Construction Engineering Technology

- 1. <u>Building Information Modeling (BIM)</u>. Recognize purpose for building information modeling within building design.
- 2. <u>Quality Assurance</u>. Monitoring project work for compliance with contract documents.
- 3. <u>Surveying</u>. Perform basic surveying tasks including layout of vertical and horizontal alignments, comprehend the underlying mathematical principles and apply the information obtained.
- 4. <u>Drawings</u>. Interpret the intent of plans and specifications as they relate to the various aspects of the construction project from the perspective of the owner, design professional, construction manager, and contractor and have the associated computer proficiencies.
- 5. <u>Project Management</u>. Apply the principles of project management process, innovation and technology to effectively identify characteristics of project delivery systems, perform contract document tasks, perform contract document tasks, and implement project processes for successful project completion.
- 6. <u>Scheduling</u>. Using critical path method to organize project requirements into logical interrelated groupings that represent consensus of project stakeholders to develop a management tool that communicates project status using industry standard technology.
- 7. <u>Estimating Cost Controls</u>. Apply sound estimating and cost management principals, using industry standard computer technology to develop and maintain an organized management tool that effectively projects and communicates the projects financial status.
- 8. <u>Problem Solving</u>. Use critical thinking skills to anticipate, identify, respond to, and resolve problems.
- 9. <u>Communication</u>. Use verbal and written skills with technological tools to clearly and effectively communicate using appropriate protocols to project stakeholders.