

**NOVA COLLEGE-WIDE COURSE CONTENT SUMMARY
AUT 265 - AUTOMOTIVE BRAKING SYSTEMS (4 CR.)**

Course Description

Presents operation, design, construction, repair, and servicing of braking system, including Anti-Lock Brake Systems (ABS). Explains uses of tools and test equipment, evaluation of test results, estimation of repair cost for power, standard and disc brakes. Lecture 3 hours. Laboratory 3 hours. Total 6 hours per week.

General Course Purpose

The student who successfully completes this course should be able to analyze automobile braking system problems and repair brake defects. The student should be able to discuss their findings with the car owner and describe the problems and corrective actions required.

Course Prerequisites/Corequisites

The ability to read, write, and speak the English language.

Course Objectives

Upon completion of this course, the student should be able to:

- Develop a working knowledge of assemblies, sub-assemblies, and components of automotive brake systems
- Understanding of the purpose and operating principles of automotive brake systems
- Demonstrate the ability to diagnosis and identify defects, their cause, and correction
- Understand and apply proper service procedures, tool and equipment use and practices
- Diagnosis and repair of anti-lock brake systems using current electronic test equipment
- Identify fluids and bleed hydraulic fluid in a brake system, including ABS systems
- Use service information when locating specifications to inspection, repair and adjustments brake systems
- Identify and practice safe work habits

Major Topics to be Included

- Equipment usage and familiarization
- Safety procedures for brake servicing and repair
- Hydraulic brakes: operation, diagnosis and service
- Power brakes: operation, diagnosis and service
- Anti-lock brake systems: operation, diagnosis and service
- Parking brake diagnosis: operation, diagnosis and service