Textbook and/or Resource Material
Required Text: No textbook, but accessing the Blackboard course site is required.

Course Description and Prerequisites
This course is designed to provide a Directed Research opportunity to undergraduate students and/or give students in civil engineering an opportunity to gain practical work experience by working as a civil engineering trainee or related position with a participating employer. The student will be advised and mentored by a faculty member or staff person who will also serve as a liaison between the university and the employer. The employment period may be during the summer or an academic semester. Each student will be required to write a report on his/her work experience. The course may be repeated for each continuous work period and may count toward the International Endorsement if the work assignment is outside the United States.
Prerequisites: Advisor’s consent

Learning Objectives/Outcomes for the Course
Course Outcomes & Assessment: H - Homework; Q – Quiz; T – Test; F – Field trip; and R – Project Report
1. Gain practical experience within the civil engineering skills and techniques [R]
2. Demonstrate knowledge and theory learned in the classroom in a work settling [R]
3. Practice with professionalism, commit to ethical responsibilities and consider safety and socioeconomic issues into developing engineering solutions [R]
4. Develop and refine oral and written communication skills [R]
5. Understand the need for lifelong learning to maintain abreast of current practice [R]

Learning Objectives for Core Curriculum Requirements
Texas Higher Education Coordinating Board (THECB) Outcomes associated with Civil Engineering Department Student Outcomes
- Critical Thinking Skills - an ability to identify, formulate, and solve engineering problems;
- Empirical and Quantitative Skills - an ability to apply knowledge of mathematics, science, and engineering; a knowledge of contemporary issues; an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice
- Social Responsibility - an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability

Course Policies
Course Qualification: Consent by a faculty advisor is required to enroll this course. Students need to submit email notification to the course instructor with a brief information of research project/internship including supervisor, internship agency, and total duration.
Course Enrollment: Students can enroll this course multiple times until their internship hour meets the minimum required 480 hours of actual work. For example, a student who spent two months of summer working at a rate of 40 hours per week, his/her total internship time accrual would be 320 hours (=2 months by 4 weeks by 40 hours). The student can enroll this course repeatedly (up to a maximum of 2 years to add 160 hours to meet the minimum hour.
Grading Policies: Enrolled students will be required to submit a properly completed Project Report and Performance Review form, which will be downloadable at the course Blackboard site. The form is composed of project description (to be completed by the applicant) and supervisor’s reference/review (to be completed by the supervisor). The form needs to be submitted by at least one week before the start of
the final exam period of each semester. Your grade will be determined based on the form evaluation rubric. Alphabetical grade (A, B, or C..) will be given after you complete the minimum time commitment, otherwise you will receive an “In Progress” (IP) grade. This grade is not considered in calculating GPA or attempted hours. See the UTRGV grading system for further information: https://www.utrgv.edu/ucentral/grades-and-transcripts/index.htm

Students can submit a request to change their IP grade to an alphabetical (final) grade, without fulfilling the minimum work time commitment. However, in this case, the students will not be able to enroll in the CIVE 3300 course again.

Technical Elective (TE) Course Substitution: Students who want to request TE substitution will be asked to submit a comprehensive **Final Work-Experience Report.** Students need to demonstrate their project/internship activities are at the equivalent level of one of the TE courses, e.g., CIVE 4333, 4348, 4351, and 4359. For example, if the internship was related to transportation, then the report needs to clearly describe the similarities between the project/internship activities and the CIVE 4348 Highway Design course contents. However, it does not need to be identical to the course. Your report will be evaluated by the TE-substitution review committee members including the course instructor. Only one TE substitution is allowed.

Final Work-Experience Report

There is no specific form. However, the report must be of professional-level quality and include:

- **Cover Page:** your name and SID, report title, submission date
- **Introduction (700 words):** project/internship job background and information including working hours and sites, goal and objectives
- **Roles and Activities (1000 words):** your given responsibilities and activities on the project and/or internship to achieve the goal and objectives, your roles of the
- **Outcome and Discussion (700 words):** your final outcome from the project/internship, assessment of your work done on the project, discussion of your experience, impact on your future career
- **Relevance of the TE course contents (500 words):** justification of your TE substitution request, need to compare your experience with the target TE course contents and topics. Explain the level equality between your experience and TE course contents
- **Figures and Tables:** very effective option to describe/present, need to add title of figure/table. adding figures/tables in Appendix is also recommended
- **Literature References:** citations and bibliography, if needed, but highly recommended.

Note: Students should add the finished report to their Work Portfolio, which will greatly enhance it and increase the chances of getting a job offers or promotions in the future.

Calendar of Activities

The UTRGV academic calendar can be found at [http://my.utrgv.edu](http://my.utrgv.edu) at the bottom of the screen, prior to login.

Civil Engineering Student Outcomes

a. an ability to apply knowledge of mathematics, science, and engineering
b. an ability to design and conduct experiments, as well as to analyze and interpret data
c. an ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
d. an ability to function on multidisciplinary teams
e. an ability to identify, formulate, and solve engineering problems
f. an understanding of professional and ethical responsibility
g. an ability to communicate effectively
h. the broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
i. recognition of the need for, and an ability to engage in life-long learning
j. a knowledge of contemporary issues
k. an ability to use the techniques, skills, and modern engineering tools necessary for engineering practice

**Contribution of Course Outcomes to Program Outcomes**

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**Civil Engineering Course Policies**

**Grades:**
- Course grades will be based upon demonstrated understanding of course content.
- An understanding of prerequisite knowledge is assumed and will not be graded.
  - To be graded, student work must demonstrate retention, understanding and confidence in the exercising of prerequisite knowledge.
- At least 10% of the course grade will be attributed to participation; tardiness, alertness, disruptive conversation, web surfing, texting, working on homework, listening to music or any other behavior that does not contribute to course success may be penalized.

**Attendance:**
- Lecture, laboratory, quiz, exam and any other course related meetings are required.
- Students not attending course meetings and/or not turning in assignments will be dropped from the course by the instructor.

**Homework:**
- will be completed in a consistent format in all Civil Engineering courses;
  - The student's full name will be provided in the upper right corner of the first page.
  - The student's last name will be provided in the upper right corner of additional pages.
  - The page number and total number of pages will be shown in the upper right corner of the second and any additional pages.
  - Homework will not be stapled.
  - Only one side (the front side, binding holes on the left, heavily printed grid on the back) of the paper will be used.
  - Homework that is not legible will not be graded.
- will be turned in on time and at the beginning of lecture (first 6 minutes), when due at a lecture;
  - No late homework will be accepted for full credit.
  - Two assignments (maximum) per course may be submitted at the beginning of the following lecture for at most 50% credit.
- problems involving calculations will be completed on engineering paper;
  - Homework completed on paper from a spiral notebook will have any spiral perforations trimmed from the pages.
  - Engineering paper created using a watermark, title block and/or border may be printed.
  - Spreadsheet solutions will include algebraic equations and adequate notations to follow the development of the solution and facilitate checks with hand calculations.
- problem solutions will include the problem statement at the top of the problem followed by any data or other information given to solve the problem.
- Assumptions used to solve problems will be clearly identified.
- References to materials used to solve the problem will be provided, including (when used) solution manuals.
• Solutions appearing to have been copied from a solution manual will not be graded.
• Solutions will include detailed progression of calculations.
• Answers will be well identified (circled, boxed, underlined or highlighted) and will include units
• Completed homework solutions will be folded in half (4.25” x 11” when folded, typical) with the students full name written in the upper right corner of the back page.

Electronic Devices:
• During lectures, all electronic devices will be turned off and put away: cell phones, i Pads, PDA’s, etc. Electronic devices, including computers, may only be used to reference and/or support course materials, content and discussions.

Exams:
• Exams are to be taken at scheduled exam times.
• Academic dishonesty will not be tolerated.
  • When observed, cheating will result in a failing grade
  • Instances of cheating will be referred to the Dean of Students
• Exams will generally be taken with tables/desks cleared.
  • The use of calculator app’s on i-devices may be prohibited.
    • Students should consider using an FE approved calculator.
  • No materials may be shared among students, including: calculators, erasers, pencils, paper, reference materials, etc.
  • Wandering eyes may constitute cheating; look at your paper or your calculator.
• Student will not be permitted to leave the classroom during lectures and exams except for extreme emergencies.
• Make-ups for in-class exams for extreme emergencies will be scheduled at the end of the semester.
UTRGV Policy Statements

STUDENTS WITH DISABILITIES:
If you have a documented disability (physical, psychological, learning, or other disability which affects your academic performance) and would like to receive academic accommodations, please inform your instructor and contact Student Accessibility Services to schedule an appointment to initiate services. It is recommended that you schedule an appointment with Student Accessibility Services before classes start. However, accommodations can be provided at any time. Brownsville Campus: Student Accessibility Services is located in Cortez Hall Room 129 and can be contacted by phone at (956) 882-7374 (Voice) or via email at ability@utrgv.edu. Edinburg Campus: Student Accessibility Services is located in 108 University Center and can be contacted by phone at (956) 665-7005 (Voice), (956) 665-3840 (Fax), or via email at ability@utrgv.edu.

MANDATORY COURSE EVALUATION PERIOD:
Students are required to complete an ONLINE evaluation of this course, accessed through your UTRGV account (http://my.utrgv.edu); you will be contacted through email with further instructions. Students who complete their evaluations will have priority access to their grades. Online evaluations will be available:

SCHOLASTIC INTEGRITY:
As members of a community dedicated to Honesty, Integrity and Respect, students are reminded that those who engage in scholastic dishonesty are subject to disciplinary penalties, including the possibility of failure in the course and expulsion from the University. Scholastic dishonesty includes but is not limited to: cheating, plagiarism, and collusion; submission for credit of any work or materials that are attributable in whole or in part to another person; taking an examination for another person; any act designed to give unfair advantage to a student; or the attempt to commit such acts. Since scholastic dishonesty harms the individual, all students and the integrity of the University, policies on scholastic dishonesty will be strictly enforced (Board of Regents Rules and Regulations and UTRGV Academic Integrity Guidelines). All scholastic dishonesty incidents will be reported to the Dean of Students.

SEXUAL HARASSMENT, DISCRIMINATION, and VIOLENCE:
In accordance with UT System regulations, your instructor is a “responsible employee” for reporting purposes under Title IX regulations and so must report any instance, occurring during a student’s time in college, of sexual assault, stalking, dating violence, domestic violence, or sexual harassment about which she/he becomes aware during this course through writing, discussion, or personal disclosure. More information can be found at www.utrgv.edu/equity, including confidential resources available on campus. The faculty and staff of UTRGV actively strive to provide a learning, working, and living environment that promotes personal integrity, civility, and mutual respect in an environment free from sexual misconduct and discrimination.

COURSE DROPS:
According to UTRGV policy, students may drop any class without penalty earning a grade of DR until the official drop date. Following that date, students must be assigned a letter grade and can no longer drop the class. Students considering dropping the class should be aware of the “3-peat rule” and the “6-drop” rule so they can recognize how dropped classes may affect their academic success. The 6-drop rule refers to Texas law that dictates that undergraduate students may not drop more than six courses during their undergraduate career. Courses dropped at other Texas public higher education institutions will count toward the six-course drop limit. The 3-peat rule refers to additional fees charged to students who take the same class for the third time.