

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



**CE 616 - Construction Cost Estimating Fall 2023**

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

**Instructor Information**

<b>Instructor</b>	<b>Email</b>	<b>Office Hours</b>
<b>Giri Venkiteela</b>	Venkitee@njit.edu	Instructor office location - Webex and office hour times- furnished upon request vis e-mail.

**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](mailto:dos@njit.edu)*

**Grading:**

<b>Midterm</b>	<b>30%</b>
<b>Discussion Forums</b>	<b>15%</b>

<b>Exercises/ Learning Activities</b>	<b>20%</b>
<b>Bidding Project</b>	<b>30%</b>
<b>Knowledge Checks/Reflections</b>	<b>5%</b>

### Syllabus and Schedule:

<b>Week</b>	<b>Topic</b>	<b>Reading/Assignment</b>	<b>Due Dates</b>
<b>1</b>	Introduction to Estimating and Contract Documents	Chap 1 Discussion #1	Initial Post- Thurs Peer Reply- Sun
<b>2</b>	Contracts, Bonds, Insurance  Project Manual	Chap 2, Chap 3, Chap 6, Chap 7 and Chap 8  Module 2 Assignment  Discussion#2	Sunday  Initial Post- Thurs Peer Reply- Sun
<b>3</b>	Estimate  Quantity Takeoff	Chap 4, Chap 5 and and Chap 21  Module 3 Assignment  Discussion#3	Sunday  Initial Post- Thurs Peer Reply- Sun
<b>4</b>	Excavation	Chap 10  Module 4 Assignment  Discussion#4	Sunday  Initial Post- Thurs Peer Reply- Sun
<b>5</b>	Masonry,Metal,Wood	Chap 12, Chap 13 and Chap 14  Module 5 Assignment  Discussion#5	Sunday  Initial Post- Thurs Peer Reply- Sun
<b>6</b>	Concrete Estimating	Chap 11	
<b>7</b>	Midterm Exam	Midterm Exam	
<b>8</b>	Bidding Project Assignment	Module 8 Assignment  Discussion#6	Sunday  Initial Post- Thurs Peer Reply- Sun
<b>9</b>	Thermal and Moisture Protection  Doors and Windows  Finishes	Chap 15, Chap 16 and Chap 17  Module 9 Assignment  Discussion#7	Sunday  Initial Post- Thurs

			Peer Reply-Sun
<b>10</b>	Mechanical Insulation Estimating HVAC/Plumbing Industrial Equipment	Chap 19 and Chap 20  Module 10 Assignment  Discussion#8 Project Check in	Sunday  Initial Post-Thurs Peer Reply-Sun
<b>11</b>	Types of Construction Projects Types of Construction Users  Business Development in the Construction Industry	Module 11 Assignment  Discussion#9	Sunday  Initial Post-Thurs Peer Reply-Sun
<b>12</b>	Value Engineering	Module 12 Short Quiz Discussion#10 Project Check in	Initial Post-Thurs Peer Reply-Sun
<b>13</b>	Students work on bidding project	Discussion-Project-related questions	
<b>14</b>	Final Project Revisions	Discussion-Reflections  Final Project Revisions	Initial Post-Thurs Peer Reply-Sun
<b>15</b>	Bidding Project Due	Submit Bidding Projects	TBD