New York University Tandon School of Engineering  
Department of Civil and Urban Engineering  
Course Outline CE8293 Construction Operations Analysis  
Spring 2018  
Professor Adis Sehic  
Monday 18:00 - 20:30; Room TBD

To contact professor:  as5586@nyu.edu  
RH 407  
Phone: 347-880-5233  
Office hours: Monday 17:00-18:00 or by appointment

Course Pre-requisites:  Graduate standing

Course Description:  The course provides a contemporary synopsis of productivity improvement investigation methods and techniques. The course will explore the use of existing methods for managing the vast array of information over the life of a project. The course will focus on the implementing different methods (the project controls tools - scheduling, EVM, estimating), managerial decision making, the building information modeling (BIM)) for the analysis of construction operations/productivity.

Course Objectives

1. Understand the concept of construction operation analysis and construction productivity.
2. Overall aspects of productivity improvement for construction operations.
3. Understand the concept of project controls methods (scheduling, estimating, EVM).
4. Understand the concept of BIM.
5. Understand the relationship between the interface management and decisions making.
6. Quantitative methods for measuring, analyzing and improving productivity at job sites.

Course Structure:  This course will consist of project-based lectures, workshops and integrated curriculum studio problem solving sessions.

Readings:  The required text/notes for the course will be provided.

Software:  
“Revit” by Autodesk  
“Navisworks” by Autodesk  
“Primavera Project Planner, P6” from Oracle  
“Microsoft Office”

Course requirements:
1. Attendance is required. Unexcused absences will be considered in assigning a final Grade.
2. Grading. Grading will be on both individual and group efforts.
   a. Class Participation, Quizzes – 30%
   b. Mid Term – 30%
   c. Final Exam – 40%
3. Punctuality: Please do not be late.
4. Software learning. We do not teach software. The course has prerequisite courses that required you learn most of the software to be used in this class. Any software must be learned on your own through tutorials and other web processes.

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<td>Lecture</td>
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<td>29-Jan</td>
<td>Construction Operation/Productivity I</td>
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<td>Construction Operation/Productivity II</td>
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<td>26-Feb</td>
<td>Labor Production Rates / Install Navisworks</td>
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<td>5-Mar</td>
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<td>2-Apr</td>
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<td>9-Apr</td>
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<td>23-Apr</td>
<td>BIM use in Construction Operations</td>
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Moses Center Statement of Disability

If you are student with a disability who is requesting accommodations, please contact New York University’s Moses Center for Students with Disabilities (CSD) at 212-998-4980 or mosescsd@nyu.edu. You must be registered with CSD to receive accommodations. Information about the Moses Center can be found at www.nyu.edu/csd. The Moses Center is located at 726 Broadway on the 2nd floor.

NYU School of Engineering Policies and Procedures on Academic Misconduct

A. Introduction: The School of Engineering encourages academic excellence in an environment that promotes honesty, integrity, and fairness, and students at the School of Engineering are expected to exhibit those qualities in their academic work. It is through the process of submitting their own work and
receiving honest feedback on that work that students may progress academically. Any act of academic dishonesty is seen as an attack upon the School and will not be tolerated. Furthermore, those who breach the School’s rules on academic integrity will be sanctioned under this Policy. Students are responsible for familiarizing themselves with the School’s Policy on Academic Misconduct.

B. Definition: Academic dishonesty may include misrepresentation, deception, dishonesty, or any act of falsification committed by a student to influence a grade or other academic evaluation. Academic dishonesty also includes intentionally damaging the academic work of others or assisting other students in acts of dishonesty. Common examples of academically dishonest behavior include, but are not limited to, the following:

1. Cheating: intentionally using or attempting to use unauthorized notes, books, electronic media, or electronic communications in an exam; talking with fellow students or looking at another person’s work during an exam; submitting work prepared in advance for an in-class examination; having someone take an exam for you or taking an exam for someone else; violating other rules governing the administration of examinations.
2. Fabrication: including but not limited to, falsifying experimental data and/or citations.
3. Plagiarism: intentionally or knowingly representing the words or ideas of another as one’s own in any academic exercise; failure to attribute direct quotations, paraphrases, or borrowed facts or information.
4. Unauthorized collaboration: working together on work that was meant to be done individually.
5. Duplicating work: presenting for grading the same work for more than one project or in more than one class, unless express and prior permission has been received from the course instructor(s) or research adviser involved.
6. Forgery: altering any academic document, including, but not limited to, academic records, admissions materials, or medical excuses.