CoE2001 Statics

Fall 2026

Mon & Wed, 2:00-2:50

Instructor: Prof. Min Zhou, Rm 4108 MRDC, Tel: 404-894-3294
Email: min.zhou@gatech.edu
Office Hours: Mon & Wed 3-4 pm

TA: TBD

Office Hour: TBD

Prerequisites: MATH 1552 Integral Calculus (Minimum grade C) and Physics 2211 Introduction to Physics I (Minimum grade C)

Course Outcomes:

Outcome 1: Students will understand the basic principles underlying the equilibrium of rigid bodies in planar and 3D spaces.

1.1 Students will demonstrate an ability to apply fundamental rigid-body mechanics concepts to set up and solve engineering mechanics problems such as equilibrium and force-balance problems for single and assemblies of rigid bodies.

Outcome 2: Students will learn to identify, formulate, and solve engineering problems in rigid-body statics.

2.1 Students will demonstrate the ability to isolate rigid bodies and to draw clear and appropriate free body diagrams.

2.2 Students will demonstrate an ability to apply skills in mathematics and physics to solve engineering mechanics problems.

2.3 Students will demonstrate an ability to identify appropriate supports and static knowns and unknowns, in both 2D and 3D structures.

2.4 Students will demonstrate that they can apply the appropriate principles referred to in Objective 1 to the solution of problems.

Textbook: Engineering Mechanics: Statics, by James L. Meriam, 9th ed., Wiley, ebook included as part of WileyPlus access (required) via Canvas.

WileyPlus: Required for completing assignments, including ebook. To purchase, Click on "Wiley course Resources" on the left of Canvas class page. This should prompt you to set up your account (if you have never had one) and make the purchase. If you previously had a WileyPlus profile, you can use

that one for the purchase. There is a 2-week free trial period before you have to pay, you can take advantage of that. You only need to do this once and can use Canvas to access homework assignments, ebook, and other WileyPlus resources afterwards. See Flyer entitled "WileyPlus registration info" for details.

Course format: On-campus in-person lectures. All assignments will be available on Canvas and submitted to Canvas. Class attendance will be taken and used to determine course grade in borderline cases, although it will not be directly used in grade calculation. All class information (lecture recordings, assignments, grades, etc.) can be accessed online via Canvas. All homework assignments will be completed through Canvas.

Zoom Recording: A live Zoom link to lectures is available under the Zoom tab on Canvas. Recordings of lectures are available under the Media Gallery tab. These are backup resources for learning that can be used in case of absences due to genuine health reasons or official GT functions. They are NOT a substitute for in-person class attendance.

HOURS	TOPICS	CHAPTERS
Hours	**Topics**	
1	**Introduction: Forces (2D)**	§1/2-2/2
2	**Forces (2D)** Components of a force Lines of Action	§2/3
6	**Moment of a Force, and of a Couple; Resultants** Cross Products Moments, Couples, Moments about a line Equivalent systems	§2/4-9
6	**Analysis of General Equilibrium Problems** Free-body Diagrams Fundamental Applications of Equilibrium Equations Interacting Bodies or Parts of a Structure	§3
8	**Structural Applications & Distributed Loads** Plane Trusses Space Trusses Systems Containing Multiforce Members	§4, §5
1	**Centroids and Center of Gravity** Centroids Method of Composite Parts	§A
2	**Friction**	§6
2	**Midterm Exams 1 & 2**	

30 **Total number of hours**

Grading:

Homework:	20%	(*one lowest score dropped automatically*)
Exam I:	25%	Wed. Sep. 23, 50 min, in regular classroom
Exam II:	25%	Wed. Nov. 18, 50 min, in regular classroom
Final exam:	30%	Fri. Dec. 4, 11:20–2:10 pm, in regular classroom

A	Excellent	90%
B	Good	80%
C	Satisfactory	70%
D	Passing	60%
F	Failure	<60%

Policies and Expectations:

1. Students and faculty shall abide by the GT honor code for conduct which can be access at https://policylibrary.gatech.edu/student-life/academic-honor-code.
2. All class materials, resources, and announcements can be accessed at ***https://canvas.gatech.edu/***.
3. Discussions on homework and class notes are encouraged. However, exchange of written information on homework is not permitted.
4. No late homework will be accepted except for delays due to serious illness or similar difficulties, documentation is required.
5. In general, no makeup will be given for missed exams which will result in a score of zero. In case of serious illness or true emergency, email min.zhou@gatech.edu as soon as possible before the exam and provide written documentation supporting your case to request a makeup. Only genuinely valid and officially documented cases will be considered. All requests must be in writing and within two weeks of the corresponding exam. No makeup will be scheduled after the graded exam has been returned to the class and the solutions released.
6. Students are expected to check online (if electronic) or pick up (if hard copy) graded assignments/exams within one week of the release date. Regrade requests should be made within two weeks of the release date. Please check the solutions before making a request. Regrade can result in higher or lower grade.
7. Use of email for class purposes is encouraged. Students are expected to check email and the Canvas site at least twice every week.

Attendance Policy:

This course requires scheduled class attendance which will be taken throughout the semester.

Academic Honesty/Integrity Statement:

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. Review the Student Code of Conduct and the Academic Honor Code.

Accommodations for Students with Disabilities:

If you are a student with learning needs that require special accommodation, contact the Office of Disability Services as soon as possible to make an appointment to discuss your special needs and to obtain an accommodations letter. Please also e-mail me the accommodation letter once you receive it.

Expectations of Faculty and Students:

At Georgia Tech, we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. The Student-Faculty Expectations articulates some basic expectations that you can have of me and that I have of you. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class.