Graduate Certificate in Construction Engineering and Management

WHY DO I NEED THIS GRADUATE CERTIFICATE?

• To advance your managerial skills and decision-making abilities in construction industries.
• To help you prepare for jobs with more responsibility and advance to management positions.
• It is ideal if you are interested in pursuing graduate studies without committing to a full master’s program.

COURSES

The department offers a 12-hour Graduate Certificate in Construction Engineering and Management.

The coursework for the certificate consists of two required courses:
• Construction Cost Estimating and Control
• Construction Management

Students choose two electives from:
• Construction Safety and Risk Management
• Sustainable Building Design and Construction
• Masonry Design and Construction
• BIM and 4D Modeling

QUALIFICATIONS

The graduate certificate is designed for professionals who have a bachelor’s degree in civil engineering, architecture, landscape architecture, interior design, or business and are seeking a senior management position in the construction industry. To be considered for this program, one should satisfy one of the following criteria:

• Bachelor’s degree in engineering, architecture, landscape architecture, interior design or
• Extensive practical (3-5 years) experience in the construction industry

Course selection is subject to change and will be reviewed and approved by the graduate advisor.

For more information on the Graduate Certificate in Construction Engineering and Management at Texas Tech, visit www.ceet.ttu.edu/grad
Graduate Faculty Research Specializations

Department of Construction Engineering & Engineering Technology

Construction Engineering Research

Graduate Faculty Research Specializations

Dr. Mukaddes Darwish
Associate Professor

Dr. Tewodros Ghebrab, P.E.
Assistant Professor and Graduate Advisor
Performance of cement based materials under adverse environments, Effect of mineral/chemical admixtures on the structure-property relationships of cement based materials, Modeling of mechanical and physical properties of cementitious materials containing nano-size mineral admixtures, Effect of mineral admixtures on concrete containing recycled aggregates

Dr. Sang Lee
Assistant Professor
Applications of emerging technologies for more efficient infrastructure management, Sustainable construction methods and materials in buildings and infrastructure systems, Engineering cost analysis of construction projects by applying a life-cycle cost analysis and/or a benefit-cost analysis, Development of risk management plan for better maintenance of built environments, Construction management education at a graduate level, Bidding strategy and bid-markup decision

Dr. Daan Liang, P.E.
Associate Professor and Interim Director of the National Wind Institute
Remote-Sensing Imagery, Post Storm Damage Assessment and Recovery, Wind Effects on Buildings and Structures, Wind Storm Damage Assessment Techniques, Agent-based Recovery Modeling

Dr. Ali Nejat
Assistant Professor
Modeling Dynamics of Post-disaster Recovery, Agent-based Modeling, System Dynamics, Infrastructure Management, Building Information Modeling, Transportation Construction Management