**R CUL 197 Culinary Arts Topics (.5-3)**
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.
***Note:*** Cross listed as CUL 197; may be taken 4 times
***Transfer acceptability:*** CSU
Topics in Culinary Arts. See Class Schedule for specific topic offered. Course title will designate subject covered.

**R CUL 200 Menu Planning and Purchasing (2)**
*2 hours lecture*
***Prerequisite:*** R CUL/CUL 111 and FCS 165/HE 165 and R CSIS 120/CSIT 120
***Note:*** Cross listed as CUL 200; graded only
***Transfer acceptability:*** CSU
Basic principles of menu planning and purchasing with emphasis on: menu design; specifications and pricing; purchasing, inventory control and storeroom operations; and food and beverage cost control. Includes spreadsheet and database applications. Students will be expected to meet high standards of professionalism and work habits.

**R CUL 210 Foodservice Management (3)**
*3 hours lecture*
***Prerequisite:*** R CUL/CUL 111
***Note:*** Cross listed as CUL 210; graded only
Introduction to foodservice management with emphasis on human relations and employee development. Includes operational planning and coordination, problem-solving and decision-making, and personnel management. Students will be expected to meet high standards of professionalism and work habits.

**R CUL 220 Catering and Event Planning (3)**
*1 hour lecture-4 hours lecture/laboratory*
***Prerequisite:*** R CUL/CUL 111 and R CUL/CUL 130
***Note:*** Cross listed as CUL 220; graded only
***Transfer acceptability:*** CSU
Fundamentals of catering, including event planning, menu development and banquet preparation. Includes opportunities to apply culinary theory and skills in actual practice. Students will be expected to meet high standards of professionalism, sanitation and work habits.

**R CUL 230 Adv Garde Manger/Competition (3)**
*1 hour lecture-4 hours lecture/laboratory*
***Prerequisite:*** R CUL/CUL 111 and R CUL/CUL 130
***Note:*** Cross listed as CUL 230; graded only
Application of advanced garde manger techniques in practical situations and culinary competition. Includes classical buffet presentation, decorative displays and artistic centerpieces. Students will be expected to meet high standards of professionalism, sanitation and work habits.

**R CUL 240 Wines and Affinities (1)**
*1 hour lecture*
***Prerequisite:*** R CUL/CUL 111
***Note:*** Cross listed as CUL 240; graded only
Classification and identification of wines, with emphasis on properties and affinities with food. Includes wines from various regions of the world. Students will be expected to meet high standards of professionalism and work habits.

**R CUL 298 Culinary Directed Practice I (3)**
*3 hours lecture-10 hours laboratory*
***Prerequisite:*** R CUL/CUL 111 and R CUL/CUL 130 or R CUL/CUL 121
***Note:*** Cross listed as CUL 298; graded only
Directed learning opportunity for culinary arts students to increase their knowledge and skill in the areas of hot and cold food production through supervised on-the-job training. Students will be expected to follow Culinary Arts standards of professionalism. Current San Diego County Food Handler Card and TB clearance required.

**R CUL 299 Culinary Directed Practice II (3)**
*3 hours lecture-10 hours laboratory*
***Prerequisite:*** R CUL/CUL 298, R CUL/CUL 200, FCS 110/MICR 110 and FCS 165/HE 165
***Note:*** Cross listed as CUL 299; graded only
Directed entry-level professional work experience in the foodservice industry that provides exposure to the foodservice industry and an opportunity for culinary arts students to practice and demonstrate their employability skills and reflect on their future roles in the industry. Students will be expected to follow Culinary Arts standards of professionalism. Current San Diego County Food Handler Card and TB clearance required.

# Diesel Mechanics Technology (R DMT)

### Associate in Arts Degrees -
AA Degree requirements are listed in Section 6 (green pages).
• Diesel Technology

### Certificates of Achievement -
Certificate of Achievement requirements are listed in Section 6 (green pages).
• Diesel Technology

## PROGRAM OF STUDY

## *Diesel Technology*

In order to earn a certificate, students must achieve a minimum grade of 'C' in each of the certificate program courses.

### A.A. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

| Program Requirements | | Units |
|---|---|---|
| AT 105 | Automotive Electricity | 2 |
| AT 197 | Associated Studies in Automotives | 3 |
| R DMT/DMT 50 | Introduction to Diesel Mechanics | 3 |
| R DMT/DMT 55 | Heavy-Duty Diesel Tune-up/ Engine Analysis | 3 |
| R DMT/DMT 61 | Diesel Engine Rebuilding I | 3 |
| R DMT/DMT 62 | Diesel Engine Rebuilding II | 3 |
| R DMT/DMT 65 | Air Brake Systems | 3 |
| R DMT/DMT 66 | Truck Transmission and Drive Lines | 3 |
| IT 100 | Technical Mathematics | 3 |
| **Electives (Select 6 units)** | | |
| AT 125 | Automotive Machining | 3 |
| DMT 54 | Heavy-Duty Electricity | 3 |
| DMT 56 | Alternative Fuels | 3 |
| R DMT/DMT 70 | Medium-Duty Diesel Engine Tune-up | 3 |
| DMT 81 | Basic Hydraulics | 3 |
| DMT 96 | Special Problems in Diesel Technology | .5-3 |
| R DMT/DMT 97 | Diesel Mechanics Technology Workshop | .5-3 |
| WELD 100 | Welding I | 3 |
| CE 100 | Cooperative Education | 1,2,3,4 |
| **TOTAL UNITS** | | **32** |

Diesel Technology A.A. Degree Major or Certificate of Achievement is also offered in Diesel Mechanics Technology

### COURSE OFFERINGS

Courses taken for college credit may be applied toward a certificate or an Associate in Arts degree.

Courses numbered under 100 are not intended for transfer credit.

**R DMT 50 Introduction to Diesel Mechanics (3)**
*6 hours lecture/laboratory*
***Note:*** Cross listed as DMT 50; graded only
Theory and practice of fundamental skills for the maintenance and operation of basic diesel engines. Topics for study include: basic theory of operation; engine applications; engine lubricating and cooling; intake, exhaust and fuel systems; and electronic control.

**R DMT 55 Heavy-Duty Diesel Tune Up and Engine Analysis (3)**
*2 hours lecture-4 hours laboratory*
***Prerequisite:*** DMT/R DMT 50
***Note:*** Cross listed as DMT 55; graded only; may be taken 2 times
The use of software and diagnostic equipment in performing diesel tune-up. Topics include: theory of operation, tune-up procedures, fuel system function and repair, diagnostic equipment usage, electronic engine controls, mechanical and electronic engine system troubleshooting.

**R DMT 61 Diesel Engine Rebuilding I (3)**
*6 hours lecture/laboratory*
***Recommended preparation:*** R DMT/DMT 50
***Note:*** Cross listed as DMT 61; graded only; may be taken 2 times
Theory and practice in rebuilding diesel engines. Topics for study include disassembly, cleaning, inspection, and analysis of engine parts. Also included are cylinder head service, sleeve and piston service, advanced machining and measuring techniques.

**R DMT 62 Diesel Engine Rebuilding II (3)**
*6 hours lecture/laboratory*
***Prerequisite:*** R DMT/DMT 61
***Note:*** Cross listed as DMT 62; graded only
Theory and practice in rebuilding diesel engines. Topics for study include final cleaning, inspection and reassembly of engine parts. Also included are assembly measuring, torque procedures and torque-turn methods used on engine assembly, and engine testing upon completion of assembly.

**R DMT 65 Air Brake Systems (3)**
*2 hours lecture-3 hours laboratory*
***Note:*** Cross listed as DMT 65; graded only
The service and repair of heavy duty hydraulic and air brake systems and their components. Topics of study include brake troubleshooting, complete system repair, anti skid brake system, and related axle services.

**R DMT 66 Truck Transmission and Drive Line (3)**
*2 hours lecture-3 hours laboratory*
***Note:*** Cross listed as DMT 66; graded only
Service and repair of heavy duty truck drive lines. Topics for study include the disassembly, inspection, and reassembly of single and multiple disc clutches, four to fifteen speed transmissions, universal joints, and differentials.

**R DMT 70 Medium Duty Diesel Engine Tune Up (3)**
*2 hours lecture-4 hours laboratory*
***Note:*** Cross listed as DMT 70; graded only; may be taken 2 times
The use of diesel tune up and diagnostic equipment. Topics include: fuel systems; compression testing; fuel pump and injection timing; troubleshooting procedures; alternators, regulators, and starting systems.

**R DMT 97 Diesel Mechanics Technology Workshop (.5-3)**
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture, laboratory, or lecture/laboratory may be scheduled by the department. Refer to Class Schedule.
***Note:*** Cross listed as DMT 97; graded only; may be taken 4 times
A special selection of topics specific in nature. The contents will vary depending on specific needs of the students and community.

# Drafting Technology (R DT)

## COURSE OFFERINGS

Courses taken for college credit may be applied toward a certificate or an Associate in Arts degree.

**R DT 125 AutoCAD Introduction to Computer Aided Drafting (3)**
*2 hours lecture-3 hours laboratory*
***Note:*** Cross listed as DT 125; may be taken 2 times; maximum of 4 completions in any combination of DT/R DT 125, DT/R DT 126, DT/R DT 127
***Transfer acceptability:*** CSU; UC – R DT 125 and 126 combined: maximum credit, one course
An introduction to computer aided drafting using AutoCAD software and IBM compatible computers. Hands on experience with AutoCAD to include the following operations: preparing and editing drawings, storage and retrieval of drawings, and production of commercial quality drawings on a plotter. Introductory computer terminology and techniques in Windows.

**R DT 126 AutoCAD Intermediate Computer Aided Drafting (3)**
*2 hours lecture/3 hours laboratory*
***Prerequisite:*** DT/R DT 125
***Note:*** Cross listed as DT 126; may be taken 2 times; maximum of 4 completions in any combination of DT/R DT 125, DT/R DT 126, DT/R DT 127
***Transfer acceptability:*** CSU; UC – R DT 125 and 126 combined: maximum credit, one course
Advanced theory and hands on operation of a CAD system. Emphasis is placed on large scale drawings, three dimensional software techniques, orthographic projections, and complex computer aided manufacturing applications.

**R DT 127 AutoCAD Customization (2)**
*4 hours lecture/laboratory*
***Prerequisite:*** R DT/DT 125
***Note:*** Cross listed as DT 127; may be taken 2 times; maximum of 4 completions in any combination of DT/R DT 125, DT/R DT 126, DT/R DT 127
***Transfer acceptability:*** CSU
Advanced theory and hands on operation of a CAD system. Emphasis is placed on increased productivity, using customization and portfolio presentation for successful career opportunities.

**R DT 128 SolidWorks Introduction to 3D Design and Presentation (3)**
*6 hours lecture/laboratory*
***Prerequisite:*** DT/R DT 125
***Recommended preparation:*** DT 110
***Note:*** Cross listed as DT 128; may be taken 2 times
***Transfer acceptability:*** CSU
Advanced theory and hands on operation of three-dimensional software techniques. Emphasis is placed on wireframe, surface, solid, and parametric three-dimensional modeling.

**R DT 130 CAD/CAM Machining (3)**
*6 hours lecture/laboratory*
***Prerequisite:*** DT 110 and DT/R DT 128
***Note:*** Cross listed as DT 130; graded only; may be taken 2 times
Hands-on operation of importing three-dimensional solid and parametric three-dimensional models into CAD/CAM operations.

**R DT 131 SolidWorks Advanced 3D Design and Presentation (3)**
*6 hours lecture/laboratory*
***Prerequisite:*** DT/R DT 128
***Note:*** Cross listed as DT 131; may be taken 2 times
***Transfer acceptability:*** CSU
Advanced theory and hands-on operation of solid and parametric three-dimensional models. Emphasis is placed on creating molds, advanced sheet metal design and developing dynamic assemblies.

**R DT 200 Advanced Computer Aided Architectural Drafting (4)**
*8 hours lecture/laboratory*
***Prerequisite:*** DT/R DT 125 and completion of, or concurrent enrollment in, DT 105
***Note:*** Cross listed as DT 200; graded only; may be taken 2 times
***Transfer acceptability:*** CSU
Advanced techniques in the operation of AutoCAD software for architectural applications on IBM-compatible computers. Preparation of various architectural working drawings from a preliminary residential design.