE, New Delhi Accredited by
NAAC with "A" Grade – 3.32 CGPA Recognized under 2(f) & 12(B) of UGC Act 1956.
Approved by AICTE, New Delhi, Permanent Affiliation to JNTUK, Kakinada
Seetharampuram, W G DT, Narsapur-534280, (Andhra Pradesh)

DEPARTMENT OF CIVIL ENGINEERING

TEACHING PLAN

Course Code	Course Title	Semester	Branch	Contact Periods /Week	Academic Year	Date of commencement of Semester
20CE7E01	ESTIMATION, SPECIFICATIONS AND CONTRACTS	VII	CIVIL	06	2024-25	05-06-2024

COURSE OUTCOMES

1	Determine the quantities of different components of buildings. [K2]
2	Find the cost of various building components. [K2]
3	Determine the quantities of earthwork and prepare bar bending schedule. [K2]
4	Finalize the contract, specifications and value of structures. [K3]
5	Prepare detailed estimation of buildings. [K3]

UNIT	Out Comes / Bloom's Level	Topics No.	Topics/Activity	Text Book / Reference	Contact Hour	Delivery Method
I	Determine the quantities of different components of buildings. [K2]	1.1	Introduction	T1,R1	1	Chalk & Talk, PPT, Tutorial
		1.2	General items of work in Building	T1,R1	1	
		1.3	General items of work in Building	T1,R1	1	
		1.4	Standard Units Principles of working out quantities for detailed and abstract estimates	T1,R1	1	
		1.5	Standard Units Principles of working out quantities for detailed and abstract estimates	T1,R2	1	
		1.6	Standard Units Principles of working out quantities for detailed and abstract estimates	T1,R2	1	
		1.7	Problems	T1,R1	1	
		1.8	Problems	T1,R1	1	



SWARNANDHRA COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

Accredited by National Board of Accreditation, AICTE, New Delhi, Accredited by NAAC with 'A' Grade - 3 32 CGPA Recognized under 2(f) & 12(B) of UGC Act 1956, Approved by AICTE, New Delhi, Permanent Affiliation to JNTUK, Kakinada, Seetharampuram, W G DT, Narsapur-534280, (Andhra Pradesh)

		1.9	Approximate method of Estimating.	T2,R1	1	
		1.10	Approximate method of Estimating.	T2,R1	1	
		1.11	Problems	T2,R1	1	
		1.12	Problems	T2,R1	1	
Total						12
II	Find the cost of various building components. [K2]	2.1	Introduction	T2,R1	1	Chalk & Talk, PPT, Tutorial
		2.2	Rate Analysis	T2,R1	1	
		2.3	Rate Analysis	T2,R2	1	
		2.4	Working out data for various items of work over head and contingent charges.	T2,R1	1	
		2.5	Working out data for various items of work over head and contingent charges.	T2,R2	1	
		2.6	Working out data for various items of work over head and contingent charges.	T2,R1	1	
		2.7	Problems	T1,R1	1	
		2.8	Problems	T1,R1	1	
		2.9	Problems	T1,R1	1	
		2.10	Problems	T1,R1	1	
		2.11	Working out data for various items of work over head and contingent charges.	T1,R1	1	
		2.12	Working out data for various items of work over head and contingent charges.	T1,R1	1	
Total						12
III	Determine the quantities of earthwork and prepare bar bending schedule. [K2]	3.1	Introduction	T2,R1	1	Chalk & Talk, PPT, Tutorial
		3.2	Earthwork for roads and canals,	T2,R1	1	
		3.3	Earthwork for roads and canals,	T1,R2	1	
		3.4	Problems	T2,R2	1	
		3.5	Problems	T1,R2	1	
		3.6	Earthwork for roads and canals,	T2,R1	1	
		3.7	Reinforcement bar bending	T1,R2	1	



SWARNANDHRA COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

Accredited by National Board of Accreditation, AICTE, New Delhi. Accredited by NAAC with "A" Grade - 3.32 CGPA. Recognized under 2(f) & 12(B) of UGC Ad 1956. Approved by AICTE, New Delhi. Permanent Affiliation to JNTUK, Kakinada. Seetharampuram, W.G.D.T., Narsapur-534280. (Andhra Pradesh)

		3.8	Reinforcement bar bending	T1,R1	1	
		3.9	bar requirement schedules.	T1,R1	1	
		3.10	bar requirement schedules.	T1,R1	1	
		3.11	Problems	T1,R1	1	
		3.12	Problems	T1,R1	1	
					Total	12
IV	Finalize the contract, specifications and value of structures. [K3]	4.1	Introduction on Contracts	T2,R1	1	Chalk & Talk, PPT, Tutorial
		4.2	Types of contracts	T2,R1	1	
		4.3	Types of contracts	T1,R2	1	
		4.4	Types of contracts	T2,R1	1	
		4.5	Contract Documents	T1,R2	1	
		4.6	Contract Documents	T2,R1	1	
		4.7	Conditions of contract	T1,R1	1	
		4.8	Valuation of buildings	T1,R1	1	
		4.9	Valuation of buildings	T1,R1	1	
		4.10	Standard specifications for different items of building construction	T1,R1	1	
		4.11	Standard specifications for different items of building construction	T1,R1	1	
		4.12	Standard specifications for different items of building construction	T1,R1	1	
					Total	12
V	Prepare detailed estimation of buildings. [K3]	5.1	Introduction	T2,R1	1	Chalk & Talk, PPT, Tutorial
		5.2	Detailed Estimation of Buildings using individual wall method	T2,R1	1	
		5.3	Detailed Estimation of Buildings using individual wall method	T2,R1	1	
		5.4	Problems	T1,R2	1	
		5.5	Detailed Estimation of Buildings using individual wall method	T1,R1	1	
		5.6	Problems	T2,R1	1	
		5.7	Problems	T2,R1	1	
		5.8	centre line method.	T1,R2	1	
		5.9	centre line method.	T1,R2	1	
		5.10	centre line method.	T1,R2	1	
		5.11	Problems	T1,R2	1	



SWARNANDHRA COLLEGE OF ENGINEERING & TECHNOLOGY (AUTONOMOUS)

Accredited by National Board of Accreditation, AICTE, New Delhi, Accredited by
NAAC with 'A' Grade - 3.32 CGPA, Recognized under 2(f) & 12(B) of UGC Act, 1956,
Approved by AICTE, New Delhi, Permanent Affiliation to JNTUK, Kakinada
Seetharampuram, W G DT, Narsapur-534280, (Andhra Pradesh)

	5.12	Problems	T1,R2	1
Total				12
CUMULATIVE PROPOSED PERIODS				60
Text Books:				
S.No.	AUTHORS, BOOK TITLE, EDITION, PUBLISHER, YEAR OF PUBLICATION			
1	B.N. Dutta , 'Estimating and Costing', UBS publishers, 2017.			
2	B.N. Dutta 'Civil Engineering Estimating and Costing ', Visionias publishers LTD, 2024.			
3	G.S. Birdie , 'Estimating and Costing, 2015.			
Reference Books:				
S.No.	AUTHORS, BOOK TITLE, EDITION, PUBLISHER, YEAR OF PUBLICATION			
1	B.N. Dutta , 'Estimating and Costing', UBS publishers, 2017.			
2	M. Chakraborti , 'Estimation, Costing and Specifications', Laxmi publications, 2018.			
Web Details				
1	https://www.youtube.com/watch?v=r0aDjTLxy5c			

	Name	Signature with Date
i.	Faculty	G.VENKATA RAMANA
ii.	Course Coordinator	G.VENKATA RAMANA
iii.	Module Coordinator	D.SATISH
iv.	Programme Coordinator	G.VLN MURTHY


Principal