

July 25, 2006

A. NAME OF DOCKET ITEM

Consideration and approval of new or revised courses and programs.

B. STATEMENT OF ISSUE/PURPOSE

1. Background and Purpose

The following curriculum changes are proposed:

Architecture	Adoption of a new course at Mesa College.	Attachment A
Art-Fine Arts	Adoption of a course reactivation at Miramar College.	Attachment B
Computer and Information Sciences	Adoption of two new courses at City, Mesa, and Miramar Colleges.	Attachment C
Computer Business Technology	Adoption of four new courses at Mesa College.	Attachment D
Dental Assisting	Adoption of a course deactivation at Mesa College.	Attachment E
Engineering Technology	Adoption of a new course at City College.	Attachment F
Fire Technology	Adoption of two course deactivations at Miramar.	Attachment G
Human Services	Adoption of a new course at City College.	Attachment H
Mathematics	Adoption of a new course at City, Mesa, and Miramar Colleges.	Attachment I
Manufacturing Engineering Tech.	Adoption of a new program at City College.	Attachment J

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Physics	Adoption of two new courses at City, Mesa and Miramar Colleges.	Attachment K
Physical Education-Fitness Specialist	Adoption of a new program at Miramar College.	Attachment L
San Diego Transit-Electronic Technician Apprenticeship	Adoption of a new program at City College.	Attachment M
San Diego Transit-General Mechanic Apprenticeship	Adoption of a new program at Miramar College.	Attachment N

2. Cost and Funding

There is no additional cost to the District

C. PROPOSAL

The Board of Trustees hereby approves the action outlined in Part A of this docket exhibit.

ACTION

Adoption of a new course at Mesa College.

Proposed course at Mesa College:

172 Architectural Design II

3 hours lecture, 3 hours lab, 4 units

Grade Only

Prerequisite: ARCH 100 and ARCH 170, each with a grade of "C" or better, or equivalent.

Advisory: ENGL 051 & ENGL 056, each with a grade of "C" or better, or equivalent or Assessment Skill Level W5/R5. ARCH 220 and MATH 090, each with a grade of "C" or better, or equivalent.

This course is a continuation of Architecture 170 in which more advanced design problems are given to students who have completed Architecture 170. The student designs several architectural projects with emphasis placed on the plan, section and form of the building. Design projects may include various projects. Contemporary architectural theory is introduced. Students are required to present their design projects to the class. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

ACTION

Adoption of a course reactivation at Miramar College.

Proposed course reactivation at Miramar College:

125 History of Art: Far Eastern Art

3 hours lecture, 3 units

Letter Grade or Credit/No Credit Option

Advisory: ENGL 051 & ENGL 56, each with a grade of "C" or better, or equivalent or Assessment Skill Levels W5/R5.

This course provides a survey of paintings, sculpture, architecture, and allied fine arts from India, China, Japan, and other Far Eastern countries. It emphasizes the social, religious, and political highlights of each culture and their effects on art forms from prehistoric to modern times. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

ACTION

Adoption of two new courses at City, Mesa and Miramar College.

Proposed new courses at City, Mesa and Miramar College:

189A Introduction to Programming I
3 hours lecture, 3 hours lab, 4 units
Grade Only

Advisory: CISC 150 and CISC 181, each with a grade of "C" or better, or equivalent.

ENGL 051 & MATH 095, each with a grade of "C" or better, or equivalent or Assessment Skill Level W5/M40.

Limitation on Enrollment: This course is not open to students with previous credit for CISC 190-Java Programming.

Using the popular programming language Java, this course introduces students to the process of developing simple software applications to solve typical human problems. This includes language syntax, structure, and semantics as well as the basics of object-oriented software engineering. CISC 189A and B together are a slower-paced version of CISC 190, with more programming practice. CISC 189A is the first of the two-course sequence. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

189B Introduction to Programming II
3 hours lecture, 3 hours lab, 4 units
Grade Only

Prerequisite: CISC 189A with a grade of "C" or better, or equivalent.

Limitation on Enrollment: This course is not open to students with previous credit for CISC 190-Java Programming.

Using the popular programming language Java, this course continues the process of students learning how to solve business problems by developing useful software applications. This includes more advanced concepts like abstract data structures, graphics, and data persistence. CISC 189A and B together are a slower-paced version of CISC 190, with more programming practice. CISC 189B is the second of the two-course sequence. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

ACTION

Adoption of four new courses at Mesa College.

Proposed new courses at Mesa College:

165 Webpage Creation with Dreamweaver
2.5 hours lecture, 1.5 hours lab, 3 units
Grade Only

Advisory: ENGL 051 & ENGL 056, each with a grade of "C" or better, or equivalent or Assessment Skill Level W5/R5. Completion of or concurrent enrollment in CBTE 101, CBTE 114, and CBTE 161, each with a grade of "C" or better, or equivalent.

Students will develop skills used in creating a personal or business webpage. Working on a team or individually, students will, using a hands-on approach, plan, design, and create Web pages for an Intranet or World Wide Web site. Students learn to use an HyperText Markup Language (HTML) editor to create Extensible HyperText Markup Language (XHTML) and Cascading Style Sheets (CSS) and add behaviors, and to use templates and library items to create Web pages containing hypertext links, video, graphic, and multimedia files.

(FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

175 Desktop Publishing Essentials
2.5 hours lecture, 1.5 hours lab, 3 units
Grade Only

Advisory: ENGL 051 & ENGL 056, each with a grade of "C" or better, or equivalent or Assessment Skill Level W5/R5. CBTE 101, MULT 127, ARTF 150B, each with a grade of "C" or better, or equivalent.

Students will develop the skills to create documents that are pre-press ready and pre-web ready. This course provides students with the skills to edit text and graphics and convert photographs and illustrations into digital file formats. Students will work individually or in teams to design page layouts, create proposals, and develop presentations and advertising campaigns. Students also translate electronic information onto film or other traditional forms as well as publish to the Internet using Portable Document Format (PDF) documents. Materials produced may include, but are not limited to, business cards, calendars, flyers, newsletters, packaging, slides, and tickets.

(FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

176 Advanced Desktop Publishing and Typography
2.5 hours lecture, 1.5 hours lab, 3 units
Grade Only

Advisory: CBTE 175, MULT 121, MULT 122, each with a grade of "C" or better, or equivalent. Students will develop advanced skills necessary to create documents that are pre-press ready and pre-web ready. This course builds on skills learned in Desktop Publishing Essentials. Students learn to create sophisticated and effective documents by combining text, images, charts, and tables and applying typography and design principles to their layouts. Students also learn to use and apply advanced desktop publishing features such as managing long documents, advanced typesetting functions, managing output to print, and creating HyperText Markup Language (HTML) and Extensible Markup Language (XML) documents. Students expand their skills to include interactive and extensible electronic documents.

(FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

177 Acrobat Portable Document Format File Creation
1 hour lecture, 1 unit
Grade Only

Advisory: CBTE 114 and with a grade of "C" or better, or equivalent. Completion of or concurrent enrollment in CBTE 161 with a grade of "C" or better, or equivalent.

Students will develop the skills to create documents that are secure and can be posted online or distributed in print format. Students learn to create Acrobat Portable Document Format (PDF) documents, the standard file format for portable documents, for print and for the Internet. Students master file optimization and accessibility, editing features, embedding multimedia, interactive navigational tools, creating interactive forms, and implementing security. Students will learn to identify and handle the critical issues relating to clients, printers, web masters

(FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

ACTION

Adoption of a course deactivation at Mesa College.

Proposed course deactivation at Mesa College:

104 Preventive Dental Care

—1 hour lecture, 1.5 hours lab, 1.5 units

Grade Only

Prerequisite: DENA 102 with a grade of "C" or better, or equivalent.

Corequisite: DENA 106.

Limitation on Enrollment: This course is not open to students with previous credit for DENA 101.

This course surveys the principles and techniques necessary for personal preventive oral hygiene. This course also includes an analysis of personal nutrition and nutrition counseling. Patient education strategies for maintaining preventive oral hygiene and regular professional care are included. The practice of using fluoridation as a preventive measure against tooth decay is also presented. This course is for students enrolled in the Dental Assisting Program. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

ACTION

Adoption of a new course at City College.

Proposed new course at City College:

128 Electronics for Technology

2 hours lecture, 3 hours lab, 3 units

Grade Only

Advisory: MATH 096 with a grade of "C" or better, or equivalent or Assessment Skill Level M50. ENGN 110 with a grade of "C" or better, or equivalent.

Electronics for Technology introduces electronics to non-electronics majors. It's a fast-paced course and progresses through basic electronics to devices and then to digital electronics. Some attention is given to industries and businesses currently using electronics. The course is designed for students with non-electronics majors to gain fundamental electronics knowledge and experience.

(FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

ACTION

Adoption of two course deactivations at Miramar College.

Proposed course deactivations at Miramar College:

~~138 Recertification Course for State Fire Marshal EMT-1~~

~~—0.7 hours lecture, 1 hour lab, 1 unit
Grade Only~~

~~(FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.~~

~~*Prerequisite:* EMGM 105 or FIPT 130 with a grade of "C" or better, or equivalent.~~

~~*Advisory:* ENGL 051 & ENGL 056, each with a grade of "C" or better, or equivalent or Assessment Skill Level W5/R5.~~

~~*Limitation on Enrollment:* This course is not open to students with previous credit for FIRE 138 or 238. Health and Safety. Students must possess a current Basic Life Support (BLS) card for Healthcare Provider.~~

~~This 32-hour non-associate-degree course provides State Fire Marshals a review of didactic knowledge and practical skills required for Emergency Medical Technician-1 recertification (in compliance with State of California regulations). The course includes a review of current San Diego Emergency Medical Service (EMS) treatment guidelines, anatomy, patient assessment, recognition and treatment of life-threatening emergencies, emergency childbirth, behavioral emergencies, ambulance operations, triage, and disaster scene management and environmental emergencies. Upon successful completion, students are eligible to take the San Diego County EMS Re-certification Examination. This course may be repeated as necessary to meet a legally mandated training requirement as a condition of continued employment. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.~~

~~380F Basic Fire Academy I~~

~~—16.5 hours lecture, 14.5 hours lab, 15 units
Grade Only~~

~~*Prerequisite:* Completion of Fire Technology X65 Academy Testing.~~

~~An instruction program of firefighter orientation involving classroom instruction and manipulative training. Designed to introduce the student to the role of the fire service in society. Meet requirements of California State Board of Fire Technology/Certified Firefighter I training.~~

ACTION

Adoption of a new course at City College.

Proposed new course at City College:

113 Capstone for Community Health Workers

**3 hours lecture, 3 units
Grade Only**

Prerequisite: HUMS 103 with a grade of "C" or better, or equivalent.

This course provides students in the Community Health Work (CHW) Certificate Program the opportunity to discuss and analyze their experiences while performing their roles and responsibilities as community health workers (CHWs) in the field. Emphasis is placed on helping students apply knowledge gained through the Certificate Program to improve performance, especially in the areas of healthy lifestyles, preventive care, community development, team participation, and health behavior modification. This course is designed and required for students completing the CHW Certificate Program. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

ACTION

Adoption of a new course at City, Mesa and Miramar Colleges.

Proposed new course at City, Mesa and Miramar Colleges:

015D Geometry Refresher

3 hours lab, 1 unit

Credit/No Credit Only

This course is intended for those students who have completed a high school geometry course or for those students who have completed Math 96 and need to review geometric principles prior to taking Math 210B or trigonometry. The course will consist of independent study using a computer program to refresh those concepts identified as needed for each student. (FT)
Not Applicable to Associate Degree, pre-collegiate basic skills, English as a Second Language.

Manufacturing Engineering Technology

ACTION

Adoption of a New Program at City College.

PROGRAM REVIEW:

Pursuant to Section 78016 of the Education Code, following is a program review summary.

- A. Labor Market¹: According to the San Diego County LMI, Industry Employment Projections, there were approximately 112,600 persons employed in Manufacturing Engineering Technology -related jobs in San Diego County. Approximately 80 additional job opening are projected through 2005-2009.
- B. Duplication²: Manufacturing Engineering Technology is not offered in the San Diego and Imperial Valley County colleges.
- C. Effectiveness³: District enrollment in Manufacturing Engineering Technology courses is estimated at 10-15 students in the year 2006-2007.

¹ Information was obtained from Engineering and Technologies Department’s Industry Survey, Dec. 2004, San Diego City College.

² Information was obtained by the College Catalogs.

³ Information was obtained from the Industry Advisory Board and on-going recruitment.

**Certificate of Completion:
Advanced Manufacturing**

The Certificate of Completion in Advanced Manufacturing furthers students' knowledge with the innovative experience and exposure to modern manufacturing practices.

Courses Required:	Units
MFET 110, Industrial Safety	2
MFET 150, Manufacturing Automation	3
MFET 210, Statistical Process Control	3
MFET 230, Lean Manufacturing	3
Total Units = 11	

**Certificate of Completion:
Manufacturing Fundamentals**

The Certificate of Completion on Manufacturing Fundamentals provides fundamental knowledge for students to enter the workforce in a manufacturing field.

Courses Required:	Units
MFET 101, Introduction to Manufacturing Engineering Technology	3
MFET 105, Print Reading and Symbolology .	3
MFET 115, Properties of Materials	3
MFET 120, Manufacturing Processes	4
Total Units = 13	

**Certificate of Achievement:
Electronics Manufacturing**

The Certificate of Achievement in Electronics Manufacturing focuses in the manufacturing of electronic devices and related products.

Courses Required for the Major:	Units
MFET 101, Introduction to Manufacturing Engineering Technology	3
MFET 105, Print Reading and Symbolology .	3
MFET 110, Industrial Safety	2
MFET 115, Properties of Materials	3
MFET 120, Manufacturing Processes	4
MFET 150, Manufacturing Automation	3
MFET 210, Statistical Process Control	3
MFET 220, Programmable Logic Controllers	3
MFET 230, Lean Manufacturing	3
ENGN 128, Electronics for Technology	3
Total Units = 30	

**Certificate of Achievement:
Fabrication Manufacturing**

The Certificate of Achievement in Fabrication Manufacturing focuses in the manufacturing of non-electronic devices and related products.

Manufacturing Engineering Technology

Courses Required for the Major: Units

MFET 101, Introduction to Manufacturing Engineering Technology	3
MFET 105, Print Reading and Symbology .	3
MFET 110, Industrial Safety	2
MFET 115, Properties of Materials	3
MFET 120, Manufacturing Processes	4
MFET 150, Manufacturing Automation.....	3
MFET 210, Statistical Process Control	3
MFET 230, Lean Manufacturing.....	3
MACT 150, Intro/Computer Num Control (CNC) and Elec Dis Mach.....	4

Select one course from:

MACT 160M, Introduction to CAD/CAM	
OR	
MACT 160S, Introduction to CAD/CAM...4	
Total Units = 32	

Associate in Science Degree: Manufacturing Engineering Technology - Option: Electronics

The Associate in Science Degree in Manufacturing Engineering Technology with Electronics Option prepares students with necessary skills, knowledge and experience to take on important roles as team members or leaders in an electronics manufacturing enterprise.

Courses Required for the Major: Units

ENGN 110, Science for Technical Applications	4
ENGN 128, Electronics for Technology	3
MATH 096, Intermediate Algebra and Geometry.....	5
MFET 101, Introduction to Manufacturing Engineering Technology	3
MFET 105, Print Reading and Symbology .	3
MFET 110, Industrial Safety	2
MFET 115, Properties of Materials	3
MFET 120, Manufacturing Processes	4
MFET 150, Manufacturing Automation.....	3
MFET 210, Statistical Process Control	3
MFET 220, Programmable Logic Controllers.....	3
MFET 230, Lean Manufacturing.....	3
TEHW 101, Introduction to Technical Writing	3

Select one course from:

ENGE 111, Introduction to Computer-Aided Design OR	3
ENGE 151, Engineering Drawing OR.....	2
TECI 101, Basic Technical Illustration	3

Select one course from:

MFET 250, Manufacturing Capstone Course	
OR	

ENGN 275, Engineering Technology Industrial Internship.....	4
Total Units = 48-49	

Associate in Science Degree: Manufacturing Engineering Technology - Option: Fabrication

The Associate in Science Degree in Manufacturing Engineering Technology with Fabrication Option prepares students with necessary skills, knowledge and experience to take on important roles as team members or leaders in a fabrication manufacturing enterprise.

Courses Required for the Major: Units

ENGN 110, Science for Technical Applications.....	4
MACT 150, Intro/Computer Num Control (CNC) and Elec Dis Mach.....	4
MATH 096, Intermediate Algebra and Geometry	5
MFET 101, Introduction to Manufacturing Engineering Technology	3
MFET 105, Print Reading and Symbology .	3
MFET 110, Industrial Safety	2
MFET 115, Properties of Materials	3
MFET 120, Manufacturing Processes	4
MFET 150, Manufacturing Automation.....	3
MFET 210, Statistical Process Control.....	3
MFET 230, Lean Manufacturing.....	3
TEHW 101, Introduction to Technical Writing	3

Select one course from:

ENGE 111, Introduction to Computer-Aided Design OR	3
ENGE 151, Engineering Drawing OR.....	2
TECI 101, Basic Technical Illustration	3

Select one course from:

MACT 160M, Introduction to CAD/CAM	
OR	
MACT 160S, Introduction to CAD/CAM...4	

Select one course from:

MFET 250, Manufacturing Capstone Course	
OR	
ENGN 275, Engineering Technology Industrial Internship.....	4

Total Units = 50-51

ACTION

Adoption of two new courses at City, Mesa and Miramar Colleges.

Proposed new courses at City, Mesa and Miramar Colleges:

195 was completed with a grade of "B" or better or with approval of the department. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

196 Electricity and Magnetism

4 hours lecture, 3 hours lab, 5 units

Grade Only

Prerequisite: PHYS 195 with a grade of "C" or better, or equivalent.

Limitation on Enrollment: This course is not open to students with previous credit for Physics 195B and 196B.

This is the second of a three-semester calculus-based general physics sequence, intended to satisfy the transfer requirements of students planning to major in the physical sciences and in engineering. The topics of study include the basic principles and applications of electrostatics, magnetostatics, time-varying electric and magnetic phenomena, direct and alternating current circuits, elementary electronics and electromagnetic waves. Emphasis is placed on the mathematical analysis of physical problems. Laboratory work on various aspects of electric and magnetic phenomena emphasizing direct current and alternating current circuits is included. (FT) Associate Degree Credit & transfer to CSU and/or private colleges and universities.

197 Waves, Optics and Modern Physics

4 hours lecture, 3 hours lab, 5 units

Letter Grade or Credit/No Credit Option

Prerequisite: PHYS 195 with a grade of "C" or better, or equivalent.

Advisory: Completion of or concurrent enrollment in PHYS 196 with a grade of "C" or better, or equivalent.

Limitation on Enrollment: This course is not open to students with previous credit for Physics 195C and PHYS 196C.

Physics 197 is the third semester of a three semester calculus-based course designed for prospective scientists and engineers. Topics include the fundamental principles of physics of waves, the behavior of light, and an introduction to relativity, quantum physics and the atomic and nuclear properties of matter. Physics 196 and 197 may be taken concurrently only if Physics

Physical Education-Fitness Specialist

ACTION

Adoption of a New Program at Miramar College.

PROGRAM REVIEW

Pursuant to Section 78016 of the Education Code, following is a program review summary:

- A. Labor Market¹: According to the California State Employment Development Department (EDD) statistics, there were approximately 131 persons employed in Fitness Specialist -related jobs in San Diego County in 2005. Approximately 131+ additional job opening are projected through 2007.
- B. Duplication²: Fitness Specialist is offered at San Diego City and Mesa Colleges, Mira Costa College, Palomar, Grossmont Cuyamaca, and Southwestern College.
- C. Effectiveness³: District enrollment in Fitness Specialist is estimated at 44 students for 2006-2007.

¹ Information was obtained from California Employment Development Department (EDD), Employment Projection 2005-2007, and Advisory Board Survey results.

² Information was obtained by the College Catalogs and interviews with Instructional Deans.

³ Information was based on class size.

**Certificate of Achievement:
Fitness Specialist**

This program prepares candidates for American College of Sports Medicine (ACSM) or American Council of Exercise (ACE) certification exams.

Courses Required for the Major:	Units
PHYE 242, Care and Prevention of Injuries.....	2
PHYE 280, Applied Exercise Physiology.....	2

PHYE 281, Applied Kinesiology	2
PHYE 282, Techniques of Weight Training	2
PHYE 283, Exercise and Fitness Assessment	2
PHYE 284, Fitness and Sports Nutrition	2
PHYE 285, Exercise for Special Populations	2
PHYE 286, Techniques of Exercise Leadership	2
PHYE 287, Fitness Specialist Internship	2
Total Units =	18

San Diego Transit-Electronic Technician Apprenticeship

ACTION:

Adoption of New Program at City.

PROGRAM REVIEW

Pursuant to Section 78016 of the Education Code, following is a program review summary:

- A. Labor Market¹: According to the California State Employment Development Department (EDD) statistics, there were approximately 1,170 persons employed in San Diego Transit Electronic Technician-related jobs in San Diego County in 2001. Approximately 1,330 additional job opening are projected through 2008.
- B. Duplication²: San Diego Transit Electronic Technician offered days and evenings at San Diego City, Palomar, and Imperial Valley Colleges.
- C. Effectiveness³: District enrollment in San Diego Transit Electronic Technician is estimated at 5 new students for the 2006-2007.

¹ Information was obtained from California Employment Development Department (EDD), projected year 2008.

² Information was obtained by the San Diego Imperial Counties Community Association Colleges (SDICCCA).

³ Information was obtained from the San Diego Transit, Inc.

**Certificate of Achievement:
San Diego Transit Electronic Technician
Apprenticeship**

Courses Required for the Major:	Units
MATH 096, Intermediate Algebra and Geometry.....	5
ELDT 123, Introduction to Digital Circuits.....	3
ELDT 123L, Digital Circuits Laboratory.....	1
ELDT 124, Basic DC/AC Electronics ⁴	
ELDT 124L, Basic DC/AC Laboratory	1
ELDT 125, DC/AC Circuit Analysis with Pspice.....	4
ELDT 125L, DC/AC Circuit Analysis Laboratory.....	1
ELDT 143, Semiconductor Devices	3
ELDT 143L, Semiconductor Devices Laboratory.....	1.5
ELDT 144, OP-AMPS, Sensors and Computers.....	3
ELDT 144L, OP-AMPS and Sensors Laboratory.....	1.2
ELDT 228, Communications Circuits and CET/NARTE Preparation	3
ELDT 228L, Communications Circuits and Certification Laboratory.....	1
Total Units =	32

**Associate in Science Degree:
San Diego Transit Electronic Technician
Apprenticeship**

Courses Required for the Major:	Units
MATH 096, Intermediate Algebra and Geometry	5
ELDT 123, Introduction to Digital Circuits....	3
ELDT 123L, Digital Circuits Laboratory	1
ELDT 124, Basic DC/AC Electronics	4
ELDT 124L, Basic DC/AC Laboratory.....	1
ELDT 125, DC/AC Circuit Analysis with Pspice	4
ELDT 125L, DC/AC Circuit Analysis Laboratory	1
ELDT 143, Semiconductor Devices	3
ELDT 143L, Semiconductor Devices Laboratory	1.5
ELDT 144, OP-AMPS, Sensors and Computers	3
ELDT 144L, OP-AMPS and Sensors Laboratory	1.2
ELDT 228, Communications Circuits and CET/NARTE Preparation.....	3
ELDT 228L, Communications Circuits and Certification Laboratory	1
Total Units =	32

San Diego Transit-General Mechanic Apprenticeship

ACTION:

Adoption of New Program at Miramar.

Pursuant to Section 78016 of the Education Code, following is a program review summary:

- A. Labor Market¹: According to the California State Employment Development Department (EDD) statistics, there were approximately 1,170 persons employed in San Diego Transit General Mechanic-related jobs in San Diego County in 2001. Approximately 1,330 additional job opening are projected through 2008.
- B. Duplication²: San Diego Transit General Mechanic offered days and evenings at all San Diego City college.
- C. Effectiveness³: District enrollment in the San Diego Transit General Mechanic is estimated at 15 students.

¹ Information was obtained from California Employment Development Department (EDD).

² Information was obtained by the San Diego Imperial Counties Community Association Colleges (SDICCCA).

³ Information was obtained from the San Diego Transit, Inc.

**Licensure Only (no paper award given):
San Diego Transit Body Shop Apprenticeship**

Courses Required:	Units
DIES 100, Introduction to Diesel Technology.....	2
DIES 105, Measuring Tools and Applied Mathematics.....	2
DIES 138, Electrical Systems.....	3
Total Units = 7	

**Certificate of Achievement:
San Diego Transit General Mechanic
Apprenticeship**

General Bus Mechanic Apprenticeship.

Courses Required for the Major: Units	Units
DIES 100, Introduction to Diesel Technology.....	2
DIES 124, Diesel Engines D	7
DIES 135, Applied Failure Analysis	3
DIES 137, Diesel Fuel Injection Systems....	2
DIES 138, Electrical Systems.....	3
DIES 144, Electronics for Diesel Technology.....	3
DIES 155, Air Brake Systems	3
DIES 170, Truck Drive Axles and Specifications	3

AIRE 100**, Thermal and Refrig Theory ...	4
AIRE 103**, Thermal/Refrigeration Lab	2
AIRE 124**, Control Systems Theory	3
AIRE 125**, Control Systems Lab	2
Total Units = 37	

** AIRE (Air Conditioning) classes are offered at San Diego City College.

**Associate in Science Degree:
San Diego Transit General Mechanic
Apprenticeship**

General Bus Mechanic Apprenticeship.

Courses Required for the Major: Units	Units
DIES 100, Introduction to Diesel Tech.	2
DIES 124, Diesel Engines D	7
DIES 135, Applied Failure Analysis	3
DIES 137, Diesel Fuel Injection Sys	2
DIES 138, Electrical Systems.....	3
DIES 144, Electronics for Diesel Tech.....	3
DIES 155, Air Brake Systems	3
DIES 170, Truck Drive Axles and Spec	3
AIRE 100**, Thermal and Refrig Theory ...	4
AIRE 103**, Thermal/Refrigeration Lab	2
AIRE 124**, Control Systems Theory	3
AIRE 125**, Control Systems Lab	2
Total Units = 37	