



I-BIM: Infrastructure-Building Information Modeling

Lecturer: Prof. **Salvatore Antonio Biancardo**, PhD



Duration: 18 CLOCK HOURS (3 CFU)

Learning Objectives

The subject of Building Information Modelling (BIM) has become a central topic to the improvement of the AECO (Architecture, Engineering, Construction and Operations) industry, requiring new mindsets, processes and technological proficiencies to achieve significant improvements in efficiency and cost control. Transitioning BIM into the domain of infrastructure projects (I-BIM) has provided challenges and emphasized the constructor perspective of BIM. This course is intended to provide an understanding of I-BIM lean principles for the design of road infrastructures. The I-BIM methodology will be investigated through the development of an infrastructure design project using OpenRoads Designer of Bentley Systems. Upon successful completion of the course, students will be issued with a certificate of accomplishment for the acquired skills. Attendees will receive a non-commercial student license for participation in this course. Attendees are required to install the software on their own computers.

Topics include:

- I-BIM General Principles and Standards
- Creating and Analyzing Surfaces
- Working with Alignments
- Working with Profiles and Profile Views
- Working with Assemblies and Subassemblies
- Creating Corridors
- Making Cross Sections and Section views
- Modeling Bridge and Intersections

Class Schedule

Lecture 1	Wednesday, January 22 nd , 2025 (3-6 PM)
Lecture 2	Wednesday, January 29 th , 2025 (3-6 PM)
Lecture 3	Wednesday, February 5 th , 2025 (3-6 PM)
Lecture 4	Wednesday, February 12 nd , 2025 (3-6 PM)
Lecture 5	Wednesday, February 19 th , 2025 (3-6 PM)
Lecture 6	Wednesday, February 26 th , 2025 (3-6 PM)