

MCAP-172-AUTOMATIC TRANS/TRANSAXLES

3 CREDITS

SYLLABUS

CATALOG DESCRIPTION

The operating principles of Chrysler FCA automatic transmissions, transaxles, and their diagnosis, electrical and electronic controls, and repair will be covered. Instruction on noise, vibration and harshness diagnosis and correction will also be covered along with mechanical and hydraulic components. Safety is emphasized.

Prerequisites: MCAP-120

Corequisites: MCAP-175

Semester Offered: Fall

COMMON STUDENT LEARNING OUTCOMES

Upon successful completion of San Juan College programs and degrees, the student will demonstrate competency in...

BROAD AND SPECIALIZED LEARNING

Students will actively and independently acquire, apply, and adapt skills and knowledge with an awareness of global contexts.

CRITICAL THINKING

Students will think analytically and creatively to explore ideas, make connections, draw conclusions and solve problems.

CULTURAL AND CIVIC ENGAGEMENT

Students will act purposefully, reflectively, and ethically in diverse and complex environments.

EFFECTIVE COMMUNICATION

Students will exchange ideas and information with clarity in multiple contexts.

INFORMATION LITERACY

Students will be able to recognize when information is needed and have the ability to locate, evaluate, and use it effectively.

INTEGRATING TECHNOLOGIES

Students will demonstrate fluency in the application and use of technologies in multiple contexts.

Student work from this class may be randomly selected and used anonymously for assessment of course, program, and/or institutional learning outcomes. For more information, please refer to the Dean of the appropriate School.

COURSE LEARNING OUTCOMES

Upon successful completion of the course, the student will be able to...

1. Complete 100% of NATEF priority 1 tasks.

2. Complete 85% of NATEF priority 2 tasks.
3. Complete 75% of NATEF priority 3 tasks.

SPECIFIC LEARNING OUTCOMES

Upon successful completion of the course, the student will be able to...

1. Demonstrate safe techniques for working on automatic transmissions, as well as transaxles.
2. Disassemble front drive axles.
3. Diagnose transfer cases malfunctions.
4. Measure flex-plate run-out.
5. Diagnose and repair automatic transmission malfunctions.
6. Pressure test automatic transmissions.
7. Adjust automatic transmission linkage.
8. Read and interpret power flow charts.
9. Service automatic transmissions in vehicle.
10. Test electrical transmission controls.
11. Remove and replace automatic transmissions.
12. Overhaul various automatic transmissions.