

Objectives and Learning Outcomes

1. Create documents and communications
 - 1.1. Create written communications appropriate to the construction discipline (1)
 - 1.2. Create oral presentations appropriate to the construction discipline (2)
 - 1.3. Create a construction project safety plan (3)
 - 1.4. Create construction project cost estimates (4)
 - 1.5. Create construction project schedules (5)
2. Critically examine essential ideas and concepts
 - 2.1. Analyze professional decisions based on ethical principles (6)
 - 2.2. Analyze construction documents for planning and management of construction processes (7)
 - 2.3. Analyze methods, materials, and equipment used to construct projects (8)
3. Apply knowledge, skills, and technology
 - 3.1. Apply construction management skills as an effective member of a multi-disciplinary team (9)
 - 3.2. Apply electronic-based technology to manage the construction process (10)
 - 3.3. Apply basic surveying techniques for construction layout and control (11)
4. Understand important methods and concepts
 - 4.1. Understand different methods of project delivery and the roles and responsibilities of all constituencies involved in the design and construction process (12)
 - 4.2. Understand construction risk management (13)
 - 4.3. Understand construction accounting and cost control (14)
 - 4.4. Understand construction quality assurance and control (15)
 - 4.5. Understand construction project control processes (16)
 - 4.6. Understand the legal implications of contract, common, and regulatory law to manage a construction project (17)
 - 4.7. Understand the basic principles of sustainable construction (18)
 - 4.8. Understand the basic principles of structural behavior (19)
 - 4.9. Understand the basic principles of mechanical, electrical, and plumbing systems (20)