Basic Probation Officer Academy (3 Units)
This course is a newly established requirement for Probation officers. It consists of four, forty-hour modules spread out over four to five months. PC832 must be taken in conjunction with this course in order to satisfy the Board of Corrections' requirements for a 200 hour program.

Pascal Programming (3 Units)
This course is a study of the structured programming concept as implemented in the programming language Pascal. Its general aim is to extend the student's knowledge of program and data structure as implemented in Pascal.

Technical Illustrations (2 Units)
Drafting 4 is a course intended to acquaint students with methods of presentation of technical data, reports, and materials including layouts, graphs, charts, monographs, and graphical presentations. The course stresses accuracy and completeness; coordination between drawings and actual and projected conditions of a product; spatial visualization and neatness.

Map Drafting (2 Units)
This course is designed to acquaint students with the methods and types of maps used in geography, geology, engineering, surveying, and related technical and scientific fields.

Electronic Drafting (2 Units)
This course is designed to acquaint students with the field of electrical drafting including such topics as packaging, printed circuits, automated graphics, components, materials, documentation layouts, assemblies, dimensioning and tolerancing.
E.S. 30 Planetary Geology (1 Unit)
Planetary Geology is a lab course which deals with a comparison of astrogeologic processes which have been and still are at work in the solar system. Students will experiment with and/or directly observe these astrogeologic processes on planets and moons through the use of satellite photographs, actual lunar and meteorite samples, maps, and telescopic observations.

G.P. 2 Phototype Composition (3 Units)
This course covers the fundamental operation of "cold type" composition which is replacing "hot type" production printing. It is faster and gives a higher quality and greater diversity of type. The process covers programming, keyboard, edit disks and print and process copy.

Marketing 11 Industrial Marketing (3 Units)
Marketing 11 is an analysis of marketing systems employed in business, industry, government and other institutions. It also studies industrial procurement and practices, individual and group problems, research, analysis and presentation of results.

Music 17 Computers and Music (1 Unit plus 2 hours lab)
This is a short class for the general student to demonstrate how the microprocessor computer is used in music. It will show students how to use computers in Music 1, 2, 3, 4, 5, 6, and 9. The new computerized music programs for music theory, ear training, appreciation and history, and composition will make a major impact on the learning process in all of these disciplines.

Investing 2 Real Estate Investing (3 Units)
This course is a practical study and instruction in real estate investing, as opposed to other forms of investing. It will help the consumer analyze and compare real estate with other forms of investing, provide an appreciation for different types of real estate investing opportunities and provide an understanding of tax laws and financing plans.

P.E. 125 Coaching Youth Football (1 Unit)
Designed to aid the youth football coaches, this course will include fundamentals of offense, defense, and the kicking game. In addition, the psychological and philosophical aspects of coordinating a safe youth program are explored.
Stress Management in Child Care (1 Unit)
This course is designed to examine common causes of stress and tension associated in working with young children. It is part of the one unit module courses being offered by the department.

Toddler's Guidelines to Early Enrichment (1 Unit)
Part of the one-unit short course modules offered by the department, this course focuses on a variety of aspects of early enrichment for the infant and toddler. It is expected that emphasis will be placed on developing the student's ability to provide qualitative interaction and appropriate developmental play activities and materials.

Creating Learning Materials for Young Children (1 Unit)
Creating Learning Materials for Young Children will enable family day-care providers, on a limited budget, to supply their centers with inexpensive learning materials. This is also a short course module.

Pump and Motor Operation and Maintenance (3 Units)
The purpose of this course is to acquaint the student with pump theory, classification and types, description of pump types, pump terminology and nomenclature, and installation practices and procedures; and to acquaint the student with routine and preventive maintenance and repair of pumps and motors found in water and wastewater treatment plants.

Practical Judo (1 Unit)
This is a coed course designed to introduce the student to the sport of Judo and its application to self defense. The class will be a three lab-lecture hours weekly short course.

The American Story (3 Units) TV
This telecourse narrates the development of the United States from the beginning through 1977. The course examines important national controversies and crises through the perspective of many individuals who have contributed to the American Way of Life.

The Growing Years (3 Units) TV
The telecourse is designed for parents or future parents and psychology majors. It deals with the interplay of biological factors, human interactions, social structure, and other environmental forces which affect the shaping of a child from conception through adolescence.
Geography 50  Of Earth and Man (3 Units) TV
This introductory level college course explores the earth as the home of man, combining physical and cultural geography in a highly visual television series. Course content includes elements of anthropology, economics, political science, history, biology, and climatology.

P.D. 50  Voyage: Career and Life Planning (2 Units) TV
"Voyage" is designed to acquaint students with the process of career/life planning. Among its aims are: to provide students with the tools and techniques required to understand career/lifestyle planning and to enable the student to understand his or her individual responsibility for creating a satisfactory work/lifestyle balance.

P.D. 14  New Careers for Women (2 Units)
This course is an exploration of non-traditional courses and careers for women, with special emphasis on SBCC programs. The course will cover assessment of educational, career and personal skills with guest speakers from non-traditional career areas.
APPLICATION FOR APPROVAL OF NEW EDUCATION PROGRAM
(to be submitted in duplicate)

I. District: Santa Barbara Community College
   Name of College: Santa Barbara City College
   Contact Person: Dr. Sanchez
   Phone Number: (805) 965-0581
   Title: DRAFTING TECHNOLOGY
   Date of Application: May 29, 1981

II. Program Descriptive Material:
   A. Program Name: DRAFTING TECHNOLOGY

E. CDP: 0953

FOR OCCUPATIONAL PROGRAMS: US86# 17.1300
   Major DOT Nos. 007.281.010 005.281.010

C. Program goals (mark all applicable boxes):
   XXX AA or AS Degree  [ ] Transfer  [ ] Special Education
   (Handicapped)
   XXX Occ. Employment [ ] Certificate (Units Req'd)
   XXX Entry Skill Training XXX Skill Upgrading  [ ] License Preparation

D. If program requires approval of licensure board, supply evidence of
   compliance.

E. Date Program will be initiated if approved: September 9, 1981

III. Objectives of Program:
   A. What are the objectives of the proposed program? (Append extra pages as necessary)
      To train draftsmen in entry-level jobs skills.

   B. If program has not appeared in Academic Master Plan, explain reasons for
      proposing it at this time.
      Santa Barbara City College has offered a full-support course program in
      Drafting for the last thirteen (13) years. Exhibit D lists those support
      courses. It wasn't until 1979 that available facilities, manpower data,
      and District funds made it feasible to start program planning to train
      Drafting Technicians.

C. Courses Included in Program:
   1. Attach list of all courses in the proposed program, including an expected
      sequence or learning pattern (such as the recommended course sequence from
      the catalog). Give title, course number, units and hours per week (lecture
      and laboratory). Indicate new courses to be included in the program.

   2. Attach course descriptions for new courses.
      See new courses listed under Exhibit A and see the AS Degree Program
      listed under Exhibit E.

FORM CCC-EP-1 (Rev. 2/76)
IV. Establishment of Need: See Exhibits B, C, and E.

How has the college established need for the proposed program? Report on one or more of the following as appropriate. Respond to as many as possible.

A. Report interdistrict attendance agreements, actions and comments of area or regional councils, inter- or intra-district advisory groups, advisory committees, or similar bodies testifying to the need for the program. Attach minutes of appropriate meetings. See Exhibit E.

B. Show summary results of job market analysis, surveys or other evidence of employment possibilities for graduates of the proposed program.
See Exhibit B.

C. What are the indications of student interest in the proposed program, and how were they determined? (particularly appropriate to non-occupational programs)
See Exhibit C.

D. Describe service to other disciplines which this proposed program will provide.
Drafting Program has provided support functions for other programs for 13 years; i.e., Marine Technology, Landscape Horticulture.

V. Estimated enrollment:

A. Estimate initial enrollment. What changes in the initial enrollment are anticipated as this program becomes fully operational?

| Fall 1979 | 895 WSCH | Fall 1980 | 1,284 WSCH |
| Spring 1980 | 1,184 WSCH | Spring 1981 | 1,520 WSCH |
| Fall 1981 | 1,700 WSCH (estimated) |

W. Will this program have a significant effect on existing enrollments? If so, explain.

We anticipate that the Drafting Program (for majors) will attract some forty (40) students annually.

VI. Articulation:

A. What articulation provisions have been made or are in process with other educational institutions?
The Assistant Dean Of Occupational and Career Education serves on the ROP Area County Council, the CETA Planning Council, and the Santa Barbara School District Coordinating Board.

B. What related programs, if any, already exist at your college?
None (certificated or AS Programs). We presently offer support courses to other programs. See Exhibit D.

C. What programs with similar objectives are offered or are planned at other regional schools and colleges?
None. Dos Pueblos High School and Santa Barbara City College are the only private or public entities offering drafting training in the South Coast area of Santa Barbara County.
VII. Capital Outlay Program:

A. Will this proposed program require any additional facility or major equipment outlays (also consider effect on library or learning resource center)?

Yes. See Exhibit E - IV. Plans are to use District funds to renovate the existing facilities; plans are to use 1981-82 VEA funds to purchase drafting stations. The Library and Learning Resource Center will not be effected.

B. Have these needs been identified in the facility master plan? If so, in what manner?

Not applicable.

C. What sources of income will be used to cover the above costs?

[ ] State Bonds [ ] State/Local Operations
[ ] Available Local bond Funds [ ] Federal
[ ] Permissive Tax (Const. Act) [ ] Other (describe)

District operational funds

VIII. Staff:

Will additional staff be required for this program to become fully operational? (if yes, specify)

Yes. Santa Barbara City College will hire a full-time ten-month contract teacher for 1981-82. This position has already institutional approval.

IX. Evaluation:

What plans does the college have for periodic evaluation of this program, e.g., COPES, SAM, enrollment data, Transfer Student Success Rate, placement-followups?

COPES, SAM, and Advisory Committee review.

X. Certification of compliance with Title 5:

On July 23, 1981 the Board of Trustees of Santa Barbara Community College District approved the above education program and by my signature I certify that all provisions and conditions of Article 2 of Title 5, Section 55137(b) and of Article 3 of Title 5, commencing with Section 55140 have been considered, and that all factors, taken as a whole, support establishment and maintenance of the proposed educational program.

Superintendent/Chancellor
Dr. David Mertes

Date
TO: Curriculum Advisory Committee       DATE: January 26, 1981
FROM: Mel Elkins and Joe Connell         RE: PROGRAM PLANNING AND UPDATE
                                               FOR DRAFTING/FALL 1981
                                               IMPLEMENTATION

I. GOALS OF PROGRAM PLANNING FOR DRAFTING

   A. To create an AS Degree program consisting of existing Drafting courses,
      selected electives, and General Education courses.

   B. To update all existing Drafting courses and redesignate some as Drafting
      and not as Industrial Technology.

   C. To develop and receive curriculum approval of the two new Advanced
      Drafting specialty courses (two units), plus a Work Experience Drafting
      component designed for Drafting majors.

   D. To continue offering existing Drafting support courses for various
      occupational majors.

II. ACTIVITIES OF FALL SEMESTER 1980 CONCERNING THE RESTRUCTURED DRAFTING PROGRAM

   A. We met with several businesses in order to determine the skills needed
      and used in a variety of occupations.

   B. We met with the lay advisory committee in order to present the Drafting
      program proposal to them.

   C. We reviewed the job opportunity data compiled by GRC (General Research
      Corporation, Santa Barbara).

   D. We reviewed, updated, and retitled the Drafting support courses with
      different cost centers. These courses serve the Landscape Horticulture,
      Marine Technology, Engineering, Geology, and the Metals Manufacturing
      programs. We also reviewed the General Education requirements with
      the counseling staff.

   E. We have reviewed the implications of facility remodeling (with Dave Hill)
      in order to ensure appropriate accommodations for a "first-class" Drafting
      program.

   F. We submitted staffing needs and their justifications to John Romo.

   G. I've spent several hours with Joe Connell in an effort to determine
      desirable laboratory furniture for Drafting, plus funding implications.

   H. I've worked with Dr. Bailon in order to establish a "second" Drafting
      laboratory at the Turnpike campus for the impacted evening classes.

bk

attachments: Proposed courses (Exhibit A)
Manpower Data (Exhibit B)
WSCH History (Exhibit C)
Summary of redesignated existing courses (Exhibit D)
Drafting Advisory Committee minutes (Exhibit E)
Proposed new program (See Exhibit E)
Santa Barbara City College

DRAFTING ADVISORY COMMITTEE

MINUTES

November 6, 1980 at 7:30 p.m.
Goleta Valley Adult Education Center  Room 15

PRESENT:

Tom Deering  . . . . . . . Santa Barbara Research Center
Nick Malenick  . . . . . . . Raytheon - CES Division
Howard Wittausch  . . . Civil Engineer/Architect
Walter Thiele  . . . . . . . Delco Electronics
Bill Serna  . . . . . . . . Burroughs Corporation
Joe Connell  . . . . . . . Civil Engineer/Drafting Instructor
Mel Elkins  . . . . . . . Assistant Dean, Occupational and Career Education

I. HISTORY OF DRAFTING PROGRAM

Joe Connell opened the meeting by presenting the following information:

The history of drafting at Santa Barbara City College has essentially been one of offering classes each semester as support courses for students in other programs such as Electronics, Marine Technology, Interior Design, Landscape Horticulture, Metals Fabrication Technology, and other technology programs. There has never been a certificate or degree program at Santa Barbara City College in Drafting.

During the past two years (four semesters and summer session), there has been a dramatic rise in enrollments in drafting courses. During this time, the college has offered an average of ten courses each semester with approximate enrollments of 30 students per class or a total enrollment of approximately 300 students per semester. This enrollment has been divided approximately 40% day and 60% evening classes.

Accompanying this high enrollment has been varying degrees of student interest in a one-year certificate or two-year degree program in Drafting and, ultimately, job placement in drafting or some related field.

The Applied Science Cluster (Industrial Technology) at Santa Barbara City College has been responsible for the drafting courses at the college. The only other "drafting" type courses offered at the college in other departments are:

Art 14/Engineering 5 - Design Graphics
Computer Science 12/Engineering 6 - Numerical and Graphical Analysis
Earth Science 12 - Geologic Illustration
Earth Science 13AB - Scientific Illustration

A complete list of information which explained existing course content in each drafting offering was included in the advisory agenda.

II. JOB OPPORTUNITIES AND TRENDS

Mel Elkins reviewed some statistical data (see Exhibit B), produced by General
Research Corporation, which indicates there are 775 people currently employed in drafting and related occupations; and projections show that 111 newly trained persons will be needed by 1983. With a normal attrition rate of 15%, this would mean that approximately 57 trained persons per year would be needed in the South Coast area to fill labor demands.

**III. RECOMMENDATIONS FOR NEW COURSE DESIGNATION AND EXPANSION OF DRAFTING PROGRAM**

The advisory committee members concurred that all existing Industrial Technology courses should be designated as DRAFTING courses. (See Exhibit D)

Much discussion surrounded the New Program Proposals; i.e., one-year certificate program and the desirability of having a two-year sequential program. Most members agreed that a one-year certificate program would not be adequate for preparing a person for employment in the research and development fields. It was further agreed that all drafting students should take a core program; i.e., Drafting 1 and 2 their first semester, to be followed by Drafting electives (depending upon their special drafting interest).

A recommended two-year (AS Degree) program is as follows:

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<th>First Year</th>
<th>Units</th>
<th>Second Year</th>
<th>Units</th>
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<tr>
<td>Drafting 1</td>
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<td>Drafting 2</td>
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<td>English 1/5/18</td>
<td>3</td>
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<td>Math 6</td>
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<td>Math 12</td>
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<td>Computer Science 2</td>
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<tr>
<td>Drafting Electives</td>
<td>6</td>
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<tr>
<td>Controlled Electives</td>
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**Options (Drafting Electives):**

**Electro/Mechanical**

- Drafting 3
- Drafting 4
- Drafting 8
- Drafting 9
- Drafting 61ABC or
- Independent Study 99AB

**Civil/Architectural**

- Drafting 4
- Drafting 5
- Drafting 7
- Drafting 61ABC or
- Independent Study 99AB

**Controlled Electives:**

Units must be taken within Drafting, Applied Technologies, Mathematics, Computer Science, Physics, Physical Science, Engineering, Chemistry, Earth Science, or Electronics.

In addition to the aforementioned two-year drafting program, the college will continue to offer support courses in drafting for Metals Fabrication Technology, Landscape Horticulture, Marine Diving Technology, Interior Design, and Graphic Communications students.
IV. FACILITIES AND EQUIPMENT

Mr. Elkins indicated that additional space would need to be made available for expansion of this program. State standards indicate that 50 - 55 square feet is needed to provide for an adequate drafting station. Based upon a planned 30-station-lab facility, 1640 square feet would be needed for this activity. Present campus structures are being checked for feasibility of modifications. There are also plans to purchase tables and drafting materials for 30 student stations which will be financed through VEA funds.

In conclusion Mr. Elkins indicated that course approval would be pursued through the campus curriculum advisory committee and that he would keep the drafting advisory committee apprised of any progress.

Respectfully submitted,

Mel Elkins
Acting Secretary

bk 11/10/80

cc: Mertes, Huglin, Sanchez, Romo

attachments: Exhibit B
             Exhibit D