Note: Cross listed as R DMT 55; 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.

DMT 56   Alternative Fuels   (3)
6 hours lecture/laboratory
Recommended preparation: DMT/R DMT 50
Theory and servicing of alternative fueled engines. Topics for study include various types of fuels, fuel handling and safety procedures, basic principles, regulators and mixers, all system components operation and service, electronic control systems, and emission testing.

DMT 61   Diesel Engine Rebuilding I   (3)
6 hours lecture/laboratory
Recommended preparation: DMT/R DMT 50
Note: Cross listed as R DMT 61; 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.

DMT 62   Diesel Engine Rebuilding II   (3)
6 hours lecture/laboratory
Recommended preparation: DMT/R DMT 61
Note: Cross listed as R DMT 62
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.

DMT 65   Air Brake Systems   (3)
2 hours lecture-3 hours laboratory
Note: Cross listed as R DMT 65
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.

DMT 66   Truck Transmission and Drive Lines   (3)
2 hours lecture-3 hours laboratory
Note: Cross listed as R DMT 66
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.

DMT 70   Medium Duty Diesel Engine Tune Up   (3)
2 hours lecture-4 hours laboratory
Note: Cross listed as R DMT 70; 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.

DMT 81   Basic Hydraulics   (3)
2 hours lecture-3 hours laboratory
Note: May be taken 2 times
Basic hydraulic system principles and service. Topics of study include hydraulic theory, safety requirements, hydraulic diagrams and ISO symbols, component operation, service and repair troubleshooting, and test equipment usage.

DMT 96   Special Problems in Diesel Technology   (.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.
Prerequisite: DMT/R DMT 50
Note: May be taken 4 times
A special study in topics in the area of interest to diesel mechanics, generally re-

search in nature. The content to be determined by the need of the student under a signed contract with the instructor.

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 R DMT 97; 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.

Disability Resource (DR)

Contact the Disability Resource Center for further information, (760) 744-1150, ext. 2375

COURSE OFFERINGS

Courses numbered under 50 are non-degree courses.
Courses numbered under 100 are not intended for transfer credit.

DR 5   Personal Adjustment and Growth   (2)
1½ hours lecture-1½ hours laboratory
Note: May be taken 3 times
An individualized class which explores existing concepts, theories, and practices pertaining to self appraisal defense mechanisms and interpersonal relations, and how that relates to school management and to the student's particular disability. This course is designed to meet the needs of students with disabilities.

DR 10   Educational Assessment/Guidance   (.5)
½ hour lecture
Note: Open entry/Open exit; Credit/No Credit grading only; may be taken 2 times
This individualized course is designed to assess, by means of diagnostic testing and the California Community College learning disability eligibility process, the student's need for academic accommodations in the community college setting. The student will be counseled in planning appropriate educational goals and in selecting and preparing for college classes.

**DR 15   English Essentials for Students
                      with Disabilities   (3)**
3 hours lecture
Note: Credit/No Credit grading only; may be taken 4 times; Students must have the ability to learn in a group setting. Students must be able to produce computer generated work by using the keyboard or other assistive technology.
Provides special assistance for students with disabilities to develop basic skills in written communication. Working with computers is part of the class format.

DR 18   Phonics for Students with Disabilities   (3)
3 hours lecture
Note: May be taken 3 times
This course is designed to meet the needs of students with disabilities. It teaches the use of phonics as a spelling and reading strategy.

DR 20   Pre-Algebra Support   (3)
3 hours lecture
Note: Credit/No Credit grading only; may be taken 4 times
Provides programmed instruction on an individual and/or small group basis to students with disabilities. Practice in understanding and performing basic arithmetic tasks necessary for successful functioning in society.

DR 25   Algebra Support   (1.5,3)
1½ or 3 hours lecture
Recommended preparation: MATH 15 or eligibility for MATH 50
Note: Credit/No Credit grading only; may be taken 4 times
Provides personalized instruction in basic study management techniques for the support of students with disabilities in mainstream classes. The course will help students with disabilities to develop specialized study techniques and interpersonal skills needed for success in mainstream classes.

DR 26   **Composition Skills and Strategies for**
                the Intermediate Writer   **(3)**
3 hours lecture
Recommended preparation: ENG 10 or eligibility for ENG 50
Note: May be taken 2 times
This class is designed to help students with disabilities improve their intermediate composition skills through methods and strategies specific to their disabilities.

DR 31   **Language Development**   **(1,2)**
2 or 4 hours lecture/laboratory
Note: May be taken 4 times
This course is for the student with communication problems relating to language processing. The course will include assessment, theory, facilitation techniques, and use of special devices.

DR 35   **Speech and Language Development:**
                Articulation, Fluency, and Voice Problems   **(3)**
3 hours lecture
Note: May be taken 4 times
For students with communication problems relating to articulation, rate/fluency, and voice. It includes assessment, theory, physiology, and management strategies.

DR 40   **Adapted Computer Skills**   **(3)**
3 hours lecture
Note: May be taken 3 times
This course is designed to meet the needs of the students with disabilities. Students learn to use computers with access technology such as voice recognition, screen readers, screen enlargement and other hardware adaptations.

DR 41   **Advanced Adapted Computers for**
                Students with Disabilities   **(3)**
3 hours lecture
Recommended preparation: DR 40
Note: May be taken 3 times
Provides training in more advanced software for students with disabilities by using their prescribed access technology. Course work meets computer literacy competence for CSUSM.

DR 42   **Voice Recognition for Students with Disabilities**   **(3)**
3 hours lecture
Note: May be taken 3 times
Provides voice recognition computer training for students with disabilities.

DR 43.1   **Software for Students with Vision Loss I**   **(3)**
3 hours lecture
Recommended Preparation: Keyboarding skills with a minimum of 15 words per minute
Note: May be taken 2 times
Provides training using specialized software and hardware adaptations to assist students with blindness/low vision to develop computer skills.

DR 43.2   **Software for Students with Vision Loss II**   **(3)**
3 hours lecture
Recommended Preparation: Keyboarding skills with a minimum of 15 words per minute along with prior experience with a screen reading or magnification application
Note: May be taken 2 times
Provides training using specialized software and hardware adaptations in combination with Microsoft Office, Internet Explorer, and other academic applications.

DR 45L   **Adapted Computer Laboratory**   **(1)**
3 hours laboratory
Note: Credit/No Credit grading only; may be taken 4 times
Provides supervised hands on opportunities to acquire and reinforce skills on computer equipment adapted for students with disabilities.

DR 47   **Topics in Disability Resource**   **(.5-3)**
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture or lecture/laboratory may be scheduled by the department.

Note: May be taken 3 times
Topics in disability resource. See Class Schedule for specific topic offered. Course title will designate subject covered.

Drafting Technology (DT)

Contact the Design and Consumer Education Department for further information, (760) 744-1150, extension 2349

Associate in Arts degree requirements, Certificate of Achievement requirements, and Certificate of Proficiency requirements are listed in Section 6 (green pages) of the catalog.

PROGRAMS OF STUDY

Architectural Drafting Technology

Prepares students for employment as a design/production drafter in the field of architecture.

Students concerned with transfer into an architectural program at a university should review specific course requirements with their architectural instructor and the Counseling Department.

A.A. DEGREE MAJOR OR
CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
DT 105	Basic Architectural Drafting	3
DT 120 or	Architectural History	
DT 121	Multicultural Architectural History	3
DT/R DT 125	AutoCAD Introduction to Computer Aided Drafting	3
DT 135	Architectural Materials/Methods Construction	3
DT 144	Architectural Drawing and Color	3
DT 145	Architectural Delineation/Pictorial Drawing	4
DT 155	Architectural Theory	2
DT 160	Environmental Architecture and Design	3
DT 185	Architectural 3D Studio MAX	3
DT/R DT 200	Advanced Computer Aided Architectural Drafting	4

Electives (Select 9 units)		
CSIS 120/		
R CSIS 120	Microcomputer Applications	3
DT 120 or	Architectural History	
DT 121	Multicultural Architectural History	3
DT/R DT 126	AutoCAD Intermediate Computer Aided Drafting	3
DT/R DT 127	AutoCAD Customization	3
DT 129	Basic Architectural Drafting with AutoCAD	3
DT 215	Architectural Design Fundamentals I	5
DT 216	Architectural Design Fundamentals II	5
MATH 115	Trigonometry	3
CE 100	Cooperative Education	1,2,3,4
CE 105	Job Hunting Techniques	1,2,3

TOTAL UNITS   **40**

Computer Assisted Drafting

Prepares students in the skills necessary for employment as a computer assisted drafting operator.

A.A. DEGREE MAJOR OR
CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
CSIS 105	Computer Concepts/Microcomputer	3
DT/R DT 125	AutoCAD Introduction to Computer Aided Drafting	3
DT/R DT 126	AutoCAD Intermediate Computer Aided Drafting	3
DT/R DT 127	AutoCAD Customization	3
DT/R DT 128	SolidWorks Intro to 3D Design and Presentation	3
IT 100	Technical Mathematics	3

To satisfy a prerequisite, the student must have earned a letter grade of A, B, C or CR in the prerequisite course, unless otherwise stated.