

**SAN BERNARDINO VALLEY COLLEGE  
SUBMITTED FOR BOARD OF TRUSTEE APPROVAL**

**NEW COURSES**

|               |                             |         |
|---------------|-----------------------------|---------|
| DIESEL 021    | DIESEL ENGINES – HEAVY-DUTY | 4 UNITS |
| PREREQUISITE: | None                        |         |
| LECTURE:      | 3 hours per week.           |         |
| LABORATORY:   | 3 hours per week.           |         |

Theory and practical shop work in the repair, operation, and maintenance of heavy-duty industrial diesel engines and fuel injection systems. Course includes general trouble-shooting and diagnostic testing. This course may be used in preparation for the Automotive Service Excellence (ASE) National Test.

*Associate Degree Applicable*  
*Effective: FA 2002*

|               |                         |         |
|---------------|-------------------------|---------|
| DIESEL 022    | HEAVY-DUTY TRUCK BRAKES | 2 UNITS |
| PREREQUISITE: | None                    |         |
| LECTURE:      | 1.5 hours per week.     |         |
| LABORATORY:   | 1.5 hours per week.     |         |

Theory and practical shop work in the construction, operation, and repair of heavy-duty truck brake systems and components. Includes principles of hydraulic and pneumatic brake systems, anti-lock, and computer controlled braking systems used in today's modern heavy-duty diesel trucks and semi-tractors.

*Associate Degree Applicable*  
*Effective: FA 2002*

|               |  |         |
|---------------|--|---------|
| DIESEL 023    | HEAVY DUTY TRUCK SUSPENSION AND STEERING | 2 UNITS |
| PREREQUISITE: | None                                     |         |
| LECTURE:      | 1.5 hours per week.                      |         |
| LABORATORY:   | 1.5 hours per week.                      |         |

Theory and practical shop work in the construction, operation, and repair of heavy-duty truck suspension and steering components. Includes principles of hydraulic and pneumatic steering and suspension systems.

*Associate Degree Applicable*  
*Effective: FA 2002*

|               |                                  |         |
|---------------|----------------------------------|---------|
| DIESEL 030    | ADVANCE HEAVY DUTY TRUCK SYSTEMS | 4 UNITS |
| PREREQUISITE: | DIESEL 028                       |         |
| LECTURE:      | 3 hours per week.                |         |
| LABORATORY:   | 3 hours per week.                |         |

Advance level theory and practical workshop in maintenance, air conditioning, ABS, computers, and operations of the heavy-duty truck and semi-tractors systems.

*Associate Degree Applicable*  
*Effective: FA 2002*

*Rationale for all DIESEL courses: Diesel truck technology has changed tremendously over the past decade. Students wishing to enter the field of diesel truck service and repair need a broad understanding of the new technologies. It is imperative that we expose our students to new technologies as much possible as to ensure their successful transition into the labor force. Technician certification programs are in great demand as the demand for qualified technicians far exceeds supply. Students completing this course will be ready to meet the challenge of the certification tests.*

### NEW COURSES (continued)

MUS 106                      HISTORY OF JAZZ    3 UNITS  
PREREQUISITE:              None  
LECTURE:                      3 hours per week.

Provides the student with a chronological survey of jazz music styles, including origins, development, effects on today's society, and major artists and styles. Concepts such as musical structure and form are explored.

*Associate Degree Applicable*  
*Course credit transfers to CSU.*  
*UC credit pending*  
*Effective: FA 2002*

*Rationale: The addition of a jazz appreciation course is more consistent with student interests. Presently, the genre specific courses are much more popular than broader survey courses.*

MUS 222                      INDEPENDENT STUDY IN MUSIC    1-3 UNITS  
PREREQUISITE:              None  
LABORATORY:                      3-9 hours per week.

Assigned projects involving research and analysis of selected topics or directed study for students who are interested in furthering their knowledge of music on an independent study basis. For each unit earned, students are required to devote three hours per week throughout the semester. Enrollment limited to those who meet independent study criteria. Prior to registration, a contract must be prepared. See instructor for details.

*Associate Degree Applicable*  
*Course credit transfers to CSU.*  
*UC credit pending*  
*Effective: FA 2002*

*Rationale: The addition of an independent study course is consistent with other independent study courses on campus. This course will serve the needs of students who desire to further study areas in music which are not covered in sufficient depth in regular courses. For example, students may do research and/or performance projects in voice, organizational communication, nonverbal communication, conflict management, etc.*

SPEECH 110                      BEGINNING VOICE AND DICTION    3 UNITS  
PREREQUISITE:              None  
LECTURE:                      3 hours per week.

*Techniques of voice production for both public speaking and the stage. Includes theory and practice in developing vocal skills for performance such as breathing, pitch, rate, articulation, volume, and quality. This course is also offered as THART 110.*

*Associate Degree Applicable*  
*Course credit transfers to CSU.*  
*UC credit pending*  
*Effective: FA 2002*

*Rationale: The addition of a Beginning Voice and Diction course is more consistent with student interests. The course will be cross-listed as THART 110.*



### NEW COURSES (continued)

THART 110                      BEGINNING VOICE AND DICTION    3 UNITS  
PREREQUISITE:                None  
LECTURE:                        3 hours per week.

*Techniques of voice production for both public speaking and the stage. Includes theory and practice in developing vocal skills for performance such as breathing, pitch, rate, articulation, volume, and quality. This course is also offered as SPEECH 110.*

*Associate Degree Applicable  
Course credit transfers to CSU.  
UC credit pending  
Effective: FA 2002*

*Rationale: The addition of a Beginning Voice and Diction course is more consistent with student interests. The course will be cross-listed as Speech 110.*

THART 165                      STAGE MAKEUP    3 UNITS  
PREREQUISITE:                None  
LECTURE:                        2 hours per week.  
LABORATORY:                  3 hours per week.

Extensive exploration of the theory, design, and application of makeup for the theatre. Students gain experience in applying makeup to both students in the class and students in the college's theatrical productions.

*Associate Degree Applicable  
Course credit transfers to CSU.  
UC credit pending  
Effective: FA 2002*

*Rationale: Additional transfer courses are needed to better serve those students interested in continuing their education in theatre.*

## COURSE MODIFICATIONS

|            |   |   |
|------------|---|---|
| ART 108    | SURVEY OF MEXICAN ART   |   |
|            | Change Course Title   | From: Survey of Mexican Art<br>To: Mexican Art History  |
|            | Change Catalog and Schedule Description   | To: Survey of Mexican art from Precolumbian times through the 20th century muralists.   |
|            | <i>Rationale: To better correspond with course needs.</i><br><i>Effective: FA03</i> |   |
| AUTO 032X3 | DIESEL ENGINES  |   |
|            | Change Course ID  | From: AUTO 032x3<br>To: DIESEL 020  |
|            | Change Course Title   | From: Diesel Engines<br>To: Diesel Engines – Light Duty   |
|            | Change Catalog and Schedule Description   | To: Theory and practical shop work in the repair, operation, and maintenance of light duty automotive diesel engines and fuel injection systems. Course includes general troubleshooting and diagnostic testing. This course may be used in preparation for the Automotive Service Excellence (ASE) National Test.  |
|            | <i>Rationale: To better correspond with course needs.</i><br><i>Effective: FA03</i> |   |
| AUTO 050X3 | WHEEL ALIGNMENT AND BRAKES  |   |
|            | Change Course ID  | From: AUTO 050x3<br>To: AUTO 050  |
|            | Change Course Title   | From: Wheel Alignment and Brakes<br>To: Automotive Brakes   |
|            | Change Catalog Description  | To: This course is based upon NATEF standards and designed for students and current technicians to gain knowledge and skills in automotive brakes (standard and anti-lock) systems. Included but not limited to disc, drum, hydraulics, power boosters, and traction control. Emphasis on diagnosing, trouble-shooting, repairing, replacing, and adjusting. This course may be used in preparation for the Automotive Service Excellence (ASE) National Test (A-5). Theory and practical work in the repair of brake system. Shop instruction to include safety, machinery, procedures for trouble shooting and reconditioning of brake systems. |
|            | Change Schedule Description   | To: Theory and practical work in the repair of brake system. Shop instruction to include safety, machinery, procedures for trouble shooting and reconditioning of brake systems. ASE National Test (A-5) applicable.  |
|            | <i>Rationale: To better correspond with course needs.</i><br><i>Effective: FA03</i> |   |

**COURSE MODIFICATIONS (continued)**

AUTO 051X3

ADVANCED WHEEL ALIGNMENT AND BRAKES

|                             |  |
|-----------------------------|--|
| Change Course ID            | From: AUTO 051x3<br>To: AUTO 051   |
| Change Course Title         | From: Advanced Wheel Alignment and Brakes<br>To: Advanced Automotive Brakes  |
| Change Prerequisite         | From: AUTO 050x3<br>To: AUTO 050   |
| Change Catalog Description  | To: This course is based on NATEF standards and is designed for students and current technicians to gain advanced knowledge and skills in automotive brakes. Advanced study of disc, drum, hydraulics, and power boosters systems. Emphasis on antilock brakes, traction control, and machining. Advanced theory and practical work in the repair of brake system. Shop instruction to include safety, reconditioning, machinery, procedures for trouble shooting and recondition brake systems. |
| Change Schedule Description | To: Advanced theory and practical work in the repair of brake system. Shop instruction to include safety, reconditioning, machinery, procedures for trouble shooting and recondition brake systems.  |

*Rationale: To better correspond with course needs.*  
*Effective: FA03*

**COURSE MODIFICATIONS (continued)**

AUTO 052X3

BRAKES, SUSPENSION AND WHEEL ALIGNMENT

|                             |   |
|-----------------------------|---|
| Change Course ID            | From: AUTO 052x3<br>To: AUTO 052  |
| Change Units                | From: 6<br>To: 4  |
| Change Laboratory Hours     | From: 9<br>To: 3  |
| Change Course Title         | From: Brakes, Suspension and Wheel Alignment<br>To: Automotive Suspension and Steering  |
| Change Catalog Description  | To: This course is based upon NATEF standards and designed for students and current technicians to gain knowledge and skills in automotive chassis and suspension systems. Included but not limited to suspension types, basic geometry, alignment angles, two wheel alignment and four-wheel alignment using both computerized and mechanical methods. Emphasis on diagnosing, trouble-shooting, repairing, replacing, and adjusting. This course may be used in preparation for the Automotive Service Excellence (ASE) National Test. Theory and practical work in the repair of chassis and suspension systems. Shop instruction to include safety, rebuilding, replacing, and alignment procedures for trouble shooting of suspension systems. This course may be used in preparation for the Automotive Service Excellence (ASE) National Test (A-4). |
| Change Schedule Description | To: Theory and practical work in the repair of chassis and suspension systems. Shop instruction to include safety, rebuilding, replacing, and alignment procedures for trouble shooting of suspension systems. (ASE) National Test (A-4) applicable.  |

*Rationale: To better correspond with course needs.  
Effective: FA03*

**COURSE MODIFICATIONS (continued)**

AUTO 053X3

ADVANCED BRAKES, SUSPENSION AND WHEEL ALIGNMENT

|                             |   |
|-----------------------------|---|
| Change Course ID            | From: AUTO 053x3<br>To: AUTO 053  |
| Change Units                | From: 6<br>To: 4  |
| Change Laboratory Hours     | From: 9<br>To: 3  |
| Change Prerequisite         | From: None<br>To: AUTO 052  |
| Change Department Advisory  | From: AUTO 052x3<br>To: None  |
| Change Course Title         | From: Brakes, Suspension and Wheel Alignment<br>To: Advanced Automotive Suspension and Steering   |
| Change Catalog Description  | To: This course is designed for students and current technicians to gain advanced knowledge and skills in automotive chassis and suspension systems. Included but not limited to suspension design, advanced geometry, alignment angles, and four-wheel alignment using computerized methods. Emphasis on diagnosing, troubleshooting, repairing, replacing, and adjusting. Advanced theory and practical work in the repair of chassis and suspension systems. Shop instruction to include safety, rebuilding, replacing, and alignment procedures for trouble shooting of suspension systems. |
| Change Schedule Description | To: Advanced theory and practical work in the repair of chassis and suspension systems. Shop instruction to include safety, rebuilding, replacing, and alignment procedures for trouble shooting of suspension systems.   |

*Rationale: To better correspond with course needs.  
Effective: FA03*



**COURSE MODIFICATIONS (continued)**

AUTO 090X4

ENGINES LABORATORY

|                             |   |
|-----------------------------|---|
| Change Course ID            | From: AUTO 090x4<br>To: AUTO 090  |
| Change Units                | From: 3<br>To: 6  |
| Change Lecture Hours        | From: None<br>To: 3   |
| Change Department Advisory  | From: AUTO 091<br>To: None  |
| Change Course Title         | From: Engines Laboratory<br>To: Engines Repair  |
| Change Catalog Description  | To: This course is based on NATEF standards and designed for students and current technicians to gain knowledge and skills in automotive engine repair. Instruction in removal, disassembly, inspection, reconditioning and reassembling of engines. Rebuilding of components using automotive machine shop equipment. Study progressing to the operation of automotive machine shop equipment. Theory and instruction of gasoline, diesel and rotary engines. Theory and practical work in the repair and rebuilding of automotive gasoline, diesel, and rotary engines. Shop instruction to include safety, engine reconditioning, auto shop machinery, and failure analysis of components. This course may be used in preparation for the Automotive Service Excellence (ASE) National Test A-1. |
| Change Schedule Description | To: Theory and practical work in the repair and rebuilding of automotive gasoline, diesel, and rotary engines. Instruction to include safety, engine reconditioning, shop machinery, and failure analysis. (ASE) National Test A-1 applicable.  |

*Rationale: To better correspond with course needs.  
Effective: FA03*

**COURSE MODIFICATIONS (continued)**

|   |  |  |
|---|--|--|
| DANCE 101X2                             | BEGINNING MODERN DANCE   |  |
| Change Units                            | From: 1<br>To: 2   |  |
| Change Laboratory Hours                 | From: 3<br>To: 6   |  |
| Change Catalog and Schedule Description | To: Focuses on the "inner impulse" of modern dance and draws upon the movement vocabularies of classical, post-modern, and contemporary styles. Strong emphasis on the acquisition of a beginning modern dance movement vocabulary, dynamic alignment, and suppleness, flexibility, rhythmically, musicality, endurance and balance. |  |

*Rationale: To better correspond with course needs.  
Effective: FA03*

|                             |   |  |
|-----------------------------|---|--|
| DANCE 102X4                 | INTERMEDIATE/ADVANCED MODERN DANCE  |  |
| Change Units                | From: 1<br>To: 2  |  |
| Change Laboratory Hours     | From: 3<br>To: 6  |  |
| Change Title                | From: Intermediate/Advanced Modern Dance<br>To: Intermediate Modern Dance   |  |
| Change Catalog Description  | To: Continuing study of modern dance techniques including the movement's vocabularies of Graham, Holm, Humphrey-Weidman, Limon, Cunningham, Hawkins, Taylor, and Tharp and the post-modern and contemporary styles of today. Emphasis is on expanding and deepening the dancer's technical and expressive skills through more complicated techniques, combinations, improvisations, and choreographic studies while supporting the discovery of a personal movement voice. Complexity, rhythmically, spatially, and dynamically aspects are stressed. |  |
| Change Schedule Description | To: Continuing study of modern dance techniques. Emphasis is on expanding and deepening the dancer's technical and expressive skills through more complicated techniques, combinations, improvisations, and choreographic studies while supporting the discovery of a personal movement voice.  |  |

*Rationale: To better correspond with course needs.  
Effective: FA03*

**COURSE MODIFICATIONS (continued)**

|             |   |   |
|-------------|---|---|
| DANCE 105X2 | BEGINNING JAZZ DANCE                    |   |
|             | Change Units                            | From: 1<br>To: 2  |
|             | Change Laboratory Hours                 | From: 3<br>To: 6  |
|             | Change Catalog and Schedule Description | To: A comprehensive survey of the beginning techniques of Jazz Dance with a focus on vocabulary, placement, centering, balance, alignment, strength and flexibility, and combinations of loco motor movement. May be taken a total of two times for credit. |

*Rationale: To better correspond with course needs.  
Effective: FA03*

|             |   |   |
|-------------|---|---|
| DANCE 106X4 | INTERMEDIATE/ADVANCED JAZZ DANCE        |   |
|             | Change Units                            | From: 1<br>To: 2  |
|             | Change Laboratory Hours                 | From: 3<br>To: 6  |
|             | Change Title                            | From: Intermediate/Advanced Jazz Dance<br>To: Intermediate Jazz Dance   |
|             | Change Catalog and Schedule Description | To: Continuing study of jazz dance techniques including the styles and techniques of jazz innovators such as Cole, Giordano, Luigi, Robbins, Fosse, and Tremaine. Contemporary and commercial styles may also be introduced. Historical and theoretical understandings of jazz technique from film, television, and stage are a primary focus as well as the development of the dancer's technical and expressive skills. |

*Rationale: To better correspond with course needs.  
Effective: FA03*

|          |   |  |
|----------|---|--|
| HIST 135 | RELIGION IN AMERICA                     |  |
|          | Change Catalog and Schedule Description | To: An introduction of the growth and development of diverse religions in the United States that spans from the colonial period to the present. This course chronologically presents these religious movements, including the Puritans, slave religion, the religious reform movements, the Catholic, Protestant and Jewish communities, the Black religious experience, and contemporary religious movements. This course is also offered as RELIG 135. |

*Rationale: To better correspond with course needs.  
Effective: FA03*

**COURSE MODIFICATIONS (continued)**

RELIG 135

RELIGION IN AMERICA

Change Catalog and  
Schedule Description

To: An introduction of the growth and development of diverse religions in the United States that spans from the colonial period to the present. This course chronologically presents these religious movements, including the Puritans, slave religion, the religious reform movements, the Catholic, Protestant and Jewish communities, the Black religious experience, and contemporary religious movements. This course is also offered as RELIG 135.

*Rationale: To better correspond with course needs.  
Effective: FA03*

TELCALC 950

ARITHMETIC

Change Course Title

From: Arithmetic  
To: Shop Calculations

Change  
Catalog and Schedule  
Description

To: A basic skill course designed as a review of whole numbers, fractions, decimals, problem solving methods, and practical measurements.

*Rationale: To better correspond with course needs.  
Effective: FA03*

THART 100

INTRODUCTION TO THE THEATRE

Change  
Catalog and Schedule  
Description

To: An introduction to the art of theatre to include the nature of the theatrical presentation, elements of dramatic structure, and the contributions of the playwright, actor, director, designer, technician and audience.

*Rationale: To better correspond with course needs.  
Effective: FA03*



## ALTERNATE DELIVERY

SPEECH 135            MASS MEDIA AND SOCIETY

## DELETE COURSES

AUTO 091            ENGINE THEORY  
AUTO 033X4        DIESEL ENGINES  
DANCE 109X4        COMMERCIAL DANCE  
DANCE 111X4        DANCE OF A SELECTED CULTURE  
DANCE 204           CHOREOGRAPHY: THE CREATIVE PROCESS  
PHYSICS 160A        PRINCIPLES OF PHYSICS I  
PHYSICS 160B        PRINCIPLES OF PHYSICS II  
PHYSICS 160C        PRINCIPLES OF PHYSICS III  
TELCALC 137        TECHNICAL CALCULATIONS  
THART 115           CONTEMPORARY THEATRE  
THART 223           SPECIAL PROBLEMS IN THEATRE ARTS II

*Rationale for AUTO 091: The content of this course has been incorporated to AUTO 090.  
Effective: FA02*

*Rationale for AUTO 033X4: The content of this course has been incorporated to DIESEL 021.  
Effective: FA02*

*Rationale for DANCE 109x4: This course will be resubmitted at a later date, possibly in the form of a "hip hop" course or dance in music videos.  
Effective: FA02*

*Rationale for DANCE 111x4: The title is "Dance of a Selected Culture". The long-term plan is to develop culture specific courses such as Ballet Folklorico and West African Dance.  
Effective: FA02*

*Rationale for DANCE 204: The existing choreography course (DANCE 203) is sufficient. Additional work in choreography is viewed as upper division at most universities.  
Effective: FA02*

*Rationale for all PHYSICS: PHYSIC 200, 201, and 210 replaced the 160A, B, C Courses.  
Effective: FA02*

*Rationale for TECALC: The content of this course has been incorporated to TECALC 097.  
Effective: SP03*

*Rationale for all THART: To reflect curriculum changes.  
Effective: FA02*

## NEW CERTIFICATES

### AVIONICS TECHNOLOGY CERTIFICATE

| <b>Required Courses:</b>                          |  | <b>Units</b>          |
|---|--|-----------------------|
| TECALC 097  | Technical Calculations                       | 4                     |
| ELECTR 110  | Direct Current Circuit Analysis              | 3                     |
| ELECTR 111  | Direct Current Circuit Laboratory            | 1                     |
| ELECTR 115  | Alternating Current Circuit Analysis         | 3                     |
| ELECTR 116  | Alternating Current Circuit Laboratory       | 1                     |
| ELECTR 155  | Electronic Drawing and Assembly              | 3                     |
| ELECTR 230  | Semiconductor Devices                        | 3                     |
| ELECTR 235  | Solid State Circuit Analysis                 | 4                     |
| ELECTR 265  | Digital Logic Design                         | 4                     |
| ELECTR 266  | Microprocessor Technology                    | 4                     |
| ELECTR 270  | Linear Integrated Circuit Analysis           | 4                     |
| <b>Additional Courses for AVIONICS TECHNOLOGY</b> |  |                       |
| AERO 121*   | Aviation Fundamentals                        | 3                     |
| AERO 140*   | Instrument Ground School & Flight Simulators | 4                     |
| ELECTR 220  | FCC Rules and Regulations                    | 3                     |
| ELECTR 250  | Radio Transmitters, Receivers, and Antennas  | 4                     |
| ELECTR 257A                                       | Navigation & Communication Systems           | 4                     |
|   |  | <b>TOTAL UNITS 52</b> |

\*AERO 102 & 103 can be substituted for AERO 121 & 140.

*Rationale: The certificate is designed to integrate basic electronics, basic communication circuits, aircraft instruments/structures, and navigation and communication systems. Both the Federal Communications Commission and the Federal Aviation Administration require the breadth of this subject.*

*Effective: SP03*

**NEW CERTIFICATES (continued)**

**HEAVY-DUTY DIESEL TECHNICIAN CERTIFICATE**

| <b>Required Courses:</b> |   | <b>Units</b> |
|--------------------------|---|--------------|
| CSYS 101                 | COMPUTER LITERACY                               | 3            |
| DIESEL 021               | DIESEL ENGINE - HEAVY DUTY                      | 4            |
| DIESEL 022               | HEAVY-DUTY TRUCK BRAKES                         | 2            |
| DIESEL 023               | HEAVY-DUTY TRUCK SUSPENSION & STEERING          | 2            |
| DIESEL 024               | HEAVY-DUTY EQUIPMENT DIESEL ENGINE              | 4            |
| DIESEL 028               | HEAVY-DUTY TRUCK PREVENTIVE MAINTENANCE SERVICE | 4            |
| DIESEL 030               | ADVANCE HEAVY-DUTY TRUCK SYSTEMS                | 4            |
| SHPCAL 950               | SHOP CALCULATIONS                               | 3            |
| WELD 023x4               | OXY-ACETYLENE WELDING                           | 3            |
| WELD 077x4               | CONTINUOUS WIRE WELDING                         | 1            |
| <b>TOTAL UNITS</b>       |   | <b>30</b>    |

*Rationale: To reflect curriculum changes. The Diesel Advisory Committee approved Dan Hook's recommendation to revise the certificate to offer a two-semester, one-year certificate program that would be much more truck oriented than automotive. The certificate would require basic math, basic computer, oxy-acetylene, and wire feed welding along with brakes, suspension, steering, and heavy-duty equipment diesel engines classes.*

*Effective: SP03*



**MODIFY CERTIFICATES**

**ADVANCED AUTOMOTIVE BODY AND PAINT TECHNICIAN**

| <b>Required Courses:</b>                                 |   | <b>Units</b> |
|--|---|--------------|
| AUTO 038x3   | Basic Auto Body                               | 9            |
| AUTO 039x3   | Secondary Auto Body                           | 9            |
| AUTO 048x3   | Intermediate Auto Body                        | 9            |
| AUTO 055   | Advanced Auto Body                            | 5            |
| AUTO 056x3   | Automotive Air Conditioning                   | 4            |
| <br><b>Must complete one subject from each category:</b> |   |              |
| <b><u>Category #1</u></b>                                |   |              |
| AUTO 052   | Automotive Suspension and Steering            | 4            |
| <b><u>Category #2</u></b>                                |   |              |
| AUTO 059x3   | Automotive Electrical & Electronic Laboratory | 3            |
| and  |   |              |
| AUTO 061x3   | Automotive Electrical & Electronic Systems    | 3            |
| <br><b><u>or</u></b>                                     |   |              |
| AUTO 058x3   | Automotive Electricity Laboratory             | 3            |
| and  |   |              |
| AUTO 060x3   | Automotive Electricity                        | 3            |
| <br><b><u>Category #3</u></b>                            |   |              |
| TECALC 950   | Shop Calculations                             | 3            |
| <b>TOTAL UNITS</b>                                       |   | <b>49</b>    |

*Rationale: To reflect curriculum changes.*

*Effective: SP03*

## MODIFY CERTIFICATES (continued)

### ARCHITECTURAL DRAFTING TECHNICIAN CERTIFICATE

| <b>Required Courses:</b> |   | <b>Units</b>          |
|--------------------------|---|-----------------------|
| ARCH 130                 | Materials of Architectural Construction | 3                     |
| ARCH 150                 | Introduction to Architectural Design I  | 3                     |
| ARCH 151                 | Introduction to Architectural Design II | 3                     |
| ARCH 159                 | Architectural Freehand Drawing          | 1                     |
| ARCH 160                 | Architectural Drawing                   | 4                     |
| ARCH 165                 | Architectural Illustration              | 4                     |
| ARCH 200                 | Basic Design I                          | 4                     |
| ARCH 201                 | Basic Design II                         | 4                     |
| ARCH 230                 | Architectural Practice I                | 3                     |
| ARCH 231                 | Architectural Practice II               | 3                     |
| TECALC 097               | Technical Calculations                  | 4                     |
| or                       |   |                       |
| MATH 102                 | Introduction to College Algebra         | 4                     |
|                          |   | <b>TOTAL UNITS 36</b> |

*Rationale: To reflect curriculum changes.*

*Effective: SP03*

### AUTOMOTIVE TECHNICIAN CERTIFICATE

| <b>Required Courses:</b> |  | <b>Units</b>          |
|--------------------------|--|-----------------------|
| AUTO 058x3               | Automotive Electricity Laboratory  | 3                     |
| AUTO 059x3               | Automotive Electrical & Electronic Laboratory                                    | 3                     |
| AUTO 060x3               | Automotive Electricity   | 3                     |
| AUTO 061x3               | Automotive Electrical & Electronic Systems                                       | 3                     |
| AUTO 070x4               | Automotive Ignitions Systems Laboratory  | 3                     |
| AUTO 071x4               | Automotive Fuel Systems Laboratory   | 3                     |
| AUTO 072x4               | Automotive Ignitions Systems   | 3                     |
| AUTO 073x4               | Automotive Fuel Systems  | 3                     |
| AUTO 075x4               | Hydraulic and Automatic Transmissions:<br>Chrysler 3-Speed and Overdrive         | 6                     |
| AUTO 076x4               | Hydraulic and Automatic Transmissions:<br>Ford C-5 and Overdrive Automatic Units | 6                     |
| AUTO 090x3               | Engine Repair  | 6                     |
| TECALC 950               | Shop Calculations  | 3                     |
|                          |  | <b>TOTAL UNITS 45</b> |

*Rationale: To reflect curriculum changes.*

*Effective: SP03*

## MODIFY CERTIFICATES (continued)

### **AUTOMATIC TRANSMISSION CERTIFICATE**

| <b>Required Courses:</b>  | <b>Units</b> |
|---|--------------|
| AUTO 075x4 Hydraulic and Automatic Transmissions:<br>Chrysler 3-Speed Overdrive             | 6            |
| AUTO 076x4 Hydraulic and Automatic Transmissions:<br>Ford C-5 and Overdrive Automatic Units | 6            |
| AUTO 090x3 Engine Repair  | 6            |
| TECALC 950 Shop Calculations  | 3            |
| AUTO 059x3 Automotive Electrical & Electronic Laboratory<br>and                             | 3            |
| AUTO 061x3 Automotive Electrical & Electronic Systems                                       | 3            |
| <b><u>or</u></b>  |              |
| AUTO 058x3 Automotive Electricity Laboratory<br>and   | 3            |
| AUTO 060x3 Automotive Electricity   | 3            |
| <b>TOTAL UNITS</b>  | <b>45</b>    |

*Rationale: To reflect curriculum changes. Per Automotive Advisory Committee's recommendation.  
Effective: SP03*

### **AUTOMOTIVE TUNE-UP CERTIFICATE**

| <b>Required Courses:</b>                           | <b>Units</b> |
|--|--------------|
| AUTO 058x3 Automotive Electricity Laboratory       | 3            |
| AUTO 060x3 Automotive Electricity                  | 3            |
| AUTO 067x3 Automotive Smog Controls                | 4            |
| AUTO 070x4 Automotive Ignitions Systems Laboratory | 3            |
| AUTO 071x4 Automotive Fuel Systems Laboratory      | 3            |
| AUTO 072x4 Automotive Ignitions Systems            | 3            |
| AUTO 073x4 Automotive Fuel Systems                 | 3            |
| AUTO 090x3 Engine Repair                           | 6            |
| TECALC 950 Shop Calculations                       | 3            |
| <b>TOTAL UNITS</b>                                 | <b>31</b>    |

*Rationale: To reflect curriculum changes.  
Effective: SP03*

## MODIFY CERTIFICATES (continued)

### **BASIC AUTOMOTIVE BODY AND PAINT TECHNICIAN**

| <b>Required Courses:</b> |                        | <b>Units</b> |
|--------------------------|------------------------|--------------|
| AUTO 038x3               | Basic Auto Body        | 9            |
| AUTO 039x3               | Secondary Auto Body    | 9            |
| AUTO 048x3               | Intermediate Auto Body | 9            |
| AUTO 055                 | Advanced Auto Body     | 5            |
| TECALC 950               | Shop Calculations      | 3            |

**TOTAL UNITS 35**

*Rationale: To reflect curriculum changes.*

*Effective: SP03*

### **DIETETIC SERVICE SUPERVISOR CERTIFICATE**

| <b>Required Courses:</b> |                           | <b>Units</b> |
|--------------------------|---------------------------|--------------|
| FCS 160                  | Food Preparation          | 3            |
| FCS 161                  | Quantity Food Preparation | 3            |
| FCS 162                  | Nutrition                 | 3            |
| FSC 225                  | Sanitation and Safety     | 3            |
| FCS 240                  | Purchasing                | 3            |
| FCS 260                  | Modified Diets            | 3            |
| FCS 262                  | Nutrition Care            | 4.5          |
| FCS 264                  | Nutrition Management      | 3            |

#### **Recommended Courses:**

|            |                           |   |
|------------|---------------------------|---|
| BUSAD 105  | Small Business Management | 3 |
| TECALC 097 | Technical Calculations    | 4 |
| Or         |                           |   |
| MATH 090   | Elementary Algebra        | 4 |

**TOTAL UNITS 25.5-32.5**

*Rationale: To reflect curriculum changes.*

*Effective: SP03*

## MODIFY CERTIFICATES (continued)

### **ELECTRONICS TECHNOLOGY (CORE COURSES REQUIRED FOR ALL SPECIALIZATIONS)**

| <b>Required Courses:</b> |  | <b>Units</b> |
|--------------------------|--|--------------|
| TECALC 097               | Technical Calculations                 | 4            |
| ELECTR 110               | Direct Current Circuit Analysis        | 3            |
| ELECTR 111               | Direct Current Circuit Laboratory      | 1            |
| ELECTR 115               | Alternating Current Circuit Analysis   | 3            |
| ELECTR 116               | Alternating Current Circuit Laboratory | 1            |
| ELECTR 155               | Electronic Drawing and Assembly        | 3            |
| ELECTR 230               | Semiconductor Devices                  | 3            |
| ELECTR 235               | Solid State Circuit Analysis           | 4            |
| ELECTR 265               | Digital Logic Design                   | 4            |
| ELECTR 266               | Microprocessor Technology              | 4            |
| ELECTR 270               | Linear Integrated Circuit Analysis     | 4            |

**TOTAL UNITS 34**

*Rationale: To reflect curriculum changes.*

*Effective: SP03*

### **GENERAL WELDING CERTIFICATE**

Students must complete all of the Required Courses plus one of the Restricted Electives Courses.

| <b>Required Courses:</b> |  | <b>Units</b> |
|--------------------------|--|--------------|
| SHPCAL 950               | Shop Calculations or higher                | 3            |
| WELD 023x4               | Oxy-Acetylene Welding                      | 3            |
| WELD 045x4               | Shielded Metal Arc Welding                 | 3            |
| WELD 046x4               | Intermediate Arc Welding                   | 3            |
| WELD 060                 | Layout Fitter I                            | 3            |
| WELD 066A                | Los Angeles City Welding Certification     | 3            |
| WELD 070x4               | Tig Welding                                | 1            |
| WELD 077x4               | Continuous Wire Welding                    |              |
| WELD 127                 | Strength of Materials Testing: Destructive | 3            |

**SUB TOTAL UNITS 23**

#### **Select one of the following:**

| <b>Restrictive Elective Courses:</b> |  | <b>Units</b> |
|--------------------------------------|--|--------------|
| WELD 061                             | Layout Fitter II                               | 3            |
| WELD 065A                            | Welding Inspection Visual                      | 4            |
| WELD 128                             | Strength of Materials Testing: Non-Destructive | 3            |

**TOTAL UNITS REQUIRED FOR GENERAL WELDING CERTIFICATE 26-27**

*Rationale: To reflect curriculum changes.*

*Effective: SP03*

**MODIFY CERTIFICATES (continued)**

**MACHINE TECHNOLOGY CERTIFICATE**

| <b>Required Core Courses:</b>         |   | <b>Units</b> |
|---------------------------------------|---|--------------|
| MACH 120A                             | Machine Shop Theory   | 2            |
| MACH 021A                             | Machine Shop I  | 4            |
| MACH 022A                             | Machine Shop II   | 4            |
| MACH 023A                             | Machine Shop III  | 4            |
| MACH 024A                             | Machine Shop IV   | 4            |
| MACH 090A                             | Engineering Blueprint Reading, Geometric Dimensioning and Tolerancing | 3            |
| TECALC 097                            | Technical Calculations  | 4            |
| TOTAL UNITS for the Core Requirements |   | 25           |

*Rationale: To reflect curriculum changes.  
Effective: SP03*

**REFRIGERATION AND AIR CONDITIONING CERTIFICATE**

| <b>Required Courses:</b>          |                              | <b>Units</b> |
|-----------------------------------|------------------------------|--------------|
| TECALC 097                        | Technical Calculations       | 4            |
| REFRIG 101x3                      | Refrigeration I              | 4            |
| REFRIG 102x3                      | Refrigeration II             | 4            |
| REFRIG 103x3                      | Refrigeration III            | 4            |
| REFRIG 104x3                      | Refrigeration Electricity I  | 4            |
| REFRIG 105x3                      | Refrigeration Electricity II | 4            |
| REFRIG 106x3                      | Air Conditioning and Heating | 4            |
| WELD 023x4                        | Oxy-Acetylene Welding        | 3            |
| EPA Universal Certification (608) |                              |              |
| TOTAL UNITS                       |                              | 31           |

| <b>Recommended Course:</b> |                             | <b>Units</b> |
|----------------------------|-----------------------------|--------------|
| AUTO 056x3                 | Automotive Air Conditioning | 4            |

*Rationale: To reflect curriculum changes.  
Effective: SP03*

**MODIFY CERTIFICATES (continued)**

**WHEEL ALIGNMENT AND BRAKES CERTIFICATE**

| <b>Required Courses:</b> |   | <b>Units</b> |
|--------------------------|---|--------------|
| AUTO 050                 | Automotive Brakes                             | 4            |
| AUTO 051                 | Advanced Automotive Brakes                    | 4            |
| AUTO 052                 | Automotive Suspension and Steering            | 4            |
| AUTO 053                 | Advanced Automotive Suspension and Steering   | 4            |
| AUTO 059x3               | Automotive Electrical & Electronic Laboratory | 3            |
| AUTO 061x3               | Automotive Electrical & Electronic Systems    | 3            |
| AUTO 084x4               | General Automotive Technology                 | 4            |
| TECALC 950               | Shop Calculations                             | 3            |
| <b>TOTAL UNITS</b>       |   | <b>29</b>    |

*Rationale: To reflect curriculum changes. Per Automotive Advisory Committee's recommendation.  
Effective: SP03*

**DELETE CERTIFICATE**

**DIESEL TECHNICIAN CERTIFICATE**

| <b>Required Courses:</b> |   | <b>Units</b> |
|--------------------------|---|--------------|
| AUTO 032X3               | DIESEL ENGINES                                | 4            |
| AUTO 033X3               | DIESEL ENGINES                                | 4            |
| AUTO 058X3               | AUTOMOTIVE ELECTRICITY LABORATORY             | 3            |
| AUTO 059X3               | AUTOMOTIVE ELECTRICAL & ELECTRONIC LABORATORY | 3            |
| AUTO 060X3               | AUTOMOTIVE ELECTRICITY                        | 3            |
| AUTO 061X3               | AUTOMOTIVE ELECTRICAL & ELECTRONIC SYSTEMS    | 4            |
| AUTO 075X4               | HYDRAULIC AND AUTOMOTIVE TRANSMISSIONS        | 6            |
| AUTO 076X4               | HYDRAULIC AND AUTOMOTIVE TRANSMISSIONS        | 6            |
| TECALC 950               | ARITHMETIC                                    | 3            |
| WELD 077X4               | CONTINUOUS WIRE WELDING                       | 1            |
| <b>TOTAL UNITS</b>       |   | <b>36</b>    |

*Rationale: To reflect curriculum changes. Per Automotive Advisory Committee's recommendation.  
Effective: SP03*