DA 85 Advanced Dental Procedures (5)
3 hours lecture - 6 hours laboratory
Prerequisite: *A minimum grade of 'C' in DA 50 , 60 and 75, and proof of Hepatitis B Immunization; and current BLS for Healthcare Providers Certificate*
Note: *Graded only*
Advanced laboratory and clinical experience focusing on basic skills previously learned. Emphasis is placed on 1) clinical use of impression materials for obtaining study models, 2) pouring and trimming plaster and stone models, 3) fabrication of custom trays, 4) fabrication of provisional restorations, and 5) advanced prosthodontic and orthodontic instruction.

DA 90 Clinical Rotation (6)
19 hours laboratory/clinical
Prerequisite: *A minimum grade of 'C' in DA 50 and 75, and proof of Hepatitis B Immunization; and current BLS for Healthcare Providers Certificate*
Note: *Pass/No Pass only*
An intensive program of clinical dental experiences, working with patients and staff at clinics and/or private dental offices. Students will assist the dentists in specialized and operative procedures and duties delegated to the California licensed Registered Dental Assistant.

DA 97 Dental Assisting Topics (.5 - 4)
Units awarded in topics courses are dependent upon the number of hours required of the student. Any combination of lecture and/or laboratory may be scheduled by the department. Refer to Class Schedule.
Note: *Pass/No Pass only*
Topics in Dental Assisting. See Class Schedule for specific topic offered. Course title will designate subject covered.

Diesel Mechanics Technology (DMT)

Contact the Trade and Industry Department for further information.
(760) 744-1150, ext. 2545
Office: T-102A

Associate in Science Degrees -
AS 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

The Diesel Technology program at Palomar College gives the student an opportunity to gain the skills and knowledge needed for success in the challenging field of Diesel Technology, learning about servicing and maintaining diesel powered highway trucks, off-road heavy equipment, and stationary engines. The two-year program which leads to a Certificate of Achievement can also be applied towards an Associate in Science Degree in Diesel Technology.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
DMT 100	Introduction to Diesel Mechanics	4
DMT 105	Heavy-Duty Diesel Tune-Up/Analysis	4
DMT 110	Heavy-Duty Electricity	4
DMT 120	Air Brake Systems	4
DMT 125	Truck Transmission and Drive Lines	4
DMT 200	Diesel Engine Rebuilding I	4
DMT 201	Diesel Engine Rebuilding II	4
Electives (Select 4 units)		
AT 160	Associated Studies in Automotives	3
CE 100	Cooperative Education	1 - 4
DMT 115	Alternative Fuels	4
DMT 130	Medium-Duty Diesel Engine Tune-Up	4
DMT 135	Basic Hydraulics	4
DMT 196	Special Problems In Diesel Technology	0.5 - 3
DMT 197	Diesel Mechanics Technology Workshop	0.5 - 3
IT/WELD 108	Technical Mathematics	3
	or	
MATH 56	Beginning/Intermediate Algebra	6
	or	
MATH 60	Intermediate Algebra	4
	or	
MATH 100	Exploring Mathematics	3
WELD 100	Welding I	3
TOTAL UNITS		**32**

COURSE OFFERINGS

Courses numbered under 100 are not intended for transfer credit.

DMT 100 Introduction to Diesel Mechanics (4)
3 hours lecture - 3 hours laboratory
Transfer acceptability: *CSU*
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.

DMT 105 Heavy-Duty Diesel Tune Up and Engine Analysis (4)
3 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in DMT 100*
Transfer acceptability: *CSU*
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 110 Heavy-Duty Electricity (4)
3 hours lecture - 3 hours laboratory
Transfer acceptability: *CSU*
Heavy-duty electricity systems principles and service. Topics of study include electrical theory, batteries, wiring diagrams, 12V and 24V starters, alternators and electrical troubleshooting, and test equipment.

DMT 115 Alternative Fuels (4)
3 hours lecture - 3 hours laboratory
Recommended preparation: *DMT 100*
Transfer acceptability: *CSU*
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 120 Air Brake Systems (4)
3 hours lecture - 3 hours laboratory
Transfer acceptability: *CSU*
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 125 Truck Transmission and Drive Lines (4)
3 hours lecture - 3 hours laboratory
Transfer acceptability: *CSU*
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 130 Medium Duty Diesel Engine Tune Up (4)
3 hours lecture - 3 hours laboratory
Transfer acceptability: *CSU*
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 135 Basic Hydraulics (4)
3 hours lecture - 3 hours laboratory
Transfer acceptability: *CSU*
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 196 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 or laboratory may be scheduled by the department. Refer to Class Schedule.
Transfer acceptability: *CSU*
A special study in topics in the area of interest to diesel mechanics, generally research in nature. The content to be determined by the need of the student under a signed contract with the instructor.

DMT 197 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 or laboratory may be scheduled by the department. Refer to Class Schedule.
Transfer acceptability: *CSU*
A special selection of topics specific in nature. The contents will vary depending on specific needs of the students and community.

DMT 200 Diesel Engine Rebuilding I (4)
3 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in DMT 100*
Recommended preparation: *DMT 105*
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 201 Diesel Engine Rebuilding II (4)
3 hours lecture - 3 hours laboratory
Prerequisite: *A minimum grade of 'C' in DMT 200*
Transfer acceptability: *CSU*
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.

Digital Broadcast Arts (DBA)

Contact the Media Studies Department for further information.,
(769) 744-1150, ext. 2440
Office: P-31

Associate in Arts Degrees –
AA Degree requirements are listed in Section 6 (green pages).
• Radio and Television

Associate in Science Degrees –
AS Degree requirements are listed in Section 6 (green pages).
• Digital Video

Certificates of Achievement –
Certificate of Achievement requirements are listed in Section 6 (green pages).
• Digital Video
• Entertainment Technology
• Radio and Television

Certificates of Proficiency –
Certificates of Proficiency requirements are listed in Section 6 (green pages).
• Broadcast Journalism
• Digital Media

PROGRAMS OF STUDY

Broadcast Journalism

Provides a background in print journalism and broadcast journalism: practical experience in gathering, writing, editing and producing news. This certificate prepares students for employment in the television news industry.

CERTIFICATE OF PROFICIENCY

Program Requirements		Units
JOUR 101	Multimedia Writing and Reporting	3
JOUR 105	Multimedia News Writing and Production	3
DBA/ENTT 120	Digital Television Production	3
DBA 240B	Beginning Television News/Sports	3
DBA 240D	Advanced Television News/Sports	3
TOTAL UNITS		**15**

The Broadcast Journalism Certificate of Proficiency is also listed under Journalism.

Digital Media

This program encompasses digital video editing in digital media. The certificate prepares students for employment in the film, video, Internet, and television industries. Major growth in this industry is anticipated as Internet and television merge into one medium.

CERTIFICATE OF PROFICIENCY

Program Requirements		Units
CINE/DBA 125	Beg Film/Video Field Production	3
	or	
GCMW 165	Digital Video Design	3
DBA 270	Digital Video Editing	3
DBA 275	Avid Editing for Television & Film	3
GCMW 204	Motion Graphics for Multimedia	3
GCMW 205	Digital Video for Multimedia	3
TOTAL UNITS		**15**

Digital Media Certificate of Proficiency is also listed under Graphic Communications-Multimedia and Web.

Digital Video

Digital Video encompasses editing and design in using digital media. This degree prepares students for employment in the film, video, Internet, and television industries.

A.S. DEGREE MAJOR OR CERTIFICATE OF ACHIEVEMENT

Program Requirements		Units
GCIP 140	Digital Imaging/Photoshop I	3
GCMW 165	Digital Video Design	3
GCMW 204	Motion Graphics for Multimedia	3
GCMW 205	Digital Video for Multimedia	3
DBA/CINE 125	Beginning Film and Video Field Production	3
DBA 230	Digital Audio with Pro Tools	3
DBA 270	Digital Video Editing	3
DBA 275	Avid Editing for Television and Film	3
Electives (2 courses required, 6 units minimum)		
ARTI 246	Digital 3D Design and Modeling	3
ARTI 247	Digital 3D Design and Animation	3