



JOHN A. REIF, JR. DEPARTMENT OF
CIVIL AND ENVIRONMENTAL
ENGINEERING



CE 616 - Construction Cost Estimating Spring 2024

Text: Estimating In Building Construction, Ninth Edition, Frank R. Dagostino and Steven J. Peterson
Published By: Prentice Hall

Instructor: Professor Giri Venkateela: email address: venkitee@njit.edu

Office Hours: Contact thru email and/or after class .

Prerequisite: CE 610

Course Description: This course objective is to learn construction cost estimation by understanding basic principles, advanced computerized tools and current research.

Course Outcomes: Upon successful completion of this course, students should specifically be able to do the following:

1. Understand the estimating and quantity take-off process and how they are associated with construction cost control.
2. Understanding the construction bidding process
3. Knowledge on current tools and technologies used in construction cost estimation

Academic Integrity is the cornerstone of higher education and is central to the ideals of this course and the university. Cheating is strictly prohibited and devalues the degree that you are working on. As a member of the NJIT community, it is your responsibility to protect your educational investment by knowing and following the academic code of integrity policy that is found at: <http://www5.njit.edu/policies/sites/policies/files/academic-integrity-code.pdf>.

Please note that it is my professional obligation and responsibility to report any academic misconduct to the Dean of Students Office. **Any student found in violation of the code by cheating, plagiarizing or using any online software inappropriately will result in disciplinary action. This may include a failing grade of F, and/or suspension or dismissal from the university.** If you have any questions about the code of Academic Integrity, please contact the Dean of Students Office at dos@njit.edu

Grading:

Midterm	30%
Project Report	30%
Homework	15%
Research Articles Review	10%
Class Discussions	15%

Schedule:

Week-1	Introduction to Estimating Contract Documents	
Week-2	Contracts, Bonds, Insurance Project Manual	HW#1
Week-3	Estimate Quantity Takeoff	HW#2
Week-4	Excavation	HW#3
Week-5	Masonry Metal Wood	HW#4
Week-6	Concrete Concrete Estimating	
Week-7	Midterm	Midterm Exam
Week-8	Spring Break	
Week-9	Thermal and Moisture Protection Doors and Windows Finishes	RAR#1 Assignment of Project Bid
Week-10	Mechanical Insulation Estimating HVAC/Plumbing Industrial Equipment	RAR#2
Week-11	Scheduling	RAR#3
Week-12	Anatomy of a Construction Project Construction Cycle Types of Construction Projects Types of Construction Users	HW#5
Week-13	Value Engineering	
Week-14	Business Development in the Construction Industry Marketing Plan Project ID Prequalification Developing Relationships	
Week-15	Project due	Project report and Project presentation slides due
Week-16	Final	Final Exam