

# INDUSTRIAL OCCUPATIONS

## Air Conditioning/Refrigeration (continued)

### Refrigerating Engineer/Service

(Advanced Troubleshooting and Repair Procedures).....29-30-75

This course prepares students for employment in the refrigeration and air conditioning trade. System fundamentals, troubleshooting and repair procedures are emphasized in practical terms. *The advanced theory section of the course is taught on M & W evenings and the hands-on application section is taught on T & Th evenings.* Both classes plus 29-28-73 and 29-30-74, are required for the Certificate of Completion. Prerequisites: Completion of basic mechanical and electrical air conditioning courses or have prior experience in Refrigeration & Air Conditioning and pass entrance exam. (See page 14 for testing schedule.)

Length of Course: 20 weeks. (Must take MW +TTh for certificate).

4705	MW 6:15 p.m. - 9:30 p.m.	20 wks	Killman*	(Theory)	56	\$60
4706	Sat 8:00 a.m.-12:15 p.m.	20 wks	Mirth	*(Practical)	57	\$60

**\*Evening students may earn a certificate by completing 29-28-73, 29-30-74, 29-30-75 (both Theory and Practical classes).**



## Automotive

### Auto Body Repairer/Fundamentals (Estimating).....29-06-60

#### No Automotive Experience Needed

This course contains instruction on various aspects of the auto body collision repair field. It prepares students for entry-level positions in auto body collision repair shops or insurance companies. Class includes a basic understanding of the auto body collision repair field such as: auto body repair tools, basic auto body repair, auto body construction and design, refinishing, and unitized frame rack system operation. This course is designed to help the student write an accurate and complete collision damage appraisal. Some hands-on training included.

Prerequisites: Student should be able to lift and carry up to 20 pounds.

Length of Course: Two semesters.

4707	M-Th 3:00 p.m.-6:15 p.m.	20 wks	Paradis	58	\$65
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### Auto Body Repairer/Fundamentals.....29-06-60

This course provides instruction in safety in the auto body shop, auto body construction, auto body repair tools, trade math, welding equipment, minor body repairs, auto paint and refinishing preparation techniques, spraying techniques, collision damage estimating, and auto body customizing techniques.

Prerequisites: Student should be able to lift and carry up to 50 pounds.

Length of Course: Two semesters.

4708	MW 6:30 p.m.- 9:45 p.m.	20 wks	Paradis	58	\$60
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4709	TTh 6:30 p.m.- 9:45 p.m.	20 wks	Paradis	58	\$60
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4710	Sat 8:00 a.m.-12:15 p.m.	20 wks	Paradis	58	\$60
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### Auto Body Repairer/2.....29-06-63

This course provides instruction in non-structural analysis and damage repair, structural analysis and damage repair, mechanical and electrical components, welding equipment, squaring and aligning of frames and body parts, spot painting, two stage refinishing techniques and frame rack system operation.

Prerequisites: Students should be able to lift and carry up to 50 pounds.

CFC (dichlorodifluoromethane) certification is mandatory for anyone working on air conditioning systems. It can be earned while attending the class if desired. Fee for test is \$17.

Length of Course: Two semesters.

4711	M-F 8:00 a.m.- 3:00 p.m.	20 wks	McLouth	58	\$70
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### Automobile Mechanic/Pre-Employment.....29-05-80

This course prepares and qualifies students for entry-level positions as imported and domestic car technicians in auto dealerships, service garages, and specialized repair shops.

Length of Course: 20 weeks.

4712	M-F 8:00 a.m.- 3:00 p.m.	20 wks	Pincus	66	\$70
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### Tune Up Mechanic/Eng. Performance/Upgrade...29-06-82/83

The first fifteen weeks of this course will introduce students to the field of tune-up technician. Students will learn engine performance fundamentals, as well as electronic engine control maintenance, diagnosis and repair. The last five weeks of the course are designed to upgrade students in the area of automotive electronics and fuel injection.

Length of Course: 20 weeks.

0752	M-F 1:00 p.m.- 4:00 p.m.	20 wks	VanZeller	(FORUM)	62	\$60
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### Auto Mechanic/Fundamentals\*

(Service Technician)..... \* 29-06-53

**Earn 4 units of Pierce College Credit**

This course is for students interested in car maintenance or a career in the automotive industry. It provides instruction in automotive internal combustion engines, fundamentals of maintenance and repair, as well as use and care of hand tools and power equipment.

Length of Course: Two semesters.

4714	TTh 6:15 p.m.- 9:30 p.m.	40 wks	VanZeller	62	\$60
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### Automotive Mechanic, 1, 2, & 3 ..... \* 29-06-70, 71, 72

This course provides instruction in the diagnosis and repair of automobile engine systems. This course includes instruction in tools and equipment, safety, engine designs, cooling systems, basic electricity, ignition systems, fuel systems, exhaust systems, emission control systems, charging systems, starting systems, and major engine operations, suspension, brakes and steering.

Length of Course: 20 weeks.

0747	M-F 8:00 a.m.-12:00 p.m.	20 wks	Bookman	(FORUM)	63	\$60
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0748	M-F 1:00 p.m.- 4:00 p.m.	20 wks	Bookman	(FORUM)	63	\$60
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### Automobile Mechanic/Introduction..... \* 29-06-69

This course is designed to introduce students to information needed for employment as garage attendants, mechanic's helpers, and as a prerequisite for other automotive courses.

Length of Course: 20 weeks.

4717	Sat 8:00 a.m.-12:15 p.m.	20 wks	VanZeller	61	\$55
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**\* This course curriculum qualifies under the Automotive Youth Educational Systems (AYES) Guidelines. Qualified 11<sup>th</sup> Grade Students may be selected for a paid Summer Internship at a local Automotive Dealership.**

### Automotive Electrician/Electronics.....29-06-59

This course provides specialized training in automotive electronics. The emphasis is on theory, diagnosis and repair of electronic systems and components.

Length of Course: 20 weeks.

4718	W 6:15 p.m.- 9:30 p.m.	20 wks	VanZeller	62	\$55
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### Automotive Technician Exhaust Emission/Fundamentals (Basic Clean Air Car Course).....29-06-97

All technicians wishing to become state licensed smog inspection technicians, must take and pass the Basic Clean Air Car Course to partially satisfy the education prerequisite for either of the license technician categories currently available. Students entering the course should have one-year experience and/or education in the automotive engine performance area prior to entering the course. **The course instructor shall determine if the student has the required automotive knowledge to enter the course. (e.g. pretest and/or interview).** The course covers the following topic areas: operation of the BAR 97 EIS emission analyzer system for the Basic Area Smog Program, Bureau rules and regulations, 2003 Update Course, 2005 Update Course, vehicle emission testing procedures for the Basic Area Program-OBD II systems operation. To pass this course the student must complete all of the laboratory assignments and pass three (3) final examinations with 70% or better. Successful completion of this course prepares the student to take the Advanced Clean Air Car Course.

Prerequisites: One year of verifiable automotive experience and/or education in the automotive engine performance area.

Length of Course: 20 weeks.

4719	MW 6:15 p.m.-9:30 p.m.	20 wks	Lerma	61	\$65
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### Automobile Mechanic/ASE Test Preparation.....29-05-82

This course offers test preparation in the following ASE certification tests: Engine Repair, Automatic Transmission/Transaxle, Manual Drive Train and Axles, Suspension and Steering, Brakes, Electrical/Electronic Systems, Heating and Air Conditioning, and Engine Performance.

**(Fall test dates: Nov. 9, 16, & 18, 2004.)**

Length of Course: 9 weeks.

4761	TTh 6:15 p.m.- 9:30 p.m.	9 wks	Storey	42	\$25
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