CATALOG1987–88

Albuquerque Technical-Vocational Institute

Volume XXI

June 1987

Main Campus 525 Buena Vista SE, Albuquerque, NM 87106 Telephone: (505) 848-1400

Joseph M. Montoya Campus 4700 Morris NE, Albuquerque, NM 87111 Telephone: (505) 298-5461

ADMINISTRATION

Louis E., Saavedra

President

Harold W. Jackson
Executive Vice President

Marvin F. Burianek
Vice President for Administration

Dale E. Kerby
Vice President for Instruction

GOVERNING BOARD

Chester French Stewart
Chairman

Francisco D. Sanchez, Jr. Vice Chairman

Lucy Jaramillo Secretary

Bob L. Gregory Robert Matteucci Manuel P. Olguin Earl C. Waid

Equal Opportunity Policy

The Albuquerque Technical-Vocational Institute, in compliance with Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972 and Section 504 of the Rehabilitation Act of 1973, does not discriminate on the basis of race, color, national origin, handicap, age or sex in any of its policies, practices or procedures. The provision includes, but is not limited to, admissions, employment, financial aid and educational services.

Any person who wants to file a complaint based on these laws should contact the T-VI equal opportunity officer, Tony Galaz, Room A-25, Main Campus, 848-1480.

Instructional Division Calendar

SEPTEMBER							
S	M	Τ'	W	Т	F	S	
		1	2	3	4	5	
£6	7	8	9 16	10	11	12	
13	14	15	16	17	18	19	
20	21	22	23	24	25	26	
27	28	29	30				

Classes begin, Sept. 1

1987

OCTOBER							
S	M	Т	W	T	F	S	
			٠	1	2	3	
4	5	- ¢	7 :	8	9	10	
11	12	13	14	15	16	17	
18	19	20	21	22	23	24	
25	26	27	28	29	30	31	
					_	•	

Midterm, Oct. 22 Staff development, Oct. 23

NOVEMBER							
5	M	T	W	Т	F	S	
1	2	3	4	5	6	7	
8	2 9	10	11	12	13	14	
15	16	17	18	19	20	21	
22 29	23	24	25	26	27	28	
29	30						

Thanksgiving, Nov. 26-27

1988

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
3	14	15	16	17	18	19
20	21	22	23	24	25	~26
27	28	29	30	31		<u>-</u>

Term break, Dec. 21-Jan. 3.

JANUARY

S	M	T	W	T	F	S
			ŀ		1	2
3	4	\$	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27.	28	29	30
31						

Classes begin, Jan. 4

FEBRUARY

S	М	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10 17 24	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29					-

Midterm, Feb. 25 Staff development, Feb. 26

MARCH W F S M T 5 1 2 3 4 8 9 10 11 12 17 18 19 15 16 26 21 22 23 24 25 28 29 30 31

Snow day, Mar. 25

APRIL

S	M	₫	W,	Т	F	S
			μ	•	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	44	23
24	25	26	27	28	29	30

Term break, Apr. 21-May 1

MAY

S	M	T	W	T	F,	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18 25	19	20	21
22	23	24	25	26	27	28
29	23 30	31				

Classes begin, May 2 Memorial Day, May 30

IUNF

		_	1011	<u> </u>	_	
S	M	T	W	Т	F	S
			1	2	3	4
5	6	7	8	9	10	וון.
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

Midterm, June 24

JULY

		_ ! '		<u> </u>		
S	M	7	W	T,	F	S
					_1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23 30
24	25	26	27	28	29	30
31		-				

Independence Day, July 4-5

AUGUST

\$	M	Т	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	ີ20
21	22	23 30	24	25	26	27
28	29	30	31	· -		

Term break, Aug. 18-Sept. 5

Telephone Directory

Main Campus

Switchboard/Locator	848-1400
Admissions	848-1540
Adult Basic Education	
Adult Learning Center	848-1771
Cashier (Admissions)	848-1514
Continuing Education Division	848-1480
Financial Aid	848-1530
GED—General Educational	
- Development	848-1650
Information	848-1540
Instructional Division	
Administration	
'Business Occupations	
College Division	848-1680
Developmental Studies	848-1750
Health Occupations	848-1560
Technologies	848-1610
The state of the s	

'Trades
Library 848-1770
Placement 842-1460
Special Services for the Handicapped 243-1741
TTY 247-9304
Student Records
Student Services Administration 848-1601
Support Services
Administration 848-1410
Business Office 848-1430
Personnel 848-1404
Public Information
Testing Services 848-1550
Workshop/Contract Training 848-1666
_
Joseph M. Montoya Campus 298-5461

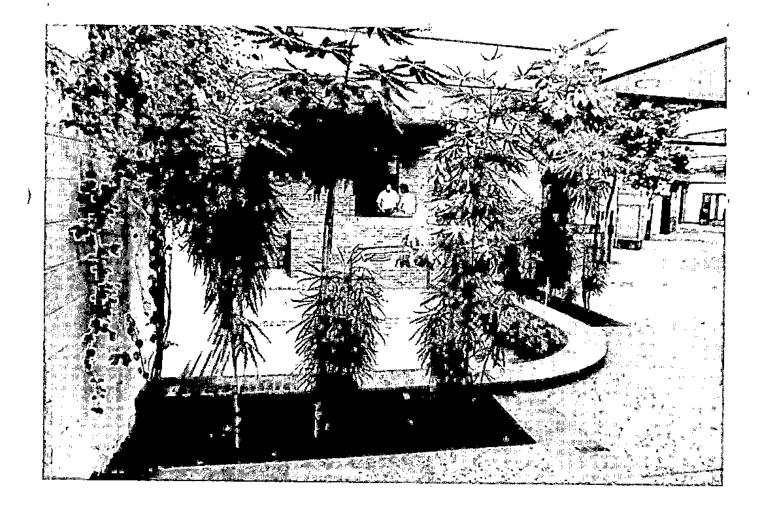
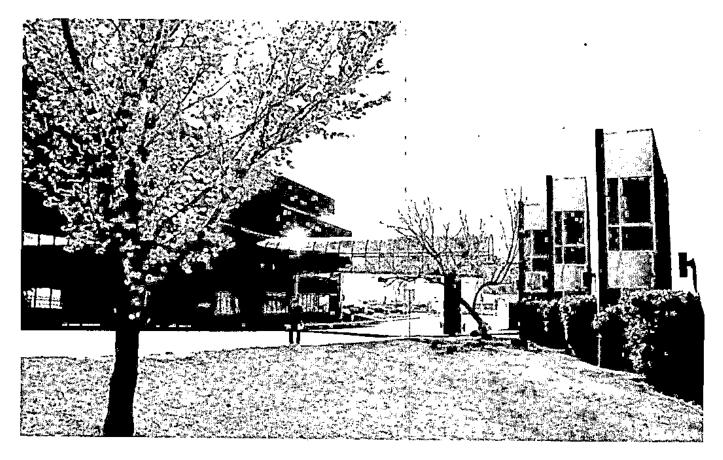


Table of Contents

GENERAL INFORMATION 2	
About the Institute2	Advanced Placement (Associate in
Instructional Programs 3	Science Degree in Nursing)
Credit Transfer 3	Nursing Assistant
Calendars 4	Phlebotomist49
School Year4	Practical Nurse49
Graduate Job Placement	Practical Nurse Advanced Standing 51
Estimated Expenses 6	
Services for Students	
Counseling and Advisement	
Health Advisement	
Job Placement	Architectural Drafting Technology
Food Services	
Student Store	
Housing	
Testing Services	
High School Equivalency Exam (GED)	· · · · · · · · · · · · · · · · · · ·
American College Test (ACT)	
Library Services 8	
Parking and Transportation9	Apprenticeship Programs70
Campus Conduct 10	Air Conditioning, Heating and
Personal Property	Refrigeration
Phone Calls and Visitors11	
Fire Alarms	Automotive Technology
Student Government and Activities	Carpentry
	Commercial Printing77
	Culinary Arts
INSTRUCTIONAL DIVISION 12	Baking
Admission Policies	Quantity Food Preparation79
Registration1	Diesel Mechanics
Tuition and Fees	Electrical Trades
Class Schedule	
Program Fees	Hospitality/Food Service Management 83
Grading	Law Enforcement 84
Standards of Progress	Machine Trades
Attendance Policies	Plumbing 86
Financial Aid	Welding87
Student Records	
Graduation	
College Division	CONTINUING EDUCATION DIVISION 89
General Education Courses2	Tuition90
Developmental Studies Department	6 Textbooks90
Preparatory Program	Standards of Progress90
Special Services2	Attendance Policies90
Business Occupations Department	Student Records90
Business Occupations Learning Centers 3	Adult Basic Education
Business Assistance Center	Registration91
Accounting	3 Textbooks91
Business Administration3	5 Skill Improvement Courses
Cashier-Sales3	7 Admission Policies93
Entrepreneurship3	Registration 93
Legal Assistant Studies3	8 Fees
Legal Office Worker4	Changing Careers94
Merchandising4	Business Education
Office Occupations4	Health Education102
Refresher Course for Office Workers4	·
Health Occupations Department4	
Child Care Assistant4	•
Health Unit Clerk	



About the Institute

The Albuquerque Technical-Vocational Institute (T-VI) is a public postsecondary school that provides occupational education and coursework leading to associate degrees. The Institute opened in 1965 and is the third largest postsecondary school in New Mexico. More than 13,000 students attend T-VI.

Funding for T-VI programs and most construction and equipment comes from a local property tax and an annual appropriation by the New Mexico Legislature. Federal funding, usually for special programs, is also received.

² T-VI's first classes were held in an elementary school, which had been closed, and surplus army housing. Since then, more than \$26 million worth of construction has taken place.

The Main Campus, near Albuquerque's downtown business district, occupies 52 acres of land on both sides of Coal Avenue SE from University Boulevard to Yale Boulevard. The 40-acre Joseph M. Montoya Campus is located at 4700 Morris NE. Situated along the Arroyo del Oso just south of Montgomery Avenue, the campus stretches from Morris Avenue to Juan Tabo Boulevard. The campus may be entered from either street.

The school year is divided into three terms of 15 weeks each. Most programs admit beginning students each term—in September, January and May.

Many programs are available at both the Main and Montoya campuses. Continuing Education and College Division classes are held at both campuses and other locations throughout the T-VI district.

ACCREDITATION: T-VI is accredited to grant certificates, diplomas, Associate in Applied Science and Associate in Science degrees by the Commission on Institutions of Higher Education of the North Central Association of Colleges and Schools.

In addition, two Health Occupations programs are accredited by special agencies. The Practical Nurse program is accredited by the National League for Nursing and the Respiratory Therapy Technician program by the American Medical Association's Committee on Allied Health Education and Accreditation.

The T-VI Catalog is the student's official guide to the programs, courses and policies of the Institute. It is the student's responsibility to become familiar with the general policies of the Institute and to comply with those policies.

Information in this catalog is subject to change without notice at any time by proper administrative directive.

Instructional Programs

Instructional Division

The T-VI Instructional Division offers the follow ing:

- CERTIFICATE PROGRAMS: Full-time programs in 37 business, health, technology and trades occupations.
- ASSOCIATE DEGREES: Available in six business, health, technology and trades majors.
- GENERAL EDUCATION COURSES: Communications, mathematics, social and natural science, and humanities classes offered for college credit.
- PREPARATORY PROGRAM: For persons who must improve skills to meet admission requirements for T-VI's occupational or associate degree programs or college entry.
- SPECIAL SERVICES: For handicapped students.

Not all certificate and degree programs are offered at both campuses or every term.

Persons not working toward a certificate or degree may enroll part time in specific courses if space is available.

If fewer than 12 persons have applied to begin a program, the program may be cancelled that term. Those applicants will be given first priority the next term the program is scheduled.

After a program begins, no required class will be cancelled regardless of enrollment. However, support classes may be cancelled if there are not enough applicants to justify the class being offered.

COLLEGE TRANSFER: T-VI programs and courses may transfer to other two- and four-year institutions. Information about credit transfer is available from T-VI counselors.

Continuing Education Division

The Continuing Education Division, for part-time students, includes:



- SKILL IMPROVEMENT CLASSES: More than 100 offerings in business, trade and industrial, health and technical subjects.
- ADULT BASIC EDUCATION: Instruction for improvement of written and spoken English, math classes, and preparation for the General Educational Development (high school equivalency) and U.S. citizenship examinations.
- VOCATIONAL ENRICHMENT CLASSES: For high school students at their schools after regular school hours.
- WORKSHOPS AND CONTRACT TRAIN-ING: Short-term training sessions in more than 100 topics available to the public and to businesses by contract.

Continuing Education Division classes are offered if 15 or more persons are enrolled. Classes may be terminated if fewer than 10 persons are attending a class regularly.

CREDIT TRANSFER: Continuing Education Division Skill Improvement classes marked with the symbol # may be used in Instructional Division programs.

Students wanting to transfer a class should see

their department counselor.

Calendar

Instructional Division

FALL TERM, 1987

Classes Begin	Sept. I
Final Registration Day	Sept. 15
Midterm Grades	Oct, 22
Staff Development (no classes)	Oct, 23
Thanksgiving	Nov. 26-27
Withdrawal Deadline	Dec. 4
Last Day of Classes	Dec. 18
Term Break	Dec. 21-Jan. 3

WINTER TERM, 1988

Classes Begin	Jan. 4
Final Registration Day	. Jan. 15
Midterm Grades	Feb. 25
Staff Development (no classes)	Feb. 26
Snow Day (no classes if not used	
as a makeup day)	Mar. 25
Withdrawal Deadline	Apr. 6
Last Day of Classes	Apr. 20
Break Apr. 2	l-May 1

SUMMER TERM, 1988

Classes Begin	av 2
Final Registration Day May	/ 13
Memorial Day May	7 30
Midterm Grades June	24
Independence Day July	4-5
Withdrawal DeadlineAu	g. 3
Last Day of Classes	17
Break Aug. 18-Sep	t. 5
•	

Continuing Education Division

FALL TERM, 1987

Adult Basic Education Registration 10 a.m8 p.n	n.
Aug. 25–2	
Skill Improvement Registration Deadline	28
Lab Fee/Book Payment Deadline Sept.	2
Late Registration Aug. 31-Sept. 1	17
Classes Begin Sept.	8
Fee/Book Refund Deadline Sept. 1	18
Holidays (no classes)	
Last Evening of Classes Dec. 1	18

WINTER TERM, 1988

Adult Basic Education Registration 10	a.m8 p.m.
	Dec. 29-30
Skill Improvement Registration Deadline	Dec. 31
Lab Fee/Book Payment Deadline	Jan. 6
Late Registration	Jan. 4-21
Classes Begin	Jan. 11
Fee/Book Refund Deadline	Jan. 22
Last Evening of Classes	Apr. 20

SUMMER TERM, 1988

Adult Basic Education Registration 10 a.m8 p.m.
April 26-27
Skill Improvement Registration Deadline Apr. 29
Lab Fee/Book Payment Deadline
Late Registration May 2-19
Classes BeginMay 9
Fee/Book Refund Deadline May 20
Holidays (no classes) May 30, July 4-5
Last Evening of Classes Aug. 17

School Year

T-VI meets year-round with the year divided into three 15-week terms—fall, winter and summer.

Each Instructional Division term has 75 class days, usually with 10 days to two weeks as a break between terms. Most full-time students attend school year-round until they finish their programs. In most programs, it is possible to take a term off if necessary. However, persons who interrupt their programs may not be able to resume their studies at the time they want, because the classes they need may not be available every term.

Continuing Education Division classes usually start a week after Instructional Division classes and meet for 14 weeks. **SNOW DAY:** During the 1988 winter term, March 25 is designated to make up a day lost because of snow conditions. If it is not needed as a makeup day, it becomes a day off for students and instructional staff.

ABBREVIATED DAY: In case of bad snow conditions, T-VI sometimes operates an "abbreviated day." Classes begin at 10 a.m. at the Montoya Campus and 10:20 a.m. at Main Campus. Abbreviated and cancelled days are announced by radio stations.

NOTE: Information about T-VI's retention rates is available from the Student Services Office upon request.

*No longer offered as separate program.

162,1 S.IATOT	167		%9L 978 680°I									
A/C, Heating and Refrigeration 46 Baking 22 Carpenty 36 Commercial Printing 50 Bleecl Mechanics 28 Electrical Trades 15 Adding 17 Adding 41 Plumbing 42 Plumbing 43 Plumbing 43 Plumbing 44 Plumbing 44 Plumbing 45 Plumbing 4	75 45 10 20 20 30 30 30 30 30 30 30 30 30 30 30 30 30	I	I S 7	35 35 46 37 37 37 37 37 37 37 37 37 37 37 37 37	61 LE LZ Sb LI 8 SI bZ LZ EZ 6 9E	7 \$ 1 \$ 2	7 7 7 1 1 1 1	%E8 %L6 %P8 %86 %001 %001 %68 %09 %76 %SL %E6	36 30 30 37 30 30 30 37	I I I Z	00.2 00.2 00.2 00.2 00.2 00.2 00.2 00.2	042,112 856,012 126,6 2 126,212 126,213 126,213 126,013 162,013
Architectural Drafting Technology 36 Architectural Drafting Technology 16 Civil and Surveying Technology 17 Electromechanical Drafting 11 Electromechanical Drafting 142 Electromics Technology 142 Instrumentation and Control Technology 90 Laser Electro-Optic Technology 36	06 771 13 92 91	Ι Ι Ζ 9 ε	દ	28 13 13 13 13 13 13 13	SZ 1S 28 E1 4E E1 E2	3 13 5 1	9 81 9E 1 1	%74 %79 %79 %001 %59 %18 %78	12 41 13 88 13 74 13	13 13 13 13	79.8 94.8 94.7 69.8 69.8	095'81\$ 776'11\$ 815'51\$ 999'61\$ 196'11\$ 664'11\$
Repiratory Therapy Technician 10 10 10 10 10 10 10 1	57 57 57 8 8 8 7 8	7 7 2 9 9 1 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7	1 2 <i>L</i>	01 17 61 26 4 7 57 6	6 61 71 57 <i>L</i> 7 61	1 3 7	1 2 5	%06 %06 %7L %8L %001 %001 %9L %77	75 70 70 70 70 70 70 70 70 70 70 70 70 70	ī	21.4 04.2 59.7 08.8 24.4 74.2 58.8	01L't1\$ 602't1\$ 761'6 \$ 616'81\$ 761'6 \$ 616'81\$
HUSINESS OCCUPATIONS Accounting Bookkeeping Merchandising Merchandising Office Morker 355 Merchandising 113 Office Refresher 24 Standardising 135 143 154 155 155 156 157 157 158 158 158 158 158 158	7 13 13 32 16 21 8 21 8	1 I I I I I I I I I I I I I I I I I I I	L I 7 7 01	07 1 56 01 87 46 21 51	8Z 69 0I IZ ZZ 6 . LE	2 01 7	8 I 6I 8	%0L %EL %00I %SL %6S %SL %OL	87 92 6 57 78 11 13 43	ξ.	56.8 20.8 10.8 10.8 76.8	171,112 124,012 124,012 124,012 124,012 171,113
TOTAL GRADUATES	TOTAL GRADUATES Could not locate	Not seeking employment	Continuing school	AVAILABLE FOR WORK	Employed in training- related job	Employed but job not related to training	Unemployed but seeking	Percent employed (training-related job- graduates available for work)	Working in New Mexico	Working out-of-state	Average hourly rate in training-related jobs	Average annual salary in training-related jobs based on 40-hour work week

Graduate Job Placement, 1986

Estimated Expenses

An important matter to consider when planning to attend T-VI full time is what it will cost. These estimated expenses—including food, housing, transportation, school and personal charges for a full-time student—are used by the Financial Aid Office to estimate financial aid needs.

DEPENDENT STUDENT EXP	ENSES		
Student's Status	1 Term	2 Terms	3 Terms
DEPENDENT LIVING AT HO	ME (assumed for Albuque	rque residents)	
Tuition and Fees* Room and Board Books and Supplies Personal Expenses Transportation	\$ 20 to \$ 120	\$ 30 to \$ 230 1,333	2,000 75 1,200 1,374
TOTAL*	\$1,570 to \$1,670	\$3,129 to \$3,329	\$4,689 to \$4,969
DEPENDENT LIVING OFF C.			
Tuition and Fees* Room and Board Books and Supplies Personal Expenses Transportation	1,720	50 880 951	5 160
TOTAL*	\$2,681 to \$2,781	\$5,351 to \$5,551	\$8,022 to \$8,302
INDEPENDENT STUDENT EX SINGLE Tuition and Fees* Room and Board Books and Supplies Personal Expenses Transportation TOTAL*	\$ 20 to \$ 120	3,440 50 1,276 1,000	5,160 75
FAMILY OF TWO Tuition and Fees* Room and Board Books and Supplies Personal Expenses Transportation TOTAL*	2,840	5,680	8,520 75 3,013
EACH ADDITIONAL MEMBER ADD		. , ,	

^{*}If student is paying nonresident tuition, add \$500 per term.

^{*}If student is paying resident associate degree tuition, add \$15 per credit hour.
*If student is paying nonresident associate degree tuition, add \$45 per credit hour.

Services for Students

The Student Services Department assists applicants, students and graduates. Services include admission, testing, educational advisement, personal and career counseling, student records and transcripts.

counselors and advisors at both campuses provide educational advisors at both campuses provide educational advisement to applicants and students. Counselors can assist students with problems that may be preventing them from doing their best in school. Counseling services normally are available in the occupational departments weekdays between 7:30 a.m. to 4:30 p.m., and in the Admissions areas weekdays between 8 a.m. and 5 p.m. During peak registration periods (August–September, December–January, and April–May) counselors and advisors are available at both campuses from 8 a.m. to 7 p.m. Monday through Thursday.

HEALTH ADVISEMENT: The Health Advisement Center, located in Room A-127 on Main Campus, is open weekdays from 8 a.m. to 5 p.m. Services, all offered free of charge, include first aid for minor injuries and illnesses; blood pressure, vision and hearing tests; and information about such health problems as venereal disease and drug addiction. There are cots for people who become ill while on campus.

JOB PLACEMENT: Graduates are responsible for finding their own jobs after completing a T-VI program. However, the Institute's Industrial Relations Office and instructional staff provide job-seeking assistance to full-time students and graduates.

The Industrial Relations Office is at 616 Buena Vista SE on Main Campus. There is a liaison office at the Montoya Campus.

Full-time Instructional Division students may apply for full- and part-time jobs listed by employers with Industrial Relations, obtain referral cards for job interviews, and call the Industrial Relations Office HOT LINE (843-9696) for a recorded list of daily job openings.

Instructional Division students in their final term may register for graduate placement services which include résumé preparation and scheduling of campus interviews. Students must be candidates for graduation with passing grades at midterm to be scheduled for interviews or have résumés sent to employers.



Food Services

The Main Campus has two food facilities—one located in the Administration Building (Room A-35) and the other in the Business Occupations Building (Room B-125).

The A-35 facility includes a bakery, open Tuesday through Friday on school days from 8:15 a.m. to 12:30 p.m.; a culinary arts line serving luncheon entrées on school days from 11:15 a.m. to 12:30 p.m.; and a snack bar serving short-order meals and snacks on school days from 7:45 a.m. to 3:30 p.m., and from 6 p.m. to 8:30 p.m. Monday through Thursday when Continuing Education Division classes are in session.

The Business Occupations Building facility includes a *snack bar* serving short-order meals and snacks on school days from 6:45 a.m. to 2 p.m.; and a culinary arts dining facility, *Student Specialties*, serving gourmet meals Tuesday through Thursday at 5:30 p.m. by reservation only.

Vending machines are available in several locations at both campuses.

Student Store

T-VI's student store, located in the A Building on Main Campus, sells a full range of school supplies and miscellaneous items such as backpacks, sportswear, combination locks and mugs.

The store is open Monday through Thursday, 7 a.m. to 7 p.m., and Friday, 7 a.m. to 3 p.m.

Housing

T-VI has no dormitories. Students must make their own arrangements for housing. A list of property owners who have contacted T-VI with available rentals is kept at the C Building reception desk at Main Campus.

Testing Services

T-VI's Testing Center, in the C Building on Main Campus, offers a variety of tests—most free of charge. Among the examinations administered are the American College Test (ACT), admission tests for occupational majors, the General Educational Development (GED) exam for high school equivalency, typing speed tests, math tests and career aptitude exams. The ACT, occupational admission tests and GED also are administered at the Montoya Campus. For more information, contact the Testing Center, 848-1550.

GED EXAM: Anyone at least 18 years old and not enrolled in high school may take the exam for a high school equivalency diploma. A 17-year-old may take the exam if released from the state compulsory school attendance law and granted a GED Underage Permission Form. No currently enrolled high school student, and no one 16 years old or younger, may take the exam.

Interested persons are pretested to determine readiness for the five-part exam. Those who want or need more study before taking the test may enroll in free GED preparatory classes, offered day and evening at both campuses and other locations in the Albuquerque area. For information on the classes, see page 92.

ACT: These exams, scheduled monthly, are for people wishing to enter an associate degree program, and for Practical Nurse and Respiratory Therapy Technician applicants. Cost is \$8 for the ACT plus a \$10 registration fee. Information about the ACT and how to prepare is available in the Testing Center.

OCCUPATIONAL ADMISSION TESTS: Basic math and vocabulary tests are administered to applicants to help them determine, with the help of a counselor or advisor, which occupational majors may best match abilities and interests.

MATH PLACEMENT TEST: The math placement test must be taken by all students who want placement in Math 150 or above but have not taken the prerequisite course within the past year. Students placing into Math 162/Calculus as a result of the test score will be given a trigonometry test at the first class meeting to verify trigonometry competency.



Library Services

Library Services includes the libraries, Adult Learning Centers and Audiovisual Services. The libraries and Adult Learning Centers are open to the public.

Main Campus Library Services is located in C Building. The Library and Adult Learning Center are on the fourth floor; Audiovisual Services is on the third floor.

When school is in session, the Main Campus facility is open from 7 a.m. to 9 p.m. weekdays except Friday, when it closes at 5 p.m.; and Saturdays from 8 a.m. to 5 p.m. When school is not in session, hours are 8 a.m. to 5 p.m., Monday through Friday.

. The Montoya Campus Library and Adult Learning Center are in J Building. They are open week-days—when T-VI classes are in session—from 7:30 a.m. to 8:30 p.m. except Fridays, when they close at 5 p.m.; and Saturdays from 9:30 a.m. to 12 noon and 1 p.m. to 4:30 p.m.

A Professional Resource Center for T-VI's instructional staff is located in the Main Campus Library.

LIBRARIES

Main Campus

Library materials include books, pamphlets, maps, newspapers, magazines, encyclopedias and dictionaries. Special collections of learning materials are maintained in all T-VI vocational subjects.

*1

Services include help in locating materials, in struction in how to use a library, study facilities, interlibrary loans, magazine back issues, and coin operated copying machines.

Montoya Campus

While the collection of books, magazines, pamphlets and newspapers concentrates on materials which support the Montoya Campus vocational subjects, there are also general interest materials and a variety of books and magazines for leisure reading. There is a coin-operated copying machine.

ADULT LEARNING CENTERS

Adult Learning Center services are offered free to T-VI students and other adults who want to develop basic education skills, vocationally related knowledge, microcomputer literacy or self-improvement.

Audiovisual materials are used and trained staff members are on duty to help each person set up and pursue an individual, self-paced learning program. Tutors are available during regular library hours when school is in session.

Basic education materials in the centers at both campuses include General Educational Development (GED) preparation, English as a second language, conversational English, beginning Spanish, spelling, reading, grammar and mathematics.

Among vocational materials available are those related to accounting, sales, computers, electronics, auto mechanics and secretarial sciences.

At the Main Campus, special audiovisual materials are available for recreational viewing.

AUDIOVISUAL SERVICES

Audiovisual Services maintains T-VI's 16mm film collection and all AV equipment. Films are available for classroom and individual viewing.

Instruction in the operation of AV equipment is available to students and staff. Other services include educational film location, preview arrangements and assistance in the design, preparation and application of audiovisual materials.

Parking and Transportation

PARKING: Student parking lots are provided free at both T-VI campuses. The lots are unsecured, and T-VI is not liable for theft, vandalism or other losses which might occur while vehicles are parked on campus. Vehicles should be locked and valuables hidden.

Students may use T-VI parking lots by obtaining a parking permit decal. Decals are issued for lots nearest the student's classes. Decals are available in the lobby of the Administration Building or from department counselors at Main Campus, and the Student Services Center at Montoya Campus. The decal should be put on the rear bumper of vehicles (rear fender of motorcycles). There are special parking areas for motorcycles and bicycles.

Violations of parking regulations result in citations by T-VI security. Students receiving three or more citations are referred to the Student Government's Judicial Affairs Committee. The committee can recommend action ranging from a warning to suspension from the Institute.

BUS PASSES: Economical passes for postsecondary students are available for Suntran city buses. A pass good for unlimited rides during one calendar month may be purchased for \$19 at the Financial Aid Office in the C Building on Main Campus or Student Services Center in the H Building at Montoya Campus.

To encourage students to use the city buses, T-VI pays a 50 percent rebate on passes purchased at the Institute.

Bus passes and rebates also may be issued to eligible Continuing Education Division students on a demonstrated need basis. Information may be obtained from the Adult Basic Education administrator at the Main Campus (Room A-29).

The speed limit in all parking lots is eight miles per hour.



Campus Conduct

Unsafe or disruptive behavior anywhere on campus property is grounds for dismissal from T-VI. This also applies to any field trip taken under the supervision of a T-VI employee.

FOOD AND BEVERAGES: Drinking and eating are prohibited in all classrooms and labs.

USE OF TOBACCO: In accordance with fire and safety regulations, use of tobacco (smoking or nonsmoking products) is prohibited indoors on campus in all areas not designated as smoking areas. Smokers should use ash trays and other provided containers.

STUDENT DRESS: Students are asked to attend class dressed appropriately for the job for which they are training. Students or visitors must wear shirts and shoes to enter a T-VI building.

CHILDREN: Students are not permitted to bring children to classroom or laboratory sessions.

ANIMALS: Animals (except seeing eye dogs) are not allowed in T-VI buildings.

LAW VIOLATIONS: Law violations by anyone on campus will be handled by appropriate law enforcement agencies.

, COMPUTER CRIME: Under the state Computer Crimes Act, a person who intentionally and without authorization accesses, alters, damages or destroys any computer system or data stored within is subject to criminal prosecution on charges ranging from misdemeanor to third degree felony.

ALCOHOLIC BEVERAGES/ILLEGAL DRUGS: Possession or use of alcoholic beverages or illegal drug substances, or attending classes under the influence of alcohol or illegal drugs, is grounds for dismissal from T-VI.

DANGEROUS SUBSTANCES: Carrying, possessing or storing dangerous substances or materials on campus is prohibited.

WEAPONS AND FIREARMS: Carrying, possessing or storing weapons and firearms on campus is prohibited. Exceptions to this policy are law enforcement officers authorized by state law to carry firearms (30-7-2 NMSA 1978) and students participating in law enforcement instruction requiring the use of firearms who are under the supervision of a certified law enforcement instructor.

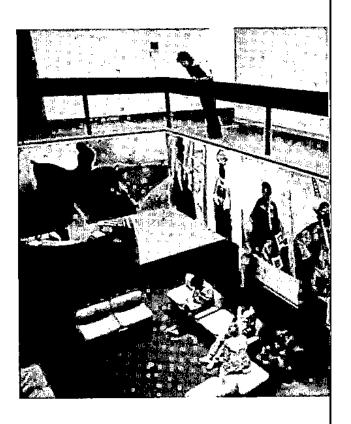
Personal Property

LOCKERS: Lockers are available at both campuses. Any student may use an empty locker by simply providing a lock for it. However, the lock and locker contents must be removed by the last day of each term, when a student is no longer enrolled, or when necessary for security or repair reasons.

Locks remaining on lockers during a term break or more than five days after a student has left school are cut off and the locker contents removed. Students then have 30 days to claim their possessions in Room M-105 on Main Campus or H-103 on Montoya Campus.

"LOST AND FOUND: The Main Campus lost and found is at the A Building lobby reception desk. On the Montoya Campus, it is in the Student Services Center.

INSURANCE: T-VI is not responsible for property loss, damage or personal injuries. Students are urged to obtain their own property and medical insurance coverage.



Phone Calls and Visitors

Students are not called from class to receive telephone calls or visitors.

Pay phones are available at both campuses for student and visitor use.

Fire Alarms

T-VI does not hold fire drills. Each classroom and lab has a fire evacuation plan posted. At the beginning of the term, students should study the plan for each room in which they have classes.

The alarm on the Main Campus is a continuous, loud bell. The Montoya Campus alarm is a horn.

If an alarm activates, the affected building should be evacuated immediately and everyone should stay well away from the building until an "all clear" has been sounded.

Student Government and Activities

Student Government for T-VI's Instructional Division is made up of representatives elected at the beginning of each term by each section of Main and Montoya Campus programs. Their job is to carry the ideas of fellow students to the Student Government meetings and report back after each meeting.

Student Government works to make T-VI a better place for both students and staff. It is the official channel for expressing student ideas and concerns about campus conditions, instructional programs, school policies and procedures, and student activities.

Leadership is provided by a student body president and vice president at each campus, elected for two consecutive terms by Instructional Division students.

A faculty advisor attends all Student Government meetings and serves as the liaison between the government and T-VI staff.

All students are welcome to attend any government meeting. However, only elected representatives may make motions and vote.

STUDENT ACTIVITIES: A limited student activities program is available. An effort is made to establish any type of extracurricular club or activity in which at least 15 students are interested. Such a club or activity can be formed if a faculty or staff member agrees to serve as sponsor and needed facilities can be located at reasonable costs. Persons interested in forming a club should contact the student activities secretary in the C Building on Main Campus or Student Activities Committee chairman at Montoya Campus.



INSTRUCTIONAL DIVISION



Admission Policies

To enroll, a person must be at least 18 years old or a high school graduate. Others can be admitted only if excused from attending a secondary school according to New Mexico's compulsory attendance law.

Interested persons should apply as soon as they have decided to attend T-VI. Some programs have entrance requirements based on test scores.

Students are admitted into one of four categories:

- PREPARATORY: For students needing or wanting preparatory work before beginning first term occupational and General Education courses.
- CERTIFICATE: For students declaring a major in an occupational area. Certificate programs vary in length from one to four terms. Students must be able to attend class 20 to 30 hours a week.
- DEGREE: For students entering an associate degree program. A high school or General Educational Development (high school equivalency) diploma is required. Students also must take the American College Test (ACT) or present official test scores dated within the past three years. All degree programs require satisfactory ACT scores in English and math. Some programs have additional ACT requirements (refer to degree programs).

Satisfactory ACT scores are: English, 17; math, 12; natural sciences, 18; social sciences, 14. Students who do not present satisfactory scores will be required to take the appropriate preparatory courses before being admitted to a degree program.

Scholastic Aptitude Test (SAT) scores corresponding to satisfactory ACT scores will be accepted if dated within the past three years.

Students who have successfully completed 15 credit hours of General Education courses (including communications and math) at a regionally accredited college or university need not take the ACT. Students must submit official transcripts from all colleges previously attended.

To qualify for an associate degree, a student must satisfactorily complete 15 credit hours in residency at T-VI after a degree program becomes available.

• PROVISIONAL: For students who want to take occupational or General Education courses without declaring for a major or degree, and for students trying to meet requirements to enter a degree program. Two General Education courses may

be taken without previous testing. Students wanting to take more than two courses must complete the normal admission process.

NOTE: Applicants holding baccalaureate degrees should check with the Admissions Office about exceptions to admission requirements.

HEALTH REQUIREMENTS: An applicant will be discouraged from entering a program where chances of success are poor because of a health or physical condition. An applicant can be denied admission to a program where health or physical condition can be dangerous to the applicant or others in that program. In such cases, the admission counselor will help the applicant select another program.

ADDING/DROPPING COURSES: Courses may be added or sections changed only through the 10th day of classes in 15-week terms, the 5th day of classes in short terms.

Courses may not be dropped during the last two weeks of a term. To drop a course, a written request must be made. Details are available from counselors/advisors. Students who do not make a written request to drop a course and are not in attendance at the time of final exams will receive an F or a U for the course. Dropped courses will be marked with a W on student transcripts.

WITHDRAWAL DEADLINE: A student cannot withdraw from school during the final two weeks of a term.

PROGRAM REQUIREMENTS: Students with continuous enrollment graduate under the program requirements/catalog in effect when they entered. Those whose enrollment is discontinuous graduate under the catalog that is current upon their return.

INTERRUPTED TRAINING: Students who drop out for one or more terms and wish to return to school should contact the Admissions Office early in the term prior to the one in which they wish to resume studies to be sure class space will be available.

Registration

Applications may be mailed or brought in person to either the Main Campus (C Building) or Montoya Campus (H Building). Admissions offices are open Monday through Thursday, 8 a.m. to 6:30 p.m., and Friday, 8 a.m. to 5 p.m. The Main Campus office also is open Saturday from 8 a.m. to 5 p.m. Except for some Health Occupations programs with special application times (refer to individual programs), applications can be submitted as far in advance as desired.

Late registration, on a space-available basis, is held only through the 10th day of classes in 15-week terms, the 5th day of classes in short terms. Any student who misses the first two days of scheduled classes will be withdrawn automatically as a "no show" and must seek readmission on a space-available basis.

Tuition and Fees

REGISTRATION FEE: There is a \$10 registration fee for each term, payable before the applicant is enrolled.

RESIDENT STATUS: A resident is a person who has lived in New Mexico for the 12 consecutive months preceding the first day of classes. Individuals between the ages of 18 and 23 seeking to establish residency may be required to provide proof of financial independence. Exceptions for resident status exist. Persons with questions about resident status should contact the Admissions Office at either campus.

TUITION:

	Resident	Nonresident
General Education Courses		
1 to 6 credit hours	\$15 per credit hour	\$15 per credit hour
7 to 12 credit hours	\$15 per credit hour	\$45 per credit
12 or more credit hours	\$180	\$540
Occupational Programs	поле	\$500 per term for full-time students (23 class hours or more per week)
		\$22 per hour for schedules of fewer than 23 class hours per week



Tuition must be paid in full before an applicant receives a class schedule. Authorized agencies that have agreed to pay a student's training expenses are billed by the Institute.

Tuition rates and structure are subject to change without notice.

BOOKS: Students enrolled in General Education courses must purchase their textbooks. Books are loaned free to students enrolled in occupational courses but must be paid for if lost or damaged. Students must pay a \$10 textbook deposit when they are admitted. The deposit is refunded if the student returns all textbooks in good condition. Cost of lost or damaged books is deducted from the deposit, and the student is required to redeposit the \$10 before registering for another term.

PROGRAM FEES: Many T-VI programs require students to buy personal equipment, such as uniforms in Health Occupations and tool kits in Trades and Technologies. The equipment is issued early in the program and becomes the student's personal property.

Several programs charge a supply fee to cover the cost of expendable items provided by T-VI. Lab fees are charged for some General Education classes.

Personal equipment, supply and lab fees must be paid in full before the student receives a class schedule. In some programs, fees are paid at the beginning of the program only. In other programs, fees are required each term.

Students may not register for a new term until all previous accounts are paid in full.

REFUNDS: The registration fee is a charge for processing the applicant's admission. It is refundable only if T-VI cancels a class.

Tuition is refundable if T-VI cancels a class or if the student withdraws before the 10th day of classes. Tuition refunds are prorated as follows: withdrawal prior to the start of the term—100 percent; withdrawal during the first five days of classes—90 percent; withdrawal during the second five days of classes. 4—80 percent.

Supjuly and lab fees are not refundable after the term begins.

• Equipment fees are not refundable after equipment is issued.

All divisions of T-VI accept the following in payment of fees or book purchases: cash, money orders, cashier's checks, personal checks (in the amount of fees and book purchases only), and VISA and MasterCard credit cards.

Class Schedule

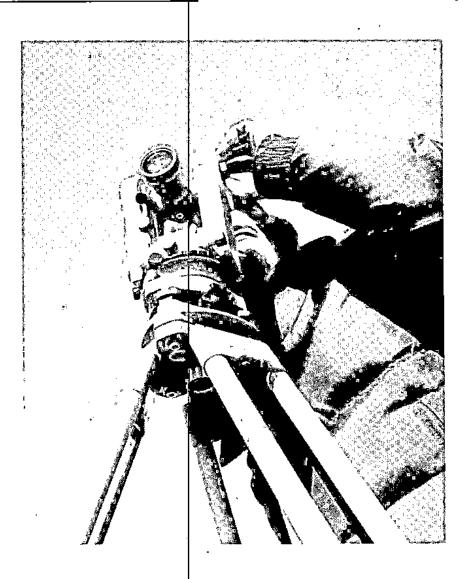
The class schedule a student receives at registration shows the time and location of each class. Most Instructional Division classes meet as follows:

MAIN CAMPUS

Morning	Afternoon			
7:20 to 8:15	12:20 to 1:15			
8:20 to 9:15	1:20 to 2:15			
9:20 to 10:15	2:20 to 3:15			
10:20 to 11:15	3:20 to 4:15			
11:20 to 12:15	4:20 to 5:15			
	5:20 to 6:15			

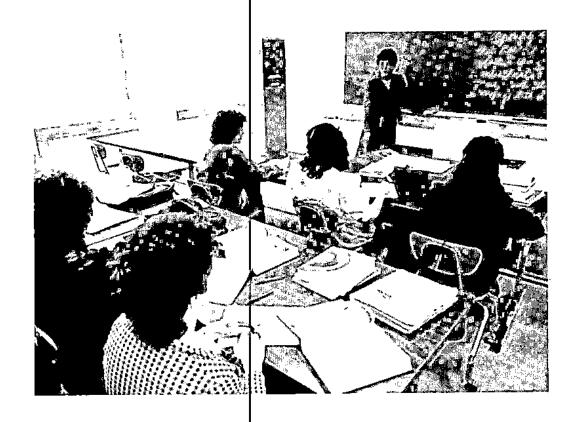
MONTOYA CAMPUS

Morning	Afternoon
7:00 to 7:55	12:00 to 12:55
8:00 to 8:55	1:00 to 1:55
9:00 to 9:55	2:00 to 2:55
10:00 to 10:55	3:00 to 3:55
11:00 to 11:55	4:00 to 4:55
	5:00 to 5:55



Program Fees

Term I	II	III	IV
BUSINESS OCCUPATIONS			
Accounting\$10	\$10	\$10	\$10
Business Administration \$10	\$10 \$10	\$10	\$10
Cashier-Sales \$10	φισ	Φ10	
Entrepreneurship			
Legal Assistant Studies\$10	\$10	\$10	\$10
Legal Office Worker\$10	ΨΙΟ	410	\$10
Merchandising			
Office Occupations	\$10	\$10	
Refresher Course for Office Workers	440	410	•
HEALTH OCCUPATIONS	•		
Child Care Assistant\$40			
Health Unit Clerk\$30			
Nursing Assistant\$30			
Nursing Associate Degree\$75		\$30 ·	
Phlebotomist\$45		Ψ50	
Practical Nurse			
Respiratory Therapy Technician\$75			
TECHNOLOGIES			
Architectural Drafting Technology			
Civil and Surveying Technology	\$30		
Data Processing Technology\$10	\$10	\$10	\$10
Electromechanical Drafting\$50		7.0	420
Electronics Technology \$10	\$8		
Instrumentation and Control Technology \$10	\$8		
Laser Electro-Optic Technology\$18			
TRADES			
Air Conditioning, Heating and Refrigeration \$90	\$70	\$70	
Automotive Body Repair\$100	\$75	\$50	
Automotive Technology\$100	\$90	\$90	
Baking\$100	\$30		
Carpentry \$100 Commercial Printing \$30	\$70		
Diesel Mechanics\$100	\$130	\$130	
Electrical Trades\$100	\$85	\$150 \$50	\$50
Law Enforcement \$ 5	\$15	\$50	\$30
Machine Trades\$100	\$80	\$70	
Plumbing\$100	\$70	Ψ10	
Quantity Food Preparation\$100	\$80		
Welding	422		
COLLEGE DIVISION (Lab Fees)			
Biology 124L—Biology for Health Sciences \$15			
Biology 211L—Microbiology\$15			
Biology 247L—Anatomy and Physiology I \$15			
Biology 248L—Anatomy and Physiology II \$15			
Biology 247L—Anatomy and Physiology I\$15 Biology 248L—Anatomy and Physiology II\$15 Chemistry 112L—Introduction to Chemistry\$15 Chemistry 121L—General Chemistry\$15			



Grading

Three grading scales are used to compute cumulative* grade point average (GPA):

Preparatory Courses		Genera	l Education Co	urses	Occu	pational Courses
	GPA			GPA		GPA T
S Satisfactory	_	Α	91–100	4.0	Α	4.0
P Progress		В	81- 90	3.0	В	3.0
U Unsatisfactory	_	c l	71- 80	2.0	C	2.0
•		D**	61- 70	1.0	บ	0.0
		F	Failing	0.0		
	1	I	Incomplete	_		
		w	Withdrew	_		
,		AUD**	* Audit	_	l	
		CR****	Credit			

^{*}Cumulative GPA is based on all courses taken after a student enters a program.

****Grade given for credit by challenge exam.

REPETITION OF A COURSE: A student may choose to repeat a course for a better grade. Both grades will appear on the transcript and become a part of the cumulative GPA.

HONOR ROLL: A "Vice President's Honor Roll" is compiled each term listing students earning GPAs of 3.6 to 4.0.

^{**}A grade of D is not considered passing for a course that is a prerequisite for any other course.

^{***}An audited course does not earn credit and is not computed in the GPA. The cost is the same as for hours taken for credit. Changes from audit to credit and credit to audit must be made by the 10th day of a 15-week term or 5th day of a short term.

Standards of Progress

GRADE REPORTS: Progress reports (grades) are given at midterm in 15-week courses. These grades are not a part of the student's permanent record.

Final grades are issued at the end of each term and are reflected on the student's transcript and calculated in both a term GPA and a cumulative GPA. Grades received in Preparatory courses, however, are not included in GPA computations.

A student who receives an I (Incomplete), U (Unsatisfactory), D or F as a final grade may not enroll in any class for which the former is a prerequisite. An I is converted to a grade upon completion of the missing work. It must be removed by the end of the second week of the following term or it will be permanently recorded as an F or U.

GRADE APPEAL: Students may appeal only unsatisfactory grades—i.e. U, D or F—if they believe the grade does not reflect the quality of work done. The following steps must be followed:

- Step 1: Appeal must be made to the instructor in writing specifying the student's reasons or substantiation for the requested grade change. The appeal must be made by the end of the first week of classes in the following term. If the matter is not satisfactorily resolved at this level, the student may appeal to the department chairman.
- Step 2: Appeal to the department chairman must be made in writing by the student within five days of the instructor appeal conference. The chairman will appoint a board to hear the appeal within one week. The written decision of the board (two faculty members and one student) is final.

PROBATION AND SUSPENSION: To graduate from T-VI, a student must have a cumulative GPA of 2.0. All work attempted in the Instructional Division except Preparatory courses is used in computing GPA. Students with a GPA below 2.0 are placed on academic warning, probation or suspension as indicated below.

- Warning: A student whose cumulative GPA is between 1.50 and 1.99 in a given term will be contacted by an advisor/counselor. Advisement will include a review of the student's academic plan and recommendations to assist the student in improving the GPA.
- Probation: A student whose cumulative GPA is between 1.0 and 1.50 in a given term will be required to meet in conference with an advisor/counselor to evaluate the situation. The student will be placed on probation effective with the following term. Probation will be continued for a maximum of two terms.



• Suspension: A student whose cumulative GPA is below 1.0 in the term of probation will be suspended from T-VI for one year.

NONTRADITIONAL CREDIT: Students may earn a maximum of 30 credit hours toward General Education requirements through the following sources:

• College Level Examination Program (CLEP): Credit may be granted for the successful completion of specific subject exams for which T-VI offers an equivalent General Education course. The current acceptable exams and scores are:

CLEP Subject	Score	T-VI Course	Credits Granted
General Chemistry	52	Chemistry 121L (122L)	8
Freshman English	51	English 101	3
College Algebra	56	Math 120	3
Trigonometry	61	Math 123	2
Calculus with Elemen- tary Functions Introduction to Sociol-	60	Math 162	4
ogy Human Growth and	52	Sociology 101	3
Development	52	Psychology 220	3
American Government	55	Political Science 200	3

A student's transcript will reflect a grade of CR (credit) for those courses with acceptable CLEP scores. CR grades are not computed in the student's GPA. Courses successfully challenged may count toward graduation but not the residency requirement.

• T-VI Challenge Exams: The College Division has! developed challenge examinations for some General Education courses. A list of courses that may be challenged is available in the College Division Office, A-102 on Main Campus.

1',

To challenge a course, a student must:

—Obtain a "challenge exam form" and approval from the college advisor in the Admissions Office or a department counselor.

—Pay a \$10 per-credit-hour fee at the Cashier's Office.

—Submit the form and arrange for the exam through the College Division Office.

The following restrictions apply:

A\student may attempt a challenge only once per course.

—A student may not use the challenge exam to remove a previously recorded grade.

—A student may not challenge a course if previously enrolled in the course beyond the second week or if a grade of F was received for the course at another institution.

—A student's transcript will reflect a grade of QR (credit) for those courses successfully challenged. CR grades are not computed in the student's GPA. Courses successfully challenged may count toward graduation but not the residency requirement. Challenge exam credit may not be transferable to other post-secondary institutions.

• Correspondence: General Education credit may be granted for a maximum of three courses completed by correspondence through a regionally accredited institution.

EARLY EXIT: Students are permitted to exit early from final term occupational courses if they

have found training-related employment. Completion of final coursework is the responsibility of the student and must be arranged by the student, instructor and chairman prior to accepting employment. Students receive their final course grades at the end of the term.

PLAGIARISM AND CHEATING: A student guilty of plagiarism and/or cheating will receive a grade of F or U in the course involved and the grade will be so recorded in the transcript. Students giving or receiving assistance in any unauthorized manner during an examination subject themselves to this policy. A pattern of cheating will result in suspension.

Attendance Policies

Students are expected to attend all class sessions. Students with excessive absences may be dropped by the instructor.

Absences do not relieve students of the responsibility for missed assignments and exams. Students must take the initiative in arranging with their instructors to make up missed work.

See the Health Occupations student handbook for specific rules in those programs.

READMISSION: A student dropped for attendance reasons may apply to reenter T-VI the following term.



Financial Aid

Financial aid to pursue programs in the Instructional Division is available through several federal and state programs. Some financial aid is through agencies and some through the T-VI Financial Aid Office. Each financial aid program has its own procedures and system of determining need and eligibility.

Those aid programs for which application is made directly to the agency, rather than the T-VI Financial Aid Office, include:

VETERANS ADMINISTRATION (VA): Most full-time T-VI programs are approved for VA education and training benefits. In addition to service veterans, persons entitled to benefits include children and widows of deceased veterans and dependents of veterans with 100% disability classifications.

However, no person may be approved for VA benefits for refresher training in any course for which he or she already has required skills, regardless of where those skills were learned, without specific VA permission.

Written records of previous education and training are maintained to show appropriate credit has been given. The training program at T-VI may be shortened proportionately.

Information about eligibility for VA education benefits is available at any Veterans Administration office.

NEW MEXICO DIVISION OF VOCATIONAL REHABILITATION (DVR): Persons with disabilities may be eligible for education and training assistance from DVR. The Albuquerque offices include: (NE and SE) 5600 Domingo Rd. NE, 842-3985; (SW) 2720 Isleta Blvd. SW, 842-3243; and (NW) 2221 Rio Grande Blvd. NW, 842-3184.

EMPLOYMENT DEVELOPMENT OFFICE (EDO): Education and training assistance for unemployed or underemployed, economically disadvantaged persons is provided by this federal agency which has offices throughout New Mexico. Information is available from the nearest service center of the New Mexico Employment Security Division. The EDO Training Control Center in Albuquerque is at 1700 Fourth St. SW.

BUREAU OF INDIAN AFFAIRS (BIA): Indian students enrolled full time may be eligible for education benefits through the BIA. Applicants should

consult with their home tribal agencies for BIA funding before applying to T-VI.

Training assistance is provided for unemployed, underemployed or economically disadvantaged Indians by a community based organization, National Indian Youth Council (NIYC). Applicants should contact their tribal offices for procedures.

Applications for financial aid are available in the T-VI Financial Aid offices, located in the C Building at Main Campus or the Student Services Center at Montoya Campus. Both offices are open weekdays from 8 a.m. to 5 p.m. Most sources require federal form processing which may take up to 10 weeks. Students who need financial aid should apply early, using forms available from either Financial Aid Office at T-VI.

Programs for which application can be made at T-VI include:

PELL GRANT: U.S. citizens and eligible noncitizens who plan to attend T-VI at least half time may apply to receive this federal grant, intended to provide up to half of the student's estimated instructional costs. A student enrolled full time in an eligible program receives the full entitlement. If attending less than full time but at least half time, the student receives a partial grant. To get a Pell Grant, a student must be an undergraduate without a bachelor's degree.

Currently, the maximum yearly Pell Grant award for eligible T-VI students enrolled in occupational programs is \$930 (\$1830 for nonresidents paying tuition). For eligible students enrolled in associate degree programs, grant award amounts depend on the total tuition costs.

Students wanting to apply for both Pell Grant and other aid should use the "Financial Aid Form" published by the College Scholarship Service.

SUPPLEMENTAL EDUCATIONAL OPPOR-TUNITY GRANT (SEOG): A limited amount of SEOG federal funding is available to aid students with the highest level of need as determined on the "Financial Analysis Statement" received by the school for each student who applies and submits the processing fee.



NEW MEXICO STUDENT INCENTIVE GRANT (NMSIG or SSIG): This program, funded by 50% federal and 50% state monies, provides aid to needy, full-time students who are legal residents of New Mexico and have established need via the "Financial Analysis Statement." Amount of an SSIG is between \$200 and \$800 per year.

college work-study (cw-s): This program, funded by federal and T-VI monies, aids needy, eligible students by providing employment at the Institute. The student employee may work during available hours up to 20 hours per week. CW-s students are paid every two weeks at the federal minimum wage rate, currently \$3.35 per hour.

NEW MEXICO WORK-STUDY (NMW-\$): This program, funded by state and T-VI monies, aids needy, full-time students who are legal residents of the state by providing employment at the Institute. The student employee may work during available hours up to 20 hours per week. NMW-S students are paid every two weeks at the federal minimum wage rate, currently \$3.35 per hour.

GUARANTEED STUDENT LOAN (GSL): United States citizens and eligible noncitizens may apply for the GSL if enrolled at least half time in an eligible program consisting of at least 600 clock hours of instruction. Pell eligibility must be determined prior to school certification of a GSL application. Maximum loans are \$2625 a year.

New Mexico residents may select a lender from a state lender list available in the Financial Aid offices. Out-of-state residents may apply for the GSL through their state lenders or select certain lenders recommended by the Financial Aid offices. Eligibility for GSL funds is based on federal guidelines, need as established by the "Financial Analysis Statement," and the student remaining in good standing at T-VI.

Upon leaving school or ceasing to attend at least half time, the borrower must begin to repay the loan within six months. The current interest rate is 8% and minimum payments are \$50 a month.

NEW MEXICO NURSING STUDENT LOAN (NMNSL): The NMNSL is a program for New Mexico residents enrolled in a nursing educational program preparing for an associate degree in nursing. Students must show need as established by the "Financial Analysis Statement." Maximum loans are \$2500 per year. Loans can be repaid with service in an underserved area within the state.

TERMINATION OF FINANCIAL AID: Campus-based financial aid will be terminated whenever a student is no longer making satisfactory progress at T-VI. A student is considered no longer making satisfactory progress when any of the following conditions occur:

- The student's most recent major or preparatory program has final grades averaging less than C (2.0 grade point average). Grade point values for financial aid eligibility are: A=4, B=3, S=3, C=2, P=2, D=1, F=0, U=0, I=0. W, AUD and CR have no value. The average is computed by multiplying each final grade point value by the number of credit hours totaling all grade points, and dividing the total points by the total number of credit hours for which there are final grades.
- The student's last two terms at T-VI have resulted in transcript credit for less than 50% of the full-time program requirements for those two terms.
- The student has not completed an occupational major within a reasonable number of terms (no more than two extra terms in a four-term major or one extra term in any other major).
- The student has not completed an associate degree major within three years.
- The student goes on full-time supervised work experience.
- The student is making a second change of majors at T-VI. (No financial aid will be approved to enroll in the third program.)

REINSTATEMENT: A student who believes termination of financial aid was based on inaccurate or incomplete information may appeal the termination in writing to the financial aid administrator.

A student terminated from financial aid can reestablish eligibility for financial aid by successfully removing the condition which caused the termination.



Student Records

Permanent records are kept for each Instructional Division student. The transcript shows all courses taken, hours and credits for the courses, final grades and supervised work experiences. Proficiency ratings are included in permanent records.

At registration, most students authorize T-VI to provide confidential copies of transcripts to employers and other educational institutions. Students not wanting this service may indicate on the transcript at any time by making a request in writing to the Main Campus Records Office or the Student Services Center at the Montoya Campus.

Students may examine any documents in their cumulative records at the Records Office. Free copies of transcripts are provided to students and former students on request. All other uses of student records are in accordance with the Federal Family Educational Rights and Privacy Act of 1974 and its amendments. Copies of the law are available for examination upon request in the Records Office at Main Campus and the Student Services Center at Montoya Campus.

Graduation

DEGREE REQUIREMENTS: All students enrolled in degree programs must meet the following general requirements:

- A minimum of 60 credit hours (most programs require more).
- A minimum of 15 credit hours in residency after a degree becomes available.
 - A minimum cumulative GPA of 2.0.
- A minimum of 15 credit hours in General Education courses.

In addition, students must satisfactorily complete all core requirements for their specific majors.

GRADUATION WITH HONORS: Students earning cumulative GPAs of 4.0 graduate "with highest honors." Students with cumulative GPAs of 3.6 to 3.9 graduate "with honors." Degrees and certificates note these awards.

DEGREES AND CERTIFICATES: Students enrolled in degree programs will receive an Associate in Science (AS) or Associate in Applied Science (AAS) degree upon completion of all requirements. Students in degree programs who complete all certificate requirements may apply for a certificate without changing their status. Certificates are awarded *en route* to the degree, if applicable.

GRADUATION CEREMONY: A graduation ceremony is held once a year at the end of the winter term for all students who have successfully completed certificate or associate degree programs during the preceding year. Any graduate may take part in the ceremonies by paying a \$15 fee. The fee covers the cost of cap and gown rental and must be paid to the Records Office by March 16.

APPLICATION FOR GRADUATION: Students in associate degree programs or certificate programs of three or more terms must complete an "Application for Graduation" form in the term preceding the graduation term. Forms are used to determine eligibility, and must be submitted no later than the 10th week of the preceding term. Students in certificate programs of two terms or fewer do not have to complete the forms.

Application forms are available in the department counselors' offices and must be returned there. If a student is determined ineligible for graduation, a copy of the form with reasons for ineligibility will be returned to the student.

COLLEGE DIVISION

The College Division, one of six instructional departments at T-VI, provides General Education courses in the liberal arts and sciences to support degree programs. These courses are transferable as freshmen and sophomore electives or requirements at other degree-granting institutions.

All College Division courses have a tuition charge. Science courses also have lab fees (see page 16). Some courses carry prerequisites or corequisites.

General Education

COURSE DESCRIPTIONS

COMMUNICATIONS

0800140—English 101—Writing with Readings in Exposition (3 cr)

This course covers expository writing and reading. It concentrates on organizing and supporting ideas in writing.

0800150-English 102-Analytic Writing (3 cr)

(Prerequisite: English 101 with a minimum grade of C) Sudents undergo intensive practice writing essays that analyze expository and literary readings.

0800249—English 119—Technical Communications (3 cr)

(Prerequisite: English 101) This is an introductory study of written and verbal communications. Topics covered include descriptive and process analysis, informal reports and proposals, short logs/reports for lab and field work, basic production of graphics, letter writing and oral presentation.

0800446—Speech 130—Public Speaking (3 cr)

Emphasis is on the dual role of speech as both a speaking and listening skill. Individual speeches and group discussion are included. Practice is provided through audience analysis, verbal/nonverbal expression, critical listening and oral presentations.

0800169—Speech 221—Interpersonal Communication (3 cr)

This course provides an analysis of a variety of interpersonal communication concepts with special emphasis on the application of communication skills that improve interpersonal relationships in different situations.

0800447—Speech 240—Organizational Communication (3

Current theories of organizational behavior are examined with emphasis on communication patterns and practices. Attention is given to superior-subordinate communication, formal and informal communication networks, authority and power.



MATHEMATICS

0800137—Math 145—Introduction to Probability and Statistics (3 cr)

(Prerequisite: Math 120) This course provides an introduction to basic concepts in probability and statistics. Included are analysis of numerical data and descriptive statistics, probability and basic probability models for statistics, sampling and statistical inference, and techniques of statistical inference by examples from a variety of fields. Demonstrations of the use of the computer in statistics are provided.

0800138-Math 120-Intermediate Algebra (3 cr)

Topics covered include linear equations and inequalities, polynomials, factoring, exponents and radicals, fractional expressions and equations, and quadratic equations. (This course is preparation for Math 150.)

0800468-Math 123-Trigonometry (2 cr)

(Prerequisite: Math 120 with a minimum grade of C) Trigonometric functions, radian and degree measure, graphs, basic trigonometric identities and inverse trigonometric functions are covered.

0800139-Math 150-Algebra and Trigonometry (4 cr)

(Prerequisite: Math 120) This course is a study of functions with emphasis on graphs, equations, inequalities, and exponential, logarithmic and trigonometric functions. (This course is preparation for Math 162.)

0800143-Math 162-Calculus I (4 cr)

(Prerequisite: Math 150) This course includes a study of derivatives; rate of a function; formal differentiation relative to rational functions, inverse and trigonometric functions; increment of a function and the concept of continuity; applications of the derivative, such as curve sketching, maxima and minima; integration, relation between derivative and integral, finding the area between two curves, and calculating volumes.

0800144---Math 163---Calculus II (4 cr)

(Prerequisite: Math 162) This course covers differentiation and integration techniques with applications involving transcendental functions; numerical integration techniques, solving simple differential equations, improper integrals and application of the mean value theorem.

SOCIAL SCIENCE

0800467—Anthropology 120—Archaeology: Discovering Our Past (3 cr)

This introductory course presents students with an overview of archaeological theory and methods including data from selected archaeological sites in various geographical areas representing different time periods.

0800412—Anthropology 130—Cultures of the World (3 cr)

This course introduces students to basic concepts of cultural anthropology. Lectures include a survey of the variety of existing human cultures in their native environments and the relationships of the cultural components. One societal example is studied in detail.

0800413—Anthropology 201—Introduction to Southwestern Anthropology (3 cr)

The archaeology of the southwest is presented from the earliest inhabitants through the early 1600's.

0800363—History 161—History of the United States I (3 cr)

This is a survey of the economic, political, intellectual and social development of the United States from 1607 to 1877.

0800364—History 162—History of the United States II (3 cr)

A continuation of History 161, this course covers the period from 1877 to the present.

0800365—History 260—History of New Mexico (3 cr)

The history of New Mexico is covered from Cabeza de Vaca to 1912. The borderlands, Spanish, Indian and Anglo contributions are studied.

0800260-Political Science 110-The Political World (3 cr)

This introduction to politics emphasizes how people can understand their own political systems and those of others.

0800261-Political Science 200-U.S. Politics (3 cr)

This is a survey of American politics including the theory of democracy and political institutions, the electorate, and American governmental branches and their bureaucracies.

0800168—Psychology 101—General Psychology I (3 cr)

An introduction to basic processes underlying behavior, this course focuses on principles of learning, memory and motivation, language, states of awareness and biological bases of behavior.

0800483—Psychology 102—General Psychology II (3 cr)

An introduction to patterns of human behavior, this course focuses on human growth and development, intelligence, personality, social psychology, abnormal behavior and therapy.

0800651—Psychology 220—Developmental Psychology (3 cr)

(Prerequisite: Psychology 101 or 102) This course is a study of the stages and processes of the development of physical, social, emotional and intellectual aspects of human personality starting from conception and leading to old age. Emphasis is placed on pertinent research and practical applications.

0800484—Sociology 101—Introduction to Sociology (3 cr)

This course covers the basic concepts, topics and theories of contemporary sociology.



0800223-Sociology 111-Criminal Justice System (3 cr)

An overview of the criminal justice processes is provided including an exploration of law, law enforcement, prosecution, defense, trial and sentencing.

0800478-Sociology 211-Social Problems (3 cr)

(Prerequisite: Sociology 101) This course provides an analysis of social problems in contemporary U.S. society—racism and prejudice, crime and delinquency, mental disorders and drug abuse from a sociological perspective.

0800479—Sociology 212—Juvenile Delinquency (3 cr)

(Prerequisite: Sociology 101) Topics covered in this course include the characteristics of the delinquent youth under the age of criminal adulthood, theories of causation and related empirical research.

0800482—Sociology 213—Criminology (3 cr)

(Prerequisite: Sociology 101) The causes of crime are covered with emphasis on sociological factors, the various faces of crime, the criminal, and past and present criminology theory.

0800489-Sociology 214-Sociology of Corrections (3 cr)

(Prerequisite: Sociology 101) This course covers the theory, practice and legal basis for the investigation, treatment and supervision of offenders in custody and on probation or parole. Included are the history of penology and its relationship to various penal philosophies.

0800487—Sociology 216—Ethnic and Minority Groups (3 cr)

(Prerequisite: Sociology 101) This course is the study of ethnic and racial groups, conflict and adjustment, cultural differences, theories of prejudice and current trends and problems in our global society.

0800488-Sociology 280-Social Science Research (3 cr)

(Prerequisite: Sociology 101) The methodology of experimental science is applied to the social sciences in this course. Topics include the study of methodologies of data collection and analysis. Library resources, including legal citations, are used.

HUMANITIES

0800485-Humanities 111-Humanities I (3 cr)

The student is given a comparative introduction to the development of human civilizations emphasizing philosophic thought, religious practice, artistic expression and scientific achievement.

0800374—Humanities 150—Study of Literature (3 cr)

An introduction to the study and appreciation of literature, this course shows how understanding writers' techniques increases reading enjoyment and relates these techniques to literary conventions.

0800513—Philosophy 156—Logic and Critical Thinking (3 cr)

This course provides the tools of reason which are helpful in everyday decision-making. It also introduces skills for argument analyses and effective communication of ideas. Informal fallacies and formal deductive systems are included.

0800516—Philosophy 245—Biomedical Ethics (3 cr)

This course examines ethical problems associated with the fields of medicine and bio-research. Moral issues such as enthanasia, genetic experimentation, informed consent and abortion are viewed from widely different moral perspectives.

0800486-Philosophy 245-Business Ethics (3 cr)

Ethical problems associated with the field of business are examined. Moral issues such as insider trading, conflict of interests, employer/employee relations and "whistle-blowing" are viewed from widely different moral perspectives.

0800515-Philosophy 245-Engineering Ethics (3 cr)

Ethical problems associated with the field of engineering are examined. Moral issues such as experimentation in engineering, safety, confidentiality, professional rights and obligations, and career choice are viewed from widely different moral perspectives.

NATURAL SCIENCE

0800544—Biology 123—Biology for Health Sciences (3 cr) (Corequisite: Biology 124L) Principles of cell biology, cell chemistry, genetics and organismic biology are studied with an emphasis on human systems.

0800545—Biology 124L—Biology for Health Sciences/Lab (1 cr)

(Corequisite: Biology 123) Laboratory exercises, demonstrations and dissections related to cell biology, organ systems and genetics are conducted.

0800550—Biology 201—Microbiology for Health Sciences (3 cr)

(Prerequisites: Biology 123 and 124L or permission of instructor; corequisite: Biology 211L) Through lecture instruction, this course introduces the concepts of microbiology, hostparasite relationships, infection and immunity.

0800551—Biology 211L—Microbiology Lab for Health Sciences (1 cr)

(Prerequisites: Biology 123 and 124L; corequisite: Biology 201) In three-hour-per-week laboratory sessions, students study laboratory techniques with microorganisms and observe the growth of microorganisms, control and sanitation procedures.

0800546—Biology 237—Anatomy and Physiology I (3 cr)

(Corequisite: Biology 247L) This course is an introduction to basic anatomy and physiology with an emphasis on normal anatomical structure and function.

0800547—Biology 247L—Anatomy and Physiology I Lab

(Corequisite: Biology 237) This course provides laboratory experience studying cells, tissues and human systems. Dissection of specimens is included.

0800548—Biology 238—Anatomy and Physiology II (3 cr)

(Corequisite: Biology 248L) This course is a continuation of Biology 237 emphasizing physiological processes, both normal and abnormal.

0800549—Biology 248L—Anatomy and Physiology II Lab

(Corequisite: Biology 238) This course provides laboratory experience focusing on measurement of physiological parameters and dissection of mammal specimens.

0800552—Chemistry 111—Introduction to Chemistry (3 cr)

(Corequisite: Chemistry 112L) This course is designed for non-science majors in the health sciences. Instruction is provided in the basic concepts of chemistry.

0800553—Chemistry 112L—Introduction to Chemistry/Lab (1 cr)

(Corequisite: Chemistry 111) Laboratory instruction, demonstration and experimentation are the focus of this course.

0800554-Chemistry 121L-General Chemistry (4 cr)

(Prerequisite: Math 120 or Math 150 with a minimum grade of C) Students are introduced to the chemical and physical behavior of matter through lecture and laboratory instruction.

0800555-Physics 160-General Physics (4 cr)

(Pre- or corequisite: Math 162) A study of mechanics and sound waves is offered in this course. Topics include Newton's law of motion, force, moments, friction, work, energy, power, momentum and longitudinal wave properties.

0800379—Physics 167—Problems in General Physics (1 cr)

(Corequisite: Physics 160—offered on an audit basis only) Students participate in problem-solving sessions and demonstrations related to Physics 160.

GENERAL ELECTIVES

0800556-Home Economics 125-Nutrition (3 cr)

This is a study of the basic principles of nutrition including the impact of nutrition on body functions, total health and life style.

0800101—Computer Science 101—Computer Literacy (3

This introductory course provides lecture and laboratory instruction in the use of computers. Lecture topics emphasizeunderstanding of how computers work. Lab time covers the basics of software application.

DEVELOPMENTAL STUDIES DEPARTMENT

Preparatory Program

1 or 2 Terms

The Preparatory Program offers a variety of courses designed to help students meet admission requirements for certificate programs, associate degree programs, the University of New Mexico, and for refresher purposes. Pre-GED courses are available for students who are preparing for the General Educational Development test.

Occupational preparatory courses are designed to provide the skills needed in the first term of certificate programs. College preparatory courses (100 level) are designed to meet general academic requirements. Students may combine a program of both occupational and college prep courses to best meet postsecondary goals. Not all combinations of occupational and college prep courses qualify for some types of financial aid, however.

Students in certificate and associate degree programs also are eligible to enroll in any of the Preparatory Program courses. Support courses are available to help students be more successful in school and on the job.

Preparatory courses are graded S, P, U. They do not earn credit toward certificate or associate degree programs at T-VI, or degree programs at the University of New Mexico. However, grades are recorded in Preparatory students' permanent records. Students are not permitted to audit Preparatory courses.

To be a full-time student and qualify for financial aid, a student must enroll for at least 12 credit hours in the Preparatory Program, but 15 credit hours is the recommended course load. Students may sign up for as many credit hours as they need.

Preparatory Program classes for all majors except Commercial Printing are held at Main Campus. Commercial Printing prep classes meet at the Montoya Campus where that major is located.

Several Preparatory Program courses are also scheduled at night. More information is available from counselors at either the Main or Montoya Campus.

PREPARATORY PROGRAM

	Hrs	Cr
Recommended Schedule	Wk	Hrs
Mathematics	10	6
Communications	5	3
Survey	5	3
Instead of communications, students wi	th low	raad
ing test scores should take one of th		
courses:	·	Ŭ
Language Development	10	6
Prep Language	10	6
Students needing to remove American	College	e Test
(ACT) deficiencies should select from to	he follo	wine
courses:	,	
Math 100-Introductory Algebra	10	6
English 100—Writing Standard		Ū
English	5	3
Social Science 100—Introduction	_	_
to Social Sciences	5	3
Natural Science 100—Introduction	_	•
to Natural Sciences	5	3
Support Courses		
Reading Improvement	5	3
Prep Reading	5 5 5 5 5 5 5	
Introduction to Typing	5	3
Introduction to Physics	5	3
Spanish for Beginners	5	3
Thinking Strategies	5	3
Writing Lab	5	3
General Science	5	3
Calculator Math (71/2 weeks)	5	3 3 3 3 3 3 2 3
Refresher Math (6 weeks)	15	3
Pre-GED Courses:		
Prep Math (ABE)	10	6
Language Development (ABE)	10	6
Reading Improvement (ABE)	5	3

COURSE DESCRIPTIONS

MATHEMATICS

Preparatory students are placed in math courses that best meet their needs, interests and abilities. The results of a math advisement test and/or the math section of the ACT (ACT-M) are used to assist in determining appropriate math placement. Math classes meet two hours per day except as otherwise noted.

0010090-Prep Math I (6 cr)

This course helps students improve basic math skills—whole numbers, fractions, decimal fractions, decimal/fraction conversions, decimal/fraction/percent conversions and percents. Students progress at their own rates to acquire entry-level math skills for Prep Major Math for their occupational majors or Math 100.

0010120-Prep Math II (6 cr)

(Prerequisite: Prep Math I) This course is for students who progressed satisfactorily in Prep Math I but have not completed the requirements for transfer into Prep Major Math for their occupational majors or Math 100.

0008443-Prep Math (ABE) (6 cr)

This course is for pre-GED students enrolled in the Adult Basic Education (ABE) program. The content is the same as Prep Math I but is designed specifically to prepare students for the math portion of the GED test.

0010 Series—Prep Major Math I for Health Occupations, Business Occupations, Culinary Arts, Technologies or Trades (6 cr)

This course begins with an overview of basic mathematics and includes special or advanced topics needed for the student's selected major. Students progress at their own rates with the objective of meeting—or exceeding—entry-level mathematics skills for their selected majors.

0010 Series—Prep Major Math II for Health Occupations, Business Occupations, Culinary Arts, Technologies or Trades (6 cr)

(Prerequisite: Prep Major Math I) This course is for students who progressed satisfactorily in Prep Major Math I but have not completed the entry-level mathematics requirements for transfer into their selected occupational fields.

0010128-Math 100-Introductory Algebra (6 cr)

Introductory algebra is for students who are not prepared to enter intermediate algebra. Satisfactory completion of Math 100 signifies that the student is prepared to enroll in Math 120. Depending on math ability, a student may be required to complete satisfactorily the Prep Math course prior to enrolling in Math 100.

0010240-Calculator Math (2 cr)

This 71/2-week introductory course, offered twice each term, features scientific and technical operations on Sharp and Hewlett-Packard calculators. Designed primarily for students in or preparing for Technologies or Trades, the course includes algebraic operating method, reverse operating logic, introduction to programming, hexadecimal/decimal conversions, trigonometric functions and coordinate systems, logarithms, multiple memory problems, and applications for mathematics, physics, electronics and mechanics. Class meets one hour per day. This course is not eligible for Veterans Administration benefits.

0010125-Refresher Math (3 cr)

This is a six-week review of Introductory Algebra (Math 100). Offered only during the summer term, the course includes basic arithmetic, operations on numbers and polynomials, linear equations, factoring, measurement and formulas. Class meets three hours per day. This course is not eligible for Veterans Administration benefits.

COMMUNICATIONS

Communication courses are offered on three levels. Prep Language is an intensive course designed for students with limited English proficiency. Language Development is an individualized course including the four basic communication skills: speaking, listening, reading and writing with emphasis on spelling, writing and good English usage. On the highest level, emphasis is on occupational applications of all four skills as they relate to the student's intended major.

0010461—Prep Language I (6 cr)

This is an intensive course in English. Students with limited English proficiency will acquire effective speaking and listening skills necessary for successful participation in T-VI preparatory communications and survey courses. Class meets two hours per day.

0010463-Prep Language II (6 cr)

(Prerequisite: Prep Language I) This course is for students who progressed satisfactorily in Prep Language I but did not attain a level of communication skills necessary to transfer into preparatory reading, communication and survey courses. Class meets two hours per day.

0010471-Language Development I (6 cr)

This class helps students improve basic communications skills—speaking, listening, reading and writing—on an individual basis. It helps them to follow oral and written instructions accurately and write, spell and use English correctly. Class meets two hours per day.

0010470—Language Development II (6 cr)

(Prerequisite: Language Development I) This course is for students who progressed satisfactorily in Language Development I but did not attain the skills required to transfer into a preparatory reading course or the vocational field selected. Class meets two hours per day.

0008444—Language Development (ABE) (6 cr)

This course is for pre-GED students who are enrolled in the Adult Basic Education (ABE) program. The course objectives are the same as for Language Development I, but the course is designed specifically to prepare students for the GED reading class or Reading Improvement (ABE). Class meets for two, hours each day.

0010 Series—Communications for Majors in Health Occupations, Business Occupations, Culinary Arts, Technologies or Trades (3 cr)

Students improve speaking, listening, reading and writing skills as related to their chosen fields. They also learn reference and study skills and the technical vocabulary for their chosen programs.

0010 Series—Survey of Majors in Health Occupations, Business Occupations, Culinary Arts, Technologies or Trades (3 cr)

Students learn more about the majors they have selected—job expectations, job availability, methods, materials and operations of each field. This course is not eligible for Veterans Administration benefits.



0010462-Prep Reading I (3 cr)

This course complements Prep Language. Students with limited English proficiency develop effective reading and writing skills which help them become successful participants in T-VI preparatory reading courses.

0010464-Prep Reading II (3 cr)

(Prerequisite: Prep Reading I) This course, as a complement to Prep Language II, is for students who progressed satisfactorily in Prep Reading I but did not develop effective reading and writing skills necessary for successful preparatory reading and communication courses.

0010490-Reading Improvement (3 cr)

This course helps students improve reading, vocabulary and comprehension skills. All T-VI students are encouraged to take this course. Performance objectives are mastered in word study, comprehension, study skills, applied skills, spelling and vocabulary building. After midterm, occupationally-related materials are a part of required reading.

0008445-Reading Improvement (ABE) (3 cr)

This course is for pre-GED students enrolled in the Adult Basic Education (ABE) program. The performance objectives are the same as for Reading Improvement, but the course is designed specifically to prepare students for the reading portion of the GED test.

0010 Series—Reading for Business Occupations, Technologies or Trades (3 cr)

This course is designed to help students build vocabulary and increase comprehension particularly in materials directly related to their chosen certificate or associate degree programs. It is recommended both for prep students and those enrolled in a major.

0010808-Introduction to Typing (3 cr)

This course is for students who want or need to learn typewriting or general keyboarding skills. Students in Business Occupations majors who have unique difficulties in learning typewriting are encouraged to enroll. The course also is recommended for students preparing for Data Processing and other majors requiring keyboard skills. This course is not eligible for Veterans Administration benefits.

0010501-Introduction to Physics (3 cr)

This survey course is designed for students who plan to enter most Trades or Technologies majors. Introduced are basic concepts of work and energy, matter, forces, friction, heat, light, electricity, sound and motion. The course creates an understanding of physics and its place in modern technology.

0010492-Spanish for Beginners (3 cr)

Conversational Spanish for non-Spanish-speaking students who will be working in a bilingual society is taught in this class. Information about the Spanish culture and an appreciation of its customs and traditions are included. This course is not eligible for Veterans Administration benefits.

0010493-Spanish for Beginners II (3 cr)

(Prerequisite: Spanish for Beginners I) A continuation of Spanish for Beginners I. Offered on demand. This course is not eligible for Veterans Administration benefits.

0010809-Thinking Strategies (3 cr)

This course is for students who want to improve their general thinking abilities. Several thought processes are explored and applied to general problem-solving situations, math, word problems, standardized testing, and group processes. The course is especially recommended for students preparing for Data Processing, Accounting, Electronics and other majors dealing with trouble-shooting, and for students weak in math.

0010491-Writing Lab (3 cr)

This course emphasizes practice in clarity, brevity and control. Assigned exercises reflecting a student's selected major are evaluated frequently. A good understanding of the four communication skills—speaking, listening, reading, writing—and a sixth-grade reading level are required.

0010502—General Science (3 cr)

This course is designed especially for students preparing for Health Occupations majors, but other students are invited to enroll. The course surveys basic physics, chemistry and biology with minimal use of mathematics.

0010130-English 100-Writing Standard English (3 cr)

Intensive study of grammar, syntax, punctuation and usage is included, with concentrated practice in writing paragraphs. Satisfactory completion of English 100 signifies that the student is prepared to enter English 101. Depending on reading and writing abilities, a student may be required to complete satisfactorily the Language Development course prior to enrolling in English 100.

0010145—Social Science 100—Introduction to Social Sciences (3 cr)

This is an intensive skills improvement course in communications, reading comprehension, study techniques, and logical reasoning which are required for further study in social sciences. Included is an interdisciplinary introduction to anthropology, economics, history, philosophy, political science and psychology. Satisfactory completion of Social Science 100 signifies that the student is prepared to enter the introductory course in any of the social science disciplines. Students enrolled in Language Development must satisfactorily complete that course prior to enrollment in Social Science 100.

0010785-Employability Skills (3 cr)

This course is designed to make the student job-conscious, self-assured and well-prepared for employment. Units include self-assessment, résumé writing, applications, interviewing techniques, on-the-job training, work samples, business vocabularies, writing and composing letters, career exploration, human relations, community resources and job market information.

0010795—Targeted Instruction I (3 cr)

This course provides intensive, individualized instruction to students who have potential for participation in occupational majors or academic programs but need concentrated help to complete the Preparatory Program. Students receive daily, individualized tutoring in a classroom setting.

0010800—Targeted Instruction II (3 cr)

This course provides intensive, individualized instruction for second-term students who continue to need concentrated assistance in order to complete the program.

0010741—Pretraining for Trades (3 cr)

This course provides preliminary exposure to industrial safety concepts, tool identification and use, and other trades-related skills. It is designed for students who have potential for and have selected a Trades major.

001046—Natural Science 100—Introduction to Natural Sci-

This is an intensive skills improvement course in observation, measurement, classification, space-time relationships, communications, reasoning, and comprehensive study techniques which are required for further study in natural sciences. Included is an interdisciplinary introduction to biology, chemistry, physics and earth sciences. Successful completion of Natural Science 100 signifies that the student is prepared to enter the introductory course in any of the science disciplines. Students enrolled in Language Development must satisfactorily complete that course prior to enrollment in Natural Science 100.

Special Services

(Main Campus)

The Special Services program is designed to meet the needs of handicapped students enrolled at T-VI. Services are provided to prepare the handicapped student for participation in the world of work and higher education.

At the Developmental Studies level, career counseling, individual program planning, vocational assessment, ancillary services, coordination with community support agencies, and individualized instruction are provided. For students enrolled in certificate and associate degree programs, limited curriculum adjustments are made to accommodate handicapping conditions. Follow-up services, such as counseling, tutoring and job-seeking help, are provided.

Handicapped students entering T-VI through Developmental Studies take regular Preparatory courses and are eligible for placement in specially designed support courses.

Referral to Special Services can be arranged through the student's department counselor/advisor, support agency, admissions counselor/advisor, dr directly by the interested student.

	Hrs	C
Support Courses	Wk	Hrs
Mathematics	10	ď
Language	10	₫
Employability Skills	5	3

Targeted Instruction..... 3 Pretraining for Trades.....

COURSE DESCRIPTIONS

0010810-SS Prep Math I (6 cr)

This course provides small group instruction in basic mathematics skills-whole numbers, common fractions, decimal fractions, percents and conversions. The student is placed in a self-paced, individualized, programmed math unit. Students who make sufficient progress are moved into regular preparatory courses. The class meets two hours each day.

0010147-SS Prep Math II (6 cr)

(Prerequisite: SS Prep Math I or Prep Math I) This course is for students who have progressed satisfactorily in SS Prep Math I or Prep Math I but have not completed the requirements for Prep Major Math or Math 100. The class meets two hours per day.

0010784—SS Language I (6 cr)

Small group instruction is provided in basic communication skills-spelling, reading, writing, speaking and listening. The course helps students follow oral and written instructions accurately and write and use English correctly. Students who make sufficient progress are transferred to regular preparatory courses. The class meets two hours per day.

0010148—SS Language II (6 cr)

(Prerequisite: SS Language 1 or Language Development 1) This course is for students who have progressed satisfactorily in SS Language I or Language Development I but have not attained the skills required to transfer into a regular preparatory reading course or the occupational or academic field selected. The class meets two hours per day.

BUSINESS OCCUPATIONS DEPARTMENT



Business Occupations Learning Centers

(Main and Montoya Campuses)

The BOLCs serve T-VI students and members of the public who want to review or learn a particular subject or skill individually.

Students may begin using these centers at any time during a term and stop when personal goals have been met. Instruction is offered on new equipment including electronic typewriters, electronic calculators, transcribing machines, word processors, microcomputers and audiovisual training aids. Hours are arranged to suit individual needs when equipment is available.

The Main Campus center, Room B-210, is open from 7:20 a.m. to 9 p.m. Monday through Thursday, 7:20 a.m. to 5 p.m. Friday, and 10 a.m. to 2 p.m. Saturday. For information, phone 842-6219.

The Montoya Campus center, Room H-127, is open from 8 a.m. to 8:30 p.m. Monday through Thursday and 8 a.m. to 4 p.m. Friday. For information, phone 298-5461.

The fee is \$20 per course.

SUBJECT/SKILL AREAS

Typing I Typing II

Typing III, Montoya Campus Alphabetic Shorthand I Century 21 Shorthand I, Main Campus Forkner Shorthand I Gregg Shorthand I Gregg Shorthand II Machine Shorthand Shorthand Review Shorthand Speedbuilding Telephone Techniques Communications Review Proofreading Business Mathematics Fundamentals Business Mathematics II Business Mathematics III, Main Campus Electronic Calculating Accounting Fundamentals Records Management Machine Transcription Medical Transcription Legal Transcription Cash Register Operation Microcomputer Courses Lotus 1-2-3, Word Processing Labs Word Processing, Main Campus, Word Processing Lab Word Processing, Montoya Campus, BOLC

COURSE DESCRIPTIONS

Typing I

Typing I is an excellent audiovisual course for beginners or for those who need a review of basic techniques and business applications. The content emphasizes business letters, reports and tables.

Typing II

(Prerequisite: Typing I or placement test) This continuation of Typing I emphasizes speed, accuracy and production.

Typing III

(Prerequisite: Typing II or placement test) This course is a continuation of Typing II with additional speedbuilding and more complex production tasks including abstracted tables, line justification and secretarial projects.

Alphabetic Shorthand I

This shorthand system uses alphabetic characters. Students learn to read, write and transcribe shorthand notes.

Century 21 Shorthand I

Students learn to read, write and transcribe this symbolic shorthand system.

Forkner Shorthand I

Students learn to read, write and transcribe this combination alphabetic and symbolic shorthand system.

Gregg Shorthand I

All theory and brief forms leading to the ability to read, write and transcribe Gregg shorthand are learned.

Gregg Shorthand II

(Prerequisite: Ability to write Gregg shorthand at 50 words per minute and transcribe into mailable form) Theory and brief forms are reviewed with emphasis on dictation and transcription.

Machine Shorthand

This course offers an introduction to this alternative shorthand system and provides a foundation for career growth in the courts.

Shorthand Review

This course is for students who have typing and shorthand skills but need review and speedbuilding.

Shorthand Speedbuilding

This course is for individuals who have learned a shorthand theory system and want to concentrate on building dictation speed.

Telephone Techniques

Familiarization with accepted telephone manners and practices is the objective of this mini-course.

Communications Review

Instruction is in grammar, spelling and punctuation.

Proofreading

This course creates an awareness of the most common types of errors in written messages and the standard marks for correcting them.

Business Mathematics Fundamentals

This course provides a review of the fundamental arithmetic operations in solving business problems.

Business Mathematics II

(Prerequisite: Placement test) The mathematics of interest, marketing, payroll and taxes are included in this course.

Business Mathematics III

(Prerequisite: Business Mathematics II or placement test) This course includes the mathematics for business ownership, depreciation, compound interest, investments and statistics.

Electronic Calculating

Skill is developed on electronic calculators using the touch method. This course is designed to assist students in acquiring competence in business applications.

Accounting Fundamentals

This course gives the student a basic understanding of accounting principles and their application.

Records Management

Basic principles of alphabetic, numeric and geographic filing are covered.

Machine Transcription

(Prerequisites: Demonstrated English proficiency and 50 words per minute typing skill) Instruction is provided in the use of transcribing machines to prepare mailable business correspondence.

Medical Transcription

(Prerequisites: Machine Transcription and 50 words per minute typing skill) This course develops familiarity with medical terminology and transcription.

Legal Transcription

(Prerequisites: Machine Transcription and 50 words per minute typing skill) Familiarity with legal terminology, forms and transcription is developed.

Cash Register Operation

Cash register operation and procedures for handling cash, checks and credit card transactions are covered.

Microcomputer Courses

Courses available are Computer Literacy, Keyboarding, BA-SIC Programming, Word Processing, Electronic Spreadsheet and Database Management. Computer Literacy is a prerequisite for all other microcomputer courses listed above.

Lotus 1-2-3

Lotus concepts are taught through the use of exercises and cases. The exercises range from simple to complex and include the use of functions and commands such as statistical, database, date arithmetic, data tables and keyboard macros.

Word Processing

(Prerequisites: English proficiency exam, Machine Transcription and 50 words per minute typing skill) Training is on various word processors with emphasis on the capabilities and mechanics of the machines.

Business Assistance Center

The Business Assistance Center provides training, consulting and referrals to small business owners and prospective owners. The center contains resource materials such as self-paced instructional programs, reference books, periodicals and computer hardware and software. Consulting, which includes on-site visitations, is provided to qualified applicants.

The center also acts as a business referral service to help business owners and prospective owners locate other service providers from both private and public sectors. These services are available to the community; however, enrollment in a training program may be required.

The Business Assistance Center is located in the Business Occupations Building, Main Campus, 717 University SE. Hours are Monday through Friday, 8 a.m. to 5 p.m., telephone 848-1650.

(both required)



CONTINUING EDUCATION DIVISION COURSE SUBSTITUTIONS

Enrolled Instructional Division students, or those who have dropped out of a Business Occupations program but plan to return in a later term, may substitute certain courses in T-VI's Continuing Education Division for some certificate requirements.

Classes which may be substituted are marked with a ## in the Continuing Education Division section of this catalog. The courses are:

Continuing Education Division Course	Instructional Division Program	Substitutes for:
Auditing	Accounting	Auditing
Alphabetic Shorthand (50 wpm required)	Office Occupations	ABC Shorthand I
Beginning Shorthand (50 wpm required)	Office Occupations	Gregg Shorthand I
Intermediate Shorthand (70 wpm required)	Office Occupations	Shorthand II
Beginning Typing, Intermediate Typing (both required) (50 wpm required)	Office Occupations	Typing Lab I
Business Mathematics, Electronic Calculators and Filing (both required)	Accounting and Business Administration	Accounting Math/ Calculators
Small Business Management	All BOD Programs	Principles of Management
Small Business Law	All BOD Programs	Business Law
Salesmanship	Business Administration	Salesmanship
Human Relations and Personnel Development	All BOD Programs	Human Relations
Accounting I and II	Accounting and Business Administration	Accounting Principles I
Accounting I	Office Occupations	Secretarial Accounting
Secretarial Accounting	Office Occupations	Secretarial Accounting
Income Tax Accounting	Accounting	Tax Accounting I
Microcomputing Today	Accounting and Business Administration	Introduction to Computer Concepts
Microcomputing Today	Office Occupations	Information Processing Concepts
Business Mathematics, Electronic Calculators and Filing	Office Occupations	Business Math/Calculators

Accounting

4 Terms (Main and Montoya Campuses)

Accounting is an excellent field for persons looking for a challenging career that has good potential for advancement.

Students in this program may earn an associate degree or certificate. The degree is awarded to students who complete both vocational and General Education courses. A certificate is awarded to students who complete the vocational component plus additional specified courses. Proficiency certificates are awarded for each course completed.

Students have an employable skill after completing all courses listed under Terms I and II. A student leaving the program at this point will receive a bookkeeping certificate if the request is made within 12 months of the exit date.

Students may select from a number of support courses, at least two of which must be accounting courses. A minimum of 15 students is required for a support course to be offered. A typing skill of 25 words per minute is required of students before they enroll in some second term courses. Typing courses are available in the Department of Developmental Studies and the Business Occupations Learning Centers.

Some T-VI Continuing Education Division courses may be substituted for courses in the Accounting program (see list on page 32). Several courses in this program may be transferred to four year institutions.

Students receiving Veterans Administration education benefits receive only partial benefits if they elect the supervised work experience in the fourth

A \$10 supply fee is charged each term.

ACCOUNTING PROGRAM

	Hrs	Cr
Term I	Wk	Hr
Accounting Principles Lab I	10	6
Accounting Math/Calculators	5	3
Business Communications I *Speech 221—Interpersonal	5	3
Communication* **Human Relations (7 ¹ / ₂ weeks)	5	3
**Introduction to Business (7½ weeks)	5	4
Term II Accounting Principles Lab II	10	ļ
Introduction to Computer Concepts	5	ĺ

•		
Business Communications II *Social Science/Humanities	5	3
Elective* **Principles of Management	5	3
1 Interpres of Management		
Term III Intermediate Accounting Lab I	5	3
Tax Accounting I	5	3 3 3 3
Accounting Computer Lab I Cost Accounting	5 5 5	3
*Math 120—Intermediate Algebra	_	3
**Support Course	5	3
Term IV Intermediate Accounting Lab II	5	3
Business Law	5	3 3 3
Accounting Computer Lab II Two (2) Accounting Support	5	3
Courses	10	6
*Math 145—Introduction to Probability and Statistics *English 101—Writing with		3
Readings in Exposition (this course may be taken any term). Totals	150 0	3 66
Accounting Support Courses Advanced Accounting Auditing Governmental Accounting Managerial Accounting Tax Accounting II	5 5 5 5 5	3 3 3 3 3
Support Courses Financial Analysis Supervised Work Experience Investments Money and Banking Principles of Economics Principles of Finance Principles of Management	5 10 5 5 5 5 5	3 6 3 3 3 3
*General Education courses required degree. Course descriptions on pages	for asso 23–25.	ociate

aegree. Course descriptions on pages 23–25.

^{**}Required courses for the certificate program only.



COURSE DESCRIPTIONS

0410018—Accounting Principles Lab I (6 cr)

(Prerequisite or corequisite: Accounting Math) This is an introductory course in the theory and practice of accounting.

0410126—Accounting Math/Calculators (3 cr)

This course covers basic arithmetic operations, familiarizes the student with a wide range of accounting procedures for which mathematics is required, and develops touch method skills using electronic calculators.

0410401—Business Communications I (3 cr)

The student learns to communicate effectively through the study of writing fundamentals. Students also have the opportunity to develop oral and listening skills.

041815—Human Relations (71/2 weeks) (2 cr)

This course deals with employee attitudes toward themselves and others. The importance of interpersonal relationships and the work ethic is stressed.

0410805—Introduction to Business (71/2 weeks) (2 cr)

The structure of business, its activities and problems are surveyed in this course. An understanding of the nature of the business world also is provided.

0410065—Accounting Principles Lab II (6 cr)

(Prerequisites: Accounting Principles Lab I, Accounting Math/ Calculators) Planning of and accounting for the partnership and corporate forms of business organization are covered. A brief introduction to cost accounting also is included. Upon successful completion of this course, the student should be a competent bookkeeper for most small business organizations.

0410699-Introduction to Computer Concepts (3 cr)

(Prerequisite: 25 words a minute typing skill) This course covers manual and automated information systems, computer hardware, data entry, business software applications and BA-SIC programming language. Hands-on experience with microcomputers is provided.

0410423—Business Communications II (3 cr)

(Prerequisites: Business Communications I and 25 words a minute typing skill) The student learns to write effective business letters, reports and memoranda. Continued use of oral communication and listening skills is stressed.

0410814-Principles of Management (3 cr)

This introductory course helps the student understand basic management functions including planning, organizing, staffing, directing and controlling.

0410112—Intermediate Accounting Lab I (3 cr)

(Prerequisite: Accounting Principles Lab II) This lab emphasizes accounting theory, concepts and their practical application. It focuses attention on the use of accounting data as a basis for decisions by management, stockholders, creditors and other users of financial statements and accounting reports.

0410191-Tax Accounting I (3 cr)

(Prerequisite: Accounting Principles Lab I) This course primarily examines the fundamental characteristics of federal income taxes as applied to individuals.

0410213—Accounting Computer Lab I (3 cr)

(Prerequisites: Introduction to Computer Concepts, Accounting Principles Lab I) This microcomputer lab is divided into two 71/2-week blocks including electronic spreadsheets and microcomputer accounting. Students use prepared business software to solve business problems.

0410172—Cost Accounting (3 cr)

(Prerequisite: Accounting Principles Lab II) This course emphasizes construction and manufacturing as compared to merchandising or service businesses. The student performs the accounting operations for estimating and bidding.

0410159—Intermediate Accounting Lab II (3 cr)

(Prerequisite: Intermediate Accounting Lab I) Accounting for capital stock transactions, dividends, retained earnings, income tax allocation, error correction, long-term investments, amortization schedules, statements from incomplete records, flow of funds statements, and analysis and interpretation of financial statements are covered in this course.

0410782-Business Law (3 cr)

This course provides a basic knowledge of law as it applies to all business dealings in our society. Particular emphasis is placed on the Uniform Commercial Code. Practical problems in law are considered.

0410214—Accounting Computer Lab II (3 cr)

(Prerequisites: Introduction to Computer Concepts, Accounting Principles Lab I) This microcomputer lab is divided into two 7½-week blocks including payroll and inventory control. Students use prepared business software.

0410218—Advanced Accounting (3 cr)

(Prerequisite: Intermediate Accounting I) Accounting for installment and consignment sales, advanced partnership accounting, fund accounting, and accounting for business combinations are covered.

0410846-Auditing (3 cr)

(Prerequisite: Accounting Principles Lab II) Auditing procedure, and reports and working papers used in financial investigations are studied and analyzed. Audit practices with verification of assets, liabilities, expense and revenue accounts are stressed. Internal control techniques are studied with the

idea of developing the student's ability to conserve company assets.

0410832—Governmental Accounting (3 cr)

(Prerequisite: Accounting Principles Lab II) This course provides the student with additional accounting training for government and other nonprofit entities.

0410200-Managerial Accounting (3 cr)

(Prerequisite: Accounting Principles Lab II) Students learn how accounting data can be interpreted and used by management in planning and controlling business activities.

0410215—Tax Accounting II (3 cr)

(Prerequisite: Tax Accounting I) This course examines corporations, estate and gift taxes, fiduciaries, tax planning and tax shelters.

0410133—Financial Analysis (3 cr)

(Prerequisite: Accounting Principles Lab II) This course covers the gathering and analysis of financial data in a manner that aids management in the decision-making process.

0410953—Supervised Work Experience (6 cr)

(Prerequisite: Accounting Principles Lab II) Students work a minimum of 150 hours at accounting-related supervised work

stations. The student trainee is paid by the cooperating firm and supervised jointly by T-VI and the employer.

0410217--- Investments (3 cr)

(Prerequisite: Accounting Principles Lab II) Students study investment analysis, management, objectives, values and risks.

0410219-Money and Banking (3 cr)

(Prerequisite: Accounting Principles Lab II) This course covers the nature, history and functioning of money-creating institutions. Techniques developed for institution control and the interrelations between monetary, price and employment theories are included.

0410856—Principles of Economics (3 cr)

The economic system is studied from micro- and macroeconomic perspectives. Emphasis is on supply and demand, production, savings, consumption and investment, pricing, mixed economy, money and banking, and governmental fiscal policy.

0410216—Principles of Finance (3 cr)

(Prerequisite: Accounting Principles Lab II) Concepts and theories of finance are covered including the history of money, monetary systems and credit. Forms of business organizations, capital budgeting, source of funds, marketing securities, capital structure, foreign expansion and reorganization of a business firm are examined.

Business Administration

3 Terms (Main Campus)

The Business Administration program is designed to develop the skills, knowledge and attitudes which enable individuals to function in decision-making positions. Business knowledge of a general nature is combined with basic accounting skills and special support courses to prepare students for a variety of job options in the business community.

A certificate is awarded to those students who complete the three-term program. Students receive a proficiency certificate for each course completed.

Students may select any of the listed support courses to prepare for their employment goals. Not all support courses are offered each term, and a minimum of 15 students is required for a support course to be offered. Courses from other programs may be substituted for Business Administration support courses with departmental approval.

A typing skill of 25 words per minute is required

before students can enroll in some second-term courses. Typing courses are available in the Department of Developmental Studies and the Business Occupations Learning Centers.

Students acquire an employable skill after successful completion of all courses listed under Terms I and II. If a student leaves the program at this point, a bookkeeping certificate is awarded if a request is made within 12 months of the exit date.

Some T-VI Continuing Education courses may be substituted for courses in the Business Administration program (see list on page 32). Several courses in the program may be transferred to four-year institutions.

Students receiving Veterans Administration education benefits receive only partial benefits during a term in which they elect to take supervised work experience.

A \$10 supply fee is charged each term.

BUSINESS ADMINISTRATION PROGRAM

Term I Human Relations (7½ weeks) Introduction to Business (7½ weeks) Accounting Principles Lab I Accounting Math/Calculators	Hrs Wk 5 5 10 5	Cr Hrs 2 2 6 3
Business Communications I	5	3
Term [I		
Accounting Principles Lab II Introduction to Computer	10	6
Concepts Business Communications II Principles of Management	.5 5 5	3 3 3
Term III Business Law Principles of Marketing Financial Analysis Salesmanship Support Course Totals 1125-	5 5 5 5 5-10 -1200	3 3 3 3 3–6 46–51
Support Courses Cost Accounting Principles of Economics Entrepreneurship Lab Principles of Finance Money and Banking Supervised Work Experience	5 5 10 5 5	3 3 6 3 3

COURSE DESCRIPTIONS

0413815—Human Relations (71/2 weeks) (2 cr)

This course deals with employee attitudes toward themselves and others. The importance of interpersonal relationships and the work ethic is stressed.

0413130-Introduction to Business (71/2 weeks) (2 cr)

The structure of business, its activities and problems are surveyed in this course. An understanding of the nature of the business world also is provided.

0413019-Accounting Principles Lab I (6 cr)

(Prerequisite or corequisite: Accounting Math/Calculators)
This is an introductory course in the theory and practice of accounting.

0413127-Accounting Math/Calculators (3 cr)

This course covers basic arithmetic operations, familiarizes the student with a wide range of business applications for which math is required, and develops touch method skills using electronic calculators.

0413402-Business Communications I (3 cr)

The student learns to communicate effectively through the study of writing fundamentals. Students also have the opportunity to develop oral and listening skills.



0413066—Accounting Principles Lab II (6 cr)

(Prerequisites: Accounting Principles Lab I, Accounting Math/ Calculators) This is a continuation of Accounting I. Planning and accounting for the partnership and corporate forms of business organization are covered. A brief introduction to cost accounting also is included. Upon successful completion of this course, the student—with minimum supervision—should be a competent bookkeeper for most small business organizations.

0413324-Introduction to Computer Concepts (3 cr)

(Prerequisite: 25 words a minute typing skill) This course covers manual and automated information systems, computer hardware, data entry, business software applications and BA-SIC programming language. It provides hands-on experience with microcomputers.

0413422—Business Communications II (3 cr)

(Prerequisites: Business Communications I and 25 words a minute typing skill) A student completing this course is able to write effective business letters, reports and memoranda. Use of oral communications and listening skills is stressed.

0413793—Principles of Management (3 cr)

In this introductory course, students develop an understanding of the basic management functions including planning, organizing, staffing, directing and controlling.

0413725-Business Law (3 cr)

This course provides a basic knowledge of law as it applies to all business dealings in our society. Particular emphasis is on the Uniform Commercial Code. Practical problems in law are considered.

0413744—Principles of Marketing (3 cr)

This course is designed to study total marketing concepts—from the production of goods to delivery to the potential customer—from a management point of view.

0413113—Financial Analysis (3 cr)

(Prerequisite: Accounting Principles Lab II) This course covers the gathering and analysis of financial data in a manner that aids management in the decision-making process.

0413174—Salesmanship (3 cr)

Personal selling skills are accented along with how to promote oneself, goods and services.

0413272—Cost Accounting (3 cr)

(Prerequisite: Accounting Principles Lab II) This course emphasizes construction and manufacturing as compared to merchandising or service businesses. The student performs the accounting operations for estimating and bidding. Labor and overhead factors of production are studied, and reports are prepared.

0413855-Principles of Economics (3 cr)

The economic system is studied from both micro- and macroeconomic perspectives. Emphasis is on supply and demand, production, savings, consumption and investment, pricing, mixed economy, money and banking, and governmental fiscal policy.

0442026-Entrepreneurship Lab (6 cr)

During the first few days of the term, the instructor meets with each student to determine specific goals, problems or

needs. Programs are then tailored to the individual students, who progress at their own speeds. Most of the daily tasks/activities are accomplished through the use of learning modules. Special workshop or seminar-type activities are scheduled throughout the term to deal with common areas of concern including time management, value clarification, improving supervisory skills, interpersonal communication skills and stress management.

0410216—Principles of Finance (3 cr)

(Prerequisite: Accounting Principles Lab II) Concepts and theories of finance are covered including the history of money, monetary systems and credit. Forms of business organizations, capital budgeting, source of funds, marketing securities, capital structure, foreign expansion and reorganization of a business firm are examined.

0410219-Money and Banking (3 cr)

(Prerequisite: Accounting Principles Lab II) This course covers the nature, history and functioning of money-creating institutions. Techniques developed for institution control and the interrelations between monetary, price and employment theories are included.

0413958-Supervised Work Experience (6 cr)

(Prerequisite: Accounting Principles Lab II) Students work a minimum of 150 hours at business/training-related supervised work stations. The student trainee is paid by the cooperating firm and supervised jointly by T-VI and the employer.

Cashier-Sales

71/2 Weeks (Main Campus)

Persons who want to learn a skill quickly and find a job as soon as possible should consider this cashier-sales program.

It is a course for those preparing for distribution of goods and services to the public including all retail, wholesale and service occupations. It also will benefit students who want to explore sales as a possible career.

The cashier-sales laboratory teaches the skills of salesmanship, the cash register touch system and human relations. Students work with various makes and models of electromechanical and electronic cash registers, a computerized cash register/scanner and produce-calculating scales.

The 7½-week program provides up to 112 hours of classroom instruction and a minimum of 75 hours of paid supervised work experience with an approved cooperating employer. Students who complete the course receive certificates.

This program does not qualify students for Veterans Administration training benefits or other student financial aids.

A \$10 supply fee is charged.

CASHIER-SALES PROGRAM

	Hrs	Cr
Course Requirements	Wk	Hrs
Cashier-Sales Education Lab	15	5
Supervised Work Experience	10	3
Totals	187	8

COURSE DESCRIPTIONS

0420020—Cashier-Sales Education Lab (5 cr)

Students learn the techniques of operating the cash register. Merchandising math, store salesmanship and retailing also are covered.

0420954-Supervised Work Experience (3 cr)

Students work a minimum of 75 hours at retailing-related, teacher-approved work stations. The student trainee is paid by the cooperating employer and supervised jointly by T-VI and the employer. There are times when it is impossible to place all students in work stations because of local employment requirements.

Entrepreneurship (Small Business Start-up and Operation)

1 Term (Main Campus)

The Entrepreneurship program is for persons who plan to open a small business and those who own or manage a business and want further training in fundamental business principles and operations. The program emphasizes business start-up and operation through the first year. Through instructor/student consultation, students are able to tailor the course to meet their specific needs.

A partial list of business topics covered is as follows:

Entrepreneurship—What's It All About?
Day-to-Day Management Skills
Goal Setting for the Business
Self-Motivation
Business Plan Development
Licensing Procedures
Accounting Systems
Customer Development and Relations
Credit Procedures and Collections
Pricing for Profit
Sales Promotion
Contracts
Inventory Control
Employer-Employee Relations

Tax Report Procedures
Students completing the 150-hour program are issued certificates.

A \$10 supply fee is charged.

ENTREPRENEURSHIP PROGRAM

	Hrs	Cr
Course Requirements	Wk	Hrs
Entrepreneurship Lab	10	6
Totals	150	<u> </u>

COURSE DESCRIPTION

0442026—Entrepreneurship Lab (6 cr)

During the first few days of the term, the instructor meets with each student to determine specific goals, problems or needs. Programs are then tailored to the individual students, who progress at their own speeds. Most of the daily tasks/activities are accomplished through the use of learning modules. Special workshop or seminar-type activities are scheduled throughout the term to deal with common areas of concern including time management, value clarification, improving supervisory skills, interpersonal communication skills and stress management.

Legal Assistant Studies (Associate in Applied Science Degree)

4 Terms (Main Campus)

The purpose of the Associate in Applied Science Degree in Legal Assistant Studies is to train qualified men and women for entry into the legal profession. Students learn about the nature and philosophy of fundamental legal theory, the legal system and how that system relates to other disciplines, and the professional responsibilities of the legal assistant. The ethical and moral issues inherent in the practice of the profession also are stressed.

Legal assistants are skilled professionals who perform tasks and services under the direct supervision of a licensed attorney. Responsibilities include statistical and record research, data analysis, drafting legal documents, and interviewing and assisting clients and witnesses. Employment opportunities include placement as a legal assistant in legal firms, corporate legal departments, insurance companies, real estate and title insurance firms, and banks. Public sector opportunities with community legal service programs and federal, state and local government agencies are expected to increase over the next few years.

To earn an associate degree, a student must successfully complete 63 credit hours of laboratory work, related legal theory and General Education courses. Proficiency certificates are given to students for each course completed.

A \$10 supply fee is charged each term.

ASSOCIATE IN APPLIED SCIENCE/ LEGAL ASSISTANT STUDIES

Term I	Cr Hrs
Legal Assistant 101—Introduction to	
Legal Assistant Studies	3
Legal Assistant 102—Business	2
Organizations	3
*Computer Science 101—Computer	3
*Psychology 101—General Psychology I.	
*English 101—Writing with Readings in	5
Exposition	3
	_
Term II	
Legal Assistant 111—Introduction to	
American Law, the Legal System and	
Ethics	3
Legal Assistant 121—Legal Research an	d _
Effective Use of Legal Materials	3
Legal Assistant 122—Survey of Civil	•
Practice with Emphasis on Torts	
*Speech 221—Interpersonal Communication	ion 3
*English 119—Technical Communication	s 3
Town 111	
Term III Legal Assistant 201—Contract Law	2
Legal Assistant 202—Legal Analysis and	3
Writing	, 4
Legal Assistant 203—Civil Litigation,	····· 1
Investigation and Discovery	3
*Math 120—Intermediate Algebra	
*Political Science 200—U.S. Politics	🛊
Term IV	ł
Legal Assistant 211—Real Estate Law . Legal Assistant 221—Wills, Probate and	3
	Estate
Planning	В
Legal Assistant 222—Supervised Work	ļ
*Math 145—Introduction to Probability a	þ
Statistics	
Support Course	
Total	d 3
	T I
*General Education courses. Course desc	riptions
on pages 23-25.	
	ł
Support Courses	
Legal Assistant 230—Advanced Civil	- 1
Litigation	3
Legal Assistant 232—Personal Injury: L	
and Medical Aspects	3 w 3
Legal Assistant 234—Administrative La Legal Assistant 236—Discrimination/La	lw 3
Employer-Employee Relations	3

COURSE DESCRIPTIONS

0460425—Legal Assistant 101—Introduction to Legal Assistant Studies (3 cr)

This course covers the definition and role of the legal assistant, human relations, law office management techniques, legal terminology, interviewing techniques and methods of discovery.

0460428—Legal Assistant 102—Business Organizations (3 cr)

Various types of business entities including corporations, partnerships, joint ventures and sole proprietorships are examined in this course.

١

1

0460438—Legal Assistant 111—Introduction to American Law, the Legal System and Ethics (3 cr)

The American judicial system is studied with focus on New Mexico's state judicial system. Covered are a study of the nature, meaning and sources of law, history of Anglo-American law, organization of modern legal systems, trends in the legal profession, and an overview of different legal areas including family law, corporations, estates, wills, real estate, criminal law, torts and contracts. An explanation of social and ethical problems associated with the legal profession is included.

0460439—Legal Assistant 121—Legal Research and Effective Use of Legal Materials (3 cr)

(Prerequisites: Computer Science 101, English 101) The student is introduced to use of legal materials and performs basic legal research using primary and secondary legal sources.

0460453—Legal Assistant 122—Survey of Civil Practice with Emphasis on Torts (3 cr)

The student is given an overview of the trial process from initial complaint through ultimate judgment. Emphasis is on drafting and filing procedures and various types of pleadings. Rules of Civil Procedure are reviewed.

0460504—Legal Assistant 201—Contract Law (3 cr)

This course is an introduction to the law of contracts, rights and responsibilities, consideration, types of contracts, remedies and assignments.

0460505—Legal Assistant 202—Legal Analysis and Writing

The student is introduced to the reading of case law and writing of abstracts, memoranda and analyses of cases.

0460506—Legal Assistant 203—Civil Litigation, Investigation and Discovery (3 cr)

Jurisdiction, commencement of actions, service of process, pleadings and discovery are discussed in this course. Also included are preparation of interrogatories, requests, rules of evidence and appellate procedure.

0460525-Legal Assistant 211-Real Estate Law (3 cr)

This course is designed to provide knowledge of the fundamental rights of ownership, obligations of the real estate agent regarding contractual encumbrances, transfers, fiduciary rights and obligations owed to the parties represented, and basic contract law.

0460526—Legal Assistant 221—Wills, Probate and Estate Planning (3 cr)

This course covers drafting of wills and trusts, administration of estates, formal and informal probate proceedings and estate tax returns.

0460959—Legal Assistant 222—Supervised Work Experience (6 cr)

(Prerequisites: All courses in first three terms) Students work a minimum of 150 hours at legal-assistant-related work stations. The student is paid by the cooperating firm and jointly supervised by T-VI and the employer.

0460527—Legal Assistant 230—Advanced Civil Litigation (3 cr)

(Prerequisite: Legal Assistant 203) This course covers theory of the case and type of relief to be sought, arbitration, habeas corpus, assembling, evidence, obtaining records, preparing trial folder, pretrial discovery, preparation of final orders or judgments, restraining orders and appeal proceedings.

0460528—Legal Assistant 232—Personal Injury: Legal and Medical Aspects (3 cr)

(Prerequisite: Legal Assistant 122) This course deals with personal injuries and litigation in the areas of tort, workers' compensation and social security.

0460541—Legal Assistant 234—Administrative Law (3 cr) Studies pertaining to policies and practices of governmental agencies, and state and local administrations are included in this course.

0460542—Legal Assistant 236—Discrimination/Labor/Employer-Employee Relations (3 cr)

This course includes an overview of hiring and firing, wages, grievance investigations, union and nonunion operations, efficient resolution of problems and controversies, employer preventive programs, discipline, wrongful discharge, employment records maintenance, safety and health, and liability.

Legal Office Worker

1 Term (Main Campus)

The Legal Office Worker program prepares persons for jobs as entry-level, legal word processing operators, clerks or transcriptionists. An aptitude for operating sophisticated machines is important for persons in this field.

There is a typing prerequisite of 50 words per minute.

The course provides a basic background in legal terminology, procedures, grammar, punctuation, machine transcription, word processing concepts and machine operation on modern equipment.

Students who complete the program receive proficiency certificates.

This program is approved for Veterans Administration training benefits but does not qualify for other student financial aids.

A \$10 supply fee is charged.



LEGAL OFFICE WORKER PROGRAM

Term I	Hrs Wk	Cr Hrs
Word Processing Concepts (7½ weeks) Word Processing Operation (7½	5	2
weeks)	5	2
Grammar/Punctuation	5	3
Legal Terminology/Procedures	5	3
Legal Typing	5	3
Totals	300	13

COURSE DESCRIPTIONS

0450709-Word Processing Concepts (71/2 weeks) (2 cr)

This introductory course helps the student understand the purpose, organization and application of word processing in the legal field.

0450727—Word Processing Operation (71/2 weeks) (2 cr)

Students receive an introduction to operation of text-editing word processors with emphasis on the capabilities and mechanics of the machines.

0450404—Grammar/Punctuation (3 cr)

Students review grammar, punctuation and spelling, and are encouraged to develop oral communication and listening skills.

0450027—Legal Terminology/Procedures (3 cr)

Meaning and spelling of legal terminology, familiarization with legal procedures, and client relationships are included in this course.

0450745—Legal Typing (3 cr)

Instruction is in the preparation of mailable legal correspondence and forms from different types of input including machine transcription, copy type and preprinted forms.

Merchandising

1 Term (Main Campus)

The Merchandising program provides a basic foundation for entry into the broad merchandising field.

Persons interested in a people-oriented career in retailing, merchandising and sales will like the employment opportunities this program offers. Entrylevel jobs may have non-traditional work hours.

The Merchandising Lab course includes salesmanship, merchandising, retailing, communications, human relations, math and cashiering.

The program offers 225 hours of instruction and a minimum of 150 hours of paid supervised work experience with an approved cooperating employer. Graduates receive proficiency certificates.

This program does not qualify students for Veterans Administration training benefits or other student financial aids.

A \$10 supply fee is charged.

MERCHANDISING PROGRAM

	Hrs	Cr
Course Requirements	Wk	Hrs
Merchandising Lab	15	9
Supervised Work Experience	_10	_6
Totals	375	15

COURSE DESCRIPTIONS

0440025-Merchandising Lab (9 cr)

The student combines oral communication and human relations skills with selling techniques. Principles of merchandising goods and services and a basic knowledge of retailing are emphasized. Students perform basic math functions needed for calculation of profit, pricing, mark-up, mark-down, discounts and payroll. Techniques of operating various cash registers are emphasized along with how to solve procedural problems that occur at a register.

0440955—Supervised Work Experience (6 cr)

Students work a minimum of 150 hours at retailing-related teacher-approved work stations. The student trainee is paid by the cooperating employer and supervised jointly by T-VI and the employer. There are times when it is impossible to place all students in work stations because of local employment requirements.

Office Occupations

3 Terms (Main and Montoya Campuses)

Career opportunities in office occupations are unlimited. More and more businesses are actively looking for office workers—both men and women—who have the potential to be promoted to administrative positions. The office worker has a choice of many fields: legal, medical, governmental, technical, service and educational.

The Office Occupations program prepares students for receptionist, clerical, and medical receptionist positions. In addition, the program offers support courses which qualify graduates for secretarial and stenographic positions.

Students acquire an employable skill upon successful completion of the second term. If a student leaves the program at this point, a receptionist certificate is awarded if requested within 12 months of the exit date.

Students who continue into the third term choose a lab from one of four specialty options: Simulation Lab, Supervised Work Experience, Information Processing Lab or Medical Records/Receptionist Lab. All options are not offered every term nor at each campus. Students completing the three terms earn a certificate indicating the specialty area.

Students who also demonstrate a shorthand proficiency receive a certificate in secretarial occupations. Proficiency certificates are given to students for each course completed.

Office Occupations labs and classrooms contain modern equipment including electric and electronic typewriters, electronic calculators, transcribing machines, word processors, microcomputers and individualized learning equipment.

An entering student with a strong background in clerical or secretarial skills may waive any course by examination and substitute a more advanced course or add a support course.

Upon completion of this program, courses may be transferred to the University of New Mexico for credit toward an Associate Degree in Secretarial Studies.

Some T-VI Continuing Education Division courses may be substituted for courses in the Office Occupations program (see list on page 32).

A \$10 supply fee is charged each term.

OFFICE OCCUPATIONS PROGRAM

U...

	Hrs	Cr
Term I	Wk	Hrs
Typing Lab I	10	6
Office Communications I	5	3
Business Math/Calculators	5	3
Human Relations (71/2 weeks)	5	2
Information Processing Concepts		
(7 ¹ / ₂ weeks)	5	2
Term II		
Typing Lab II	10	6
Office Communications II	5	
Secretarial Accounting	5	3 3 3
Word Processing	5	3
word frocessing	,	5
Term III		
Lab Option	10	6
Information Processing Lab		
Medical Records/Receptionist		
Lab		
Office Simulation Lab III		
Supervised Work Experience		,
Office Communications III	5	3
Business Procedures	5	3
Machine Transcription (skill		•
building)	5	3
Totals	$\frac{3}{1125}$	46
	1123	70
Support Courses		
Business Law	5	3
Cashiering	5	3
Introduction to Business (71/2	-	-
weeks)	5	2
Principles of Management	5	2 3 3 3
Shorthand I*	5	3
Shorthand II*	5	3
Shorthand III*	5	3

^{*}Shorthand proficiency is required for a secretarial certificate and Shorthand is an additional course each day.

COURSE DESCRIPTIONS

0430021-Typing Lab I (6 cr)

This course builds the student's skills to a typing proficiency of at least 40 words per minute. The student practices typing of business letters, memos, business forms and manuscripts.

0430403—Office Communications I (3 cr)

This course is an introduction to oral and written communications with emphasis on vocabulary building, spelling, grammar, punctuation, oral expression and listening skills.

0430325—Business Mathematics/Calculators (3 cr)

This course features a combined approach to teaching business mathematics and calculators. Students receive a thorough

review of math fundamentals and their applications in solving business problems. Calculator instruction stresses use of the touch method.

0430818—Human Relations (71/2 weeks) (2 cr)

This course deals with employee attitudes toward themselves and others. The importance of interpersonal relationships and the work ethic is stressed.

0430819—Information Processing Concepts (71/2 weeks) (2 cr)

This course provides the student with an understanding of the computer and the word processor—how they work, how they process data to produce useful information, and how they can be integrated as a tool in the work environment.

0430067/0430077—Typing Lab II (6 cr)

(Prerequisite: Typing Lab I) Typing competence of at least 50 words per minute is the goal. Students produce mailable business letters, manuscripts, tables, business forms and other correspondence.

0430431-Office Communications II (3 cr)

(Prerequisites: Typing I, Office Communications I) This course is a continuation of Office Communications I with greater emphasis on punctuation, and sentence and paragraph construction. Students receive an introduction to telephone techniques and machine transcription.

0430773—Secretarial Accounting (3 cr)

(Prerequisite: Business Mathematics/Calculators) This course is a study of the complete bookkeeping cycle including preparation of the balance sheet, income statement and worksheet. Emphasis is on journalizing, posting, accounts payable and accounts receivable. Payroll accounting also is covered. Students complete a computerized practice set.

0430759-Word Processing (3 cr)

(Prerequisites: Typing I, Information Processing Concepts) Students receive instruction in the use of text editing word processors and word processing software on the microcomputer. Emphasis is on practical office applications.

0430820—Information Processing Lab (6 cr)

(Prerequisites: Typing II, Word Processing, Information Processing Concepts) Advanced instruction is provided in the use of microcomputer/word processing equipment. Applications include advanced word processing, electronic spreadsheets, list processing and database management.

0430202—Medical Records/Receptionist Lab (6 cr)

(Prerequisites: Typing II, Word Processing, Business Mathl Calculators, Office Communications II) Course content includes basic anatomy, medical terminology, transcription, word processing, record keeping, insurance form completion, appointment handling, telephone techniques and medical ethics.

0430114—Office Simulation Lab III (6 cr)

(Prerequisite: Typing II: prerequisite or corequisite: Secretarial Accounting) Students practice time management, decision making and priority setting in a realistic office setting. This lab offers the culmination of clerical applications using modern electronic typewriters, word processors, machine transcribers, electronic calculators and telephones. A typing speed of 60 words per minute should be reached at the end of the course.

0430957-Supervised Work Experience Lab (6 cr)

(Prerequisites: Typing Lab II, 55 words per minute typing speed) Students work a minimum of 150 hours at office-related supervised work stations. The student trainee is paid by the cooperating firm and supervised jointly by T-VI and the employer.

0430440—Office Communications III (3 cr)

(Prerequisites: Typing I, Office Communications II) Principles of writing and composing business correspondence are covered. Continued emphasis is on grammar, punctuation, spelling, oral communication and listening skills.

0430794—Business Procedures (3 cr)

(Prerequisites: Typing II, Office Communications II) Office procedures, records management, human relations and job portfolio preparation are included in this course.

0430725-Machine Transcription (3 cr)

This course builds speed and accuracy in the transcription of mailable copy.

0410782—Business Law (3 cr)

This course provides a basic knowledge of law as it applies to all business dealings in our society. Particular emphasis is on the Uniform Commercial Code. Practical problems in law are considered.

0430754—Cashiering (3 cr)

Use of various cash registers, including the ability to solve procedural problems that occur at a register and checkout station, is developed in this course. Instruction also focuses on bank teller applications.

0413130-Introduction to Business (71/2 weeks) (2 cr)

The structure of business, its activities and problems are surveyed in this course. An understanding of the nature of the business world also is provided.

0413793—Principles of Management (3 cr)

In this introductory course, students develop an understanding of the basic management functions including planning, organizing, staffing, directing and controlling.

0430823-Shorthand I (Gregg) (3 cr)

This introductory course covers the theory and writing of Gregg shorthand. A writing speed of 50 words per minute is attained upon completion.

0430825—Shorthand I (Alphabetic) (3 cr)

Reading and writing of ABC Stenoscript shorthand is learned. A writing speed of 50 words per minute is achieved upon completion.

0430833--Shorthand II (3 cr)

(Prerequisite: Shorthand I) The ability to write shorthand at a rate of 70 words per minute is sought with emphasis on speed, accuracy, grammar, punctuation and transcription speed.

0430835—Shorthand III (3 cr)

(Prerequisite: Shorthand II) The goal for this course is a minimum dictation speed of 80 words per minute on new materials and transcription at a minimum rate of 20 words per minute.

Refresher Course for Office Workers

1 Term, Open-entry/Open-exit (Main Campus)

The Refresher Course is for persons who need a review of office skills and procedures to return to work. Students entering this program must have a minimum of two years' full-time secretarial or general office experience.

The program allows for individualized courses of study based on each student's career needs. Instruction is on the most modern office equipment available. All courses offered within the department are considered. Students attend class four hours a day, five days a week, for a maximum of 15 weeks.

Course offerings include typewriting, shorthand, machine transcription, calculators, accounting, English, mathematics, filing, human relations and word processing. Graduates receive proficiency certificates for each course.

This program does not qualify students for Veterans Administration training benefits or other student financial aids.

A \$10 supply fee is charged.



HEALTH OCCUPATIONS DEPARTMENT

T-VI's Health Occupations Department includes Associate Degree in Nursing, Child Care Assistant, Health Unit Clerk, Nursing Assistant, Phlebotomist, Practical Nurse and Respiratory Therapy Technician programs. The Practical Nurse and associate degree programs are cosponsored by T-VI and Presbyterian Hospital Center.

Classes for all programs are held in the C Building at Main Campus. The Helene Fuld Library and audiovisual collection, part of Main Campus Library Services, provide excellent learning resources.

Learning laboratories are equipped with hospital furnishings and supplies, respiratory therapy machines and life-like models which give students the chance to practice basic skills needed for clinical experiences. Students have supervised patient or child care practicums and observations at different community agencies.

ADMISSION: Applicants for all Health Occu-

pations programs except Nursing Assistant must have a high school or General Educational Development (GED) diploma because of licensing or health care employer requirements. There is also a math skill requirement, met by making a satisfactory score on a math examination.

Child Care Assistant, Health Unit Clerk, Nursing Assistant and Phlebotomist applicants follow regular T-VI admission procedures. Health Unit Clerk is offered summer and winter terms only. Phlebotomist is offered winter and fall terms only. Contact the Health Occupations Department for information on starting dates and application procedures.

The Associate Degree in Nursing, Practical Nurse, and Respiratory Therapy Technician programs have special application forms and admission requirements. Applications are accepted for these programs from January through July of each year. There are beginning groups in the fall term only.

Child Care Assistant

1 Term (Main Campus)

Child care assistants are taught basic child care skills so they can work in child care centers, nurseries or private homes where there are young children needing care and supervision. Students learn child growth and development, communication skills, discipline techniques, play skills, nutrition, first aid, ethics, cardiopulmonary resuscitation, sanitation procedures and care of sick children.

To be admitted, applicants must be at least 18 years old, have a high school diploma or GED, read at seventh grade level and pass a math test. Applicants must be of good character and physically, mentally and emotionally equipped to provide good care and maintain responsible supervision over children.

There is a \$40 fee which covers a health test, name tag, apron and fingerprinting. Fingerprinting is required by law of all child care workers at child care sites.

The 15-week program includes 375 hours classroom theory and supervised experiences in day care centers in the community.

The Child Care Assistant program is offered in the fall and summer terms only.

CHILD CARE ASSISTANT PROGRAM

	Contact	Cr
Course Requirements	Hrs	Hrs
· Child Care Assistant Theory	193	7
Nutrition	22	1
Supervised Practicum	160	7
Totals	375	15

COURSE DESCRIPTIONS

0525827—Child Care Assistant Theory (7 cr)

This course includes growth and development, communication skills, ethics, play theory, care of the sick child, discipline techniques and sanitation procedures.

0525867—Nutrition (1 cr)

Basic nutrition principles with special emphasis on child nutrition are taught in this course. Students learn to prepare nutritious snacks.

0525837—Supervised Practicum (7 cr)

Students are placed in child care centers throughout the city for supervised practicum with different age groups of children. Practicum allows students to apply theory learned in classes.

Health Unit Clerk

1 Term (Main Campus)

The Health Unit Clerk program trains persons to work in hospitals, elder care centers, outpatient clinics and physicians' offices. Transcribing doctors' written and verbal orders, typing, ordering supplies, answering the telephone, working with computers, and giving information to patients, visitors and staff are typical activities.

To be admitted, applicants must have a high school diploma or GED, read at the seventh grade level, pass a math test and type 25 words per minute. Applicants also must be able to write clearly and accurately and have the ability to speak distinctly to others.

There is a \$30 personal equipment fee which covers the required uniform top and health tests. Uniform slacks are required, but are not covered by the fee.

The 375-hour program lasts 15 weeks, with nine weeks of classroom theory and six weeks of clinical practice in local hospitals and hospital out-patient clinics. A certificate is awarded upon completion.

Health Unit Clerk is offered in the summer and winter terms only.

HEALTH UNIT CLERK PROGRAM

	Contact	Cr
Course Requirements	Hrs	Hrs
Health Unit Clerk Theory and Lab	225	8
Health Unit Clerk Clinical Practice	150	4
Totals	375	12

COURSE DESCRIPTIONS

0540618—Health Unit Clerk Theory and Lab (8 cr)

This course combines a number of topics including orientation to the hospital, patient and role of the health unit clerk Presentations and practice of medical terms, anatomy, abbreviations, communications, pharmacological terms, computerized patient information systems, forms and order transcriptions are included.

0540032—Health Unit Clerk Clinical Practice (4 cr)

Supervised clinical experience takes place in local hospitals and hospital out-patient clinics during the last six weeks of the program.



Nursing (Associate in Science Degree)

4 Terms (Main Campus)

This program prepares technical nurses who provide nursing care to individuals or groups admitted to health care agencies. The clients have common, well-defined health problems. Graduates work in structured health care settings where they provide and manage client care, teach and promote communication while participating as members of the nursing profession.

The associate degree in nursing program is approved by the New Mexico Board of Nursing. Graduates are eligible to take the board's state registered nurse examination.

Applications for the associate degree program which begins in the fall term may be submitted from January 11 until June 30.

In addition to the degree program admission requirements listed on page 13, Associate in Science Degree in Nursing applicants must have satisfactory ACT scores of 18 in natural sciences and 14 in social sciences, and must meet the following general requirements for admission:

- Submit official transcripts of previous education including high school, vocational school or college.
- Provide proof of completion within the past five years of Biology 123/124L—Biology for Health Sciences—or equivalent with a minimum grade of C. Permission of the biology department faculty is required to substitute high

school biology for the college biology prerequisite. Applicants who do not meet this requirement may take Biology 123/124L at T-VI in order to qualify for admission to the program.

- Score 90% on a math entrance exam. Applicants may retest once. Following a second unsuccessful attempt on the test, applicants must satisfactorily complete Developmental Studies Math or Math 100 before they can be accepted into the nursing program.
- Have a personal interview with a nursing program representative. Interviews are scheduled after applicants complete the preadmission testing.
- Submit three letters of recommendation from former teachers, employers or other supervisors.
- If selected for the program, submit a completed physical examination and health form with evidence of current immunizations before beginning clinical courses.
- Submit evidence of current CPR certification before beginning clinical courses. CPR certification must be kept current throughout the program.

Applicants are admitted to the program on the basis of their application dates after all admission requirements are met.

General Education courses must be taken prior to, or as scheduled in, the curriculum plan. Some substitute placement of General Education courses may be allowed.

Students must maintain a grade of C in all required courses to advance to the next term. Students must attend classes, observation and clinical experiences as scheduled, and arrange for their own transportation to the agencies and hospitals.

There are equipment fees of \$75 the first year and \$30 the second year for required uniforms, stethoscope, scissors and identification tags. Students are responsible for the expenses of the physical examination, a watch with a second hand, uniform shoes, cap, graduation exercises and licensing exam fees.

ASSOCIATE IN SCIENCE/NURSING

	Contact	Cr
Term I	Hrs	Hrs
*Biology 237—Anatomy and		
Physiology I		3
*Biology 247LAnatomy and		
Physiology I Lab		1
*Psychology 102—General		
Psychology II		3
·		

*English 101—Writing with		
Readings in Exposition		3
Nursing I		
Theory	60	4
Clinical	135	3
70 71		
Term II		
*Biology 238—Anatomy and		_
Physiology II		3
*Biology 248—Anatomy and		
Physiology II Lab		l
*Home Economics 125—Nutrition .		3
*Speech 221Interpersonal		_
Communication		3
Nursing II		
Theory	60	4
Clinical	135	3
Term III		
*Biology 201—Microbiology for		
Health Sciences		3
*Biology 21 IL—Microbiology for		
Health Sciences Lab		
Pharmacology in Nursing	4.5	3
	45	3
" Nursing III	75	_
Theory	75 225	5
Clinical	225	3
Term IV .		
*Psychology 101—General		
Psychology I		3
² *Philosophy 245—Biomedical		,
Ethics		3
Nursing Seminar	15	1
Nursing IV	10	•
Theory	75	5
Clinical	225	5
Totals	1050	$\frac{3}{68}$

^{*}General Education courses required for associate degree. Course descriptions on pages 23–25.
Human Growth and Development may be substituted.

COURSE DESCRIPTIONS

0560235/0560236-Nursing I (7 cr)

Concepts of the nursing process and the theoretical framework of the curriculum are introduced. The individual, society, health and nursing are developed within the self-care deficit model of nursing. Nursing skills are developed to meet the universal needs of individuals within cultures and include communication skills, health care delivery systems, legal/ethical role of nurses, introduction to pharmacology and medication administration. Accompanying laboratory and clinical experiences provide opportunities to apply theory to practice.

²Sociology 101—Introduction to Sociology—or social science elective may be substituted.

0560393/0560392—Nursing II (7 cr)

(Prerequisite: Completion of all first-term courses) The use of the nursing process to meet self-care deficits of clients unable to meet their own needs because of illness or injury is emphasized. The role of the nurse in meeting developmental self-care needs is introduced through study of the geriatric client. Laboratory and clinical experiences focus on continuing development of assessment skills with clients in acute and long-term care facilities.

0560237—Pharmacology in Nursing (3 cr)

(Prerequisite: Biology 238/248L) This course presents the concepts necessary for judgment in the use of chemical agents and the theoretical base required to administer medications. Information presented includes the role of the nurse in assisting the client with self-administration of medications, history of pharmacology, drugs and their therapeutic use, adverse reactions, precautions, contraindications, food and drug interactions, psychosocial aspects of drug use and drug abuse.

0560397/0560398-Nursing III (10 cr)

(Prerequisites: Nursing II, Biology 238/248L) More complex self-care deficits in adult clients and the developmental self-care needs of pediatric clients are the focus of this course. Clinical experiences support the application of nursing knowledge to adults and children who have complex medical-surgical health problems.

0560396—Nursing Seminar (1 cr)

(Prerequisite: Nursing III; corequisite: Nursing IV) Students study and discuss the role of the registered nurse in relation to trends, legal/ethical issues, professional relationships and health care delivery. The course is designed to develop critical thinking in legal/ethical issues in professional nursing.

0560436/0560437—Nursing IV (10 cr)

(Prerequisite: Nursing III) This course presents the study of clients with self-care deficits in psychiatric and advanced medical-surgical problems as well as those with developmental self-care needs in the childbearing family. Students integrate and apply nursing knowledge in a variety of health care facilities.

Advanced Placement

(Associate in Science Degree in Nursing)

To apply for advanced standing in the Nursing associate degree program, individuals must meet the general requirements for admission into an associate degree program as listed on page 13. Advanced placement may be granted in two ways:

- Transfer—Transfer from an approved associate degree or baccalaureate nursing program with equivalent courses. To apply for transfer, the individual must submit evidence of completion of equivalent courses with minimum grades of C. Transfer students are required to enroll a minimum of one term and complete 15 credit hours.
- 2. LPN Mobility—Admission of Licensed Practical Nurses. The associate degree program is designed to admit qualified Licensed Practical Nurses into the second year. In addition to meeting the general requirements for admission into an associate degree program as listed on page 13, applicants must meet the following requirements:
 - Provide proof of completion within the past five years of Biology 123/124L—Biology for Health Sciences—or equivalent with a minimum grade of C. Permission of the biology department faculty is required to substitute high school biology for the college biology prerequisite.
 - Submit official transcripts of previous education including high school, vocational school or college.

- Provide proof of completion or challenge of the following courses within the last five years with a minimum grade of C: Biology 237/247L—Anatomy and Physiology I Biology 238/248L—Anatomy & Physiol-
- Complete or challenge Home Economics 125—Nutrition.
- Complete or challenge at least three of the following courses:
 English 101—Writing with Readings in Exposition

 Psychology 101—General Psychology I.

Psychology 101—General Psychology I Psychology 102—General Psychology II Philosophy 245—Biomedical Ethics Speech 221—Interpersonal Communication

- Complete Nursing Concepts for LPNs with a minimum grade of C.
- Take the Nursing Mobility Profile I examination if an approved postsecondary practical nurse program has not been completed. The exam also may be required if the applicant has not been active in nursing during the last five years.
- Submit three letters of recommendation from former teachers, employers or other supervisors.
- Following admission to the program, submit a completed physical examination and

- health form with evidence of current immunizations before beginning clinical courses.
- Submit evidence of current CPR certification before beginning clinical courses. CPR certification must be kept current throughout the program.

Applicants for advanced standing may complete additional courses required for the associate degree in nursing before taking Nursing III, Nursing IV and Nursing Seminar, enabling them to complete the program on a part-time basis.

COURSE DESCRIPTION

0560416-Nursing Concepts for LPNs (2 cr)

This course is an introduction to the conceptual framework of the nursing program and an in-depth study of the nursing process with emphasis on assessment skills. The process of role change from LPN to RN is included. This course is required for LPNs and transfer applicants who seek advanced placement in the associate degree program.

Nursing Assistant

1 Term (Main Campus)

This program trains students in nursing skills required for the care and comfort of the sick in hospitals, outpatient clinics, nursing homes, public health agencies, private medical offices and the home. Persons successfully completing the program receive certificates as nursing assistants.

To be admitted, applicants must pass a basic math test and read at the seventh grade level. Good communication skills and the ability to clean and cook are necessary for this program. Applicants must have a New Mexico driver's license and a car because students must provide their own transportation to the various health care agencies and patients' homes. City buses are not adequate for meeting transportation needs.

The 15 wa

The 15-week program includes 324 instructional hours. Nine weeks are spent in the classroom and laboratory, followed by six weeks of extensive supervised clinical training in local hospitals, nursing homes, outpatient clinics and health care agencies. A student attends an average of 22 hours per week throughout the program.

A \$30 equipment fee covers the cost of the required uniform top, stethoscope and health test. A watch with a second hand, uniform slacks, blouse and shoes are required but not covered in the fee.



NURSING ASSISTANT PROGRAM

·	Contact	Cr
Course Requirements		Hrs
Nursing Assistant Lab and Theory.	125	6
Health Communications	40	2
Mathematics	25	3
Nursing Assistant Clinical		
Experiences	134	5
Totals	324	16

COURSE DESCRIPTIONS

0530031/0530016—Nursing Assistant Lab and Theory (6 cr)

During the first nine weeks, students attend classes covering basic nursing skills used in health care agencies and homes. Practice of these skills is provided in the laboratory.

0530406—Health Communications (2 cr)

This course includes introductions to medical terminology, anatomy and physiology, and nutrition. Also covered are home management, community resources, purchase and preparation of foods, as well as basic understanding of the structure and normal function of the body systems and some of the health problems which can occur in those systems.

0530319-Mathematics (3 cr)

Basic math is reviewed in this course with practice working selected problems.

0530070-Nursing Assistant Clinical Experiences (5 cr)

Four of the last six weeks of the program include supervised practice of nursing skills in hospitals, elder care centers or outpatient clinics throughout the city. The other two weeks cover home health experiences and include nursing care of patients in selected home settings.

Phlebotomist

10 Weeks (Main Campus)

The primary work of a phlebotomist is to draw blood specimens from health care clients for testing. A phlebotomist generally works part time in a medical laboratory under the supervision of a registered technologist.

The job includes establishing a professional relationship with the client, selecting and preparing the skin puncture site, collecting specimens, preparing and maintaining equipment used to obtain blood specimens, caring for the client after specimen collection, entering data into the computer for the testing process, and performing clerical duties related to laboratory test record-keeping. The job also requires a lot of walking, bending and standing.

Applicants must have a high school diploma or GED, verbal ability to communicate with clients, basic math skills for calculating dosages and timing tests, and manual dexterity required to handle laboratory equipment. The student must be able to read orders and labels associated with the procedures. To be admitted, applicants must pass a math test and read at the seventh grade level.

To receive a certificate, a student must complete the 10-week program which includes 250 hours of classroom instruction and clinical experience in local hospitals and/or clinics.

A \$45 equipment fee covers the cost of a lab coat, health tests, name tags and other equipment.

The program is offered on the basis of demand and need. Information on starting dates is available from the Health Occupations Department.

This program does not qualify students for Veterans Administration benefits or other financial aids.



PHLEBOTOMIST PROGRAM

	Contact	Cr
Course Requirements	Hrs	Hrs
Phlebotomist Theory and Lab	160	6
Phlebotomist Clinical Practice		3
Totals	250	9

COURSE DESCRIPTIONS

0533617—Phlebotomist Theory and Lab (6 cr)

Students learn the procedures for collecting blood and other specimens from patients. Interpersonal relationships with patients, peers and staff are stressed. An introduction to computer processes and laboratory clerical duties also is included.

0533038—Phlebotomist Clinical Practice (3 cr)

Students practice skills and apply the theory learned in class during supervised clinical practice in city hospitals and/or clinics.

Practical Nurse

3 Terms (Main Campus)

This program prepares students to care for patients in a variety of health care facilities under the supervision of registered nurses and physicians. The T-VI/Presbyterian Hospital School of Practical Nursing is accredited by the National League for Nursing and approved by the New Mexico State Board of Nursing (NMSBN).

Graduates of this program are eligible to take the licensing examination for practical nurses administered by the NMSBN. Following licensure, LPNs may find employment in long-term care facilities, hospitals, physicians' offices and other health care agencies.

To be eligible for selection, an applicant must:

- Hold a high school diploma or GED.
- Earn satisfactory American College Test (ACT) scores. Applicants must take the ACT at T-VI unless they have completed it within the last three years and have a copy of results which qualify them for admission.
- Provide proof of completion within the past five years of Biology 123/124L—Biology for Health Sciences—or equivalent with a minimum grade of C. Permission of the biology department faculty is required to substitute high school biology for the college biology prerequisite. Applicants who do not meet this requirement may take Biology 123/124L at T-VI

- during the winter or summer term in order to qualify for admission to the Practical Nurse program in the fall.
- Score 90% on a math entrance exam. Applicants may retest once. Following a second unsuccessful attempt on the test, applicants must satisfactorily complete Developmental Studies Math or Math 100 before they can be accepted into the program.
- Have a personal interview with a representative of the nursing program.
- Submit three letters of recommendation from former teachers, employers or other supervisors.
- If selected for the program, submit a completed physical examination and health form with evidence of current immunizations before beginning clinical courses.
- Submit evidence of current CPR certification before beginning clinical courses. CPR certification must be kept current throughout the program.

Applicants are admitted to the program on the basis of their application dates after all admission requirements are met.

The Practical Nurse program includes General Education courses for which college credit is awarded. Those courses must be taken prior to, or as scheduled in, the curriculum plan. A minimum grade of C must be earned in all courses to continue in the program. Students must attend classes, observations and clinical experiences as scheduled, and arrange for their own transportation to the agencies and hospitals.

There is a \$75 personal equipment fee for required uniforms, stethoscope, scissors and identification tags. Students are responsible for the expenses of the physical examination, a watch with a second hand, uniform shoes, cap, graduation pin and licensing exam fees.



Presbyterian Hospital School of Practical Nursing

The Presbyterian Hospital School of Practical Nursing was started in 1956 at Presbyterian Hospital. In 1965, T-VI assumed administrative responsibility for the school. Presbyterian Hospital Center supports the school through housing of the program, offering the clinical facility for patient care experiences. The Presbyterian Hospital School of Practical Nursing in 1972 became the first and only nursing program in New Mexico accredited by the National League for Nursing. The program was reaccredited in 1980. It is also included in T-VI's accreditation from the Commission on Higher Education of North Central Association of Colleges and Schools.

PRACTICAL NURSE PROGRAM

Term I	Contact Hrs	Cr Hrs
	1173	11/3
*Biology 237—Anatomy and		•
Physiology I		3
*Biology 247L—Anatomy and		
Physiology I Lab		1
*Psychology 102—General		
Psychology II		3
Practical Nursing Nutrition	45	3
Nursing I		
Theory	60	4
Clinical	135	3
		,
Term II		
*Philosophy 245—Biomedical		
Ethics		3
*Speech 221—Interpersonal		_
Communication		3
Practical Nursing Pharmacology.	45	3
Nursing II	7,7	,
	60	1
Theory		4
Clinical	135	3
Term III		
201111 222		
Practical Nursing III	100	^
Theory	135	9
Clinical	<u>315</u>	_7
Totals	930	49

^{*}General Education courses. Course descriptions on pages 23-25.

COURSE DESCRIPTIONS

0510235/0510236—Nursing I (7 cr)

Concepts of the nursing process and the theoretical framework of the curriculum are introduced. The individual, society, health and nursing are developed within the self-care deficit model of nursing. Nursing skills are developed to meet the universal needs of individuals within cultures and include communication skills, health care delivery systems, legal/ethical role of nurses, introduction to pharmacology and medication administration. Accompanying laboratory and clinical experiences provide opportunities to apply theory to practice.

0510179—Practical Nursing Nutrition (3 cr)

This course presents normal nutrition needs of humans throughout the life span and the means of fulfilling these needs through diet. Content includes assessment of nutritional status, the impact of nutrition on health and community nutrition resources. Functions, sources, deficiency symptoms and metabolism of required nutrients are presented.

Human Growth and Development may be substituted.

0510632-Practical Nursing Pharmacology (3 cr)

This course covers effects of commonly-used drugs on various body systems. Dosages, application, side effects and/or toxicity, laboratory tests performed to monitor actions, and effects of given drugs are discussed.

0510393/0510392-Nursing II (7 cr)

(Prerequisite: Completion of all first-term courses) The use of the nursing process to meet self-care deficits of clients unable to meet their own needs because of illness or injury is emphasized. The role of the nurse in meeting developmental self-care needs is introduced through study of the geriatric client. Laboratory and clinical experiences focus on continuing development of assessment skills with clients in acute and long-term care facilities.

0510221/0510222—Practical Nursing III (16 cr)

The developmental self-care needs of clients of all ages, emphasizing pediatrics and the child-bearing family, are correlated with the nursing process. The legal/ethical role of the practical nurse is presented. Clinical experiences in maternity, pediatric and medical-surgical areas support the theory portion of the course.



Practical Nurse Advanced Standing

There are two ways in which advanced standing can be given to Practical Nurse applicants—credit granted for equivalent coursework and/or successful completion of a challenge exam.

The General Education courses required in the Practical Nurse program must be transferred, taken or challenged through the College Division. These courses include: Biology 237/247L—Anatomy and Physiology I, Psychology 102—General Psychology II, Philosophy 245—Biomedical Ethics, and Speech 221—Interpersonal Communication.

The nursing courses must be transferred, taken, or challenged through the Health Occupations Department. These courses include: Nursing I, Nursing II, Practical Nursing Nutrition, Practical Nursing Pharmacology and Practical Nursing III.

TRANSFER APPLICATION: T-VI will grant credit for equivalent coursework completed at an accredited technical-vocational school or college when official transcripts show grades of "C" or better on equivalent courses. Students desiring to transfer to T-VI's Practical Nurse program should contact the program director.

CHALLENGE APPLICATION: Challenge applicants must have a health occupations background and experience in performing basic nursing skills. The Nursing Mobility I Examination, published by the National League for Nursing, is used to determine the applicant's knowledge of clinical nursing courses. Individual challenge examinations are available for nutrition and pharmacology.

Challenge examinations for the nursing courses are offered twice a year. Applications are accepted at the Health Occupations Office during February and July. Challenge of General Education courses should be arranged through the College Division.

An applicant who does not score satisfactorily on the challenge exam for the nursing courses must take the courses to obtain a certificate. The nursing course challenge exam may be taken only once.

ADMISSION: Challenge and transfer students are admitted to the program on the basis of available space, challenge exam scores, prior academic work and nursing experience. Applicants for transfer and applicants passing the challenge exams are scheduled for interviews with a faculty admission com-

mittee. The entire faculty makes a decision regarding the admission and residency requirements of all applicants for advanced standing based on the recommendations of the admission committee. Residency requirements in clinical nursing courses range from a minimum of 12 weeks to a maximum of 30 weeks. During this period, faculty evaluate each student's performance to determine if the program objectives have been met and make recommendations regarding graduation. Challenge students who meet the program objectives are considered full graduates and are eligible to take the licensing exam for practical nurses.

OTHER ADMISSION REQUIREMENTS:

Challenge and transfer students admitted to the program must meet these additional requirements:

- Submit transcripts of prior education and proof of high school graduation or GED.
- Submit a completed physical examination and health form with evidence of current immunizations.
- Submit evidence of current CPR certification.
 CPR certification must be kept current throughout the program.
- Purchase school uniforms and other needed equipment.
- Pay required T-VI fees.

Respiratory Therapy Technician

3 Terms (Main Campus)

The Respiratory Therapy Technician program teaches the knowledge and skills required for treatment, management, control and care of patients with breathing problems. The one-year program includes classroom and laboratory instruction and supervised clinical experiences at local hospitals and other health care facilities.

Employment opportunities for respiratory therapy technicians are available in urban and rural health care facilities nationwide including veteran and military base hospitals. The newest employment opportunities are with medical equipment suppliers and agencies providing home health care to pulmonary patients.

The program is accredited by the American Medical Association's Council on Allied Health Education and Accreditation and the Joint Review Committee for Respiratory Therapy Education. Graduates are eligible to take the National Board for Respiratory Care certification exam to obtain Certified Respiratory Therapy Technician credentials. Successful completion of this exam also allows individuals to be recognized as Licensed Respiratory Care Practitioners in New Mexico.

Graduates may wish to continue their training by completing a second year of coursework at the University of New Mexico. This additional training prepares certified technicians to become registered therapists. An Associate of Applied Science Degree is awarded by the UNM School of Medicine/Allied Health Sciences Center upon completion of the required coursework.



Applications for the fall 1988 class will be accepted between January 4 and July 1, 1988 or until 125 applications have been received. A class of 22 students will be selected. To be considered for acceptance into the program, an applicant must:

- Have a high school diploma or GED.
- Complete the ACT exam with satisfactory scores or submit satisfactory exam scores from within

the last three years. A minimum composite score of 15 is required.

- Score 12 or higher on the ACT math test. If applicants score below 12, they may be considered for admission if they satisfactorily complete Math 100.
- Complete Biology 123/124L—Biology for Health Sciences—or equivalent with a minimum grade of C.
- Complete a personal interview with a Respiratory Therapy program faculty member.
- Submit three letters of recommendation.
- Submit a completed physical examination form. Respiratory Therapy students pay a \$75 equipment fee when they begin the program to cover the cost of the required uniform and identification badges. Additional costs include purchase of a stethoscope, bandage scissors and graduation pin, and the preentrance physical exam.

RESPIRATORY THERAPY TECHNICIAN PROGRAM

	Contact	Crl
Term I	Hrs	Hrs
*Biology 237/247L—Anatomy		
and Physiology I		4
*Math 120—Intermediate Algebra		3
Respiratory Therapy Principles		
and Practices I	45	3
Respiratory Therapy Lab I	45	Ų
Clinical Experiences I	225	4
Term II		
Cardiopulmonary Physiology	45	3
Physics of Respiratory Therapy	45	3
Respiratory Therapy Principles		
and Practices II	60	4
Respiratory Therapy Lab II	45	1
Clinical Experiences II	255	\$
Term III		
Psychosocial Aspects of Patient		
Care	45	3
Respiratory Therapy Seminar	45	3
Respiratory Therapy Principles		
and Practices III	60	4
Respiratory Therapy Lab III	45	ì
Clinical Experiences III	255	5
Totals	1215	. 48

^{*}General Education courses. Course descriptions on pages 23-25.

COURSE DESCRIPTIONS

0520615—Respiratory Therapy Principles and Practices I (3 cr)

This course covers respiratory, therapy as a paramedical profession—the personal qualifications, ethics, expectations and opportunities, medical terminology and charting. It also covers practices and procedures of basic respiratory care including cardiopulmonary clinical assessment, medical gas administration, oxygen therapy, principles of microbiology, infection control and equipment maintenance.

0520030-Respiratory Therapy Lab I (1 cr)

Students practice basic respiratory care procedures, using state-of-the-art equipment in the learning laboratory and in simulated patient situations.

0520115-Clinical Experiences I** (5 cr)

Supervised clinical experiences in the hospital setting allow students to apply knowledge and skills learned in classroom and laboratory sessions. Students apply basic respiratory therapy skills in direct patient contact situations supervised by clinical faculty members.

0520522—Cardiopulmonary Physiology (3 cr)

More advanced knowledge of the physiologic processes of the circulatory, pulmonary, renal and nervous systems and their relationships to each other is emphasized. Basic principles of chemistry are covered as they relate to blood chemistry and blood gas analysis.

0520189-Physics of Respiratory Therapy (3 cr)

The basic concepts of physics as they relate to physiology of the lungs, gas laws, gas flow and mechanics of the breathing process are covered and applied to the operation of respiratory therapy equipment.



0520647—Respiratory Therapy Principles and Practices II (4 cr)

Additional theory of respiratory therapy procedures is presented with emphasis on breathing treatments, chest physiotherapy and airway management. Basic principles of pharmacology are taught along with the procedure of administering medicated aerosol therapy. The concepts and skills required to perform basic pulmonary function testing are included.

0520069—Respiratory Therapy Lab II (1 cr)

Students practice additional respiratory care procedures learned in Principles and Practices II. Students use equipment in simulated patient situations.

0520160-Clinical Experiences II** (5 cr)

Supervised clinical experiences continue in area hospitals and health care facilities. Students also visit patients in the home setting, supervised by qualified personnel working with medical equipment supply companies in Albuquerque.

0520729—Psychosocial Aspects of Patient Care (3 cr)

The basic psychosocial and emotional aspects of human behavior are explored as they relate to the hospital environment and the circumstances involving people who are hospitalized. Emphasis is placed on understanding human psychologic, sociologic and emotional needs during illness and hospitalization. Students also explore the psychosocial aspects of working in the health care field and their effects upon their own human behavior and coworkers.

0520669—Respiratory Therapy Seminar (3 cr)

Students study current trends in the respiratory care profession. Included are concepts of education, supervision and management principles necessary for respiratory therapy personnel who aspire to leadership positions.

0520684—Respiratory Therapy Principles and Practices III (4 cr)

Concepts and principles of critical care are introduced for patients with life threatening diseases. Emphasis is on learning mechanical ventilatory support for neonatal, pediatric and adult patients who need life support maintenance. Concepts and theories of critical care medicine are introduced.

0520163—Respiratory Therapy Lab III (1 cr)

Students practice procedures learned in Principles and Practices III. Advanced respiratory therapy procedures are simulated in lab sessions including extensive work with mechanical ventilation devices.

0520192—Clinical Experiences III** (5 cr)

Supervised clinical experiences in the hospital setting continue. More emphasis is placed on caring for patients in critical care settings with special concentration on maintaining life support systems.

**During clinical experiences, students meet for formal lectures on the pathophysiology of the cardiopulmonary system. The lectures are given by the respiratory therapy program's medical director, one of his associates, or other physicians in the community. Clinical pathologic disorders which require respiratory therapy diagnosis, treatment and care are covered.

Respiratory Therapy Technician Advanced Standing

There are two ways in which advanced standing can be granted to Respiratory Therapy Technician applicants.

The first is through credit for equivalent coursework completed at an accredited technical-vocational school, college or university. Credit may be given when the Health Occupations Department receives official transcripts showing grades of C or better on equivalent courses.

The second, for people with documented respiratory therapy work experience, is through challenge exams. Persons wanting to challenge Term I coursework may apply at the Health Occupations Department during the month of April. Challenge exams will be given in May. A written exam is used to challenge theory courses. A competency test using respiratory therapy equipment under simulated conditions in the learning laboratory is used to challenge lab and clinical coursework.

Applicants also must meet all prerequisites for admission into the program including minimal ACT scores, math and science requirements.

Those with previous respiratory therapy work experience under medical supervision must document at least 225 hours to challenge Term I coursework and another 255 hours to challenge Term II coursework. Those taking challenge exams must score at least 71% on each component to receive Term I credit. Challenge exams may be taken only once. Persons given challenge credit for Term I will be admitted in January for Term II on a space-available basis.

Persons successfully completing all Term I requirements may apply to challenge Term II coursework. Term II challenge applications will be accepted during October and tests will be scheduled in November.

Portions of Term III may be challenged depending on prior clinical work experiences which must total at least 700 hours under medical supervision. Dates for challenging Term III coursework will be scheduled on an individual basis.

Challenge and transfer students accepted must submit transcripts of prior education and proof of high school graduation or GED. They must pay required T-VI fees, purchase school uniforms and other needed equipment, and have a physical examination before admission.



TECHNOLOGIES DEPARTMENT

Programs in the Technologies Department are the longest at the Institute. All except Electromechanical Drafting are four terms (16 months). Technologies programs also have the highest math skill entry requirements.

Students in two programs—Laser Electro-Optics Technology and Instrumentation and Control Technology—can choose to complete either an Associate in Applied Science Degree or a certificate.

Because the Technologies programs are in high demand, interested persons should apply as early as possible. A year ahead is not too soon.

All of the Technologies except Electromechanical Drafting are offered at the Main Campus. Three Data Processing Technology, Electronics Technology and Laser Electro-Optic Technology—are offered at both the Main and Montoya campuses.

There are beginning groups each term in all Technologies except Electromechanical Drafting, which starts once a year in the summer term.

SUPERVISED WORK EXPERIENCE PLAN

Supervised work experience is for students who have acquired most of the skills and work attitudes needed to succeed in an entry-level job. In Technologies, students may apply for this option during the final term.

This on-the-job experience—a training plan developed by the cooperating employer and T-VI instructional staff—may be substituted for the laboratory part of a program. Before beginning a supervised work experience, the student must have the approval of the instructor, academic advisor, counselor, department chairman and student services director (or assistant resident administrator at Montoya Campus).

The supervised work experience option is not eligible for Veterans Administration benefits.

SUPPORT COURSES

There are several optional support courses common to Technologies programs. At least 12 students must sign up for an optional support course before it can be offered. Common support courses are:

	Hrs	Cr
Course Title	Wk	Hrs
BASIC Language Programming	5	3
FORTRAN Programming	5	3
Pascal Programming	5	3
Reading Improvement	5	3
Technical Writing (7½ weeks)	5	1
Thinking Strategies (71/2 weeks)	5	1
Introduction to Computers	5	3

COURSE DESCRIPTIONS

0130703—BASIC Language Programming (3 cr)

This introduction to BASIC includes use of input and output statements, arithmetic operations, comparison and branching commands, use of subroutines and the library functions. Algorithms associated with technological computations are developed.

0130872—FORTRAN Programming (3 cr)

This is an introductory course in FORTRAN IV computer programming.

0110212—Pascal Programming (3 cr)

This class uses microcomputers and covers the Pascal language for personal or mainframe computers.

0091241-Reading Improvement (3 cr)

This course helps students understand what they read. Students with special reading problems are counseled to take this course.

0110420-Technical Writing (71/2 weeks) (1 cr)

This course consists of two parts: a skills brush-up emphasizing writing with control (word choice, material placement, organization and punctuation), and application of that skill to technical writing situations. Students practice writing lab reports, technical reports and various types of technical documentation.

0110891—Thinking Strategies (71/2 weeks) (1 cr)

This is a course for those who want to improve their general thinking abilities. Several thought processes are explored and applied to general problem-solving situations, math word problems and group processes.

0110880-Introduction to Computers (3 cr)

Instruction is provided in computer vocabulary. Students learn how to use personal computers to perform tasks related to their studies.

Architectural Drafting Technology

4 Terms (Main Campus)

Drafting is an excellent employment skill for persons who like to draw, have construction experience, or have a strong interest in building design or the construction process. The potential for advancement into jobs with increasing responsibility and wider scope is good.

The Architectural Drafting Technology program includes the principles of architectural and engineering graphics and the theory and practice of construction technology. Graduates are prepared for entry level job opportunities as architectural or engineering drafting technicians in residential and commercial construction, and for estimating and sales positions with contractors, fabricators and suppliers.

The program also provides a strong foundation for pursuing a degree in engineering or architecture. Several courses combine to provide the basis for waiving specified courses in the School of Architecture at the University of New Mexico.

To earn a certificate, students must complete successfully a total of 1650 hours of which 675 are laboratory work and 975 are related theory.

A student may leave the program when a training objective is reached and receive a rating certificate detailing the skills completed.

Students pay a personal equipment fee of \$50 at the beginning of the program.

ARCHITECTURAL DRAFTING TECHNOLOGY PROGRAM

_	Hrs	Cr
Term I	Wk	Hrs
Residential Drafting	12	8
Architectural Mathematics	5	3
Residential Materials and Methods	5	3
Introduction to CAD	3	1

Term II		
Architectural Drafting	12	8
Architectural CAD	3	1
Energy Systems	3 _. 5	3
Commercial Design Development.	5	3
Architectural Trigonometry	5	3
Term III		
Structural Engineering Drafting	12	8
Structural Detailing	5	3
Structural CAD	3	1
Structural Mathematics	5	3
Project Management	5	3
Term IV		•
M/E Systems Drafting	10	6
M/E Systems CAD	5	3
M/E Systems Analysis	10	6
Totals	1650	66
Support Courses		
Architectural Rendering	5	3
Architectural Design	5	3
Construction Management	5	3
Computer Estimating	5	3
•		

COURSE DESCRIPTIONS

0121002-Residential Drafting (8 cr)

(Corequisites: Residential Materials and Methods; Introduction to CAD) This course introduces general drafting theory and techniques needed to produce construction drawings and related contract documents for residential structures. The development of graphic skills is emphasized. The student also learns to use manufacturers' technical data and standard reference works in developing drawings.

0121302—Architectural Mathematics (3 cr)

This course covers basic concepts of algebra and geometry with emphasis on architectural and engineering applications and calculator usage.

0121702-Residential Materials and Methods (3 cr)

Properties of building materials are related to building design and construction methods. Blueprint reading, zoning, building codes, material estimates, energy conservation, and alternative building technologies are covered. The student learns the City of Albuquerque's requirements for obtaining a building permit.

0121326-Introduction to CAD (1 cr)

(Corequisite: Residential Drafting) This course includes an introduction to the microcomputer and its operating system text editing, electronic spreadsheets, and basic experience in computer assisted drafting (CAD).

0121051—Architectural Drafting (8 cr)

(Prerequisite: Residential Drafting; corequisites: Architectural CAD. Architectural Trigonometry, Commercial Design Development) The student's drafting skills are expanded to include the style and media commonly used in architects' of-

fices. Students produce selected working drawings for light commercial structures using appropriate professional reference materials to solve typical problems.

0121248-Architectural CAD (1 cr)

(Prerequisite: Introduction to CAD; corequisite: Architectural Drafting) The student builds on CAD skills developed in Introduction to CAD, learning intermediate drawing and editing commands. Enhanced architectural drafting software is introduced, and text editing and electronic spreadsheets are used.

0121842-Energy Systems (3 cr)

(Prerequisites: Residential Drafting, Residential Materials and Methods) This course teaches the use of current energy conservation techniques including passive solar design. Concepts covered include comfort zones, building orientation, heat transfer, thermal mass and overall efficiency calculations. The student applies these techniques to an original residential design with the help of computer simulation.

0121787—Commercial Design Development (3 cr)

(Prerequisites: Residential Materials and Methods, Residential Drafting) This course follows the sequence of critical decisions that take a commercial project from conceptual design to detailed architectural drawings. These decisions include site development, code compliance, setting vertical dimensions, and the selection of wall, floor and ceiling systems. Typical light commercial construction materials and detailing are explained throughout and illustrated with example blueprints and specifications.

0121375—Architectural Trigonometry (3 cr)

(Prerequisite: Architectural Mathematics) This course uses a calculator approach to trigonometry that includes architectural applications such as site planning.

0121103—Structural Engineering Drafting (8 cr)

(Prerequisite: Architectural Drafting; corequisites: Structural Detailing, Structural CAD, Project Management, Structural Mathematics) This course offers drafting applications and theory for heavy construction projects. Working drawings are prepared in four major modes of construction—structural steel, precast concrete, cast-in-place concrete and heavy timber. The development of graphic skills for engineering drafting is emphasized.

0121851-Structural Detailing (3 cr)

(Prerequisite: Architectural Drafting) This class introduces typical structural steel and precast concrete fabricating shop practices in the preparation of shop drawings. Steel beam, column, and concrete reinforcing detailing information is given. Graphic techniques and standards for shop drawings are presented.

0121241-Structural CAD (1 cr)

(Prerequisite: Architectural CAD; corequisite: Structural Engineering Drafting) Intermediate CAD drawing and editing skills are expanded, and structural drafting applications are developed. Three dimensional views, text editing and applications software also are used.

0121331—Structural Mathematics (3 cr)

(Prerequisites: Architectural Trigonometry, Architectural Drafting) This course covers the basic principles of physics as they apply to construction and structural analysis. The student is introduced to structural design in wood, steel and concrete. Students learn to set up and solve elementary beam design problems.

0121901—Project Management (3 cr)

(Prerequisites: Commercial Design Development, Architectural Drafting) This course includes the discussion of contracts, fees, bidding and construction administration. Structural drawings in steel and concrete are used to illustrate the coordination among architect, fabrication firm and general contractor. Principles of cost estimation and project scheduling are introduced with special reference to heavy construction projects. Typical structural material and processes are explained throughout.

0121365-M/E Systems Drafting (6 cr)

(Prerequisite: Structural Engineering Drafting: corequisites: MIE Systems CAD, MIE Systems Analysis) The student learns conventional drafting methods of mechanical and electrical systems. This includes overlaying electrical, heating, ventilation and plumbing systems on architectural views. Engineering drawings are developed and engineering graphic skills are expanded with emphasis on inking techniques.

0121154—M/E Systems CAD (3 cr)

(Prerequisite: Structural Cad; corequisites: M/E Systems Drafting, M/E Systems Analysis) The student develops complete engineering drawings of mechanical and/or electrical systems on the computer. Text editing is used to develop extensive sets of general and coded notes.

0121760—M/E Systems Analysis (6 cr)

(Prerequisites: Energy Systems, Structural Engineering Drafting) This theory course presents general and layout information and code requirements for commercial systems. Topics include power and lighting, plumbing and air conditioning. Microprocessor software applications are used to expedite the design process.

0121871-Architectural Rendering (3 cr)

Techniques in architectural rendering and illustration are explored. Students work with axonometric and perspective drawings in a variety of media such as pencil sketching, inking and color.

0121731—Architectural Design (3 cr)

This course begins with two-dimensional abstract exercises that teach basic design concepts. Those principles are then applied to individual rooms using three-dimensional space and light study models. The majority of the term is spent simulating the preliminary design process for a residence. Each student completes a client interview, site analysis, relationship diagram and preliminary drawings. Scale models of the designs are built.

0121328—Construction Management (3 cr)

(Prerequisite: Residential Drafting; corequisite: Commercial Design Development) This course covers basic management systems required for effective project planning and scheduling; cost estimating, budgeting and cost control accounting; quality assurance; materials management; and the interrelationships among each. Students analyze how well and widely these systems are used in industrial, utility and commercial segments of construction. Microcomputer software is used where applicable.

0121329—Computer Estimating (3 cr)

(Prerequisite: Architectural Drafting: corequisite: Project Management) Determination of probable costs of construction projects is emphasized. Topics include making quantity takeoffs, determining local unit costs and job scheduling. Microcomputer software is used extensively.

See also the common support course descriptions on page

Civil and Surveying Technology

ij

4 Terms (Main Campus)

Civil and Surveying Technology provides students with job-entry skills as surveyors, cartographic technicians and design (civil) drafters. Positions are with surveying, mining, engineering and drafting organizations.

The program uses labs that contain modern drafting machines, drafting stations, theodolites, levels, total stations and electronic distance meters. A minicomputer with work stations, digitizers, graphics CRTs and plotters also is used.

To earn a certificate, students must complete successfully 1605 hours of which 1035 are laboratory work and 570 are related theory.

The program requires that instructional hours in the plane surveying course be alternated in Terms II and IV. During those terms, students attend classes up to seven hours two days a week and four hours the remaining days. Students must pay a \$35 personal equipment fee before entering the first term and another \$30 for the second term.

CIVIL AND SURVEYING PROGRAM

i,	Hrs	Cr
Term I	Wk	Hrs
Civil and Surveying Lab/Theory I. Civil and Surveying Mathematics	15	9
1	10	6
Term II		
Cartographic Techniques Lab/	ų	
Theory	15	. 9 .,
II	5	3
Plane Surveying I	6	3

Term III		
Photogrammetric Techniques Lab/	,	
Theory	3	1
BASIC Language Programming	10	6
Boundary Law and Public Land		
Surveys	5	3
Plane Surveying II	9	3 5 3
Computer-Assisted Civil Drafting.	3	3
Term IV		
Civil Design Lab/Theory	15	9
Technical and Legal		
Communications	5	3
Plane Surveying III	6	3
Totals	1605	63
Support Courses		- 1
FORTRAN Programming	5	3

COURSE DESCRIPTIONS

0120001-Civil and Surveying Lab/Theory I (9 cr)

This course introduces general drafting theory and techniques needed to produce a variety of engineering drawings and survey maps. Emphasis is on development of graphic skills and free-hand lettering. The student also learns to trace from rough sketches and manuscripts and develop maps from field notes.

0120301—Civil and Surveying Mathematics I (6 cr)

This course applies algebra, geometry and numerical trigonometry concepts to the surveying field. A computer-related course could be substituted for part of the math course with permission of the program advisor.

0120050—Cartographic Techniques Lab/Theory (9 cr)

(Prerequisite: Civil and Surveying Lab/Theory I) This course includes an introduction to mapping followed by practice in inking lines and lettering on vellum and drafting film. Tracings are made of topographic, geological and plan profile maps. Format development precedes techniques and practice in negative scribing, and preparation and reproduction of mechanical separations.

0120330—Civil and Surveying Mathematics II (3 cr)

(Prerequisite: Civil and Surveying Math I) Trigonometry is related in detail to surveying and civil problems. The course includes traversing, adjustments, area calculations, intersections and partitioning.

0120701—Plane Surveying I (3 cr)

(Corequisite: Civil and Surveying Math II) The student learns basic techniques and equipment used in surveying including tape, level, theodolite and engineering transit. Field work and related computations are done in leveling, distance and angle measurement and traversing related to mapping.

0120102-Photogrammetric Techniques Lab/Theory (1 dr)

(Prerequisite: Cartographic Techniques Lab/Theory) This course includes theory in aerial photography, geometry of single vertical photographs and overlapping aerial photos, flight plan-

ning and establishment of ground control. Students learn the use of modern stereoscopic plotting instruments and map compilation leading to the preparation of maps from aerial photos.

0120771—BASIC Language Programming (6 cr)

(Prerequisite: Civil and Surveying Math I) This introduction to BASIC includes the use of input and output statements, arithmetic operations, comparison and branching commands, use of subroutines and library functions. Algorithms and programs associated with surveying and engineering computations are developed.

0120739-Boundary Law and Public Land Surveys (3 cr)

(Prerequisite: Civil and Surveying Mathematics II) A study of modern surveying methods is related to resurveys of U.S. Public Lands, corner restoration and researching GLO plats and field notes. Boundary survey law and techniques are introduced. Extensive practice in the use of the National Geodetic Survey (NGS) Horizontal and Vertical Networks and the New Mexico State Coordinate System is provided along with training in law library use and courthouse record research.

0120721-Plane Surveying II (5 cr)

(Prerequisites: Plane Surveying I, Civil and Surveying Mathematics II) Instruction includes practice in the use of one-second theodolites, EDMs and total stations, precise leveling, stadia surveys, control surveys, computerized surveying systems and computer data reduction. Field observations and office calculations for determining azimuth by solar observation are included, and a retracement of a U.S. Public Land survey is conducted.

0120780—Computer-Assisted Civil Drafting (3 cr)

(Prerequisites: Plane Surveying I, Civil and Surveying Mathematics II; corequisite: Photogrammetric Techniques) The student learns how to operate the digitizer, plotter and graphics CRT using the CAST system. The input of coordinates, boundary or subdivision points from the keyboard or from COGO output is followed by the creation of label, text and annotation files and drafting sequences for plotted finished drawings.

0120153—Civil Design Lab/Theory (9 cr)

(Prerequisite: Photogrammetric Techniques Lab/Theory; corequisites: Plane Surveying III, Surveying Technical and Legal Communications) Students practice development and calculation techniques to analyze route surveys and produce highway, utility plan and profile drawings. An original subdivision, including drainage plans, is designed to subdivision ordinance specifications.

0120400-Technical and Legal Communications (3 cr)

(Prerequisite: Boundary Law and Public Land Surveys; corequisite: Civil Design Lab/Theory) Reading, writing and speaking skills are developed through practice in writing and interpreting land descriptions and interpretation and application of codes and specifications related to subdivision and design ordinances.

0120750-Plane Surveying III (3 cr)

(Prerequisites: Boundary Law and Public Land Surveys, Plane Surveying II) Included are mine survey methods; grid and radial topographic surveys; retracement of a boundary survey; horizontal and vertical curve calculations, design and layout; earthwork measurements; fluid mechanics and design of a sanitary sewer system.

See also the common support course descriptions on page 56.

Data Processing Technology

4 Terms (Main and Montoya Campuses)

In this program, students learn to solve information and management problems using computer hardware. Graduates are prepared for jobs as business applications programmers, which can be the first step in a career in the computer field. A typing prerequisite of 25 words per minute is required.

Computers currently used at T-VI are the Data General M600, 96MB disk drives, CRT terminals, magnetic tape, line printer and card reader; an IBM 4361, disk drives, tape drives, 3278 CRT displays, printer and reader; and a variety of microcomputers.

The first and second terms give students a sound background in fundamental skills used on a wide variety of computer and computer-related equipment. The third and fourth terms continue to build computer application skills with emphasis on problem-solving techniques and the man-machine interface. Minicomputer and mainframe environments are used in teaching five widely used programming languages.

To earn a certificate, students must complete successfully 1575 instructional hours of which 825 are laboratory work and 750 are related theory.

Students must pay a \$10 supply fee at the beginning of each term.

DATA PROCESSING TECHNOLOGY PROGRAM

	Hrs	Cr
Term I	Wk	Hrs
ANSI COBOL	10	6
Introduction to Computers/JCL	5	3
Computer Mathematics I	5	3
Data Processing Accounting I	5	3
Term II		
Advanced ANSI COBOL	10	6
VSE JCL/VSAM Utilities	10	6
Computer Mathematics II	5	3
Data Processing Accounting II	5	3
Term III		
Programming Techniques	5	3
Assembler Language		
Programming	10	6
BASIC Language Programming	5	3
Business Systems Analysis and		
Design	5	3
•	_	

Term IV		
Report Program Generator II	5	3
Computer System Software	5	3
Database and Telecommunications	5	3
Advanced BASIC Language		
Programming	5	3
Programming Projects	5	3
Totals	1575	63
Support Courses		
FORTRAN Programming	5	3
Pascal Programming	5	3
Technical Writing (71/2 weeks)	´ 5	1
Thinking Strategies (71/2 weeks)	5	1
C Language Programming	5	3

COURSE DESCRIPTIONS

0110242—ANSI COBOL (6 cr)

(Corequisite: Introduction to Computers/ICL or equivalent) Structured programming projects directly related to business and accounting applications are designed, coded, debugged and executed using a mainframe or microcomputer.

0110801—Introduction to Computers/Job Control Language (JCL) (3 cr)

(Corequisite: Computer Mathematics I) Instruction is provided in computer vocabulary, logic and control, and structured programming techniques including hierarchy charts and top-down planning. Also included are utilities, sorts and JCL for mainframe and microcomputer systems.

0110300—Computer Mathematics I (3 cr)

(Corequisite: Introduction to Computers/JCL) Algebra fundamentals are covered in this course along with selected business and management math applications. Microcomputers are used to assist in the instructional process.

0110700—Data Processing Accounting I (3 cr)

Students learn data accounting theory, practice and terms, and their relation to computer data processing.

0110250—Advanced ANSI COBOL (6 cr)

(Prerequisite: ANSI COBOL or equivalent) This course continues development of programming skills in the ANSI COBOL language with emphasis on indexed file processing, file update and subprogram concepts. Programming is done on mainframes and microcomputers.

0110600-VSE JCL/VSAM/Utilities (6 cr)

(Prerequisite: ANSI COBOL) IBM DOS/VSE Job Control, Editor, Power, Job Entry System, Procedures, Utilities, VSAM File Structures, and CICS concepts are studied.

0110370-Computer Mathematics II (3 cr)

(Prerequisite: Computer Math I) This course continues the development of algebra, business math skills and introductory statistics. Elementary BASIC programs are used to teach formulas on microcomputers.



0110720-Data Processing Accounting II (3 cr)

(Prerequisite: Data Processing Accounting I) Students learn the vocabulary and concepts used in manufacturing and corporation accounting. Emphasis is placed on computerized accounting on microcomputers.

0110263—Programming Techniques (3 cr)

(Prerequisites: Advanced ANSI COBOL, VSE JCL/VSAM, Utilities) This course involves development of an interactive on-line business application using a commercial screen generator, plus VSAM file handling and command level CICS.

0110122—Assembler Language Programming (6 cr)

(Prerequisite: VSE JCLJVSAM/Utilities) Students learn programming techniques necessary to write and refine efficient programs.

0110841—BASIC Language Programming (3 cr)

(Prerequisite: Introduction to Computers/ICL) This course uses the BASIC language to further the student's knowledge of interactive programming, routines using menu selection, and search and retrieval routines. Mainframe and microcomputers are used.

0110860—Business Systems Analysis and Design (3 cr)

(Prerequisite: Data Processing Accounting II; pre- or carequisite: Advanced ANSI COBOL) This course teaches structured techniques of systems analysis and design. The systems life cycle is presented and several methods of analyzing existing systems are covered. Microcomputers are used to write documentation and run project management software.

0110220-Report Program Generator II (3 cr)

(Prerequisite: VSE JCLIVSAM/Utilities) Students are introduced to the RPG II programming language used in business organizations.

0110660-Computer System Software (3 cr)

(Prerequisites: Advanced ANSI COBOL, Assembler Language Programming) This course covers topics designed to increase understanding of the use of microcomputers. This includes the study of various software operating systems, macro assembler programming, mainframe, mini and micro software computer packages.

0110831—Database and Telecommunications (3 cr)

(Prerequisite: VSE JCLIVSAM/Utilities) General concepts and organization of database systems are included along with practical application of Database Management Systems through the use of networks, telecommunication lines and hardware. Mainframe and/or microcomputers are used.

0110164—Advanced BASIC Language Programming (3 cr)

(Prerequisite: BASIC Language Programming) This course covers file structures, database techniques, interactive computing, statistics, management methods and string manipulations. Mainframe and/or microcomputers are used.

0110165-Programming Projects (3 cr)

(Prerequisites: Programming Techniques, Business Systems Analysis and Design) This course is a continuation of Programming Techniques with emphasis on individualized or group data processing projects.

0110622—C Language Programming (3 cr)

(Prerequisite: Advanced ANSI COBOL) This course is an introduction to C programming language using microcomputers.

See also the common support course descriptions on page 56.

Electromechanical Drafting

3 Terms (Montoya Campus)

Electromechanical Drafting is a complex field of drafting for persons with a strong interest in electronics and mechanical design. This program presents drafting fundamentals in both electronics applications and specialized mechanical drafting and design concepts.

Graduates are prepared for jobs as electromechanical drafters with a background in conceptual and applied experiences to allow growth and development in typical industrial situations.

The lab contains modern drafting stations, drafting machines and other typical drafting equipment. Computer user applications are included throughout the program.

To earn a certificate, a student must successfully complete 1237 hours of which 562 are laboratory work, 375 are theory, and 300 are supervised work experience. A new class is accepted at the beginning of the summer term only.

The supervised work experience in Term III does not qualify students for Veterans Administration benefits or other financial aid.

A personal equipment fee of \$50 is required to enter the program.

ELECTROMECHANICAL DRAFTING PROGRAM

Term I	Hrs Wk	Cr Hrs
Electromechanical Drafting Lab/ Theory I Technical Mathematics I Mechanical Analysis	15 5 5	9 3 3
Term II Electromechanical Drafting Lab/ Theory II Technical Mathematics II Basic Electronics	15 5 5	9 3 3
Term III Electromechanical Drafting Lab/ Theory III (7 ¹ / ₂ weeks) Technical Mathematics III (7 ¹ / ₂ weeks) Technical Writing (7 ¹ / ₂ weeks) Supervised Work Experience (7 ¹ / ₂ weeks) Totals	. 15 5 5 40 1237	5 2 2 6 45
Support Courses BASIC Language Programming FORTRAN Programming Reading Improvement Thinking Strategies (71/2 weeks)	5 5 5 5	3 3 3 2

COURSE DESCRIPTIONS

0122041—Electromechanical Drafting Lab/Theory I (9 cr)
This is an introduction to basic mechanical drafting skills,
orthographic projection, detail drawings and mechanical assemblies related to the electromechanical industry.

0122322—Technical Mathematics I (3 cr)

11

Algebra, geometry, formula manipulation and tolerances are covered.

0122716-Mechanical Analysis (3 cr)

Mechanical processes used to form and join metallic and nonmetallic materials are presented. The student is introduced to fabrication techniques and strength of materials.

0122074—Electromechanical Drafting Lab/Theory II (9 cr)

(Prerequisite: Electromechanical Drafting LabiTheory 1; corequisite: Basic Electronics) This lab incorporates the fundamental concepts of the electronics field. Students learn to use correct symbology, designations and layout techniques in accordance with conventional standards to describe formal schematics, logic diagrams, wiring layouts, cable drawings, single-sided and double-sided printed circuit boards, and fabrication drawings.

0122356—Technical Mathematics II (3 cr)

(Prerequisite: Technical Math I) An applied approach to trigonometry is presented based on mechanical computational needs.

0122715-Basic Electronics (3 cr)

[] (Prerequisite: Technical Math I) This course develops basic concepts of electronics and digital logic relevant to electromechanical drafting and printed circuit design. Circuitry characteristics, functions of components, typical circuitry applications, and the composition of discrete and integrated circuitry are studied.

0122121—Electromechanical Drafting Lab/Theory III (71/2 weeks) (5 cr)

(Prerequisite: Electromechanical Drafting Lab/Theory II) This course stresses advanced drafting skills and application techniques practiced in industry. Included are exposure to and use of computer-aided-design hardware and software, advanced geometric tolerancing applications and simplified electromechanical techniques. Class work includes a cumulative electromechanical design project.

0122357—Technical Mathematics III (71/2 weeks) (2 cr)

(Prerequisite: Technical Math II) This course concentrates on practical solutions of engineering problems through mathematical manipulation including formulas, charts and tables, identification and use of math resource materials, development of math logic sequences, and applications for CAD/CAM system operations. An introduction to calculus is included.

0110420—Technical Writing (7½ weeks) (2 cr)

Communication skills essential to the drafting technician are the focus of this course. Topics include identifying report targets, effective vocabulary and notation, outlining, technical writing techniques, process descriptions, report formatting and types of reports.

0122950—Supervised Work Experience (71/2 weeks) (6 cr)

(Prerequisites: All Term I and II courses) Students work a minimum of 300 hours at electromechanical-related supervised work stations. The student trainee is paid by the cooperative firm and supervised jointly by T-VI and the employer. When it is impossible to place all students in work stations because of local employment conditions, an equivalent activity is conducted on campus.

See also the common support course descriptions on page 56:

ļ



Electronics Technology

4 Terms (Main and Montoya Campuses)

The Electronics Technology program has been developed to provide the student with a broad base of skills in analog and digital circuits.

The program provides training in the fundamental concepts of electronics with an emphasis on digital equipment such as computers and electronic control devices.

Circuits which have application in the semiconductor, digital equipment manufacturing, measurement and control, communications and display industries are studied.

Lab facilities contain modern equipment for testing, troubleshooting, calibrating, analyzing and designing electronic circuits. Such electronic circuits may be found in communications equipment, computers, electronic instruments and many other electronic devices.

For a certificate in Electronics, the student must complete successfully 1500 hours of which 975 hours are laboratory work and 525 are theory. To qualify for a communications electronics endorsement on the certificate, students must complete an additional 150 hours in RF Fundamentals and Telecommunications.

Students must pay a \$10 personal equipment fee before entering the first term and another \$8 for the second term.

ELECTRONICS TECHNOLOGY PROGRAM

	Hrs	C_{r}
Term I	Wk	H_{rs}
Electronics Lab/Theory I	15	þ
Technical Mathematics	10	b

Term II Electronics Lab/Theory II Digital Circuits	15 10	, 9 6
Term III		
Electronics Lab/Theory III	15	9
Introduction to Microprocessors	10	6
Term IV		
Electronics Lab/Theory IV	15	9
Advanced Digital Techniques	10	6
Totals	1500	60
*Recommended Support Courses		
RF Fundamentals	5	3
Telecommunications	5	3

*The above courses are optional during Terms III and IV and may be scheduled to receive a communications electronics endorsement on the certificate.

Support Courses

Troubleshooting Techniques	5	3
BASIC Language Programming	5	3
FORTRAN Programming	5	3
Pascal Programming	5	3
Technical Writing (7 ¹ / ₂ weeks)	5	1
Introduction to Computers	5	3
Soldering Techniques (7 ¹ / ₂ weeks)	5	1

COURSE DESCRIPTIONS

0130003/0130601—Electronics Lab/Theory I (9 cr)

(Corequisite: Technical Mathematics or Laser Mathematics I) This course covers the basic concepts of direct and alternating current electricity, Ohm's Law, Kirchhoff's Law, meter circuits, magnetism and network analysis for DC and AC circuits. The laboratory supports the classroom theory. Students obtain skills in the use of oscilloscopes, function generators, multimeters and breadboarding circuits from schematic diagrams.

0130303—Technical Mathematics (6 cr)

This course covers algebra and trigonometry with emphasis on DC and AC circuit analysis.

0130052/0130634—Electronics Lab/Theory II (9 cr)

(Prerequisites: Technical Math, Electronics Lab/Theory I) Theory of semiconductors is applied to diode and transistor circuits. Power supplies and amplifier circuits are studied in detail.

0130380—Digital Circuits (6 cr)

(Prerequisite: Technical Mathematics) Logic circuit concepts are introduced. Small and medium scale integrated circuitry is used to introduce logic gates, counters, shift registers, arithmetic circuits, memories and connections with analog devices. The essential building blocks of many digital systems in computers, instruments, clocks and data processors are covered.

0130104/0130661—Electronics Lab/Theory III (9 cr)

(Prerequisite: Electronics Lab/Theory II) Analysis of transistor circuits is continued. Operation of the various classes of amplifiers, waveshaping circuits and oscillators is included. The course also covers the principles of operational amplifiers and basic operational amplifier circuits. Analog systems using AM and FM principles are studied.

0130385-Introduction to Microprocessors (6 cr)

(Prerequisite: Digital Circuits) The first part of this course focuses on programming in machine language. The student learns microcomputer architecture, central processing unit (CPU) block diagrams, bus structures and machine cycles. The second part of the course exposes students to computer hardware including clock circuitry, bus drivers, input and output ports and memory. Troubleshooting the different computer components is emphasized.

0130155/0130680-Electronics Lab/Theory IV (9 cr)

(Prerequisite: Electronics LabiTheory III) This course teaches practical applications of differential and operational amplifiers, switched mode power supplies, thyristors, various types of transducers and instrumentation for data collection, fiber-optics and opto-electronic devices. Related laboratory exercises provide experience in design and construction of operating systems, troubleshooting and component replacement techniques.

0130390-Advanced Digital Techniques (6 cr)

(Prerequisite: Introduction to Microprocessors: corequisite: Electronics Lab/Theory IV) This course provides students with practical experience in microcomputer interfacing. Topics include interfacing with keyboards, printers, ADCs, DACs and video displays. Polling and interrupts are discussed and used. Electromechanical devices are interfaced with the computer. Solving malfunctions in hardware and software is stressed. Students must create and troubleshoot assembly language programs to control the hardware.

0130717—RF Fundamentals (3 cr)

(Corequisite: Electronics LabiTheory III) This course provides study and practical analysis of broadcast communications systems. Included are single side band, radio, video equipment and regulations. Specific equipment may cover receivers, transmitters and related monitoring or recording devices.

0130435—Telecommunications (3 cr)

(Prerequisites: Electronics Lab/Theory III, Introduction to Microprocessors) Students learn data communication techniques and analog-to-digital applications. Topics studied include UARTS and USARTS, standards of interface such as RS232, protocols for interface, FSK and modems. Telephone switching systems and microwave transmission modes are introduced.

0130861—Troubleshooting Techniques (3 cr)

(Corequisites: Electronics Lab/Theory II and Digital Circuits) Students learn systems analysis of various electronic equipment which will be encountered in the industry. Emphasis is on locating problems and using proper methods for replacing defective components. The course includes theoretical work to complement the laboratory assignments.

0130382—Soldering Techniques (71/2 weeks) (1 cr)

Students use a top repair center to learn high-reliability soldering and desoldering techniques. Nondestructive printed circuit board repairs and component replacement techniques also are used.

See also the common support course descriptions on page 56.

Instrumentation and Control Technology

4 Terms (Main Campus)

The Instrumentation and Control Technology program provides students with job-entry skills to troubleshoot and repair automated or process control equipment and instrumentation. Students may earn an associate degree or certificate.

Topics covered include digital and analog circuitry, microprocessors, electronic and pneumatic instrumentation, and robotics. The program meets in a modern laboratory containing electronic lab benches and test instruments, oscilloscopes, signal generators, power supplies, digital trainers, microprocessors, servo trainers, hydraulic-pneumatic and process control equipment, and a student shop area.

To qualify for a certificate, students must com-

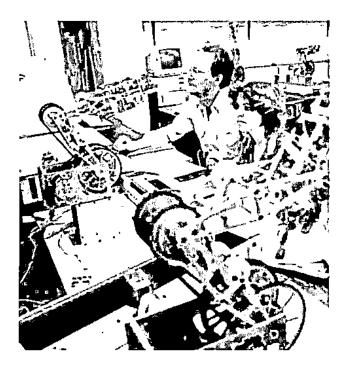
plete successfully 1575 instructional hours of which 825 are laboratory work and 750 are theory. To qualify for a communications electronics endorsement on the certificate, students must complete an additional 150 hours in RF Fundamentals and Telecommunications.

The associate degree program provides graduates additional science and technical skills for the support of engineering activities. Graduates of the Instrumentation and Control Technology program within the last four years must fulfill the General Education and residency requirements to receive the associate degree.

Students must pay a \$10 personal equipment fee before entering the first term and another \$8 for the second term.

INSTRUMENTATION AND CONTROL TECHNOLOGY PROGRAM

!		
	Hrs	Cr
Term I	Wk	Hrs
Electronics Lab/Theory I	15	9
Technical Mathematics	10	6
*English 119—Technical	10	·
		2
Communications		3
*Humanities/Social Science		
Elective		3
•		
T 11		
Term II		_
Semiconductors	10	6
Digital Circuits	10	6
Introduction to Robotics and		
Automated Equipment	5	3
*Math 162—Calculus I		4
		•
(
Term III		
Industrial Electronics III	10	6
Instrumentation and Control	10	ŏ
Feedback and Control	5	.31
	J	ر.
*Chemistry 121L—General		
Chemistry		4
		i
T 17		
Term IV		ا۔
Industrial Electronics IV	10	- 6
Advanced Feedback and Control	10	- 6'
Digital Applications	10	6
*Physics 160—General Physics		4
Totals	1575	81
		ľ
		- 1
*General Education courses required f		ciate
degree. Course descriptions on pages	<i>23–25</i> .	
C C		
Support Courses	_	
Basic Tool Applications	5	3
BASIC Language Programming	5 5 5 5 5	3
FORTRAN Programming	5	3
Technical Writing (71/2 weeks)	5	1
RF Fundamentals	5	3
Telecommunications	5	3
Troubleshooting Techniques	5	4
Soldering (71/2 weeks)	5	Ą
Soldering (7 /2 weeks)	3	1
Associate Degree Support Courses		
Computer Architecture and		
Operating Systems	5	Ţ
		Ţ
Principles of Laser Electro-Optics.	5	P
Telecommunications Techniques	5	Ď
Vacuum Systems	5	ß
Pulse Power	5	β
		- 1



COURSE DESCRIPTIONS

0130003/0130601-Electronics Lab/Theory I (9 cr)

This course covers basic concepts of direct current and alternating current electricity, Ohm's Law, Kirchhoff's Law, meter circuits, magnetism, and network analysis for DC and AC circuits. Students also obtain skills in the use of oscilloscopes, function generators, multimeters and breadboarding circuits from schematic diagrams.

0130303—Technical Mathematics (6 cr)

This course covers algebra and trigonometry with an emphasis on DC and AC circuit analysis.

0133796-Semiconductors (6 cr)

(Prerequisites: Electronics Lab/Theory I, Technical Math) Theory of semiconductors is applied to diode and transistor circuits. Power supplies and amplifier circuits are studied in detail. An introduction to the theory and operation of AC and DC motors is included.

0130380-Digital Circuits (6 cr)

(Prerequisite: Electronics Lab/Theory I) Logic circuit concepts are introduced. Small and medium scale integrated circuitry is used to introduce logic gates, counters, shift registers, arithmetic circuits, memories, and connections with analog devices. The essential building blocks of many digital systems in computers, instruments, clocks and data processors are covered.

0133797—Introduction to Robotics and Automated Equipment (3 cr)

(Prerequisites: Electronics Lab/Theory I, Technical Mathematics) This course introduces the student to the study of automation and robotics. Motors, pneumatics and hydralics are covered.

0133106—Industrial Electronics III (6 cr)

(Prerequisite: Semiconductors) Operational amplifiers, audio and video amplifiers, oscillator circuits, modulation methods and thyristor components are studied.

0133813-Instrumentation and Control (6 cr)

(Prerequisite: Digital Circuits) Microprocessor interfacing, AC and DC motor control techniques, stepper motor control and robot construction are studied. A laboratory robotic arm is interfaced to a computer.

0133740-Feedback and Control (3 cr)

(Prerequisite: Digital Circuits) Assembler and BASIC programming languages are studied and used to control automated processes.

0133156—Industrial Electronics IV (6 cr)

(Prerequisites: Industrial Electronics III, Instrumentation and Control) Servo mechanisms, serial and parallel data communications, fiber optic communications, process control, AC and DC motor control, instrument and computer troubleshooting, and advanced pneumatic and hydraulic techniques are studied. A personal computer is used in the lab.

0133781—Advanced Feedback and Control (6 cr)

(Prerequisite: Feedback and Control) Circuit analysis of typical electronic instruments, video terminals and computers is studied. Transducers used in industry and pneumatic and hydraulic components also are covered.

0133376-Digital Applications (6 cr)

(Prerequisite: Instrumentation and Control) This course provides students with practical experience in microcomputer interfacing. Topics include interfacing with keyboards, video monitors and serial communication devices. A/D and D/A convertors and electromechanical devices are interfaced with the microprocessor. Solving malfunctions in both hardware and software is stressed.

0920765—Basic Tool Applications (3 cr)

This combined laboratory and theory course provides instruction in shop safety, basic benchwork, precision measuring instruments, and basic operations on the drill press, lathe and band saw. Computer numerical control (CNC) machine applications are introduced.

0130717-RF Fundamentals (3 cr)

(Corequisite: Industrial Electronics II) This course provides study and practical analysis of broadcast communications systems. Included are single side band, radio, video equipment and regulations.

0130435-Telecommunications (3 cr)

(Prerequisites: Industrial Electronics III, Instrumentation and Control) Students learn data communication techniques and analog-to-digital applications. Topics studied include UARTS and USARTS, standards of interface such as RS232, protocols for interface, FSK and modems. Telephone switching systems and microwave transmission modes are introduced.

0130861—Troubleshooting Techniques (3 cr)

(Corequisites: Semiconductors, Digital Circuits) Students learn systems analysis of various electronic equipment. Emphasis is on locating problems and using proper methods for replacing defective components.

0130382-Soldering Techniques (71/2 weeks) (1 cr)

Students use a top repair center to learn high-reliability soldering and desoldering techniques. Nondestructive printed circuit board repairs and component replacement techniques also are used.

0133256—Computer Architecture and Operating Systems (3 cr)

(Pre- or corequisite: Digital Applications) This course introduces the architecture and operating system concepts that form the basis of microcomputer systems. Eight- and 16-bit microcomputers, architecture, operating systems, and I/O device drivers are studied.

0133255-Principles of Laser Electro-Optics (3 cr)

(Prerequisite: Math 150) The student is introduced to the operation and principles of a laser. Applications studied include low power laser alignment, gauging and inspection, and low power laser applications to interferometry and holography. Interaction of high power lasers is introduced.

0133254—Telecommunications Techniques (3 cr)

(Prerequisites: Industrial Electronics III, Instrumentation and Control III or equivalent) Telecommunication transmission mediums (phone systems, microwaves and fiber optics) are introduced. The course concentrates on how to process a digital signal for transmission. Topics include UARTs, USARTs, standard serial interfaces, synchronous and asynchronous protocols, and modems.

0133252--Vacuum Systems (3 cr)

(Corequisite: General Physics 160) This course examines the various types of vacuum systems equipment used in industry. Laboratory work includes the assembly, maintenance and leak detection of various systems.

0133253—Pulse Power (3 cr)

(Pre- or corequisite: Term IV of Instrumentation and Control)
The generation, transmission and measurement of high voltage,
pulsed power systems are studied.

See also the common support course descriptions on page 56.



Laser Electro-Optic Technology

4 Terms (Main and Montoya Campuses)

The technology of lasers and electro-optics requires electronics, digital, laser and optics training for persons interested in a career in this rapidly growing industry. Lasers and electro-optic devices are used in a variety of areas including construction and excavation, welding and cutting operations, communications systems, laboratory testing and measurement, data processing, photography, medicine, military and space projects, and research and development.

Students may graduate with either a certificate or associate degree. To earn a certificate, students must complete successfully 1650 instructional hours of which 900 are laboratory work and 750 are related theory.

The associate degree program provides graduates additional science and technical skills for the support of engineering activities. Graduates of the LEOT program within the last four years must fulfill the General Education and residency requirements to receive the associate degree.

The program's facilities include modern classrooms and laboratories containing state-of-the-art lasers, lenses, mirrors and analytical test equipment.

An \$18 personal equipment fee is required of beginning students.

LASER ELECTRO-OPTIC TECHNOLOGY PROGRAM

Term I	Hrs Wk	Cr Hrs
Electronics Lab/Theory I	15	9
Laser Mathematics I	5	3
Digital Principles	5	3
*English 119—Technical		_
Communications		3
*Math 162—Calculus I		4
Term II		
AC Circuits with Semiconductors.	15	9
Introduction to Microprocessor		[
Circuitry	5	- 3
Laser Mathematics II	5	3
Introduction to Lasers with Optics	5	3
*Physics 160—General Physics		4
Term III]
Semiconductor Circuit		
Applications	15	9
Microprocessor Interfacing	5	3



Advanced Laser Systems	5	3
LEO Components	5	3
*Chemistry 121L—General	•	_
Chemistry		4
Chemishy		4
Term IV		
Advanced Laser Systems with		
Applications	10	6
		2
Laser Measurements	5	3
Op-Amps and Linear Integrated		
Circuits	3	1
Technical Physics	5	3
Vacuum System Technology	2	1
*Humanities/Social Science	_	_
Elective		3
Totals	1650	83
AOtais	1050	03
*General Education courses required j	or asso	ciate
degree. Course descriptions on pages		
Support Courses		
11		

BASIC Language Programming FORTRAN Programming

Technical Writing (7¹/₂ weeks).....

Basic Tool Applications

Troubleshooting Techniques......

RF Fundamentals

Telecommunications

3

3

3

3

COURSE DESCRIPTIONS

0130003/0130601-Electronics Lab/Theory I (9 cr)

(Corequisite: Laser Mathematics I) This course covers basic concepts of direct current and alternating current electricity, Ohm's Law, Kirchhoff's Law, meter circuits, magnetism, and network analysis for DC and AC circuits. Students obtain skills in the use of oscilloscopes, function generators, multimeters and breadboarding circuits from schematic diagrams.

0132333—Laser Mathematics I (3 cr)

Beginning and advanced algebra is emphasized. Concepts in trigonometry and geometry are covered.

0132304—Digital Principles (3 cr)

This course introduces logic circuit devices and concepts applicable to many areas of the electronics industry, and covers such topics as logic gates, truth tables and flip-flops. Students wire circuits using actual digital integrated circuits. Analysis and development of larger digital systems are covered.

0132053/0132045---AC Circuits with Semiconductors (9 cr)

(Prerequisites: Electronics Lab/Theory I, Laser Math I) Theory of semiconductors is applied to diode and transistor circuits. Power supplies and amplifier circuits are studied. An introduction to the theory and operation of DC and AC motors is included.

0132843—Introduction to Microprocessor Circuitry (3 cr)

(Prerequisite: Digital Principles) Clocked logic, multiplexers, shift-registers, memories and digital displays are studied. Machine and Assembler programming are introduced.

0132386-Laser Mathematics II (3 cr)

(Prerequisites: Laser Mathematics I, Electronics LabsTheory I) This is the further study of mathematics and its application to lasers, optics and electronics. Where applicable, problems are solved using BASIC language programming on a microcomputer.

0132704-Introduction to Lasers with Optics (3 cr)

(Corequisite: Laser Mathematics II) This is the study of the nature of light, laser operation as applied to the helium-neon laser, and laser safety. The use of lenses, prisms, mirrors and flats is studied from the viewpoint of geometric optics.

0132105/0132123—Semiconductor Circuit Applications (9 cr)

(Prerequisite: AC Circuits with Semiconductors) Analysis of transistor circuits is continued. Operation of the various classes of amplifiers, waveshaping circuits, oscillators, and principles of AM and FM are studied. Differential amplifier and operational amplifier operation principles are introduced.

0132361—Microprocessor Interfacing (3 cr)

(Prerequisite: Introduction to Microprocessor Circuitry) A system of digital circuits is studied using a microcomputer. Interfacing and concepts projects are stressed.

0132821-Advanced Laser Systems (3 cr)

(Prerequisite: Introduction to Lasers with Optics) Wave propagation is examined in terms of interference, diffraction and polarization. Also studied are solid state, molecular gas, ion gas and semiconductor lasers. Laboratory experiments stressing safety, accuracy and technical writing skills are performed.

0132812-LEO Components (3 cr)

(Prerequisite: Introduction to Lasers with Optics) Physical optics are used to illustrate the operation and compare the performances of windows, prisms, lenses, filters, gratings, polarizers and frequency doublers.

0132162—Advanced Laser Systems with Applications (6 cr)

(Prerequisites: Advanced Laser Systems, LEO Components) Students perform experiments using fiber optics, A-O Q switch, dye cell, spectrum analyzer and A-O modulator. Electronic instruments are studied for correct usage of application. Students are required to write a technical paper on a topic in the laser electro-optic field.

0132371-Laser Measurements (3 cr)

[4] (Corequisite: Advanced Laser Systems with Applications) Detection of radiation is covered. Various devices—calorimeters, photo-multiplier tubes, semiconductor diodes and pyroelectric detectors—and interferometric measurements also are studied.

0132788-Op-Amps and Linear Integrated Circuits (1 cr)

(Prerequisite: Semiconductor Circuit Applications) Linear integrated circuits are studied with emphasis on applications in instrumentation, signal generation active filters and control circuits.

0132500—Technical Physics (3 cr)

"(Corequisite: Advanced Laser Systems with Applications) Concepts studied are potential and kinetic energy, force, work, momentum and an introduction to atomic and nuclear physics. Concepts are applied using the technology of lasers and electrooptics.

0132798-Vacuum System Technology (1 cr)

[(Corequisite: Technical Physics) This course examines the various types of vacuum equipment used in industry. Laboratory work includes the assembly, maintenance and leak detection of various systems.

0920765—Basic Tool Applications (3 cr)

pl'This combined laboratory and theory course provides instruction in shop safety, basic benchwork, precision measuring instruments, and basic operations on the drill press, lathe and band saw. Computer numerical control (CNC) machine applications are introduced.

0130861—Troubleshooting Techniques (3 cr)

(Corequisite: Semiconductor Circuit Applications) Students learn systems analysis of various electronic equipment. Emphasis is on locating problems and using proper methods for replacing defective components.

0130717-RF Fundamentals (3 cr)

(Corequisite: Semiconductor Circuit Applications) This course provides study and practical analysis of broadcast communications systems. Included are single side band, radio, video equipment and regulations.

0130435—Telecommunications (3 cr)

(Corequisite: Advanced Digital Techniques or permission of instructor) Students learn data communication techniques and analog-to-digital applications. Topics studied include UARTS and USARTS, standards of interface such as RS232, protocols for interface, frequency-shift keying (FSK) and modems. Telephone switching systems and microwave transmission modes are introduced.

See also the common support course descriptions on page 66:

TRADES DEPARTMENT

Most classes in the Trades, the largest skill cluster at T-VI, meet on the Main Campus in classrooms, indoor and outdoor lab spaces, and live work areas. The Commercial Printing and Welding programs are located at the Montoya Campus. Admission information is available at either campus.

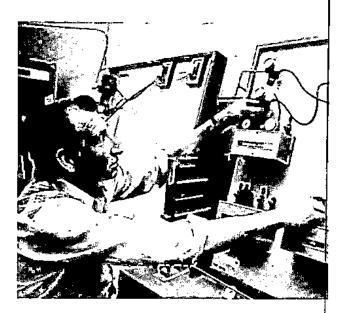
Most Trades programs accept new students at the beginning of each term. Each applicant has an interview with an admission counselor and also may be interviewed by the program advisor during the admission process.

Students in the Trades must furnish their own shop clothes appropriate for their particular programs. All students, instructors, instructional aides and visitors must wear approved safety glasses or goggles which conform to ANSI 287.1 in classes where they are required.

Students are encouraged to participate in T-VI's chapter of the Vocational Industrial Clubs of America (VICA). VICA activities are an integral part of the Trades curriculum.

SPECIFIC ENTRANCE REQUIREMENTS

All Trades programs have in common the following three entrance requirements: Applicants must pass math and reading tests, be able to lift materials and equipment weighing 50 pounds, and be free of allergies or health conditions which cannot be controlled and would endanger their own or others' safety.



Specific requirements of individual programs are as follows:

AIR CONDITIONING, HEATING AND REFRIGERA-TION: Must be free of chronic respiratory diseases and allergies to sheet metal fluxes and metals, and have normal color differentiation.

CARPENTRY: Must be free of chronic wood or wood product allergies.

COMMERCIAL PRINTING: Must be free of chronic allergies to lubricants, solvents, inks and photographic chemicals, and have normal color differentiation with near- and far-point depth perception.

CULINARY ARTS: Must be free of chronic allergies to detergents and soap. *Health Requirement*: To enroll in this field, it is necessary to present a certificate to T-VI stating that the student is free from tuberculosis in a transmissible form. The certificate must be obtained from and signed by a licensed physician no more than 90 calendar days before the start of classes.

TRANSPORTATION TRADES: Must be free of chronic respiratory diseases and allergies to fuels and solvents.

ELECTRICAL TRADES: Must have normal color differentiation.

MACHINE TRADES: Must be free of chronic respiratory diseases and allergies to oils, solvents and cutting fluids; be able to stand on concrete floors for long periods of time; and have depth perception correctable in both eyes.

PLUMBING: Must be free of chronic respiratory diseases and allergies to plumbing fluxes, oils, glues and plastic compounds.

WELDING: Must be free of chronic respiratory diseases and have depth perception correctable in both eyes.

SAFETY NOTE: Students are advised that it can be dangerous to wear contact lenses in any area where there are fumes from chemicals, solvents and gases. These students should plan to wear regular eyeglasses in classes where such hazards exist.

SUPERVISED WORK EXPERIENCE

Supervised work experience is for students who have acquired most of the skills and work attitudes needed to succeed in an entry-level job. Students may apply for this option during the final term.

This on-the-job experience is a training plan developed by the cooperating employer and T-VI instructional staff. Before beginning a supervised work experience, the student must have the approval of the instructor, Trades Department student advisor, department chairman and student services chairman

The supervised work experience option does not qualify students for Veterans Administration benefits.

APPRENTICESHIP PROGRAMS

Culinary Apprenticeship

9 Terms (Main Campus)

The Culinary Apprenticeship program is offered for persons currently employed full time in the cooking industry.

The three-year program combines on-the-job experience with classroom instruction and results in certified cook skill levels. Beginning students are admitted each term, as space permits. The class meets one day a week from 3:30 p.m. to 7:15 p.m.

There is a \$20 registration fee each term. Students much purchase a special textbook through the local chapter of the American Culinary Federation.

COURSE DESCRIPTION

0613035—Culinary Apprenticeship (27 cr)

(Prerequisite: Current full-time employment in the cooking industry) This course consists of 6000 instructional hours of which 400 hours are theory taught at T-VI, and 5600 hours are supervised work experience in a full-time cooking job secured before entering the class. Theory covers culinary history, garde manger (food decorating), food management techniques and front-of-the-house personnel use. A three-step written and practicum final exam, administered in conjunction with the New Mexico Chefs and Cooks Assn., is required to graduate.

Electrical Trades Apprenticeship

8 Terms (Main Campus)

The Electrical Trades Apprenticeship program for persons currently employed full time in the electrical industry is offered in conjunction with the Independent Electrical Contractors Association (IECA).



The four-year program combines on-the-job experience with classroom instruction and provides the opportunity for participants to obtain New Mexico journeyman licenses. Beginning students are admitted each fall term as space permits. The class meets on Tuesday and Thursday evenings from 6 p.m. to 8:30 p.m.

There is a \$20 registration fee each term. Students must purchase books through the IECA.

COURSE DESCRIPTION

0615391—Electrical Trades Apprenticeship (24 cr)

(Prerequisite: Current full-time employment in the electrical trades field) This course consists of 8600 hours of which 8000 hours are supervised on-the-job training with electrical journeymen, and 600 hours are related classroom instruction at T-VI. The classroom instruction covers safety, electrical theory, blueprint reading and layout, National Electrical Code interpretation, tool usage and motor controls.

Sheet Metal Apprenticeship

8 Terms (Main Campus)

The Sheet Metal Apprenticeship program, for persons currently employed full time in the sheet metal industry, is offered in conjunction with the Rio Grande Chapter of Associated Builders and Contractors Inc. (ABC).

The four-year program combines on-the-job experience with classroom instruction and provides the opportunity for participants to obtain New Mexico journeyman licenses. Beginning students are admitted each fall term as space permits. The class meets on alternate Saturdays from 8 a.m. to 4:45 p.m. or one evening each week from 6 p.m. to 10 p.m.

There is a \$20 registration fee each term. Students must purchase textbooks through the local ABC chapter.

COURSE DESCRIPTION

0720475-Sheet Metal Apprenticeship (24 cr)

(Prerequisite: Current full-time employment in the sheet metal industry) This course consists of 8610 hours of which 8000 hours are supervised on-the-job training with experienced sheet metal journeymen, and 610 hours are related classroom instruction at T-VI. The classroom instruction covers safety, shop and trade math, sheet metal processes for shop machinery, triangulation layout, radial line layout, parallel line layout, blueprint reading, and Sheet Metal and Air Conditioning National Assn. (SMACNA) manuals.

SUPPORT COURSES

At least 12 students must sign up and instructional space must be available before a support course can be offered. As a result, not all courses are offered each term. Most are offered only at the Main Campus.

	Hrs	Cr
Course Title	Wk	Hrs
Basic Tool/CNC	5	3
Energy Management/Solar		•
Applications	5	3
Occupational Safety	5	3
Plumbing/Heating Control		
Circuitry	5	3
Pneumatic Control Systems	5	.3
Pole Climbing	4	2
Precision Measurement	5	3
Transportation Trades Machining	5	3
Welding Skills Improvement	5	3
*Introduction to Physics	5	3
*Thinking Strategies	5	3
*Writing Lab	5	3
*Reading for Trades	5	3

^{*}See Developmental Studies Department, page 28, for course descriptions.



COURSE DESCRIPTIONS

0920905-Basic Tool/CNC (3 cr)

This course includes an introduction to basic machine shop practices. Instruction is provided in safety, hand tools, elementary lathe, mill and drill press. Students are introduced to basic programming concepts related to computer-numerical-control (CNC) turning and machining centers and computer-aided-design (CAD) systems.

0920854—Energy Management/Solar Applications (3 cr)

This course is for students interested in management of a residential energy package. Instruction is provided in how life styles, design and orientation conserve natural resources. Emphasis is on the selection, installation, maintenance and repair of solar equipment as related to heating water and air.

0920711—Occupational Safety (3 cr)

Training is given in the Red Cross Multimedia System and cardiopulmonary resuscitation, for which Red Cross Certification is issued upon successful completion. An introduction to the Occupational Safety and Health Act (OSHA) regulations is included.

0920247—Plumbing/Heating Control Circultry (3 cr)

This course includes installation and troubleshooting of heating control circuits. Control theory, terminology and symbols are covered. Instructional emphasis is on electrical control devices from various manufacturers. Also included are the reading and developing of wiring diagrams and line schematics.

0920904—Pneumatic Control Systems (3 cr)

Basic control system components and diagrams are included. Emphasis is on the installation and calibration of typical pneumatic control systems used for environmental control.

0170036-Pole Climbing (2 cr)

Instruction is provided in safety, proper use of equipment, climbing and maneuvering techniques up to the 18-foot level on unstepped poles, and the proper use of ladders on poles and span lines.

0920204—Precision Measurement (3 cr)

This course is an introduction to basic measurement principles and techniques. Students are instructed in the care, calibration, uses and applications of outside micrometers, inside micrometers, depth micrometers, vernier calipers, indicators and other measuring equipment specific to their majors.

0920178—Transportation Trades Machining (3 cr)

This course introduces basic machine shop practices particularly as they relate to the auto diesel mechanic. Instruction is provided in safety, hand tools, elementary lathe, mill and drill press. Emphasis is on tapping, rethreading, broken stud removal, thread inserts, shaft straightening, torque wrenches, fasteners, sized nuts and chisel use.

0920985-Welding Skills Improvement (3 cr)

This class includes instruction in safety practices, general tools and equipment, sources of heat, operational procedures, metals and their properties, and applications of oxyacetylene and are welding.

CONTINUING EDUCATION DIVISION COURSE SUBSTITUTIONS

Some Continuing Education Division courses may be substituted for Trades Instructional Division courses. Classes which substitute are marked with a ## in the Continuing Education Division section of this catalog.

The courses are:

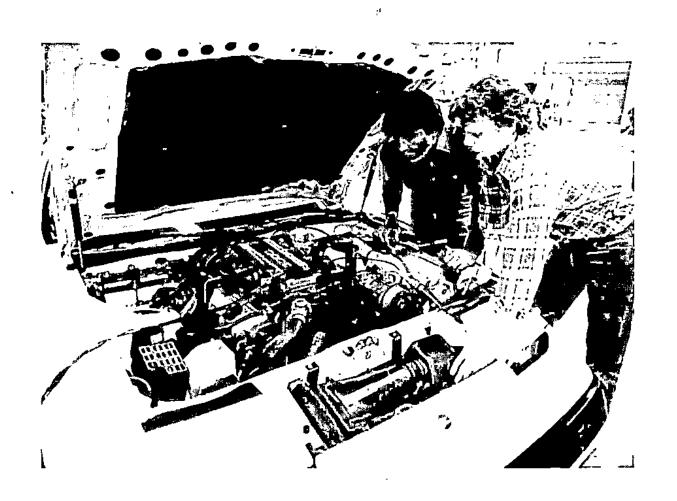
Continuing Education Division Course	Instructional Division Program_	Substitutes for:
SK 210: Automotive Servicing SK 510: Automotive Brakes SK 510A: Automotive Front End	Automotive Technology	0215080/0215081—Automotive Technology Lab I and Theory I
Alignment	•	

NOTE: All three Continuing Education Division courses must be completed successfully to substitute for the two Instructional Division courses.

SK 235: Refrigeration I	Air Conditioning, Heating and	0230009/0230606—Air
SK 236: Refrigeration II	Refrigeration	Conditioning, Heating and
SK 238: Electrical Control Circuitry	_	Refrigeration Lab I and Theory I

NOTE: All three Continuing Education Division courses must be completed successfully to substitute for the two Instructional Division courses.

SK 265: Sheet Metal Fabrication Air Conditioning, Heating and Refrigeration O230157/0230682—Sheet Metal Applications Lab and Theory



Air Conditioning, Heating and Refrigeration

3 Terms (Main Campus)

The Air Conditioning, Heating and Refrigeration program prepares students for entry into the installation, maintenance and service field. With on-the-job experience and brand-oriented training, the graduate of this program should be able to advance quickly.

Training includes installing mechanical equipment, ductwork, piping and electrical controls; servicing various air conditioning, heating and refrigeration components; troubleshooting systems; and performing required preventive maintenance.

To earn a certificate, a student must complete successfully a total of 1275 instructional hours of which 720 are laboratory work and 555 are related theory.

A student may leave the program when a training objective is reached and receive a rating sheet detailing the skills mastered.

Eligible third-term students are encouraged to participate in the supervised work experience program.

Air Conditioning, Heating and Refrigeration students must pay an equipment fee of \$90 before entering the first term and \$70 before each additional term.

AIR CONDITIONING, HEATING AND REFRIGERATION PROGRAM

	Hrs	Cr
Term I	Wk	Hrs
Air Conditioning, Heating and		
Refrigeration Lab I	15	9
Air Conditioning, Heating and		- 1
Refrigeration Theory I	5	اد
Renigeration Theory 1	5	3
Control Circuitry/Math I	5	3
Term II		
Air Conditioning, Heating and		1
		اہ
Refrigeration Lab II	15	- 91
Air Conditioning, Heating and		
Refrigeration Theory II	5	3
Air Conditioning, Heating and		- 1
Refrigeration Mathematics II	5	3
Control Circuitry II	5	3
	,	
Term III		
Air Conditioning, Heating and		- 1
Refrigeration Lab III	10	اء
remgeration Lau III	IU	0

Air Conditioning, Heating and		
Refrigeration Theory/Control		
Circuitry III	5	3
Sheet Metal Applications Lab	8	5
Sheet Metal Applications Theory	2	1
Systems Design	5	3
Totals	$\overline{1275}$	<u>51</u>

Option

Supervised Work Experience

Support Courses
See page 71.

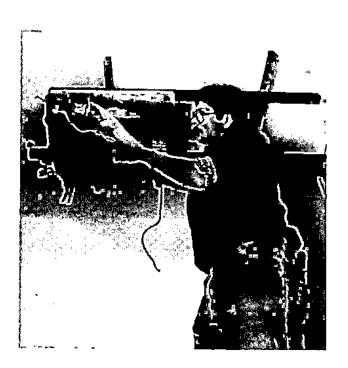
COURSE DESCRIPTIONS

0230009/0230606—Air Conditioning, Heating and Refrigeration Lab/Theory I (12 cr)

Students learn shop safety; basic tools and equipment; applicable laws of physics and chemistry; electrical circuits; electric meters; test and measuring equipment; and installation, maintenance and service procedures for the mechanical refrigeration cycle and components.

0230514—Control Circuitry/Math I (3 cr)

This course is designed to lay the groundwork required for diagnosis and service of refrigeration equipment with emphasis on DC circuits as applied to Ohm's Law. Students are taught algebra as applied to DC electricity and geometry as applied to sheet metal.



0230058/0230639—Air Conditioning, Heating and Refrigeration Lab/Theory II (12 cr)

(Prerequisites: All Term I courses or equivalent) Instruction is in the installation, maintenance and service of residential air conditioning, heating and refrigeration systems.

0230336—Air Conditioning, Heating and Refrigeration Mathematics II (3 cr)

(Prerequisite: Control Circuitry/Math I or equivalent) This course covers elements of algebra and physics as applied to the industry.

0230520—Control Circuitry II (3 er)

(Prerequisite: Control Circuitry/Math 1 or equivalent) This course includes the design, installation and troubleshooting of air conditioning, heating and refrigeration control circuits. Instructional emphasis is on electrical control devices from various manufacturers.

0230109—Air Conditioning, Heating and Refrigeration Lab III (6 cr)

(Prerequisites: Air Conditioning, Heating and Refrigeration Lab/Theory II, Control Circuitry II or equivalent) The installation, maintenance and service of commercial air conditioning, heating and various refrigeration systems are covered, plus multizone heating/cooling, chilled water and hot water systems.

0230474—Air Conditioning, Heating and Refrigeration Theory/Control Circuitry III (3 cr)

(Prerequisite: Control Circuitry II or equivalent) More advanced control theory and terminology are covered. Emphasis is on electrical, pneumatic and solid state circuitry as well as electronic and electric control devices, their installation and service.

0230157/0230682—Sheet Metal Applications Lab/Theory (6 cr)

Instruction is provided in sheet metal processes performed with hand, bench, cutting and layout tools; safety; care of tools and equipment; use of materials and supplies; straight pattern development and fabrication. Lab projects are oriented to typical heating and ventilation installations.

0230791—Systems Design (3 cr)

This course includes study of the design, layout and application of air distribution duct sytems for air conditioning. Emphasis is on basic principles of physics as related to human comfort and the thermodynamics of air flow.

0230947-Supervised Work Experience

This is a continuation of Air Conditioning, Heating and Refrigeration Lab and Theory III, placing the student into supervised work experience with a local contractor. Instructional staff makes periodic visits to the job site and, in conjunction with the contractor, completes written evaluations of the student's work program.

Automotive Body Repair

3 Terms (Main Campus)

The Automotive Body Repair program prepares students for entry-level employment repairing collision damage on passenger and commercial vehicles. Proper safety procedures, work ethics, and correct selection and use of tools and equipment are stressed.

The program is designed to allow a student to enter the industry at three separate levels. Upon successful completion of Automotive Body Repair Lab/Theory I and Automotive Body Repair I, the student may receive a detailing certificate and obtain employment detailing and preparing vehicles for collision/refinishing repairs. Completion of all courses through the second term gives the student additional skills with welding, collision repair procedures and comprehensive refinishing techniques. The student may then receive a basic refinishing certificate and obtain employment as a painter's helper. The third term upgrades the student's abilities to repair and refinish major collision damage using state-of-theart pulling and measuring equipment. During the third term, students have the option to apply their skills in a supervised work experience program with employers.

To earn an Auto Body Repair certificate, a student must successfully complete a total of 1035 instructional hours of which 855 are laboratory and 180 are related theory.

Students must pay a \$100 equipment fee before entering the first term, \$75 before the second term, and \$50 before the third term.

AUTOMOTIVE BODY REPAIR

	Hrs	Cr
Term I	Wk	Hrs
Automotive Body Repair Lab I	15	9
Automotive Body Repair Theory I	3	3
Math/Basic Electricity	5	3
Detailing Certificate		
Term II		
Automotive Body Repair Lab II	21	14
Automotive Body Repair Theory		
II	2	1
Basic Refinishing Certificate		
Term III		
Automotive Body Repair Lab III	21	14
Automotive Body Repair Theory		
Ш	2	1
Totals	1035	45
Automotive Body Repair Certific	cate	

Option
Supervised Work Experience

Support Courses See page 71.

COURSE DESCRIPTIONS

0210369-Automotive Body Repair Lab I (9 cr)

The student is introduced to all phases of the auto collision industry including safety procedures, terminology, body and frame construction, tools, equipment, minor damage repair, basic refinishing techniques, detailing, and understanding estimates. Students learn how to set up and operate oxyacetylene, shielded metal-arc and gas metal-arc welding equipment. The procedures for cutting, welding and brazing automotive sheet metal are covered.

0210337-Automotive Body Repair Theory I (3 cr)

This course includes an introduction to work rules and regulations, work habits, trade ethics, human relations, job-seeking skills and job orientation. Instruction is provided in shop safety, nomenclature, industrial materials, hand and power tools, and inspection and repair procedures.

0210332-Math/Basic Electricity (3 cr)

Students learn basic math principles as they relate to measuring tools, equipment, schematics, blueprints, paint mixing and basic electricity. The theory of basic electricity principles, related terminology, and electronic components identification also are covered. Students are introduced to test equipment, testing procedures and theory related to automotive electrical systems.

0210367—Automotive Body Repair Lab II (14 cr)

(Prerequisites: All Term 1 courses) The student receives instruction in safety, body shop tools and equipment, and removal and replacement of body parts. This course covers cleaning, sanding, masking, all phases of surface preparation, metal treatment, undercoats, and comprehensive refinishing systems; air conditioning diagnosis, testing, repair and servicing; and instruction in basic shielded metal-arc, gas metal-arc, gas tungsten-arc and plastic welding techniques.

0210368—Automotive Body Repair Theory II (1 cr)

(Prerequisites: All Term I courses) The student receives instruction in safety, tools, equipment, welding and surface preparation and collision repair procedures, body replacement and related electrical systems. The theory of air conditioning, testing, repair and operation also is studied.

0210372—Automotive Body Repair Lab III (14 cr)

(Prerequisites: All Term II courses) This course covers comprehensive metal repair, body panel replacement, sectioning, repair to cooling, related electrical systems, alignment and fitting techniques, under body and frame measurement, body shelf alignment procedures and estimating techniques. The student performs a wide variety of refinishing jobs duplicating a modern auto collision production shop environment.

0210373-Automotive Body Repair Theory III (1 cr)

(Prerequisites: All Term II courses) This course covers metal alloy characteristics, major collision repair techniques, unitized body shell alignment equipment, and repair procedures.

Automotive Technology

3 Terms (Main Campus)

The Automotive Technology program provides individuals with the skills needed to diagnose and repair mechanical problems on automobiles and light trucks. The successful student qualifies as an entrylevel general automobile technician.

Employment opportunities for the auto technician include such positions as basic servicing, general mechanic, specialist, service writer, shop foreman, service manager, sales representative and service station attendant.

Upon successful completion of Automotive Technology Lab and Theory I, the student may receive a basic auto servicing certificate and obtain employment servicing automobiles. Students who complete the first and second terms gain additional skills with engines and air conditioning. Upon completion of Automotive Technology Lab and Theory II, the student may receive a basic auto repair certificate and obtain employment performing minor repairs and servicing automobiles and light duty trucks.

Third term studies upgrade the student's abilities to diagnose and repair electrical systems including computer-controlled components. During Term III, students have the option to apply their skills in a supervised work experience program with cooperating employers.

To satisfy full program requirements, a student must complete successfully a total of 1125 instructional hours of which 750 are laboratory work and 375 are related courses including theory.

Automotive Technology students must pay an equipment fee of \$100 before entering the first term, \$90 for the second term, and \$90 for the third term.

AUTOMOTIVE TECHNOLOGY PROGRAM

Term I Automotive Technology Lab I Automotive Technology Theory I Math/Basic Electricity Basic Auto Servicing Certification	Hrs Wk 15 5 5	Cr Hrs 9 3 3
Term II Automotive Technology Lab II Automotive Technology Theory II. Transportation Electronics Basic Auto Repair Certificate	15 5 5	9 3 3

Term III

12 Automotive Technology Lab III ... Automotive Technology Theory III Totals.....

Automotive Technology Certificate

Option Supervised Work Experience

Support Courses See page 71.

COURSE DESCRIPTIONS

0215080/0215081-Automotive Technology Lab/Theory I (12 cr)

These courses are designed to provide the student with the skills needed to perform common automotive service work. Inspection, repair and replacement of brakes; automotive chassis; front and rear end suspension components; related hardware, steering, and wheel alignment are covered. Students also receive instruction in work rules and regulations, work habits, job-seeking and retention skills and human relations.

0215197-Math/Basic Electricity (3 cr)

Students learn basic math principles as they relate to measuring tools, equipment, graphs and schematics. The theory of mechanical power, basic electricity principles, related terminology, and electronic component identification also are covered. Students are introduced to diagnosis and equipment-testing procedures and theory related to automotive electrical systems.

0215085/0215086—Automotive Technology Lab/Theory II (12 cr)

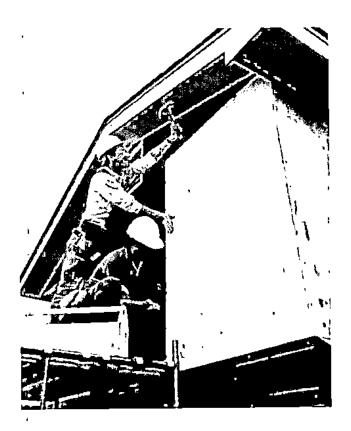
(Prerequisites: Automotive Technology Lab/Theory 1, Math/ Basic Electricity) These courses cover basic internal combustion engine theory; complete engine overhaul procedures; use of precision measuring tools; related systems including cooling. oil, ignition, fuel emission and exhaust; and diagnostic and repair procedures for clutches, manually shifted transmissions, automatic transmissions, transaxles and differential units. Air conditioning diagnosis, testing, repair and servicing also are included.

0215199—Transportation Electronics (3 cr)

(Prerequisites: Automotive Technology Lab/Theory I, Math/ Basic Electricity) The student learns to test and replace malfunctioning electronic components. The theory of solid-state devices, basic principles of electronics, and interpretation of circuit diagrams are studied.

0215088/0215089—Automotive Technology Lab/Theory III (15 cr)

(Prerequisites: Automotive Technology Lab/Theory II, Transportation Electronics) These courses cover the diagnosis and repair of electrical components and fuel systems. Instruction also covers tune-up equipment and diagnosis-and-repair procedures required to tune up vehicles. Emission control standards and components are studied, and the student learns to make repairs and final adjustments.



Carpentry

2 Terms (Main Campus)

The Carpentry program provides students with practical and realistic job skills to enter the construction industry. Classes meet in indoor and outdoor labs specifically designed for cabinetmaking and residential construction.

During the first term, the fundamentals of residential framing and tools of the trade are taught. In the second term, emphasis is on residential and light commercial work, maintenance and remodeling along with instruction on interior finish carpentry, basic construction and installation of cabinets and millwork.

. To earn a certificate, a student must complete successfully 750 instructional hours of which 450 are laboratory work and 300 are related theory.

A student may leave the program when a training objective has been reached and receive a rating sheet detailing the skills mastered.

A framing certificate may be requested upon successful completion of all Term I courses if a student leaves the program at that point.

Carpentry students must pay an equipment fee of \$100 before entering the first term and an additional \$70 for the second term. They also must provide their own carpenter's overalls or nail apron.

CARPENTRY PROGRAM

	$H\kappa s$	Cr
Term I	Wk	Hrs
Carpentry Lab I	15	9
Carpentry Theory I	5	3
Carpentry Math/Blueprint Reading		
Ι	5	3
Framing Certificate		
•		
Term II		
Carpentry Lab II	15	9
Carpentry Theory II	5	3
Carpentry Math/Blueprint Reading		
II	- 5	3
Totals	750	30
Carpentry Trades Certificate	e	

Option

Supervised Work Experience

Support Courses
See page 71.

COURSE DESCRIPTIONS

0311014/0311610—Carpentry Lab and Theory I (12 cr)

Instruction is provided in hand and power tools, site layout and foundations, rough framing, roof framing, structural shell basics, stair construction, exterior finish and safety.

0311311—Carpentry Mathematics/Blueprint Reading I (3 cr)

This course provides instruction in whole numbers, combining numbers, lumber sizing, scaling, centering and triangle theory. Instruction in the interpretation of elevation drawings and floor plans, symbols and notations, dimensions and structural information is included. Students are introduced to material estimation.

0311061/0311642—Carpentry Lab and Theory II (12 cr)

(Prerequisite: Carpentry Lab and Theory I or equivalent This course is a continuation of Carpentry Lab and Theory with the addition of finish carpentry, basic construction and installation of cabinets and millwork. Maintenance, remodeling, concrete finishing and light commercial construction are emphasized.

0311338—Carpentry Mathematics/Blueprint Reading II (3 cr)

(Prerequisite: Math/Blueprint Reading I or equivalent) This course includes an introductory study of blueprint applications to residential homes, multiple family dwellings and commercial buildings. Instruction also is provided in the use of rules and formulas for material estimating, volume measure, ratio and proportion.

Commercial Printing

2 Terms (Montoya Campus)

This program teaches entry-level skills for jobs in the offset printing industry or in-plant print/duplication shops.

The lab contains computers, phototypesetters, paste-up and stripping tables, process cameras, plate makers, offset duplicators and presses, paper cutters, folder and bindery machines, and other equipment used in the industry.

Instructional units have specific prerequisites as follows: typesetting—typing skill of 25 words per minute; proofreading—good spelling/grammar; paste-up/layout—visual coordination, color perception and measurement skills; camera—allergy free and night vision; press—allergy free, depth and color perception, mechanical aptitude; bindery—mechanical aptitude, lifting ability.

To earn a certificate, a student must complete successfully a total of 750 instructional hours of which 525 are laboratory work and 225 are related theory.

When students leave the program, they receive rating sheets listing the skills mastered.

Commercial Printing students must pay a personal equipment fee of \$30 before entering the first term.





COMMERCIAL PRINTING PROGRAM

	Hrs	Cr
Term I	Wk	Hrs
Commercial Printing Theory I	5	3
Commercial Printing Lab I	15	9
Layout and Planning	5	3
Term II		
Commercial Printing Theory II	5	3
Commercial Printing Lab II	_20	<u>12</u>
Totals	750	30

COURSE DESCRIPTIONS

0715036/0715621—Commercial Printing Lab and Theory I (12 cr)

This course covers safety of tools, equipment, solvents and chemicals; use of tools and equipment; design; composition, layout and paste-up; proofs and proofreading; basic photo typesetting; papers and inks; basic setup and operation of offset duplicators and presses; bindery processes; and quality control,

0715747—Layout and Planning (3 cr)

This combined lab and theory course provides instruction in job analysis, cost control, estimating, quality control and production work flow.

0715075/0715650—Commercial Printing Lab and Theory II (15 cr)

(Prerequisite: Commercial Printing Lab and Theory I or equivalent) Students are exposed to more complex operations. Emphasis is on advanced processes in all areas of the lab; computer composition; imposition; duotone and special effect screens; multicolor register and special penalty stock printing; troubleshooting techniques; computer estimating; production control and legal considerations.

Culinary Arts

Baking

2 Terms (Main Campus)

This food service specialty prepares persons for jobs as bakers in restaurants, bake shops, bakeries and institutional kitchens such as schools or hospitals. Persons entering this field should be early risers since most baking begins early in the morning.

Baking meets in a lab furnished with commercial equipment and display cases. The program's products are sold in the T-VI food service areas.

To earn a certificate, a student must complete successfully 750 instructional hours of which 525 are laboratory work and 225 are related theory.

Students may leave the program when a training objective is reached and receive a rating sheet detailing the skills mastered.

Baking students must pay an equipment fee of \$100 before entering Term I and \$30 for Term II.

BAKING PROGRAM

·	Hrs	Cr
Term I	Wk	Hrs
Baking Lab I	15	9
Baking Theory I	5	3
Food Service Mathematics	5	3



Term II		
Baking Lab II	20	12
Baking Theory II	5	3
Totals	750	30

Option

Supervised Work Experience

COURSE DESCRIPTIONS

0611034/0611620—Baking Lab/Theory I (12 cr)

Students learn fundamentals of mixing and processing the ingredients used in a variety of breads, sweet yeast dough products and specialties. Also included are care and use of equipment, bakery sanitation, proper use and storage of bakery ingredients, experiments with baking formulas, leavening agents and human relation skills.

0611321—Food Service Mathematics (3 cr)

Basic arithmetic for sales, portioning and pricing of food products is covered. Students also learn to use cash registers.

0611072/0611649-Baking Lab/Theory II (15 cr)

(Prerequisite: Baking LabiTheory I) This course continues the principles of Baking I with emphasis on baking chemistry and advanced production procedures. More study of international pastries and desserts is provided and cake decorating is covered. Supervisory management principles are included.

Quantity Food Preparation

2 Terms (Main Campus)

Quantity Food Preparation emphasizes nutritional food preparation and prepares students for entry into the rapidly growing food industry—as sauté cooks after the first term or dinner cooks upon completion of the full program.

Classes are held in industrial kitchens. First-term students prepare food for and operate a cafeteria line including cash registers. More than 250 meals are served on most school days.

Second term students operate the Student Specialties program, a fine dining restaurant open to the public by reservation only. (See page 7.)

To earn a certificate, a student must complete successfully 750 instructional hours of which 525 are laboratory work and 225 are related theory.

A student may leave the program when a training objective has been reached and receive a rating sheet detailing the skills mastered.

Graduates are encouraged to enroll in the Baking program, as space permits, to gain an additional job skill which may be helpful in their careers.

Quantity Food Preparation students must pay an equipment fee of \$100 before entering the first term and another \$80 for the second term.



QUANTITY FOOD PREPARATION PROGRAM

Term I Quantity Food Lab I Quantity Food Theory I Food Service Mathematics	Hrs Wk 15 5 5	Cr Hrs 9 3 3
Term II Quantity Food Lab II Quantity Food Theory II Totals	20 5 750	$\frac{12}{30}$

COURSE DESCRIPTIONS

0610033/0610619-Quantity Food Lab/Theory I (12 cr)

This course provides instruction in preparing meats, vegetables, soups, sauces, sandwiches, salads and breakfast foods. Emphasis is placed on cost, nutrition, sanitation, safety, tools and equipment, cooking methods and techniques, speed and efficiency, and cafeteria line operation.

0610320-Food Service Mathematics (3 cr)

Basic arithmetic for sales, portioning and costing of food products is covered. Students also learn how to use cash registers.

0610071/0610648—Quantity Food Lab/Theory II (15 cr)

Students learn methods of cooking stews, fricassees, garnishes, sauces and other dinner items. Also covered are herbs and spices, salad preparation, use of recipes, application of costing procedures, pantry work, restaurant service and operation, and customer service.

Diesel Mechanics

3 Terms (Main Campus)

This program prepares students to work on a variety of diesel-powered equipment used in the trucking, heavy equipment and mining industries.

The program meets in five working labs where students are introduced to a variety of diesel engines, electrical and hydraulic test equipment, dynamometers, air conditioning equipment, drive train components, fuel injection test and calibration devices, and related equipment.

In the first term, students learn basic engine block design; component parts disassembly, inspection and reassembly; diesel engine accessories; introduction to diagnosis; troubleshooting; and injection system component replacement. The second term includes the transmission, drive train and fuel injection portions of the program. In the third term, students repair electrical components and hydraulic systems.

A student may leave the program when a training objective is reached and receive a performance certificate detailing the skills completed.

To satisfy full program requirements, a student must complete successfully 1125 instructional hours of which 675 are laboratory work and 450 are related theory.

Diesel Mechanics students must pay an equipment fee of \$100 before entering the first term, \$130 for the second term, and \$130 for the third term.

DIESEL MECHANICS PROGRAM

Hrc

	nrs	C/
Term I	Wk	Hrs
Diesel Engine Principles and Accessories Lab Diesel Engine Principles and	15	9
Accessories Theory	5	3
Diesel Mathematics/Basic	_	_
Electricity	5	3
Term II Transmission, Final Drive, Clutch, Brake, Steering and Fuel		
Injection Lab	15	9
Injection Theory	5	3
Transportation Electronics	5	3



Term III		
Electrical and Hydraulic Systems		
Lab	15	9
Electrical and Hydraulic Systems		
Theory	5	3
Troubleshooting and Problem		
Solving	5	વ

Totals.....

Option

Supervised Work Experience

Support Courses
See page 71.

COURSE DESCRIPTIONS

0240010—Diesel Engine Principles and Accessories Lab/ Theory (9 cr)

This course covers diesel shop safety and basic tools and equipment used by the diesel mechanic. Emphasis is on twoand four-stroke diesel engines including basic engine cylinder
block assembly design; component parts disassembly, inspection and reassembly; fits, tolerances and service specifications;
use of precision measuring tools; interpreting mechanical drawings; thread repair procedures; lubricating, cooling, air intake
and fuel systems; governor control design. The course introduces the student to diagnosis and repair of engine failures and
reduced operational capabilities.

0240607—Diesel Engine Principles and Accessories Theory (3 cr)

Instruction is provided in shop safety, industrial materials, and hand and power tools as they relate to basic engines and principles. Students are introduced to repair manuals, schematics, charts and job sheets.

0240279—Diesel Mathematics/Basic Electricity (3 cr)

The student learns and applies basic math principles as they relate to measuring tools, equipment, graphs and schematics. The theory of mechanical power, basic electricity principles, related terminology and electrical component identification also are covered. An introduction to diagnosis equipment, testing procedures and theory related to heavy equipment, electrical systems, troubleshooting and repair procedures is included.

0240110—Transmission, Final Drive, Clutch, Brake, Steering and Fuel Injection Lab (9 cr)

(Prerequisites: Diesel Engine Principles and Accessories Lab/ Theory, Diesel Mathematics/Basic Electricity or equivalent) Instruction covers the service and repair of drive train, brake and steering systems and components. Students learn manual transmission repair procedures and how to perform standardized tests on automatic transmissions. Instruction also is provided in fuel system design, construction, operating principles, servicing procedures and troubleshooting.

0240666—Transmission, Final Drive, Clutch, Brake, Steering and Fuel Injection Theory (3 cr)

(Prerequisites: Diesel Engine Principles and Accessories Labs Theory, Diesel Mathematics/Basic Electricity or equivalent) Basic theory of the entire drive train, brake, and steering and fuel systems is studied. The course also covers the theory related to test equipment, diagnosis, troubleshooting and analysis sequence procedures.

0240341—Transportation Electronics (3 cr)

(Prerequisites: Diesel Engine Principles and Accessories Labi Theory, Diesel Mathematics/Basic Electricity or equivalent) The student learns how to test and replace malfunctioning electronic components. The theory of solid-state devices, basic principles of electronics, and interpretation of circuit diagrams also are covered. The basic principles of signal-tracing characteristics and operation of semiconducting diodes, effects of bias voltages on semiconducting diodes, and the operation of rectifier circuits are included. The student also studies and performs lab experiments on full wave rectifiers, voltage rectifiers, transistors, thyristors, integrated circuits, operational amplifiers, digital gates and timing circuits.

0240158—Electrical and Hydraulic Systems Lab (9 cr)

(Prerequisites: Transmission, Final Drive, Clutch, Brake Steering and Fuel Injection Lab/Theory; Transportation Electronics or equivalent) This course covers the application of basic and advanced diesel electricity, electrical circuits and components with related schematics; carburetion for gasoline liquified petroleum and natural gas engines; magneto design construction and maintenance; and diesel electric generator operation, maintenance and repair. Hydraulic pumps, control devices, cylinders and motors are studied, disassembled and repaired. The course also covers diesel air conditioners and the refrigeration cycle of transport units.

0240683—Electrical and Hydraulics Systems Theory (3 cr (Prerequisites: Transmission, Final Drive, Clutch, Brake

Steering and Fuel Injection Lab/Theory; Transportation Electronics or equivalent) Students learn safety, diagnosis, trouble shooting and repair procedures of electrical, hydraulic and air conditioning systems.

0240804—Troubleshooting and Problem Solving (3 cr)

(Prerequisites: Transmission, Final Drive, Clutch, Brake Steering and Fuel Injection Lab/Theory; Transportation Electronics or equivalent) Students diagnose problems in lubrication, cooling, air induction, exhaust, fuel starting and drive train systems.

Electrical Trades

4 Terms (Main Campus)

This program provides students with entry-level skills for employment in the construction industry, electrical maintenance and related electrical trades.

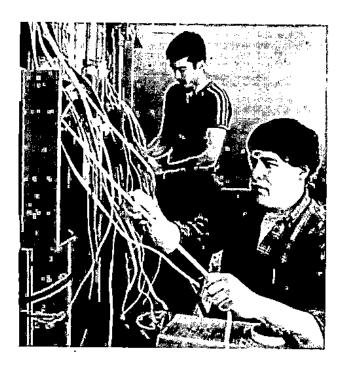
The program is designed to allow a student to enter the electrical trade industry at three separate levels. Upon completion of Terms I and II, the student may receive a residential wiring certificate and obtain employment as an apprentice electrician.

Completion of Term III gives the student additional skills in design and installation of industrial control systems and heavy construction work. A student may receive an electrical trades certificate at this point.

Term IV upgrades the student's abilities in installation and maintenance of solid-state equipment. Students also have the option to participate in a supervised work experience program.

To earn a certificate, a student must successfully complete a total of 1575 instructional hours of which 900 are laboratory work and 675 are related theory. A student may leave the program when a training objective is reached and receive a proficiency certificate detailing the skills mastered.

Electrical Trades students must pay a personal equipment fee of \$100 before entering the first term, another \$85 for the second term, \$50 for the third term, and \$50 for the fourth term. They also must provide their own shop clothing and industrial safety glasses or goggles which conform to ANSI 287.1.



ELECTRICAL TRADES PROGRAM

	Hrs	Cr
Term 1	Wk	Hrs
Electrical Trades Lab I	15	9
Electrical Trades Theory I	5	3
Electrical Math I	5	3
Electrical Main 1	J	J
Term II		
Electrical Trades Lab II	15	9
Electrical Trades Theory II	5	3
Electrical Math II	5	3
Electrical Blueprint Reading I	5	3
	_	,
Residential Wiring Certificat	ť	
Term III		
Electrical Trades Lab III	15	9
Electrical Trades Theory III	5	3
Electrical Blueprint Reading II	5	3
Commercial Wiring Certifica	te	•
Term IV		
Electrical Trades Lab IV	15	9
Electrical Trades Theory IV	5	3
Occupational Safety	5	$\frac{3}{63}$
Totals	1575	$\overline{63}$
Electrical Trades Certificate		35

Option

Supervised Work Experience

Support Courses See page 71.

COURSE DESCRIPTIONS

0353672/0353673—Electrical Trades Lab and Theory I (12

This course provides instruction in the fundamentals of basic electricity. Subject areas include AC and DC theory, symbol identification, schematic reading, circuit application, magnetism, introduction to basic transformers, single-phase motors, and use of the National Electric Code and utility requirements.

0353655—Electrical Trades Mathematics I (3 cr)

The student reviews basic arithmetic functions and is introduced to electrical formulas which include Ohm's and Kirchhoff's laws. Problem solving includes calculations of material and circuit load requirements; rules for series, parallel and combination circuits; and mechanical work and power.

0353675/0353676—Electrical Trades Lab and Theory II (12 cr)

(Prerequisites: Electrical Trades Lab and Theory I) The fundamentals of electricity learned in Term I are applied to the

design and installation of residential and commercial building circuitry. Subject areas include safety; use of tools and equipment; and the design and installation of branch circuits, service entrances, and the necessary hardware such as outlet boxes, electrical cable and tow-voltage equipment. Also covered are wiring of temporary services, basic circuit bending, and an indepth study of the National Electric Code and local codes and regulations.

0353656—Electrical Trades Mathematics II (3 cr)

(Prerequisite: Electrical Trades Mathematics I or equivalent) This course advances the student's knowledge of electrical formulas into algebraic concepts and trigonometric functions as they apply to power production, magnetic circuitry, generators and three-phase motors.

0353659-Electrical Trades Blueprint Reading I (3 cr)

(Prerequisite: Electrical Trades Theory I) Basic instruction is provided in reading and interpreting blueprints and specifications. Emphasis is on terminology, symbols, notations, scaling, dimensioning and basic blueprint drawing techniques. Construction methods, materials and structural support of residential, commercial and industrial buildings also are covered.

0353678/0353679—Electrical Trades Lab and Theory III (12 cr)

(Prerequisites: Electrical Trades Lab and Theory I and II) Tools and materials used in commercial installations are taught. Students work outside the lab on projects around campus when possible, gaining first-hand knowledge of installation methods to reinforce training.

0353681—Electrical Motor Controls (3 cr)

Industrial control circuits for motor-driven equipment are covered including automatic and manual controls, sequencing, forward and reversing, and time delays.

0353657—Electrical Trades Blueprint Reading II (3 cr)

(Prerequisite: Electrical Trades Blueprint Reading I or equivalent) Advanced instruction in reading blueprints and specifications is provided. The blueprints include transformers, feeders, distribution panels, subfeeder panels, lighting circuits, motors and controllers, signal systems and power requirements.

0353658/0353654—Electrical Trades Lab and Theory IV (12

(Prerequisites: Electrical Trades Lab and Theory I, II and III or equivalent) This course is an advanced study of motor control circuitry. Included are solid-state devices and a comparison between magnetic control circuitry and state-of-the-art equipment.

0353653—Occupational Safety (3 cr)

This course presents training in the Red Cross Multimedia System and cardiopulmonary resuscitation for which Red Cross Certification is issued upon successful completion. An introduction to the Occupational Safety and Health Act (OSHA) regulations is included.

0353963—Supervised Work Experience

This is a continuation of Electrical Trades Lab and Theory IV, placing the student into supervised work experience with a local contractor. Instructional staff makes periodic visits to the job site and, in conjunction with the employer, completes written evaluations of the student's work program.

General Trades

1 Term (Main Campus)

The General Trades program is for persons wanting to find work quickly and learn a skill while employed as a helper or trainee.

The first half of the program provides instruction designed to help students determine the types of work best suited to their interests and abilities coupled with skill development in job seeking and job retention. Instruction also includes use, care and maintenance of hand and power tools common to trades occupations, and industrial safety.

When a student has made satisfactory progress in the readiness unit, the student and instructor seek an entry-level job for which the student qualifies. A supervised work experience program is established with the cooperating employer for the remaining weeks of the term. Most jobs are expected to be permanent and full time.

The 15-week program provides up to 160 hours of classroom/laboratory instruction and about the same amount of supervised work experience.

Students who complete the program receive proficiency certificate.

This program does not qualify students for Veterans Administration training benefits or other student financial aids.

GENERAL TRADES PROGRAM

	Hrs	
Term I	Wk	Hrs
General Trades Lab/Theory (71/2		- 1
weeks)	20	9
Supervised Work Experience (71/2		
weeks)	20	6
Totals	300	15

Support Courses See page 71.

COURSE DESCRIPTIONS

0290011/0290623—General Trades Lab/Theory (9 cr)

The student is taught skills to find job openings, apply and interview for jobs, obtain and hold a job. Safety, hand and power tools, and industrial materials used in a variety of occupations also are covered.

0290951-Supervised Work Experience (6 cr)

As they become prepared, students begin work at teacher approved work stations in the specific fields chosen. Student trainees are supervised jointly by T-VI and the cooperating employers for the remainder of the term.

Hospitality/Food Service Management

1 Term (Main Campus)

This program is available to persons employed in the hospitality/food service field who want to learn the skills necessary to become entry-level supervisors or managers.

Classroom instruction totals 135 hours of theory in human relations, supervision and business practices. The supervised work experience portion of the program, totaling a minimum of 240 hours, is established with a cooperating employer under the supervision of the instructor.

Students who complete the program receive a proficiency certificate.

This program does not qualify students for Veterans Administration training benefits or other student financial aids.

HOSPITALITY/FOOD SERVICE MANAGEMENT PROGRAM

	Hrs	Cr
Term I	Wk	Hrs
Hospitality/Food Service		
Management Theory	9	6
Supervised Work Experience	16	9
Totals	375	15

COURSE DESCRIPTIONS

0312671—Hospitality/Food Service Management Theory (6 cr)

The student learns skills to advance into supervision and management. Students develop human relations skills needed to facilitate cooperation among employees and attract customers; supervision skills related to motivating employees, resolving conflicts, setting goals, rewarding good performance and providing constructive discipline; and the business practices of basic accounting, marketing and cost control.

0312970-Supervised Work Experience (9 cr)

The student is employed at an approved work station that provides relevant learning experiences directly related to career and educational goals. The student is supervised and evaluated jointly by the employer and T-VI personnel.

Law Enforcement

4 Terms (Main Campus)

The Law Enforcement program provides basic instruction in the field of law enforcement and criminal justice. Students may earn either a certificate or an associate degree.

The training and instruction provided in the first and second terms lead to a certificate and prepare the student for entry-level employment with a law enforcement agency. To earn a certificate, a student must successfully complete 32 credit hours.

Students who have already received a certificate from an approved New Mexico law enforcement academy with which T-VI has an articulation agreement are given block credit for the 23 credit hours of training in the first and second terms of the associate degree program. These students may enter the third term after meeting T-VI admission requirements. They also must take English 101, Sociology 111 and Math 120. Credit will be posted at the completion of all courses in the degree program.

The curriculum covered in the third and fourth terms provides advanced coursework designed to train the student for higher level positions in the fields of security, law enforcement and corrections. Degree program credits may be transferred to four-year colleges or universities that have related programs.

To earn an Associate in Applied Science Degree in Law Enforcement, a student must successfully complete 65 credit hours of which 23 are certificate core requirements and 42 are academic courses.

Students must pay personal equipment fees of \$5 for the first term and \$15 for the second term.

ASSOCIATE IN APPLIED SCIENCE/LAW ENFORCEMENT

	Hrs	Cr
Term I	Wk	Hrs
*Sociology 111—Criminal Justice		
System		3
*English 101—Writing with		
Readings in Exposition		3
Law Enforcement I	20	10

Term II		
*Math 120—Intermediate Algebra		3
Law Enforcement II	23	13
Law Enforcement Certificate		
4		
1		
Term III		
*English 119—Technical		
f · Communications		3
*Psychology 101 or 102—General		
Psychology I or II		3
*Sociology 101—Introduction to		
Sociology		3
*Computer Science 101—Computer		
Literacy		3
*Sociology 280—Social Science		
Research		3
,		
);		
Term IV		
*Speech 221—Interpersonal		
* Communication		3 '
*Sociology 211—Social Problems		3
*Sociology 212-Juvenile		
Delinquency		3
*Sociology 213—Criminology		3
*Sociology 214—Sociology of		
Corrections		3
*Sociology 216—Ethnic and		
Minority Groups		3
	545	65
[]		

*General Education courses. Course descriptions on pages 23-25.

COURSE DESCRIPTIONS

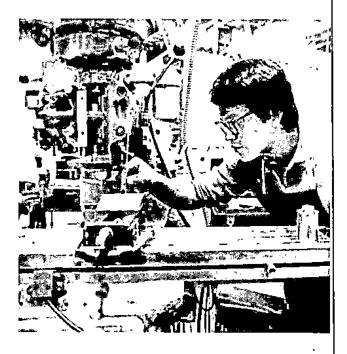
0770207—Law Enforcement I (10 cr)

This course includes a study of the historical development, purposes and goals of criminal common law, New Mexico statutory law and the procedures which control actions of the criminal justice system. Other topics include patrol concepts, officer safety, tactical procedures, survival techniques and first aid.

0770208-Law Enforcement II (13 cr)

þ

¡This course provides the student with the critical elements of criminal and accident investigation, traffic enforcement and community relations. Students also learn appropriate force levels to use when confronting a potentially dangerous person, handcuffing, search techniques, prisoner handling and self-defense.



Machine Trades

4 Terms (Main Campus)

The Machine Trades program qualifies students for job entry as machine tool operators.

Students learn the fundamental operations of various machine tools. Classes meet in two well-equipped labs where students are introduced to micrometers, gauges, drill presses, hand saws, engine lathes, milling machines and other equipment used throughout the metal working industry.

To earn a certificate, a student must complete successfully 1500 instructional hours of which 900 are laboratory work and 600 are related theory.

A student may leave the program when a training objective has been reached and receive a rating sheet detailing the skills mastered.

Machine Trades students must pay an equipment fee of \$100 before entering the first term, \$80 before the second term, and \$70 for the third term. Students also must provide their own industrial goggles or safety glasses with side shields which conform to ANSI 287.1.

MACHINE TRADES PROGRAM

	Hrs	Cr
Term I	Wk	Hrs
Machine Trades Lab I	15	9
Machine Trades Theory I	5	3
Machine Trades Math/Blueprint		
Reading I	5	3

Term II		
Machine Trades Lab II	15	9
Machine Trades Theory II	5	3
Machine Trades Math/Blueprint		
Reading II	5	3
Term III		
Machine Trades Lab III	15	9
Machine Trades Theory III	5	3
Numerical Control Programming I	5	3
Term IV		
Machine Trades Lab IV	15	9
Geometrical Tolerancing/		
Metallurgy	5	3
Numerical Control Programming		
П	5	3
Totals	1500	60

Option

Supervised Work Experience

Support Courses
See page 71.

COURSE DESCRIPTIONS

0220007/0220604—Machine Trades Lab/Theory I (12 cr)

These courses provide experience in the operation of drill presses, pedestal grinders, band saws, engine lathes, surface grinders and milling machines. Instruction also covers shop safety, benchwork, machine construction and nomenclature, speeds and feeds, cutting tool physics and abrasives.

0220306—Machine Trades Mathematics/Blueprint Reading I (3 cr)

Review of basic math and introduction of simple formula manipulation, introduction to shop drawings, and sketching of orthographic and isometric views are included.

0220056/0220637—Machine Trades Lab/Theory II (12 cr)

(Prerequisites: Machine Trades Lab/Theory I, Math/Blueprint Reading I or equivalent) Instruction covers advanced engine lathe operations, basic surface grinding and an introduction to turret lathes and milling machines. Emphasis in the theory portion of the course is on the technical aspects of tooling.

0220334—Machine Trades Mathematics/Blueprint Reading II (3 cr)

Instruction includes a continuation of algebra with emphasis on machine-related problems, geometric theorems, introduction to trigonometry as applied to the trade, and continuation of print reading.

0220107/0220663—Machine Trades Lab/Theory III (12 cr)

(Prerequisites: Machine Trades Lab/Theory II, Math/Blueprint Reading II or equivalent) The advanced milling machine operations of hole production, indexing and rotary table work are emphasized. Tracer and advanced turret lathe operations are introduced along with tool, cutter and cylindrical grinding. Numerical control (N/C) and computer numerical control (C/ N/C) operations also are covered.

0220755-Numerical Control Programming I (3 cr)

(Prerequisites: All Machine Trades II courses or equivalent) Instruction includes word address formats, the programming and tape preparation necessary for numerical control machining along with practical trigonometry as applied to the N/C programs.

0220161-Machine Trades Lab IV (9 cr)

(Prerequisites: All Machine Trades III courses or equivalent) Major emphasis is on advanced milling and turning setups, advanced N/C, C/N/C setup, and operation of drilling/milling and turning machines.

0220652—Geometrical Tolerancing/Metallurgy (3 cr)

This course covers care and application of tooling with emphasis on applications to commonly machined materials with high-speed steels, carbides, coated carbides and ceramics. Instruction covers methods and processes, structure and properties of metal, temperature changes in metal machining, effects of alloying elements, weights and conversion factors. Also included are heat treatment of ferrous alloys and instruction in interpretation and application of the geometrical tolerancing system.

0220761—Numerical Control Programming II (3 cr)

(Prerequisite: Numerical Control Programming I ar equivalent) This course offers instruction in computer-assisted interactive graphics and part programming system applications. It provides the basic information necessary for writing milling, drilling and turning programs. The course also covers advanced manual programming techniques and geometric applications to computer-assisted drafting/computer-assisted manufacturing (CAD/CAM) systems used in distributive numerical control (D/N/C) and C/N/C machining.

Plumbing

2 Terms (Main Campus)

The Plumbing program provides the technical knowledge and occupational skills necessary to enter the plumbing industry.

During the first term, instruction is in the fundamentals of layout, assembly and installation; nomenclature of tools and materials; and practice with the tools of the trade.

Emphasis in the second term is on residential and light commercial work, maintenance and remodeling; installation of fixtures; alteration, planning and coordination of the job; repair of piping systems; installation of water, soil and vent lines; and application of codes.

To earn a certificate, a student must complete successfully 750 instructional hours of which 450 are laboratory work and 300 are related theory.

A student may leave the program when a training objective has been reached and receive a rating sheet detailing the skills mastered.

Plumbing students must pay an equipment fee of \$100 before entering the first term and another \$70 for the second term.

PLUMBING PROGRAM

	Hrs	Cr
Term I	Wk	Hrs
Plumbing Lab I	15	9
Plumbing Theory I	5	3
Plumbing Math/Blueprint Reading		
I	5	3



T 11		
Term II		
Plumbing Lab II	15	9
Plumbing Theory II	5	3
Plumbing Math/Blueprint Reading		
ÌÌ	5	$\frac{3}{30}$
Totals	750	30
Option		-
Supervised Work Experience		

Support Courses
See page 71.

COURSE DESCRIPTIONS

0340015/0340611—Plumbing Lab/Theory I (12 cr)

This class covers safe and proper use of tools and equipment; identification of plumbing fittings and pipe; basic hydraulics and pneumatics; layout, assembly, installation, alteration and repair of pipe systems; safety practices; general tools and equipment; sources of heat; and operational procedures.

0340312—Plumbing Mathematics/Blueprint Reading I (3 cr)

This course covers basic arithmetic, whole numbers, common and decimal fractions, cubic and weight measures, use of rules and formulas, ratio and proportion, area calculations, volumes, pressure and capacities, hydraulics and pipe length calculations, and surface and direct measurements. Also covered is basic instruction in sketching and reading workshop drawings, blueprints, and specifications for residential and light commercial work.

0340062/0340643-Plumbing Lab/Theory II (12 cr)

(Prerequisites: Plumbing Lab and Theory I or equivalent, Math and Blueprint Reading I or equivalent) This course emphasizes design, layout and installation of water, soil and vent lines; related fixtures and fittings; inspecting and testing systems; soldering; maintenance and repair of plumbing; solar systems; yard irrigation; swimming pool, hot tubs and spa installation and service.

0340339—Plumbing Mathematics/Blueprint Reading II (3 cr)

(Prerequisite: Math/Blueprint Reading 1 or equivalent) Course content includes a detailed study of piping drawings, isometric pipe layouts, interpreting residential and light commercial blue-prints, application of plumbing codes, knowledge of terms, and planning and coordinating the job.



Welding

3 Terms (Montoya Campus)

The Welding program qualifies students for entrylevel employment in the metals-processing industry. Specific welding qualification is the goal of each term.

During the first term, students study, practice and qualify in oxyacetylene welding. Instruction also is provided in shielded metal-arc welding.

In the second term, welder qualification tests are given in shielded metal-arc welding and gas metal-arc welding. Students must pass these tests to advance to Term III.

During the third term, tests are given in pipe welding and gas tungsten-arc welding to acquaint the student with standard operating procedures for various qualifications. Students must be making progress on these tests to exit the program early. (See *Early Exit*, page 19.) Instruction also is offered on welding fabrication and materials testing.

A student may leave the program when a training objective is reached and receive a rating sheet detailing the skills mastered.

A certificate is awarded to students who complete successfully 1200 instructional hours of which 750 are laboratory work and 450 are related theory.

Specific welding qualification is the goal of each term. A student may leave the program when a training objective is reached and receive a rating sheet detailing the skills mastered.

Welding students must pay a personal equipment fee of \$100 before entering the first term.

WELDING PROGRAM

	Hrs	Cr
Term I	Wk	Hrs
Welding Lab I	15	9
Welding Metallurgy I	5	3
Welding Math/Blueprint Reading I	5	3
Term II		
Welding Lab II	15	.9
Welding Metallurgy II	5	3
Welding Math/Blueprint Reading		_
п	5	3
Term III		
Welding Lab III	20	12
Welding Metallurgy III/Inspection.	5	3
Blueprint Reading III	5	3
Totals	1200	48



COURSE DESCRIPTIONS

0221008--Welding Lab I (9 cr)

This class teaches welding safety, general tools and equipment, common gases and their properties, welding materials, welding joints, oxyacetylene welding and brazing, thermal cutting, and shielded metal-arc welding procedures and processes.

0221605-Welding Metallurgy I (3 cr)

Instruction is offered in manufacturing processes, welding methods and processes, structure and properties of metal, temperature changes in welding, effects of alloying elements, variations of fluxes, and slags and gases for shielding.

0221307—Welding Mathematics/Blueprint Reading I (3 cr)

This is a course in basic arithmetic. Surface and direct measurements, graphs and charts, and payroll calculations are studied. Instruction also is provided in basic drawing interpretation, welding symbols, terms and detailed fittings applied to the welding area.

0221057-Welding Lab II (9 cr)

(Prerequisites: Welding I Lab, Welding Metallurgy I or equivalent) This course provides advanced instruction in shielded are and gas metal-are welding. Beginning instruction in gas tungsten-are welding is provided.

0221638-Welding Metallurgy II (3 cr)

(Prerequisite: Welding Metallurgy I or equivalent) Instruction is offered in filler metal for joining iron, steel and nonferrous metals, shrinkage and distortion in weldments, preheating and postheating, difficulties and defects in welds, welding carbon and alloy steels, welding tests, conversion factors and symbols, weights and properties.

0221335—Welding Mathematics/Blueprint Reading II (3 cr)

(Prerequisite: Welding Math/Blueprint Reading I or equivalent) Rules, formulas, ratio, proportion, volume and right-angle calculations are covered. Also included is blueprint reading instruction in which the student reads commercial construction and fabrication drawings, complex detail section and assembly drawings related to the welding field.

0221108—Welding Lab III (12 cr)

i. (Prerequisites: Welding Lab II, Welding Metallurgy II, Welding Mathematics/Blueprint Reading II or equivalent) Working speed and proficiency are emphasized through continued practice and shop fabrication assignments. Instruction is provided in basic pipe welding and layout, materials testing and industrial safety. Welding and testing of pipe intersections designed in Blueprint Reading III and pipe qualification tests are included.

0221664—Welding Metallurgy III/Inspection (3 cr)

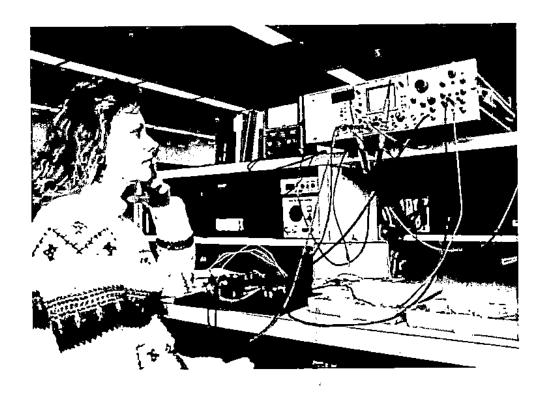
'(Prerequisite: Welding Metalturgy II or equivalent) This course deals with technical reports and welding problems arising from the lab sessions including daily discussion and review. Instruction is in the welding processes used for carbon steels, stainless steels, aluminum and pipe; procedures, layout used in fabrication and AWS inspection standards.

0221790—Blueprint Reading III (3 cr)

(Prerequisite: Welding Math/Blueprint Reading II or equivalent) This lab course teaches development of templets for various types of pipe and fabrication welding, materials estimating, pipe layout and development, pipe and structural print reading, performance of pipe qualification tests for the basic intersections, transferring of measurements from working drawings and blueprints, design considerations, layout and welding related to fabrication.

CONTINUING EDUCATION DIVISION





Tuition

Continuing Education Division classes are tuition free.

Textbooks

Continuing Education Division students—except those taking Adult Basic Education classes—must purchase their own books. Textbook prices are listed in this catalog but may change during the year.

Standards of Progress

SKILL IMPROVEMENT PROGRAM: To complete successfully a Skill Improvement class and receive a certificate, a student must attend at least 80 percent of the classes and earn a minimum grade of C. Letter grades used are:

A = Excellent

B = Above Average

C = Average

U = Unsatisfactory

Certificates are granted to students for each class completed successfully.

ADULT BASIC EDUCATION PROGRAM:

Students must attend at least 80 percent of the class sessions to receive a certificate. No grades are given.

Attendance Policies

Continuing Education Division teachers take attendance each class session and turn in absence reports to the division office each month. If a student is absent four class meetings in a row, the teacher tries to contact the student. A student may be dropped from the class after four consecutive absences.

Student Records

Permanent records kept by the Continuing Education Division include the date a student enrolled in a class, date completed or dropped, total number of class hours, total number of hours the student attended, final grade, and whether a certificate was awarded to the student. The words per minute attained in a typing or shorthand class also are noted when applicable.

The Continuing Education Division will furnish transcripts whenever requested by a student. The first transcript is free; others cost \$1 each. Please allow 48 hours to process transcript requests.

ADULT BASIC EDUCATION

T-VI's Adult Basic Education program, which is offered free, includes classes in written and spoken English, math, General Educational Development (GED) examination subjects for persons seeking a high school equivalency diploma, and a citizenship class for aliens who want to become United States citizens.

Registration

Persons wanting to take an Adult Basic Education class should begin by registering in person at either T-VI campus on one of the ABE registration days. The 1987–88 registration days are: Fall term, August 25–26; winter term, December 29–30; summer term, April 26–27. Registration is held between 10 a.m. and 8 p.m.

A Continuing Education Division counselor will help with class selection to meet individual needs and schedules. During the term, ABE counselors are available at both Main and Montoya campuses Monday through Thursday from noon to 9 p.m., and Friday from 8 a.m. to 5 p.m.

Textbooks

Textbooks are loaned to students free. There are no fees for the classes because they are funded with state and federal monies.

Persons or groups interested in additional ABE classes in the community should contact the Continuing Education Division. It may be possible for T-VI to provide ABE classes at locations not listed here.

NOTE: English as a Second Language classes are for persons learning to speak English. Most of the class work is in speaking and listening although some written work is given. In addition to textbooks, tape recorders and other audiovisual equipment are used.



101-B: BEGINNING ENGLISH AS A SECOND LANGUAGE

This class is for students who do not speak English and for those who have not studied English before. The class uses a conversational approach to learning English. Linguistic differences and teacher recommendations will be considered for proper placement of students in the class.

Fall-Winter-Summer

MW or TTh	7-9 p.m.	T-VI Main Campus
MW	7–9 p.m.	T-VI Montoya Campus
MTWThF	8:30-10:30 a.m.	T-VI Main Campus
MTWThF	10:45 a.m12:45 p.m.	T-VI Main Campus
MTWThF	1:15-3:15 p.m.	T-VI Main Campus

101-I: INTERMEDIATE ENGLISH AS A SECOND LANGUAGE

This class is for students who have completed the beginning conversational English class or persons who speak some English. It is a continuation of the beginning class with emphasis on speaking and writing.

Fall-Winter-Summer

7–9 p.m.	T-VI Main Campus
7–9 p.m.	T-VI Montoya Campus
8:30-10:30 a.m.	T-VI Main Campus
10:45 a.m12:45 p.m.	
	T-VI Main Campus
	7–9 p.m. 8:30–10:30 a.m. 10:45 a.m.–12:45 p.m.

101-A: ADVANCED ENGLISH AS A SECOND LANGUAGE

Students who have had a previous conversational English class and persons who can speak some English but need additional practice may take this class. Speaking, writing and basic grammar are taught.

Fall-Winter-Summer

MW or TTh	7–9 p.m.	T-VI Main Campus
MW		T-VI Montoya Campus
MTWThF		T-VI Main Campus
MTWThF	10:45 a.m12:45 p.m.	T-VI Main Campus
MTWThF		T-VI Main Campus

101-L: BASIC LITERACY FOR ENGLISH AS A SECOND LANGUAGE

This class helps students learn the most basic skills for reading and writing in English. It is especially for those with little formal education or whose language does not use the same written alphabet as English. The class includes letter formation (printing and cursive), relation between English sounds and letters, reading and writing single words and short sentences, and filling out short application forms.

Fall-Winter-Summer

MW or TTh	7–9 p.m.	T-VI Main Campus
MTWThF	10:45 a.m12:45 p.m.	T-VI Main Campus
PREREQUIS	SITE: Completion of Beg	inning English as a

Second Language or equivalent.

102-B: BEGINNING BASIC ENGLISH GRAMMAR/ SPELLING

This class is recommended for students who can function in the English language or have taken at least two terms of conversational English, or students who have difficulty reading and writing the English language. Included are grammar, speech correction, oral expression, writing, spelling and phonetics.

Fall-Winter-Summer

TTh	7–9 p.m.	T-VI Main Campus
MW	7–9 p.m.	T-VI Montoya Campus

102-A: ADVANCED BASIC ENGLISH GRAMMAR/ SPELLING

Persons who need English grammar and spelling review or reinforcement will benefit from this class. Persons registering should talk with a Continuing Education Division counselor for proper placement. This is a structured English grammar class which may be taken by high school graduates for review purposes.

Fall-Winter-Summer

TTh	7–9 p.m.	T-VI Main Campus
TT h	7–9 p.m.	T-VI Montoya Campus

103: COMBINATION BASIC MATHEMATICS AND ENGLISH GRAMMAR

This class is for students who want to improve their basic English and mathematics. Mathematics, English and spelling are emphasized. Students are divided according to abilities and individual instruction is given in mathematics. Students should talk with a counselor before registering for this class.

Fall-Winter-Summer

T T h	7–9 p.m.	T-VI Main Campus
TTh	7–9 p.m.	T-VI Montoya Campus

104: BASIC MATHEMATICS

This class helps students understand numbers and how to work word problems. It uses numbers to teach the student how to buy on credit, borrow money, plan spending, and deal with everyday problems. Facts about insurance and some modern basic math also are covered. Algebra is not taught in this class.

Fall-Winter-Summer

TTh	7–9 p.m.	T-VI Main Campus
TTh	7–9 p.m.	T-VI Montoya Campus

107-B: BEGINNING READING IMPROVEMENT AND SPELLING

This is a beginning literacy class for native English speakers who have difficulty reading and recognizing words. It improves the student's reading ability and understanding of what is read. Word recognition, spelling and sight vocabulary are included.

Fall-Winter-Summer

MW	7–9 p.m.	T-VI Main Campus
TTh	7~9 p.m.	T-VI Montova Campus

107-I: INTERMEDIATE READING IMPROVEMENT AND SPELLING

This class improves the student's ability to read and understand what is read. Textbooks and audiovisual aids are used to help improve reading, comprehension and spelling.

Fall-Winter-Summer

MW -	7–9 p.m.	T-VI Main Campus
TTh	7–9 p.m.	T-VI Montoya Campus

107-A: ADVANCED READING IMPROVEMENT AND SPELLING

This advanced reading class is for students who can read but want to improve comprehension and reading speed. This is not a speed reading class. Audiovisual equipment and other reading materials are used for speed, comprehension, retention and spelling.

Fall-Winter-Summer

MW	7–9 p.m.	T-VI Main Campus
TTh	7–9 p.m.	T-VI Montoya Campus

108: GED REVIEW IN WRITING SKILLS, MATHEMATICS, SCIENCE, SOCIAL STUDIES AND READING SKILLS

This class prepares students for the General Educational Development (GED) examination for a high school equivalency diploma. The five areas included in the GED exam are covered—writing skills, social studies, science, reading skills and mathematics. Students are placed in this class if their pretest scores are in the middle range, which is approximately seventh grade overall. Much of the class can be planned for the individual student and may be completed at the student's own pace. Students are encouraged to take the GED examination at the end of the term, but those with high demonstrated ability may take the test earlier. The test is free. All textbooks are furnished to the student free on a card check-out basis.

Fall-Winter-Summer

MTWThF	8:15-11:15 a.m.	T-VI Main Campus
MTWThF	8-11 a.m.	T-VI Montoya Campus
MTWThF	12:15-3:15 p.m.	T-VI Main Campus
MTWThF	12 noon-3 p.m.	T-VI Montoya Campus
MTW	6:30-9 p.m.	T-VI Main Campus
MTW	6:30-9 p.m.	T-VI Montoya Campus

This class can be offered in other locations if requested. Ask the registration monitors about locations.

PREREQUISITE: Persons wanting to take this class must be at least 18 years old and not enrolled in high school. A 17-year-old may enroll if released from the state compulsory school attendance law and granted a GED Underage Permission Form. Prospective students must take a pre-GED test at T-VI. Scores on that test help place applicants in the most appropriate class. NOTE: During the term, students may register for GED classes at Main Campus between 10 a.m. and 8:30 p.m. Monday through

NOTE: During the term, students may register for GED classes at Main Campus between 10 a.m. and 8:30 p.m. Monday through Thursday, 8 a.m. and 4:30 p.m. on Friday; and at Montoya Campus from 12 noon to 8:30 p.m. Monday through Thursday and 8 a.m. to 4:30 p.m. on Friday.

109: CITIZENSHIP FOR ALIENS

This is a class in United States history and government for aliens who want to take the United States Naturalization Test. To become a U.S. citizen, an alien must first pass an oral and written test before an examiner from the Naturalization Department. That test is not given at T-VI nor administered by T-VI personnel. The test also may include information on national, state and municipal government. Free textbooks are given only to students enrolled in the class.

Fall-Winter-Summer

TTh 7–9 p.m.

SKILL IMPROVEMENT COURSES

The Skill Improvement Program assists adults in improving their job skills for career advancement, preparing for a career change, exploring a new career field, or acquiring basic educational skills which they lack. Skill Improvement classes are open to all adults and high school sophomores, juniors and seniors.

Admission Policies

Classes numbered 110 through 499 are open to adults and high school sophomores, juniors and seniors. Classes numbered 500 or above teach specialized skills, and are designed for persons who have a job-related need for the instruction and meet the prerequisites.

Every effort will be made to place all applicants in classes. If fewer than 15 persons have applied for a class, it may be canceled.

Registration

Persons who want to take a Continuing Education Division Skill Improvement class should register early for the best chance of getting in a class. Every effort will be made to add classes so all applicants can be placed.

To complete the registration process, applicants must:

- Submit a separate registration form for each class desired. Forms are available at both campuses and all branches of the Albuquerque Public Library. Registration deadlines are August 28 for the fall term, December 31 for the winter term, and April 29 for the summer term. After those deadlines, forms must be hand-delivered. Continuing Education Division office hours at both campuses are 8 a.m. to 9 p.m. Monday through Thursday, and 8 a.m. to 5 p.m. on Friday.
- Pay the \$10 registration fee. This fee is paid once per term, regardless of the number of classes taken. The fee may be mailed or hand-delivered to either campus. Payment may be by check, money order, Mastercard or VISA. Payment must accompany the registration form. The fee is refundable only if T-VI is unable to place the applicant in a requested class.



• Purchase required textbooks. Applicants will be notified about placement in classes, schedules, book and lab fees, and bookroom hours. Deadlines for payment of book and lab fees are September 2 for the fall term, January 6 for the winter term, and May 4 for the summer term.

Fees

REGISTRATION FEE: There is a \$10-per-term registration fee for Skill Improvement classes (regardless of the number of classes taken), payable when the registration form is submitted.

TEXTBOOK FEES: Persons taking Skill Improvement classes must purchase their own text-books. Textbook prices listed in this catalog are subject to change.

LABORATORY FEES: In some classes, there is a laboratory fee to cover the cost of supplies used by the student. Laboratory fees listed in this catalog are subject to change.

REFUNDS: The registration fee will be refunded if the applicant cannot be placed in a class. Students who withdraw from class during the first two weeks may receive a refund of their textbook and lab fees but not the registration fee. Refunds will not be given for textbooks that have been damaged. No refunds are given after the first two weeks of class.

Refunds are not made in cash; a check is mailed to the student.

All laboratory and book fees must be paid before the student is admitted to class.

Changing Careers Course

5 Weeks (Main and Montoya Campuses)

This course is designed for adults who have spent years as homemakers or in other careers, and want or need to change professions, obtain employment or return to school.

Changing Careers is offered each term at both campuses. To accommodate different schedules, classes are offered at various day and night starting times.

Anyone may enroll, and space is available on a first-come/first-served basis. The only cost for the course is the \$10 Continuing Education Division registration fee.

Course topics include: developing a positive selfimage; self-assessment of marketable skills, abilities and interests; résumé writing; interviewing techniques; the local job market and community resources; and help with personal decisions related to vocational and educational choices. Emphasis is placed on the many options open to students including T-VI's Preparatory Program, General Educational Development (GED) preparation classes, occupational and associate degree programs, other educational programs in Albuquerque, or employment.

SK440: CHANGING CAREERS

		Fall	
Sept. 1-Oct. 6	MTWThF	9-11 a.m.	Montoya Campus
Sept. 8-Oct. 14	MTW	6:30-9:30 p.m.	Main Campus
Oct. 7-Nov. 10	MTWThF	9:15-11:15 a.m.	Main Campus
Nov. 11-Dec. 17	MTWThF	9-11 a.m.	Montoya Campus
		Winter	
Jan. 4-Feb. 5	MTWThF	9-11 a.m.	Montoya Campus
Jan. 11-Feb. 16	MTW	6:30-9:30 p.m.	Main Campus
Feb. 8-Mar. 11	MTWThF	9:15-11:15 a.m.	Main Campus
Mar. 14-Apr. 15	MTWThF	9-11 a.m.	Montoya Campus
	2	Summer	
May 2-Junc 6	MTWThF	9-11 a.m.	Montoya Campus
May 9-Junc 15	MTW	6:30-9:30 p.m.	Main Campus
Junc 7-July 13	MTWThF	9:15-11:15 a.m.	Main Campus
July 14-Aug. 17	MTWThF	9-11 a.m.	Montoya Campus

Business Education

transfers to a T-VI Instructional Division program

SK110: ACCOUNTING I

Principles of the double entry bookkeeping cycle, from the opening entry through the formal balance sheet and income statement, are covered. Business forms and their function, business terms, accuracy, neatness, orderliness, thoroughness and responsibility are included.

Fall-Winter

MW 7-9 p.m.

Cibola High School Highland High School La Cueva High School T-VI Main Campus T-VI Montoya Campus

TTh	7–9 p.m.	Del Norte High School
		La Cueva High School
t .		T-VI Main Campus
		T-VI Montoya Campus

Summer

MW 7-9 p.m. T-VI Main Campus TTh 7-9 p.m. T-VI Montoya Campus

TEXTS: College Accounting, 12th Ed.—\$22 Study Assignments, Part 1—\$7

Vance Zarmer Computer Consultant Practice Set—



SK111: ACCOUNTING II

This is a continuation of Accounting I. Units cover purchasing and sales accounting, installment sales, inventory and prepaid expenses, tangible assets, accruals and reversing entries along with further study of financial statements. A unit or accounting for a partnership also is included.

	Fall	
MW	7–9 p.m.	Highland High School T-VI Main Campus
TTh	7–9 p.m.	T-VI Montoya Campus
	Winter	-
MW	7–9 p.m.	Cibola High School Highland High School T-VI Main Campus
TTh	7–9 p.m.	T-VI Montoya Campus
	Summer	
MW TTh	7–9 p.m. 7–9 p.m.	T-VI Main Campus T-VI Montoya Campus

PREREQUISITE: A beginning class in double-entry book keeping or accounting

TEXTS: College Accounting, 12th Ed.-\$22 Study Assignments, Part 2-\$7

Spinner & Thomas Baking Co. Practice Set-\$10.50

SK112: ACCOUNTING III

A continuation of Accounting II, this class covers variou aspects of corporate accounting, the voucher system of ac counting and accounting for a manufacturing business. Cost accounting is introduced.

Fall-Winter

7-9 p.m. MW Highland High School TTh 7-9 p.m. T-VI Montoya Campus

Summer

TTh 7-9 p.m. T-VI Montoya Campus

PREREQUISITE: Accounting II or equivalent TEXTS: College Accounting, 12th Ed.—\$22 Study Assignment, Part 3-\$7

Marcus Tool & Die, Inc. Practice Set-\$11

SK113: AUDITING

Auditing procedure, reports and working papers used in financial investigations are studied and analyzed. Audit practice with verification of assets, liabilities, owner's equity, expense and revenue accounts are stressed. Internal control techniques are studied to develop the student's ability to conserve assets.

Fall

TTh 7-9 p.m. T-VI Main Campus

PREREQUISITE: Accounting I, II and III or equivalent

TEXTS: Principles of Auditing, 8th Ed.—\$31 Audit Problem: Crafters-\$17

SK114: SECRETARIAL ACCOUNTING

Instruction is provided in basic bookkeeping incorporating the complete bookkeeping cycle. Included are preparation of the balance sheet, income statement, trial balance, worksheet, payroll records, petty cash disbursement record and subsidiary ledgers. Emphasis is on the principles of journalizing and posting from the combined cash journal. A practice set is used to help the student understand the complete procedure of double entry bookkeeping.

Fall-Winter

MW 7-9 p.m. TTh 7-9 p.m.

T-VI Main Campus T-VI Montoya Campus

TEXTS: Accounting Essentials for Career Secretaries, 5th Ed.-\$12

Working Papers-\$6.50

Jerome W. Stearn's Attorney at Law Practice Set-

SK115: INCOME TAX ACCOUNTING

This class progresses from problems of taxpayers who use the short form to those of the higher bracket wage earner. Tax procedures for the self-employed person, investor, property owner, retired person, business partner and small corporation are explained.

Fall

MW

7-9 p.m.

Highland High School

Summer

TTh

7-9 p.m.

T-VI Montoya Campus

PREREQUISITE: Completion of a double entry bookkeeping cycle

TEXT: Income Tax Procedures—\$17

SK117: CREDIT UNION FINANCIAL ACCOUNTING

Terms and procedures basic to accounting and unique to credit unions are explained. Topics covered include the credit union accounting cycle, journal records and the general ledger, members' ledger cards, interest refunds and dividends, reserves and undivided earnings, the statement of financial condition, the balancing of other subsidiaries, closing the books, accounting bases and internal control.

Winter

6:30-9:30 p.m.

T-VI Main Campus

PREREQUISITE: A general knowledge of credit union bookkeeping or completion of Accounting I

TEXT: Credit Union Accounting—\$12.50

SK117A: CREDIT UNION FINANCIAL MANAGEMENT

This course helps participants develop financial management skills needed to operate a credit union. Emphasis is on basic credit union accounting and bookkeeping including financial statement analysis and budgeting. Implications of risk management and insurance are discussed along with investing procedures.

Fall

T 6:30-9:30

6:30-9:30 p.m. T-VI Main Campus

PREREQUISITE: Credit Union Financial Accounting or equivalent

TEXT: Credit Union Financial Management—\$15.50

SK117B: INTRODUCTION TO CREDIT UNIONS

This course covers functions particular to credit unions, traditional financial services, credit union management, credit union financial systems, and basics of credit union insurance and bonding.

Fql

Th 6:30-9:30 p.m.

T-VI Main Campus

TEXT: Introduction to Credit Unions-\$21

SK117C: CREDIT UNION OPERATIONS

This course focuses on teller transaction, loan granting, financial counseling, collections, credit granting skills, loan policies and current regulations including Equal Credit Opportunity Act (ECOA) and Truth in Lending (TIL). Interview techniques, methods of personal finance, collections and delinquency control are emphasized.

Winter

T or Th 6:30-9:30 p.m.

T-VI Main Campus

TEXT: Credit Union Operations---\$18

SK118: PAYROLL ACCOUNTING

Calculation of gross wages and local, state, and federal payroll reporting requirements are covered. Students are introduced to certified payroll requirements of certain federally funded projects.

Fall-Summer

TTh

7-9 p.m.

T-VI Main Campus

TEXT: Payroll Accounting-\$15

SK119: BEGINNING COMPUTER ACCOUNTING

This course helps the student gain knowledge in computerized accounting including general ledger, accounts receivable, accounts payable and payroll systems.

Fall-Winter-Summer

MW or TTh

7-9 p.m.

T-VI Main Campus

PREREQUISITE: Accounting I or equivalent

LAB FEE: \$6.50

TEXT: Accounting Applications for the Microcomputer— \$10

k SK120: BUSINESS MATHEMATICS

This class begins with a thorough review of arithmetic and proceeds to specific business problems. Forms, practices and formulas used in business—including discounts, mark-ups, mark-downs and percentages—are covered. Real estate math involving square footage, cubic footage, acreage calculations, market value methods, compound interest and depreciation are included.

Fall-Winter

MW

7-9 p.m.

T-VI Main Campus

TEXT: Mathematics for Business Careers-\$21

SK125: BUSINESS ENGLISH

This course is designed for individuals working in the business community who need to improve their grammar, punctuation, vocabulary and spelling. Specific emphasis is placed on grammar usage as applied to effective writing and speaking.

Fall-Winter-Summer

TTh

7-9 p.m.

T-VI Main Campus (1)

TEXTS: College English and Communication, 4th Ed.—\$24 Communication Problems—\$14

SK125A: ADVANCED BUSINESS ENGLISH

This course includes a brief review of basic grammar and punctuation. Emphasis is placed on improving written expression as related to business writing. Practice in letters, memos, and other office communication is stressed.

Fall

MW

7-9 p.m.

T-VI Main Campus ·

TEXTS: College English and Communication—\$24
Communication Problems—\$14

SK130: PUBLIC SPEAKING

This class covers principles of public speaking including preparing and organizing different types of speeches, understanding the speaker's purpose, psychological impact of public speaking, and practice giving speeches.

Fall-Winter

MW

7-9 p.m.

T-VI Main Campus

TEXT: Speaking in Public-\$16

SK139: LEGAL SECRETARY

This is a specialized class for the beginning legal secretary or persons who want to work in the legal field. It includes a general background of basic legal terms, practice in dictation and transcription of legal terms and letters, and study of law office procedures as they apply to the legal secretary.

Fall-Winter

MW

7-9 p.m.

T-VI Main Campus

PREREQUISITE: Typing proficiency of at least 60 wpm TEXTS: The Career Legal Secretary—\$18.50

Student Workbook-\$8.50

SK140: ADVANCED LEGAL SECRETARY

This course is designed for legal secretaries who want advanced training. It provides legal secretaries with the resources needed to locate information to fulfill their responsibilities with a minimum of supervision.

Fall-Winter

MW

7-9 p.m.

T-VI Main Campus

PREREQUISITE: One year legal secretarial work experience
TEXTS: The Career Legal Secretary Advanced Edition—\$30.50
The Career Legal Secretary Advanced Edition, Student Study Guide—\$10.50

SK144: INTRODUCTION TO INSURANCE

This course provides a general introduction to insurance, how it is sold; premiums, policies, underwriting, commercial and personal insurance, and insurance in the marketplace.

Fall

M

5:30-7:30 p.m.

T-VI Montoya Campus

TEXT: How Insurance Works—\$20.50

SK145: PERSONAL LINES INSURANCE

Insurance history, fundamentals, marketing, underwriting, regulations, deductibles, homeowners, auto and special coverage are included in this course.

Fall-Winter

Th

7-9 p.m.

T-VI Montoya Campus

SK146: COMMERCIAL LINES INSURANCE

Commercial lines of property and casualty insurance, excluding life insurance, are covered. Areas discussed include the coverage and rating of various commercial property casualty insurance policies and the commercial automobile policy. The last six weeks of the class are divided into coverage and rating of commercial fire insurance policies, commercial umbrella policies and worker's compensation policies.

Fall-Winter

M

6:30-9:30 p.m.

T-VI Main Campus

NOTE: Students must supply their own rating manuals.

SK147B: RISK CONTROL (ARM 55)

This course focuses on implementing selected risk management techniques and monitoring the results for effective control and coordination of the organization's total risk management effort.

Winter

M 5:30-7:

5:30-7:30 p.m.

T-VI Montoya Campus

TEXTS: Course Guide—Essentials of Risk Control—\$11
Text—Essentials of Risk Control, Volume I—\$22

Text-Essentials of Risk Control, Volume II-\$22

****SK148: MULTIPLE LINES INSURANCE PRODUCTION (AAI 82)

This course covers major insurance products such as garage and truckers, general liability, worker's compensation, inland

marine, aviation, commercial crime, surety bonds, excess property and liability, business owners' policies, and special multiperil policies. Selling techniques and case studies are included.

Winter

v

5:30-7:30 p.m.

T-VI Montoya Campus

TEXTS: Course Guide—Multiple Lines Insurance Produc-

tion—\$9

Text-Multiple Lines Insurance Production, Vol. I-

\$15

Text-Multiple Lines Insurance Production, Vol. II-

\$15

SK149: INSURANCE AGENCY OPERATIONS AND SALES MANAGEMENT (AAI 83)

This course covers the identification and analyzation of loss exposures and developing alternative techniques for treating each exposure. Choosing the best risk management alternative is introduced and guidelines for selecting the most appropriate technique for handling each exposure are explored.

Fall

W

5:30-7:30 p.m.

T-VI Montoya Campus

TEXTS: Course Guide—Essentials of Risk Management—\$9
Text—Essentials of the Risk Management Process,
Vol. I—\$18

Text—Essentials of the Risk Management Process, Vol. II—\$18

voi. 11—\$

SK150: ELECTRONIC CALCULATORS AND FILING

Skills are developed on the most widely used electronic calculators, and practical application of business mathematics is reinforced. Also covered are the processing, storing, retrieving and restoring of various kinds of records. Alphabetic, geographic, numeric, alpha-numeric and subject filing are explored.

Winter

MW

7-9:30 p.m.

T-VI Montoya Campus

LAB FEE: \$7

TEXTS: Electronic Calculators and Office Machines—\$10.50

Records Management, 2nd Ed.—\$13.50 Records Management Lab Materials—\$13.50

SK156: ALPHABETIC SHORTHAND

This system of rapid writing uses alphabetic abbreviations and 43 special rules. It is an easy, fast method of learning to take dictation at acceptable speeds for a job. A minimum dictation speed of 50 words per minute should be attained in this class.

Fall-Winter

MW

7-9 p.m.

T-VI Main Campus

TTħ

7-9 p.m.

T-VI Montoya Campus

Summer

MW

7-9 p.m.

T-VI Main Campus

PREREQUISITE: 25 wpm typing speed by the touch method TEXTS: Stenoscript ABC Shorthand—\$12

Student Workbook-\$7



SK160: BEGINNING SHORTHAND

This class offers beginning instruction in the theory of symbolic (Gregg) shorthand Series 90. Daily study and practice in the reading and writing of shorthand is imperative. A minimum dictation speed of 50 words per minute should be attained in this class.

Fall-Winter

MW	6:30-9 p.m.	T-VI Main Campus
TTh	6:30-9 p.m.	Del Norte High School
	•	La Cueva High School
		T-VI Montoya Campus

Summer

MW	6;30-9 p.m.	T-VI Main Campus
TTh	6:30-9 p.m.	T-VI Montoya Campus

PREREQUISITE: Must be able to type at least 25 wpm by the touch method or be taking a typing class

TEXTS: Gregg Shorthand for Colleges, Vol. I. Series 90— \$29

> Workbook, Vol. I—\$10 Student Transcript, Vol. I—\$9

SK161: INTERMEDIATE SHORTHAND

The theory of Series 90 Gregg shorthand is reviewed. Emphasis is on speed, accuracy, grammar, punctuation and transcription speed. A minimum dictation speed of 70 words per minute should be attained in this class.

Fall-Winter

MW		6:30-9 p.m.	T-VI Main Campus
TTh	-	6:30-9 p.m.	T-VI Montoya Campus

Summer

MW 6:30-9 p.m. T-VI Main Campus

PREREQUISITES: A beginning class in shorthand; 25 wpm typing speed by the touch method

TEXTS: Gregg Shorthand for Colleges, Vol. 2, Series 90— \$29

> Workbook, Vol. 2—\$10 Student Transcript, Vol. 2—\$9

SK164: TYPING-SHORTHAND REVIEW

This class is for persons who can type and take shorthand but have not used either for some time and are planning to return to work. A minimum dictation speed of 80 words per minute and minimum typing speed of 70 words per minute should be attained in this class.

Fall-Winter-Summer

TTh 6:30-9 p.m. T-VI Main Campus

PREREQUISITES: One year typing and one year shorthand

experience -

TEXTS: College Typewriting, 10th Ed.—\$15.50

Refresher Course in Gregg Shorthand—\$17.50

SK165: BEGINNING TYPING

Typing by the touch method and basic arrangement of business letters, memos, reports, tables and forms are included. A minimum typing speed of 25 words per minute should be attained in this class.

Fall-Winter .

MW	6:30-9 p.m.	Cibola High School Highland High School
1,		La Cueva High School T-VI Main Campus
,	. 20 0	T-VI Montoya Campus :
TTh	6:30-9 p.m.	Del Norte High School T-VI Main Campus
		T-VI Montoya Campus

Summer

MW or TTh	6:30-9 p.m.	' T-VI Main Campus	
	-	T-VI Montoya Cam	pus

TEXT: College Typewriting, 11th Ed.—\$21

SK166: INTERMEDIATE TYPING .

Basic typing skills are reviewed with emphasis on building speed, accuracy and number control. Production emphasis is on business letters, reports and forms. A minimum typing speed of 35 words per minute should be attained in this class.

Fall-Winter

MW	6:30–9 p.m.	Cibola High School
	•	Highland High School
		T-VI Montoya Campus
TTh	6:30-9 p.m.	T-VI Main Campus
٠,	Summe	r
MW	6:30-9 p.m.	T-V1 Montoya Campus
TTh	6:30-9 p.m.	T-VI Main Campus

PREREQUISITES: 25 wpm typing speed by the touch system; background knowledge of manuscript and tabulation typing

TEXTS: College Typewriting, 11th Ed.—\$21 Lab Materials, Part 2—\$8.50

SK167: ADVANCED TYPING

This class is for the typist who wants to increase speed, accuracy and production output of office typewriting. Letter styles, fill-in business forms, manuscripts, financial reports and the making of multiple copies for office work are developed. A minimum typing speed of 60 words per minute should be attained in this class.

Fall

MW 6:30-9 p.m. T-VI Main Campus

PREREQUISITES: 40 wpm typing speed by the touch system; background knowledge of manuscripts with footnotes, tabulation typing with subheadings, column headings and outline typing

TEXTS: College Typewriting, 11th Ed.—\$21 Lab Materials, Part 3—\$9.50

SK170: OFFICE SUPERVISION

The relationships of people within a business environment. including managers with employees and employees with employees, are reviewed. Supervisory authority, responsibility factors, human relationships and measurements used for decision making are included. This class is recommended for office employees now in a leadership position and those interested in supervision.

Fall-Winter

Th

7-9 p.m.

T-VI Main Campus

LAB FEE: \$7

SK172: HUMAN RELATIONS AND PERSONNEL DEVELOPMENT

This class is for persons who want to explore human behavior and develop a more positive attitude. Applications to family and work situations are stressed including understanding manager/employee relations. This class is recommended for employee advancement to supervisory positions.

Fall

MW

7-9 p.m.

T-VI Main Campus

Summer

MW

7-9 p.m.

T-VI Montoya Campus

TEXT: Human Relations, 2nd Ed.-\$23

SK173: HUMAN RELATIONS AND SUPERVISION

Human behavior and communication skills and their impact on human relations and success in supervision are explored. Management, case studies, labor union relations, minority employee relations and supervision of the experienced employee are reviewed.

Winter

MW

7-9 p.m.

T-VI Main Campus

PREREQUISITE: Human Relations and Personnel Development

TEXT: Practical Human Relations-\$22.50

SK175: BANK TELLER

Bank organization, human relations, personal appearance, interrelationships and banking ethics are included in this introductory class.

Fall-Winter-Summer

MW

7-9 p.m.

T-VI Montoya Campus

TTh 7-9 p.m. T-VI Main Campus

TEXT: Teller World—\$18

SK180: SMALL BUSINESS MANAGEMENT

This class covers benefits, successes and problems relating to beginning, continuing, owning, managing and closing a small business.

Fall-Winter-Summer

MW

6:30-9 p.m.

T-VI Main Campus

TEXT: Small Business Management, 7th Ed. -\$24

SK181: SMALL BUSINESS ACCOUNTING

This class provides basic accounting principles and practices; The accounting cycle for service and merchandising businesses is covered including journalizing, posting, preparation of the work sheet, financial statements, adjusting and closing entries. post-closing trial balance and preparation of government report forms.

Fall-Winter-Summer

MW

7-9 p.m.

T-VI Main Campus

TEXTS: Accounting Principles and Practices, Module I, 3rd

Ed.—\$16.50

Janae's Lawn and Beach Furniture Practice Set-\$10

SK182: SMALL BUSINESS LAW

A basic knowledge of law as it applies to small business dealings is provided. Emphasis is on commercial transactions, contracts, commercial paper, personal property insurance and Uniform Commercial Code.

Fall-Winter

TTh

7--9 p.m.

T-VI Main Campus

TEXT: College Law for Business, 9th Ed.—\$15.50

SK410: CASHIERING

This class teaches cash register operation by the touch method. Procedures for handling cash, checks and credit card transactions, and the role of the cashier in meeting the public are covered. Basic mathematics and bookkeeping skills are reviewed, and operation of the produce scale is taught.

Fall-Winter

M or T

6:30-9:30 p.m.

T-VI Main Campus

Summer

6:30-9:30 p.m.

T-VI Main Campus

LAB FEE: \$7

TEXTS: The Cashier-\$8.50

Marketing Math-\$7.50

SK411: SALESMANSHIP

This class is for persons wishing to enter the field of selling or to upgrade themselves in salesmanship principles. Leadership and motivation are stressed.

Fall

MW

7-9 p.m.

T-VI Main Campus

TEXT: Professional Selling, 3rd Ed.—\$26



SK412: MARKETING AND RETAILING

This class covers many facets of marketing and retailing including inventory, buying, pricing, advertising, displaying, merchandising, credit management and services.

Winter

MW

7-9 p.m.

T-VI Main Campus

TEXT: Essentials of Marketing—\$27

SK416: FASHION CONCEPTS AND MERCHANDISING

This introductory class covers fashion terminology, elements of design, apparel sizing and styling, basic construction and current trends in the fashion industry.

Fall

TTh

7-9 p.m.

T-VI Montoya Campus

TEXT: Introduction to Fashion Merchandising-\$19

NEW MEXICO REAL ESTATE COMMISSION EXAM REQUIREMENTS

SALESPERSON LICENSE EXAM (60-hour requirement):

Real Estate Law and Real Estate Practice must be completed. It is recommended that Real Estate Law be completed before Real Estate Practice.

BROKER EXAM (90-hour requirement):

In addition to Real Estate Law and Real Estate Practice, Real Estate Appraisal or Real Estate Finance must be completed. Applicants also must have completed two years as active, licensed, New Mexico salespersons.

BROKER EXAM (180-hour requirement):

Applicants must have completed Real Estate Practice, Real Estate Law, Real Estate Appraisal and Real Estate Finance plus 60 hours in approved courses such as Property Management and Investment.

SK430: REAL ESTATE PRACTICE

This is a class in general real estate practice for persons needing a review or wanting a basic knowledge of the real estate business.

Fall-Winter

ΜW	÷
MW	
TTh	

7-9 p.m. 8-10 a.m. 7–9 p.m.

T-VI Main Campus T-VI Main Campus T-VI Montoya Campus

Summer

MW TTh 7-9 pim. 7-9 p.m. T-VI Main Campus T-VI Montoya Campus

NOTE: Class meets for 10 weeks.

TEXT: Modern Real Estate Practice-\$21

SK431: REAL ESTATE LAW

The rights and obligations of the real estate agent with regard to contractual and fiduciary duties owed to the parties being represented are established in this class. Major topics include ownership rights, law of agency and law of contracts.

Fall

TTh MW	7–9 p.m. 10 a.m.–12 noon	T-VI Main Campus T-VI Main Campus
	Winter	
MW	10 a.m12 noon	T-VI Main Campus
MW	7–9 p.m.	T-VI Montoya Campus

Summer

TTh MW

7-9 p.m. 7-9 p.m. T-VI Main Campus T-VI Montoya Campus

NOTE: This class meets for 10 weeks.

TEXT: Modern Real Estate Practice-\$21

SK432: REAL ESTATE APPRAISAL

1) An introduction to accepted methods for estimating the value of real property, this class covers fundamentals of real estate appraisal of both land and improved property and techniques used by professional appraisers.

Fall

;¦ TTh

7-9 p.m.

T-VI Main Campus

Winter

MW

7-9 p.m.

T-VI Montoya Campus

NOTE: This class meets for 10 weeks. PREREQUISITE: Real Estate Practice

TEXT: The Appraisal of Real Estate, 8th Ed.—\$22.50

SK433: REAL ESTATE FINANCE

This is a study of financing real property, the money market, sources and cost determinants of mortgage money, financial leverage, value of existing mortgage in relation to the current market and purchaser qualification.

MW

7-9 p.m.

T-VI Montoya Campus

Winter

TTh

7-9 p.m.

T-VI Main Campus

NOTE: This class meets for 10 weeks. PREREQUISITE: Real Estate Practice

TEXT: Essentials of Real Estate Finance, 4th Ed.—\$20

SK434: REAL ESTATE INVESTMENT

This course gives the student a basic understanding of investment principles to ensure sound investment decisions and assessment of property potential. The student gains an awareness of the marketplace and the needs of the public through text, lecture and case study.

Winter

MW TTh

7–9 p.m.

7-9 p.m.

T-VI Montoya Campus La Cueva High School

NOTE: This class meets for 10 weeks.

PREREQUISITES: Real Estate Practice, Real Estate Law TEXT: Real Estate Investment Decision Making—\$30

SK435: PROPERTY MANAGEMENT

'This course covers residential and commercial rental property management. Topics include marketing of services, market and prospect analysis, recordkeeping, laws relating to rental properties, legal documents including leases and management contracts, property maintenance, employee relations, insurance, security and administration.

Fall-Winter

TTh

7-9 p.m.

T-VI Main Campus

TEXTS: Property Management—\$20

Tenant Landlord Relations Act-\$6

BUSINESS OCCUPATIONS LEARNING CENTERS

The BOLCs serve T-VI students and members of the public who want to review or learn a particular subject or skill individually.

Students may begin using the centers anytime during the term and continue until personal objectives have been met. Hours are arranged to meet individual needs.

Instruction is conducted on new equipment which includes electric typewriters, electronic office machines, transcribing machines and audiovisual equipment.

The Main Campus center, Room B-210, is open from 7:20 a.m. to 9 p.m., Monday through Thursday, 7:20 a.m. to 5 p.m. Friday, and 10 a.m. to 2 p.m. Saturday. Telephone: 842-6219.

The Montoya Campus center, Room H-127, is open from 8 a.m. to 8:30 p.m. Monday through Thursday and 8 a.m. to 4 p.m. Friday. Telephone 298-5461.

A fee of \$20 per course is required of students who are not attending T-VI full time.

SUBJECT/SKILL AREAS

Accounting Fundamentals

(Prerequisite: Business Mathematics II or placement test) A basic understanding of accounting principles and their application is provided.

Business Mathematics Fundamentals

This review of fundamental arithmetic operations builds speed and accuracy. The percentage formula for solving business problems is included.

Business Mathematics II

(Prerequisite: Placement test) The mathematics of interest marketing, payroll and taxes is covered.

Cash Register

Cash register operation and procedures for handling cash checks and credit card transactions are covered.

Communications Review

Instruction is in grammar, spelling and punctuation.

Electronic Calculating

Skill is developed on electronic calculators.

Machine Shorthand

This class offers an introduction to this alternative shorthand system and provides a foundation for career growth in the courts.

Gregg Shorthand I

All theory and brief forms are learned, leading to the ability to read, write and transcribe Gregg shorthand.

Gregg Shorthand II

(Prerequisite: Ability to write Gregg shorthand at 60 words per minute and transcribe into mailable form) Theory and brief forms are reviewed with emphasis on dictation and transcription.

Shorthand Review

This course is for students who have typing and Gregg or ABC shorthand skills but need review and speedbuilding.

Alphabetic Shorthand I

This shorthand system uses alphabetic characters. Students learn to read, write and transcribe shorthand notes.

Forkner Shorthand I

Students learn to read, write, and transcribe this combination alphabetic and symbolic shorthand system.

Shorthand Speedbuilding

This course is for individuals who have learned a shorthand theory system and want to concentrate on building dictation speed.

Typing I

Students with no prior formal typing courses are encouraged to enroll in a typing class for techniques before entering this skill area. The keyboard and basic techniques are reviewed, and mechanics, letters and tabulation are taught.

Typing II

(Prerequisite: Typing I or placement test) This continuation of Typing I emphasizes speed, accuracy and tabulation.

Typing III

(Prerequisite: Typing II or placement test) This continuation of Typing II provides more complex production tasks including abstracted tables, line justification and secretarial projects.

Microcomputer Courses

Courses available on the microcomputer are Keyboarding, Computer Literacy, BASIC Programming (prerequisite: Computer Literacy) Word Processing, Electronic Spreadsheet and Database Management.

Telephone Techniques (Main Campus only)

Familiarization with accepted telephone manners and practices is the objective of this mini-class.

Machine Transcription

Instruction is provided in the use of transcribing machines to prepare mailable business correspondence.

Medical Transcription

(Prerequisite: Machine Transcription) This area develops familiarity with medical terminology and transcription.

Legal Transcription

(Prerequisite: Machine Transcription) Legal terminology, forms and transcription are included.

Records Management

This area provides basic principles of filing.

Word Processing

(Prerequisites: Demonstrated English and typing skills) Training is on various word processors with emphasis on the capabilities and mechanics of the machines.

Proofreading

Awareness of the most common errors in written messages and the standard marks for correcting them is the objective of this class.

Health Education

SK450: MEDICAL OFFICE ASSISTANT, **ADMINISTRATIVE**

This class provides a person with clerical skills for employment as a medical office aide. Instruction concentrates on medical terms, greeting the patient, office management, public relations, health and hospitalization insurance, basic medical law and ethics, and credit and collection records.

Fall-Winter

TTh

7-9 p.m.

T-VI Main Campus

PREREQUISITES: Filing skills and 40 wpm typing speed TEXTS: Medical Office Assistant, Administrative and Clinical, 5th Ed.-\$30

Medical Terminology, 4th Ed .-- \$16

SK451: MEDICAL OFFICE ASSISTANT, CLINICAL

This class prepares persons with clinical skills for employment in doctors' offices as aides. Instruction concentrates on medical terms, basic medical laws and ethics, preparing the patient, assisting the doctor, selecting and sterilizing instruments, selecting materials and supplies for the doctor and preparing medications.

Fall-Winter

TTh

7-9 p.m.

T-VI Main Campus

PREREQUISITE: 40 wpm typing speed

TEXTS: Medical Office Assistant, Administrative and Clini-

cal, 5th Ed.—\$30

Medical Terminology, 4th Ed.—\$16

SK452: HOSPITAL WARD CLERK

This class includes an introduction to medical terminology, communications, the working environment, patient centered activities and the understanding of medication orders. Personal hygiene is emphasized.

Fall-Winter

MW

7-9 p.m.

T-VI Montoya Campus

PREREQUISITE: High school diploma or equivalent

TEXTS: Health Unit Coordinating-\$20.50 Building a Medical Vocabulary-\$16.50



SK453: MEDICAL TERMINOLOGY

This class is designed for persons with little or no medical background. It is also useful as a medical terminology refresher course. Included are word parts, building medical terms, basic anatomy and common medical abbreviations.

Summer

MW

7-9 p.m.

T-VI Montoya Campus

NOTE: This class meets for 10 weeks.

TEXT: Building a Medical Vocabulary-\$16.50

SK490: EMERGENCY CARE (FIRST RESPONDER) -

This class is part of the emergency medical system and follows the national Department of Transportation (DOT) guidelines. It prepares the student for emergency situations until help arrives. There are lectures and labs on emergency care of the sick and injured. Cardiopulmonary resuscitation (CPR) certification is included.

Fall

MW

7-9 p.m.

T-VI Main Campus

Winter

T**T**h

7-9 p.m.

T-VI Montoya Campus

TEXTS: First Responder—\$15

First Responder Workbook—\$9.50

SK590: EMERGENCY MEDICAL TECHNICIAN

This class covers all emergency medical techniques currently used by emergency medical technicians who provide emergency care with rescue squads or ambulances. The 39 class lessons include 117 hours of classroom didactics and practice sessions. Also included are nine hours of hospital rotation, observation and training, and four hours of water extracation. This class helps students prepare for state and/or national EMT and cardiopulmonary resuscitation (CPR) certification.

Fall-Winter-Summer

MW or TTh

6:30-9:30 p.m.

T-VI Main Campus

NOTE: Students must be at least 18 years old to take state, and/or national certification examinations.

LAB FEE: \$14

TEXT: Prehospital Emergency Care & Crisis Intervention-\$19.50

SK591: EMERGENCY MEDICAL TECHNICIAN RECERTIFICATION

This class is designed to recertify a currently certified EMT-B with the newest and most up-to-date equipment and techniques covered in the state and national registry guidelines.

Summer

Saturday

8 a.m.-12 noon

T-VI Main Campus

NOTE: This class will meet for nine consecutive Saturdays. PREREQUISITE: Current New Mexico EMT Certificate | | |

LAB FEE: \$14

TEXT: Prehospital Emergency Care & Crisis Intervention— \$19.50

Technical Education

SK350: GENERAL MATHEMATICS

This class reviews addition, subtraction, multiplication and division with whole numbers, common fractions, decimal fractions, mixed numbers and denominate numbers. It also covers elementary algebra and geometric constructions before moving to the application of mathematics to mechanics, machines and shop problems.

Fall-Winter

MW

7-9 p.m.

Highland High School

TEXT: General Trade Math-\$21



SK351: ALGEBRA I

Field properties of the real number system are applied to the algebraic structure. Emphasis is on written problems and eldmentary functions and their graphs including systems of linear equations in two variables.

Fall-Winter

MW

7-9 p.m.

Cibola High School

Highland High School

La Cueva High School T-VI Montoya Campus

TTħ 7-9 p.m. T-VI Main Campus

Summer

MW TTh 7-9 p.m. 7-9 p.m.

T-VI Montoya Campus

T-VI Main Campus

TEXT: Intermediate Algebra, 4th Ed.-\$22



SK352: ALGEBRA II

This class presents a strong emphasis on algebraic skills with significant attention paid to understanding concepts. Exponents and involution processes; quadratic equations, their solutions and graphs; conic sections; and exponential and logarithmic functions are developed. Applications of these concepts as models for solutions of physical problems are practiced.

Fall-Winter-Summer

MW

7-9 p.m.

T-VI Main Campus

T-VI Montoya Campus

TTh 7-9 p.m.

PREREQUISITE: Algebra I

TEXT: Intermediate Algebra, 4th Ed. - \$22

SK356: TRIGONOMETRY

The necessary background for the technician is provided in trigonometry and beginning analytic geometry. Numerous applications from many fields of technology are included. Enphasis is on the trigonometric functions, identities and inverse functions, vectors and solutions of oblique triangles, graphs of the trigonometric functions and applications of the graphs, exponential and logarithmic functions and trigonometric equations. A review of basic analytic geometry, polar coordinates and applied problems helps students develop a feeling for mathematical methods in problem solving.

Fall-Winter

MW

7-9 p.m.

T-VI Main Campus

PREREQUISITES: Algebra I and II

TEXT: Basic Technical Mathematics with Calculus, 4th Ed.

\$29



SK357: BEGINNING CALCULUS

This class is designed for students interested in learning functional calculus at an introductory level. Differentiation and integration techniques are investigated with emphasis on practical applications.

Winter

MW

7-9 p.m.

T-VI Main Campus

PREREQUISITES: Completion of trigonometry and a working knowledge of geometry

TEXT: Basic Technical Mathematics with Calculus, 4th Ed.-\$29

SK360: ELECTRONICS I

This is a study of DC electricity applied to electronics. Instruction includes basic conductor and semiconductor concepts, basic circuits, meters, time constants, relays, and DC properties of inductance and capacity. The laboratory acquaints students with components, circuits, wiring and measurements.

Fall-Winter-Summer

MW or TTh MW

6:30-9:30 p.m. 6:30-9:30 p.m.

T-VI Main Campus T-VI Montoya Campus

PREREQUISITE: Algebra I or equivalent

LAB FEE: \$14

TEXT: Basic Electronics, 5th Ed.—\$29

SK361: ELECTRONICS II

This course covers the principles of component reaction when alternating voltages are applied. The course includes a study of AC analysis in reference to impedance, reactance, vectors, circuit analysis, tuned circuits, transformers and filters. The laboratory includes the use of the oscilloscope as a tool in electronics.

Fall-Winter-Summer

MW 6:30-9:30 p.m.

T-VI Main Campus T-VI Montoya Campus

TTh 6:30-9:30 p.m.

PREREQUISITE: Electronics I or equivalent

LAB FEE: \$10

TEXT: Basic Electronics, 5th Ed. - \$29

SK362: ELECTRONICS III

:

The basic concepts of semiconductor fundamentals are explored and developed to achieve a thorough understanding of the diode and transistor. Emphasis is placed on approximating transistor amplifying circuits from a practical standpoint. These techniques are verified in the laboratory for both normal and abnormal circuit conditions.

Fall-Winter-Summer

MW 6:30-9:30 p.m. T-VI Main Campus TTh 6:30-9:30 p.m. T-VI Montoya Campus

PREREQUISITE: Electronics II or equivalent

LAB FEE: \$8

TEXT: Electronic Principles-\$30

SK363B; COMPUTER NETWORKING AND DATA COMMUNICATIONS

This course is designed for business and personal computer users considering local area networks, other communications and related technology, and the people who advise these decision makers. The course covers data communications, networks and their cousins, the multitasking and multiuser operating systems, and multiplexors. Local area networks are emphasized. Also covered are public packet networks, voice technology, teletext, videotext and security issues.

Fall

MW 6:30-9:30 p.m. T-VI Montoya Campus

Winter

TTh 6:30-9:30 p.m. T-VI Montoya Campus

PREREQUISITE: Introduction to Data Processing or

Microcomputing Today

LAB FEE: \$8

TEXT: Networking and Data Communication for

Business—\$23.50

SK364: DIGITAL CIRCUITS

This is an introduction to AND, NAND, OR, NOR and INVENTER logic gates and their uses in counters, flip-flops, shift registers, latches, adders and other logic circuit applications. Class time is divided between lecture and laboratory, in which experiments and exercises involving the logic gates and devices are performed.

Fall-Winter-Summer

TTh 6:30-9:30 p.m. T-VI Main Campus

PREREQUISITE: Algebra I

LAB FEE: \$8

TEXT: Digital Electronics: An Introduction to Theory and

Practice, 2nd Ed.--\$30

SK366: TELEVISION SERVICING

The television and cathode ray tube serve as an introduction followed by a circuit analysis which includes deflection circuit, high voltage section, sync system, video and pix I.F., sound section, power supply (low voltage) and tuners. Operation of equipment includes the sweep generator, calibration of the market generator, operation of crosshatch generator, field strength and flyback tester. Practical servicing, alignment of television, installation of antenna and the color television introduction with purity and convergence adjustments are included.

Fall-Winter

MW 6:30-9:30 p.m. T-V1 Main Campus

PREREQUISITE: Electronics III or equivalent TEXT: Television Electronics, 8th Ed.—\$25

SK368: TECHNICIAN CERTIFICATION PREPARATION—NARTE, NABER AND SBE (formerly FCC License Preparation)

This is a review and preparation course for the industry certification examinations that have replaced the FCC license exams. Included are the former FCC material and current practices and procedures used by communications relay and broadcast technology. Information covered is significantly updated from the old FCC examination material.

Winter

MW 6:30-8:30 p.m. T-VI Main Campus

PREREQUISITE: Three years of radio communication expe-

rience or equivalent education

TEXT: Electronic Communications, 4th Ed.-\$31

SK369: THEORY OF ELECTRONIC MICROPROCESSORS

An overview of the basic architecture of a microprocessor (CPU) is provided. Attention is directed toward the additional system components (memory and I/O devices) required to enable a microprocessor to function as a microcomputer. Emphasis is on programming.

Fall-Winter

TTh 6:30-9:30 p.m. T-VI Main Campus

PREREQUISITE: Digital Circuits

LAB FEE: \$10

TEXT: Programming the 8086/8088—\$16.50

SK369A: MICROPROCESSOR INTERFACING

This class introduces Assembler language programming on the 8088 microprocessor using the MS-DOS operating system. After learning to program in Assembler language, the student studies interfacing the computer to peripherals—keyboards, printers, serial devices and analog-to-digital devices.

Fall

MW 6:30-9:30 p.m. T-VI Main Campus

PREREQUISITES: Theory of Electronic Microprocessors, Digital Circuits

LAB FEE: \$10

TEXT: Programming the 8086/8088—\$16.50

SK370: DRAFTING I

General drafting theory and techniques needed to produce multiview and sectional view drawings are introduced. The student also learns proper care and handling of equipment.

Fall-Winter

MW or TTh 6:30-9:30 p.m. T-VI Main Campus TTh 6:30-9:30 p.m. T-VI Montoya Campus

Summer

MW or TTh 6:30-9:30 p.m. T-VI Main Campus

NOTE: Students must purchase their own instruments.

LAB FEE: \$10

TEXT: Technical Drawing, 8th Ed.-\$31



SK371: DRAFTING II

Multiview drawings, sectional views, auxiliary views, threads and fasteners, isometric views, perspective views, intersections, development and drafting mathematics are included.

Fall

TTh 6:30-9:30 p.m.

T-VI Montoya Campus

Winter

MW 6:30-9:30 p.m.

T-VI Main Campus

PREREQUISITE: Beginning drafting class or equivalent ex

perience

LAB FEE: \$10

TEXT: Technical Drawing, 8th Ed.—\$31

SK372: ARCHITECTURAL DRAFTING

The student is introduced to the techniques and materials common in architectural drafting and solves problems in detailing and completing working drawings for residential structures.

Fall-Winter-Summer

MW 6:3

6:30-9:30 p.m.

T-VI Main Campus

PREREQUISITE: Beginning drafting class or equivalent experience

LAB FEE: \$10

SK373: BUILDING MATERIALS AND METHODS

Properties of building materials relating to actual methods of light construction and building design are introduced. Blueprint reading, zoning, building codes, material estimates, aspects of solar energy and financing are included.

Fall-Winter

TTh 6:30-9:30 p.m.

T-VI Main Campus

TEXT: Materials and Methods for Contemporary Construction, 2nd Ed.—\$27

SK374: ARCHITECTURAL RENDERING

Use of pencils, pens and black ink to make shadings and shadows to obtain scale, depth and perspective in black-and-white architectural drawings and surrounding landscapes is taught. After the concepts of depth and perspective are learned, emphasis is on the use of brushes and colored inks to make multicolored three-dimensional renditions of interior and exterior views incorporating one or more vanishing points.

Winter

TTh

6:30-9:30 p.m.

T-VI Main Campus

NOTE: Students must provide their own supplies with the ex-

ception of paper.

PREREQUISITE: Completion of Architectural Drafting or equivalent

LAB FEE: \$10

TEXT: Architectural Illustration & Presentation-\$24.50

SK375: ELECTRONICS DRAFTING

This class develops the skills and techniques needed to document requirements of the electronics of modern technology. Students learn to design and develop electronic systems by using correct symbology, designations and layout techniques to define schematics, logic diagrams, printed wiring assembly, circuit masters, interconnecting diagrams, fabrication drawings and cabling in accordance with military and American Standards Assn. (ASA) standards. A brief introduction to true position dimensioning is included.

Winter

MW

6:30-9:30 p.m.

T-VI Main Campus

NOTE: Students must purchase their own instruments.

PREREQUISITE: Basic knowledge of good drafting practices including orthographic views, sections, dimensioning and auxiliary views

LAB FEE: \$10

TEXT: Electronics Drafting Workbook-\$22.50

豪

SK376: TECHNICAL WRITING

This class consists of skills brush-up and skills application. Emphasis is on understanding the style and purpose of technical writing. Objectives include mastering the concepts of control, brevity, clarity and exactness; and the processes of descriptions, classification, documentation and interpretation.

Fall-Winter

MW

7-9 p.m.

T-VI Main Campus

TEXT: Handbook of Technical Writing, 2nd Ed.-\$12.50

SK378: HEATING, VENTILATION, AIR CONDITIONING (HVAC) AND PLUMBING SYSTEMS

Students learn to draft heating, ventilation, air conditioning and plumbing systems for commercial and industrial buildings. Training is provided in basic theories of HVAC and plumbing systems design. Drafting work includes a final project. An introduction to computer assisted drafting also is included.

Fall

MW

6:30-9:30 p.m.

T-VI Montoya Campus

Winter

TTh

6:30-9:30 p.m.

T-VI Main Campus

PREREQUISITE: Knowledge of geometry, trigonometry, and basic drafting skills

NOTE: Students must provide their own drafting instruments.

LAB FEE: \$10

SK380: INTRODUCTION TO DATA PROCESSING

Basic data processing concepts, purposes, equipment systems, procedures, organization and computer oriented approaches to automated data processing are provided.

Fall-Winter-Summer

6:30-9:00 p.m. T-VI Main Campus MW or TTh T-VI Montoya Campus

LAB FEE: \$4

TEXT: Computer Fundamentals for an Information Age—

SK380A: MICROCOMPUTING TODAY

This class covers microcomputers from early history to the present, explaining the basics of getting comfortable with personal computers. It teaches the student how to tap into the power of LOTUS 1-2-3 and use a word processor, explains database using dBASE III, and introduces BASIC language.

Fall-Winter

Highland High School MW or TTh 6:30-9:30 p.m.

La Cueva High School T-VI Main Campus T-VI Montoya Campus

Summer

MW or TTh 6:30-9:30 p.m. T-VI Main Campus

T-VI Montoya Campus

LAB FEE: \$6.50

TEXT: Microcomputer Software & Applications—\$24.50

SK381: RPG II

This class is an application of Report Program Generator II featuring a variety of business and commercial applications. RPG II specification codes and their uses are covered in depth.

Summer

T-VI Main Campus TTh 6:30-9:30 p.m.

PREREQUISITE: Introduction to Data Processing or equiv-

TEXT: RPG II and RPG III Programming—\$27.50

SK382: ASSEMBLER LANGUAGE PROGRAMMING

Concepts of data storage and manipulation using the IBM/ 370 instruction set are included. Fundamentals of binary and packed decimal arithmetic compare instruction, branching and addressing techniques. Output format and editing also are included.

Fall-Winter

6:30-9:30 p.m. T-VI Main Campus TTh

PREREQUISITE: Introduction to Data Processing or equivalent

TEXT: Assembler Language Programming—\$28

SK383: ANSI COBOL

This class covers the principles and techniques of structured programming. Emphasis is on the development of application programs as a means of solving business programs. Included are computer programs-recipes for processing information, application program development, the process of programming, defining data, converting data to information, printed reports, file principles and management, control breaks and tables.

Fall-Winter-Summer

6:30-9:30 p.m. T-VI Main Campus MW TVI Montoya Campus 6:30-9:30 p.m. TTh

PREREQUISITE: Introduction to Data Processing or equivalent

TEXT: Programming Principles with COBOL I-\$18.50

SK383A: ADVANCED ANSI COBOL

This class continues development of programming skills in the ANSI COBOL language. Emphasis is on the more complicated statements and clauses plus advanced file organization concepts.

Fall-Winter-Summer

T-VI Main Campus 6:30-9:30 p.m. MW T-VI Montoya Campus 6:30-9:30 p.m. TTh

PREREQUISITE: ANSI COBOL or equivalent TEXT: Advanced Structured COBOL-\$24.50

SK384: FORTRAN PROGRAMMING

This class covers both FORTRAN IV and ANSI FORTRAN 77. The theoretical concepts of differently structured programming and design techniques are presented. Modular programming techniques along with FUNCTION and SUBROUTINE subprograms are discussed. The capabilities of FORTRAN are introduced through a variety of business and mathematical problems which illustrate iteration techniques, subroutine applications, array manipulations and elementary statistical and business routines.

Fall-Winter-Summer

T-VI Main Campus 6:30-9:30 p.m. MW

PREREOUISITES: Introduction to Data Processing or equivalent: a basic algebra class

TEXT: FORTRAN IV and ANSI FORTRAN 77-\$20

SK385: DATA ENTRY

Persons are prepared for entry-level data entry positions with extensive training in data entry on microcomputers and some exposure to keypunch.

Fall-Winter-Summer

MTWTh

4-6 p.m.

T-VI Main Campus T-VI Montoya Campus

NOTE: Students may enter this class at either the beginning or middle of a term.

PREREQUISITE: 25 wpm typing speed

LAB FEE: \$15

TEXT: Data Entry Activities-\$5.50

SK386: BASIC LANGUAGE PROGRAMMING

This class covers the functions and uses of the BASIC programming language. Techniques for interactive program development are illustrated through application.

Fall-Winter-Summer

MW or TTh 6:30-9:30 p.m. T-VI Main Campus

TVI Montoya Campus

PREREQUISITE: Introduction to Data Processing or equivalent

TEXT: Introduction to BASIC Programming—\$24.50

SK387: ADVANCED BASIC LANGUAGE PROGRAMMING

Interactive programming, program structure and format are emphasized. The use of key values in sorted data directories for rapid data retrieval is introduced. Various search, sort and merge routines are used in problems involving inventory control, payroll and other business applications. Efficient use of disk for data storage and retrieval is learned. Advanced problem solving involves manipulation of sequential and random access data files with large database involved.

Fall-Winter-Summer

MW 6:30-9:30 p.m. TVI Main Campus

PREREQUISITE: BASIC Language Programming

TEXT: Programming Business Systems with BASIC—\$18.50

★ SK388: JOB CONTROL LANGUAGE

Emphasis is placed on the IBM system software including VSESP, JECL, VSE/ICL, VSE/ICCF, library functions, IBM utilities, and spooler, sort/merg, DASD access methods including VSAM, CICS configuration, tables used with COBOL and command level coding.

Fall-Winter

TTh 6:30-9:30 p.m. T-VI Main Campus

PREREQUISITE: Data Processing or equivalent

TEXTS: DOS/VSE JCL-\$18

VSE/Power Reference Summary—\$3

VSE/Advanced Functions Reference Summary-\$3

SK389: PROGRAMMING MICROCOMPUTERS IN BASIC

This class covers the BASIC language with emphasis on programming business applications. It includes such activities as arithmetic-designed programs, using the READ and DATA statements, improving the appearance of printed reports and designing interactive programs. Also covered are subtotals and group printing; writing programs in casy-to-understand modules; using control loops, tables, sorting; and handling character data, sequential data files and random data files using IBM compatible microcomputers.

Fall-Winter-Summer

MW 6:30-9:30 p.m. T-VI Montoya Campus

TTh 6:30-9:30 p.m. T-VI Main Campus

PREREQUISITE: Data Processing or equivalent

LAB FEE: \$6.50

MW

TEXT: BASIC Programming: A Structural Approach—\$20

SK389A: ADVANCED BASIC PROGRAMMING ON MICROCOMPUTERS

This class is a continuation of Programming Microcomputers in BASIC. Advanced structured BASIC is emphasized with the student developing the skill to plan and code production programs for business use. Topics covered are control structures, data storage and modification, display control, input control, sorts, searches, multiple files, linked files, indexed files, and block and pixel graphics.

Fall-Winter

6:30-9:30 p.m. T-VI Main Campus

Summer

TTh 6:30-9:30 p.m. T-VI Montoya Campus

PREREQUISITE: Programming Microcomputers in BASIC or

equivalent.

LAB FEE: \$6.50

TEXT: BASIC Concepts and Applications—\$20,50

SK390: PASCAL PROGRAMMING

The Pascal language is taught on the IBM 4361 mainframe computer. Topics covered are structure, notation (symbols and separators), concepts of data, program headings and declaration part, concept of action enumeratored and subrange types, array, record set, file and pointer types, and procedures and functions.

Fall-Winter

TTh 6:30-9:30 p.m. T-VI Main Campus

Summer

MW 6:30-9:30 p.m. T-VI Montoya Campus

PREREQUISITE: Introduction to Data Processing or equiv-

alent

LAB FEE: \$6.50

TEXT: Oh! PASCAL!—\$21

SK391A: DATABASE CONCEPTS (USING dBASE III)

The student learns use of a database including the syntax of commands, creating databases and reports. Analysis, design, programming, testing and implementation techniques are covered.

Fall-Winter-Summer

MW 6:30-9:30 p.m. T-VI Montoya Campus TTh 6:30-9:30 p.m. T-VI Main Campus

PREREQUISITE: Microcomputing Today
TEXT: Understanding dBASE III—\$14.50

🛎 💮 SK392: C LANGUAGE PROGRAMMING

This class covers the C programming language using Apple microcomputers and IBM personal computers. It includes the basic data types—bytes, short integers, long integers, and single- and double-precision floating point numbers. Pointers to other data also are covered.

Fall-Winter-Summer

MW 6:30-9:30 p.m. T-VI Main Campus

PREREQUISITE: A programming language class or work experience as a programmer

LAB FEE: \$6.50

TEXT: Mix C Compiler—\$24.50

SK393: MICROCOMPUTER ASSEMBLER LANGUAGE PROGRAMMING

Assembler language for microcomputers is covered. Students learn to write utilities and control the system of a microcomputer.

Summer

TTh 6:30-9:30 p.m. T-VI Main Campus

PREREQUISITE: Introduction to Data Processing

LAB FEE: \$6.50

TEXT: The 8086 Book—\$10.75

Trades and Industrial Education

SK210: AUTOMOTIVE SERVICING

Instruction covers the basic theory of automotive service, maintenance and performance. Included are chassis lubrication, tire service, wheel balancing, brake inspection, cooling system, battery maintenance and an introduction to engine identification and minor tune-up.

Fall-Winter-Summer

6:30-9:30 p.m. T-VI Main Campus MW or TTh

LAB FEE: \$15

TEXT: Auto Mechanics Fundamentals-\$16

SK510: AUTOMOTIVE BRAKES

This class offers basic theory and practice in brake system construction, operation and repair. Students overhaul hydraulic brake components, machine drums and rotors on the brake drum lathe. The students also rebuild disc and standard brakes.

Fall-Summer

T-VI Main Campus 6:30-9:30 p.m. TTh

LAB FEE: \$12

TEXT: Automotive Suspensions, Steering, Alignment and

Brakes, 5th Ed.-\$13

SK510A: AUTOMOTIVE FRONT-END ALIGNMENT

This class offers basic theory and practice in front-end rebuilding and alignment principles of front-end geometry, steering and front suspension systems. Ball-joints, "A" frames, rebuilding McPhearson struts and wheel balancing also are covered,

Winter

TVI Main Campus TTh 6:30-9:30 p.m.

LAB FEE: \$12

TEXT: Automotive Suspensions, Steering, Alignment and

Brakes, 5th Ed.-\$13

SK511: AUTOMOTIVE AIR CONDITIONING

Basic principles of the automotive cooling system and its relation to the heating and air conditioning systems in refrigeration and heat exchange are studied. System diagnosis, components analysis and testing, and servicing procedures are demonstrated with the use of air conditioning equipment.

Summer

T-VI Main Campus TTh 6:30-9:30 p.m.

LAB FEE: \$12

TTh

TEXT: Automotive Air Conditioning, 4th Ed.-\$16

SK512: AUTOMOTIVE ELECTRICITY

This class emphasizes the principles of basic electricity and automotive electrical circuits used in the operation, testing and servicing of storage batteries, cranking motors, alternators, generators and regulators. Instruction includes motor wiring diagrams and lighting systems as well as appropriate test equipment such as volt meters, ampmeters and ohmeters.

Fall-Winter-Summer

T-VI Main Campus 6:30-9:30 p.m.

LAB FEE: \$12

TEXT: Automotive Electrical Systems, Shop and Classroom

Manuals—\$19

SK513: AUTOMOTIVE CARBURETION

Fundamentals of carburetor operations and circuits, fuel system and carburetion trouble-shooting, servicing and overhaul procedures are covered.

Fall-Winter-Summer

T-VI Main Campus MW 6:30-9:30 p.m.

LAB FEE: \$12

TEXT: Fuel Systems and Emission Controls-Shop and

Classroom Manuals—\$18.50

SK514: AUTOMOTIVE TUNE-UP AND EMISSIONS I

The basic principles of automotive carburetion and tune-up and their relationships to automobile exhaust emissions, basic emissions system diagnosis, component analysis, testing and servicing procedures are stressed with the use of infrared and electronic scope equipment.

Fall-Winter-Summer

MW 6:30-9:30 p.m. T-VI Main Campus

PREREQUISITE: Automotive Carburetion

LAB FEE: \$12

TEXTS: The Automotive Oscilloscope-\$10

Automotive Emission Control, 3rd Ed.-\$21

SK515: AUTOMOTIVE TUNE-UP AND EMISSIONS II

This class covers basic principles of feedback sensors, adjusting carburetion and ignition timing, component testing, computer testing and calibration, and scope and infrared operation. Testing and servicing procedures with the use of infrared and electronic equipment are stressed.

Winter

TTh 6:30-9:30 p.m. T-VI Main Campus

PREREQUISITE: Automotive Tune-Up and Emissions I

LAB FEE: \$12

TEXTS: The Automotive Oscilloscope-\$10

Automotive Emissions Control, 3rd Ed.—\$21

SK520: AUTOMOTIVE BODY REPAIR

Instruction covers theory and practice of preparing vehicles for repainting including dent removal, welding, filing, priming, painting, panel straightening with power tools, replacement of panels and glass service.

Fall-Winter-Summer

T-VI Main Campus 6:30-9:30 p.m. MW or TF

NOTES: Students may not work on their own cars. Students must purchase painting supplies.

LAB FEE: \$30

TEXT: The Principles of Auto Body Repairing and Repaint-

ing, 3rd Ed.-\$23.50

SK530: SMALL ENGINE MECHANICS

Instruction is provided in the proper use of hand tools, twoand four-cycle engines, ignition and starting systems, engine tune-up procedures and small engine trouble-shooting.

Fall-Winter-Summer

MW or TTh 6:30-9:30 p.m.

T-VI Main Campus

LAB FEE: \$10

TEXT: Small Gas Engines 2- and 4-Cycle—\$12

豊

SK540: ARC WELDING

This is a basic class in arc electric welding. Instruction is in welding safety, the welding circuit, welding symbols, types of welding machines, beading, buildups and various types of joints.

Fall-Winter

MW or TTh

6:30-9:30 p.m.

T-VI Main Campus T-VI Montoya Campus

Summer

MW MW or TTh 6:30-9:30 p.m. 6:30-9:30 p.m. T-VI Main Campus T-VI Montoya Campus

NOTE: Student must furnish welding gloves.

LAB FEE: \$65

TEXTS: Welding Skills-\$16

Welding Skills Study Guide-\$8

*

SK541: OXYACETYLENE WELDING

Welding safety, identification of metals, types of joints, cutting procedures, tubing welding, welding alloys, brazing and fusion welding are stressed.

Fall-Winter-Summer

T or Th

6:30-10:30 p.m.

T-VI Main Campus

NOTE: Student must furnish welding gloves.

LAB FEE: \$70

TEXTS: Welding Skills-\$16

Welding Skills Study Guide—\$8



SK542: INERT GAS WELDING

Instruction is provided in basic tungsten inert gas (TIG) and metallic inert gas (MIG) welding. Inert gases, inert gas welding equipment, welding safety, basic welding procedures and practices are covered.

Fall-Summer

MW

6:30-9:30 p.m.

T-VI Main Campus

NOTE: Student must furnish welding gloves.
PREREQUISITES: An arc and a gas welding class

LAB FEE: \$80

TEXTS: Welding Skills-\$16

Welding Skills Study Guide—\$8

SK543: PIPE WELDING

Commonly used types of pipe welding are emphasized. Units of instruction include welding safety, position but welds on horizontal and vertical pipe, 90° branch connection pipe and forged fittings for welding and lateral pipe connections.

Winter

MW

6:30-9:30 p.m.

T-VI Main Campus

Summer

TTh

6:30-9:30 p.m.

T-VI Main Campus

NOTE: Student must furnish welding gloves.

PREREQUISITE: Arc Welding

LAB FEE: \$70

TEXT: Pipe Welding Techniques, 2nd Ed.—\$12

SK225: MACHINE TOOL

This beginning class introduces students to tools, materials, processes and machines used in the machine tool industry. Students acquire experience on such machines as the drill press, lathe, milling machine and grinder.

Fall-Winter-Summer

MW or TTh

6:30-9:30 p.m.

T-VI Main Campus

LAB FEE: \$18

TEXTS: Technology of Machine Tool-\$30

Technology of Machine Tool Workbook--\$13

SK226: MACHINE TOOL NUMERICAL CONTROL

The history of numerical control, TAB sequential, fixed block and word address formats, and the programming and tape preparation necessary for numerical control machining are included.

Fall-Winter

TTh

7-9 p.m.

T-VI Main Campus

PREREQUISITE: Machine Tool

LAB FEE: \$10

SK233: SOLAR ENERGY AND HOME HEATING THEORY

This class covers various passive, active and hybrid solar heating systems. Included are energy conservation, maintenance of systems, and pros and cons of each approach based on configurations, materials, performance characteristics and construction aspects.

Fall-Winter

MW

7-9 p.m.

T-VI Main Campus

TEXT: The Passive Solar Energy Book-\$10

SK235: REFRIGERATION I

Students learn shop safety, basic tools and equipment, mechanical refrigeration components and basic refrigeration cycle. Maintenance and servicing, including soldering and brazing, also are covered. Electrical circuits are analyzed, and correct methods for wiring basic circuits are included.

Fall-Winter-Summer

6:30-9:30 p.m. TTh

T-VI Main Campus

LAB FEE: \$10

TEXT: Refrigeration and Air Conditioning Technology-

SK236: REFRIGERATION II

More complex refrigeration systems are introduced. Lab work in diagnosing and servicing small systems is emphasized. Instruction is designed to meet the student's individual needs and interests.

Winter-Summer

MW 6:30-9:30 p.m. T-VI Main Campus

PREREQUISITE: Refrigeration I ...

LAB FEE: \$10

TEXT: Refrigeration and Air Conditioning Technology-\$20

SK238: ELECTRICAL CONTROL CIRCUITRY

This class covers circuitry and controls commonly used in commercial and industrial applications. Emphasis is on understanding wiring diagrams for installation and troubleshooting purposes. Students build and troubleshoot systems they have designed in class.

Fall-Winter

MW

6:30-9:30 p.m.

T-VI Main Campus

PREREOUISITE: A knowledge of electricity as related to al-

ternating current

LAB FEE: \$7

TEXTS: Electrical Motor Controls-\$19.50

Electrical Motor Controls Workbook-\$7.50

SK239: ELECTRICAL MOTORS AND CONTROLS

This class covers basic concepts of magnetism as applied to motor operation. It continues with the theory of operation, parts identification, application and troubleshooting of single and three-phase AC motors. Basic motor controls also are covered including installation and basic programming of a typical programmable controller.

Winter

TTh

6:30-9:30 p.m.

T-VI Main Campus

PREREOUISITE: Thorough knowledge of AC and DC electricity concepts and the use of a volt-ohm milliammeter

TEXT: Basics of Fractional Horsepower Motors—\$9

SK241: FREEHAND ILLUSTRATION

The basic fundamentals of freehand drawing, perspective drawing and their application to the graphic arts are covered.

MW 6:30-9:30 p.m. T-VI Montoya Campus



Winter

MW

6:30-9:30 p.m. T-VI Main Campus

NOTE: Students must provide their own supplies with the ex-

ception of paper. LAB FEE: \$12

SK242: LAYOUT AND PASTE-UP

This class includes typesetting, dummy layouts, paste-up, art, use of stripping tools, explanation of stripping terms and actual stripping for various jobs.

Fall-Winter

M or W

Th

Th

6:30-9:30 p.m.

T-VI Montoya Campus

NOTE: Students must provide their own supplies with the exception of paper.

LAB FEE: \$12

SK243: ILLUSTRATION PROJECTS AND TECHNIQUES

Producing camera-ready art for commercial printing is the goal of this class. Techniques for both line and half-tone reproduction are used. Imaginative solutions, well-drawn and technically well-executed, to problems in illustration and graphics are stressed. Projects include illustrations for ads and books and design of trademarks and posters.

Fall

6:30-9:30 p.m.

T-VI Main Campus

Winter

6:30-9:30 p.m.

T-VI Montoya Campus

NOTE: Students must provide their own supplies with the exception of paper.

PREREQUISITE: Previous drawing experience.

LAB FEE: \$12

SK244: OFFSET DUPLICATOR OPERATION AND MAINTENANCE

This class introduces the basic operation of the offset du plicator and gives the student a basic proficiency with operation and maintenance. The class also allows the student to advance in press operation techniques and log additional hours in make ready, run and wash-up.

Winter

T 6:30-9:30 p.m. T-VI Montoya Campus

LAB FEE: \$17

TEXT: Small Offset: Preparation and Press-\$13

SK246: MICROGRAPHICS

This class covers theory and principles of microform technologies from an introductory level through computer output microfilm and computer assisted retrieval systems. Some handson experience in the operation of microfilm equipment also is provided.

Fall

TŢħ

6:30-9:30 p.m.

T-VI Main Campus

TEXTS: Handbook of Micrographic Technologies and Procedures-\$16.50

Quality Control Procedures for Source Document-

SK250: SECURITY OFFICER TRAINING

This is an introduction to such areas as personal defense, report writing, first aid, mob control, civil legal liabilities, criminal law, patrol procedures, rules of evidence and emergency procedures.

Fall-Winter

TTh

6:30-9:30 p.m.

T-VI Main Campus

LAB FEE: \$12

SK260: BASIC DIESEL

This class covers the operating principles of the two- and four-cycle engine, air induction and exhaust systems, fuel systems, cooling systems, governors and basic engine adjustments.

Fall-Winter-Summer

MW

6:30-9:30 p.m.

T-VI Main Campus

LAB FEE: S8

TEXT: Diesel Mechanics-\$29.50

SK581: DIESEL TROUBLESHOOTING AND TUNE-UP

Emphasis is on the use of the test equipment, repair practices, corrective actions, tune-up procedures on two- and four-stroke engines and engine support systems. Operating principles of major brands of fuel systems also are covered.

TTh

6:30-9:30 p.m.

T-VI Main Campus

PREREQUISITE: Basic Diesel or equivalent

LAB FEE: \$8

TEXT: Diesel Mechanics, 2nd Ed. -\$29.50

SK582: DIESEL TRANSMISSION, DRIVE TRAIN AND BRAKES

This class provides an introduction to service, repair and troubleshooting of manual transmissions, final drives, third members, clutches and air-over-hydraulic brakes. Service specifications and power dividers are covered.

Winter

6:30-9:30 p.m.

T-VI Main Campus

PREREQUISITE: Basic Diesel or equivalent

LAB FEE: \$8

TEXT: Power Trains, John Deere Manual, 4th Ed.—\$8

SK265: SHEET METAL FABRICATION

In this introductory class, students learn pattern layout on paper for heating, air conditioning and general sheet metal and carry it through in the lab to the finished sheet metal fittings. Lessons are custom designed for the needs of students already working in the field and wanting to upgrade their skills.

Fall

TTh

6:30-9;30 p.m. T-VI Main Campus

NOTE: Students must purchase some supplies.

LAB FEE: \$10

TEXT: Sheet Metal Pattern Drafting and Shop Problems-

\$14

SK560: CABINETMAKING

Proper use of basic hand tools and power woodworking machines is taught for persons employed in the construction industry. Students may complete a project using hand tools and a project using woodworking machines.

Fall-Winter-Summer

MW or TTh

6:30-9:30 p.m.

T-VI Main Campus

NOTE: Students must provide their own project materials.

LAB FEE: \$15

TEXT: Cabinetmaking and Millwork-\$23.50

SK570: BLUEPRINT READING FOR CONSTRUCTION TRADES

This theory class teaches basic construction techniques and blueprint reading for residential and light commercial construction. Emphasis is on terminology, construction theory, symbols and notations used on floor plans, scaling and dimensioning practice, structural information, drawings, plot plans, codes, blueprint reading and simple detail sketching.

MW

7-9 p.m.

T-VI Main Campus La Cueva High School

Winter-Summer

MW

7-9 p.m.

T-VI Montoya Campus

TEXTS: Building Trades Blueprint Reading, Part 1-\$10 Building Trades Blueprint Reading, Part 2-\$12

SK571: PLUMBING THEORY

This class covers proper use of tools and equipment; elements of plumbing; identification of plumbing fittings and pipes; basic hydraulics and pneumatics; and layout, assembly, installation, alteration and repair of piping systems.

Fall-Winter

TTh 7-9 p.m.

T-VI Main Campus

TEXTS: Uniform Plumbing Code-\$26.50

Uniform Plumbing Code Study Guide-\$11.50

SK575: ELECTRICAL TRADES THEORY I

This class is for the beginning apprentice or helper in an entry-level residential electrical position and is limited to the basic electrical systems in a typical home. Instruction is in working safety, electrical codes and utility regulations, basic electrical principles and measurements, wiring materials and devices, residential wiring circuits, outlet installation, switch boxes, nonmetallic sheathed cable, over-current devices, low voltage equipment, branch circuits and service entrances.

Fall-Winter

MW TTh 7–9 p.m. 7–9 p.m. T-VI Montoya Campus T-VI Main Campus

TEXT: Electric Wiring: Residential-Utility Building-Ser-

vice Areas-\$7

SK576: ELECTRICAL TRADES THEORY II

This more technical class concentrates on the semi-custom and totally custom home. The scope of the total electrical home is shown in depth with a concentration on electrical heating and cooling and their control system. The larger residential service entrance systems are examined in addition to electrical wiring design. An introduction to estimating electrical wiring and supplies for the job and modernization of existing electrical systems also are included.

Fall-Winter

TTh

7–9 p.m.

T-VI Main Campus

PREREQUISITE: Electrical Trades Theory I or equivalent

TEXT: National Electric Code Handbook—\$40

SK577: ELECTRICAL TRADES THEORY III

The National Electrical Code and its application to the commercial and industrial aspects of the electrical industry are discussed. Basic electrical theory, OHM's law and related calculations are studied in depth.

Fall-Winter

TTh

7-9 p.m.

T-VI Main Campus

PREREQUISITE: Electrical Trades Theory II or equivalent

TEXT: National Electrical Code Handbook-\$40

SK578: INTRODUCTION TO ELECTRICAL DESIGN

Some of the basic problems confronting a designer in commercial and industrial applications are covered. Selection of electrical conductors and raceways for various applications are discussed, as well as different voltages available to the designer. Emphasis is on calculation of feeder and branch circuits for general appliances, lighting and motor circuits in accordance with the National Electrical Code.

Fall-Winter

TTh

7-9 p.m.

T-VI Main Campus

PREREQUISITES: Basic Math, Blueprint Reading for the Construction Trades, Electrical Trades Theory I or equivalent.

TEXT: Designing Electrical Systems -\$16.50

SK579: CONSTRUCTION ESTIMATING

Determination of probable costs of a construction project is emphasized. Job scheduling, subcontracts, insurance, bonds and bidding procedures are discussed.

Fall-Summer

TTh

7-9 p.m.

T-VI Montoya Campus

Winter

TTh

7-9 p.m.

T-VI Main Campus

PREREQUISITE: Blueprint Reading for Construction Trades or equivalent

TEXT: Estimating in Building Construction, 2nd Ed.—\$28

SK583: LIGHTING—DESIGN AND APPLICATION

This course leads to a better understanding of light sources and principles. It covers color effect of lighting application and light source design. Fixture types and lighting calculation are geared to the commercial and industrial environment. The student is exposed to specification technique and cost-effective light system planning.

Fall-Winter

TTh

7-9 p.m.

T-VI Main Campus

PREREQUISITES: (Suggested but not mandatory) Electrical Trades Theory I and II or Introduction to Electrical Design

TEXT: North American Phillips Lighting Handbook-\$18.50

SK584: SPECIAL SYSTEMS—ELECTRICAL DESIGN AND APPLICATION

This course introduces the student to the design and application of special electrical systems including fire and security alarm, telephone and computer communications. Basic theory and design principles, conductors, raceways and system equipment specifications are covered. Commercial and industrial applications are emphasized.

Fall-Winter

TTh

7-9 p.m.

T-VI Main Campus

PREREQUISITES: Suggested but not mandatory—Electrical Trades Theory I and II or Introduction to Electrical Design.

TEXT: Design and Application of Security/Fire Alarm Systems—\$20

SK586: GENERAL CONTRACTORS LICENSING PREPARATION

This class is for the student interested in obtaining a contractor's license in New Mexico. Units of instruction include application, rules and regulations, business and law, the Uniform Building Code, construction methods, licensing act and examination practices.

Fall-Winter-Summer

MW

7-9 p.m.

T-VI Main Campus

PREREQUISITE: Completion of a minimum of two years of verifiable work experience in the construction industry

TEXT: Uniform Building Code—\$43

Workshop/Contract Training

T-VI's Workshop/Contract Training Office offers workshops that provide professional and technical education. The sessions are open to the public.

Workshops are structured to combine theory with practical applications. Newest technologies, skills and business techniques are discussed and practiced in the sessions.

Advance registration is required for each workshop and is accepted on a first-come, first-served basis. To be included on the monthly mailing list or to obtain more information about the workshops phone the Workshop/Contract Training Office at the Main Campus, 848-1666, or Montoya Campus, 298-5461, Ext. 234. For most workshops, the \$20 reg istration fee includes all instructional materials.

The topics listed below are representative of those workshops that may be scheduled during the year. All workshops listed also are available to individual organizations on a contract basis. These workshops can be adapted to the special needs of an organization.

Communication

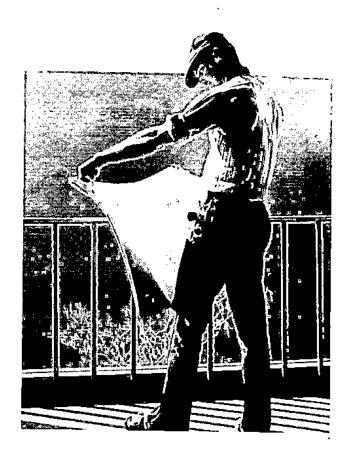
Assertive Communication Basic Report Writing Effective Oral Presentations Five C's of Letter Writing Grammar Review Improving Listening Skills Nonverbal Communication Skills Punctuation Updated Speed Reading Techniques Spelling Tips Technical Report Writing

Construction, Drafting and Surveying

Angle Manipulations for Surveyors Applied Physics for Draftsmen Architectural Rendering-Two-Point Perspective Auto CAD: Getting Past the Basics Basic Trigonometry for Surveyors Conduit Bending for Electricians Construction Estimating for the New Contractor Interpretation of Electrical Codes Interpretation of General Building Codes Interpretation of Mechanical Codes Motor Control Circuits Sizing Timber Beams and Columns Surveys of U.S. Public Lands Title Elements, Surveying Standards and Legal Descriptions Trigonometry Applications for Surveyors

Culinary Arts

Christmas Baking French Bread, Quick Breads and No-Knead Dinner Rolls Garnishes and Basic Garde Manger Introduction to Food, Beverage and Labor Cost Control Nutrition Pizza Preparation



Preparing a Christmas Buffet Sanitation and Safety

Developmental Skills

Basic Skills Career Exploration Math Essentials

Electronics

Nondestructive Electronic Circuit Repair (Soldering and Desoldering) Programmable Controllers Transducer Fundamentals and Applications

Financing and Accounting

Employer and Employee Benefits for the Small Business Financial Analysis—An Introduction Financial Management for Small Businesses Financial Statement Analysis Payroll Accounting Personal Income Tax Small Business Payroll Tax Reporting Your Business and Federal Income Tax

General Office

Automated Office Balancing Personal, Family and Work Life Building Typing Skill Using Cortez Peters' Method Business Math Review

114

Developing Interpersonal Skills
Dressing for the World of Business
Electronic Typewriters
Harmony in the Workplace
Moving Up—It's Up to You!
Records Management
Shortcut Typing Tips
Stress Management
Telephone Etiquette and Techniques
Time Management
Word Processing

Health Occupations

Assessment of the Oncology Patient
Basic Physical Assessment
Calculations for Administering Medication
Caring for the Respiratory Patient
Common Health Problems in the Elderly
General Surgical Nursing as a Specialty
Licensed Practical Nurse Refresher
Nursing Diagnosis and Data Collection
Phlebotomist Course
Review of Cardiovascular Drugs
Registered Nurse Refresher
The Confused Patient

Maintenance

Air Conditioning Control Circuitry
Basic Building Maintenance
Basic Home/Apartment Repairs
Commercial Heating and Cooling Systems
Custodial Services
Electrical Repairs
Plumbing Repairs
Servicing Gas-Fired Heating Systems

Metals

Advanced Oxyacetylene Welding (AOAW)
Arc Welding (SMAW)
Fabrication Layout/Fitting
Gas Tungsten Arc Welding (GTAW)
Plasma Processes
Precision Measurement
Metallurgy
Tooling Selection

Microcomputer and Computer

Analyzing IBM Computer Dumps
Assembly Language Graphics on the Apple
BASIC Programming Language (for Business Applications)
COBOL 84

Computer Literacy

Computerizing a Small Business Data General CLI Macros

Data General Utilities

Database Overviews-File Structure and Design

Getting Your First Microcomputer

Introduction to dBASE III

Introduction to IBM Mainframe Editor and Utilities

Introduction to IBM OS/JCL Introduction to Macro Building

Introduction to MS-DOS and IBM PC-DOS

Lotus 1-2-3 (Levels I and II) Microcomputer Accounting Microcomputer Business Software Packages
Microcomputer Database Management
Microcomputer Spreadsheets
Microcomputer Word Processing
Programming with dBase III
Telecommunications
Turbo Pascal on the Personal Computer

Printing

How to Produce a Show-Stopping Newsletter Produce and Print a Newsletter with Your Office Equipment

|| | Real Estate

Anatomy of a Contract Calculator Math Seminar Real Estate Finance Update Real Estate Investments Real Estate Law Update Trust Accounts

Sales

Creative Salesmanship—Managing Your Sales People Good Customer Relations

Small Business Operations

Computerizing a Small Business Developing a Business Plan Financial Management for Small Businesses Managing Cash Flow

Supervision and Management

Automated Office
Collecting the Uncollectibles
Conflict Management
Decision Making/Problem Solving
Developing Interpersonal Skills
Harmony in the Workplace

Harmony in the Workplace
Hiring and Firing Employees
Improving Dictation
Improving Your Memory

Improving Your Negotiating Skills Interviewing and Personnel Selection

Managing Change Meetings That Work

Mid-Management Skills (21-24 hours) Motivating Yourself and Your Employees Networking—Forming Support Relationships

Office Supervision Performance Appraisal

Planning, Scheduling and Controlling

Project Management Stress Management Time Management

Upgrading Employees' Performance through Recognition and Counseling

What It Takes To Be a Supervisor (21-24 hours)

Transportation

Automobile Winterization Automotive Glass Tinting Basic Auto Servicing Brake Systems Flectrical System Troubles

Electrical System Troubleshooting Introduction to Computerized Cars

Index

Abbreviated Day, 4	Relations, 35-37, 38, 41-43, 99	Workshops, 113
Absences, 19	Workshops, 113114	Dress, Student, 10
Accounting, 9, 30, 31, 32, 33-35, 42, 94, 95, 96, 101, 113	Writing, 31, 34, 36, 42, 96, 101, 113	Dropping Courses, 13
Computer, 33–35, 96	Business Administration, 35–37	Drugs, Illegal, 10
Cost, 34	Business Assistance Center, 32 Business Occupations Learning Centers, 30–31,	Factor Caie 10
Credit Union, 95	101	Early Exit, 19 Economics, 35, 37
Governmental, 35		Electrical Control Circuitry, 110
Managerial, 35	C Language, 60-61, 107	Electrical Design, 112
Microcomputer, 96, 114 Payroll, 96, 113	Cabinetmaking 111	Electrical Trades Apprenticeship, 70
Secretarial, 32, 42, 95	Calculators, 30-31, 33-35, 35-37, 97, 101 Calculus, 23, 103	Electrical Motors and Controls, 110
Small Business, 38	Calendars '	Electrical Trades, 81–82, 112
Tax, 32, 34, 35, 95	Continuing Education Division, 4	Electromechanical Drafting, 61-62 Electronics Technology, 9, 63-64, 64-66, 67-
Workshops, 113	Instructional Division, iii, 4	68, 103, 104
Accreditation, 2, 49, 52	Campus Conduct, 10	Electronics Workshops, 113
ACT (American College Test), 8, 13 Activities, Student, 11	Carburetion, see Automotive	Emergency Care (First Responder), 102
Adding Courses, 13	Career Exploration, 94, 113 Carpentry, 76–77, 111	Emergency Medical Technician, 102
Administration, title page	Cashier-Sales, 37	English As a Second Language, 9, 91
Admission Policies, 13, 44, 45, 47, 49, 51, 52,	Cashiering, 30-31, 37, 41, 99, 101	Basic, 9, 91–92
53, 69, 91, 93	Certificate Programs, 3, 13	Business, 96, 101, 113
Adult Basic Education, 91 Instructional Division, 13, 44, 69	Challenge Exams, 19, 51, 54	College Credit Classes, 23
Skill Improvement, 93	Changing Careers Course, 94	Entrance Requirements, 13, 44, 45, 47, 49, 51,
Advisement, 7	Cheating, 19 Chemistry, 25	53, 69, 91, 93
Adult Basic Education, 3, 91-92	Child Care Assistant Program, 44	Entrepreneurship, 38 Equal Opportunity Policy, back of title page
Adult Learning Centers, 9	Children on Campus, 10	Estimating, Construction, 112
Air Conditioning, Heating and Refrigeration, 73-	Citizenship for Aliens, 92	Expenses, Estimated, 6
74, 110 Alcoholic Beverages, 10	Civil and Surveying Technology, 58-59	
Algebra, 23, 103	Class Periods, 15 CLEP (College Level Examination Program), 18—	Family Educational Rights and Privacy Act. 22
Alphabetic Shorthand, see Shorthand	19	Fashion Merchandising, 100 Fees, 6, 14, 16, 93
American College Test (ACT), 8, 13	Clubs, 11	Filing, 30–31, 41–43, 101, 114
American Medical Association, 2, 52	COBOL, see ANSI COBOL	Financial Aid, 20–21
Anatomy and Physiology, 25, 45-47, 49-51	College Level Examination Program (CLEP), 18-	Financial Services, 96
Animals on Campus, 10 ANSI COBOL, 60, 106, 114	College Branger Classes 36 29	Financing and Accounting Workshops, 113
Anthropology, 24	College Preparatory Classes, 26-28 College Transfer, 3	Firearms on Campus, 10
Appeal, Grading, 18	College Work-Sludy, 21	Fires, Fire Alarms, 10 First Aid, 7
Appraisal, Real Estate, 100	Commercial Printing, 77–78, 111	Food, 7, 10
Apprenticeship Programs, 70	Communications	FORTRAN, 56, 106
Architectural Drafting, 56-58, 105 Architectural Rendering, 58, 105	Business, 36	
Assembler Language Programming, 60–61, 106,	College Credit Classes, 23 Office, 42-43	General Education Courses, 3, 23-25
107	Workshops, 113	General Educational Development (GED), 8, 9, 92
Associate Degrees, 3, 13, 22, 33, 38, 45, 64,	Computer Crimd, 10	General Trades Program, 83
67, 84	Computer Networking, 104	Governing Board, title page
Attendance Policies, 19, 90 Audiovisual Services, 9	Computer Science, 9, 25, 60-61, 106, 107, 114	Government, Student, 24
Auditing, 95	Computer Workshops, 114 Construction Estimating, 58, 112, 113	Grade Appeal, 18
Automotive	Construction Workshops, 113	Grade Reports, 18, 90 Grading, 17, 90
Air Conditioning, 108	Continuing Education Division, 89-114	Graduation, 22
Body Repair, 74, 108	Contractor Licersing Preparation, 112	Application, 22
Brakes, 108 Carburetion, 108	Cooking, see Culinary Aris	Ceremony, 22
Electricity, 108	Counseling, 7 Credit Cards, 12	Degrees and Certificates, 22
Front-End Alignment, 108	Credit, Nontraditional, 18	Degree Requirements, 22 Program Requirements, see each program
Servicing, 108	Credit Union Operations, 96	With Honors, 22
Technology, 9, 75–76	Culinary Apprendiceship, 70	Graduate Placement, 5, 7
Tune-Up and Emissions, 108	Culinary Arts, 78–79	Grammar, 9, 40, 92, 113
Baking, 78	Culinary Arts Workshops, 113	Grants, Student, 20–21
Bank Teller, 99	Dangerous Substances, 10	Gregg Shorthand, see Shorthand Guidance, 7
BASIC Language Programming, 56, 59, 60-61,	Database Concepts, 61, 107	Guidance, 7
106, 107, 114	Data Entry, 106	Handicapped, 9, 29-30
Basic Education, see Adult Basic Education and Developmental Studies	Data Processing, 25, 60-61, 106, 107, 114	Health Advisement Services, 7
Biology, 25	Degree Requirements, 22, 33, 38, 45, 64, 67,	Health Occupations Programs, Courses, 2, 19,
Blueprint Reading, 76, 82, 85, 86, 87, 111	Developmental Studies, 26-29, 113	44-54, 102 Health Occupations Workshops, 114
Bookkeeping Certificate, 33	Diesel Mechanics, 80–81, 111	Health Unit Clerk, 45, see also Hospital Ward
Books and Supplies, 14, 90, 91, 93	Digital Circuits, 104	Clerk
Budget, Estimated, 6	Disruptive Behavior, 10	Heating, 73-74
Bureau of Indian Affairs, 20 Bus Passes and Rebates, 9	Denoritories, 7 Drafting	Heating, Ventilation, Air Conditioning (HVAC)
Business	Architectural, 56-58, 105	and Plumbing Systems, 105
Communications, 33-34, 36, 96, 99, 101, 113	Civil, 58–59	High School Equivalency Exam Preparation, 92 History, 24
English, 96, [01, 113	Computer-Assisted, 56-58, 58-59, 85-86	Holidays, 4
Law, 34, 36, 99 Mathematics, 42, 96, 101	Electromechanical, 61–62	Home Economics, 25
Programs, Courses, 33–43, 94–101	Electronics, 105 General, 104	Hospital Ward Clerk, 102, see also Health Unit
-0,	Conordi, 104	Clerk
	4	

Hospitality/Food Service Management, 83 Housing, 7 Human Relations, 34, 37, 38, 42, 99, 113-114	Parking, 9 Pascal Programming, 56, 107 Paste-up and Layout, 77–78, 110	Social Science Courses (College Credit), 24 Solar Applications, 57, 71, 109 Spanish, 9, 27-28 Special Services, 29
Humanities Courses (College Credit), 25 Illegal Drugs, 10 Illustration, 110	Patient Service Clerk, see Health Unit Clerk Pell Grants, 20 Periods, Class, 15 Philosophy, 25	Speed Limits, 9 Speelling Improvement, 9, 26–28, 91–92, 113 Standards of Progress, 18 Store, Student, 7
Industrial Relations Office, 7 Instructional Division, 3, 4, 12–88 Instrumentation and Control Technology, 64–66 Insurance, 97	Phlebotomist, 49 Phone Calls, 11 Physics, 25, 28, 68 Placement, 5, 7 Placing 19	Student Government, 11 Student Judicial Affairs Committee, 9 Student Services, 7 Student Store, 7
Insurance, Student, 10 Interrupted Training, 13 Investment, Real Estate, 100	Plagiarism, 19 Plumbing, 86–87, 112 Pole Climbing, 71 Political Science, 24 Postical Suggest 49, 51	Substances, Dangerous, 10 Supervised Work Experience, see each program Supervision, Office, 99, 114 Supervision and Management Workshops, 114
Job Control Language (JCL), 60, 107, 114 Job Placement, 5, 7	Practical Nurse, 49-51 Practical Nurse Advanced Standing, 51-52 Preparatory Program, 3, 13, 26-29 Preparatory Program, 50, 26-29	Supplemental Educational Opportunity Grant, 20 Surveying, 54-55, 113 Suspension, Academic, 18
Laser Electro-Optic Technology, 67-68 Law Business, 34, 36, 99	Presbyterian Hospital Center, 50 Printing, 77–78, 111, 114 Probation, Academic, 18	Tax Accounting, 32, 34, 35, 95
Enforcement Program, 84 Real Estate, 100 Violations, 10	Program Requirements, 13 Progress Reports, 18 Proofreading, 30, 101	Technical Writing, 56, 105, 113 Technologies Programs, Courses, 56-68, 103- 107 Telephone
Layout, Printing, 77-78, 110 Legal Assistant Studies (Associate Degree), 38-40	Property, Personal, 10	Calls and Visitors, 11 Directory, iv Etiquette, 30–31, 101, 114
Legal Office Worker Program, 40 Legal Secretary, 96, 97 Legal Transcription, 31, 38-40, 101 Libraries, 8, 9, 44	Quantity Food Preparation, 79	Television Servicing, 104 Terms, 4 Testing, 8, 13, 92
License, Contractor's, 112 Licensed Practical Nurse Refresher, 114 Literacy, 91 Loans, 20-21	Radio Technician Certification, 104 Reading Improvement, 9, 28, 71, 91–92 Readmission, 19 Real Estate, 100, 114	Tobacco, Use of, 10 Trades Programs, Courses, 69–88, 108–112 Transcription, 30–31, 40, 41–43, 101 Transcripts, 22, 90
Lockers, 10 Lost and Found, 10	Records Management, 30–31, 41–43, 101, 114 Student, 22, 90	Transfer Credit, 3, 32, 33, 35, 41, 47, 51, 52, 54, 72, 94, 99, 103, 105-111 Transportation, 9 Transportation Workshops, 114
Machine Trades, 85–86, 109 Machine Transcription, 31, 43, 101 Maintenance Workshops, 114 Management, 34, 36, 43, 96, 97, 99, 100, 114	Refresher Course for Office Workers, 43 Refresher, Practical Nursing, 114 Refrigeration, 73-74, 110 Refunds, 15, 93	Trigonometry, 23, 103 Tuttion, 6, 14, 90 Typing, 30–31, 40, 41–43, 98, 101, 113–114
Marketing, 35-37, 38, 41, 100 Mathematics, see each program Business, 33-35, 96	Registration Adult Basic Education, 91 Instructional Division, 14	University of New Mexico, 3, 27, 41, 52, 56
College Credit, 23 General, 9, 92, 103, 113 Medical Office Assistant, 102 Medical Terminology, 102	Skill Improvement Courses, 93 Workshop/Contract Training, 113 Rendering, Architectural, 58, 105 Resident Status, 14	Vehicle Registration, 9 Veterans Administration Benefits, 20, also see each program Visitors on Campus, 10, 11
Medical Transcription, 30-31, 45, 102 Merchandising Program, 41 Metals Workshops, 114	Respiratory Therapy Technician, 44, 52-53 Respiratory Therapy Technician Advanced Standing, 54	Vocabulary and Spelling Development, 26-28, 91-92 Vocational Enrichment Program (VEP), 3
Microcomputers, see each program, 9, 30-31, 106, 107, 114 Microcomputer Workshops, 114	Retailing, 37, 38, 41, 100 Retention Rates, 5 Robotics, 64-66	Vocational Rehabilitation, New Mexico Division of, 20 Weapons on Campus, 10
Micrographics, 111 Microprocessors, 63-64, 67-68, 104 Motors, Electrical, 110	RPG II, 60-61, 106 Rules of Conduct, see Campus Conduct Safety Glasses, 69	Welding, 71, 87-88, 109 Withdrawals, 4, 13 Word Processing, 30-31, 40, 42, 43, 101, 114
National League for Nursing, 2, 49 Natural Science Courses (College Credit), 25 New Mexico State Board of Nursing, 45, 49 New Mexico State Student Incentive Grant, 21	Safety, Occupational, 71 Salaries, Graduate, 5 Salesmanship, 9, 37, 38, 41, 99, 100, 114 SAT (Scholastic Aptitude Test), 13	Workshops Communication, 113 Construction, Drafting and Surveying, 113 Culinary Arts, 113
New Mexico Nursing Student Loan, 21 New Mexico Work-Study, 21 Nonresident, 14	Schedules, Class, 15 Scholastic Aptitude Test (SAT), 13 School Year, 4 Secretarial Occupations, 9, 41-43	Developmental Skills, 113 Electronics, 113 Financing and Accounting, 113 General Office, 113, 114
North Central Association of Colleges and Schools, 2 Numerical Control Machining, 85–86, 109 Nursing	Security, 9, 10 Officer Training, 111 Services for Students, 7	Health Occupations, 114 Maintenance, 114 Metals, 114
Associate Degree, 44, 45-47 Associate Degree Advanced Placement, 47-48	Sheet Metal Apprenticeship, 70 ¹³ Sheet Metal, 70, 72, 73–74, 111 Shorthand	Microcomputer and Computer, 114 Printing, 114 Real Estate, 114 Sales, 114
Practical Nurse, 44, 49-51 Practical Nurse Advanced Standing, 51-52 Nursing Assistant, 48	Alphabetic, 30-31, 41-43, 97, 101 Century, 30-31 Forkner, 30-31, 101 Gregg, 30-31, 41-43, 98, 101	Small Business Operations, 114 Supervision and Management, 114 Transportation, 114
Occupational Safety, 71 Office Occupations Program, 41–43 Office Refresher Program, 43 Office Supervision, 99, 114	Machine, 30-31 Review, 30-31, 98, 101 Transcription, 30-31, 40, 41-43, 101 Skill Improvement Classes, 93-112	
Office Workshops, 114 Offset Printing, 77-78, 111 Operating Your Own Business, see Small Business Operation	Small Business Operation, 38, 99, 113-114 Small Engine Mechanics, 109 Smoking, Tobacco Use, 10 Snow Day, 4	