

**1: Course Number and Name**

- a. **CENG 4091:** Independent Study- Steel Connection Design, Fall 2021
- b. Section D10, TBD

**2: Credits and Contact Hours**

- a. **Credits:** 3
- b. **Contact Hours:** 1 hour/week (Meeting); 4+ hours/week (Laboratory)

**3: Instructor Information**

- a. **Course Coordinator:** Anthony Battistini
- b. **Instructors:**
  - i. Anthony Battistini, 325-486-5511, [anthony.battistini@angelo.edu](mailto:anthony.battistini@angelo.edu). Office: VIN 271. For office hours see [faculty homepage](#)<sup>1</sup>.

**4: Required Course Materials**

- a. **Required Textbook:** None
- b. **Recommended Textbook:** None
- c. **Software:** The use of CAD software and other analysis software will be necessary to complete the course project. Students have access to the software through the Engineering Computer Lab (VIN 245) and can access the platform remotely at <https://view.angelo.edu><sup>2</sup>.
- d. **Other Supplemental Materials:** None

**5: Technology Requirements**

To successfully complete this course, you need to access to the Blackboard® Learning Management System, to the shared Google Drive and Documents, and to the software in the Engineering Computer Lab.

**6: Specific Course Information**

- a. **Catalog Description:** Independent study or individual research problems in Civil Engineering. May be repeated for a total of 12 credits.
- b. **Prerequisites:** Civil Engineering Majors only with Junior or Senior standing. Departmental permission.
- c. **Required or elective:** Elective for BSCE Majors (may satisfy Design or Technical Elective pending DLHE faculty approval).

**7: Specific Goals for the Course**

- a. Course Learning Outcomes:
  1. Design an experimental test setup using the UTM to test bolted and welded connections.
  2. Design specimens to fail in specific failure modes based on engineering mechanics and the AISC 360-16 specification.
  3. Organize weekly meetings with instructor to review progress.
  4. Record steel connection test failures and data.
  5. Compile CAD drawings of all testing apparatuses and specimens, videos, and other documents for future dissemination.
  6. Write a brief report outlining the research findings and present results at a future conference.

b. Course Learning Outcome Mapping to ABET Criterion 3 Student Outcomes:

**Table 1: Course Learning Outcomes mapped to ABET Student Outcomes**

<b>ABET Student Outcomes</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
1. Solve Problems	X	X				
2. Design	X	X			X	
3. Communication	X		X		X	X
4. Ethics & Professionalism			X			
5. Teamwork						
6. Experimentation	X			X		
7. Acquire New Knowledge	X				X	X

**8: Topics Covered**

1. Steel Connection Design
2. CAD Drawing
3. UTM Testing Procedures and Safety
4. Technical Report Writing and Presentation

## 9: Course Delivery and Communications

### 9.1: Delivery Methods

The course does not have a defined meeting time. The student and instructor will arrange weekly meetings as needed to accomplish the tasks of the research.

Most documents will be added and organized by the student on a shared Google Drive hosted by the instructor.

Academic integrity is expected from all students at all times in accordance with [Part I, Section B.1<sup>3</sup>](#) of the Angelo State University *Code of Student Conduct*.

Respect for your fellow classmates and instructor is required.

### 9.2: Communications

Important course announcements and changes will be sent directly by email.

Students should feel free to contact the instructor regarding any issues with the class.

## 10: Professionalism

Professional engineering standards apply in this class. You are expected to demonstrate a behavior consistent with the conduct of an individual practicing in the engineering profession. You are expected to: (1) come prepared for class; (2) respect faculty and peers; (3) demonstrate responsibility and accountability for your own actions; (4) demonstrate sensitivity and appreciation for diverse cultures, backgrounds, and life experiences; (5) offer and accept constructive criticism in a productive manner; (6) demonstrate an attitude that fosters professional behavior among peers and faculty; (7) be punctual to class meetings; (8) maintain a good work ethic and integrity; and (9) recognize the classroom as a professional workplace.

## 11: Graded Material

### 11.1: Final Grades

**Table 2: Grade Weighting**

<b>Item</b>	<b>Percent</b>
ACAD Drawings	20%
Design Calculations	20%
Test Data and Videos	20%
Weekly Meetings	20%
Final Report	20%
Total	100%

The instructor reserves the right to adjust the weights given to the items listed above, if the student is not making adequate progress on the item.

### **11.2: Grading Scale**

The instructor will determine letter grades for the course using his professional judgment, and the following standards as described in the University Catalog:

A = excellent work      B = good work      C = average work      D = poor work      F = failing work

### **12: Classroom and University Policies and Student Support**

#### **12.1: General Policies**

All students are required to follow the policies and procedures presented in the [Angelo State University Student Handbook](#)<sup>4</sup> and [Angelo State University Catalog](#)<sup>5</sup>.

#### **12.2: Accommodations for Students with Disabilities**

ASU is committed to the principle that no qualified individual with a disability shall, on the basis of disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the university, or be subjected to discrimination by the university, as provided by the Americans with Disabilities Act of 1990 (ADA), the Americans with Disabilities Act Amendments of 2008 (ADAAA) and subsequent legislation.

Student Disability Services is located in the Office of Student Affairs, and is the designated campus department charged with the responsibility of reviewing and authorizing requests for reasonable accommodations based on a disability. It is the student's responsibility to initiate such a request by contacting an employee of the Office of Student Affairs, in the Houston Harte University Center, Room 112, or contacting the department via email at [ADA@angelo.edu](mailto:ADA@angelo.edu). For more information about the application process and requirements, visit the [Student Disability Services website](#)<sup>6</sup>. The employee charged with the responsibility of reviewing and authorizing accommodation requests is:

Dr. Dallas Swafford  
Director of Student Disability Services  
Office of Student Affairs  
325-942-2047  
[dallas.swafford@angelo.edu](mailto:dallas.swafford@angelo.edu)  
Houston Harte University Center, Room 112

#### **12.3: Title IX at Angelo State University**

Angelo State University is committed to providing and strengthening an educational, working, and living environment where students, faculty, staff, and visitors are free from sex discrimination of any kind. In accordance with Title VII, Title IX, the Violence Against Women Act (VAWA), the Campus Sexual Violence Elimination Act (SaVE), and other federal and state laws, the University prohibits discrimination based on sex, which includes pregnancy, and other types of Sexual Misconduct. Sexual Misconduct is a broad term encompassing all forms of gender-based harassment or discrimination and unwelcome behavior of a sexual nature. The term includes sexual harassment, nonconsensual sexual contact, nonconsensual sexual intercourse, sexual assault, sexual exploitation, stalking, public indecency, interpersonal violence (domestic violence or dating violence), sexual violence, and any other misconduct based on sex.

You are encouraged to report any incidents of sexual misconduct directly to the Office of Title IX Compliance and the Director of Title IX Compliance/Title IX Coordinator, Michelle Miller, J.D. You may submit reports in the following manner:

Online: [Incident Reporting Form](#)<sup>7</sup>

Face to Face: Mayer Administration Building, Room 210

Phone: 325-942-2022

Email: [michelle.miller@angelo.edu](mailto:michelle.miller@angelo.edu)

Note, as a faculty member at Angelo State, I am a mandatory reporter and must report incidents involving sexual misconduct to the Title IX Coordinator. Should you wish to speak to someone in confidence about an issue, you may contact the University Counseling Center (325-942-2371), the 24-Hour Crisis Helpline (325-486-6345), or the University Health Clinic (325-942-2171).

For more information about resources related to sexual misconduct, Title IX, or Angelo State's policy please visit: [ASU's Title IX Website](#)<sup>8</sup>.

#### **12.4: Student Absence for Observance of Religious Holy Days**

A student who intends to observe a religious holy day should make that intention known in writing to the instructor prior to the absence. See ASU Operating Policy 10.19 Student Absence for [Observance of Religious Holy Day](#)<sup>9</sup> for more information.

#### **12.5: Incomplete Grade Policy**

It is policy that incomplete grades be reserved for student illness or personal misfortune. Please contact faculty if you have serious illness or a personal misfortune that would keep you from completing course work. Documentation may be required. See ASU Operating Policy 10.11 [Grading Procedures](#)<sup>10</sup> for more information.

#### **12.6: Information About COVID-19**

Please refer to ASU's [COVID-19 \(Coronavirus Update\)](#)<sup>11</sup> webpage for current information about campus guidelines and safety standards as they relate to the COVID-19 pandemic.

#### **12.7: Student Conduct Policies**

##### **12.7.1: Academic Integrity**

Students are expected to maintain complete honesty and integrity in all work. Any student found guilty of any form of dishonesty in academic work is subject of disciplinary action and possible expulsion from ASU.

##### **12.7.2: Plagiarism**

Plagiarism is a serious topic covered in ASU's [Academic Integrity policy](#)<sup>12</sup> in the Student Handbook. Plagiarism is the action or practice of taking someone else's work, idea, etc., and passing it off as one's own. Plagiarism is literary theft.

In your discussions and/or your papers, it is unacceptable to copy word-for-word without quotation marks and the source of the quotation. It is expected that you will summarize or paraphrase ideas giving appropriate credit to the source both in the body of your paper and the reference list.

Papers are subject to be evaluated for originality via Turnitin or SafeAssign. Resources to help you understand this policy better are available at the [ASU Writing Center](#)<sup>13</sup>.

##### **12.7.3: Copyright Policy**

Students officially enrolled in this course should make only one printed copy of the given articles and/or chapters. You are expressly prohibited from distributing or reproducing any portion of course readings in printed or electronic form without written permission from the copyright holders or publishers.

### **13: Instructor Specific Information**

The instructor reserves the right to change the policies and procedures of this course when he deems it necessary.

#### **13.1: Diversity and Equity Statement**

The instructor strives to promote a living and learning environment for outstanding growth and productivity among all students, faculty and staff. Diversity is broadly defined to include such characteristics as, but not limited to, race, ethnicity, gender, religion, age, disability, sexual orientation, or socio-economic background. Diversity also entails different viewpoints, philosophies, and perspectives. Course activities and attention to these aspects of diversity will help promote a culture of inclusion and belonging, and an environment where diverse opinions, backgrounds and practices have the opportunity to be voiced, heard and respected. All students in my classroom are expected to show respect for one another.

#### 14: Course Outline

The course outline is presented in Table 3. Updates to this schedule will be provided via Blackboard.

**Table 3: Course Lesson Outline**

<b>Week</b>	<b>Day</b>	<b>Date</b>	<b>Notes/Topic</b>
01	Monday	8/23	Meeting TBD; CAD Drafting; Lab Safety
02	Monday	8/30	Meeting TBD; CAD Drafting; UTM Training
03	Monday	9/6	Meeting TBD; Design Calculations
04	Monday	9/13	Meeting: Agenda TBD
05	Monday	9/20	Meeting: Agenda TBD
06	Monday	9/27	Meeting: Agenda TBD
07	Monday	10/4	Meeting: Agenda TBD
08	Monday	10/11	Meeting: Agenda TBD
09	Monday	10/18	Meeting: Agenda TBD
10	Monday	10/25	Meeting: Agenda TBD
11	Monday	11/1	Meeting: Agenda TBD
12	Monday	11/8	Meeting: Agenda TBD
<b>13</b>	Monday	11/15	Meeting: Agenda TBD
14	Monday	11/22	Meeting: Agenda TBD
15	Monday	11/29	<b>FINAL REPORT, DESIGN CALCULATIONS, TESTED SPECIMENS, AND VIDEOS ARE DUE</b>
16	Monday	12/6	<b>NO FINAL EXAM</b>

## 15: End Notes

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- <sup>1</sup> <https://www.angelo.edu/live/profiles/6463-anthony-battistini>
- <sup>2</sup> <https://view.angelo.edu>
- <sup>3</sup> <https://www.angelo.edu/student-handbook/code-of-student-conduct/misconduct.php>
- <sup>4</sup> <https://www.angelo.edu/current-students/student-handbook/>
- <sup>5</sup> <https://www.angelo.edu/academics/catalog/>
- <sup>6</sup> <https://www.angelo.edu/current-students/disability-services/>
- <sup>7</sup> <http://www.angelo.edu/incident-form>
- <sup>8</sup> <https://www.angelo.edu/current-students/title-ix/>
- <sup>9</sup> <http://www.angelo.edu/content/files/14206-op-1019-student-absence-for-observance-of>
- <sup>10</sup> <https://www.angelo.edu/content/files/14197-op-1011-grading-procedures>
- <sup>11</sup> <https://www.angelo.edu/covid-19/>
- <sup>12</sup> <http://www.angelo.edu/student-handbook/community-policies/academic-integrity.php>
- <sup>13</sup> [https://www.angelo.edu/current-students/writing-center/academic\\_honesty.php](https://www.angelo.edu/current-students/writing-center/academic_honesty.php)