

**Western Dakota Technical Institute  
800 Mickelson Drive  
Rapid City, SD 57703-4018**

**Master Syllabus**

**Course Number:** CAD 232  
**Course Name:** Mechanical Principles  
**Credits:** 3  
**Contact Hours:** 3 Lecture

**Course Description:** This course equips the student with basic principles of mechanical operations, component interaction, and assembly procedure.

**Prerequisites:** CAD 139

**Pre- or Co-requisite:** CAD 142

**Textbooks:** <http://bookstore.wdt.edu>

**Materials:** Notebook and/or note paper, drafting scales (Arch. & Eng.), storage media for backing up electronic working files, and folder for handouts.

**Student Learning Outcomes:**

- Examine the mechanical design process including materials, manufacturing methods, and analysis
- Design mechanical devices that contain fasteners, power transmission, and motion control components

**Assessment:** Students' life skills, communication skills, analytical skills, technology skills, teamwork techniques, and social values will be assessed throughout this course.

**ADA Accommodations:** Students Rights to Assistance or Accommodations: Western Dakota Technical Institute (hereinafter WDT) does not discriminate on the basis of disability. If you have a disability as defined by federal or state law, including a temporary disability related to pregnancy and/or parenting as a result of a medical necessity due to childbirth, WDT will provide reasonable accommodations including but not limited to architectural access, aids and services necessary for effective communication, and modification of its policies and procedures. Students with a disability who are requesting an accommodation should contact your instructor and the Student Success Director who serves as the disability coordinator as early as possible in the semester.

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committed to providing an environment free from harassment and other forms of discrimination for students, employees, non-employees and its invitees. The following person has been designated to handle inquiries or complaints regarding the non-discrimination policies: Student Success Director