COURSES

NONCREDIT AUTOMOTIVE TECHNOLOGY COURSES

NAUT A1 - Engine Repair

0 units

An in depth study of engines: mechanical, measurement, and assembly. A study of the above mentioned components including theory, teardown, evaluate, qualifying, and rebuilding. This class' emphasis is on engines. Students are encouraged to enroll in Automotive Lab concurrently. 36 hours lecture, 108 hours laboratory.

Prerequisite: AUTO INTR with a minimum grade of C (May be taken concurrently) or NAUT INTR with a minimum grade of C (May be taken concurrently) or AUTO INTL with a minimum grade of C (May be taken concurrently) and AUTO INTZ with a minimum grade of C (May be taken concurrently).

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT A2 - Automatic Transmission/Transaxle

0 units

An in depth study of engine, transmission, transaxles: mechanical, measurement, and assembly. An in-depth study of the above mentioned components including theory, teardown, evaluate, qualifying, and rebuilding. Students are encouraged to enroll in Automotive Lab concurrently. 36 hours lecture, 108 hours laboratory.

Prerequisite: AUTO INTR with a minimum grade of C (May be taken concurrently) or NAUT INTR with a minimum grade of C (May be taken concurrently) or AUTO INTL with a minimum grade of C (May be taken concurrently) and AUTO INTZ with a minimum grade of C (May be taken concurrently).

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT A3 - Manual Drive Train and Axles

0 units

An in-depth study of rear axle, front axle, and transfer cases: mechanical, measurement, and assembly. Including theory, teardown, qualifying, and rebuilding. Students are encouraged to enroll in Automotive Lab concurrently. 36 hours lecture, 108 hours laboratory.

Prerequisite: AUTO INTR with a minimum grade of C (May be taken concurrently) or NAUT INTR with a minimum grade of C (May be taken concurrently) or AUTO INTL with a minimum grade of C (May be taken concurrently) and AUTO INTZ with a minimum grade of C (May be taken concurrently).

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT A4 - Suspension and Steering

0 units

Diagnosis, evaluation, testing, adjustment, alignment and repair of steering and suspension systems. Including all common automotive steering and suspension systems both car and truck. Future systems will also be covered. Students are strongly recommended to enroll in Automotive Lab concurrently. 36 hours lecture, 108 hours laboratory.

Prerequisite: AUTO INTR with a minimum grade of C (May be taken concurrently) or NAUT INTR with a minimum grade of C (May be taken concurrently) or AUTO INTL with a minimum grade of C (May be taken concurrently) and AUTO INTZ with a minimum grade of C (May be taken concurrently).

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT A5 - Brakes

0 units

Diagnosis, evaluation, inspection, adjustment, and repair of braking, antilock braking systems, traction control and related devices. Class will involve California State law regarding brake and safety inspections. Includes the material on the California Brake Adjuster's Licensing Examination. Students are strongly recommended to enroll in Automotive Lab concurrently. 36 hours lecture, 108 hours laboratory.

Prerequisite: AUTO INTR with a minimum grade of C (May be taken concurrently) or NAUT INTR with a minimum grade of C (May be taken concurrently) or AUTO INTL with a minimum grade of C (May be taken concurrently) and AUTO INTZ with a minimum grade of C (May be taken concurrently).

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT A6 - Electrical/Electronic Systems

0 units

Automotive electrical/electronic systems, including electrical circuits, Ohm's Law, battery, starting, charging, ignition, fuel, accessories, brakes, chassis, suspension, steering, HVAC, and wiring systems. Emphasis on diagnosis of electrical troubles, assembly, repair of components, and diagnostic equipment usage. Students are strongly recommended to enroll in Automotive Lab concurrently. 54 hours lecture, 108 hours laboratory.

Prerequisite: AUTO INTR with a minimum grade of C (May be taken concurrently) or NAUT INTR with a minimum grade of C (May be taken concurrently) or AUTO INTL with a minimum grade of C (May be taken concurrently) and AUTO INTZ with a minimum grade of C (May be taken concurrently).

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT A7 - Automotive Heating and Air Conditioning

0 units

Diagnosing, evaluation, testing, adjustment, and repair of heating, ventilation and air conditioning (HVAC). Includes heat and energy, psychometrics, air flow, refrigerant recycling, equipment and controls. Student will be prepared to pass a nationally recognized HVAC certificate program, required by all California HVAC repair shops. Students are strongly recommended to enroll in Automotive Lab concurrently. 36 hours lecture, 108 hours laboratory.

Prerequisite: AUTO INTR with a minimum grade of C (May be taken concurrently) or NAUT INTR with a minimum grade of C (May be taken concurrently) or AUTO INTL with a minimum grade of C (May be taken concurrently) and AUTO INTZ with a minimum grade of C (May be taken concurrently).

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT ASCL - Automotive Summer Camp Hands On

0 units

This is the hands-on lab section of the Automotive Summer Camp! To enroll in this class you must first be enrolled in Automotive Summer Camp (ASMC). Have you ever wanted to know more about your car but do not have time to take an 18-week course? Have you ever wanted to change your own oil? Learn what the cryptic code on the tire means? Learn general knowledge about cars? This is the class for you! From maintenance to oil changes to tires to smog to hybrids to jump starting. Speaking of jump starting, let's start!. 27 hours laboratory.

Corequisite: NAUT ASMC.

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT ASMC - Automotive Summer Camp

0 units

Have you ever wanted to know more about your car but do not have time to take an 18-week course? Have you ever wanted to change your own oil? Learn what the cryptic code on the tire means? Learn general knowledge about cars? This is the class for you! From maintenance to oil changes to tires to smog to hybrids to jump starting. Speaking of jump starting, let's start! There is a lab section that follows the lecture section for students to gain hands-on experience. 17.5 hours lecture.

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT CA1 - Concepts of Engine Repair

0 units

This class is lecture only and non-credit. An in depth study of engines: mechanical, measurement, and assembly. A study of the above mentioned components including theory, teardown, evaluate, qualifying, and rebuilding. This class' emphasis is on engines. 36 hours lecture.

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT CA2 - Concepts of Automatic Transmission/Transaxle

0 units

This class is lecture only and non-credit. An in depth study of engine, transmission, transaxles: mechanical, measurement, and assembly. An in-depth study of the above mentioned components including theory, teardown, evaluate, qualifying, and rebuilding. 36 hours lecture.

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT CA3 - Concepts of Manual Drive Train and Axles

0 units

This class is lecture only and non-credit. An in-depth study of rear axle, front axle, and transfer cases: mechanical, measurement, and assembly. Including theory, teardown, qualifying, and rebuilding. 36 hours lecture.

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT CA4 - Concepts of Suspension and Steering

0 units

This class is lecture only and non-credit. Diagnosis, evaluation, testing, adjustment, alignment and repair of steering and suspension systems. Including all common automotive steering and suspension systems both car and truck. Future systems will also be covered. 36 hours lecture.

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT CA5 - Concepts of Brakes

0 units

This class is lecture only and non-credit. Diagnosis, evaluation, inspection, adjustment, and repair of braking, antilock braking systems, traction control and related devices. Class will involve California State law regarding brake and safety inspections. Includes the material on the California Brake Adjuster's Licensing Examination. 36 hours lecture.

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT CA6 - Concepts of Electrical/Electronic Systems

0 units

This class is lecture only and non-credit. Automotive electrical/electronic systems, including electrical circuits, Ohm's Law, battery, starting, charging, ignition, fuel, accessories, brakes, chassis, suspension, steering, HVAC, and wiring systems. Emphasis on diagnosis of electrical troubles, assembly, repair of components, and diagnostic equipment usage. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT CA7 - Concepts of Automotive Heating and Air Conditioning

0 units

This class is lecture only and non-credit. Diagnosing, evaluation, testing, adjustment, and repair of heating, ventilation and air conditioning (HVAC). Includes heat and energy, psychometrics, air flow, refrigerant recycling, equipment and controls. Student will be prepared to pass a nationally recognized HVAC certificate program, required by all California HVAC repair shops. 36 hours lecture.

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT CA8 - Concepts of Engine Performance

0 units

This class is lecture only and non-credit. Principles of automotive fuel induction, ignition and emission control systems, including inspection, diagnosis and repair of fuel and emission control systems/components governed by federal and state laws and standards. Electrical diagnosis of emission control systems. Relation of chassis and body systems to emissions. 54 hours lecture.

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT CA9 - Concepts of Light Vehicle Diesel Engines

0 units

This class is lecture only and non-credit. An in-depth study of diesel engines: mechanical, measurement, and assembly. A study of the above mentioned components including theory, teardown, evaluate, qualifying, and rebuilding. Diesel engine performance including emissions, turbos, exhaust and intake systems. This class's emphasis is on diesel engines and diesel engine performance/emissions. 36 hours lecture.

- Credit - Degree Applicable
- Grading Option: Pass/No Pass

NAUT CINTR - Concepts of Automotive Service and Introduction

0 units

This class is lecture only and non-credit. Bumper-to-Bumper Automotive Knowledge. Starting with hazardous waste handling, tool identification, maintenance and lubrication, moving into engine mechanical, emissions controls, suspension systems, air conditioning, airbags and safety, transmissions, axles, and finishing off with the future of the automotive industry. This is an introductory class for people who want to know more about their vehicle. 36 hours lecture.

- Noncredit
- Grading Option: Pass/No Pass

NAUT CSDR - Concepts of Specified Diagnostic and Repair

0 units

This class is lecture only and non-credit. This is a Bureau of Automotive Repair alternative to the ASE A6, A8 and L1 certification. This class is intended to allow California drivers to understand the training and laws of the smog check program. Student will not qualify for the license exam after taking this class. For more information see www.smogcheck.ca.gov. 72 hours lecture.

- Credit - Not Degree Applicable
- Grading Option: Pass/No Pass

NAUT CSMG - Concepts of Smog Level One and Level Two

0 units

This class is lecture only and non-credit. This class will include Level One and Level Two smog lectures only. This class is intended to allow California drivers to understand the training and laws of the smog check program. At the end of the class students will not qualify for either EI or EO smog license. See www.smogcheck.ca.gov for more information. 90 hours lecture.

- Noncredit
- Grading Option: Pass/No Pass

NAUT INTR - Automotive Service and Introduction

0 units

Bumper-to-Bumper Automotive Knowledge. Starting with hazardous waste handling, tool identification, maintenance and lubrication, moving into engine mechanical, emissions controls, suspension systems, air conditioning, airbags and safety, transmissions, axles, and finishing off with the future of the automotive industry. This is an introductory class for people who want to know more about their vehicle or who are planning an automotive career. 36 hours lecture, 108 hours laboratory.

- Noncredit
- Grading Option: Letter or P/NP

NAUT L1L2 - Smog Level One and Level Two

0 units

This course includes classes/modules the State of California's requires for a student/automotive technician to be prepared to take their Smog License Test. This class will include Level One and Level Two smog training only. At the end of the class students may or may not qualify for either EI or EO smog license. See www.smogcheck.ca.gov for more information. 90 hours lecture, 27 hours laboratory.

- Noncredit
- Grading Option: Letter or P/NP

NAUT LABA - Automotive Lab

0 units

Automotive Lab is an open laboratory class for basic automotive students. This class is for students desiring to expand their hands-on experience using their own vehicle. Instructor will provide technical and supervisory support to guide students in completion of their self initiated projects. Service information via computer service manuals will be available for students to use for vehicle information and research. 108 hours laboratory.

Prerequisite: AUTO INTR with a minimum grade of C (May be taken concurrently) or NAUT INTR with a minimum grade of C (May be taken concurrently) or AUTO INTL with a minimum grade of C (May be taken concurrently) and AUTO INTZ with a minimum grade of C (May be taken concurrently).

- Noncredit
- Grading Option: Letter or P/NP

NAUT LABB - Automotive Lab Advanced

0 units

Automotive Lab Advanced is an open laboratory class for advanced automotive students. This class is for students desiring to expand their hands-on experience using their own vehicle. Instructor will provide technical and supervisory support to guide students in completion of their self initiated projects. Students are expected to help others in class and be able to work without guidance. Service information via computer service manuals will be available for students to use for vehicle information and research. Class is recommended for second year students only. 108 hours laboratory.

Prerequisite: AUTO LABA with a minimum grade of C (May be taken concurrently) or NAUT LABA with a minimum grade of C. AUTO INTR with a minimum grade of C (May be taken concurrently) or NAUT INTR with a minimum grade of C (May be taken concurrently) or AUTO INTL with a minimum grade of C (May be taken concurrently) and AUTO INTZ with a minimum grade of C (May be taken concurrently).

- Noncredit
- Grading Option: Letter or P/NP

NAUT LABC - Automotive Lab Specialized Bench Work

0 units

Automotive Lab Specialized Bench Work is an open laboratory class for automotive students. This class is for students desiring to expand their hands-on experience using shop equipment. This class specializes in rebuilding automotive parts. The instructor will provide technical and supervisory support to guide students in the completion of their self-initiated projects. Service information via computer service manuals will be available for students to use for vehicle information and research. Class is recommended for second year students only. 108 hours laboratory.

Prerequisite: AUTO INTR with a minimum grade of C (May be taken concurrently) or NAUT INTR with a minimum grade of C (May be taken concurrently) or AUTO INTL with a minimum grade of C (May be taken concurrently) and AUTO INTZ with a minimum grade of C (May be taken concurrently).

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

NAUT LABD - Automotive Lab Specialized Electronic Work

0 units

Automotive Lab Specialized Electronic Work is an open laboratory class for automotive students. This class is for students desiring to expand their hands-on experience using shop equipment. This class specializes in electronics work. This includes accessories, EV, hybrid, and aftermarket electrical. The instructor will provide technical and supervisory support to guide students in the completion of their self-initiated projects. Service information via computer service manuals will be available for students to use for vehicle information and research. 108 hours laboratory.

Prerequisite: AUTO INTR with a minimum grade of C (May be taken concurrently) or NAUT INTR with a minimum grade of C (May be taken concurrently) or AUTO INTL with a minimum grade of C (May be taken concurrently) and AUTO INTZ with a minimum grade of C (May be taken concurrently).

- Credit - Degree Applicable
- Grading Option: Letter or P/NP

NAUT SDR - Specified Diagnostic and Repair

0 units

This is a Bureau of Automotive Repair approved alternative to the ASE A6, A8 and L1 certification required for obtaining and maintaining smog technician licenses. This course will follow BAR guidelines for smog license prep. Student may or may not qualify for license exam after taking this class. For more information see www.smogcheck.ca.gov. 72 hours lecture, 54 hours laboratory.

- Credit - Not Degree Applicable
- Grading Option: Letter or P/NP