

AUTOMOTIVE

AUTO V02 - FUNDAMENTALS OF AUTOMOTIVE TECHNOLOGY - 1.5 Units

Hours: 3 lecture-laboratory weekly

This course provides basic techniques of automotive technology, adjustment, repair and maintenance of the engine; driving mechanism; suspension and steering system; electrical system and fuel systems in modern automotive equipment.

Field trips may be required. Formerly Auto 2. Transfer credit: CSU.

AUTO V10 - INTRODUCTION TO AUTOMOTIVE TECHNOLOGY - 1.5 Units

Hours: 3 lecture-laboratory weekly

This is an overview course to familiarize the student with the history, nomenclature, operation and construction of the modern automobile. An appreciation of the skills and abilities necessary to maintain the automobile will be discussed.

Field trips may be required. Formerly Auto 10. Transfer credit: CSU.

AUTO V14 - AUTOMOTIVE ELECTRICAL SYSTEMS - 4 Units

Corequisite: AUTO V14LA and AUTO V14LB

Hours: 4 lecture weekly

This course is designed to prepare an automotive student in the theory and skills necessary to diagnose, adjust, maintain and repair automotive battery, starting, charging, chassis electrical and electronic systems.

Field trips may be required. Formerly Auto 14. Transfer credit: CSU.

AUTO V14LA - AUTOMOTIVE CHASSIS ELECTRICAL LABORATORY - 1 Unit

Corequisite: AUTO V14 and AUTO V14LB

Hours: 3 laboratory weekly

This course is designed to provide vocational preparation in the practical skills required to diagnose, adjust, maintain, and repair automotive chassis electrical and electronic systems.

Field trips may be required. Formerly Auto 14LA.

AUTO V14LB - AUTOMOTIVE ENGINE ELECTRICAL SYSTEMS LABORATORY - 1 Unit

Corequisite: AUTO V14 and AUTO V14LA

Hours: 3 laboratory weekly

This course will provide vocational preparation in the practical skills required to diagnose, adjust, maintain and repair battery, starting and charging systems. An introduction to ignition system diagnosis will be included.

Field trips may be required. Formerly Auto 14LB.

AUTO V15 - AUTOMOTIVE FUEL SYSTEMS - 2 Units

Corequisite: AUTO V15LA and AUTO V15LB

Hours: 2 lecture weekly

This course is designed to prepare an automotive student in the theory and skills necessary to test, adjust, maintain and repair modern gasoline and alternative fuel systems. The areas of preparation are: fuels, carburetion, computer carburetion, central electronic injection, continuous injection and electronic port injection. This course will provide preparation for certification tests in engine performance and alternative fuels.

Field trips may be required. Formerly Auto 15. Transfer credit: CSU.

AUTO V15LA - AUTOMOTIVE FUEL SYSTEMS

LABORATORY A - 1 Unit

Corequisite: AUTO V15 and AUTO V15LB

Hours: 3 laboratory weekly

This course will provide vocational preparation in the practical skills required to adjust, maintain, test and repair gasoline and alternative fuel carburetor, computer carburetor and continuous injection. This course will provide preparation for certification tests in engine performance and alternative fuels.

Field trips may be required. Formerly Auto 15LA.

AUTO V15LB - AUTOMOTIVE FUEL SYSTEMS

LABORATORY B - 1 Unit

Corequisite: AUTO V15 and AUTO V15LA

Hours: 3 laboratory weekly

This course will provide vocational preparation in the practical skills required to diagnose, adjust, maintain and repair fuel injection systems. This course will provide preparation for certification tests in engine performance.

Field trips may be required. Formerly Auto 15LB.

AUTO V16 - AUTOMOTIVE EMISSION CONTROL SYSTEMS - 2 Units

Corequisite: AUTO V16LA and AUTO V16LB

Hours: 2 lecture weekly

This course is designed to prepare an automotive student in the theory and skills necessary to diagnose, adjust, maintain and repair automotive emission control systems. Laws and regulations pertaining to emission controls will be covered. This course will provide preparation for the California Smog Technician test.

Field trips may be required. Formerly Auto 16. Transfer credit: CSU.

AUTO V16LA - AUTOMOTIVE EMISSION CONTROL SYSTEMS LABORATORY A - 1 Unit

Corequisite: AUTO V16 and AUTO V16LB

Hours: 3 laboratory weekly

This course will provide vocational preparation in the service and repair of automotive emission control systems. Diagnosis, test, service and repair of all emission systems will be covered. This course will provide preparation for the California Smog Technician test.

Field trips may be required. Formerly Auto 16LA.

AUTO V16LB - AUTOMOTIVE EMISSION CONTROL SYSTEMS LABORATORY B - 1 Unit

Corequisite: AUTO V16 and AUTO V16LA

Hours: 3 laboratory weekly

This course will provide vocational preparation in the inspection and diagnosis of automotive emission control systems. Vehicle inspection procedures and proper use of documents will be practiced. This course will provide preparation for the California Smog Technician test.

Field trips may be required. Formerly Auto 16LB.

AUTO V17 - AUTOMOTIVE DRIVEABILITY DIAGNOSTICS AND REPAIR - 2 Units

Corequisite: AUTO V17LA and AUTO V17LB

Hours: 2 lecture weekly

This course will provide vocational preparation in the practical skills required to diagnose, test, and repair automotive driveability problems in modern automobiles. This course will provide preparation for certification tests in engine performance and alternative fuels.

Field trips may be required. Formerly Auto 17. Transfer credit: CSU.

AUTO V17LA - AUTOMOTIVE DRIVEABILITY DIAGNOSTICS AND REPAIR LABORATORY A - 1 Unit

Corequisite: AUTO V17 and AUTO V17LB

Hours: 3 laboratory weekly

This lab will provide vocational preparation in the practical skills required to diagnose, test, and repair automotive driveability problems in modern automobiles. This lab will provide preparation for certification tests in engine performance and alternative fuels.

Field trips may be required. Formerly Auto 17LA.

AUTO V17LB - AUTOMOTIVE DRIVEABILITY DIAGNOSTICS AND REPAIR LABORATORY B - 1 Unit

Corequisite: AUTO V17 and AUTO V17LA

Hours: 3 laboratory weekly

This lab will provide vocational preparation in the practical skills required to diagnose, test, and repair automotive diagnostic problems in modern automobiles. This lab will provide preparation for certification tests in engine performance and alternative fuels.

Field trips may be required. Formerly Auto 17LB.

AUTO V18 - AUTOMOTIVE HEATING/AIR CONDITIONING - 1 Unit

Corequisite: AUTO V18L

Hours: 1 lecture weekly

This course will provide vocational preparation in the practical skills required to diagnose, adjust, test and repair modern automotive heating/air conditioning and cooling systems. This course will also provide preparation for certification test in heating/air conditioning.

Field trips may be required. Formerly Auto V18LA. Transfer credit: CSU.

AUTO V18L - AUTOMOTIVE HEATING/AIR CONDITIONING LABORATORY - 1 Unit

Corequisite: AUTO V18

Hours: 3 laboratory weekly

This lab will provide vocational preparation in the practical skills required to diagnose, adjust and repair modern automobiles with heating/air conditioning and cooling system problems. This lab will also provide preparation for certification tests and certification in heating/air conditioning.

Field trips may be required. Formerly AUTO V18LA.

AUTO V20 - AUTOMOTIVE ENGINE REPAIR - 3 Units

Corequisite: AUTO V20LA and AUTO V20LB

Hours: 3 lecture weekly

This course is designed to prepare an automotive student in the theory and skills necessary to diagnose, adjust, maintain and repair automotive engines. This course will provide preparation for certification tests in engine repair.

Field trips may be required. Formerly Auto 20. Transfer credit: CSU.

AUTO V20LA - AUTOMOTIVE ENGINE REPAIR LABORATORY A - 2 Units

Corequisite: AUTO V20 and AUTO V20LB

Hours: 6 laboratory weekly

This course will provide vocational preparation in the practical skills required to diagnose, adjust, maintain and repair automotive engines. Engine disassembly, inspection, measuring and reassembly will be emphasized in this course. This course will provide preparation for certification tests in engine repair.

Field trips may be required. Formerly Auto 20LA.

AUTO V20LB - AUTOMOTIVE ENGINE REPAIR LABORATORY B - 1 Unit

Corequisite: AUTO V20 and AUTO V20LA

Hours: 3 laboratory weekly

This course will provide vocational preparation in the practical skills required to diagnose, adjust, maintain and repair automotive engines. Engine servicing procedures, techniques and machining will be emphasized in this course. This course will provide preparation for certification tests in engine repair.

Field trips may be required. Formerly Auto 20LB.

AUTO V22 - AUTOMOTIVE TRANSMISSION AND DRIVE LINE - 3 Units

Corequisite: AUTO V22LA and AUTO V22LB

Hours: 3 lecture weekly

This course is designed to prepare an automotive student in the theory and skills necessary to diagnose, adjust, maintain and repair automotive transmissions, 4-wheel drive systems and differentials. Both automatic and manual transmissions will be covered. This course will provide preparation for certification tests in automatic transmissions and manual transmissions.

Field trips may be required. Formerly Auto 22. Transfer credit: CSU.

AUTO V22LA - AUTOMOTIVE TRANSMISSION AND DRIVE LINE LABORATORY A - 2 Units

Corequisite: AUTO V22 and AUTO V22LB

Hours: 6 laboratory weekly

This course will provide vocational preparation in the service and repair of automatic transmissions. Diagnosis, service and repair of torque converter, gear train, hydraulic and electronic systems will be pursued. Preparation for the Automotive Service Excellence (ASE) test in automotive transmissions will be included.

Field trips may be required. Formerly Auto 22LA.

AUTO V22LB - AUTOMOTIVE TRANSMISSION AND DRIVE LINE LABORATORY B - 1 Unit

Corequisite: AUTO V22 and AUTO V22LA

Hours: 3 laboratory weekly

This course will provide vocational preparation in the service and repair of manual transmissions and differentials. Diagnosis, service and repair of the clutch, manual transmission, 4-wheel drive system and differential systems will be pursued. Preparation for the Automotive Service Excellence (ASE) test in manual transmission and differentials will be included.

Field trips may be required. Formerly Auto 22LB.

AUTO V26 - AUTOMOTIVE BRAKES SERVICE AND REPAIR - 2 Units

Corequisite: AUTO V26LA and AUTO V26LB

Hours: 2 lecture weekly

This course is designed to provide vocational preparation in the theory and operation of modern automotive braking systems. Types of brake systems, hydraulic principles, anti-lock brake systems and supplemental restraint systems will be discussed. Preparation for the Automotive Service Excellence (ASE) test will be included.

Field trips may be required. Formerly Auto 26. Transfer credit: CSU.

AUTO V26LA - AUTOMOTIVE BRAKES SERVICE AND REPAIR LABORATORY A - 1 Unit

Corequisite: AUTO V26 and AUTO V26LB

Hours: 3 laboratory weekly

This course will provide vocational preparation in the service and repair of modern automotive braking systems. Service and repair of drum and disc brake systems and hydraulic systems will be pursued. Preparation for the Automotive Service Excellence (ASE) test in brakes will be included.

Field trips may be required. Formerly Auto 26LA.

AUTO V26LB - AUTOMOTIVE BRAKES SERVICE AND REPAIR LABORATORY B - 1 Unit

Corequisite: AUTO V26 and AUTO V26LA

Hours: 3 laboratory weekly

This course will provide vocational preparation in the service and repair of automotive anti-lock braking and supplemental restraint systems. Preparation for the Automotive Service Excellence (ASE) test in brakes will be included.

Field trips may be required. Formerly Auto 26LB.

AUTO V28 - AUTOMOTIVE SUSPENSION SYSTEMS - 2 Units

Corequisite: AUTO V28LA and AUTO V28LB

Hours: 2 lecture weekly

This course will provide vocational preparation in the theory and operation of modern automotive suspension systems. Types of suspension systems, suspension component identification, alignment theory, and diagnosis technique will be discussed. Preparation for the Automotive Service Excellence (ASE) test in front-end will be included.

Field trips may be required. Formerly Auto 28. Transfer credit: CSU.

AUTO V28LA - AUTOMOTIVE SUSPENSIONS LABORATORY - 1 Unit

Corequisite: AUTO V28 and AUTO V28LB

Hours: 3 laboratory weekly

This course will provide vocational preparation in the service and repair of modern automotive suspension systems. Inspection and replacement of suspension components will be practiced. Preparation for the Automotive Service Excellence (ASE) test in front-end will be included.

Field trips may be required. Formerly Auto 28LA.

AUTO V28LB - AUTOMOTIVE ALIGNMENT LABORATORY - 1 Unit

Corequisite: AUTO V28 and AUTO V28LA

Hours: 3 laboratory weekly

This course will provide vocational preparation in the vehicle alignment. Various type of alignment techniques will be practiced using different types of alignment equipment. Preparation for the Automotive Service Excellence (ASE) test in front-end will be included.

Field trips may be required. Formerly Auto 28LB.

AUTO V32 - AUTOMOTIVE SERVICE EXCELLENCE (ASE) CERTIFICATION PREPARATION - 1 Unit

Recommend preparation: working in the automotive industry

Hours: 2 lecture-laboratory weekly

This course is designed to help the student prepare for and review the theory and skills necessary to pass the Automotive Service Excellence (ASE) certification examinations. All areas of automotive certification will be reviewed, including compressed natural gas and parts certification.

Field trips may be required. May be taken for a maximum of 4 times.

AUTO V40 - ADVANCED PROBLEMS IN AUTOMOTIVE TECHNOLOGY - .5-6 Units

Prerequisite: previous automotive course at Ventura College

Hours: 1.5-18 laboratory weekly

This course is designed to meet the specific needs of automotive technology majors who wish to expand their knowledge and manual skills with stress on advanced concepts in specialty areas of the automotive trade.

Field trips may be required. May be taken for a maximum of 4 times not to exceed 12 units. Formerly Auto 40.

AUTO V45 - CLEAN AIR CAR CERTIFICATION - 6 Units

Recommended preparation: 1 year of automotive tune-up experience

Hours: 6 lecture weekly

Completion of this course is a prerequisite for admission into the state administered Inspection and Maintenance (I/M) training, and examination administered by the Bureau of Automotive Repair.

Field trips may be required. May be taken for a maximum of 2 times. Formerly Auto 45. Offered on a credit/no credit basis only.

AUTO V88 - AUTOMOTIVE WORKSHOPS - .5-10 Units

Prerequisite: varies with topic

Hours: lecture and/or laboratory as required by unit formula

Designed to meet specific needs of the college and community, as required and requested by persons whose needs in this area are not met by present course offerings.

Fees may be required. Courses with same title may not be repeated; may be taken for a maximum of 4 times. Formerly AUTO V89.

AUTO V95 - AUTOMOTIVE INTERNSHIP I - 1-4 Units

Corequisite: enrolled in a minimum of 7 units to include internship

Recommended preparation: completion of or concurrent enrollment in one course in the discipline

Hours: 60 per unit

This automotive internship course offers students who are volunteers (unpaid) an opportunity to obtain work experience related to their field of study. Students are accepted as a result of consultation with a designated faculty member in the discipline and the acceptance of an approved work proposal.

Field trips will be required. May be taken for a maximum of 4 times not to exceed 16 units total in combination with any other work experience/internship courses. Offered on a credit/no credit basis only.

AUTO V96 - AUTOMOTIVE INTERNSHIP II - 1-4 Units

Corequisite: enrolled in a minimum of 7 units to include internship

Recommended preparation: completion of or concurrent enrollment in one course in the discipline

Hours: 75 per unit

This automotive internship course offers students who are employed in the field an opportunity to expand their work experience related to their field of study. Students are accepted as a result of consultation with a designated faculty member in the discipline and the acceptance of an approved work proposal.

Field trips will be required. May be taken for a maximum of 4 times not to exceed 16 units total in combination with any other work experience/internship courses. Offered on a credit/no credit basis only.