



**Department of Engineering Technology
Construction Engineering Technology Program
Combined Course Policy – Spring 2022**

Title and Course Number:

CET 416 –Senior Construction Project, Section 102 & Section 002

Course Location and Hours:

Section 102 will meet on Monday evenings, 6:00 P.M. – 8:50P.M.in room CKB 320; Section 002 (Day Section) will meet on Tuesdays and Fridays at 2:30 – 3:50 P.M. in room FMH 205. Class sessions will primarily be delivered in a face to face format unless otherwise required by NJIT policy.

Course Description:

Simulates the methods and procedures used to successfully manage a construction project and the construction process. Provides familiarization with constructability analysis, value engineering, productivity improvement, quality control, advanced field and office administration techniques, problem solving, and construction automation. Extensive use of construction-related computer software. Written submittals and oral presentations are required.

Prerequisites/Co-Requisites:

Prerequisite: CET 415, Construction Project Management and second semester senior standing in construction engineering technology or construction management technology.

Textbooks and Course Materials:

The course manual is posted on Canvas. There is no text for the course. However we will be drawing on all of the texts that we have used in the curriculum. The student should have a personal computer (desktop or laptop).

Course Materials will be available on Canvas. The student will also need to have access to the software necessary for the course (Microsoft Excel, Project, Word and PowerPoint all of which are available free of charge from the NJIT IST homepage).

Instructor

The instructor for this course is John A. Wiggins, P.E., J.D., F.ASCE. Professor Wiggins holds a BSCE degree (1973) from Newark College of Engineering, an MSCE degree (1981) from the New Jersey Institute of Technology and a Juris Doctor degree (1980) from the Seton Hall School of Law and is a full time member of the staff at NJIT. In addition to his teaching duties, Prof. Wiggins is a practicing civil engineer. He holds Professional Engineer and Professional Planner licenses from the State of New Jersey and a Professional Engineer's license from the Commonwealth of Pennsylvania as well as being admitted to the New Jersey State Bar. He is also a PhD candidate in Civil Engineering at Rutgers University, New Brunswick, NJ where his principal area of study is Construction Management.

Office

This semester your Instructor will be available in his office during the times shown on his online schedule. You may make an appointment by going to

http://saet-app0.coresys.njit.edu/et_scheduling/appointment_days.php?id_person=3.

Concepts and Skills (Course Learning Objectives)

Upon completion of the course, each student will have demonstrated the ability to:

- (1) an ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline;
- (2) an ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline;
- (3) an ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature;
- (4) an ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes; and
- (5) an ability to function effectively as a member as well as a leader on technical teams.
- (6.) an ability to apply knowledge, techniques, skills and modern tools of mathematics, science, engineering, and technology to solve broadly-defined engineering problems appropriate to the discipline;
- (7) an ability to design systems, components, or processes meeting specified needs for broadly-defined engineering problems appropriate to the discipline;
- (8) an ability to apply written, oral, and graphical communication in broadly-defined technical and non-technical environments; and an ability to identify and use appropriate technical literature;
- (9) an ability to conduct standard tests, measurements, and experiments and to analyze and interpret the results to improve processes; and
- (10) an ability to function effectively as a member as well as a leader on technical teams.

Attendance Policy and Student Conduct

The class will be conducted in a professional atmosphere in an effort to acquaint the students with the atmosphere of a professional environment.

It is the student's responsibility to attend class. If a class is missed, the student is responsible for all material and announcements provided during his absence. Assignments are posted on the course's Canvas webpage. Lecture attendance is not required but is encouraged and is a portion, although a minor portion, of the student's grade. For project presentations, attendance is required. Unless you have something to say, your microphone should be muted and your camera should be on. You are encouraged to ask any questions that you feel further clarifies the material being presented or that will be to the benefit of class in general. Please feel free to ask any question at any time.

Course Materials

All course materials will be posted on-line in Canvas. It is the student's responsibility to periodically check the course's Canvas site. All student submissions will be made via Canvas and hard copies of assignments will not be

accepted. Also, please be advised that all submissions in Canvas are time sensitive and that no work will be received after a deadline for submission.

Conduct of the Class

This course is centered around project work in teams. The intent of this course, as a capstone course, is to allow the student to be presented with various construction problems and to solve these problems in a team format within a limited time frame. Teams will be randomly selected by the Instructor however, students will have the ability to select their own teams near the end of the course. With the exception of the first week, a different project will be assigned every other week and due at the end of when indicated within the project instructions.

Quizzes may be offered at various points during the course and will be based on the lectures. These lectures and quizzes will focus on professional responsibility and ethics issues.

Final Test

A final test will be offered during the last week of the course. This test will not be counted for credit but is an assessment instrument for your time in our program here. It is required that you take this test but, again, it will not be counted for credit.

Grading Criteria

Your grade in this course will be a function of your project assignments, quizzes, attendance and any homework that is assigned.

In determining the final grade for this course, all grades shall be weighted as follows:

Projects	70 %
Quizzes	20 %
Attendance	<u>10 %</u>
Total	100 %

Grading Scale

Letter grades will be assigned based on the following scale

A	100 - 90
B	89 – 80
C	79 – 70
D	69 – 60
F	59 - 0

The grade of Incomplete will only be granted in the case of an extreme emergency on the part of the student, demonstrated by appropriate documentation from the Dean of Students. Your Instructor reserves the right to vary the above as necessary based on the results of the course.

Professional Communications

All communications between the student and Instructor (homework, reports, papers, emails, etc.) are professional communications and should be treated as same. Use of slang and computer short-hand are improper and should be avoided. Also, proper grammar and spelling should be employed at all times.