CATALOG 1988–89

Albuquerque Technical-Vocational Institute

Volume XXIII **June 1988**

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

Telephone Directory

Main Campus

Switchboard/Locator	848-1400
Admissions	848-1540
Adult Basic Education	848-1486
Adult Learning Center	848-1771
Cashier (Admissions)	848-1516
Continuing Education Division	848-1480
Financial Aid	848-1530
GED—General Educational Development	247-9579 Ext. 28
Information	848-1540
Instructional Division	848-1607
Administration	848-1607
Arts and Sciences	848-1680
Business Occupations	247-9579
Developmental Studies	848-1750
Health Occupations	848-1560
Technologies	848-1610
Trades	848-1700
Library	848-1770
Placement	848-1460
Special Services for the Handicapped	243-1741 TTY 247-9304
Student Records	848-1510
Student Services Administration	848-1601
Support Services Administration	848-1410
Business Office	848-1430
Personnel	848-1409
Public Information	848-1407
Testing Services	848-1550

Joseph M. Montoya Campus 298-5461

Calendar

1988

SEPTEMBER

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	19	20	21	22	23	24
25	26	27	28	29	30	

Classes begin, Sept. 6

OCTOBER

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	19	20	21	22
23	24	25	26	27	28	29
30	31					

Midterm, Oct. 27
Staff development, Oct. 28

NOVEMBER

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	19
20	21	22	23	24	25	26
27	28	29	30			

Thanksgiving:
Instructional Division, Nov. 24–25
Continuing Education Division, Nov. 23–25

DECEMBER

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	19	20	21	22	23	24
25	26	27	28	29	30	31

Term break, Dec. 23–Jan. 8
(Arts and Sciences classes and some degree program classes end Dec. 23)

1989

JANUARY

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

Classes begin, Jan. 9

FEBRUARY

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
19	20	21	22	23	24	25
26	27	28				

President's Day, Feb. 20
Midterm, Feb. 23
Staff development, Feb. 24

MARCH

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
19	20	21	22	23	24	25
26	27	28	29	30	31	

APRIL

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	19	20	21	22
23	24	25	26	27	28	29
30						

Term break, Apr. 26–May 7
(Arts and Sciences classes and some degree program classes end Apr. 29)

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	19	20
21	22	23	24	25	26	27
28	29	30	31			

Classes begin, May 8
Memorial Day, May 29

JUNE

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	19	20	21	22	23	24
25	26	27	28	29	30	

Midterm, June 23

JULY

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	19	20	21	22
23	24	25	26	27	28	29
30	31					

Independence Day, July 3–4

AUGUST

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	19
20	21	22	23	24	25	26
27	28	29	30	31		

Term break, Aug. 24–Sept. 5
(Arts and Sciences classes and some degree program classes end Aug. 26)

☐ = non-school day

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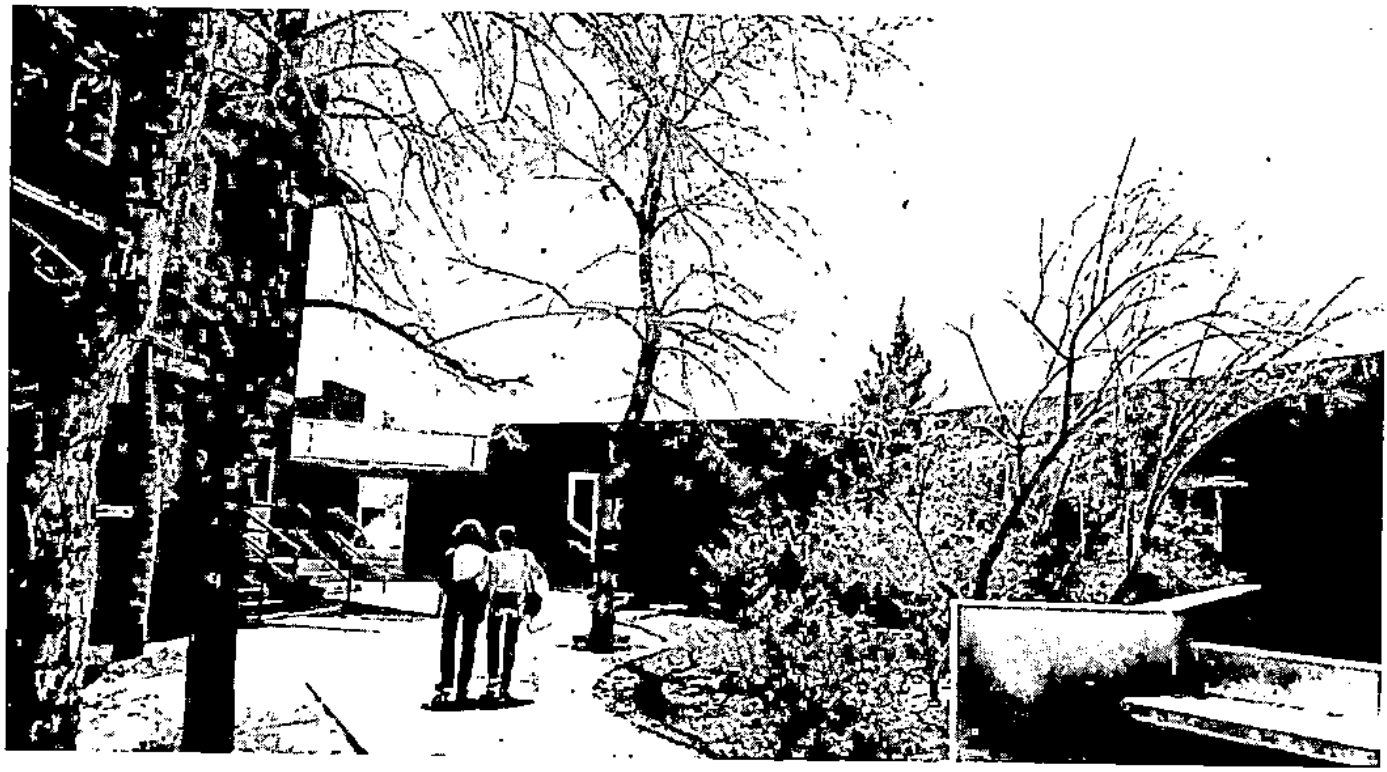


About the Institute

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. About 16,000 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.

T-VI's first classes were held in an elementary school, which had been closed, and surplus army housing. Since then, more than $49 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 42-acre Joseph M. Montoya Campus is located at 4700 Morris NE. Situated along the Bear Canyon Arroyo just north of Montgomery Boulevard, 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 Division classes are held at both campuses and other locations throughout the T-VI district. College credit and college prep classes are also offered at Kirtland Air Force Base.

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 following:

- **CERTIFICATE PROGRAMS:** Full-time programs in 35 business, health, technology and trades occupations.

- **ASSOCIATE DEGREES:** Available in 13 business, health, technology and trades majors.

- **GENERAL EDUCATION COURSES:** Communications, mathematics, social and natural science, humanities and general elective 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.

- **OTHER PROGRAMS:** For persons wanting to pursue a course of study at their own pace. These services include Adult Learning Centers, Business Occupations Learning Centers, a Business Assistance Center, and apprenticeship programs in various trades occupations.

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

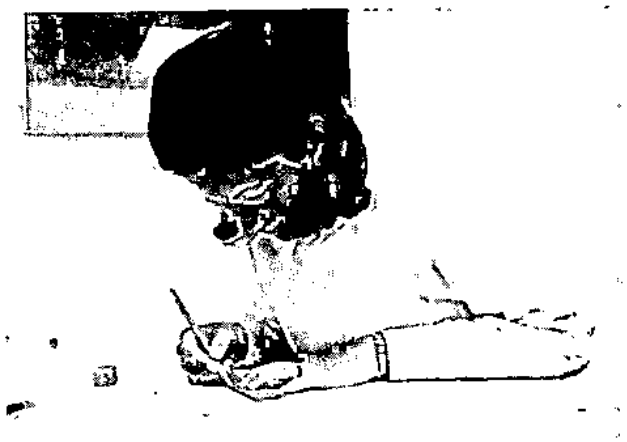
Persons not working toward a certificate or degree may enroll part time in specific courses if space is available.

If fewer than 12 persons have applied to begin a program, the program may be cancelled that term.

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.

For complete information on programs and policies, see *Instructional Division* beginning on page 12 of this catalog.

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, with offerings primarily of interest to 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. Contact high school counselors for more information. (Adults may enroll in these classes on a space-available basis.)

A Continuing Education class may be cancelled if enrollment is insufficient. Fees for such classes are refunded. Classes may be terminated if fewer than 10 persons are attending regularly.

Continuing Education classes are offered at T-VI's Main and Montoya campuses and other locations throughout the Albuquerque area. For complete information on classes and registration procedures, see *Continuing Education Division* beginning on page 95 of this catalog.

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 must be enrolled currently in the Instructional Division and see their program academic advisor.

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 EXPENSES

Student's Status	*1 Term*	*2 Terms*	*3 Terms*
DEPENDENT STUDENT LIVING AT HOME (assumed for Albuquerque residents)			
Tuition and Fees*	$ 20 to $ 120	$ 30 to $ 260	$ 40 to $ 400
Room and Board	697	1,393	2,091
Books and Supplies	25	50	75
Personal Expenses	414	828	1,255
Transportation	329	658	997
*TOTAL**	$1,485 to $1,585	$2,959 to $3,189	$4,458 to $4,818
DEPENDENT STUDENT LIVING OFF CAMPUS			
Tuition and Fees*	$ 20 to $ 120	$ 30 to $ 260	$ 40 to $ 400
Room and Board	1,780	3,560	5,395
Books and Supplies	25	50	75
Personal Expenses	455	910	1,380
Transportation	470	941	1,427
*TOTAL**	$2,750 to $2,850	$5,491 to $5,721	$8,317 to $8,677

INDEPENDENT STUDENT LIVING OFF CAMPUS

Tuition and Fees*	$ 20 to $ 120	$ 30 to $ 260	$ 40 to $ 400
Room and Board	1,779	3,558	5,392
Books and Supplies	173	346	525
Personal Expenses	660	1,320	2,000
Transportation	357	714	1,082
*TOTAL**	$2,989 to $3,089	$5,968 to $6,198	$9,039 to $9,399

**If student is paying nonresident tuition, add $636 per term.*
If student is paying resident associate degree tuition, add $17 per credit hour.
If student is paying nonresident associate degree tuition, add $53 per credit hour.

Graduate Job Placement, 1987

(Winter and summer 1987 terms only. Fall 1987 figures available June 1, 1988.)

	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
BUSINESS OCCUPATIONS													
Accounting	42	6	5	4	31	26	2	3	84%	26	2	6.48	$13,478
Bookkeeping	9	1	1	—	7	4	1	2	57%	5	—	4.00	$ 8,320
Business Administration	25	2	5	5	18	15	1	2	83%	16	—	5.28	$10,978
Legal Office Worker	15	—	4	2	11	10	—	1	91%	10	—	4.97	$10,334
*Merchandising	7	—	—	—	7	6	—	1	86%	6	—	3.94	$ 8,195
Office Occupations	66	9	10	5	47	36	5	6	77%	41	—	5.11	$10,619
*Office Refresher	2	—	—	—	2	1	1	—	50%	2	—	5.75	$11,960
*Receptionist	7	1	1	—	5	3	1	1	60%	4	—	4.74	$ 9,854
*Word Processing	14	4	1	—	9	5	1	3	56%	6	—	5.62	$11,679
HEALTH OCCUPATIONS													
Health Unit Clerk	17	3	1	—	13	9	—	4	69%	9	—	5.47	$11,375
Nursing: Associate Degree	42	9	1	—	32	31	—	1	97%	30	1	9.59	$19,947
Nursing Assistant	36	7	7	6	22	16	1	5	73%	16	1	4.65	$ 9,672
Phlebotomist	14	4	4	2	6	3	—	3	50%	3	—	5.12	$10,643
Practical Nurse	23	1	4	5	18	18	—	—	100%	18	—	7.73	$16,081
Respiratory Therapy Technician	12	—	1	—	11	11	—	—	100%	11	—	7.48	$15,551
TECHNOLOGIES													
Architectural Drafting Technology	28	1	1	1	26	22	2	2	85%	22	2	5.63	$11,715
Civil and Surveying Technology	16	2	—	1	14	10	—	4	71%	9	1	5.79	$12,030
Data Processing Technology	20	2	—	—	18	12	2	4	67%	11	3	6.85	$14,234
*Electromechanical Drafting	9	—	—	—	9	6	1	2	67%	7	—	6.75	$14,050
Electronics Technology	36	6	5	6	25	16	3	6	64%	17	2	7.06	$14,666
Instrumentation and Control Technology	38	1	5	7	32	22	4	6	69%	24	2	8.38	$17,422
Laser Electro-Optic Technology	30	3	3	2	24	20	2	2	83%	15	7	8.14	$16,912
TRADES													
A/C, Heating and Refrigeration	33	1	4	3	28	27	1	—	96%	27	1	5.45	$11,334
Auto Technology	15	—	1	—	14	13	1	—	93%	14	—	5.13	$10,660
Baking	18	—	5	5	13	11	1	1	85%	11	1	4.59	$ 9,534
Carpentry	23	1	5	1	17	17	—	—	100%	16	1	6.13	$12,738
Commercial Printing	17	2	1	1	14	8	5	1	57%	13	—	4.71	$ 9,796
Diesel Mechanics	19	—	4	4	15	11	1	3	73%	11	1	5.38	$11,181
Electrical Trades	15	—	—	—	15	15	—	—	100%	14	1	6.01	$12,491
Law Enforcement	22	—	—	—	22	22	—	—	100%	22	—	7.08	$14,718
Machine Trades	24	—	—	—	24	24	—	—	100%	19	5	7.11	$14,792
Plumbing	28	2	5	1	21	17	1	3	81%	18	—	6.49	$13,485
Quantity Food Preparation	24	—	8	5	16	13	2	1	82%	15	—	5.11	$10,619
Welding	18	3	3	3	12	10	—	2	83%	10	—	4.85	$10,076
TOTALS	764				598	490			82%				

*No longer offered as separate program.

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

School Year

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

Each 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.*

ABBREVIATED SCHEDULES AND SNOW DAYS: The Institute announces a special schedule or school closing only under extreme weather conditions. If an abbreviated schedule is designated, classes begin at 10 a.m. at the Montoya Campus and 10:20 a.m. at Main Campus. If a "snow day" is designated, the Institute is closed. T-VI observes the determination of the Albuquerque Public Schools in designating abbreviated schedules and snow days. *When either situation occurs, information is announced by local radio stations.*

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.

COUNSELING AND ADVISEMENT: Professional counselors 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 from 7:30 a.m. to 4:30 p.m., and in the admissions areas weekdays from 8 a.m. to 5 p.m. During peak registration periods (August–September, December–January, and April–May), advisement is available at both campuses from 8 a.m. to 7 p.m. Monday through Thursday, and 8 a.m. to 5 p.m. on Friday.

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.

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 certificate majors, the General Educational Development (GED) exam for high school equivalency, typing speed tests, math tests and career aptitude tests. The ACT, certificate program admission tests and GED also are administered at the Montoya Campus. For more information, contact the Testing Center, 848-1550.

CAREER APTITUDE TESTS: A variety of tests is available for applicants by appointment. Aptitude, personality and interest tests are given to assist applicants with career choices.

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 100.

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

CERTIFICATE PROGRAM ADMISSION TESTS: Basic math and vocabulary tests are administered to applicants to help them determine, with the help of a counselor, which certificate programs may best match abilities and interests.

MATH PLACEMENT TESTS: The algebra 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 planning to enroll in Math 162/Calculus I must take both the algebra and trigonometry placement tests.

Library Services

Library Services includes the libraries, Adult Learning Centers and Audiovisual Services. All the facilities 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. The Montoya Campus Library and Adult Learning Center are in J Building.

When school is in session, the facilities are open from 7 a.m. to 9 p.m. weekdays except Friday, when they close 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.

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

LIBRARIES

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

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

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.

AUDIOVISUAL SERVICES

Audiovisual Services maintains T-VI's 16mm film and videotape collections and all AV equipment. Materials 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.

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

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 5:15 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.

A snack bar will be available at Montoya Campus in September 1988. Vending machines are available in several locations at both campuses.

Student Store

T-VI's student store, located in the Administration 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, 8 a.m. to 7 p.m., and Friday, 8 a.m. to 5 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.

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-30).

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

Campus Conduct

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

- **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 on the transcript. A pattern of cheating will result in suspension.

- **Computer Crime:** Under the state Computer Crimes Act, a person who intentionally and without authorization accesses, alters, damages, copies or destroys any computer system or data stored within is subject to criminal prosecution on charges ranging from misdemeanor to third degree felony. Such conduct also will lead to suspension or dismissal.

- **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 suspension or 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.

- **Law Violations:** Law violations by anyone on campus will be handled by appropriate law enforcement agencies.

- **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 non-smoking 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. Children left unattended on campus will be brought to the attention of the appropriate enforcement agency.

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

DISRUPTIVE BEHAVIOR APPEAL: A student suspended or dismissed for disruptive behavior may appeal to the department dean. The appeal must be made in writing by the student within three days of the suspension or dismissal. The department dean shall appoint a review board (two faculty members and one student) to hear the appeal within one week. The board will determine if the suspension or dismissal is upheld or if the student is to be reinstated. If reinstated, the student will be placed on probation and may have stipulations as part of the probation. The written decision of the review board is final. Appeal forms are available in departmental offices.

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 from 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 Student 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 coordinator in the M Building on Main Campus or the Montoya Campus dean.

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, Joline Mahr, Room M-102, Main Campus, 525 Buena Vista SE, 848-1407.

INSTRUCTIONAL DIVISION

Admission Policies

To enroll in the Instructional Division, 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 or through the special admission option (see next column).

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 three categories:

- **CERTIFICATE:** For students declaring a major in an occupational area. Certificate programs vary in length from one to four terms. Students must take an admission test.

- **DEGREE:** For students entering an associate degree program. Applicants must meet the following requirements:

1. Provide a high school or General Educational Development (GED) diploma.
2. Score satisfactorily on the American College Test or present official test scores dated within the past three years. 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. All degree programs require satisfactory ACT scores in English and math. Some programs have additional ACT requirements (refer to degree programs).

Applicants may use one of the following as an equivalent to the ACT:

—Scholastic Aptitude Test (SAT) scores corresponding to satisfactory ACT scores, if dated within the past three years.

—Completion of all 100-level courses.

—Presentation of associate or bachelor's degree. (Official transcripts with statement of degree from an accredited institution required; proof of high school diploma or GED not required.)

- **NONDEGREE:** 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.

PREPARATORY PROGRAM: Applicants needing or wanting preparatory work to help them meet admission requirements for T-VI certificate or degree programs or college entry are admitted to the Preparatory Program in the Developmental Studies Department.

SPECIAL ADMISSION OPTION—CONCURRENT ENROLLMENT: A highly qualified high school senior may enroll in general education courses at T-VI while also enrolled in high school. Students seeking concurrent enrollment must meet the following requirements:

- Be a currently enrolled high school senior with graduation scheduled within one calendar year.
- Provide an official high school transcript with a cumulative grade point average of 3.0 or better on a 4.0 scale, and rank in the top 25 percent of the class.
- Submit to the registrar the T-VI permission and recommendation form signed by the high school principal or designee and the student's parents or guardians.
- Meet the general admission requirements.
- Have an interview with an admissions counselor.

A concurrent student may enroll for a maximum course load of eight general education credit hours (two courses) per term.

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 fifth day of classes in short terms.

Courses may *not be dropped* during the last two weeks of a term. To drop a course, a "drop form" must be completed. Details are available from counselors. 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.

AUDIT: Changes from audit to credit must be made by the 10th day of a 15-week term or the fifth day of a short term. Changes from credit to audit must be made by midterm of a 15-week term or the fourth week of a short term.

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.

Graduation Policies

GENERAL REQUIREMENTS: Degree and certificate students must satisfactorily complete all core requirements for their majors and have fulfilled all requirements to be in regular status with no restrictions during the last term of enrollment. A student's last term of coursework must be completed at T-VI.

DEGREE REQUIREMENTS: All students enrolled in degree programs must meet these additional 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.
- Required general education courses.

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.

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.

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 12th week of the preceding term. Students in certificate programs of one or two terms do not have to complete the form.

Failure to apply for graduation may delay graduation. Students who have completed all course requirements but have failed to apply for graduation must pay the $10 registration fee, apply for graduation and, if approved, receive their certificate or degree at the end of the term in which they apply.

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.

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.

Late registration, on a space-available basis, is held only through the 10th day of classes in 15-week terms, the fifth day of classes in short terms. Any student who misses the first three days of scheduled classes in a certificate program 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	$17 per credit hour	$17 per credit hour
7 to 12 credit hours and more than 18 credit hours	$17 per credit hour	$53 per credit hour
12 to 18 credit hours	$204	$636
Certificate Programs	none	$636 per term for full-time students (23 class hours or more per week) $28 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 and some associate degree programs must purchase their textbooks. Books are loaned free to students enrolled in certificate program 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—80 percent.

Supply 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

Calendar

Instructional Division

FALL TERM, 1988

Classes Begin ..... Sept. 6
Final Registration Day ..... Sept. 19
Midterm Grades ..... Oct. 27
Staff Development (no classes) ..... Oct. 28
Thanksgiving (no classes) ..... Nov. 24–25
Withdrawal Deadline ..... Dec. 8
Last Day of Classes ..... Dec. 22
(Arts and Sciences classes and some degree program classes end Dec. 23)
Term Break ..... Dec. 23–Jan. 8

WINTER TERM, 1989

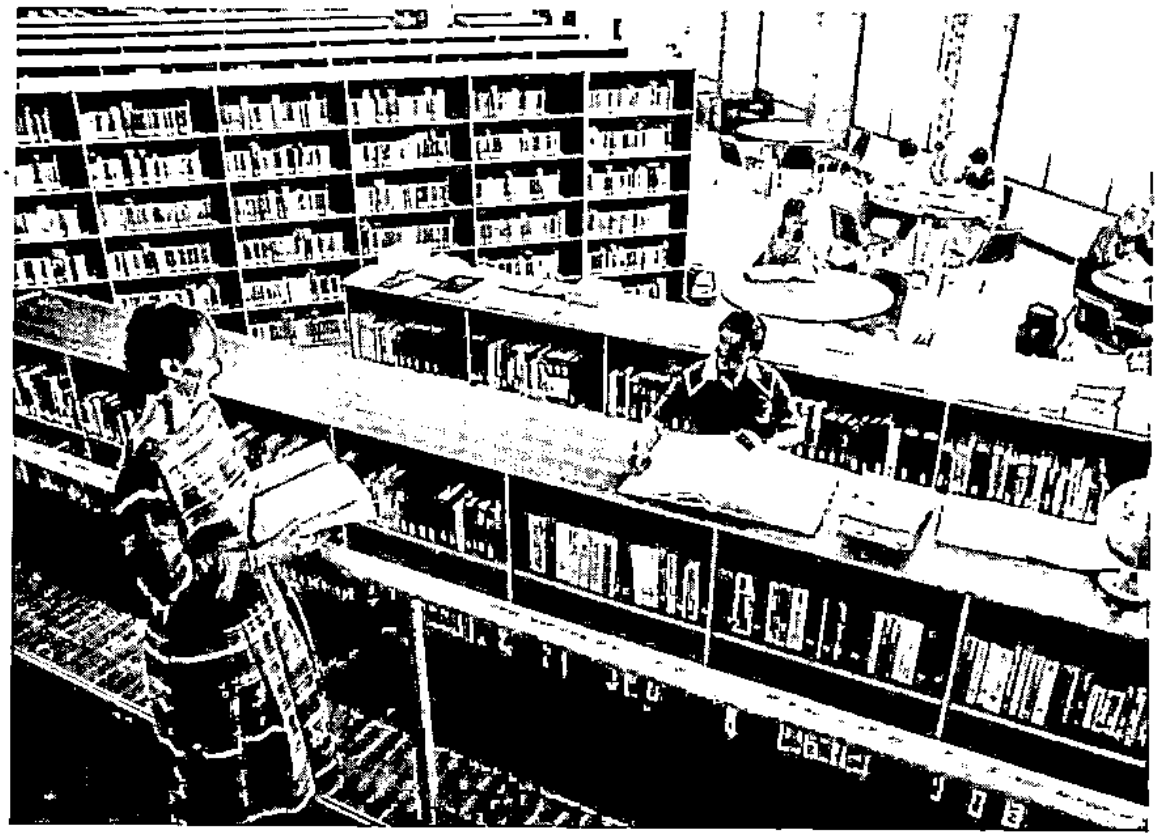
Classes Begin ..... Jan. 9
Final Registration Day ..... Jan. 20
President's Day (no classes) ..... Feb. 20
Midterm Grades ..... Feb. 23
Staff Development (no classes) ..... Feb. 24
Withdrawal Deadline ..... Apr. 11
Last Day of Classes ..... Apr. 25
(Arts and Sciences classes and some degree program classes end Apr. 29)
Break ..... Apr. 26–May 7

SUMMER TERM, 1989

Classes Begin ..... May 8
Final Registration Day ..... May 19
Memorial Day (no classes) ..... May 29
Midterm Grades ..... June 23
Independence Day (no classes) ..... July 3–4
Withdrawal Deadline ..... Aug. 9
Last Day of Classes ..... Aug. 23
(Arts and Sciences classes and some degree program classes end Aug. 26)
Break ..... Aug. 24–Sept. 5

Program Fees

	Term I	II	III	IV
BUSINESS OCCUPATIONS				
Accounting	$15	$15	$15	$15
Business Administration	$15	$15	$15	
Cashier-Sales	$10			
Entrepreneurship	$10			
Legal Assistant Studies	$15	$15	$15	$15
Legal Office Worker	$10			
Secretarial Studies	$15	$15	$15	$15
HEALTH OCCUPATIONS				
Associate Degree in Nursing	$75		$10	
Health Unit Clerk	$30			
Licensed Practical Nurse Refresher	$10			
Medical Laboratory Technician	$50	$15	$30	$30
Nursing Assistant	$30			
Perioperative Registered Nurse Specialist	$25			
Phlebotomist	$45			
Practical Nurse	$75			
Registered Nurse Refresher	$10			
Respiratory Therapy Technician	$75			
Surgical Technologist	$25	$25		
TECHNOLOGIES				
Architectural Drafting Technology	$55		$40	
Civil and Surveying Technology	$45	$40		
Data Processing Technology	$10	$10	$10	$10
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	$70		
Commercial Printing	$30			
Diesel Mechanics	$100	$130	$130	
Electrical Trades	$100	$85	$50	$50
Fire Science	$10	$10		
Law Enforcement	$10	$15		
Machine Trades	$100	$80	$70	
Plumbing	$100	$70		
Quantity Food Preparation	$100	$80		
Welding	$100			
COLLEGE DIVISION (Lab Fees)				
BIO 124L—Biology for Health Sciences	$15			
BIO 211L—Microbiology	$15			
BIO 247L—Anatomy and Physiology I	$15			
BIO 248L—Anatomy and Physiology II	$15			
CHEM 112L—Introduction to Chemistry	$15			
CHEM 121L—General Chemistry	$15			
PHYS 153L—General Physics	$15			
PHYS 163L—General Physics	$15			



Grading

Three grading scales are used to compute cumulative[1] grade point average (GPA):

Preparatory Courses			General Education Courses			Certificate Courses		
		GPA			GPA			GPA
S	Satisfactory	—	A	91–100	4.0	A		4.0
P	Progress	—	B	81– 90	3.0	B		3.0
U	Unsatisfactory	—	C	71– 80	2.0	C		2.0
			D[2]	61– 70	1.0	I	Incomplete	0.0
			F	Failing	0.0	U		
			I	Incomplete	—	AUD[3]	Audit	
			W	Withdrew	—	CR[4]	Credit	
			AUD[3]	Audit	—			
			CR[4]	Credit				

[1]*Cumulative GPA is based on all courses taken after a student enters a program.*
[2]*A grade of D is not considered passing for a course that is a prerequisite for any other course.*
[3]*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.*
[4]*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 full-time students earning GPAs of 3.6 to 4.0.

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 final failing grades. Appeal forms are available from department offices. 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 dean.
- **Step 2:** Appeal to the department dean must be made in writing by the student within five days of the instructor appeal conference. The dean 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 *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 receive a warning.
- **Probation:** A student whose cumulative GPA falls below 1.50 in a given term will be placed on probation effective with the following term.
- **Suspension:** After two consecutive terms of probation, a student will be suspended from the program or major for one year. A student who has been suspended must have department dean approval for readmission to the same program or major.

ACADEMIC SUSPENSION: A student who fails for three successive terms to make satisfactory progress toward a certificate or degree will be suspended from T-VI for one year. Academic suspension may not be appealed.

PREREQUISITE COURSES: Before a student may enroll in a course which has prerequisites, the prerequisite courses must be completed satisfactorily. A student may be disenrolled if the prerequisites have not been met.

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.

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.

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 so 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. Free copies of transcripts are provided to students and former students on request at the Records Office. 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.

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.

All students seeking financial aid are urged to inform themselves, through information provided at the Financial Aid Office, of the various rules and regulations pertinent to receiving financial aid.

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.

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.

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

PELL GRANT: U.S. citizens and eligible non-citizens 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, awards range from $930 to $1350 per year for eligible T-VI students who are New Mexico residents enrolled full time in certificate programs. For eligible students enrolled in associate degree programs, grant award amounts depend on the total tuition costs.

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

SUPPLEMENTAL EDUCATIONAL OPPORTUNITY 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 federal and 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-S): 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 300 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 T-VI transcript for the past five years 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 has not completed a certificate 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 supervisor.

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

ARTS AND SCIENCES DEPARTMENT

Arts and Sciences, 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 Arts and Sciences courses have a tuition charge. Science courses also have lab fees (see page 17). Some courses carry prerequisites or corequisites.

General Education

COURSE DESCRIPTIONS

COMMUNICATIONS

ENG 101—Writing with Readings in Exposition (3 cr)
This course stresses expository writing and reading. It concentrates on organizing and supporting ideas in essay writing. Students must pass a first-day diagnostic essay to remain enrolled.

ENG 102—Analytic Writing (3 cr)
(*Prerequisite: ENG 101 with a minimum grade of C*) Students undergo intensive practice writing essays that analyze expository and literary readings.

ENG 119—Technical Communications (3 cr)
(*Prerequisite: ENG 101 with a minimum grade of C*) 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.

ENG 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.

ENG 240—Traditional Grammar (3 cr)
Using traditional grammar, this course is a study of the basic analysis of English sentences. Students are introduced to terminology and methods for identifying parts of speech, functional units of sentences and basic sentence patterns.

ENG 270—Modern Literature (3 cr)
American and European literature of the 20th century is introduced. Works by such authors as Eliot, Faulkner, Fitzgerald, Yeats, Joyce, Ibsen, Camus and Chekhov are emphasized.

ENG 296—American Literature (3 cr)
Students survey literature from colonial to present times. Short stories, poetry, drama and nonfiction are emphasized.

SPCH 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.

SPCH 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.

SPCH 240—Organizational Communication (3 cr)
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

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.)

MATH 121—College Algebra (3 cr)
(*Prerequisite: MATH 120 with minimum grade of C or math placement exam*) This course includes the study of equations, inequalities, graphs, functions, exponential and logarithmic functions, systems of equations and inequalities, and polynomials. This course is preparation for MATH 180.

MATH 123—Trigonometry (2 cr)
(*Prerequisite: MATH 121 or MATH 150 with a minimum grade of C*) Trigonometric functions, radian and degree measure, graphs, basic trigonometric identities and inverse trigonometric functions are covered.

MATH 145—Introduction to Probability and Statistics (3 cr)
(Prerequisite: MATH 120 with a minimum grade of C) This course provides an introduction to basic concepts in probability and statistics—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.

MATH 150—Advanced Algebra (3 cr)
(Prerequisite: MATH 120 with a minimum grade of C or math placement exam) This course emphasizes polynomial, rational, exponential and logarithmic functions, as well as the graphs of these functions. Designed as a preparation for MATH 162, the course includes a study of infinite sequences. Problems and examples are oriented toward the sciences.

MATH 162—Calculus I (4 cr)
(Prerequisite: MATH 150 with a minimum grade of C; pre- or corequisite: MATH 123) 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.

MATH 163—Calculus II (4 cr)
(Prerequisite: MATH 162 with a minimum grade of C) 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.

MATH 180—Elementary Calculus (3 cr)
(Prerequisite: MATH 121 with a minimum grade of C) Students briefly review functions; graphs; limits; derivatives as a rate of change; applications to graphing, maxima, minima and motion; integral as antiderivative and as a sum, applications, exponential and logarithmic functions.

SOCIAL SCIENCE

ANTH 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.

ANTH 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.

ANTH 150—Evolutionary Anthropology (3 cr)
An introduction to the world of biological anthropology and the concepts of organic evolution, this course emphasizes the fossil history of primates and prehistoric man with a consideration of their paleoecological context. Modern primate behavior is considered in terms of its relevance to human evolution.

ANTH 201—Introduction to Southwestern Anthropology (3 cr)
The archaeology of the southwest is presented from the earliest inhabitants through the early 1600's.

ECON 101—Introduction to Economics (3 cr)
Students are introduced to basic economic concepts and developments. Topics include the origins of capitalism, transplantation and adaptation in the New World, and new institutions in America in the 1800s and 1900s.

HIST 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.

HIST 162—History of the United States II (3 cr)
A continuation of HIST 161, this course covers the period from 1877 to the present.

HIST 260—History of New Mexico (3 cr)
The history of New Mexico is covered from Cabeza de Vaca to the present. The borderlands, Spanish, Indian and Anglo contributions are studied.

PSCI 110—The Political World (3 cr)
This introduction to politics emphasizes how people can understand their own political systems and those of others.

PSCI 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.

PSCI 220—Comparative Government and Politics (3 cr)
By considering European, developing and communist regimes and systems, students gain insights into the political history, socioeconomic structure, and contemporary political institutions and behaviors of governments and "the body politic."

PSY 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.

PSY 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.

PSY 220—Developmental Psychology (3 cr)
(Prerequisite: PSY 101 or PSY 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.

SOC 101—Introduction to Sociology (3 cr)
This course covers the basic concepts, topics and theories of contemporary sociology.

SOC 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.

SOC 211—Social Problems (3 cr)
(Prerequisite: SOC 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.

SOC 212—Juvenile Delinquency (3 cr)
(*Prerequisite: SOC 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.

SOC 213—Criminology (3 cr)
(*Prerequisite: SOC 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.

SOC 214—Sociology of Corrections (3 cr)
(*Prerequisite: SOC 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.

SOC 216—Ethnic and Minority Groups (3 cr)
(*Prerequisite: SOC 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.

SOC 225—Marriage and the Family (3 cr)
(*Prerequisite: SOC 101*) Emphasizing influences between large-scale social changes and changes in family composition and interaction, this course analyzes contemporary family and household forms.

SOC 280—Social Science Research (3 cr)
(*Prerequisite: SOC 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.

SOC 296—Topics in Sociology (3 cr)
Topics vary. Students explore an issue in sociology or the works of an influential sociologist.

HUMANITIES

HUM 107—Living World Religions (3 cr)
Major living world religions are introduced. Students study Buddhism, Christianity, Hinduism, Islam and Judaism.

HUM 111—Humanities I (3 cr)
The student is given a comparative introduction to the development of human civilizations from their beginnings through the Middle Ages.

HUM 112—Humanities II (3 cr)
Students are given a comparative introduction to the development of human civilization from the Renaissance through contemporary times.

PHIL 110—Introduction to Philosophical Thought (3 cr)
This course surveys philosophical issues addressed by great thinkers of the Western tradition. Problems concerning values, knowledge, reality, and social, political and religious philosophy are introduced. Some time is given to a comparison of Western philosophical systems with those of the Orient.

PHIL 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.

PHIL 241—Topics in Philosophy (3 cr)
Topics vary. Students explore a major philosophic issue or give special attention to a great philosopher's works.

PHIL 245B—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.

PHIL 245E—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.

PHIL 245M—Biomedical Ethics (3 cr)
This course examines ethical problems associated with the fields of medicine and bio-research. Moral issues such as euthanasia, genetic experimentation, informed consent and abortion are viewed from widely different moral perspectives.

NATURAL SCIENCE

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

BIO 124L—Biology for Health Sciences/Lab (1 cr)
(*Corequisite: BIO 123*) Laboratory exercises, demonstrations and dissections related to cell biology, organ systems and genetics are conducted.

BIO 201—Microbiology for Health Sciences (3 cr)
(*Prerequisites: BIO 123, BIO 124L or permission of instructor; corequisite: BIO 211L*) Through lecture instruction, this course introduces the concepts of microbiology, host-parasite relationships, infection and immunity.

BIO 211L—Microbiology Lab for Health Sciences (1 cr)
(*Prerequisites: BIO 123, BIO 124L; corequisite: BIO 201*) In three-hour-per-week laboratory sessions, students study laboratory techniques with microorganisms and observe the growth of microorganisms, control and sanitation procedures.

BIO 237—Anatomy and Physiology I (3 cr)
(*Prerequisites: BIO 123, BIO 124L; corequisite: BIO 247L*) This course is an introduction to basic anatomy and physiology with an emphasis on normal anatomical structure and function.

BIO 247L—Anatomy and Physiology I Lab (1 cr)
(*Prerequisites: BIO 123, BIO 124L; corequisite: BIO 237*) This course provides laboratory experience studying cells, tissues and human systems. Dissection of specimens is included.

BIO 238—Anatomy and Physiology II (3 cr)
(*Prerequisites: BIO 237, BIO 247L; corequisite: BIO 248L*) This course is a continuation of BIO 237 emphasizing physiological processes, both normal and abnormal.

BIO 248L—Anatomy and Physiology II Lab (1 cr)
(Prerequisites: BIO 237, BIO 247L; corequisite: BIO 238) This course provides laboratory experience focusing on measurement of physiological parameters and dissection of mammal specimens.

CHEM 111—Introduction to Chemistry (3 cr)
(Corequisite: CHEM 112L) This course is designed for nonscience majors in the health sciences. Instruction is provided in the basic concepts of chemistry.

CHEM 112L—Introduction to Chemistry/Lab (1 cr)
(Corequisite: CHEM 111) Laboratory instruction, demonstration and experimentation are the focus of this course.

CHEM 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.

PHYS 102—Introduction to Physics (3 cr)
This general-interest course for nonscience or science majors introduces the basic concepts and phenomena of physics. In conjunction with practical demonstrations and applications, the course is descriptive. Students need only a minimum of elementary mathematics.

PHYS 151—Physics (3 cr)
(Prerequisite: MATH 121 or MATH 150 or MATH 180; corequisite: PHYS 153L) Through lectures and demonstrations, this course is a study of mechanics, sound and heat. This is a noncalculus-based course which satisfies premedical, predental, preoptometry, and certain technologies requirements.

PHYS 153L—Physics Lab (1 cr)
(Corequisite: PHYS 151) Experimental technique and demonstration of the principles and phenomena of physics are the focus of experiments in mechanics, heat and sound.

PHYS 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.

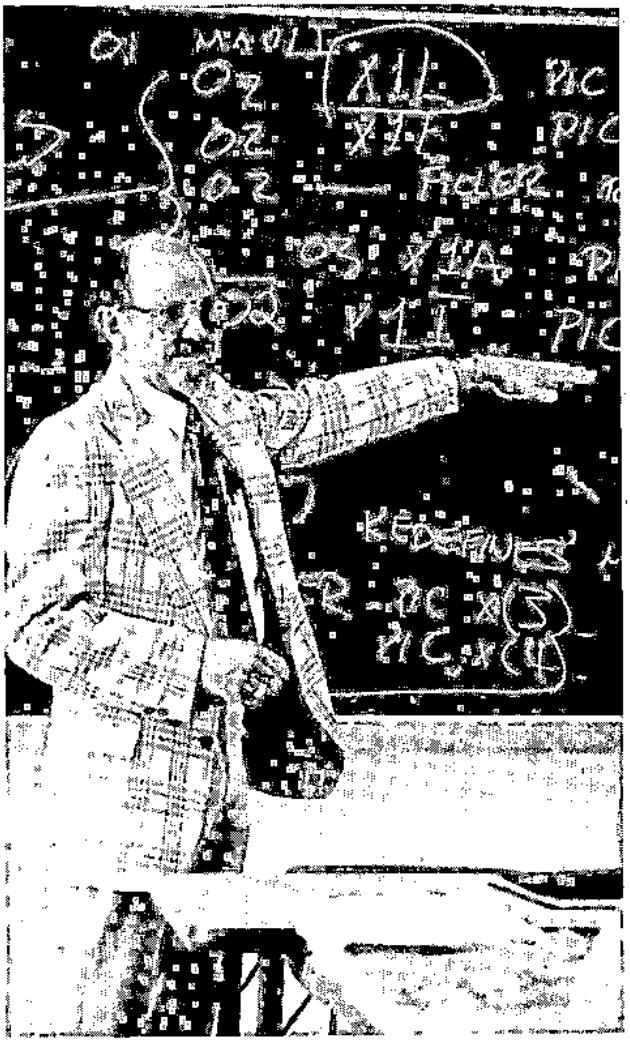
PHYS 163L—General Physics Lab (1 cr)
(Corequisite: PHYS 160) Topics introduced in the lecture corequisite are explored in the laboratory.

PHYS 167—Problems in General Physics (1 cr)
(Corequisite: PHYS 160—offered on an audit basis only) Students participate in problem-solving sessions and demonstrations related to PHYS 160.

GENERAL ELECTIVES

ART 101—Introduction to Art (3 cr)
Students are introduced to the fundamental concepts of visual arts as well as the language of form and the mediums of artistic expression. Instruction centers around readings and slide presentations. Some museum exhibition attendance may be required.

CSCI 101—Computer Literacy (3 cr)
This introductory course provides lecture and laboratory instruction in the use of computers. Lecture topics emphasize understanding of how computers work. Lab time covers the basics of software application.



CSCI 155L—Introduction to Computer Programming (4 cr)
This course is an introduction to the skill of computing. Understanding the relationship between computing and problem solving, using programs written in PASCAL, is the main objective.

HEC 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.

MUSC 139—Music Appreciation I (3 cr)
Concentrating on compositions from chamber music and symphonic literature, students expand their abilities to listen actively. This course is nontechnical and may require attending musical performances.

SPAN 101—Elementary Spanish I (3 cr)
Designed for students with no previous exposure to Spanish, this course develops all four language skills. Emphasis is on listening, comprehension and speaking.

SPAN 102—Elementary Spanish II (3 cr)
(Prerequisite: SPAN 101) Students continue development of listening and speaking skills. More emphasis is placed on reading and writing.

CREDIT BY EXAMINATION

Students may earn a maximum of 30 credit hours toward general education requirements through the following:

1) Advanced Placement (AP)
2) College Level Examination Program (CLEP) (subjects exams only)
3) T-VI Challenge Exams
4) Correspondence Courses

AP and CLEP exams and scores are as follows:

1) ADVANCED PLACEMENT

T-VI Course	AP	Minimum Score	Cr
BIO 121L/122L	Biology	3	8
CHEM 121L/122L	Chemistry	3	8
ENG 101 & 102	English Language & Composition	3	6
ENG 101 & 102	English Literature & Composition	3	6
HIST 101 & 102	European History	4	6
HIST 161 & 162	American History	4	6
MATH 162	Calculus AB	3	4
PHYS 151, 153L	Physics B	4	4
PHYS 160, 163L	Physics C	4	4
SPAN 101 & 102	Spanish Language	3	6

2) COLLEGE LEVEL EXAMINATION PROGRAM

T-VI Course	CLEP	Minimum Score	Cr
CHEM 121L/122L	General Chemistry	52	8
ECON 200	Introduction to Macroeconomics	55	3
ECON 201	Introduction to Macroeconomics	55	3
ENG 101	Freshman English*	51	3
ENG 102	College Composition*	57	3
ENG 150	Analysis & Interpretation of Literature*	55	3
ENG 296	American Literature*	50	3
HIST 101 & 102	Western Civilization I & II	50	6
MATH 121	College Algebra	56	3
MATH 123	Trigonometry	61	2
MATH 162	Calculus with Elementary Functions*	60	4
PSCI 200	American Government	55	3
PSY 220	Human Growth & Development	52	3
SOC 101	Introduction to Sociology	52	3
SPAN 101	College Spanish	40	3
SPAN 101 & 102	College Spanish	45	6

*Exam is no longer available; credit is awarded for exams taken previously.

Scores on CLEP and AP must be forwarded to the T-VI Records Office. Scores are considered *official* if they are:

- Sent directly from the Testing Center.
- Original scores forwarded to the student clearly show no tampering. (In this case, the student surrenders this copy.)
- *AP* scores are included on high school or college transcripts as part of the student's permanent record.

The student's transcript will reflect a grade of CR (credit) for those courses with acceptable CLEP or AP scores. The transcript also will show the credits were obtained by examination. *CR grades are not computed in the student's GPA. Credits count toward graduation but not residency.*

3) CHALLENGE EXAMS

The Arts and Sciences Department has developed challenge examinations for some general education courses. Exams are scheduled during the last week of each term.

Courses that may be challenged are:

BIO 237	Anatomy & Physiology I (lecture)
BIO 247L	Anatomy & Physiology I (lab)
BIO 238	Anatomy & Physiology II (lecture)
BIO 248L	Anatomy & Physiology II (lab)
CSCI 101	Computer Literacy
HEC 125	Nutrition
PSY 101	General Psychology I
PSY 102	General Psychology II

To challenge a course, a student must:

- Obtain a "challenge exam form" and approval from the Arts and Sciences 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 schedule the exam through the Arts and Sciences Office, A-102 on Main Campus.
- Present picture I.D. at exam site.

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 CR (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 might not be accepted by other postsecondary institutions.

4) CORRESPONDENCE COURSES

General education credit may be granted for a maximum of three courses completed by correspondence through a regionally accredited institution.

DEVELOPMENTAL STUDIES DEPARTMENT

Preparatory Program

1 or 2 Terms (Main and Montoya Campuses)

The Preparatory Program offers a variety of courses designed to help students meet admission requirements for certificate and associate degree programs, other degree-granting institutions, and 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.

Preparatory courses are graded S, P, U. They do not earn credit toward certificate or associate degree programs at T-VI, nor do they transfer to other degree-granting institutions. 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.

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

PREPARATORY PROGRAM

Recommended Schedule for Certificate Programs	*Hrs Wk*	*Cr Hrs*
Mathematics	10	6
Communications	5	3

A variety of additional courses may be selected from:

Language Skills	5	3
Science	5	3

Instead of communications, students with low reading test scores should take one of the following courses:

Language Development	10	6
Prep Language	10	6

Students needing to remove American College Test (ACT) deficiencies should select from the following courses:

ENG	100	Writing Standard English	5	3
MATH	100	Introductory Algebra	10	6
SCIE	100	Introduction to Natural Sciences	5	3
SSCI	100	Introduction to Social Sciences	5	3

Pre-GED Courses:

MATH	013	Prep Math (ABE)	10	6
LANG	023	Language Development (ABE)	10	6
LANG	053	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.

MATH 011—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 MATH SERIES I for their selected majors or MATH 100.

MATH 012—Prep Math II (6 cr)
(*Prerequisite: MATH 011*) This course is for students who progressed satisfactorily in MATH 011 but have not completed the requirements for transfer into MATH SERIES I for their selected majors or MATH 100.

MATH 013—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 MATH 011 but is designed specifically to prepare students for the math portion of the GED test.

MATH SERIES I—Prep Major Math I for Business Occupations, Culinary Arts, Health Occupations, 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.

MATH SERIES II—Prep Major Math II for Business Occupations, Culinary Arts, Health Occupations, Technologies or Trades (6 cr)
(*Prerequisite: MATH SERIES I*) This course is for students who progressed satisfactorily in MATH SERIES I but have not completed the entry-level mathematics requirements for transfer into their selected majors.

MATH 099—Refresher Math (3 cr)
This is a six-week review of 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.*

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 MATH 011 course prior to enrolling in MATH 100.

LANGUAGE SKILLS

Courses are offered on two 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. Reading improvement courses also are available.

LANG 011—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.

LANG 012—Prep Language II (6 cr)
(*Prerequisite: LANG 011*) This course is for students who progressed satisfactorily in LANG 011 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.

LANG 021—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.

LANG 022—Language Development II (6 cr)
(*Prerequisite: LANG 021*) This course is for students who progressed satisfactorily in LANG 021 but did not attain the skills required to transfer into a preparatory reading course or the occupational field selected. Class meets two hours per day.

LANG 023—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 LANG 021, 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.

LANG 041—Prep Reading I (3 cr)
This course complements LANG 011. Students with limited English proficiency develop effective reading and writing skills which help them become successful participants in T-VI preparatory reading courses.

LANG 042—Prep Reading II (3 cr)
(*Prerequisite: LANG 041*) This course, as a complement to LANG 012, is for students who progressed satisfactorily in LANG 041 but did not develop effective reading and writing skills necessary for successful preparatory reading and communication courses.

LANG 051—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.

LANG 053—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 LANG 051, but the course is designed specifically to prepare students for the reading portion of the GED test.

LANG 061—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.

LANG 071—Spanish for Beginners I (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.*

LANG 072—Spanish for Beginners II (3 cr)
(*Prerequisite: LANG 071*) This course is a continuation of LANG 071. *It is offered on demand. This course is not eligible for Veterans Administration benefits.*

ENG 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 ENG 100 signifies that the student is prepared to enter ENG 101. Depending on reading and writing abilities, a student may be required to complete satisfactorily LANG 021 prior to enrolling in ENG 100.

COMMUNICATIONS—SURVEY

Occupational applications of speaking, reading and writing are taught. Students are provided an opportunity to further explore and define their career fields.

COMM SERIES—Communications for Majors in Business Occupations, Health Occupations, 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.

SURV SERIES—Survey of Majors in Business Occupations, Health Occupations, 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.*

SURV 071—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.*

SOCIAL SCIENCE

SSCI 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 SSCI 100 signifies that the student is prepared to enter the introductory course in any of the social science disciplines. Students enrolled in LANG 021 must satisfactorily complete that course prior to enrollment in SSCI 100.

NATURAL SCIENCE

SCIE 011—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.

SCIE 012—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.

SCIE 013—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 Accounting, Data Processing, Electronics and other majors dealing with trouble-shooting, and for students weak in math.

SCIE 014 (first 7½ weeks)
SCIE 015 (second 7½ weeks)—Introduction to the Calculator (2 cr)
This 7½-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.*

SCIE 100—Introduction to Natural Sciences (3 cr)
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 SCIE 100 signifies that the student is prepared to enter the introductory course in any of the natural science disciplines. Students enrolled in LANG 021 must satisfactorily complete that course prior to enrollment in SCIE 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, or directly by the interested student.

Support Courses	*Hrs Wk*	*Cr Hrs*
Mathematics	10	6
Language	10	6
Targeted Instruction	5	3
Pretraining for Trades	5	3
Employability Skills	5	3

COURSE DESCRIPTIONS

MATH 021—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.

MATH 022—SS Prep Math II (6 cr)
(*Prerequisite: MATH 011 or MATH 021*) This course is for students who have progressed satisfactorily in MATH 011 or MATH 021 but have not completed the requirements for MATH SERIES I or MATH 100. The class meets two hours per day.

LANG 031—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.

LANG 032—SS Language II (6 cr)
(*Prerequisite: LANG 021 or LANG 032*) This course is for students who have progressed satisfactorily in LANG 021 or LANG 032 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.

SSVC 001—Targeted Instruction I (3 cr)
This course provides intensive, individualized instruction to students who have potential for participation in certificate majors or academic programs but need concentrated help to complete the Preparatory Program. Students receive daily, individualized tutoring in a classroom setting.

SSVC 002—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.

SSVC 003—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.

SSVC 004—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.

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 7 a.m. to 9 p.m. Monday through Thursday, 7 a.m. to 5 p.m. Friday, and 10 a.m. to 2 p.m. Saturday. For information, phone 298-5461.

The fee is $20 per course.

SUBJECT/SKILL AREAS

Typing I
Typing II
Typing III, Montoya Campus
Typing Speedbuilding
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
Legal Transcription
Medical Transcription
Medical Terminology
Cash Register Operation, Montoya Campus
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.

Typing Speedbuilding
(*Prerequisite: 25 words per minute typing skill*) This course improves typing accuracy and speed using championship methodology.

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.

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

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

Medical Terminology
This course familiarizes students with medical terminology. Students develop the vocabulary and knowledge needed for typing and transcribing medical documents. Various areas of medicine are covered.

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, BASIC Programming, Word Processing, Electronic Spreadsheet and Database Management. Computer Literacy is a prerequisite for all other microcomputer courses listed above.

Lotus 1-2-3
(*Prerequisite: 25 words per minute typing skill*) 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 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.

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 247-9579.

CONTINUING EDUCATION DIVISION COURSE SUBSTITUTIONS

Some Continuing Education Division courses may be substituted for Instructional Division business occupations courses. Classes that substitute are marked with a ✹ in the Continuing Education Division section of this catalog.

Continuing Education Division Course	*Substitutes for:*	*Instructional Division Program*
SK 110 Accounting Principles I and SK 110A Accounting Principles II	ACCT 101L Accounting Principles Lab I	Accounting and Business Administration
SK 110 Accounting Principles I	SS 112 Secretarial Accounting	Secretarial Studies
SK 112 Accounting Principles III and SK 112A Accounting Principles IV	ACCT 102L Accounting Principles Lab II	Accounting and Business Administration
SK 113 Auditing	ACCT 271 Auditing	Accounting
SK 114 Secretarial Accounting	SS 112 Secretarial Accounting	Secretarial Studies
SK 115 Tax Accounting I	ACCT 210 Tax Accounting I	Accounting and Business Administration
SK 115A Tax Accounting II	ACCT 241 Tax Accounting II	Accounting
SK 116 Cost Accounting	ACCT 260 Cost Accounting	Accounting
SK 120 Business Mathematics and Calculators	ACCT 111 Accounting Math/ Calculators SS 111 Business Mathematics and Calculators	All BOD Programs
SK 121 Financial Analysis	BA 201L Financial Analysis	Accounting and Business Administration
SK 122 Investments	BA 240 Investments	Accounting and Business Administration
SK 123 Governmental Accounting	ACCT 270 Governmental Accounting	Accounting
SK 124 Money and Banking	BA 215 Money and Banking	Accounting and Business Administration
SK 156 Alphabetic Shorthand (50 wpm required)	SS 135 ABC Shorthand I	Secretarial Studies
SK 160 Beginning Shorthand (50 wpm required)	SS 134 Gregg Shorthand I	Secretarial Studies
SK 161 Intermediate Shorthand (70 wpm required)	SS 136 Shorthand II	Secretarial Studies
SK 163 Machine Transcription	SS 250 Machine Transcription	Secretarial Studies
SK 165 Beginning Typing and SK 166 Intermediate Typing (50 wpm required)	SS 101L Typing Lab I	Secretarial Studies
SK 173 Human Relations and Personnel Development	BA 131 Human Relations	All BOD Programs
SK 180 Small Business Management	BA 133 Principles of Management	All BOD Programs
SK 182 Business Law	BA 211 Business Law	All BOD Programs
SK 380A Microcomputing Today	BA 150 Introduction to Computer Processing	Accounting and Business Administration
SK 380A Microcomputing Today	SS 132 Information Processing Concepts	Secretarial Studies
SK 411 Salesmanship	BA 284 Salesmanship	Business Administration
SK 412 Marketing and Retailing	BA 222 Principles of Marketing	Business Administration

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 occupational and general education courses. A certificate is awarded to students who complete the occupational component. Proficiency certificates are awarded for each course completed.

Students have an employable skill after completing all occupational 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 Developmental Studies Department, Business Occupations Learning Centers and Continuing Education Division.

Some T-VI Continuing Education Division courses may be substituted for courses in the Accounting program (see list on page 33). *Several courses in this program may be transferred to four-year institutions (see Accounting program advisor).*

A student may elect to accept full-time training-related employment during the last term of the program. This option is available after midterm only for occupational courses and if the student is in good academic standing. Students are responsible for completing course requirements and should see the program advisor for details.

A $15 supply fee is charged each term.

ACCOUNTING PROGRAM

			Hrs Wk	Cr Hrs
Term I				
ACCT	101L	Accounting Principles Lab I...	10	6
ACCT	111	Accounting Math/Calculators	5	3
BA	113	Introduction to Business (7½ weeks)	5	2
BA	121	Business Communications I ...	5	3
BA	131	Human Relations (7½ weeks) .	5	2
*SPCH	221	Interpersonal Communication..		3
Term II				
ACCT	102L	Accounting Principles Lab II ..	10	6
BA	122	Business Communications II...	5	3
BA	133	Principles of Management.....	5	3
BA	150	Introduction to Computer Processing.....	5	3
		*Social Science/Humanities Elective		3
Term III				
ACCT	201L	Intermediate Accounting Lab I.	5	3
ACCT	240	Tax Accounting I.....	5	3
ACCT	250	Accounting Computer Lab I...	5	3
ACCT	260	Cost Accounting.....	5	3
*MATH	120	Intermediate Algebra.....		3
		Support Course.....	5	3
Term IV				
ACCT	202L	Intermediate Accounting Lab II	5	3
ACCT	251	Accounting Computer Lab II ..	5	3
BA	211	Business Law	5	3
*ENG	101	Writing with Readings in Exposition (this course may be taken any term)		3
*MATH	145	Introduction to Probability and Statistics.....		3
		Two (2) Accounting Support Courses.....	10	6
		Totals	1500	76
Accounting Support Courses				
ACCT	241	Tax Accounting II	5	3
ACCT	270	Governmental Accounting.....	5	3
ACCT	271	Auditing	5	3
ACCT	272	Accounting Systems Design ...	5	3
ACCT	280	Managerial Accounting.....	5	3
ACCT	290	Advanced Accounting.....	5	3
Support Courses				
ACCT	298	Supervised Work Experience ..	10	6
BA	201L	Financial Analysis	5	3
BA	215	Money and Banking	5	3
BA	226	Principles of Finance.....	5	3
BA	240	Investments	5	3
*ECON	101	Principles of Economics.....	5	3

**General education courses (required for associate degree unless listed as a support course). Course descriptions on pages 22–25.*

COURSE DESCRIPTIONS

ACCT 101L—Accounting Principles Lab I (6 cr)
(*Prerequisite or corequisite: ACCT 111*) This is an introductory course in the theory and practice of accounting.

ACCT 102L—Accounting Principles Lab II (6 cr)
(*Prerequisites: ACCT 101L, ACCT 111*) 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.

ACCT 111—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.

ACCT 201L—Intermediate Accounting Lab I (3 cr)
(*Prerequisite: ACCT 102L*) 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. Emphasis is on the asset side of the balance sheet.

ACCT 202L—Intermediate Accounting Lab II (3 cr)
(*Prerequisite: ACCT 201L*) Accounting for current and long-term liabilities, capital stock transactions, dividends, retained earnings, income tax allocation, cash flow statements, and analysis and interpretation of financial statements are covered in this course.

ACCT 240—Tax Accounting I (3 cr)
(*Prerequisite: ACCT 101L*) This course primarily examines the fundamental characteristics of federal income taxes as applied to individuals.

ACCT 241—Tax Accounting II (3 cr)
(*Prerequisite: ACCT 240*) This course examines corporations, estate and gift taxes, fiduciaries, tax planning and tax shelters.

ACCT 250—Accounting Computer Lab I (3 cr)
(*Prerequisites: ACCT 101L, BA 150*) This microcomputer lab includes electronic spreadsheets and microcomputer accounting. Students use prepared business software to solve business problems.

ACCT 251—Accounting Computer Lab II (3 cr)
(*Prerequisites: ACCT 101L, BA 150*) This microcomputer lab includes payroll, inventory control, accounts payable, and general ledger. Students use prepared integrated business software on microcomputers.

ACCT 260—Cost Accounting (3 cr)
(*Prerequisite: ACCT 102L*) This course emphasizes job order and process costing for construction and manufacturing.

ACCT 270—Governmental Accounting (3 cr)
(*Prerequisite: ACCT 102L*) This course provides the student with training in accounting for governmental and other non-profit entities.

ACCT 271—Auditing (3 cr)
(*Prerequisite: ACCT 102L*) Auditing procedure, and reports and working papers are studied and analyzed. Audit practices for 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.

ACCT 272—Accounting Systems Design (3 cr)
(*Prerequisite: ACCT 102L*) Students study systems development through the design of a chart of accounts, an accounting manual, flow charts, control and support systems and reports to management.

ACCT 280—Managerial Accounting (3 cr)
(*Prerequisite: ACCT 102L*) Students learn how accounting data can be interpreted and used by management in planning and controlling business activities.

ACCT 290—Advanced Accounting (3 cr)
(*Prerequisite: ACCT 201L*) Accounting for installment and consignment sales, advanced partnership accounting, and accounting for business combinations are covered.

ACCT 298—Supervised Work Experience (6 cr)
(*Prerequisite: ACCT 102L*) 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.

BA 113—Introduction to Business (7½ 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.

BA 121—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.

BA 122—Business Communications II (3 cr)
(*Prerequisites: BA 121 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.

BA 131—Human Relations (7½ weeks) (2 cr)
This course deals with employee attitudes toward themselves and others. The importance of interpersonal relationships and the work ethic is stressed.

BA 133—Principles of Management (3 cr)
This introductory course helps the student understand basic management functions including planning, organizing, staffing, directing and controlling.

BA 150—Introduction to Computer Processing (3 cr)
(*Prerequisite: 25 words a minute typing skill*) This course introduces automated information systems, computer hardware, data entry, business software applications and BASIC programming language. Hands-on experience with microcomputers is provided.

BA 201L—Financial Analysis (3 cr)
(*Prerequisite: ACCT 102L*) This course covers the gathering and analysis of financial data in a manner that aids management in the decision-making process.

BA 211—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.

BA 215—Money and Banking (3 cr)
(*Prerequisite: ACCT 102L*) This course covers the history, nature and function of money. Methods of institutional control and theories of monetary policy are included.

BA 226—Principles of Finance (3 cr)
(*Prerequisite: ACCT 102L*) 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.

BA 240—Investments (3 cr)
(*Prerequisite: ACCT 102L*) Students study investment analysis, management, objectives, values and risks.

Business Administration

3 Terms (Main and Montoya Campuses)

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 Developmental Studies Department, Business Occupations Learning Centers and Continuing Education Division.

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 33). *Several courses in this program may be transferred to four-year institutions (see Accounting program advisor).*

A student may elect to accept full-time training-related employment during the last term of the program. This option is available after midterm only for occupational courses and if the student is in good academic standing. Students are responsible for completing course requirements and should see the program advisor for details.

A $15 supply fee is charged each term.

BUSINESS ADMINISTRATION PROGRAM

			Hrs Wk	Cr Hrs
Term I				
ACCT	101L	Accounting Principles Lab I ...	10	6
ACCT	111	Accounting Math/Calculators ..	5	3
BA	113	Introduction to Business (7½ weeks)	5	2
BA	121	Business Communications I ...	5	3
BA	131	Human Relations (7½ weeks) .	5	2
Term II				
ACCT	102L	Accounting Principles Lab II ..	10	6
BA	122	Business Communications II...	5	3
BA	133	Principles of Management.....	5	3
BA	150	Introduction to Computer Processing	5	3
Term III				
BA	201L	Financial Analysis	5	3
BA	211	Business Law	5	3
BA	222	Principles of Marketing	5	3
BA	284	Salesmanship.....	5	3
		Support Course.....	5–10	3–6
		Totals	1125–1200	46–49
Support Courses				
ACCT	240	Tax Accounting I.....	5	3
ACCT	260	Cost Accounting.....	5	3
ACCT	272	Accounting Systems Design ...	5	3
BA	111	Communications (7½ weeks)..	5	2
BA	215	Money and Banking	5	3
BA	226	Principles of Finance.....	5	3
BA	240	Investments	5	3
BA	250	Merchandising.....	5	3
BA	260	Purchasing	5	3
BA	298	Supervised Work Experience ..	10	6
*ECON	101	Principles of Economics.....	5	3
ENTR	101L	Entrepreneurship Lab	10	6

**General education course. Course description on page 23.*

COURSE DESCRIPTIONS

ACCT 101L—Accounting Principles Lab I (6 cr)
(Prerequisite or corequisite: ACCT 111) This is an introductory course in the theory and practice of accounting.

ACCT 102L—Accounting Principles Lab II (6 cr)
(Prerequisites: ACCT 101L, ACCT 111) This is a continuation of ACCT 101L. 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 minimal supervision—should be a competent bookkeeper for most small business organizations.

ACCT 111—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.

ACCT 240—Tax Accounting I (3 cr)
(*Prerequisites: ACCT 101L*) This course primarily examines the fundamental characteristics of federal income taxes as applied to individuals.

ACCT 260—Cost Accounting (3 cr)
(*Prerequisite: ACCT 102L*) 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.

ACCT 272—Accounting Systems Design (3 cr)
(*Prerequisite: ACCT 102L*) Students study systems development through the design of a chart of accounts, an accounting manual, flow charts, control and support systems and reports to management.

BA 111—Communications (7½ weeks) (2 cr)
(*Offered for Trades and Technologies students only*) The primary focus of this course is to develop effective communications skills. Course content includes fundamentals of grammar, punctuation and word usage. Effective expression in written communications is stressed.

BA 113—Introduction to Business (7½ 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.

BA 121—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.

BA 122—Business Communications II (3 cr)
(*Prerequisites: BA 121 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.

BA 131—Human Relations (7½ weeks) (2 cr)
(*Available also for Trades and Technologies students*) This course deals with employee attitudes toward themselves and others. The importance of interpersonal relationships and the work ethic is stressed.

BA 133—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.

BA 150—Introduction to Computer Processing (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 BASIC programming language. It provides hands-on experience with microcomputers.

BA 201L—Financial Analysis (3 cr)
(*Prerequisite: ACCT 102L*) This course covers the gathering and analysis of financial data in a manner that aids management in the decision-making process.

BA 211—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.

BA 215—Money and Banking (3 cr)
(*Prerequisite: ACCT 102L*) This course covers the history, nature and function of money. Methods of institutional control and theories of monetary policy are included.

BA 222—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.

BA 226—Principles of Finance (3 cr)
(*Prerequisite: ACCT 102L*) 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.

BA 240—Investments (3 cr)
(*Prerequisite: ACCT 102L*) Students study investment analysis, management, objectives, values and risks.

BA 250—Merchandising (3 cr)
(*Prerequisite: BA 133*) This course covers the elements of merchandising which include the buying function, pricing, personnel, dollar planning, sales promotion, inventory control, financial controls, turnover, customer and human relations.

BA 260—Purchasing (3 cr)
(*Prerequisite: BA 133*) This course studies problems involved in wholesale purchasing. Topics covered include financial and trade discounts, economic order quantities, seasonal price movements, anti-trust law relating to price discounts, transportation (shipping) considerations, and inventory control practices.

BA 284—Salesmanship (3 cr)
Personal selling skills are accented along with how to promote oneself, goods and services.

BA 298—Supervised Work Experience (6 cr)
(*Prerequisite: ACCT 102L*) 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.

ENTR 101L—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.

Cashier-Sales

1 Term (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 entry-level jobs in retail 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 and a computerized cash register/scanner.

The 15-week program provides up to 225 hours of classroom instruction and a minimum of 150 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

Course Requirements			*Hrs Wk*	*Cr Hrs*
CASH	101L	Cashier-Sales Lab	15	9
CASH	198	Supervised Work Experience	10	6
		Totals	375	15

COURSE DESCRIPTIONS

CASH 101L—Cashier-Sales Lab (9 cr)

Fundamentals of cashiering, merchandising math and retail salesmanship are taught in this course. Human and customer relations are covered extensively.

CASH 198—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.

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

Course Requirement			*Hrs Wk*	*Cr Hrs*
ENTR	101L	Entrepreneurship Lab	10	6
		Totals	150	6

COURSE DESCRIPTION

ENTR 101L—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 $15 supply fee is charged each term.

ASSOCIATE IN APPLIED SCIENCE/ LEGAL ASSISTANT STUDIES

			Cr Hrs
Term I			
*CSCI	101	Computer Literacy	3
*ENG	101	Writing with Readings in Exposition	3
LAS	101	Introduction to Legal Assistant Studies	3
LAS	122	Survey of Civil Practice with Emphasis on Torts	3
*PSY		General Psychology Elective	3
Term II			
*ENG	119	Technical Communications	3
LAS	102	Business Organizations	3
LAS	111	American Law and Ethics	3
LAS	121	Legal Research and Effective Use of Legal Materials	3
*SPCH	221	Interpersonal Communication	3
Term III			
LAS	201	Contract Law	3
LAS	202	Legal Analysis and Writing	3
LAS	203	Civil Litigation, Investigation and Discovery	3
*MATH	120	Intermediate Algebra	3
*PSCI	200	U.S. Politics	3
Term IV			
LAS	211	Real Estate Law	3
LAS	221	Wills, Probate and Estate Planning	3
LAS	298	Supervised Work Experience	6
*MATH	145	Introduction to Probability and Statistics	3
		Support Course	3
		Total	63

Note: All first- and second-term core courses are prerequisites for third- and fourth-term core courses.

**General education courses. Course descriptions on pages 22–25.*

Support Courses			
ACCT	101L	Accounting Principles Lab I	3
LAS	230	Advanced Civil Litigation	3
LAS	232	Personal Injury: Legal and Medical Aspects	3
LAS	234	Administrative Law	3
LAS	236	Discrimination/Labor/Employer-Employee Relations	3

COURSE DESCRIPTIONS

ACCT 101L—Accounting Principles Lab I (6 cr)
(*Prerequisite or corequisite: ACCT 111*) This is an introductory course in the theory and practice of accounting.

LAS 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.

LAS 102—Business Organizations (3 cr)
(*Prerequisites: LAS 101, LAS 122*) Various types of business entities including corporations, partnerships, joint ventures and sole proprietorships are examined in this course.

LAS 111—American Law and Ethics (3 cr)
(*Prerequisites: LAS 101, LAS 122*) 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.

LAS 121—Legal Research and Effective Use of Legal Materials (3 cr)
(*Prerequisites: CSCI 101, ENG 101, LAS 101, LAS 122*) The student is introduced to use of legal materials and performs basic legal research using primary and secondary legal sources.

LAS 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.

LAS 201—Contract Law (3 cr)
(*Prerequisites: All core courses in first two terms*) This course is an introduction to the law of contracts, rights and responsibilities, consideration, types of contracts, remedies and assignments.

LAS 202—Legal Analysis and Writing (3 cr)
(*Prerequisites: All core courses in first two terms*) The student is introduced to the reading of case law and writing of abstracts, memoranda and analyses of cases.

LAS 203—Civil Litigation, Investigation and Discovery (3 cr)
(*Prerequisites: All core courses in first two terms*) 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.

LAS 211—Real Estate Law (3 cr)
(*Prerequisites: All core courses in first two terms*) 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.

LAS 221—Wills, Probate and Estate Planning (3 cr)
(*Prerequisites: All core courses in first two terms*) This course covers drafting of wills and trusts, administration of estates, formal and informal probate proceedings and estate tax returns.

LAS 230—Advanced Civil Litigation (3 cr)
(*Prerequisite: LAS 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.

LAS 232—Personal Injury: Legal and Medical Aspects (3 cr)
(*Prerequisite: LAS 122*) This course deals with personal injuries and litigation in the areas of tort, workers' compensation and social security.

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

LAS 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.

LAS 298—Supervised Work Experience (6 cr)
(*Prerequisites: All core 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.

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

Course Requirements			*Hrs Wk*	*Cr Hrs*
LOW	101L	Legal Terminology/Procedures	5	3
LOW	111	Word Processing Concepts (7½ weeks)	5	2
LOW	112	Word Processing Operation (7½ weeks)	5	2
LOW	113	Grammar/Punctuation	5	3
LOW	114	Legal Typing	5	3
		Totals	300	13

COURSE DESCRIPTIONS

LOW 101L—Legal Terminology/Procedures (3 cr)
Meaning and spelling of legal terminology, familiarization with legal procedures, and client relationships are included in this course.

LOW 111—Word Processing Concepts (7½ weeks) (2 cr)
This introductory course helps the student understand the purpose, organization and application of word processing in the legal field.

LOW 112—Word Processing Operation (7½ weeks) (2 cr)
Students receive an introduction to operation of text-editing word processors with emphasis on the capabilities and mechanics of the machines.

LOW 113—Grammar/Punctuation (3 cr)
Students review grammar, punctuation and spelling, and are encouraged to develop oral communication and listening skills.

LOW 114—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.

Secretarial Studies

4 Terms (Main and Montoya Campuses)

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 secretarial graduate has a choice of seeking employment in many fields: legal, medical, governmental, technical, service and educational.

The Secretarial Studies student has four options for successful completion of training goals:

Certificate Programs

First two terms	Receptionist Certificate
Three terms	Clerical Certificate
Three terms plus shorthand	Secretarial Certificate

Degree Program

Four terms	Associate Degree

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 are they all offered 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.

An associate degree may be earned by completing four terms of occupational courses, including shorthand, and 15 credit hours of general education courses.

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

A student may elect to accept full-time training-related employment during the last term of the program. This option is available after midterm only for occupational courses and if the student is in good academic standing. Students are responsible for completing course requirements and should see the program advisor for details.

An entering student with a strong background in clerical or secretarial skills may challenge 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 a Bachelor's Degree in Business Education (see Secretarial Studies program advisor).

Some T-VI Continuing Education Division courses may be substituted for courses in the Secretarial Studies program (see list on page 33).

A $15 supply fee is charged each term.

SECRETARIAL STUDIES PROGRAM

			Hrs Wk	Cr Hrs
Term I				
[1]BA	113	Introduction to Business (7½ weeks)	5	2
[2]BA	131	Human Relations (7½ weeks)	5	2
[3]SPCH	221	Interpersonal Communication		3
SS	101L	Typing Lab I	10	6
SS	111	Business Math/Calculators	5	3
SS	121	Office Communications I	5	3
SS	132	Information Processing Concepts (7½ weeks)	5	2

Term II

SS	102L	Typing Lab II	10	6
SS	122	Office Communications II	5	3
SS	133	Word Processing	5	3
[4]SS	134	Shorthand I (Gregg)	5	3
or				
SS	135	Shorthand I (Alphabetic)	5	3
		[3]General education elective		3

Term III

[1]ENG	101	Writing with Readings in Exposition		3
SS	112	Secretarial Accounting	5	3
[4]SS	136	Shorthand II	5	3
SS	201L	Information Processing Lab	10	6
or				
SS	202L	Medical Records/Receptionist Lab	10	6
or				
SS	203L	Office Simulation Lab	10	6
or				
SS	298L	Supervised Work Experience	10	6
		[3]Social Science/Humanities Elective		3

Term IV

[1]MATH	120	Intermediate Algebra		3
SS	230	Office Communications III	5	3
[4]SS	234	Shorthand III	5	3
SS	250	Machine Transcription	5	3
SS	260	Business Procedures	5	3
		Total	1350	70

[1]Required for degree only
[2]Required for certificate only
[3]General education courses required for associate degree. Course descriptions on pages 22–25.
[4]Shorthand proficiency is required for the secretarial certificate and the associate degree.

Support Courses

ACCT	101L	Accounting Principles Lab I	5	3
BA	113	Introduction to Business (7½ weeks)	5	2
BA	133	Principles of Management	5	3
BA	150	Introduction to Computer Processing	5	3
BA	211	Business Law	5	3
BA	222	Principles of Marketing	5	3
LOW	101L	Legal Terminology and Procedures	5	3
LOW	114	Legal Typing	5	3
SS	113	Cashiering	5	3
SS	134	Shorthand I (Gregg)	5	3
SS	135	Shorthand I (Alphabetic)	5	3
SS	136	Shorthand II	5	3
SS	234	Shorthand III	5	3

COURSE DESCRIPTIONS

ACCT 101L—Accounting Principles Lab I (6 cr)
(Prerequisite or corequisite: ACCT 111) This is an introductory course in the theory and practice of accounting.

BA 113—Introduction to Business (7½ 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.

BA 131—Human Relations (7½ weeks) (2 cr)
This course deals with employee attitudes toward themselves and others. The importance of interpersonal relationships and the work ethic is stressed.

BA 133—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.

BA 150—Introduction to Computer Processing (3 cr)
(Prerequisite: 25 words a minute typing skill) This course introduces automated information systems, computer hardware, data entry, business software applications and BASIC programming language. Hands-on experience with microcomputers is provided.

BA 211—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.

BA 222—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.

LOW 101L—Legal Terminology/Procedures (3 cr)
Meaning and spelling of legal terminology, familiarization with legal procedures, and client relationships are included in this course.

LOW 114—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

SS 101L—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.

SS 102L—Typing Lab II (6 cr)
(*Prerequisite: SS 101L*) Typing competence of at least 50 words per minute is the goal. Students produce mailable business letters, manuscripts, tables, business forms and other correspondence.

SS 111—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.

SS 112—Secretarial Accounting (3 cr)
(*Prerequisite: SS 111*) 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 payroll package.

SS 113—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.

SS 121—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.

SS 122—Office Communications II (3 cr)
(*Prerequisites: SS 101L, SS 121*) This course is a continuation of SS 121 with greater emphasis on punctuation, and sentence and paragraph construction. Students receive an introduction to telephone techniques.

SS 132—Information Processing Concepts (7½ 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.

SS 133—Word Processing (3 cr)
(*Prerequisites: SS 101L, SS 132*) Students receive instruction in the use of text editing word processors and word processing software on the microcomputer. Emphasis is on practical office applications.

SS 134—Shorthand I (Gregg) (3 cr)
This introductory course covers the theory and writing of Gregg shorthand. A writing speed of 50 words per minute should be reached upon completion.

SS 135—Shorthand I (Alphabetic) (3 cr)
Reading and writing of ABC Stenoscript shorthand is learned. A writing speed of 50 words per minute should be reached upon completion.

SS 136—Shorthand II (3 cr)
(*Prerequisite: SS 134 or SS 135*) 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.

SS 201L—Information Processing Lab (6 cr)
(*Prerequisites: SS 102L, SS 132, SS 133*) Advanced instruction is provided in the use of microcomputer/word processing equipment. Applications include advanced word processing, electronic spreadsheets, list processing and database management.

SS 202L—Medical Records/Receptionist Lab (6 cr)
(*Prerequisites: SS 102L, SS 111, SS 122, SS 133*) Course content includes basic anatomy, medical terminology, transcription, word processing, record keeping, insurance form completion, appointment handling, telephone techniques and medical ethics.

SS 203L—Office Simulation Lab III (6 cr)
(*Prerequisites: SS 102L, SS 133; prerequisite or corequisite: SS 112*) Students practice time management, decision making and priority setting in a realistic office environment. 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.

SS 230—Office Communications III (3 cr)
(*Prerequisites: SS 101L, SS 122*) Principles of writing and composing business correspondence are covered. Continued emphasis is on grammar, punctuation, spelling, oral communication and listening skills.

SS 234—Shorthand III (3 cr)
(*Prerequisite: SS 136*) 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.

SS 250—Machine Transcription (3 cr)
(*Prerequisites: SS 101L, SS 102L, SS 121, SS 122*) This course builds speed and accuracy in the transcription of mailable copy.

SS 260—Business Procedures (3 cr)
(*Prerequisites: SS 102L, SS 122*) Office procedures, records management, human relations and job portfolio preparation are included in this course.

SS 298L—Supervised Work Experience Lab (6 cr)
(*Prerequisites: SS 101L, 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.

HEALTH OCCUPATIONS DEPARTMENT

T-VI's Health Occupations Department includes the following nursing programs: Associate Degree in Nursing, Nursing Assistant, Practical Nurse, Perioperative Registered Nurse Specialist, Licensed Practical Nurse Refresher and Registered Nurse Refresher. Other Health Occupations majors are: Health Unit Clerk, Medical Laboratory Technician, Phlebotomist, Respiratory Therapy Technician and Surgical Technologist. The Practical Nurse and Associate Degree in Nursing 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 practicums and observations at different community agencies.

ADMISSION: Applicants for all Health Occupations 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.

Health Unit Clerk is offered summer and winter terms only. Phlebotomist is offered winter and fall terms only. Licensed Practical Nurse Refresher and Registered Nurse Refresher are offered on demand. Contact the Health Occupations Department for information on starting dates and application procedures.

The Practical Nurse and Respiratory Therapy Technician programs have beginning groups in the fall term only. The Medical Laboratory Technician program has a beginning group in the winter term only.

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 the admissions 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, parking fees 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

Course Requirements			*Contact Hrs*	*Cr Hrs*
HUC	101L	Health Unit Clerk Theory and Lab	225	8
HUC	121C	Health Unit Clerk Clinical Practice	150	7
		Totals	375	15

COURSE DESCRIPTIONS

HUC 101L—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.

HUC 121C—Health Unit Clerk Clinical Practice (7 cr)
Supervised clinical experience takes place in local hospitals and hospital out-patient clinics during the last six weeks of the program.

Medical Laboratory Technician

(Associate in Science Degree)

5 Terms (Main Campus)

The five-term Medical Laboratory Technician program prepares students to perform laboratory procedures which aid the physician and pathologist in the diagnosis and treatment of disease. Medical Laboratory Technicians (MLTs) work in clinics, hospitals, private laboratories and physician office labs performing test procedures in such disciplines as clinical chemistry, hematology, immunohematology, immunology, microbiology and urinalysis under the supervision of a pathologist and medical technologist.

To be admitted, students must meet the degree program admission requirements listed on page 13. In addition to satisfactory ACT scores in math and English, applicants must score at least 18 in natural sciences. Applicants must also meet the following general requirements for admission:

- Submit transcripts of previous education including high school, vocational school or college. College transcripts must be official.
- Score at least 85% on the Health Occupations basic math entrance test. Applicants may retest once. Applicants with two unsuccessful attempts on the test must successfully complete health math in the Developmental Studies Department before they can be accepted into the program.
- Have a personal interview with a program representative. Interviews are scheduled after applicants complete preadmission requirements.
- If selected for the program, submit completed health forms with evidence of current immunizations and a physical examination before beginning the practicum portion.

Applicants will be admitted to the program on a space available basis once all admission requirements are met. The program begins in the winter term of each year and has a capacity of 20 students.

Medical Laboratory Technician students will obtain both academic instruction and practical experience. A grade of C or better must be earned in all science and core courses, and a cumulative grade point average of 2.0 is required for all coursework. The clinical practicum experience at affiliated hospitals and laboratories is designed to provide actual experience in performing laboratory tests under the direction of a supervisor. Students must arrange for their own transportation to the hospitals or labs.

There is an equipment charge of $35 for a lab coat, parking fee and name tag. Each MLT laboratory course also has a $15 fee.

ASSOCIATE IN SCIENCE/ MEDICAL LABORATORY TECHNICIAN

			Contact Hrs	Cr Hrs
Term I				
[1]BIO	123	Biology for Health Sciences		3
[1]BIO	124L	Biology for Health Sciences Lab		1
[1]ENG	101	Writing with Readings in Exposition		3
[1,2]MATH	120	Intermediate Algebra		3
MLT	110L	Introduction to Medical Technology	90	4
Term II				
[1]BIO	201	Microbiology for Health Sciences		3
[1]BIO	211L	Microbiology for Health Sciences Lab		1
[1]CHEM	121L	General Chemistry		4
MLT	112L	Clinical Immunology	60	2
MLT	150C	Clinical Experience Urinalysis/Immunology	180	4
		[1,3]Communications Elective		3
Term III				
[1]BIO	237	Anatomy and Physiology I		3
[1]BIO	247L	Anatomy and Physiology I Lab		1
MLT	201L	Clinical Chemistry	165	7
MLT	202L	Clinical Microbiology	135	5
Term IV				
[1]BIO	238	Anatomy and Physiology II		3
[1]BIO	248L	Anatomy and Physiology II Lab		1
		[1]Humanities/Social Science Elective		3
MLT	203L	Clinical Hematology/ Coagulation	150	6
MLT	204L	Clinical Immunohematology	75	3
Term V				
MLT	250C	Clinical Experience	540	12
		Totals	1395	72–75

[1]General education courses. Course descriptions on pages 22–25.

[2]MATH 150 is recommended if considering transfer to Bachelor's Degree Medical Technology program at the University of New Mexico.

[3]Communications elective not required for graduation but necessary for transfer to Bachelor's Degree Medical Technology program at UNM.

COURSE DESCRIPTIONS

MLT 110L—Introduction to Medical Technology (4 cr)
(*Corequisite: MATH 120*) The student is introduced to basic medical laboratory techniques emphasizing urinalysis. The course includes principles and procedures of the chemical and microscopic analysis of urine, laboratory mathematics, phlebotomy skills and safety procedures.

MLT 112L—Clinical Immunology (2 cr)
(*Prerequisite: MLT 110L*) This course offers a basic study of the body's immune response and serological methods used in testing for immunological reactions.

MLT 150C—Clinical Experience Urinalysis/Immunology (4 cr)
(*Corequisite: MLT 112L*) This course is designed for students to practice procedures learned in urinalysis, phlebotomy and immunology by giving them practical experience at affiliated hospitals.

MLT 201L—Clinical Chemistry (7 cr)
(*Prerequisites: CHEM 121L, MLT 110L, MLT 112L, MLT 150C*) The basic chemical reactions that occur in normal and disease processes of the body and the principles and methods used in testing for chemical components in blood and other body fluids are studied in this course. It includes basic instrumentation and laboratory experiences for performing the basic procedures used in a clinical chemistry laboratory.

MLT 202L—Clinical Microbiology (5 cr)
(*Prerequisites: BIO 201, BIO 211L, MLT 110L, MLT 112L*) A comprehensive study of clinical bacteriology, mycology and parasitology is presented including macroscopic and microscopic identification of organisms, antibiotics susceptibility testing, life cycles, and pathology and etiology of various diseases. Virology is introduced.

MLT 203L—Clinical Hematology/Coagulation (6 cr)
(*Prerequisites: MLT 110L, MLT 112L, MLT 150C, MLT 201L, MLT 202L*) This course is a basic study of theory, principles and test methods for determining blood group typing, antibody detection and identification, crossmatching and component therapy. Laboratory experiences are included for practicing the basic procedures to perform in a clinical immunohematology lab.

MLT 204L—Clinical Immunohematology (3 cr)
(*Prerequisites: MLT 110L, MLT 112L, MLT 150C, MLT 201L, MLT 202L*) A basic study is presented of normal and abnormal blood cell enumeration and morphology, and the coagulation mechanisms. Included are the principles of routine testing methods involved in cell counting, evaluation of coagulation factors and other routine procedures performed in the hematology laboratory. There also is laboratory experience in the performance of basic procedures used in a clinical hematology laboratory.

MLT 250C—Clinical Experience (12 cr)
(*Prerequisites: MLT 110L, MLT 112L, MLT 150C, MLT 201L, MLT 202L, MLT 203L, MLT 204L*) Supervised clinical practice takes place in the clinical laboratories of affiliated hospitals with rotations through hematology/coagulation, microbiology, chemistry and immunohematology departments. Students practice procedures and apply theory learned in MLT 201L, MLT 202L, MLT 203L and MLT 204L.

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 the admissions 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, parking fees 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 aid.

PHLEBOTOMIST PROGRAM

Course Requirements			*Contact Hrs*	*Cr Hrs*
PHLB	101L	Phlebotomist Theory and Lab..	160	6
PHLB	121C	Phlebotomist Clinical Practice .	90	3
		Totals	250	9

COURSE DESCRIPTIONS

PHLB 101L—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.

PHLB 121C—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.

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 nationwide in urban and rural health care facilities 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.

Twenty-two qualified applicants will be selected to start Respiratory Therapy Technician coursework each fall term. Additional qualified applicants—if not selected to fill vacancies that occur prior to the start of classes—will be eligible to start coursework the succeeding fall term. Required general education courses may be completed during this waiting period.

Selection of students is based upon the date the application is received in the Admissions Office and proof that all entrance requirements are met.

To meet entrance requirements an applicant must:

- Complete T-VI admissions application form.
- Provide proof of high school or GED diploma.
- Complete the ACT or submit test scores from within three years of application date.

  Minimum ACT scores: Composite 15
  Math 12
  Natural Science ... 18

  —If the composite score is at least 15 but the math score is less than 12, the applicant must successfully complete a 100-level math course prior to entering the program.
  —If the composite score is at least 15 but the natural science score is less than 18, the applicant must successfully complete a 100-level course in natural science prior to entering the program.
  —If the composite score is less than 15, the applicant must either successfully complete 100-level courses in all subjects where scores are deficient prior to entering the program or retake the ACT and achieve minimum scores.

Applicants 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. Official transcripts of college work must be submitted to T-VI.

- Complete a personal interview with a Respiratory Therapy Technician program faculty member.
- 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, identification badges and parking fees. Additional costs include purchase of a stethoscope, bandage scissors and graduation pin, and the pre-entrance physical exam.

RESPIRATORY THERAPY TECHNICIAN PROGRAM

				Contact Hrs	Cr Hrs
Term I					
'BIO	123	Biology for Health Sciences	...		3
'BIO	124L	Biology for Health Sciences Lab	.....		1
'MATH	120	Intermediate Algebra	.....		3
RTT	110	Respiratory Therapy Principles and Practices I	.....	45	3
RTT	115L	Respiratory Therapy Lab I	.....	45	1
RTT	121C	Clinical Experiences I	.....	225	5
Term II					
'BIO	237	Anatomy and Physiology I	....		3
'BIO	247L	Anatomy and Physiology I Lab			1
RTT	111	Respiratory Therapy Principles and Practices II	.....	45	3
RTT	116L	Respiratory Therapy Lab II	....	45	1
RTT	122C	Clinical Experiences II	.....	250	5
RTT	131	Physics of Respiratory Therapy		45	3

Term III

RTT	112	Respiratory Therapy Principles and Practices III.....	75	5
RTT	117L	Respiratory Therapy Lab III ...	45	1
RTT	123C	Clinical Experiences III	250	5
RTT	132	Cardiopulmonary Physiology ..	45	3
[1]SSCI		Social Science Elective.....		3
		Totals	1115	49

[1]*General education courses. Course descriptions on pages 22–25.*

COURSE DESCRIPTIONS

RTT 110—Respiratory Therapy Principles and Practices I (3 cr)
(*Corequisites: RTT 115L, RTT 121C*) 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.

RTT 111—Respiratory Therapy Principles and Practices II (3 cr)
(*Corequisites: RTT 116L, RTT 122C, RTT 131*) 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.

RTT 112—Respiratory Therapy Principles and Practices III (5 cr)
(*Corequisites: RTT 117L, RTT 123C, RTT 132*) 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.

RTT 115L—Respiratory Therapy Lab I (1 cr)
(*Corequisites: RTT 110, RTT 121C*) Students practice basic respiratory care procedures, using state-of-the-art equipment in the learning laboratory and in simulated patient situations.

RTT 116L—Respiratory Therapy Lab II (1 cr)
(*Corequisites: RTT 111, RTT 122C, RTT 131*) Students practice additional respiratory care procedures learned in RTT 111. Students use equipment in simulated patient situations.

RTT 117L—Respiratory Therapy Lab III (1 cr)
(*Corequisites: RTT 112, RTT 123C, RTT 132*) Students practice procedures learned in RTT 112. Advanced respiratory therapy procedures are simulated in lab sessions including extensive work with mechanical ventilation devices.

RTT 121C—Clinical Experiences I* (5 cr)
(*Corequisites: RTT 110, RTT 115L*) 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.

RTT 122C—Clinical Experiences II* (5 cr)
(*Corequisites: RTT 111, RTT 116L, RTT 131*) 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.

RTT 123C—Clinical Experiences III* (5 cr)
(*Corequisites: RTT 112, RTT 117L, RTT 132*) 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.

RTT 131—Physics of Respiratory Therapy (3 cr)
(*Corequisites: RTT 111, RTT 116L, RTT 122C*) 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.

RTT 132—Cardiopulmonary Physiology (3 cr)
(*Corequisites: RTT 112, RTT 117L, RTT 123C*) 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.

*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.

Advanced Placement
(Respiratory Therapy Technician)

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 July. Challenge exams will be given in August. 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 and have acceptable composite, math and natural science ACT scores.

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 November and tests will be scheduled in December.

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.

Surgical Technologist

3 Terms (Main Campus)

The surgical technologist is a skilled technical person who provides services in the operating room under the supervision of a registered nurse. Technologists are part of the operating room team responsible for the cleanliness, safety and efficiency that leads to good patient care. Their knowledge of and experience with aseptic surgical techniques qualify them to prepare and assist in the use of surgical materials.

Applicants must meet the following requirements:

- Provide proof of high school or GED diploma and official college transcripts of any transferable college courses.
- Submit proof of current certification in cardiopulmonary resuscitation.
- Have acceptable ACT scores: English (17), math (12), natural science (18).
- Provide proof of completion of BIO 123/124L—Biology for Health Sciences—or equivalent.
- Have a personal interview with the major instructor or designee.
- Submit completed health forms, with evidence of current immunizations and physical examination, before beginning classes.

Clinical experiences take place in hospitals. A grade of C or better must be earned in all courses. A certificate is awarded for successful completion of the program.

There are $25 program fees for the first and second terms to cover supplies used in learning labs, parking fees and a name badge.

SURGICAL TECHNOLOGIST PROGRAM

			Contact Hrs	*Cr Hrs*
Term I				
*BIO	201	Microbiology		3
*BIO	211L	Microbiology Lab		1
*BIO	237	Anatomy and Physiology I		3
*BIO	247L	Anatomy and Physiology I Lab		1
STEC	110	Surgical Technology I	75	5
STEC	115L	Surgical Technology I Lab	75	2
Term II				
*BIO	238	Anatomy and Physiology II		3
*BIO	248L	Anatomy and Physiology II Lab		1
*SPCH	221	Interpersonal Communication		3
STEC	111	Principles and Practices Theory	75	5
STEC	121C	Clinical Experiences I	135	3

Term III

*PSY	101	General Psychology		3
STEC	112	Advanced Principles and Practices Theory	60	4
STEC	122C	Clinical Experiences II	270	6
		Total	690	43

**General education courses. Course descriptions on pages 22–25.*

[1]BIO 123/124L are prerequisites.

COURSE DESCRIPTIONS

STEC 110—Surgical Technology I (5 cr)
(*Corequisite: STEC 115L*) An orientation to the operating room including terminology, pharmacology, weights and measures, medical legal aspects, ethics, and hospital and operating room environments is the focus of this course.

STEC 111—Principles and Practices Theory (5 cr)
(*Corequisite: STEC 121*) Safe patient care including transport, anesthesia, positioning, related nursing procedures, skin preparation and environmental control is one component of the course. The other component includes operating room techniques such as sterilization and disinfection; preparation and care of surgical supplies and equipment; aseptic technique; sutures, needles, instruments; and responsibilities of the operating room technician in the circulating assistant and scrub roles.

STEC 112—Advanced Principles and Practices Theory (4 cr)
(*Corequisite: STEC 122C*) Surgical procedures in the specialty branches of medicine are reviewed. The pathology which necessitates surgical intervention, instruments, sutures and supplies for various procedures, positioning of the patient, draping, preparation and anesthesia, and incisions and procedures are covered.

STEC 115L—Surgical Technology I Lab (2 cr)
(*Corequisite: STEC 110*) Concepts learned in STEC 110 are applied in a simulated operating room. Observations take place in local hospitals.

STEC 121C—Clinical Experiences I (3 cr)
(*Corequisite: STEC 111*) Students practice surgical techniques in lab and are assigned to operating rooms in hospitals to apply skills to actual situations.

STEC 122C—Clinical Experience II (6 cr)
(*Corequisite: STEC 112*) Students have experiences in general surgery, gynecology, ophthalmology, plastic surgery, urology and other surgical specialties, and demonstrate a safe level of practice and knowledge.

NURSING PROGRAMS

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 the admissions math test and read at the seventh grade level. Good communication skills and the ability to care for others 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-week program includes 315 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 home 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, health test, parking fees and a transfer belt. A watch with a second hand, uniform slacks, shirt and shoes are required but not covered by the fee.

NURSING ASSISTANT PROGRAM

Course Requirements			*Contact Hrs*	*Cr Hrs*
NA	101L	Nursing Assistant Lab and Theory	118	6
NA	121C	Nursing Assistant Clinical Experiences	124	6
NA	131	Health Communications	48	3
NA	141	Mathematics	25	1
		Totals	315	16

COURSE DESCRIPTIONS

NA 101L—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. Also covered are home management, community resources, purchase and preparation of foods.

NA 121C—Nursing Assistant Clinical Experiences (6 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.

NA 131—Health Communications (3 cr)
This course includes introductions to medical terminology, anatomy and physiology, and nutrition. The basic structure and normal function of the body systems and some of the health problems which can occur in those systems are covered.

NA 141—Mathematics (1 cr)
Basic math is reviewed in this course with practice working selected problems.

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:

- Provide proof of a high school diploma or GED.
- Earn satisfactory American College Test (ACT) scores: math (8), composite (15). The ACT must have been completed within the last three years.
- Provide proof of completion of BIO 123/124L—Biology for Health Sciences—or equivalent with a minimum grade of C. Permission of the biology department faculty is required to substitute advanced high school biology for the college biology prerequisite.
- Score 85% on the Health Occupations basic math entrance test. Applicants may retest once. Applicants with two unsuccessful attempts on the test must satisfactorily complete health math in the Developmental Studies Department before they can be accepted into the program.
- Have a personal interview with a representative of the nursing program.
- If selected for the program, submit completed physical examination and health forms with evidence of current immunizations before beginning clinical courses.
- Submit evidence of current certification in cardiopulmonary resuscitation 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, parking fees 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.

PRACTICAL NURSE PROGRAM

			Contact Hrs	Cr Hrs
Term I				
*BIO	237	Anatomy and Physiology I		3
*BIO	247L	Anatomy and Physiology I Lab		1
*HEC	125	Nutrition		3
[1] NURS	110	Fundamentals of Nursing/ Theory	60	4
[1] NURS	121C	Fundamentals of Nursing/ Clinical	135	3
[2]*PSY	102	General Psychology II		3
Term II				
[1] NURS	111	Medical-Surgical Nursing/ Theory	60	4
[1] NURS	122C	Medical-Surgical Nursing/ Clinical	135	3
*PHIL	245	Biomedical Ethics		3
PN	131	Pharmacology	45	3
*SPCH	221	Interpersonal Communication		3
Term III				
PN	112	Maternity-Pediatric-Medical-Surgical Theory	135	9
PN	123C	Maternity-Pediatric-Medical-Surgical Clinical	315	7
		[3]Totals	885	49

**General education courses. Course descriptions on pages 22–25.*

[1]Nursing course descriptions on page 55.

[2]PSY 220 may be substituted.

[3]Practical Nurse curriculum has a total of 1155 contact hours.

COURSE DESCRIPTIONS

PN 112—Maternity-Pediatric-Medical-Surgical Theory (9 cr)

(Prerequisites: NURS 111, NURS 122C; corequisite: PN 123C) 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.

PN 123C—Maternity-Pediatric-Medical-Surgical Clinical (7 cr)

(Prerequisites: NURS 111, NURS 122C; corequisite: PN 112) Clinical experiences in maternity, pediatric and medical-surgical areas support the theory portion of the course.

PN 131—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. Nursing implications and responsibilities are integrated.

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 financial contributions and by providing clinical facilities for patient care experiences. The Presbyterian Hospital School of Practical Nursing in 1972 became the first practical nursing program in New Mexico to be 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.

Advanced Placement
(Practical Nurse)

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 Arts and Sciences Department. These courses include: BIO 237/247L—Anatomy and Physiology I, PSY 102—General Psychology II, PHIL 245M—Biomedical Ethics, SPCH 221—Interpersonal Communication, and HEC 125—Nutrition.

The nursing courses must be transferred, taken, or challenged through the Health Occupations Department. These courses include: NURS 110/121C—Fundamentals of Nursing Theory/Clinical and NURS 111/122C—Medical-Surgical Nursing Theory/Clinical.

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: Advanced placement by challenge exam is offered to students who meet one of the following criteria:

- Completion of a formal course of study in a health/nursing-related field within a postsecondary educational institution (e.g.; military corpsperson, physician's assistant).
- Performance of basic nursing skills during employment in a health-related setting within the last three years.

Applicants for challenge must submit an application to the Practical Nurse program and meet the program admission requirements. In addition, the applicant must meet the general education and science course requirements scheduled in the curriculum prior to the desired point of entry. The challenge process includes theory and laboratory exams.

The challenge exam for NURS 110/121C is a comprehensive examination of the theory and laboratory content. The challenge exam for NURS 111/122C is the Nursing Mobility Profile I—Part I published by the National League for Nursing and a laboratory examination.

Challenge exams for the nursing courses are offered three times a year in January, June and September. For specific information, contact the Health Occupations Department.

Applicants who successfully challenge NURS 110/121C and NURS 111/122C must complete an orientation to the program before entering PN 112/123C.

Successful challenge students are admitted to the program on a space-available basis. Challenge students who meet the program objectives are considered full graduates and are eligible to take the licensing examination administered by the New Mexico State Board of Nursing.

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 completed physical examination and health forms with evidence of current immunizations.
- Submit evidence of current certification in cardiopulmonary resuscitation. CPR certification must be kept current throughout the program.
- Purchase school uniforms and other needed equipment.
- Pay required T-VI fees.

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 State Board of Nursing (NMSBN). Graduates are eligible to take the licensing examination for nurses administered by the NMSBN.

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 transcripts of previous education including high school, vocational school or college. College transcripts must be official.
- Provide proof of completion of BIO 123/124L—Biology for Health Sciences—or equivalent with a minimum grade of C. Permission of the biology department faculty is required to substitute advanced high school biology for the college biology prerequisite.
- Score 85% on the Health Occupations basic math entrance test. Applicants may retest once. Applicants with two unsuccessful attempts on the test must satisfactorily complete health math in the Developmental Studies Department 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 admission requirements.
- If selected for the program, submit completed physical examination and health forms with evidence of current immunizations before beginning clinical courses.
- Submit evidence of current certification in cardiopulmonary resuscitation before beginning clinical courses. CPR certification must be kept current throughout the program.

Once all admission requirements are met, applicants are admitted to the program on the basis of their application dates.

General education courses must be taken prior to, or as scheduled in, the curriculum plan. Required biology courses must have been taken within five years of the date of application to the Nursing program. Some substitute placement of general education courses may be allowed.

Students must maintain a grade of C in all 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 term for required uniforms, stethoscope, scissors, parking fees and identification tags. There is a $10 fee the third term for supplies and parking fees. 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.

ASSOCIATE IN SCIENCE/NURSING

			Contact Hrs	Cr Hrs
Term I				
*BIO	237	Anatomy and Physiology I		3
*BIO	247L	Anatomy and Physiology I Lab		1
*ENG	101	Writing with Readings in Exposition		3
NURS	110	Fundamentals of Nursing Theory	60	4
NURS	121C	Fundamentals of Nursing Clinical	135	3
*PSY	101	General Psychology I		3
	or			
*PSY	102	General Psychology II		3
Term II				
*BIO	238	Anatomy and Physiology II		3
*BIO	248	Anatomy and Physiology II Lab		1
*HEC	125	Nutrition		3
NURS	111	Medical-Surgical Nursing Theory	60	4
NURS	122C	Medical-Surgical Nursing Clinical	135	3
*PSY	220	Developmental Psychology		3

Term III

*BIO	201	Microbiology for Health Sciences		3
*BIO	211L	Microbiology for Health Sciences Lab		1
NURS	210	Maternity Nursing Theory	45	3
NURS	211	Psychiatric Nursing Theory	45	3
NURS	221C	Maternity Nursing Clinical	90	2
NURS	222C	Psychiatric Nursing Clinical	90	2
NURS	231	Pharmacology in Nursing	45	3

Term IV

NURS	212	Pediatric-Advanced Medical Surgical Nursing Theory	75	5
NURS	223C	Pediatric-Advanced Medical Surgical Nursing Clinical	225	5
NURS	241	Nursing Seminar	15	1
[2]*PHIL	245M	Biomedical Ethics		3
		[3]Elective		3
		Totals	1020	68

**General education courses. Course descriptions on pages 22–25.*

[1]*May use PSY 102 if entering Nursing I or Advanced Placement Nursing III before fall 1989. If PSY 102 is used for PSY 220, PSY 101 must also be taken.*

[2]*Social science elective may be substituted if entering Nursing I or Advanced Placement Nursing II before fall 1989.*

[3]*May be any desired nonlab science course. List of recommended courses available from department counselor.*

COURSE DESCRIPTIONS

NURS 110—Fundamentals of Nursing Theory (4 cr)
(*Prerequisites or corequisites: BIO 237/247L; corequisite: NURS 121C*) The conceptual framework of the curriculum and nursing process is introduced. The concepts of the individual, society, health and nursing are developed within the nursing theory of Orem's self-care deficit model. Nursing skills are developed to meet the universal and developmental needs of individuals across cultures, with topics including communication, teaching-learning, health care delivery systems, legal/ethical role of nurses, introduction to pharmacology and medication administration.

NURS 111—Medical-Surgical Nursing Theory (4 cr)
(*Prerequisites: NURS 110/121C; corequisites: BIO 238/248L; NURS 122C*) This course offers a theoretical study of the nursing process for adult clients. Nursing process including assessment, planning, implementation and evaluation is used to meet self-care deficits of clients unable to meet their own needs due to common illnesses or injuries. The role of the nurse in promoting developmental self-care requirements in adult clients with health problems is presented.

NURS 121C—Fundamentals of Nursing Clinical (3cr)
(*Corequisite: NURS 110*) Laboratory and clinical experiences allow the student to carry out activities required to meet universal, developmental, and health problem self-care requirements.

NURS 122C—Medical-Surgical Nursing Clinical (3 cr)
(*Corequisite: NURS 111*) Students have practicum with adult clients in medical-surgical acute-care facilities and with elderly adult clients in long-term care facilities and a variety of well/elderly community agencies. The students apply the theoretical content covered in NURS 111 to the clinical area.

NURS 210—Maternity Nursing Theory (3 cr)
(*Prerequisites: BIO 238/248L, HEC 125, NURS 111/121C, PSY 220; corequisites: NURS 211/222C, NURS 221C*) The study of the childbearing family with universal, developmental and health deviation self-care requirements is presented. Students are able to integrate the nursing process, client education, nursing care systems and assessment skills.

NURS 211—Psychiatric Nursing Theory (3 cr)
(*Prerequisites: BIO 238/248L, HEC 125, NURS 111/121C, PSY 102 or PSY 220; corequisites: NURS 210/221C, NURS 222C*) The study of self-care deficits in clients with psychiatric health problems is presented.

NURS 212—Pediatric-Advanced Medical Surgical Nursing Theory (5 cr)
(*Prerequisites: NURS 210/221C, NURS 211/222C; pre- or corequisites: BIO 201/211L, NURS 231; corequisite: NURS 241*) This course presents a theoretical study of the nursing process using nursing systems as defined by Orem to care for children and adults. The nursing process is used to meet health problems of children and adults unable to meet their own needs due to developmental factors or more complex health conditions. The roles of the professional nurse in working with families are presented.

NURS 221C—Maternity Nursing Clinical (2 cr)
(*Corequisite: NURS 210*) This course allows the clinical application of theoretical concepts presented in NURS 210.

NURS 222C—Psychiatric Nursing Clinical (2 cr)
(*Corequisite: NURS 211*) Clinical experiences provide the opportunity for students to apply theoretical concepts through establishing therapeutic relationships, participating in groups and interdisciplinary meetings, and visiting community mental health agencies.

NURS 223C—Pediatric-Advanced Medical Surgical Nursing Clinical (5 cr)
(*Corequisite: NURS 212*) A clinical practicum provides application of theoretical concepts in the care of children and families in acute-care facilities and in adult clients with more complex health conditions as studied in NURS 212.

NURS 231—Pharmacology in Nursing (3 cr)
(*Prerequisites: BIO 238/248L, NURS 111/122C*) 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.

NURS 241—Nursing Seminar (1 cr)
(*Prerequisites: NURS 210/221C, NURS 211/222C; corequisite: NURS 212/223C*) 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.

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 three ways:

1. **Challenge**—Challenge exam for students who meet one of the following criteria:
   - Completion of a formal course of study in a health/nursing related field within a post-secondary educational institution (e.g.; military corpsperson, physician's assistant).
   - Performance of basic nursing skills during employment in a health-related setting within the last three years.

   Applicants for challenge must submit an application to the associate degree program and meet the program admission requirements. In addition, the applicant must meet the general education and science course requirements scheduled in the curriculum prior to the desired point of entry. The challenge process includes theory and laboratory exams.

   The challenge exam for NURS 110/121C is a comprehensive examination of the theory and laboratory content. The challenge exam for NURS 111/122C is the Nursing Mobility Profile I—Part I published by the National League for Nursing and a laboratory examination.

   Challenge exams for the nursing courses are offered three times a year in January, June and September. For specific information, contact the Health Occupations Department.

   Applicants who successfully challenge NURS 110/121C and NURS 111/122C must complete NURS 201 before entering NURS 210/221C and NURS 211/223C.

   Successful challenge students are admitted to the program on a space-available basis. Challenge students who meet the program objectives are considered full graduates and are eligible to take the licensing examination administered by the New Mexico State Board of Nursing.
2. **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. In addition, transfer students are required to take NURS 201—Nursing Concepts for LPNs and Transfer Students. Transfer students are required to enroll a minimum of one term and complete 15 credit hours.
3. **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 for BIO 123/124L—Biology for Health Sciences—or equivalent with a minimum grade of C. Permission of the biology department faculty is required to substitute advanced high school biology for the college biology prerequisite.
   - Submit transcripts of previous education including high school, vocational school or college. College transcripts must be official.
   - Provide proof of completion or challenge of the following courses within five years of the date of application with a minimum grade of C:
     BIO 237/247L—Anatomy and Physiology I
     BIO 238/248L—Anatomy & Physiology II
   - Complete PSY 220—Developmental Psychology.
   - Complete or challenge HEC 125—Nutrition.
   - Complete NURS 201 with a minimum grade of C.
   - Complete or challenge at least three of the following courses:
     ENG 101—Writing with Readings in Exposition
     PSY 101 or 102—General Psychology I or II
     PSY 220—Developmental Psychology
     PHIL 245M—Biomedical Ethics
     Elective—three hours of non-lab science course
   - 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.

- Following admission to the program, submit completed physical examination and health forms with evidence of current immunizations before beginning clinical courses.
- Submit evidence of current certification in cardiopulmonary resuscitation 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 beginning the second year nursing courses. This enables them to complete the program on a part-time basis.

COURSE DESCRIPTION

NURS 201—Nursing Concepts for LPNs and Transfer Students (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.

Perioperative Registered Nurse Specialist

1 Term (Main Campus)

This 15-week course provides registered nurses with the skills and knowledge to work in hospital operating rooms or free-standing day surgical units. The curriculum offers an introduction to the history, scope and role of the perioperative nurse; the concept of team management and collaboration; the surgical environment; principles of asepsis, sterilization and safety; use and care of basic instruments and equipment; standards of practice and legal, moral and ethical issues; the nursing process; continuity of care; surgical pharmacological agents; wound healing; and management skills. Students have an opportunity to apply theory to practice in hospital operating rooms.

Applicants must be registered nurses with six months' clinical nursing experience within the last two years and be currently certified in cardiopulmonary resuscitation. Applicants also must submit proof of current immunizations, a physical examination within the last year, and a current New Mexico nursing license.

There is a $25 supply fee and students are required to purchase their own textbooks.

Students must make grades of C or better to satisfactorily complete the course and receive a certificate.

PERIOPERATIVE REGISTERED NURSE SPECIALIST PROGRAM

Course Requirements			*Contact Hrs*	*Cr Hrs*
PRNS	255L	Perioperative Registered Nurse Specialist Theory/Lab.....	125	8
PRNS	265C	Perioperative Registered Nurse Specialist Clinical Experience.....	250	6
		Totals.....	375	14

COURSE DESCRIPTIONS

PRNS 255L—Perioperative Registered Nurse Specialist Theory/Lab (8 cr)

This course content is divided into five units—history and philosophy of perioperative nursing, the surgical environment, perioperative care, intraoperative care and postoperative care. Laboratory experiences in a mock operating room allow practice of skills.

PRNS 265C—Perioperative Registered Nurse Specialist Clinical Experience (6 cr)

Students apply new and previously learned concepts to perioperative nursing in hospital operating rooms.

Licensed Practical Nurse Refresher

6 Weeks (Main Campus)

This 180 hour, six-week course is designed to renew skills of inactive licensed practical nurses, introduce new trends and procedures, and provide clinical experiences. It meets the New Mexico State Board of Nursing requirements of license renewal for practical nurses who have not worked in nursing for the past five years. Theory classes and clinical experiences focus on medical and surgical nursing care including pharmacology.

Refresher courses are offered on the basis of demand and need, availability of clinical experiences and qualified faculty. No definite dates are set, and interested persons should contact the Health Occupations Department for more information. Thirty people are admitted to each course.

Participants pay a $10 registration fee, $10 supply fee, and the costs of required textbooks. There are additional fees payable to the New Mexico State Board of Nursing for licensure endorsement and reinstatement if a nursing license has expired.

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

LICENSED PRACTICAL NURSE REFRESHER PROGRAM

Course Requirements			*Contact Hrs*	*Cr Hrs*
LPNR	155L	Refresher Theory/Lab	90	6
LPNR	165C	Refresher Clinical Experience	90	2
		Total	180	8

COURSE DESCRIPTIONS

LPNR 155L—Refresher Theory/Lab (6 cr)
Medical and surgical trends, new procedures and techniques, and pharmacology are covered in the theory portion of the program.

LPNR 165C—Refresher Clinical Experience (2 cr)
Medical and surgical clinical experiences include administration of medications.

Registered Nurse Refresher

6 Weeks (Main Campus)

This six-week refresher course meets the requirements of the Nursing Practice Act of New Mexico for registered nurses who have not worked in nursing the past five years. Theory classes and clinical experiences focus on medical and surgical trends, pharmacology, cardiac care, obstetrics and other current subjects.

No definite dates are set since refresher courses are offered on the basis of demand and need. Applicants are admitted on a first-come, first-served basis and enrollment is limited to 32 persons. Participants pay a $10 registration fee, $10 supply fee, and the cost of required textbooks. There are additional fees payable to the New Mexico State Board of Nursing for licensure endorsement and reinstatement if a nursing license has expired.

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

REGISTERED NURSE REFRESHER PROGRAM

Course Requirements			*Contact Hrs*	*Cr Hrs*
RNR	255L	Refresher Theory/Lab	90	6
RNR	265C	Refresher Clinical Experience	90	2
		Totals	180	8

COURSE DESCRIPTIONS

RNR 255L—Refresher Theory/Lab (6 cr)
Trends in medical-surgical, geriatric, maternal-child and psychiatric nursing, pharmacology, and fluid and electrolytes are covered in the course.

RNR 265C—Refresher Clinical Experience (2 cr)
Students have supervised medical and surgical clinical experiences including patient care, medication administration, IVs and uses of current equipment.

TECHNOLOGIES DEPARTMENT

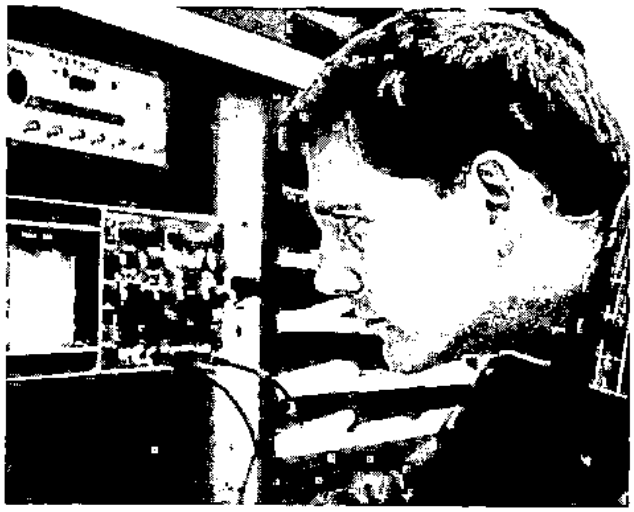
Programs in the Technologies Department are among the longest at the Institute. All programs are four terms (16 months). Technologies programs also have the highest math skill entry requirements.

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

A new associate degree program in Electronics Engineering Technology provides a combination of general education courses, technical courses, and mathematics and science coursework that will enable graduates to seek employment at scientific and research facilities throughout the country.

Because the Technologies programs are in high demand, interested persons should apply as early as possible.

Laser Electro-Optic Technology and Electronics Engineering Technology are offered at the Montoya Campus. The Data Processing Technology program is offered at both campuses. Other technologies programs are offered only at the Main Campus.



There are beginning groups each term in all Technologies majors except Laser Electro-Optics which starts new groups every other term.

CONTINUING EDUCATION DIVISION COURSE SUBSTITUTIONS

Some Continuing Education Division classes may be substituted for Instructional Division technologies classes. Those that substitute are marked with a ✹ in the Continuing Education Division section of this catalog.

Continuing Education Division Course	*Substitutes for:*	*Instructional Division Program*
SK 380 Introduction to Data Processing	DP 102 Introduction to Computers/Job Control Language	Data Processing
SK 380A Microcomputing Today	DP 171 Introduction to Computers	Data Processing
SK 381 RPG II	DP 208L Report Program Generator II	Data Processing
SK 382 Assembler Language Programming	DP 205L Assembler Language Programming	Data Processing
SK 383 ANSI COBOL I and SK 383A ANSI COBOL II	DP 101L ANSI COBOL	Data Processing
SK 383B Advanced ANSI COBOL I and SK 383C Advanced ANSI COBOL II	DP 111L Advanced ANSI COBOL	Data Processing
SK 384 FORTRAN Programming	DP 172L FORTRAN Programming	Data Processing
SK 386 BASIC Language Programming	DP 174L BASIC Language Programming	Data Processing
SK 388 Job Control Language	DP 112L VSE JCL/VSAM Utilities	Data Processing
SK 394 Turbo Pascal	DP 173L Pascal Programming	Data Processing
SK 392 C Language Programming	DP 175L C Language Programming	Data Processing
SK 400 Computer Math I	DP 103 Computer Mathematics I	Data Processing
SK 401 Computer Math II	DP 113 Computer Mathematics II	Data Processing
SK 402 Business Systems Analysis and Design	DP 207 Business Systems Analysis and Design	Data Processing

Support Courses

The optional support courses that are available to Technologies students are listed below. At least 12 students must sign up for an optional support course before it can be offered, and each student must meet the required prerequisites. Common support courses are:

		Course Title	Hrs Wk	Cr Hrs
BA	111	Communications (7½ weeks)	5	2
BA	131	Human Relations (7½ weeks)	5	2
DP	172L	FORTRAN Programming	5	3
DP	173L	Pascal Programming	5	3
DP	174L	BASIC Language Programming	5	3
DP	175L	C Language Programming	5	3
DP	176L	Introduction to Microcomputers	5	3

COURSE DESCRIPTIONS

BA 111—Communications (7½ weeks) (2 cr)
(*Offered for Trades and Technologies students only*) The primary focus of this course is to develop effective communications skills. Course content includes fundamentals of grammar, punctuation and word usage. Effective expression in written communications is stressed.

BA 131—Human Relations (7½ weeks) (2 cr)
(*Available also for Trades and Technologies students*) This course deals with employee attitudes toward themselves and others. The importance of interpersonal relationships and the work ethic is stressed.

DP 172L—FORTRAN Programming (3 cr)
This is an introductory course in FORTRAN IV computer programming.

DP 173L—Pascal Programming (3 cr)
This class uses microcomputers and covers the Pascal language for personal or mainframe computers.

DP 174L—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.

DP 175L—C Language Programming (3 cr)
(*Prerequisite: A programming language*) This course is an introduction to C programming language using microcomputers.

DP 176L—Introduction to Microcomputers (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 1725 hours of which 675 are laboratory work and 1050 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 $55 at the beginning of the program and another $40 upon entering the third term.

Note: Students are required to take 7½-week human relations and communications courses to fulfill graduation requirements. It is recommended that these courses be taken during the first term.

ARCHITECTURAL DRAFTING TECHNOLOGY PROGRAM

			Hrs Wk	Cr Hrs
Term I				
ARDR	101L	Residential Drafting	12	8
ARDR	102	Architectural Mathematics	5	3
ARDR	103	Residential Materials and Methods	5	3
ARDR	104L	Introduction to CAD	3	1
*BA	111	Communications (7½ weeks)	5	2
*BA	131	Human Relations (7½ weeks)	5	2
Term II				
ARDR	111L	Architectural Drafting	12	8
ARDR	112	Architectural Trigonometry	5	3
ARDR	113	Commercial Design Development	5	3
ARDR	114L	Architectural CAD	3	1
ARDR	115	Energy Systems	5	3
Term III				
ARDR	201L	Structural Drafting	12	8
ARDR	202	Structural Mathematics	5	3
ARDR	204L	Structural CAD	3	1
ARDR	206	Structural Detailing	5	3
ARDR	217	Project Management	5	3
Term IV				
ARDR	211L	M/E Systems Drafting	10	6
ARDR	213	M/E Systems Analysis	10	6
ARDR	214L	M/E Systems CAD	5	3
		Totals	1725	70
Support Courses				
ARDR	171	Architectural Design	5	3
ARDR	172	Architectural Rendering	5	3
ARDR	173	Technical Sketching	5	3
ARDR	271	Construction Management	5	3
ARDR	272	Computer Estimating	5	3

*Course descriptions on page 60.

COURSE DESCRIPTIONS

ARDR 101L—Residential Drafting (8 cr)
(*Corequisites: ARDR 103, ARDR 104L*) 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.

ARDR 102—Architectural Mathematics (3 cr)
This course covers basic concepts of algebra and geometry with emphasis on architectural and engineering applications and calculator usage.

ARDR 103—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.

ARDR 104L—Introduction to CAD (1 cr)
(*Corequisite: ARDR 101L*) This course includes an introduction to the microcomputer and its operating system, text editing, electronic spreadsheets, and basic experience in computer assisted drafting (CAD).

ARDR 111L—Architectural Drafting (8 cr)
(*Prerequisite: ARDR 101L; corequisites: ARDR 112, ARDR 113, ARDR 114L*) The student's drafting skills are expanded to include the style and media commonly used in architects' offices. Students produce selected working drawings for light commercial structures using appropriate professional reference materials to solve typical problems.

ARDR 112—Architectural Trigonometry (3 cr)
(*Prerequisite: ARDR 102*) This course uses a calculator approach to trigonometry that includes architectural applications such as site planning.

ARDR 113—Commercial Design Development (3 cr)
(*Prerequisites: ARDR 101L, ARDR 103*) 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.

ARDR 114L—Architectural CAD (1 cr)
(*Prerequisite: ARDR 104L; corequisite: ARDR 111L*) 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.

ARDR 115—Energy Systems (3 cr)
(*Prerequisites: ARDR 101L, ARDR 103*) 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.

ARDR 171—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.

ARDR 172—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.

ARDR 173—Technical Sketching (3 cr)
This course encourages students to develop visual perception, awareness of their environment, and freehand drawing skills. Students explore basic forms, perspective, still life and figure drawing as applications of drafting problems. Large scale drawings are executed in various black and white media.

ARDR 201L—Structural Drafting (8 cr)
(*Prerequisite: ARDR 111L; corequisites: ARDR 202, ARDR 204L, ARDR 206, ARDR 217*) Students are introduced to the drafting styles and conventions used in consulting engineers' offices. They develop representative drawings of precast and site cast concrete, structural steel and heavy timber structures. Blueprint reading and the development of appropriate graphic skills using a variety of media are emphasized.

ARDR 202—Structural Mathematics (3 cr)
(*Prerequisites: ARDR 111L, ARDR 112*) 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.

ARDR 204L—Structural CAD (1 cr)
(*Prerequisite: ARDR 114L; corequisite: ARDR 201L*) 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.

ARDR 206—Structural Detailing (3 cr)
(*Prerequisite: ARDR 111L*) This class introduces typical fabricating shop practices for structural steel, reinforcing steel and precast concrete. Preparation of both erection and production drawings is presented; the notational conventions and graphic standards of shop detailing are emphasized. Blueprint reading and extensive use of industry manuals are required.

ARDR 211L—M/E Systems Drafting (6 cr)
(*Prerequisite: ARDR 201L; corequisites: ARDR 213, ARDR 214L*) 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.

ARDR 213—M/E Systems Analysis (6 cr)
(*Prerequisites: ARDR 115, ARDR 201L*) 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.

ARDR 214L—M/E Systems CAD (3 cr)
(*Prerequisite: ARDR 204L; corequisites: ARDR 211L, ARDR 213*) 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.

ARDR 217—Project Management (3 cr)
(*Prerequisites: ARDR 111L, ARDR 113*) 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 materials and processes are explained throughout.

ARDR 271—Construction Management (3 cr)
(*Prerequisite: ARDR 101L; corequisite: ARDR 113*) 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.

ARDR 272—Computer Estimating (3 cr)
(*Prerequisite: ARDR 101L; corequisite: ARDR 113*) Determination of probable costs of construction projects is emphasized. Topics include making quantity take-offs, determining local unit costs and job scheduling. Microcomputer software is used extensively.

See also the common support course descriptions on page 60.

Civil and Surveying Technology

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 1680 hours of which 1035 are laboratory work and 645 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 $45 personal equipment fee before entering the first term and another $40 for the second term.

Note: Students are required to take 7½-week human relations and communications courses to fulfill graduation requirements. It is recommended that these courses be taken during term one.

CIVIL AND SURVEYING PROGRAM

			Hrs Wk	Cr Hrs
Term I				
*BA	111	Communications (7½ weeks)	5	2
*BA	131	Human Relations (7½ weeks)	5	2
C&S	101L	Civil and Surveying Lab/Theory I	15	9
C&S	102	Civil and Surveying Mathematics I	10	6
Term II				
C&S	111	Cartographic Techniques Lab/Theory	15	9
C&S	112	Civil and Surveying Mathematics II	5	3
C&S	113	Plane Surveying I	6	3
Term III				
C&S	203L	Plane Surveying II	9	5
C&S	204L	Photogrammetric Techniques Lab/Theory	3	1
C&S	206	Boundary Law and Public Land Surveys	5	3
C&S	207L	Computer-Assisted Civil Drafting	3	3
C&S	215	BASIC Language Programming	10	6
Term IV				
C&S	211L	Civil Design Lab/Theory	15	9
C&S	213L	Plane Surveying III	6	3
C&S	218	Technical and Legal Communications	5	3
		Totals	1680	67

*Course descriptions on page 60.

COURSE DESCRIPTIONS

C&S 101L—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 freehand lettering. The student also learns to trace from rough sketches and manuscripts and develop maps from field notes.

C&S 102—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.

C&S 111—Cartographic Techniques Lab/Theory (9 cr)
(*Prerequisite: C&S 101L*) 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.

C&S 112—Civil and Surveying Mathematics II (3 cr)
(*Prerequisite: C&S 102*) Trigonometry is related in detail to surveying and civil problems. The course includes traversing, adjustments, area calculations, intersections and partitioning.

C&S 113—Plane Surveying I (3 cr)
(*Corequisite: C&S 112*) 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.

C&S 203L—Plane Surveying II (5 cr)
(*Prerequisites: C&S 112, C&S 113*) 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.

C&S 204L—Photogrammetric Techniques Lab/Theory (1 cr)
(*Prerequisite: C&S 111*) This course includes theory in aerial photography, geometry of single vertical photographs and overlapping aerial photos, flight planning 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.

C&S 206—Boundary Law and Public Land Surveys (3 cr)
(*Prerequisite: C&S 112*) 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.

C&S 207L—Computer-Assisted Civil Drafting (3 cr)
(*Prerequisites: C&S 112, C&S 113; corequisite: C&S 204L*) 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.

C&S 211L—Civil Design Lab/Theory (9 cr)
(*Prerequisite: C&S 204L; corequisites: C&S 213L, C&S 218*) 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.

C&S 213L—Plane Surveying III (3 cr)
(*Prerequisites: C&S 203L, C&S 206*) Included are mine survey methods; grid and radial topographic surveys; GPS surveys; horizontal and vertical curve calculations, design and layout; earthwork measurements; fluid mechanics; and design of a sanitary sewer system.

C&S 215—BASIC Language Programming (6 cr)
(*Prerequisite: C&S 112*) 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.

C&S 218—Technical and Legal Communications (3 cr)
(*Prerequisite: C&S 206; corequisite: C&S 211L*) 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.

See also the common support course descriptions on page 60.

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.

Computers currently used at T-VI are the 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, with a number of computer languages offered as optional courses.

To earn a certificate, students must complete successfully 1650 instructional hours of which 825 are laboratory work and 825 are related theory.

Students must pay a $10 supply fee at the beginning of each term.

Note: Students are required to take 7½-week human relations and communications courses to fulfill graduation requirements. It is recommended that these courses be taken during the first term.

DATA PROCESSING TECHNOLOGY PROGRAM

			Hrs Wk	Cr Hrs
Term I				
*BA	111	Communications (7½ weeks)..	5	2
*BA	131	Human Relations (7½ weeks) .	5	2
DP	101L	ANSI COBOL	10	6
DP	102	Introduction to Computers/JCL	5	3
DP	103	Computer Mathematics I	5	3
DP	104	Data Processing Accounting I..	5	3
Term II				
DP	111L	Advanced ANSI COBOL.....	10	6
DP	112L	VSE JCL/VSAM Utilities	10	6
DP	113	Computer Mathematics II	5	3
DP	114	Data Processing Accounting II .	5	3
Term III				
DP	201L	Programming Techniques.....	5	3
DP	205L	Assembler Language Programming	10	6

DP	206L	BASIC Language Programming	5	3
DP	207	Business Systems Analysis and Design	5	3
Term IV				
DP	175L	C Language Programming.....	5	3
DP	208L	Report Program Generator II ..	5	3
DP	211L	Programming Projects.....	5	3
DP	215L	Computer System Software....	5	3
DP	216	Database and Telecommunications	5	3
		Totals	1650	67

*Course descriptions on page 60.

COURSE DESCRIPTIONS

DP 101L—ANSI COBOL (6 cr)
(*Corequisite: DP 102*) Structured programming projects directly related to business and accounting applications are designed, coded, debugged and executed using a mainframe or microcomputer.

DP 102—Introduction to Computers/Job Control Language (JCL) (3 cr)
Instruction is provided in computer vocabulary, logic and control, and structured programming techniques including hierarchy charts and topdown planning. Also included are utilities, sorts and JCL for mainframe and microcomputer systems.

DP 103—Computer Mathematics I (3 cr)
Algebra fundamentals are covered in this course along with selected business and management math applications. Microcomputers are used to assist in the instructional process.

DP 104—Data Processing Accounting I (3 cr)
Students learn data accounting theory, practice and terms, and their relation to computer data processing.

DP 111L—Advanced ANSI COBOL (6 cr)
(*Prerequisite: DP 101L*) 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.

DP 112L—VSE JCL/VSAM/Utilities (6 cr)
(*Prerequisites: DP 101L, DP 102*) IBM DOS/VSE Job Control, Editor, Power, Job Entry System, Procedures, Utilities and VSAM File Structures are studied.

DP 113—Computer Mathematics II (3 cr)
(*Prerequisite: DP 103*) This course continues the development of algebra, business math skills and introductory statistics. Elementary BASIC programs are used to teach formulas on microcomputers.

DP 114—Data Processing Accounting II (3 cr)
(*Prerequisite: DP 104*) Students learn the vocabulary and concepts used in manufacturing and corporation accounting. Emphasis is placed on computerized accounting on microcomputers.

DP 175L—C Language Programming (3 cr)
(*Prerequisite: A programming language*) This course is an introduction to C programming language using microcomputers.

DP 201L—Programming Techniques (3 cr)
(*Prerequisites: DP 111L, DP 112L*) This course involves development of an interactive, on-line business application using a commercial screen generator, plus VSAM file handling and command level CICS.

DP 205L—Assembler Language Programming (6 cr)
(*Prerequisites: DP 111L, DP 112L*) Students learn programming techniques necessary to write Assembler language programs.

DP 206L—BASIC Language Programming (3 cr)
This course uses the BASIC language to further the student's knowledge of interactive programming, routines using menu selection, and search and retrieval routines. Also covered are file structures, database techniques, statistics, management methods and string manipulations. Mainframe and/or microcomputers are used.

DP 207—Business Systems Analysis and Design (3 cr)
(*Prerequisites: DP 111L, DP 114*) 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.

DP 208L—Report Program Generator II (3 cr)
(*Prerequisite: DP 112L*) Students are introduced to the RPG II programming language used in business organizations.

DP 211L—Programming Projects (3 cr)
(*Prerequisites: All Term I, II and III courses*) This course is a continuation of Programming Techniques with emphasis on individualized or group data processing projects.

DP 215L—Computer System Software (3 cr)
(*Prerequisite: DP 205L*) This course covers the use of mainframe computers and topics designed to increase understanding of the use of microcomputers. This includes the study of operating systems, macro assembler programming, and microcomputer software packages.

DP 216—Database and Telecommunications (3 cr)
(*Prerequisites: DP 112L, DP 201L, DP 207*) 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.

See also the common support course descriptions on page 60.

Design Drafting Engineering Technology
(Associate in Applied Science Degree)

4 Terms (Main Campus)

Design Drafting Engineering Technology is a complex field of drafting for persons with a strong interest in electronics and mechanical design. The program contains an equal amount of time spent on electrical/electronic drafting concepts and mechanical drafting concepts. The program also integrates the concepts of mathematics and science into the technical courses. The use of computer-assisted-design drafting (CADD) is emphasized and applied throughout the program using microcomputers and state-of-the-art software.

The program provides a well-rounded curriculum that enables graduates to seek employment with engineering and scientific research organizations throughout New Mexico.

The program uses modern drafting stations, drafting machines and other typical drafting equipment along with microcomputers.

A personal equipment fee of $50 is required to enter the program.

DESIGN DRAFTING ENGINEERING TECHNOLOGY

			Cr Hrs
Term I			
DDET	101L	Introduction to Technical Drafting	2
DDET	102L	Manufacturing Methods	3
DDET	103L	Basic CADD	1
*ENG	101	Writing with Readings in Exposition	3
*MATH	150	Advanced Algebra	3
		*Humanities/Social Science Elective	3
Term II			
*CSCI	155	Introduction to Programming	4
*ENG	119	Technical Communications	3
DDET	111L	Mechanical Detailing	3
DDET	112L	Basic Electronic Drafting	2
DDET	113L	Intermediate CADD	1
*MATH	162	Calculus I	4
or			
*MATH	180	Elementary Calculus	3
Term III			
DDET	201L	Descriptive Geometry	3
DDET	202L	Applied Electronic Drafting	2
DDET	203L	Advanced CADD	1
DDET	204L	Machine Design Layout	3
*PHYS	151/ 153L	General Physics/Lab	4
or			
*PHYS	160	General Physics	4
		*Humanities/Social Science Elective	3
Term IV			
*CHEM	111/ 112L	Introduction to Chemistry/Lab	4
or			
*CHEM	121L	General Chemistry	4
DDET	211L	Electromechanical Drafting	3
DDET	212	Applied Engineering Mechanics	3
DDET	213L	Technical Computer Applications	1
DDET	214	Manufacturing Materials	3
		*Humanities/Social Science Elective	3
		Total	64–65

**General education courses. Course descriptions on pages 22–25.*

Support Courses			
DDET	191	Basic Electronics	3
DDET	296	Special Projects	1–3
DDET	299	Cooperative Training	3–6
[1]DP	174L	BASIC Language Programming	3
[1]DP	175L	C Language Programming	3
[2]ELEC	101L	Electronics 1 Lab/Theory	6
[2]ELEC	113L	Digital Circuits	6

[1]*Course descriptions on page 60.*
[2]*Course descriptions on page 69.*

COURSE DESCRIPTIONS

DDET 101L—Introduction to Technical Drafting (2 cr)
This course is an introduction to fundamental drafting techniques including proper care and use of drafting equipment, lettering, sketching, linework, scaling, geometric construction, orthographic projection, sections and conventions.

DDET 102L—Manufacturing Methods (3 cr)
The student is introduced to manufacturing methods unique to modern industrial technology including machining, fabrication, hot and cold metal working processes, assembly operations and quality assurance methodology.

DDET 103L—Basic CADD (1 cr)
Microcomputer CADD hardware and software are introduced including format and execution or basic command verbs, creation, editing and saving of drawing files, and generation of hardcopy output.

DDET 111L—Mechanical Detailing (3 cr)
(*Prerequisite: DDET 101L*) This course introduces the student to the development of detail drawings including layout, view selection, notation, dimensioning, Y-14.5 tolerancing, and revisions of mechanical parts.

DDET 112L—Basic Electronic Drafting (2 cr)
(*Prerequisite: DDET 101L*) This course presents electronic drafting fundamentals including symbolic representation of electronic components and devices, block and connection diagramming, cable drawings and circuit schematics.

DDET 113L—Intermediate CADD (1 cr)
(*Prerequisite DDET 103L*) The student continues use of CADD software in an applied situation. Advanced drawings include insertions, layering, auto-dimensioning, attributes, constructing library files and developing wireframe models.

DDET 191—Basic Electronics (3 cr)
This course explores the basic concepts of electronics and digital logic relevant to the electronic drafting profession including circuitry characteristics and applications, component functions, and integrated chip technology.

DDET 201L—Descriptive Geometry (3 cr)
A graphical analysis of the relationship between points, lines and planes in space is presented.

DDET 202L—Applied Electronic Drafting (2 cr)
(*Prerequisite: DDET 112L*) This course introduces electronic drafting techniques unique to printed circuit board design including development of both discrete and integrated component layouts, artwork, fabrication and assembly drawings and chassis design.

DDET 203L—Advanced CADD (1 cr)
(*Prerequisite: DDET 113L*) Students produce complete technical drawings by merging principles of CADD with standard drafting rules and conventions.

DDET 204L—Machine Design Layout (3 cr)
(*Prerequisite: DDET 111L*) Students apply machine element principles to machine design including fixed and removable fastening techniques; dimensioning and tolerancing for assembly; relational functions of bearings, gears, cams, belts, pulleys and shafts; and parts list development. Layout formats are assembled.

DDET 211L—Electromechanical Drafting (3 cr)
(*Prerequisites: DDET 202L, DDET 204L*) This course involves the design and drafting of electromechanical systems using combined concepts learned and practiced in previous machine and electronics drafting courses.

DDET 212—Applied Engineering Mechanics (3 cr)
(*Prerequisites: PHYS 151/153L or PHYS 160, MATH 162 or MATH 180*) This course analyzes the forces on mechanical elements at rest and in motion. The study of statics and dynamics also is included.

DDET 213L—Technical Computer Applications (1 cr)
(*Prerequisite: DDET 203L*) Students use the computer to solve engineering and related problems.

DDET 214—Manufacturing Materials (3 cr)
Students analyze and evaluate the engineering characteristics of materials used in modern manufacturing technology in typical applications.

DDET 296—Special Projects (1–3 cr)
(*Corequisites: All Term IV courses and permission from the department dean*) The student is given a problem to investigate and solve. The student then designs and drafts the solution using a combination of drafting techniques.

DDET 299—Cooperative Training (3–6 cr)
(*Prerequisites: All Term IV courses*) In cooperation with local industry, the student works for one term on a cooperative basis in an appropriate training program.

See also the common support course descriptions on page 60.

Electromechanical Drafting Technology
(Associate in Applied Science Degree)

(Main Campus)

This Associate in Applied Science Degree is offered to students who have graduated from the Electromechanical Drafting certificate program within the last five years. To earn the degree, students must complete 19 or 20 credit hours of general education courses and two technical courses as listed below. For further information on this program, please see the program counselor for the Technologies Department.

Note: Persons wanting to begin studies in this field should refer to the Design Drafting Engineering Technology program on page 66.

ASSOCIATE IN APPLIED SCIENCE/ ELECTROMECHANICAL DRAFTING

General Education Requirements (19–20 cr)

Communications			
[1]ENG	101	Writing with Readings in Exposition ..	3
[1]ENG	119	Technical Communications	3
Mathematics/Natural Science			
[1]MATH	150	Advanced Algebra	3
[1]MATH	162	Calculus I	4
or			
[1]MATH	180	Elementary Calculus	3
[1]PHYS	151/ 153L	Physics/Lab	4
or			
[1]PHYS	160	General Physics	4
Humanities/Social Science			
[1]Elective			3
		Total	19–20

Additional Core Requirements (6 cr)

DDET	291	Advanced CADD	3
DDET	296	Special Projects	3
		Total	6

[1]*Course descriptions on pages 22–25.*

COURSE DESCRIPTIONS

DDET 291—Advanced CADD (3 cr)

This course involves project work using advanced CADD concepts. The projects are in the field of electromechanical drafting.

DDET 296—Special Projects (3 cr)

(*Prerequisite: Completion of the Electromechanical Drafting program and permission from the department dean*) The student is given a problem in the area and asked to do a complete investigation and come up with the correct solution. The student designs the solution using a combination of drafting techniques.

Electronics Technology

4 Terms (Main Campus)

The Electronics Technology program, which offers both certificate and associate degree options, provides the student with a broad base of skills in analog and digital circuits.

Training is provided 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 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 1575 hours of which 975 hours are laboratory work and 600 are theory. To qualify for an electronics communications endorsement on the certificate, the student 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 Electronics Technology program within the last four years must fulfill the general education and residency requirements to receive the associate degree.

Note: Certificate program students are required to take 7½-week human relations and communications courses to fulfill graduation requirements. It is recommended that these courses be taken during the first term.

ELECTRONICS TECHNOLOGY PROGRAM

			Hrs Wk	*Cr Hrs*
Term I				
[1]BA	111	Communications (7½ weeks)	5	2
[1]BA	131	Human Relations (7½ weeks) ...	5	2
ELEC	101L	Electronics Lab/Theory I	15	9
ELEC	102	Electronics Mathematics	10	6
[2]ENG	119	Technical Communications		3
		[2]Humanities/Social Science Elective		3
Term II				
ELEC	111L	Semiconductors	10	6
ELEC	113L	Digital Circuits	10	6
ELEC	114L	Electromechanical Devices	5	3

[2]MATH	162	Calculus I		4
or				
[2]MATH	180	Elementary Calculus		3
Term III				
ELEC	201L	Electronics Lab/Theory III	15	9
ELEC	203L	Introduction to Microprocessors	10	6
[2]PHYS	151/153L	Physics/Lab		4
or				
[2]PHYS	160	General Physics		4
Term IV				
[2]CHEM	111/112L	Introduction to Chemistry/Lab		4
or				
[2]CHEM	121L	General Chemistry		4
ELEC	211L	Electronics Lab/Theory IV	15	9
ELEC	213L	Advanced Digital Techniques	10	6
		Totals	1575	81/82

[1]*Course descriptions on page 60.*
[2]*General education courses required for associate degree. Course descriptions on pages 22–25.*

Support Courses				
ELEC	271	RF Fundamentals	5	3
ELEC	272	Telecommunications	5	3
ELEC	273L	Troubleshooting Techniques	5	3
ELEC	274L	Soldering Techniques (7½ weeks)	5	1

COURSE DESCRIPTIONS

ELEC 101L—Electronics Lab/Theory I (9 cr)
(*Corequisite: ELEC 102 or LEOT 102*) 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.

ELEC 102—Electronic Mathematics (6 cr)
This course covers algebra and trigonometry with emphasis on DC and AC circuit analysis.

ELEC 111L—Semiconductors (6 cr)
(*Prerequisites: ELEC 101L, ELEC 102*) Theory of semiconductors is applied to diode and transistor circuits. Power supplies and amplifier circuits are studied in detail.

ELEC 113L—Digital Circuits (6 cr)
(*Prerequisite: ELEC 102*) 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.

ELEC 114L—Electromechanical Devices (3 cr)
(*Prerequisite: ELEC 101L*) This course is an introduction to electromechanical devices. The topics covered are pneumatic and hydraulic devices, motors and generators, servomechanisms, and power distribution systems including single and three phase devices.

ELEC 201L—Electronics Lab/Theory III (9 cr)
(*Prerequisite: ELEC 111L*) 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.

ELEC 203L—Introduction to Microprocessors (6 cr)
(*Prerequisite: ELEC 113L*) 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.

ELEC 211L—Electronics Lab/Theory IV (9 cr)
(*Prerequisite: ELEC 201L*) 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 optoelectronic devices. Related laboratory exercises provide experience in design and construction of operating systems, troubleshooting and component replacement techniques.

ELEC 213L—Advanced Digital Techniques (6 cr)
(*Prerequisite: ELEC 203L; corequisite: ELEC 211L*) 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.

ELEC 271—RF Fundamentals (3 cr)
(*Prerequisite: ELEC 111L*) 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.

ELEC 272—Telecommunications (3 cr)
(*Corequisite: ELEC 213L*) 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.

ELEC 273L—Troubleshooting Techniques (3 cr)
(*Prerequisites: ELEC 111L, ELEC 113L*) Students learn systems analysis of various electronic equipment which will be encountered in the industry. Emphasis is on locating problems. The course includes theoretical work to complement the laboratory assignments.

ELEC 274L—Soldering Techniques (7½ 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 60.

Electronics Engineering Technology

(Associate in Applied Science Degree)

4 Terms (Montoya Campus)

The Electronics Engineering Technology program emphasizes the application of scientific and engineering methods along with related technical skills necessary to support engineering activity in research, development, production, maintenance and operation.

This program represents a rigorous, engineering-type course of study. Lectures, lab work and considerable homework provide the basis for developing the necessary electronics skills to gain employment in a broad occupational area at levels between the electronics technician and the electrical engineer.

Lab facilities contain modern equipment for testing, troubleshooting, calibrating, analyzing and designing electronic circuits. Such circuits may be found in communications equipment, computers, electronic instruments and many other electronic devices.

Students applying for this program should be seriously interested in the study of electronics with emphasis on mathematics and science and have high standards of excellence.

For the Associate Degree in Electronics Engineering Technology, the student must complete a total of 69 credit hours in general education and technical courses.

ELECTRONICS ENGINEERING TECHNOLOGY PROGRAM

			Cr Hrs
Term I			
*ENG	101	Writing with Readings in Exposition	3
ET	109L	Circuit Analysis I	5
ET	117L	Graphics and Analytical Methods	3
*MATH	150	Advanced Algebra	3
Term II			
*CHEM	111/112L	Introduction to Chemistry/Lab	4
or			
*CHEM	121L	General Chemistry	4
*ENG	119	Technical Communications	3
ET	119L	Circuit Analysis II	5
ET	137L	Digital Electronics I	3
*MATH	162	Calculus I	4
or			
*MATH	180	Elements of Calculus I	3
Term III			
*CSCI	155	Introduction to Computer Programming	4
ET	209L	Electronic Devices	5
ET	237L	Digital Electronics II	3
ET	244L	Microprocessors	4
		*Humanities/Social Science Elective	3
Term IV			
ET	219L	Electronic Systems	5
ET	229L	Microprocessor Interfacing	3
*PHYS	151/153L	Physics/Lab	4
or			
*PHYS	160	General Physics	4
		*Humanities/Social Science Elective	3
		*Math/Science/Technical Elective	3
		Total	69/70
Term V (Optional)			
ET	230L	Cooperative Training	6

**General education courses. Course descriptions on pages 22–25.*

Technical Electives			
ET	118	Electronic Processing	3
ET	215	Telecommunications	3
ET	216	Robotics and Industrial Control Systems	3
ET	217	Power Systems	3
ET	218	Pulse Power	3

COURSE DESCRIPTIONS

ET 109L—Circuit Analysis I (5 cr)
(*Pre- or corequisites: ENG 101, ET 117L, MATH 150*) This course provides an introduction to electrical circuit elements and the basic methods for circuit analysis. Ohm's Law, Kirchhoff's Law, Mesh and Nodal analysis, Thevenin's and Norton's theorems, capacitance, inductance, and single time-constant circuits are covered.

ET 117L—Graphics and Analytical Methods (3 cr)
(*Corequisite: MATH 150*) The fundamentals of drawing room drafting practices, electrical circuit drawing, terms, symbols and standards are covered in this course. Also included is an introduction to computer-aided graphics using application programs. Techniques used to solve problems using a microprocessor along with graphical presentation of data using computer application programs are covered.

ET 118—Electronic Processing (3 cr)
This course is a study of current electronic processing methods used by the local industry.

ET 119L—Circuit Analysis II (5 cr)
(*Prerequisite: ET 109L; corequisites: ENG 119, MATH 162*) The techniques for analysis of AC circuits, reactance, impedance, phasor analysis, power factor, and energy considerations are included in this course.

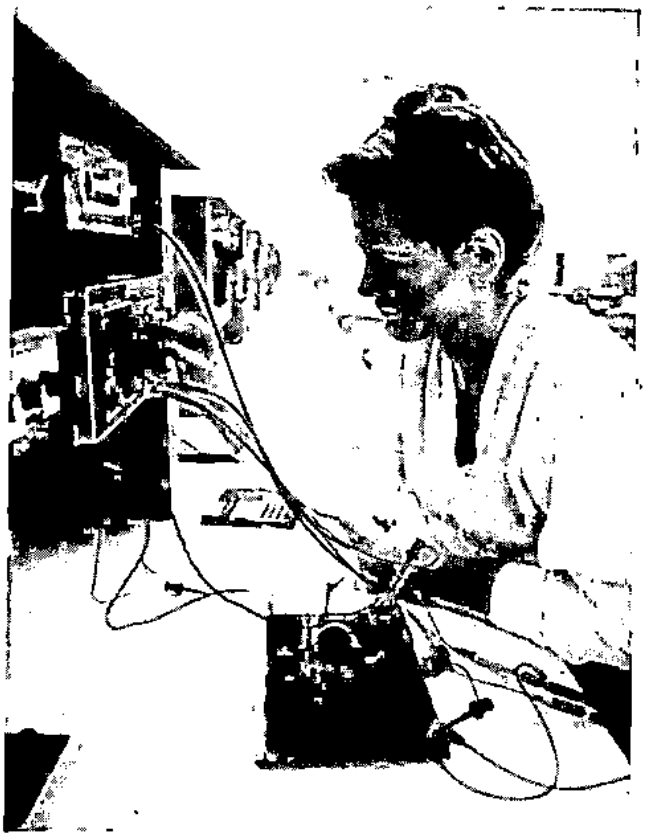
ET 137L—Digital Electronics I (3 cr)
(*Prerequisite: ET 109L*) The analysis and synthesis of combinational logic circuits, Boolean algebra, logic gates, Karnaugh Maps, MSI and LSI integrated circuits are covered in this course. Also included are the interpretation of logic diagrams and techniques of troubleshooting digital circuits.

ET 209L—Electronic Devices (5 cr)
(*Prerequisites: ET 119L and MATH 162*) This course is an introduction to the discrete and integrated circuit devices used in electronic circuits. Included are diodes, Junction and FET transistors, and operational amplifiers as they are used in electronic circuits.

ET 215—Telecommunications (3 cr)
(*Prerequisite: ET 244L; corequisite: ET 229L*) 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.

ET 216—Robotics and Industrial Control Systems (3 cr)
(*Prerequisites: All Term I and Term II courses*) This course includes the study and implementation of robot/industrial control systems. Industrial servo systems, both analog and hybrid, are covered. Position and velocity sensors and conversion techniques are included in hybrid servo control systems. The laboratory exercises support and enhance the classroom subject matter.

ET 217—Power Systems (3 cr)
(*Prerequisites: All Term I, Term II and Term III courses*) Analysis of power system parameters, load studies and fault calculations by digital computers are studied.



ET 218—Pulse Power (3 cr)
(*Pre- or corequisite: PHYS 151 or equivalent*) The generation, transmission and measurement of high voltage, pulsed power systems are studied.

ET 219L—Electronic Systems (5 cr)
(*Prerequisite: ET 209L*) The installation, maintenance, calibration and application of electronic systems are covered. Also included are the interpretation of reference material for electronic systems, system integration and checkout, automated data collection and writing technical manuals of instruction.

ET 229L—Microprocessor Interfacing (3 cr)
(*Prerequisites: All Term III courses*) A system of digital circuits is studied using a microcomputer. Interfacing and concepts projects are stressed.

ET 230L—Cooperative Training (6 cr)
(*Prerequisites: All Term IV courses*) In cooperation with local industry, students work in an appropriate training program on a cooperative basis for one term.

ET 237L—Digital Electronics II (3 cr)
(*Prerequisite: ET 137L; corequisite: ET 209L*) Sequential logic circuits, MSI, LSI,and VLSI integrated circuits are covered in this course along with counters, shift-registers, ALUs, memory and interface circuitry for microprocessors.

ET 244L—Microprocessors (4 cr)
(*Corequisites: ET 237L, ET 209L*) This course covers computers and microprocessors for Electronics Technology including the architecture, programming, input/output and applications.

See also the common support course descriptions on page 60.

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, microcomputers, 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, microcomputers, servo trainers, hydraulic-pneumatic and process control equipment, and a student shop area.

To qualify for a certificate, students must complete successfully 1650 instructional hours of which 825 are laboratory work and 825 are theory. To qualify for an electronics communications 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 three years must fulfill the general education and residency requirements to receive the associate degree.

Note: Students seeking a certificate are required to take 7½-week human relations and communications courses to fulfill graduation requirements. It is recommended that these courses be taken during the first term.

INSTRUMENTATION AND CONTROL TECHNOLOGY PROGRAM

			Hrs Wk	Cr Hrs
Term I				
[1]BA	111	Communications (7½ weeks)	5	2
[1]BA	131	Human Relations (7½ weeks)	5	2
ELEC	101L	Electronics Lab/Theory I	15	9
ELEC	102	Electronics Mathematics	10	6
[2]ENG	119	Technical Communications		3
		[2]Humanities/Social Science Elective		3
Term II				
ELEC	111L	Semiconductors	10	6
ELEC	113L	Digital Circuits	10	6
ELEC	114L	Electromechanical Devices	5	3
[2]MATH	162	Calculus I		4
or				
[2]MATH	180	Elementary Calculus		3
Term III				
[2]CHEM	111/ 112L	Introduction to Chemistry/Lab		4
or				
[2]CHEM	121L	General Chemistry		4
IC	201L	Industrial Electronics III	10	6
IC	205L	Instrumentation and Control	10	6
IC	206L	Feedback and Control	5	3
Term IV				
IC	211L	Industrial Electronics IV	10	6
IC	215L	Digital Applications	10	6
IC	216	Advanced Feedback and Control	10	6
[2]PHYS	151/ 153L	Physics/Lab		4
or				
[2]PHYS	160	General Physics		4
		Totals	1650	84–85

[1]*Course descriptions on page 60.*
[2]*General education courses required for associate degree. Course descriptions on pages 22–25.*

Support Courses				
ELEC	271	RF Fundamentals	5	3
ELEC	272	Telecommunications	5	3
ELEC	273L	Troubleshooting Techniques	5	3
ELEC	274L	Soldering (7½ weeks)	5	1

COURSE DESCRIPTIONS

ELEC 101L—Electronics Lab/Theory I (9 cr)
(*Corequisite: ELEC 102*) 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.

ELEC 102—Electronics Mathematics (6 cr)
This course covers algebra and trigonometry with an emphasis on DC and AC circuit analysis.

ELEC 111L—Semiconductors (6 cr)
(*Prerequisites: ELEC 101L, ELEC 102*) 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.

ELEC 113L—Digital Circuits (6 cr)
(*Prerequisite: ELEC 102*) 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.

ELEC 114L—Electromechanical Devices (3 cr)
(*Prerequisite: ELEC 101L*) This course is an introduction to electromechanical devices. Topics covered are pneumatic and hydraulic devices, motors and generators, servomechanisms, and power distribution systems including single and three phase devices.

ELEC 271—RF Fundamentals (3 cr)
(*Prerequisite: ELEC 111L*) This course provides study and practical analysis of broadcast communications systems. Included are single side band, radio, video equipment and regulations.

ELEC 272—Telecommunications (3 cr)
(*Corequisite: ELEC 213L*) 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.

ELEC 273L—Troubleshooting Techniques (3 cr)
(*Prerequisites: ELEC 111L, ELEC 113L*) Students learn systems analysis of various electronic equipment. Emphasis is on locating problems. The course includes theoretical work to complement the laboratory assignments.

ELEC 274L—Soldering Techniques (7½ 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.

IC 201L—Industrial Electronics III (6 cr)
(*Prerequisite: ELEC 111L*) Operational amplifiers, audio and video amplifiers, oscillator circuits, modulation methods and thyristor components are studied.

IC 205L—Instrumentation and Control (6 cr)
(*Prerequisite: ELEC 113L*) In this course, the student learns to design and construct a computer-controlled robot. Assembly language using the 8088 microprocessor is covered, and several interfacing projects are done including motor control.

IC 206L—Feedback and Control (3 cr)
(*Prerequisite: ELEC 113L*) The student learns to program an 8088-based microcomputer in Pascal and Assembler languages. Emphasis is placed on structured top-down programming. Program requirements include various input and output formats, arrays and files. A simulation project is required using computer graphics techniques.

IC 211L—Industrial Electronics IV (6 cr)
(*Prerequisites: IC 201L, IC 205L, IC 206L*) Topics covered in this course include robotics, Pascal applications programming, telecommunications, transducer/computer interfacing projects and thyristor motor controls. The Puma industrial robot with VAL II control language and the Rhino robot with Pascal are covered extensively.

IC 215L—Digital Applications (6 cr)
(*Prerequisite: IC 205L*) 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.

IC 216—Advanced Feedback and Control (6 cr)
(*Prerequisite: IC 201L*) This course is totally a theory class with demonstrations and aids but no lab work. Topics covered include the theory of transducers—thermal, P/I, P/E, 20ma loop, etc.—computer interfacing and communications.

See also the common support course descriptions on page 60.

Laser Electro-Optic Technology

4 Terms (Montoya Campus)

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 1725 instructional hours of which 900 are laboratory work and 825 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 three 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.

Note: Students seeking a certificate are required to take 7½-week human relations and communications courses to fulfill graduation requirements. It is recommended that these courses be taken during the first term.

LASER ELECTRO-OPTIC TECHNOLOGY PROGRAM

			Hrs Wk	*Cr Hrs*
Term I				
[1]BA	111	Communications (7½ weeks)	5	2
[1]BA	131	Human Relations (7½ weeks)	5	2
ELEC	101L	Electronics Lab/Theory I	15	9
[2]ENG	119	Technical Communications		3
LEOT	102	Laser Mathematics I	5	3
LEOT	103L	Digital Principles	5	3
[2]MATH	162	Calculus I		4
or				
[2]MATH	180	Elementary Calculus		3
Term II				
ELEC	111L	Semiconductors	10	6
LEOT	112	Laser Mathematics II	5	3
LEOT	113L	Introduction to Microprocessors	10	6
LEOT	114	Introduction to Lasers with Optics	5	3
[2]PHYS	151/153L	Physics/Lab		4
or				
[2]PHYS	160	General Physics		4
Term III				
[2]CHEM	111/112L	Introduction to Chemistry/Lab		4
or				
[2]CHEM	121L	General Chemistry		4
LEOT	201L	Semiconductor Circuit Applications	15	9
LEOT	203L	Microprocessor Interfacing	5	3
LEOT	205L	Advanced Laser Systems	5	3
LEOT	207L	LEO Components	5	3
Term IV				
LEOT	211L	Op-Amps and Linear Integrated Circuits	3	1
LEOT	212L	Vacuum System Technology	2	1
LEOT	217L	Advanced Laser Systems with Applications	10	6
LEOT	218L	Laser Measurements	5	3
LEOT	219	Technical Physics	5	3
		[2]Humanities/Social Science Elective		3
		Totals	1725	86–87

[1]*Course descriptions on page 60.*
[2]*General education courses required for associate degree. Course descriptions on pages 22–25.*

Support Courses				
ELEC	273L	Troubleshooting Techniques	5	3
ELEC	274L	Soldering (7½ weeks)	5	1
LEOT	171L	Basic Tool Applications	5	3

COURSE DESCRIPTIONS

ELEC 101L—Electronics Lab/Theory I (9 cr)
(*Corequisite: LEOT 102*) 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.

ELEC 111L—Semiconductors (6 cr)
(*Prerequisites: ELEC 101L, LEOT 102*) 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.

ELEC 273L—Troubleshooting Techniques (3 cr)
(*Prerequisite: LEOT 201L*) Students learn systems analysis of various electronic equipment. Emphasis is on locating problems. The course includes theoretical work to complement the laboratory assignments.

ELEC 274L—Soldering Techniques (7½ 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.

LEOT 102—Laser Mathematics I (3 cr)
Beginning and advanced algebra is emphasized. Concepts in trigonometry and geometry are covered.

LEOT 103L—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.

LEOT 112—Laser Mathematics II (3 cr)
(*Prerequisites: ELEC 101L, LEOT 102*) 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.

LEOT 113L—Introduction to Microprocessor Circuitry (6 cr)
(*Prerequisite: LEOT 103L*) Clocked logic, multiplexers, shift-registers, memories and digital displays are studied. Machine and Assembler programming are introduced.

LEOT 114L—Introduction to Lasers with Optics (3 cr)
(*Corequisite: LEOT 112*) 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.

LEOT 171L—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.

LEOT 201L—Semiconductor Circuit Applications (9 cr)
(*Prerequisite: ELEC 111L*) Analysis of transistor circuits is continued. Operation of the various classes of amplifiers, wave-shaping circuits, oscillators, and principles of AM and FM are studied. Differential amplifier and operational amplifier operation principles are introduced.

LEOT 203L—Microprocessor Interfacing (3 cr)
(*Prerequisite: LEOT 113L*) A system of digital circuits is studied using a microcomputer. Interfacing and concepts projects are stressed.

LEOT 205L—Advanced Laser Systems (3 cr)
(*Prerequisite: LEOT 114L*) This course covers the basics of theory and operation of solid state, ion gas, molecular gas and semiconductor lasers. Laboratory experiments stressing safety, accuracy and technical writing skills are performed.

LEOT 207L—LEO Components (3 cr)
(*Prerequisite: LEOT 114L*) Physical optics are used to illustrate the operation and compare the performances of windows, prisms, lenses, filters, gratings, polarizers and frequency doublers.

LEOT 211L—Op-Amps and Linear Integrated Circuits (1 cr)
(*Prerequisite: LEOT 201L*) Linear integrated circuits are studied with emphasis on applications in instrumentation, signal generation active filters and control circuits. Power supplies are introduced.

LEOT 212L—Vacuum System Technology (1 cr)
(*Corequisite: LEOT 219*) This course examines the various types of vacuum equipment used in industry. Laboratory work includes the assembly, maintenance and leak detection of various systems.

LEOT 217L—Advanced Laser Systems with Applications (6 cr)
(*Prerequisites: LEOT 205L, LEOT 207L*) 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.

LEOT 218L—Laser Measurements (3 cr)
(*Corequisite: LEOT 217L*) Detection of radiation is covered. Various devices—calorimeters, photo-multiplier tubes, semiconductor diodes and pyroelectric detectors—and interferometric measurements also are studied.

LEOT 219—Technical Physics (3 cr)
(*Corequisite: LEOT 217L*) 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 electro-optics.

See also the common support course descriptions on page 60.

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 program is 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 counselor 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 REFRIGERATION: 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.

ELECTRICAL TRADES: Must have normal color differentiation.

FIRE SCIENCE: Must purchase all textbooks for the program.

LAW ENFORCEMENT: Must purchase all textbooks for the program and a pair of gray sweat togs for the second term.

MACHINE TOOL TECHNOLOGY: 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.

TRANSPORTATION TRADES: Must be free of chronic respiratory diseases and allergies to fuels and solvents. A valid driver's license and clean driving record are required by most employers.

WELDING: Must be free of chronic respiratory diseases and have depth perception correctable in both eyes.

SAFETY NOTE: *It can be dangerous to wear contact lenses in any area where there are fumes from chemicals, solvents and gases. Affected 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 dean and counselor.

The supervised work experience option does not qualify students for Veterans Administration benefits or other student financial aids. It is not an option for associate degree programs.

APPRENTICESHIP PROGRAMS

Commercial Carpentry Apprenticeship

8 Terms (Main Campus)

The Commercial Carpentry Apprenticeship program for persons currently employed in the 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 become journeymen.

The class meets Wednesdays and Thursdays from 7 p.m. to 9:30 p.m. and some Saturdays from 8 a.m. to noon.

There is a $20 registration fee each term. Students must purchase textbooks and instructional materials through the local ABC chapter.

COURSE DESCRIPTION

CEAP 199—Commercial Carpentry Apprenticeship (24 cr)
(Prerequisite: Current full-time employment in the carpentry industry) This course consists of 8610 hours of which 8000 hours are supervised on-the-job training with experienced journeymen and 610 hours are related classroom instruction at T-VI. The classroom instruction covers orientation, safety, shop and trade math, commercial carpentry process for shop tools and equipment, supplies and materials, building systems, blueprint reading, concrete, specifications and code interpretation.

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

CUAP 199—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

ETAP 199—Electrical Trades Apprenticeship (24 cr)
(Prerequisite: Current full-time employment in the electrical trades industry) 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

SMAP 199—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

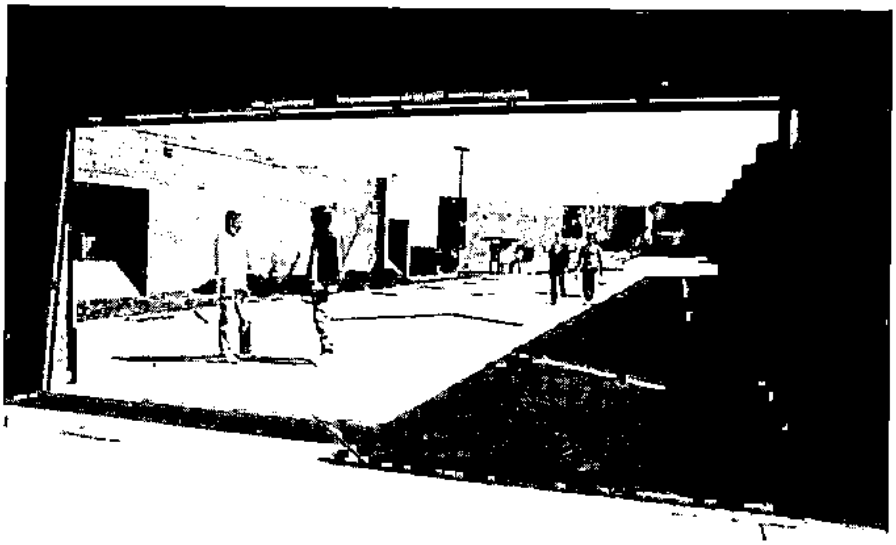
At least 12 students must sign up and instructional space must be available before a support course can be offered. As a result, not all courses are offered each term. Most are offered only at the Main Campus.

Course			Hrs Wk	Cr Hrs
ACHR	170	Pneumatic Control Systems	5	3
AUTC	102	Math/Basic Electricity	5	3
AUTC	170	Transportation Trades Machining	5	3
[1]COMM	041	Communications for Trades	5	3
ELTR	170	Pole Climbing	4	2
ELTR	213	Occupational Safety	5	3
[1]LANG	061	Writing Lab	5	3
LAWE	296	Special Topics		1–6
MATR	170	Basic Tool/CNC	5	3
MATR	171	Precision Measurement	5	3
PLMB	170	Energy Management/Solar Applications	5	3
PLMB	171	Plumbing/Heating Control Circuitry	5	3
[1]SCIE	011	Introduction to Physics	5	3
[1]SCIE	013	Thinking Strategies	5	3
WELD	170	Welding Skills Improvement	5	3

[1]*See Developmental Studies Department, page 29, for course descriptions.*

COURSE DESCRIPTIONS

ACHR 170—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.



AUTC 102—Math/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 diagnostic equipment, testing procedures and theory related to heavy equipment, electrical systems, troubleshooting and repair procedures is included.

AUTC 170—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.

ELTR 170—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.

ELTR 213—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.

LAWE 296—Special Topics (1–6 cr)
This course includes an in-depth study of problems and the advanced techniques that criminal justice experts use in responding to them.

MATR 170—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.

MATR 171—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.

PLMB 170—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.

PLMB 171—Plumbing/Heating Control Circuitry (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.

WELD 170—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 arc welding. Instruction is geared for the specific needs of all majors.

CONTINUING EDUCATION DIVISION COURSE SUBSTITUTIONS

Some Continuing Education Division courses may be substituted for Instructional Division trades courses. Classes which substitute are marked with a ✹ in the Continuing Education Division section of this catalog.

The courses are:

Continuing Education Division Course	*Substitutes for:*	*Instructional Division Program*
SK 210: Automotive Servicing SK 510: Automotive Brakes SK 510A: Automotive Front End Alignment	AUTC 101L—Automotive Technology Theory/Lab I	Automotive Technology

NOTE: All three Continuing Education Division courses must be completed successfully to substitute for the Instructional Division course.

SK 235: Refrigeration I SK 236: Refrigeration II SK 238: Electrical Control Circuitry	ACHR 101L—Air Conditioning, Heating and Refrigeration Theory/Lab I	Air Conditioning, Heating and Refrigeration

NOTE: All three Continuing Education Division courses must be completed successfully to substitute for the Instructional Division course.

SK 265: Sheet Metal Fabrication	ACHR 202L—Sheet Metal Applications Theory/Lab	Air Conditioning, Heating and Refrigeration

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 proficiency certificate 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 Wk	*Cr Hrs*
Term I				
ACHR	101L	Air Conditioning, Heating and Refrigeration Theory/Lab I ..	20	12
ACHR	102	Control Circuitry/Math I	5	3
Term II				
ACHR	111L	Air Conditioning, Heating and Refrigeration Theory/Lab II .	20	12
ACHR	112	Air Conditioning, Heating and Refrigeration Mathematics II	5	3
ACHR	113	Control Circuitry II	5	3
Term III				
ACHR	201L	Air Conditioning, Heating and Refrigeration Theory/Control Circuitry Lab III	15	9
ACHR	202L	Sheet Metal Theory/Lab.....	15	9
		Totals	1275	51

Option
Supervised Work Experience

Support Courses
See page 78.

COURSE DESCRIPTIONS

ACHR 101L—Air Conditioning, Heating and Refrigeration Theory/Lab 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.

ACHR 102—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.

ACHR 111L—Air Conditioning, Heating and Refrigeration Theory/Lab 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.

ACHR 112—Air Conditioning, Heating and Refrigeration Mathematics II (3 cr)
(*Prerequisite: ACHR 102 or equivalent*) This course covers calculations required for residential heating and cooling system design including equipment sizing, duct sizing and layout.

ACHR 113—Control Circuitry II (3 cr)
(Prerequisite: ACHR 102 or equivalent) This course includes the design, installation and troubleshooting of air conditioning, heating and refrigeration control circuits. Emphasis is on electrical control devices from various manufacturers.

ACHR 201L—Air Conditioning, Heating and Refrigeration Theory/Control Circuitry Lab III (9 cr)
(Prerequisites: ACHR 102, ACHR 111L or equivalent) The installation, maintenance and service of commercial air conditioning, heating and various refrigeration systems are covered, along with multizone heating/cooling, chilled water and hot water systems. More advanced control theory and terminology also are covered. Emphasis is on electrical, pneumatic and solid state circuitry as well as electronic and electric control devices, their installation and service.

ACHR 202L—Sheet Metal Theory/Lab (9 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. Study of the design, layout and application of air distribution duct systems for air conditioning also is included.

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.

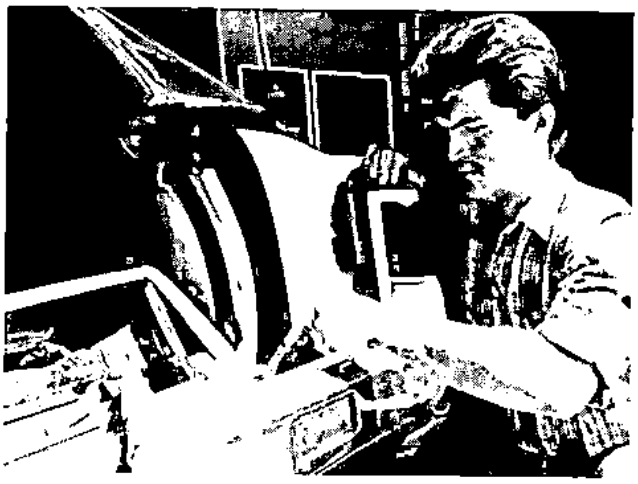
The program is designed to allow a student to enter the industry at three separate levels. Upon successful completion of Automotive Body Repair Theory/Lab I, the student may receive a detailing certificate and obtain employment detailing and preparing vehicles for collision/refinishing repairs. Completion 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-the-art 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 work 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 PROGRAM

			Hrs Wk	Cr Hrs
Term I				
AUBO	101L	Automotive Body Repair Theory/Lab I.....	18	12
AUBO	102	Math/Basic Electricity.....	5	3
		Detailing Certificate		
Term II				
AUBO	111L	Automotive Body Repair Theory/Lab II.....	23	15
		Basic Refinishing Certificate		
Term III				
AUBO	201L	Automotive Body Repair Theory/Lab III	23	15
		Totals	1035	45
		Automotive Body Repair Certificate		



Option
Supervised Work Experience

Support Courses
See page 78.

COURSE DESCRIPTIONS

AUBO 101L—Automotive Body Repair Theory/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.

AUBO 102—Math/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 diagnostic equipment, testing procedures and theory related to heavy equipment, electrical systems, troubleshooting and repair procedures is included.

AUBO 111L—Automotive Body Repair Theory/Lab II (15 cr)
(*Prerequisites: All Term I courses or equivalent*) 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.

AUBO 201L—Automotive Body Repair Theory/Lab III (15 cr)
(*Prerequisites: All Term II courses or equivalent*) 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 shell alignment procedures and estimating techniques. The student performs a wide variety of refinishing jobs duplicating a modern auto collision production shop environment.

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 entry-level 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 Theory/Lab 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, power trains and air conditioning. Upon completion of Automotive Technology Theory/Lab 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

			Hrs Wk	Cr Hrs
Term I				
AUTC	101L	Automotive Technology Theory/Lab I	20	12
AUTC	102	Math/Basic Electricity	5	3
		Basic Auto Servicing Certificate		
Term II				
AUTC	111L	Automotive Technology Theory/Lab II	20	12
AUTC	113	Transportation Electronics	5	3
		Basic Auto Repair Certificate		
Term III				
AUTC	201L	Automotive Technology Theory/Lab III	25	15
		Totals	1125	45
		Automotive Technology Certificate		

Option
Supervised Work Experience

Support Courses
See page 78.

COURSE DESCRIPTIONS

AUTC 101L—Automotive Technology Theory/Lab 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 receive instruction on basic internal combustion engine theory—complete engine service and repair procedures and the use of precision measuring tools.

AUTC 102—Math/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 diagnostic equipment, testing procedures and theory related to heavy equipment, electrical systems, troubleshooting and repair procedures is included.

AUTC 111L—Automotive Technology Theory/Lab II (12 cr)

(*Prerequisites: AUTC 101L, AUTC 102 or equivalent*) These courses cover diagnostic and repair procedures for manual drive train and axles, and automatic transmission/transaxle. Instruction is provided in diagnostic and repair procedures for clutches and differential units. Heating and air conditioning diagnosis, testing, repair and servicing also are included.

AUTC 113—Transportation Electronics (3 cr)

(*Prerequisites: AUTC 101L, AUTC 102 or equivalent*) The student learns how multimeters are used in analyzing basic, direct and alternating current circuits. The theory of solid-state devices, basic principles of electronics, and interpretation of circuit diagrams are covered.

AUTC 201L—Automotive Technology Theory/Lab III (15 cr)

(*Prerequisites: AUTC 111L, AUTC 113 or equivalent*) These courses cover advanced heating and air conditioning instruction. Diagnosis and repair of electrical components and engine performance are covered. 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 proficiency certificate detailing the skills mastered.

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

			Hrs Wk	Cr Hrs
Term I				
CARP	101L	Carpentry Theory/Lab I	20	12
CARP	102	Carpentry Math/Blueprint Reading I	5	3
		Totals	750	30
		Framing Certificate		
Term II				
CARP	111L	Carpentry Theory/Lab II	20	12
CARP	112	Carpentry Math/Blueprint Reading II	5	3
		Totals	750	30
		Carpentry Trades Certificate		

Option

Supervised Work Experience

Support Courses

See page 78.

COURSE DESCRIPTIONS

CARP 101L—Carpentry Theory/Lab 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.

CARP 102—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.

CARP 111L—Carpentry Theory/Lab II (12 cr)

(*Prerequisite: CARP 101L or equivalent*) This course is a continuation of CARP 101L with the addition of finish carpentry, basic construction and installation of cabinets and millwork. Maintenance, remodeling, concrete finishing and light commercial construction are emphasized.

CARP 112—Carpentry Mathematics/Blueprint Reading II (3 cr)

(*Prerequisite: CARP 102 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 35 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 825 instructional hours of which 600 are laboratory work and 225 are related theory.

When students leave the program, they receive a proficiency certificate listing the skills mastered.

Commercial Printing students must pay a personal equipment fee of $30 before entering the first term.

COMMERCIAL PRINTING PROGRAM

			Hrs Wk	Cr Hrs
Term I				
CMPR	101L	Commercial Printing Theory/Lab I	25	15
Term II				
CMPR	111L	Commercial Printing Theory/Lab II	30	18
		Totals	825	33

COURSE DESCRIPTIONS

CMPR 101L—Commercial Printing Theory/Lab I (15 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. Instruction also is provided in job analysis, cost control, estimating and production work flow. Basic arithmetic as it applies to the printing trade for measurements, ink and chemical formulas, paper cuts and job pricing is included.

CMPR 111L—Commercial Printing Theory/Lab II (18 cr)
(*Prerequisite: CMPR 101L or equivalent*) 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. The course continues special principles as they relate to individual work stations. The student receives instruction in one of seven specialty areas.

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 proficiency certificate 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 Wk	Cr Hrs
Term I				
BKNG	101L	Baking Theory/Lab I	20	12
BKNG	102	Food Service Mathematics	5	3
Term II				
BKNG	111L	Baking Theory/Lab II	25	15
		Totals	750	30

Option
Supervised Work Experience

COURSE DESCRIPTIONS

BKNG 101L—Baking Theory/Lab (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.

BKNG 102—Food Service Mathematics (3 cr)
Basic arithmetic for sales, portioning and pricing of food products is covered. Students also learn to use cash registers.

BKNG 111L—Baking Theory/Lab II (15 cr)
(*Prerequisite: BKNG 101L*) 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 8).

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 proficiency certificate 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

			Hrs Wk	Cr Hrs
Term I				
QUFD	101L	Quantity Food Theory/Lab I	20	12
QUFD	102	Food Service Mathematics	5	3
Term II				
QUFD	111L	Quantity Food Theory/Lab II	25	15
		Totals	750	30

COURSE DESCRIPTIONS

QUFD 101L—Quantity Food Theory/Lab 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.

QUFD 102—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.

QUFD 111L—Quantity Food Theory/Lab 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 covers the transmission, drive train and hydraulic systems. In the third term, students repair electrical components, air conditioning and fuel injection systems.

A student may leave the program when a training objective is reached and receive a proficiency 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

			Hrs Wk	Cr Hrs
Term I				
DIME	101L	Diesel Theory/Lab I	20	12
DIME	102	Math/Basic Electricity	5	3
Term II				
DIME	111L	Diesel Theory/Lab II	20	12
DIME	113	Transportation Electronics	5	3
Term III				
DIME	201L	Diesel Theory/Lab III	25	15
		Totals	1125	45

Option
Supervised Work Experience

Support Courses
See page 78.

COURSE DESCRIPTIONS

DIME 101L—Diesel Theory/Lab I (12 cr)
Emphasis is on two- and 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; and governor control design. The course introduces the student to diagnosis and repair of engine failures and reduced operational capabilities.

DIME 102—Math/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 diagnostic equipment, testing procedures and theory related to heavy equipment, electrical systems, troubleshooting and repair procedures is included.

DIME 111L—Diesel Theory/Lab II (12 cr)
(*Prerequisites: DIME 101L, DIME 102 or equivalent*) Basic theory of the entire drive train and hydraulic systems is studied. The course covers shop safety and the theory related to test equipment, diagnosis, troubleshooting, analysis procedures and an introduction to job seeking and job retention skills. Instruction includes the service and repair of drive train and hydraulic system components.

DIME 113—Transportation Electronics (3 cr)
(*Prerequisites: DIME 101L, DIME 102 or equivalent*) Students learn how multimeters are used in analyzing basic direct and alternating current circuits. The theory of solid-state devices, basic principles of electronics and interpretation of circuit diagrams are covered.

DIME 201L—Diesel Theory/Lab III (15 cr)
(*Prerequisites: DIME 111L, DIME 113 or equivalent*) Students learn safety, diagnosis, troubleshooting and repair procedures of electrical systems, fuel injection components and air conditioning 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 trades 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.

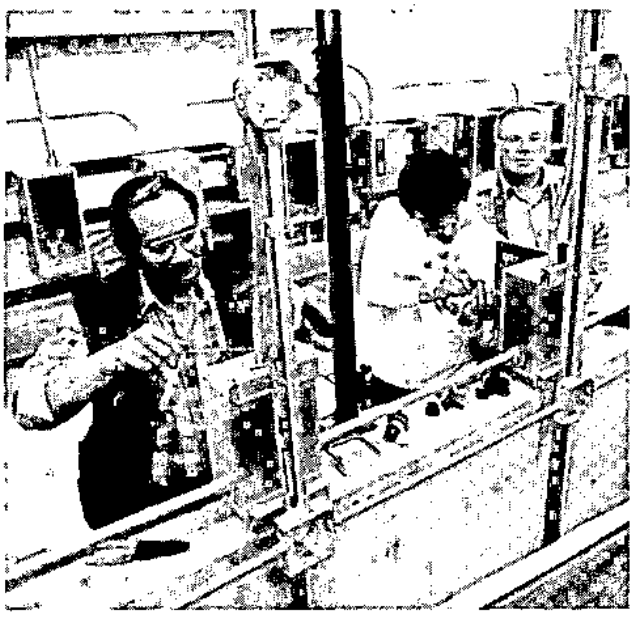
Completion of Term III gives the student additional skills in design and installation of industrial control systems and heavy construction work. A student may receive a commercial wiring certificate at this point.

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 1725 instructional hours of which 900 are laboratory work and 825 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.

Note: Students are required to take 7½-week human relations and communications courses to fulfill graduation requirements. It is recommended that these courses be taken during Term I or Term III.



ELECTRICAL TRADES PROGRAM

			Hrs Wk	*Cr Hrs*
Term I				
[1]BA	111	Communications (7½ weeks)..	5	2
[1]BA	131	Human Relations (7½ weeks) .	5	2
ELTR	101L	Electrical Trades Theory/Lab I.	20	12
ELTR	102	Electrical Math I	5	3
Term II				
ELTR	111L	Electrical Trades Theory/Lab II	20	12
ELTR	112	Electrical Trades Math II.....	5	3
ELTR	113	Electrical Trades Blueprint Reading I.....	5	3
		Residential Wiring Certificate		
Term III				
ELTR	201L	Electrical Trades Theory/Lab III.....	25	15
ELTR	202	Electrical Trades Blueprint Reading II	5	3
		Commercial Wiring Certificate		
Term IV				
ELTR	211L	Electrical Trades Theory/Lab IV	20	12
ELTR	213	Occupational Safety.....	5	3
		Totals	1725	70
		Electrical Trades Certificate		

Option
Supervised Work Experience

Support Courses
See page 78.

[1]*Course descriptions on page 60.*

COURSE DESCRIPTIONS

ELTR 101L—Electrical Trades Theory/Lab I (12 cr)
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.

ELTR 102—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.

ELTR 111L—Electrical Trades Theory/Lab II (12 cr)
(*Prerequisite: ELTR 101L*) 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 low-voltage equipment. Also covered are wiring of temporary services, basic circuit bending, and an in-depth study of the National Electric Code and local codes and regulations.

ELTR 112—Electrical Trades Mathematics II (3 cr)
(*Prerequisite: ELTR 102 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.

ELTR 113—Electrical Trades Blueprint Reading I (3 cr)
(*Prerequisite: ELTR 101L*) 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.

ELTR 201L—Electrical Trades Theory/Lab III (15 cr)
(*Prerequisite: ELTR 111L*) 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. Industrial control circuits for motor-driven equipment are covered including automatic and manual controls, sequencing, forward and reversing, and time delays.

ELTR 202—Electrical Trades Blueprint Reading II (3 cr)
(*Prerequisite: ELTR 113 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.

ELTR 211L—Electrical Trades Theory/Lab IV (12 cr)
(*Prerequisites: ELTR 101L, ELTR 111L, ELTR 201L 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.

ELTR 213—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.

Fire Science

4 Terms (Main Campus)

The Fire Science program provides basic classroom instruction in the field of firefighting. 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 fire department. To earn a certificate, a student must complete successfully 30 credit hours.

The curriculum covered in the third and fourth terms provides additional coursework designed to train the student for higher level positions in the fire science occupation. To earn an Associate in Applied Science Degree in Fire Science, a student must complete successfully 64 credit hours of which 33 are core requirements and 31 are academic courses. Degree program credits may be transferred to four-year colleges or universities that have related programs.

Students must pay personal equipment fees of $10 for the first term and $10 for the second term.

FIRE SCIENCE PROGRAM

			Hrs Wk	Cr Hrs
Term I				
ELTR	213	Occupational Safety	5	3
[1]ENG	101	Writing with Readings in Exposition		3
FIRE	101	Introduction to Fire Science	6	4
FIRE	102	Fire Science I	6	4
[1]SOC	101	Introduction to Sociology		3
Term II				
[1]ENG	119	Technical Communications		3
FIRE	111	Fire Science II	6	4
[1]PHYS	102	Introduction to Physics		3
[1]PSY	101	General Psychology I		3
		Fire Science Certificate		
Term III				
[1]CHEM	111/112L	Introduction to Chemistry/Lab		4
FIRE	201	Fire Science III	6	4
FIRE	202	Fire Science Administration I	6	4
[1]MATH	120	Intermediate Algebra		3
[1]SPCH	221	Interpersonal Communication		3
		or		
		Speech Elective		3
Term IV				
[1]CSCI	101	Computer Literacy		3
		or		
		Computer Elective		3
FIRE	211	Fire Science IV	6	4
FIRE	212	Fire and Arson Investigation	5	3
FIRE	213	Industrial Fire Protection	5	3
[1]SOC	216	Race and Ethnic Groups		3
		Totals	765	64

[1]*General education courses. Course descriptions on pages 22–25.*

COURSE DESCRIPTIONS

ELTR 213—Occupational Safety (3 cr)
This course includes 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.

FIRE 101—Introduction to Fire Science (4 cr)
This is an introductory course that covers fire protection systems, fire protection systems components, fire protection and the environment, and fire protection and the future. Information about physical conditioning also is included.

FIRE 102—Fire Science I (4 cr)
This course covers operational definitions, types of organizations, fire department management approaches, manning other organizations, and fire science service.

FIRE 111—Fire Science II (4 cr)
(*Prerequisites: FIRE 101, FIRE 102*) The basic principles of fire prevention, training and management concepts, public education, inspections and fire codes are covered.

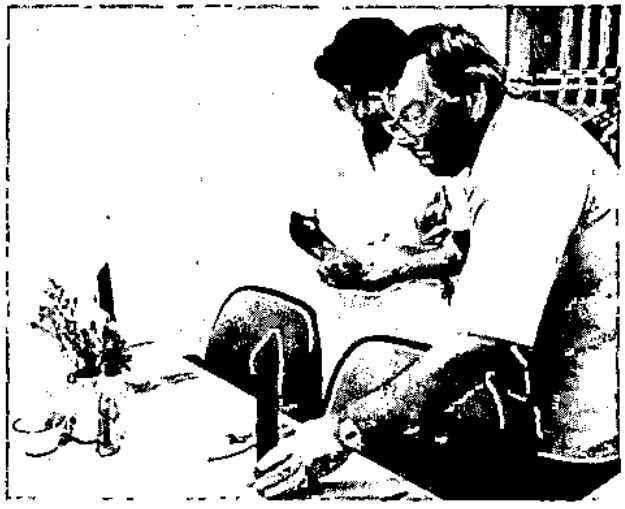
FIRE 201—Fire Science III (4 cr)
(*Prerequisite: FIRE 111*) The student is introduced to building construction with emphasis on structural fire elements, fire spreads, fire safety in buildings, fire loads and definitions. Also covered are the basics in fire protection systems, types, basic operations, definitions and codes.

FIRE 202—Fire Science Administration I (4 cr)
(*Prerequisite: FIRE 111*) This course is designed for new administrators as well as company officers and firefighters. Topics include the budgetary process, personnel management, labor relations, measuring and evaluating productivity, training and education, and fire station location, design and management.

FIRE 211—Fire Science IV (4 cr)
(*Prerequisites: FIRE 201, FIRE 202*) This course covers the basic rules of firefighting strategy, fundamentals of firefighting operations, general and specific fire problems, solving firefighting problems and command at fires.

FIRE 212—Fire and Arson Investigation (3 cr)
(*Prerequisites: FIRE 201, FIRE 202*) All types of fires are covered in this course. The student is introduced to arson problems, motives, chemistry of fire, determining origin and cause, fire scene search and scientific aids. Also included are interview and interrogation techniques and case presentation.

FIRE 213—Industrial Fire Protection (3 cr)
(*Prerequisites: FIRE 201, FIRE 202*) This course covers fire loss prevention and control management, responsibilities of the fire loss prevention and control manager, private emergency organizations, traffic and exit drills, NFPA 704 System of Hazard Identification, Department of Transportation (DOT) placards, package and container labels, hazard emergency teams, and fire hazards of materials and hazardous materials.



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 certificates.

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

FOOD SERVICE MANAGEMENT PROGRAM

Course Requirements			*Hrs Wk*	*Cr Hrs*
FSMG	101	Food Service Management Theory	9	6
FSMG	198	Supervised Work Experience	16	9
		Totals	375	15

COURSE DESCRIPTIONS

FSMG 101—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.

FSMG 198—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 35 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 26 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 better prepare the student for various 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 68 credit hours of which 26 are certificate core requirements and 42 are academic courses.

Students must pay personal equipment fees of $10 for the first term and $15 for the second term.

Students also are required to purchase their own textbooks, and Term II students must have a pair of gray sweat togs.

LAW ENFORCEMENT PROGRAM

			Hrs Wk	Cr Hrs
Term I				
'ENG	101	Writing with Readings in Exposition		3
LAWE	101	Law Enforcement I	23	13
'SOC	111	Criminal Justice System		3
Term II				
LAWE	102	Law Enforcement II	23	13
'MATH	120	Intermediate Algebra		3
		Law Enforcement Certificate		
Term III				
'CSCI	101	Computer Literacy		3
'ENG	119	Technical Communications		3
'PSY	101	General Psychology I		3
or				
'PSY	102	General Psychology II		3
'SOC	101	Introduction to Sociology		3
'SOC	280	Social Science Research		3
Term IV				
'SOC	211	Social Problems		3
'SOC	212	Juvenile Delinquency		3
'SOC	213	Criminology		3
'SOC	214	Sociology of Corrections		3
'SOC	216	Ethnic and Minority Groups		3
'SPCH	221	Interpersonal Communication		3
		Totals	690	68

'General education courses. Course descriptions on pages 22–25.

COURSE DESCRIPTIONS

LAWE 101—Law Enforcement I (13 cr)

This course includes a study of criminal law, juvenile law, criminal procedures, patrol procedures, probation and parole. Additional topics include interviewing techniques, report writing procedures, officer safety and survival, search and seizure, booking and custody, legal aspects of evidence and emergency first aid.

LAWE 102—Law Enforcement II (13 cr)

(*Prerequisite: LAWE 101*) This course includes a study of criminal investigation, traffic accident investigation and enforcement, community relations and corrections methods. Additional topics include investigative report writing, evidence collection, identification and presentation, appropriate force levels, search techniques, crime scene protection, diagramming and sketching, prisoner handling and physical conditioning for police.

Machine Tool Technology

4 Terms (Main Campus)

The Machine Tool Technology 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 tools, engine lathes, milling machines, numerically controlled turning and machining centers, and other equipment used throughout the metal working industry.

To earn a certificate, a student must complete successfully 1575 instructional hours of which 900 are laboratory work and 675 are related theory.

A student may leave the program when a training objective has been reached and receive a proficiency certificate detailing the skills mastered.

Machine Tool Technology 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.

Note: Students are required to take 7½-week human relations and communications courses to fulfill graduation requirements. It is recommended that these courses be taken during Term I or Term II.

MACHINE TOOL TECHNOLOGY PROGRAM

			Hrs Wk	Cr Hrs
Term I				
[1]BA	111	Communications (7½ weeks)	5	2
[1]BA	131	Human Relations (7½ weeks)	5	2
MATT	101L	Machine Tool Technology Theory/Lab I	20	12
MATT	102	Machine Tool Technology Math/Blueprint Reading I	5	3
Term II				
MATT	111L	Machine Tool Technology Theory/Lab II	20	12
MATT	112	Machine Tool Technology Math/Blueprint Reading II	5	3
Term III				
MATT	201L	Machine Tool Technology Theory/Lab III	20	12
MATT	203	Numerical Control Programming I	5	3
Term IV				
MATT	211	Machine Tool Technology Lab IV	15	9
MATT	212	Geometrical Tolerancing/ Metallurgy	5	3
MATT	213	Numerical Control Programming II	5	3
		Totals	1575	64

Option
Supervised Work Experience

Support Courses
See page 78.

[1]*Course descriptions on page 60.*

COURSE DESCRIPTIONS

MATT 101L—Machine Tool Technology Theory/Lab 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.

MATT 102—Machine Tool Technology 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.

MATT 111L—Machine Tool Technology Theory/Lab II (12 cr)

(*Prerequisites: MATT 101L, MATT 102 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.

MATT 112—Machine Tool Technology 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.

MATT 201L—Machine Tool Technology Theory/Lab III (12 cr)

(*Prerequisites: MATT 111L, MATT 112 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.

MATT 203—Numerical Control Programming I (3 cr)

(*Prerequisites: All Term 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.

MATT 211—Machine Tool Technology Lab IV (9 cr)

(*Prerequisites: All Term 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.

MATT 212—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.

MATT 213—Numerical Control Programming II (3 cr)

(*Prerequisite: MATT 203 or 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 proficiency certificate 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 Wk	Cr Hrs
Term I				
PLMB	101L	Plumbing Theory/Lab I	20	12
PLMB	102	Plumbing Math/Blueprint Reading I	5	3
Term II				
PLMB	111L	Plumbing Theory/Lab II	20	12
PLMB	112	Plumbing Math/Blueprint Reading II	5	3
		Totals	750	30

Option
Supervised Work Experience

Support Courses
See page 78.

COURSE DESCRIPTIONS

PLMB 101L—Plumbing Theory/Lab 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.

PLMB 102—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.

PLMB 111L—Plumbing Theory/Lab II (12 cr)
(*Prerequisites: PLMB 101L or equivalent, PLMB 102 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.

PLMB 112—Plumbing Mathematics/Blueprint Reading II (3 cr)
(*Prerequisite: PLMB 102 or equivalent*) Course content includes a detailed study of piping drawings, isometric pipe layouts, interpreting residential and light commercial blueprints, application of plumbing codes, knowledge of terms, and planning and coordinating the job.

Welding

3 Terms (Main Campus)

The Welding program qualifies students for entry-level 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 qualify for supervised work experience. 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 proficiency certificate 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.

Welding students must pay a personal equipment fee of $100 before entering the first term.

WELDING PROGRAM

			Hrs Wk	Cr Hrs
Term I				
WELD	101L	Welding Metallurgy Theory/ Lab I	20	12
WELD	102	Welding Math/Blueprint Reading I	5	3
Term II				
WELD	111L	Welding Metallurgy Theory/ Lab II	20	12
WELD	112	Welding Math/Blueprint Reading II	5	3
Term III				
WELD	201L	Welding Metallurgy Theory/ Lab III	25	15
WELD	202	Blueprint Reading III	5	3
		Totals	1200	48

Option
Supervised Work Experience

Support Courses
See page 78.

COURSE DESCRIPTIONS

WELD 101L—Welding Metallurgy Theory/Lab I (12 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. Instruction is offered in manufacturing processes, structure and properties of metal, temperature changes in welding, effects of alloying elements, variations of fluxes, and slags and gases for shielding.

WELD 102—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.

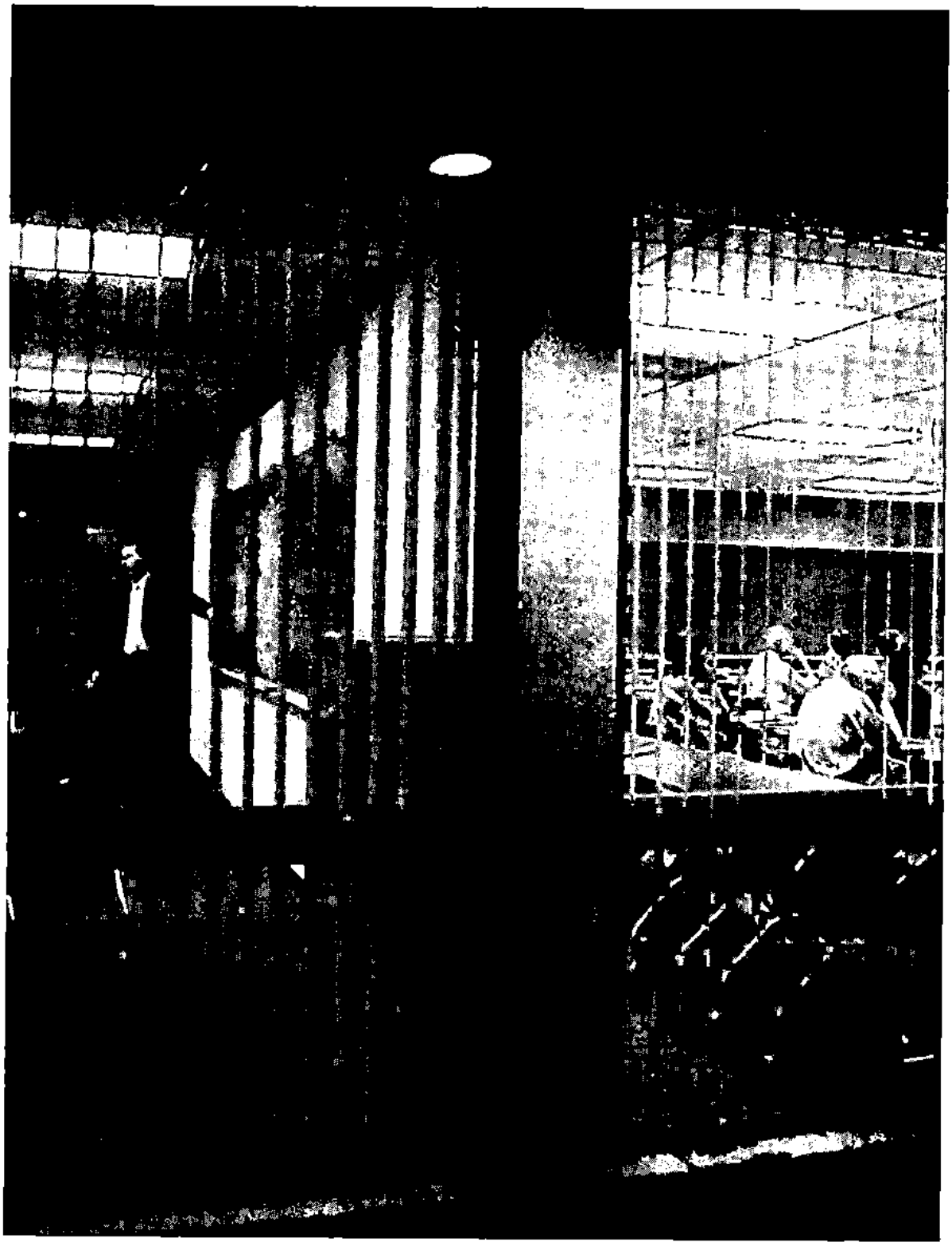
WELD 111L—Welding Metallurgy Theory/Lab II (12 cr)
(*Prerequisite: WELD 101L or equivalent*) This course provides advanced instruction in shielded arc and gas metal-arc welding, and beginning instruction in gas tungsten-arc welding. Students learn about filler metal for joining iron, steel and nonferrous 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.

WELD 112—Welding Mathematics/Blueprint Reading II (3 cr)
(*Prerequisite: WELD 102 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.

WELD 201L—Welding Metallurgy Theory/Lab III (15 cr)
(*Prerequisites: WELD 111L, WELD 112 or equivalent*) Working speed and proficiency are emphasized through continued practice. Instruction is provided in basic pipe welding and layout, materials testing and industrial safety. The course also deals with technical reports and welding problems; welding processes used for carbon steels, stainless steels, aluminum and pipe; procedures, layout used in fabrication and AWS inspection standards.

WELD 202—Blueprint Reading III (3 cr)
(*Prerequisite: WELD 112 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



Calendar
Continuing Education Division

FALL TERM, 1988

Classes Begin ..... Sept. 6
Skill Improvement Registration-by-Mail Deadline ... Aug. 19
Skill Improvement Late Registration ..... Sept. 6–15
Adult Basic Education Registration ..... Sept. 15
Refund Deadline ..... Sept. 16
Staff Development (no classes) ..... Oct. 28
Thanksgiving (no classes) ..... Nov. 23–25
Last Evening of Classes ..... Dec. 22

WINTER TERM, 1989

Classes Begin ..... Jan. 9
Skill Improvement Registration-by-Mail Deadline ... Dec. 16
Skill Improvement Late Registration ..... Jan. 9–19
Adult Basic Education Registration Deadline ..... Jan. 19
Refund Deadline ..... Jan. 20
President's Day (no classes) ..... Feb. 20
Staff Development (no classes) ..... Feb. 24
Last Evening of Classes ..... Apr. 25

SUMMER TERM, 1989

Classes Begin ..... May 8
Skill Improvement Registration-by-Mail Deadline ... Apr. 14
Skill Improvement Late Registration ..... May 8–18
Adult Basic Education Registration Deadline ..... May 18
Refund Deadline ..... May 19
Memorial Day (no classes) ..... May 29
Independence Day (no classes) ..... July 3–4
Last Evening of Classes ..... Aug. 23

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. Registration deadlines are: Fall term—September 15; winter term—January 19; summer term—May 18. Registration is held between 10 a.m. and 8 p.m. Midterm registration also will be held at both campuses. For information, phone 848-1486 (Main Campus) or 298-5461 (Montoya Campus).

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.

Locations

Adult Basic Education classes are offered at T-VI's Main and Montoya campuses and other locations throughout the Albuquerque area. Current off-campus sites include:

Cañoncito Community School, Cañoncito
Cibola High School, 1510 Ellison Rd. N.W.
Duranes Elementary School, 2436 Zickert NW
East Central Multi-Service Center, 7525 Zuni SE
Ernie Pyle Middle School, 1820 Valdora SW
Griegos Elementary School, 4040 San Isidro NW
John Marshall Multi-Service Center, 1500 Walter SE
Nativity School, 9502 Fourth NW
Polk Middle School, 2220 Raymac SW
Rio Grande High School, 2300 Arenal SW
San Jose Cursillo Center, 2401 Broadway SE
West Mesa High School, 6701 Fortuna NW

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 classes at locations not listed here.

Tuition and Fees

There are no tuition charges or fees for Adult Basic Education classes. They are funded with state and federal monies.

Textbooks

Textbooks are loaned to students free.

Standards of Progress

Students must attend at least 80 percent of the class sessions to receive a certificate. No letter grades are given.

Attendance

Teachers take attendance at each class session and turn in monthly absence reports. If a student is absent four class sessions in a row, the teacher tries to contact the student. A student may be dropped from the class after four consecutive absences.

Student Records

The Continuing Education Division maintains permanent records which include the date a student enrolled in a class, date completed or dropped, total number of class hours and hours attended, and whether a certificate was issued to the student. Transcripts are furnished upon student request by the Continuing Education Division Office. The first transcript is free; others cost $1 each. *At least 48 hours must be allowed to process transcript requests.*

ADULT BASIC EDUCATION CLASSES

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

MW	6:30–8:30 p.m.	East Central Multi-Service Center
	7–9 p.m.	Rio Grande High School
		T-VI Main Campus
		T-VI Montoya Campus
		Cibola High School
		Ernie Pyle Middle School
		John Marshall Multi-Service Center
		Nativity School—Alameda
		San Jose Cursillo Center
TTh	7–9 p.m.	T-VI Main Campus
		T-VI Montoya Campus
		Duranes Elementary School
		Nativity School—Alameda
		Polk Middle School
		West Mesa High School
MTWThF	8:30–10:30 a.m.	T-VI Main Campus
	10:45 a.m.–12:45 p.m.	T-VI Main Campus
		T-VI Montoya Campus
	1:15–3:15 p.m.	T-VI Main Campus
Sat	9 a.m.–12 noon	T-VI Montoya Campus

Summer

MW	6:30–8:30 p.m.	East Central Multi-Service Center
	7–9 p.m.	Rio Grande High School
		T-VI Main Campus
		T-VI Montoya Campus
		John Marshall Multi-Service Center
		Nativity School—Alameda
		San Jose Cursillo Center
TTh	7–9 p.m.	T-VI Main Campus
		T-VI Montoya Campus
		Duranes Elementary School
		Nativity School—Alameda
MTWThF	8:30–10:30 a.m.	T-VI Main Campus
	10:45 a.m.–12:45 p.m.	T-VI Main Campus
		T-VI Montoya Campus
	1:15–3:15 p.m.	T-VI Main Campus
Sat	9 a.m.–12 noon	T-VI Montoya Campus

101–I: INTERMEDIATE ENGLISH AS A SECOND LANGUAGE

This class is for students who have completed 101-B or persons who speak some English. It is a continuation of the beginning class with emphasis on speaking and writing.

Fall-Winter-Summer

MW	7–9 p.m.	T-VI Main Campus T-VI Montoya Campus Nativity School—Alameda San Jose Cursillo Center
TTh	7–9 p.m.	T-VI Main Campus T-VI Montoya Campus John Marshall Multi-Service Center Nativity School—Alameda
MTWThF	8:30–10:30 a.m.	T-VI Main Campus
	10:45 a.m.–12:45 p.m.	T-VI Main Campus
	1:15–3:15 p.m.	T-VI Main Campus

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	6:30–8:30 p.m.	East Central Multi-Service Center
	7–9 p.m.	T-VI Main Campus T-VI Montoya Campus Nativity School—Alameda San Jose Cursillo Center
TTh	7–9 p.m.	T-VI Main Campus T-VI Montoya Campus Nativity School—Alameda
MTWThF	8:30–10:30 a.m.	T-VI Main Campus
	10:45 a.m.–12:45 p.m.	T-VI Main Campus
	1:15–3:15 p.m.	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

MW	6:30–8:30 p.m.	Rio Grande High School
	7–9 p.m.	T-VI Main Campus T-VI Montoya Campus Cibola High School Ernie Pyle Middle School
TTh	7–9 p.m.	T-VI Main Campus Nativity School—Alameda West Mesa High School
T	6–9 p.m.	East Central Multi-Service Center
MTWThF	10:45–12:45 p.m.	T-VI Main Campus

Summer

MW	6:30–8:30 p.m.	Rio Grande High School
	7–9 p.m.	T-VI Main Campus T-VI Montoya Campus
TTh	7–9 p.m.	T-VI Main Campus Nativity, School—Alameda
T	6–9 p.m.	East Central Multi-Service Center
MTWThF	10:45–12:45 p.m.	T-VI Main Campus

PREREQUISITE: 101-B 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 three 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

MW	7–9 p.m.	T-VI Montoya Campus
TTh	7–9 p.m.	T-VI Main Campus

102–A: ADVANCED BASIC ENGLISH GRAMMAR/ SPELLING

Persons who need English grammar and spelling review or reinforcement will benefit from this class. This is a structured English grammar class which may be taken by high school graduates for review purposes.

Fall-Winter-Summer

TTh	4:30–6:30 p.m.	Cañoncito School
	7–9 p.m.	T-VI Main Campus 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.

Fall-Winter-Summer

TTh	7–9 p.m.	T-VI Main Campus T-VI Montoya Campus

104: BASIC MATHEMATICS

This class helps students understand addition, subtraction, multiplication and division of whole numbers, fractions, decimals and word problems. The student learns how to use thise math in household budget, borrowing money, insurance, distance/area measurements, and other everyday problems. Percent is covered. Advanced basic math topics are introduced.

Fall-Winter-Summer

TTh	7–9 p.m.	T-VI Main Campus T-VI Montoya Campus

105: 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

MW	7–9 p.m.	T-VI Main Campus T-VI Montoya Campus San Jose Cursillo Center
TTh	7–9 p.m.	T-VI Main Campus Nativity School—Alameda
Sat	9 a.m.–12 noon	T-VI Montoya Campus

107–B: BEGINNING READING IMPROVEMENT AND SPELLING

This is a beginning literacy class for 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 Montoya 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 LITERATURE

This class prepares students for the General Educational Development (GED) examination for a high school equivalency diploma. The five areas covered for the GED exam are writing skills, social studies, science, literature and mathematics. Students are placed in this class according to their pretest scores. 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

MTWThF	8–11 a.m.	T-VI Montoya Campus
	8:15–11:15 a.m.	T-VI Main Campus
	12 noon–3 p.m.	T-VI Montoya Campus
	12:15–3:15 p.m.	T-VI Main Campus
MW	6–7 p.m.	T-VI Main Campus T-VI Montoya Campus
	6:30–8:30 p.m.	Rio Grande High School
	7–8 p.m.	T-VI Main Campus T-VI Montoya Campus
	7–9 p.m.	Ernie Pyle Middle School
	8–9 p.m.	T-VI Main Campus T-VI Montoya Campus
TTh	3:30–6:30 p.m.	Cañoncito School
	6–7 p.m.	T-VI Main Campus T-VI Montoya Campus
	7–8 p.m.	T-VI Main Campus T-VI Montoya Campus
	7–9 p.m.	Griegos Elementary School Polk Middle School West Mesa High School
	8–9 p.m.	T-VI Main Campus T-VI Montoya Campus
Sat	9 a.m.–12 noon	T-VI Montoya Campus

Summer

MW	6–7 p.m.	T-VI Main Campus T-VI Montoya Campus
	6:30–8:30 p.m.	Rio Grande High School
	7–8 p.m.	T-VI Main Campus T-VI Montoya Campus
	8–9 p.m.	T-VI Main Campus T-VI Montoya Campus
TTh	3:30–6:30 p.m.	Cañoncito School
	6–7 p.m.	T-VI Main Campus T-VI Montoya Campus
	7–8 p.m.	T-VI Main Campus T-VI Montoya Campus
	7–9 p.m.	Griegos Elementary School
	8–9 p.m.	T-VI Main Campus T-VI Montoya Campus
Sat	9 a.m.–12 noon	T-VI Montoya Campus

This class can be offered at other locations upon request. Please call 247-9579, Ext. 28, for additional information.

PREREQUISITE: Persons wanting to take the GED exam or GED preparation classes must be AT LEAST 18 YEARS OLD AND MUST NOT BE ENROLLED IN ANY HIGH SCHOOL. A PERSON WHO IS 17 YEARS OLD MAY ENROLL ONLY IF RELEASED FROM THE NEW MEXICO STATE COMPULSORY SCHOOL ATTENDANCE LAW AND IF GRANTED A GED UNDERAGE PERMISSION FORM.

NOTE: 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.

SKILL IMPROVEMENT PROGRAM

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.

Tuition and Fees

TUITION: Skill Improvement classes are tuition free.

REGISTRATION FEE: There is a $12-per-term registration fee for Skill Improvement classes (regardless of the number of classes taken), payable when the registration form is submitted.

TEXTBOOK FEES: Textbooks are required for most Skill Improvement classes. Students must purchase their own textbooks. The cost of textbooks for a specific class may range from $8 to $65. Students will be notified of required textbooks and their costs.

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 apply for a refund of their *textbook and lab fees* but not the registration fee. Refunds will not be given for textbooks that have been damaged or marked. *No refunds are given after the first two weeks of class.*

Refunds are not made in cash; a check is mailed to the student.

Registration

Persons who want to take a Skill Improvement class should register early for the best chance of placement. Every effort will be made to add class sections 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 T-VI campuses and all branches of the Albuquerque Public Library. Registration is handled on a continuous basis for each term. Deadlines for registering by mail are: Fall term, August 19; winter term, December 16; summer term, April 14. 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 required fees.** The $12 registration fee is paid only once per term, regardless of the number of classes taken. Lab fees for classes that require them are payable at the time of registration. (Exception: Lab fees for welding classes are due August 19 for fall term, December 16 for winter term, and April 14 for summer term.) Fees 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 registration fee is refundable only if T-VI is unable to place the applicant in a requested class. Lab fees may be refunded upon request until the end of the second week of classes.

- **Purchase required textbooks.** Applicants will be notified about placement in classes, schedules and bookstore hours. The required textbooks and costs will be included in this notification.

Standards of Progress

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.

A grade, but no certificate, may be awarded upon successful completion of all coursework and attendance of at least 70 percent of the class sessions.

Attendance Policies

Continuing Education Division teachers take attendance each class session. 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.*

Business Education

✹ = transfers to a T-VI Instructional Division program

✹ SK 110: ACCOUNTING PRINCIPLES I

Principles of the double entry accounting system including recording transactions, adjusting accountings, preparing statements, closing accounts of proprietorship, partnerships and corporations, merchandise and cash accounts, and accounting systems are thoroughly covered. Business forms and terms, accuracy, neatness, orderliness and responsibility are included.

Fall-Winter

MW	7–9 p.m.	T-VI Main Campus T-VI Montoya Campus Cibola High School Highland High School La Cueva High School Rio Grande High School
TTh	7–9 p.m.	T-VI Main Campus T-VI Montoya Campus Del Norte High School La Cueva High School West Mesa High School
Sat	8:30 a.m.–12:30 p.m.	T-VI Montoya Campus

Summer

MW or TTh	7–9 p.m.	T-VI Main Campus T-VI Montoya Campus

NOTE: Students may be required to furnish their own calculators.

✹ SK 110A: ACCOUNTING PRINCIPLES II

This is a continuation of SK 110. Units cover accounts receivable, inventories, cost of goods sold, plant and equipment accounts, tangible and intangible assets, current and long-term liabilities, and payroll accounting.

Fall

MW	7–9 p.m.	T-VI Main Campus Highland High School
TTh	7–9 p.m.	T-VI Montoya Campus

Winter

MW	7–9 p.m.	T-VI Main Campus Cibola High School Highland High School
TTh	7–9 p.m.	T-VI Montoya Campus
Sat	8:30 a.m.–12:30 p.m.	T-VI Montoya Campus

Summer

MW	7–9 p.m.	T-VI Main Campus
TTh	7–9 p.m.	T-VI Montoya Campus

NOTES: Students may be required to furnish their own calculators.
To transfer this class to the Instructional Division for credit, the student must complete both SK 110 and SK 110A.
PREREQUISITE: A beginning class in double-entry bookkeeping or accounting

✹ SK 112: ACCOUNTING PRINCIPLES III

A continuation of SK 110A, this course covers various aspects of corporate accounting, notes and bonds, departmental accounting, and accounting for manufacturing.

Fall-Winter

MW	7–9 p.m.	Highland High School
TTh	7–9 p.m.	T-VI Montoya Campus

Summer

TTh	7–9 p.m.	T-VI Montoya Campus

NOTE: Students may be required to furnish their own calculators.
PREREQUISITE: SK 110A or equivalent

✹ SK 112A: ACCOUNTING PRINCIPLES IV

This course is a continuation of SK 112. It covers cost accounting, job orders, master budgets, profit analysis, standard costs, managerial decisions and tax considerations.

Fall-Summer

MW	7–9 p.m.	T-VI Montoya Campus

Winter

TTh	7–9 p.m.	T-VI Montoya Campus

NOTES: Students may be required to furnish their own calculators.
To transfer this class to the Instructional Division for credit, the student must complete both SK 112 and SK 112A.
PREREQUISITES: SK 112, SK 120 or equivalent

✹ SK 113: 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-Winter

TTh	6:30–9 p.m.	T-VI Main Campus

PREREQUISITES: SK 110, SK 110A, SK 112 or equivalent

✹ SK 114: 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	6:30–9 p.m.	T-VI Main Campus
TTh	6:30–9 p.m.	T-VI Montoya Campus

NOTE: Students may be required to furnish their own calculators.

✹ SK 115: TAX ACCOUNTING I

This course primarily examines the fundamental characteristics of federal income taxes as applied to individuals.

Fall

MW	6:30–9 p.m.	Highland High School

Winter

TTh	6:30–9 p.m.	T-VI Montoya Campus

PREREQUISITES: SK 110, SK 110A

SK 115A: TAX ACCOUNTING II

This course examines corporations, estate and gift taxes, fiduciaries, tax planning and tax shelters.

Winter

TTh	6:30–9 p.m.	Highland High School

Summer

MW	6:30–9 p.m.	T-VI Montoya Campus

PREREQUISITE: SK 115

SK 116: COST ACCOUNTING

This class emphasizes construction and manufacturing as compared to merchandising or service businesses. The student performs the accounting operations for estimating and bidding.

Fall

MW	6:30–9 p.m.	T-VI Main Campus

Winter

TTh	6:30–9 p.m.	T-VI Montoya Campus

PREREQUISITE: SK 112A or equivalent

SK 119: 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: SK 110 or equivalent

LAB FEE: $10

SK 120: BUSINESS MATHEMATICS AND CALCULATORS

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. The touch method skills using electronic calculators are developed.

Fall-Summer

TTh	6:30–9 p.m.	T-VI Montoya Campus

Winter

MW	6:30–9 p.m.	T-VI Main Campus

SK 121: FINANCIAL ANALYSIS

This course covers the gathering and analysis of financial data in a manner that aids management in the decision-making process.

Summer

MW	6:30–9 p.m.	T-VI Montoya Campus

PREREQUISITE: SK 112A

SK 122: INVESTMENTS

Students study investment analysis, management, objectives, values and risks.

Fall

MW	6:30–9 p.m.	T-VI Main Campus

Winter

TTh	6:30–9 p.m.	T-VI Montoya Campus

PREREQUISITE: SK 112A

SK 123: GOVERNMENTAL ACCOUNTING

This course provides the student with additional accounting training for government and other nonprofit entities.

Fall

MW	6:30–9 p.m.	T-VI Montoya Campus

Winter

TTh	6:30–9 p.m.	T-VI Main Campus

PREREQUISITE: SK 112A or equivalent

SK 124: MONEY AND BANKING

This class 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.

Fall

MW	6:30–9 p.m.	T-VI Montoya Campus

Winter

TTh	6:30–9 p.m.	T-VI Main Campus

PREREQUISITE: SK 112A or equivalent

SK 125: BUSINESS COMMUNICATIONS I

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

TTh	6:30–9 p.m.	T-VI Main Campus West Mesa High School

Winter

MW	6:30–9 p.m.	Rio Grande High School
TTh	6:30–9 p.m.	T-VI Montoya Campus

Summer

TTh	6:30–9 p.m.	T-VI Main Campus TVI Montoya Campus

SK 125A: BUSINESS COMMUNICATIONS II

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-Winter

MW	6:30–9 p.m.	T-VI Main Campus

Summer

MW	6:30–9 p.m.	T-VI Montoya Campus

PREREQUISITE: SK 125 and 25 words a minute typing skill

SK 139: 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

SK 144: 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.

Winter

M	5:30–7:30 p.m.	T-VI Montoya Campus

SK 149A: PRINCIPLES OF LIFE AND HEALTH INSURANCE

This class introduces principles, uses of contracts, coverages, ratings, and evaluation of life and health insurance practices.

Fall

M	5:30–7:30 p.m.	T-VI Montoya Campus

Winter

T	5:30–7:30 p.m.	T-VI Montoya Campus

SK 156: ALPHABETIC SHORTHAND

This shorthand system is based on the letters of the alphabet and common punctuation symbols incorporated into 40 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	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

PREREQUISITE: 25 wpm typing speed by the touch method

SK 160: 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 Rio Grande High School
TTh	6:30–9 p.m.	T-VI Montoya Campus Del Norte High School
Sat	8:30 a.m.–1:30 p.m.	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

SK 161: 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

SK 163: MACHINE TRANSCRIPTION

Students use transcription equipment to prepare mailable business correspondence. English skills are reviewed and applied in the production assignments.

Fall-Winter-Summer

MW	6:30–9 p.m.	T-VI Main Campus

PREREQUISITES: 50 wpm typing speed; SK 125 or equivalent

SK 165: 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.	T-VI Main Campus T-VI Montoya Campus Cibola High School Highland High School La Cueva High School Rio Grande High School
TTh	6:30–9 p.m.	T-VI Main Campus T-VI Montoya Campus Del Norte High School West Mesa High School
Sat	8:30 a.m.–1:30 p.m.	T-VI Montoya Campus

Summer

MW or TTh	6:30–9 p.m.	T-VI Main Campus T-VI Montoya Campus

SK 166: 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 40 words per minute should be attained in this class.

Fall-Winter

MW	6:30–9 p.m.	T-VI Montoya Campus Cibola High School Highland High School
TTh	6:30–9 p.m.	T-VI Main Campus

Summer

MW	6:30–9 p.m.	T-VI 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

SK 167: 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 emphasized. 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

SK 170: 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

TTh	7–9 p.m.	T-VI Main Campus

LAB FEE: $10

SK 172: 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	6:30–9 p.m.	T-VI Main Campus
Sat	8:30 a.m.–1:30 p.m.	T-VI Montoya Campus

Summer

MW	6:30–9 p.m.	T-VI Montoya Campus

SK 173: 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.

Fall

TTh	6:30–9 p.m.	T-VI Montoya Campus

Winter

MW	6:30–9 p.m.	T-VI Main Campus
Sat	8:30 a.m.–1:30 p.m.	T-VI Montoya Campus

PREREQUISITE: SK 172

SUPERVISORY SKILLS SERIES

Meeting for five weeks each, the six classes in this series are designed for persons who want to improve their supervisory and management skills. Each class provides 25 hours of instruction. These classes may be taken individually or in any sequence. There are no prerequisites.

SK 174A: WHAT SUPERVISORS NEED TO KNOW

In this class, students gain knowledge of how perceptions differ; how attitudes, self concept and disclosure affect work relations; what motivates employees; the effect of group dynamics; and how employees are affected by the work environment.

	Fall	
MW	6:30–9 p.m. (Sept. 7–Oct. 10)	T-VI Main Campus
	Winter	
MW	6:30–9 p.m. (Jan. 9–Feb. 8)	T-VI Main Campus
	Summer	
MW	6:30–9 p.m. (May 8–June 12)	T-VI Main Campus

SK 174B: SUPERVISING OTHERS

This class covers selecting, orienting, and training employees; leadership styles; motivating employees; performance reviews; and health and safety.

	Fall	
MW	6:30–9 p.m. (Oct. 12–Nov. 14)	T-VI Main Campus
	Winter	
MW	6:30–9 p.m. (Feb. 13–Mar. 20)	T-VI Main Campus
	Summer	
MW	6:30–9 p.m. (June 14–July 19)	T-VI Main Campus

SK 174C: MANAGING YOURSELF

Managing your time, coping with stress, managing your career, values and ethics, and putting your best foot forward are among the topics included in this class.

	Fall	
MW	6:30–9 p.m. (Nov. 16–Dec. 21)	T-VI Main Campus
	Winter	
MW	6:30–9 p.m. (Mar. 22–Apr. 24)	T-VI Main Campus
	Summer	
MW	6:30–9 p.m. (July 24–Aug. 23)	T-VI Main Campus

SK 174D: COMMUNICATING PROCESS

Students learn about communication barriers and verbal/nonverbal communication in this class. Listening, writing, speaking and negotiating skills also are covered.

	Fall	
TTh	6:30–9 p.m. (Sept. 6–Oct. 6)	T-VI Main Campus

	Winter	
TTh	6:30–9 p.m. (Jan. 10–Feb. 9)	T-VI Main Campus
	Summer	
TTh	6:30–9 p.m. (May 9–June 8)	T-VI Main Campus

SK 174E: SPECIAL CHALLENGES

This class addresses the special challenges which face the supervisor: solving problems, making decisions, dealing with problem employees and employee problems, hiring and firing employees, dealing with discrimination and special needs of employees, and managing conflict.

	Fall	
TTh	6:30–9 p.m. (Oct. 11–Nov. 10)	T-VI Main Campus
	Winter	
TTh	6:30–9 p.m. (Feb. 14–Mar. 16)	T-VI Main Campus
	Summer	
TTh	6:30–9 p.m. (June 13–July 18)	T-VI Main Campus

SK 174F: PLANNING, ORGANIZING, AND CONTROLS

This class covers planning and the management process, managing change, human resource planning, the importance of organizing, organizing the work of others, and the importance of controls.

	Fall	
TTh	6:30–9 p.m. (Nov.15–Dec. 20)	T-VI Main Campus
	Winter	
TTh	6:30–9 p.m. (Mar. 21– Apr. 20)	T-VI Main Campus
	Summer	
TTh	6:30–9 p.m. (July 20–Aug. 22)	T-VI Main Campus

SK 175: FINANCIAL INSTITUTION TELLER

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

SK 180: SMALL BUSINESS MANAGEMENT

This class covers benefits, successes and problems relating to beginning, continuing, owning, managing and closing a small business.

Fall

MW	6:30–9 p.m.	T-VI Main Campus
TTh	6:30–9 p.m.	T-VI Montoya Campus West Mesa High School

Winter

MW	6:30–9 p.m.	T-VI Main Campus Rio Grande High School
TTh	6:30–9 p.m.	T-VI Montoya Campus

Summer

MW	6:30–9 p.m.	T-VI Main Campus

SK 181: 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

MW	7–9 p.m.	T-VI Main Campus
TTh	7–9 p.m.	La Cueva High School

Summer

MW	7–9 p.m.	T-VI Main Campus

SK 182: 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-Summer

TTh	6:30–9 p.m.	T-VI Main Campus

Winter

MW	6:30–9 p.m.	T-VI Montoya Campus

SK 183: SMALL BUSINESS COMPUTER INFORMATION SYSTEMS

This course provides the small business person with a general understanding of the functions of various modules within an integrated accounting computer package. Topics include accounting systems overview, flow charting and use of accounting modules.

Fall-Winter-Summer

TTh	6:30–9:30 p.m.	T-VI Montoya Campus

SK 410: 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

M	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $10

SK 411: 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	6:30–9 p.m.	T-VI Main Campus

SK 412: 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	6:30–9 p.m.	T-VI Main Campus

SK 413: ADVERTISING

This class gives the student a basic understanding of the many elements of advertising. The advertising plan, media selection and schedule, budget, design and production, and advertising effectiveness are included.

Fall

MW	6:30–9 p.m.	T-VI Montoya Campus

Winter

TTh	6:30–9 p.m.	T-VI Main Campus

SK 415: ENTREPRENEURSHIP

This class is designed for persons who plan to open a small business or who already own and/or manage a business and desire further specialized training. Topics covered include introduction to entrepreneurship, goal setting and time management, defining and marketing a product or service, targeting customers, competition, marketing strategy, location, financial management, funding, legal structure and taxation, payroll and accounting, selling, and the role of the computer.

Fall-Winter

MTWTh	6:30–9 p.m.	T-VI Main Campus La Cueva High School

SK 416: 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

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.

SK 430: 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

MW	8–10 a.m.	T-VI Main Campus
	7–9 p.m.	T-VI Main Campus
TTh	7–9 p.m.	T-VI Montoya Campus
Sat	9 a.m.–12 noon	T-VI Montoya Campus

Summer

MW	8–10 a.m.	T-VI Main Campus
	7–9 p.m.	T-VI Montoya Campus
TTh	7–9 p.m.	T-VI Main Campus

NOTE: This class meets for 10 weeks except for the Saturday sessions, which meet for 15 weeks.

SK 431: 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-Winter

MW	10 a.m.–12 noon	T-VI Main Campus
	7–9 p.m.	T-VI Montoya Campus
TTh	7–9 p.m.	T-VI Main Campus
Sat	1–4 p.m. (full term)	T-VI Montoya Campus

Summer

MW	10 a.m.–12 noon	T-VI Main Campus
	7–9 p.m.	T-VI Main Campus
TTh	7–9 p.m.	T-VI Montoya Campus

NOTE: This class meets for 10 weeks except for the Saturday sessions, which meet for 15 weeks.

SK 432: REAL ESTATE APPRAISAL

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

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: SK 430

SK 433: 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.

Fall

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: SK 430

SK 434: 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	4–6 p.m.	T-VI Montoya Campus

NOTE: This class meets for 10 weeks.
PREREQUISITES: SK 430, SK 431

SK 435: 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

NOTE: This class meets for 10 weeks.

SK 436: LAND USE PLANNING

This class provides the student with terminology, strategies, planning processes, subdivision plans, development processes, condemnation procedures, liabilities and remedies used in land use planning.

Summer

MW	4–6 p.m.	T-VI Montoya Campus

NOTE: This class meets for 10 weeks.
PREREQUISITES: SK 430, SK 431

SK 437: REAL ESTATE COMPREHENSIVE CONTRACTS

Instruction is provided in contract law relating to basis of equipment and premises, buyer-seller-agent relationships, basis of law governing contracts, written contracts, misrepresentations, special relationships and contract remedies.

Summer

TTh	7–9 p.m.	T-VI Montoya Campus

NOTE: This class meets for 10 weeks.
PREREQUISITES: SK 430, SK 431

SK 438: REAL ESTATE AND TAXES

This class deals with government involvement in real estate and taxes. Units cover municipal and state taxes affecting real estate, and the federal government's role in the sale and income derived from real estate.

Summer

MW	7–9 p.m.	T-VI Montoya Campus

NOTE: This class meets for 10 weeks.
PREREQUISITES: SK 430, SK 431

SK 440: CHANGING CAREERS

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.

Course topics include: developing a positive self-image; 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, certificate and associate degree programs, other educational programs in Albuquerque, and employment.

Fall

MTW	6:30–9:30 p.m. (Sept. 6–Oct. 12)	T-VI Main Campus
MW	7–9 p.m. (Sept. 7–Dec. 5)	Rio Grande High School
TTh	7–9 p.m. (Sept. 6–Dec. 1)	West Mesa High School
MTWThF	9–11 a.m. (Sept. 6–Oct. 10)	T-VI Montoya Campus
MTWThF	9:15–11:15 a.m. (Oct. 11–Nov. 14)	T-VI Main Campus
MTWThF	9–11 a.m. (Nov. 15–Dec. 21)	T-VI Montoya Campus

Winter

MTW	6:30–9:30 p.m. (Jan. 9–Feb. 14)	T-VI Main Campus
MW	7–9 p.m. (Jan. 9–Apr. 5)	Rio Grande High School
TTh	7–9 p.m. (Jan. 10–Apr. 4)	West Mesa High School
MTWThF	9–11 a.m. (Jan. 9–Feb. 10)	T-VI Montoya Campus
MTWThF	9:15–11:15 a.m. (Feb. 13–Mar. 20)	T-VI Main Campus
MTWThF	9–11 a.m. (Mar. 21–Apr. 24)	T-VI Montoya Campus

Summer

MTW	6:30–9:30 p.m. (May 8–June 14)	T-VI Main Campus
MTWThF	9–11 a.m. (May 8–June 12)	T-VI Montoya Campus
MTWThF	9:15–11:15 a.m. (June 13–July 19)	T-VI Main Campus
MTWThF	9–11 a.m. (July 20–Aug. 23)	T-VI Montoya Campus

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 7 a.m. to 9 p.m. Monday through Thursday, 7 a.m. to 5 p.m. Friday, and 10 a.m. to 2 p.m. Saturday. 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
Business Mathematics Fundamentals
Business Mathematics II
Business Mathematics III (Main Campus)
Cash Register (Montoya Campus)
Communications Review
Electronic Calculating
Machine Shorthand
Gregg Shorthand I
Gregg Shorthand II
Shorthand Review
Alphabetic Shorthand I
Century 21 Shorthand I (Main Campus)
Forkner Shorthand I
Shorthand Speedbuilding
Typing I
Typing II
Typing III (Montoya Campus)
Typing Speedbuilding
Microcomputer courses
Telephone Techniques (Main Campus only)
Machine Transcription
Medical Transcription
Medical Terminology
Legal Transcription
Records Management
Word Processing
Lotus 1-2-3, Word Processing Labs
Proofreading

NOTE: Course descriptions on pages 31–32.

Health Education

SK 450: 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

SK 451: 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

SK 452: 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

SK 453: 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.

Fall

MW	7–9 p.m.	Highland High School

Winter

TTh	7–9 p.m.	Del Norte High School

Summer

MW	7–9 p.m.	T-VI Montoya Campus

NOTE: This class meets for 10 weeks.

SK 590: 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 lessons include 105 hours of classroom didactics and practice sessions. Also included are hospital rotation, observation and training, and three 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 17½ years old to take state and/or national certification examinations.

LAB FEE: $45

Technical Education

SK 350: 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 Rio Grande High School

SK 360: 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

MW or TTh	6:30–9:30 p.m.	T-VI Main Campus
MW	6:30–9:30 p.m.	T-VI Montoya Campus
Sat	9 a.m.–4 p.m.	T-VI Montoya Campus

Summer

MW or TTh	6:30–9:30 p.m.	T-VI Main Campus
MW	6:30–9:30 p.m.	T-VI Montoya Campus

PREREQUISITE: Knowledge of beginning algebra

LAB FEE: $15

SK 361: ELECTRONICS II

This class 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
TTh	6:30–9:30 p.m.	T-VI Montoya Campus

PREREQUISITE: SK 360 or equivalent
LAB FEE: $10

SK 362: 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-Summer

MW	6:30–9:30 p.m.	T-VI Main Campus

Winter

TTh	6:30–9:30 p.m.	T-VI Montoya Campus

PREREQUISITE: SK 361 or equivalent
LAB FEE: $10

SK 363B: COMPUTER NETWORKING AND DATA COMMUNICATIONS

This class 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: SK 380 or SK 380A
LAB FEE: $10

SK 364: DIGITAL CIRCUITS

This is an introduction to AND, NAND, OR, NOR and INVERTER 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: Knowledge of beginning algebra
LAB FEE: $10

SK 366: 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 marker 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.

Winter

MW	6:30–9:30 p.m.	T-VI Main Campus

PREREQUISITE: SK 362 or equivalent
LAB FEE: $10

SK 368: 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 experience or equivalent education

SK 369: 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: SK 364
LAB FEE: $10

SK 369B: INTRODUCTION TO LASERS

This is the study of the elements and operation of a laser and optical power meter, laser safety, properties of light, lasing action, optical cavaties and modes of oscillation, temporal and spatial characteristics of lasers, helium-neon gas laser operations and laser classifications and characteristics.

Fall-Winter

TTh	6:30 p.m.–9:30 p.m.	T-VI Montoya Campus

NOTE: Students must pass both the theory and laboratory portion of the course to receive a passing grade.

PREREQUISITE: Knowledge of algebra and trigonometry

LAB FEE: $10

SK 370: 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: $15

SK 371: DRAFTING II

Multiview drawings, sectional views, auxiliary views, threads and fasteners, isometric views, perspective views, intersections, development and drafting mathematics are included.

Winter

TTh	6:30–9:30 p.m.	T-VI Main Campus

PREREQUISITE: Beginning drafting class or equivalent experience

LAB FEE: $15

SK 372: ARCHITECTURAL DRAFTING

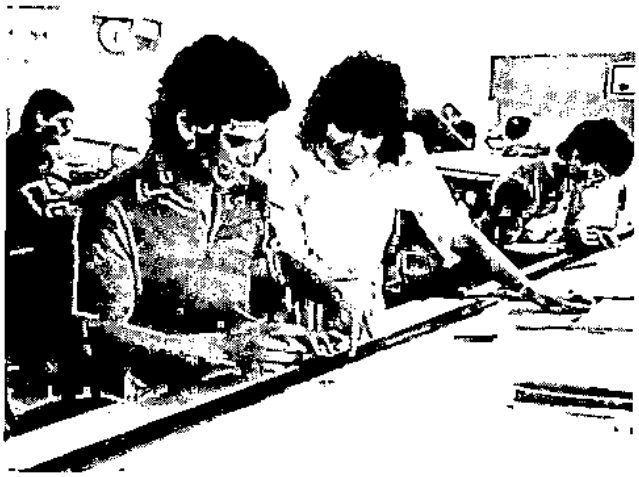
The student is introduced to the techniques and materials common in architectural drafting and solves problems in detailing and completing working drawings for residential structures.

Fall-Winter-Summer

MW	6:30–9:30 p.m.	T-VI Main Campus

PREREQUISITE: Beginning drafting class or equivalent experience

LAB FEE: $15



SK 373: 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

TTh	6:30–9:30 p.m.	T-VI Main Campus

SK 374: 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 exception of paper.

PREREQUISITE: SK 372 or equivalent

LAB FEE: $15

SK 375: ELECTRONICS DRAFTING

This class develops techniques for the documentation of electronics systems. Students learn to design electronics systems drawings using both traditional manual tools and CAD.

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

SK 379: BEGINNING COMPUTER AIDED DRAFTING (CAD)

This course introduces the use of CAD programs to turn ideas and designs into technical drawings. Topics include fundamental systems operations, dimensioning, plotting, command files, drawing organization and text.

Fall

MW	6:30–9:30 p.m.	T-VI Main Campus Eldorado High School Rio Grande High School
TTH	6:30–9:30 p.m.	Del Norte High School La Cueva High School

Winter

MW	6:30–9:30 p.m.	T-VI Main Campus Eldorado High School Rio Grande High School
TTH	6:30–9:30 p.m.	Del Norte High School

Summer

MW	6:30–9:30 p.m.	T-VI Main Campus

PREREQUISITE: SK 370 or equivalent

LAB FEE: $10

SK 380: 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	
MW or TTh	6:30–9 p.m.	T-VI Main Campus T-VI Montoya Campus
Sat	8:30 a.m.–1:30 p.m.	T-VI Montoya Campus
	Summer	
MW or TTh	6:30–9 p.m.	T-VI Main Campus T-VI Montoya Campus

SK 380A: MICROCOMPUTING TODAY

This class covers microcomputers from early history to the present, explaining the basics of getting comfortable with personal computers. It introduces the student to current spreadsheets, word processing and databases. The BASIC programming language also is introduced.

	Fall-Winter	
MW or TTh	6:30–9:30 p.m.	T-VI Main Campus T-VI Montoya Campus Highland High School La Cueva High School
MW	6:30–9:30 p.m.	Cibola High School Eldorado High School Rio Grande High School
TTh	6:30–9:30 p.m.	Del Norte High School West Mesa High School
	Summer	
MW or TTh	6:30–9:30 p.m.	T-VI Main Campus T-VI Montoya Campus

LAB FEE: $10

SK 380B: MS-DOS

This class introduces the use of the MS-DOS operating system for IBM microcomputers and compatibles. Topics covered include both fundamental and advanced commands, floppy and hard disk management, the use of directories, backup and restore procedures, and the use of batch files.

	Fall	
Sat	8:30 a.m.–12:30 p.m. (Sept. 10–Oct. 8)	T-VI Montoya Campus
	Winter	
Sat	8:30 a.m.–12:30 p.m. (Jan. 14–Feb. 11)	T-VI Montoya Campus
	Summer	
TTh	6:30–9 p.m. (May 9–June 1)	T-VI Montoya Campus
Sat	8 a.m.–1 p.m. (May 13–June 10)	T-VI Montoya Campus

PREREQUISITE: SK 380A or equivalent
LAB FEE: $10

SK 380C: WORD PROCESSING USING WORDPERFECT

This class helps students become more proficient using a microcomputer word processing program. Topics covered include formats, editing documents, printing, merging, block operations, search techniques and the use of a speller.

	Fall	
Sat	1–5 p.m. (Sept. 10–Oct. 8)	T-VI Montoya Campus
	Winter	
Sat	1–5 p.m. (Jan. 14–Feb. 11)	T-VI Montoya Campus
	Summer	
TTh	6:30–9 p.m. (June 6–June 29)	T-VI Montoya Campus
Sat	12 noon–5 p.m. (May 13–June 10)	T-VI Montoya Campus

PREREQUISITE: SK 380A or equivalent
LAB FEE: $10

SK 380D: SPREADSHEET PROGRAMMING USING LOTUS 1-2-3

This class covers use of a microcomputer spreadsheet program such as LOTUS 1-2-3. Topics covered include creating and using macros, sorting, lookup tables and database manipulation capabilities.

	Fall	
Sat	8:30 a.m.–12:30 p.m. (Oct. 15–Nov. 5)	T-VI Montoya Campus
	Winter	
Sat	8 a.m.–1 p.m. (Feb. 18–Mar. 18)	T-VI Montoya Campus
	Summer	
TTh	6:30–9:30 p.m. (July 11–Aug. 3)	T-VI Montoya Campus
Sat	8 a.m.–1 p.m. (June 17–July 15)	T-VI Montoya Campus

PREREQUISITE: SK 380A or equivalent
LAB FEE: $10

SK 380E: ADVANCED MS-DOS

This class is a continuation of SK 380B. It covers advanced hard disk management, directories and batch files.

	Fall	
TTh	6:30–9 p.m. (Sept. 6–Sept. 29)	T-VI Montoya Campus
Sat.	1–5 p.m. (Oct. 15–Nov. 12)	T-VI Montoya Campus
	Winter	
Sat	12 noon–5 p.m. (Feb. 18–Mar. 18)	T-VI Montoya Campus
	Summer	
Sat	12–5 p.m. (June 17–July 15)	T-VI Montoya Campus

PREREQUISITE: SK 380B or equivalent
LAB FEE: $10

SK 380F: ADVANCED WORD PROCESSING USING WORDPERFECT

This course is a continuation of SK 380C. It covers advanced block processing, super and subscripts, fonts, and importing and exporting files.

	Fall	
TTh	6:30–9 p.m. (Oct. 4–Oct. 27)	T-VI Montoya Campus
Sat	8 a.m.–1 p.m. (Nov. 19–Dec. 17)	T-VI Montoya Campus

Winter

Sat	8:30 a.m.–12:30 p.m. (Mar. 25–Apr. 22)	T-VI Montoya Campus

Summer

Sat	8:30 a.m.–12:30 p.m. (July 22–Aug. 19)	T-VI Montoya Campus

PREREQUISITE: SK 380C or equivalent
LAB FEE: $10

SK 380G: ADVANCED SPREADSHEET PROGRAMMING USING LOTUS 1-2-3

This course is a continuation of SK 380D. It covers advanced use of macros, importing and exporting spreadsheets, database manipulations and business graphics.

Fall

TTh	6:30–9 p.m. (Nov. 1–Nov. 29)	T-VI Montoya Campus
Sat	12 noon–5 p.m. (Nov. 19–Dec. 17)	T-VI Montoya Campus

Winter

Sat	1–5 p.m. (Mar. 25–Apr. 22)	T-VI Montoya Campus

Summer

Sat	1–5 p.m. (July 22–Aug. 19)	T-VI Montoya Campus

PREREQUISITE: SK 380D
LAB FEE: $10

SK 381: 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

MW	6:30–9:30 p.m.	T-VI Montoya Campus

PREREQUISITE: SK 380 or equivalent

SK 382: ASSEMBLY LANGUAGE PROGRAMMING I

Students learn fundamental programming techniques necessary for writing and refining efficient programs in IBM mainframe assembly language.

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: SK 388

SK 382A: ASSEMBLY LANGUAGE PROGRAMMING II

This class is a continuation of SK 382. Students learn more complex techniques of writing and refining programs in IBM mainframe assembly language.

Summer

TTh	6:30–9:30 p.m.	T-VI Main Campus

NOTE: To transfer this class to the Instructional Division for credit, the student must complete both SK 382 and SK 382A.
PREREQUISITE: SK 382

SK 383: ANSI COBOL I

Elementary structured programming projects directly related to business and accounting applications are designed, coded, debugged and executed.

Fall-Winter

MW	6:30–9:30 p.m.	T-VI Main Campus
TTh	6:30–9:30 p.m.	T-VI Montoya Campus
Sat	9 a.m.–4 p.m.	T-VI Montoya Campus

Summer

MW	6:30–9:30 p.m.	T-VI Main Campus
TTh	6:30–9:30 p.m.	T-VI Montoya Campus

PREREQUISITE OR COREQUISITE: SK 380

SK 383A: ANSI COBOL II

This class is a continuation of SK 383. More advanced, structured programming projects are designed, coded, debugged and executed.

Fall-Winter

MW	6:30–9:30 p.m.	T-VI Main Campus
TTh	6:30–9:30 p.m.	T-VI Montoya Campus
Sat	9 a.m.–4 p.m.	T-VI Montoya Campus

NOTE: To transfer this class to the Instructional Division for credit, the student must complete both SK 383 and SK 383A.
PREREQUISITE: SK 383 or equivalent

SK 383B: ADVANCED ANSI COBOL I

This class continues the development of structured programming skills developed in SK 383 and SK 383A with emphasis on indexed file processing.

Fall-Winter-Summer

MW	6:30–9:30 p.m.	T-VI Main Campus

PREREQUISITE: SK 383A or equivalent

SK 383C: ADVANCED ANSI COBOL II

This class continues the development of structured programming skills developed in SK 383B with emphasis on file update and subprogram concepts.

Fall-Winter-Summer

MW	6:30–9:30 p.m.	T-VI Main Campus

NOTE: To transfer this class to the Instructional Division for credit, the student must complete both SK 383B and SK 383C.
PREREQUISITE: SK 383B

SK 384: 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

MW	6:30–9:30 p.m.	T-VI Montoya Campus

PREREQUISITES: SK 380 or equivalent; a basic algebra class

SK 385: 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 Montoya Campus

PREREQUISITE: 30 wpm typing speed
LAB FEE: $15

✹ SK 386: BASIC LANGUAGE PROGRAMMING

This course introduces writing, editing and running computer programs in BASIC. No prior programming experience is assumed. Course topics include input and output operations, program flow of control, arrays, built-in functions and file manipulations.

Fall-Winter-Summer

TTh	6:30–9:30 p.m.	T-VI Main Campus TVI Montoya Campus

PREREQUISITE: SK 380 or equivalent

✹ SK 388: JOB CONTROL LANGUAGE

Emphasis is placed on the IBM system software including VSESP, JECL, VSE/JCL, 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: SK 380 or equivalent

SK 388A: ADVANCED JCL STRUCTURES AND UTILITIES

This class covers advanced VSE functions for release 2.1 with emphasis on advanced data management and label processing concepts, system operation and facilities, and system management techniques. System utilities such as librarian, clear disk and fastcopy will be covered. Data protection facilities and VSE interface between POWER, VTAM and CICS are discussed.

Summer

TTh	6:30–9:30 p.m.	T-VI Main Campus

PREREQUISITES: SK 388 and knowledge of the COBOL programming language

SK 389: PROGRAMMING MICROCOMPUTERS IN BASIC

This class covers the BASIC language with emphasis on business applications. No prior programming experience is assumed. Fundamental programming techniques up to and including arrays, string handling and sequential files are included. Structured programming methods are emphasized.

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: SK 380 or equivalent
LAB FEE: $10

SK 389A: ADVANCED BASIC PROGRAMMING ON MICROCOMPUTERS

This class is a continuation of SK 389. It assumes prior computer programming experience. Topics include interactive programs and reports, random access file processing, indexing, sorting and other advanced programming topics.

Fall-Winter-Summer

TTh	6:30–9:30 p.m.	T-VI Main Campus

PREREQUISITE: SK 389 or equivalent
LAB FEE: $10

SK 391A: 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: SK 380A
LAB FEE: $10

✹ SK 392: C LANGUAGE PROGRAMMING

This class is an introduction to the C programming language using MS-DOS microcomputers. Topics covered include the syntax of C language statements, elementary data types, C operators and fundamental control statements. The course stresses the use of structured programming techniques.

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: $10

SK 392A: ADVANCED C LANGUAGE PROGRAMMING

A continuation of SK 392, this class assumes considerable programming experience. It stresses modular programming using functions and external source code files. Topics include advanced and structured data types, parameter passing, scope of variables, recursion and external file operations.

Fall-Summer

MW	6:30–9:30 p.m.	T-VI Main Campus

PREREQUISITE: SK 392

SK 393: MICROCOMPUTER ASSEMBLER LANGUAGE PROGRAMMING

This class teaches Assembler language for IBM compatible microcomputers. Experience in computer programming is assumed. Students write Assembler programs, utilities and control systems for microcomputers.

Fall-Winter

MW	6:30–9:30 p.m.	T-VI Main Campus

PREREQUISITE: SK 380
LAB FEE: $10

SK 394: TURBO PASCAL PROGRAMMING

The Pascal programming language is introduced using TURBO Pascal on MS-DOS microcomputers. Topics include use of the MS-DOS operating system, TURBO Pascal environment, program structure, Pascal language syntax, elementary data types, and use of functions and procedures. Structured programming techniques are stressed.

Fall

MW	6:30–9:30 p.m.	T-VI Main Campus

Winter

MW	6:30–9:30 p.m.	T-VI Main Campus
TTh	6:30–9:30 p.m.	T-VI Montoya Campus

PREREQUISITE: SK 380 or equivalent

LAB FEE: $10

SK 394A: ADVANCED TURBO PASCAL PROGRAMMING

This class stresses modular programming and structured programming techniques using functions and procedures. Topics covered include structured and other advanced data types, parameter passing, the scope of variables, pointers, recursion and advanced file manipulation.

Summer

MW	6:30–9:30 p.m.	T-VI Main Campus

PREREQUISITE: SK 394 or equivalent

SK 400: COMPUTER MATHEMATICS I

Algebra fundamentals are covered along with selected business and management applications.

Fall-Winter-Summer

MW	6:30–9 p.m.	T-VI Main Campus
TTh	6:30–9 p.m.	T-VI Montoya Campus

SK 401: COMPUTER MATHEMATICS II

This class continues the development of algebra and business mathematics skills developed in SK 400. Elementary statistics are introduced.

Fall-Winter-Summer

MW	6:30–9 p.m.	T-VI Main Campus
TTh	6:30–9 p.m.	T-VI Montoya Campus

PREREQUISITE: SK 400

SK 402: BUSINESS SYSTEMS ANALYSIS AND DESIGN

This class presents 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 system documentation and run project management software.

Winter

MW	6:30–9:30 p.m.	T-VI Montoya Campus

PREREQUISITE: SK 110 or equivalent

PREREQUISITE OR COREQUISITE: SK 383C or equivalent

Trades and Industrial Education

SK 200: INTRODUCTION TO HORTICULTURE

In this class, the various phases of horticulture are introduced. Topics covered include plant physiology, diagnosis and control of house plant disorders, pruning, propagation of soft and hardwood cuttings, asexual propagation, transplanting, soils, fertilizer selection and application, pesticide application, and residential landscape design.

Fall-Winter

MW	6:30–9 p.m.	Cibola High School

LAB FEE: $15

SK 210: 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

MW or TTh	6:30–9:30 p.m.	T-VI Main Campus
MW	6:30–9:30 p.m.	Rio Grande High School

Summer

MW or TTh	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $15

SK 510: 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

TTh	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $15

SK 510A: AUTOMOTIVE SUSPENSION AND 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

TTh	6:30–9:30 p.m.	TVI Main Campus

LAB FEE: $15

SK 511: 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

TTh	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $15

SK 512: 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

TTh	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $15

SK 513: AUTOMOTIVE FUEL SYSTEMS

Fundamentals of carburetor operations and circuits, fuel system and carburetion trouble-shooting, servicing and overhaul procedures are covered.

Fall-Winter-Summer

MW	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $15

SK 514: AUTOMOTIVE TUNE-UP AND EMISSIONS I

The basic principles of automotive tune-up and its relationship to automobile exhaust emissions, basic emissions system diagnosis, component analysis, testing and servicing procedures meeting current standards are stressed with the use of infrared and electronic testing equipment.

Fall-Winter

MW	6:30–9:30 p.m.	T-VI Main Campus

PREREQUISITE: SK 513

LAB FEE: $15

SK 515: AUTOMOTIVE TUNE-UP AND EMISSIONS II

This class covers basic principles of computers, feedback sensors, computer-controlled carburetors, throttle body fuel injection, rail injection, and how computers work and control emissions. Testing and servicing of components meeting current standards are stressed with the use of infrared and electronic test equipment.

Winter-Summer

TTh	6:30–9:30 p.m.	T-VI Main Campus

PREREQUISITE: SK 514

LAB FEE: $15

SK 520: 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

MW or TTh	6:30–9:30 p.m.	T-VI Main Campus

NOTES: Students may not work on their own cars. Students must purchase painting supplies.

LAB FEE: $40

SK 530: SMALL ENGINE MECHANICS

Instruction is provided in the proper use of hand tools, two- and 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: $15

SK 540: 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-Summer

MW or TTh	6:30–9:30 p.m.	T-VI Main Campus

NOTE: Student must furnish welding gloves.

LAB FEE: $65

SK 541: 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

TTh	6:30–9:30 p.m.	T-VI Main Campus

NOTE: Student must furnish welding gloves.

LAB FEE: $70

SK 542: 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.

Summer

MW	6:30–9:30 p.m.	T-VI Main Campus

NOTE: Student must furnish welding gloves.

PREREQUISITES: SK 540 and SK 541 or equivalent

LAB FEE: $80

SK 543: PIPE WELDING

Commonly used types of pipe welding are emphasized. Instruction includes welding safety, position butt welds on horizontal and vertical pipe, 90° branch connection pipe and forged fittings for welding and lateral pipe connections.

Fall

MW	6:30–9:30 p.m.	T-VI Main Campus

NOTE: Student must furnish welding gloves.
PREREQUISITE: SK 540
LAB FEE: $70

SK 544: ADVANCED WELDING AND FABRICATION TECHNIQUES

This class is a continuation of SK 540. It covers blueprint reading, fabrication techniques, welding processes and their limitations and advantages.

Winter

MW	6:30–9:30 p.m.	T-VI Main Campus

NOTE: Students must furnish welding gloves.
PREREQUISITE: SK 540 or SK 541 or SK 542 or equivalent
LAB FEE: $70

SK 225: 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

MW	6:30–9:30 p.m.	T-VI Main Campus

Summer

TTh	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $20

SK 226: 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.

Winter

TTh	7–9 p.m.	T-VI Main Campus

PREREQUISITE: SK 225
LAB FEE: $15

SK 235: 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 covered.

Fall-Winter-Summer

TTh	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $15

SK 236: 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: SK 235
LAB FEE: $15

SK 238: 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

PREREQUISITE: A knowledge of electricity as related to alternating current
LAB FEE: $15

SK 239: 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

PREREQUISITE: Thorough knowledge of AC and DC electricity concepts and the use of a volt-ohm milliammeter
LAB FEE: $10

SK 240: FUNDAMENTALS OF PRINTING

Students are introduced to the printing industry and its processes. Topics covered include principles of design, layout and paste-up, camera and darkroom, stripping and platemaking, and bindery.

Fall

TTh	6:30–9:30 p.m.	T-VI Montoya Campus

NOTE: Students must purchase some equipment. Supplies are furnished by T-VI.

LAB FEE: $20

SK 241: FREEHAND ILLUSTRATION

The basic fundamentals of freehand drawing, perspective drawing and their application to the graphic arts are covered.

Fall

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 exception of paper.

LAB FEE: $15

SK 242: 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	6:30–9:30 p.m.	T-VI Montoya Campus
Sat	9 a.m.–12 noon	T-VI Montoya Campus

NOTE: Students must provide their own supplies with the exception of paper.

LAB FEE: $15

SK 243: 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

T	6:30–9:30 p.m.	T-VI Main Campus

Winter

T	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: $15

SK 244: OFFSET DUPLICATOR OPERATION AND MAINTENANCE

This class introduces the basic operation of the offset duplicator and gives the student a basic proficiency with operations 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

Th	6:30–9:30 p.m.	T-VI Montoya Campus

LAB FEE: $20

SK 250: SECURITY OFFICER TRAINING

This is an introduction to such areas as 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: $20

SK 260: 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

MW	6:30–9:30 p.m.	T-VI Main Campus

LAB FEE: $10

SK 581: 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.

Fall

TTh	6:30–9:30 p.m.	T-VI Main Campus

PREREQUISITE: SK 260 or equivalent

LAB FEE: $10

SK 582: 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

TTh	6:30–9:30 p.m.	T-VI Main Campus

PREREQUISITE: SK 260 or equivalent
LAB FEE: $10

SK 265: 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-Winter

TTh	6:30–9:30 p.m.	T-VI Main Campus

NOTE: Students must purchase some supplies.
LAB FEE: $15

SK 560: 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

SK 570: 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.

Fall

MW	7–9 p.m.	T-VI Main Campus La Cueva High School

Winter

MW	7–9 p.m.	T-VI Montoya Campus
TTh	7–9 p.m.	La Cueva High School

Summer

TTh	7–9 p.m.	T-VI Montoya Campus

SK 571: 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
Sat	8:30 a.m.–12:30 a.m.	T-VI Montoya Campus

SK 571A: PLUMBING AND HEATING CONTROL CIRCUITRY

This course includes installation and troubleshooting of heating control circuits. Safety, tools and equipment, terminology, symbols and various controls are covered. Instructional emphasis is on electrical control devices from many manufacturers. Also included are the reading and developing of wiring diagrams and line schematics.

Fall-Winter

MW	7–9:30 p.m.	T-VI Main Campus

PREREQUISITE: SK 571 or equivalent

SK 575: ELECTRICAL TRADES THEORY AND LAB 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	7–9 p.m.	T-VI Montoya Campus
TTh	7–9 p.m.	T-VI Main Campus
Sat	8:30 a.m.–12:30 p.m.	T-VI Montoya Campus

LAB FEE: $10

SK 576: ELECTRICAL TRADES THEORY AND LAB 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: SK 575 or equivalent
LAB FEE: $10

SK 577: ELECTRICAL TRADES THEORY AND LAB III

The National Electric 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: SK 576 or equivalent

LAB FEE: $10

SK 578: 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 Electric Code.

Fall

TTh	7–9 p.m.	T-VI Main Campus

PREREQUISITES: SK 350, SK 570, SK 575 or equivalent.

SK 578A: ELECTRICAL DESIGN II

A continuation of SK 578, this class focuses on short-circuit analysis and overcurrent coordination. A study of an in-depth lighting analysis also is included.

Winter

TTh	7–9 p.m.	T-VI Main Campus

PREREQUISITE: SK 350, SK 570, SK 578 or equivalent

SK 579: 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: SK 570 or equivalent

SK 586: 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

MW	7–9 p.m.	T-VI Main Campus
Sat	8:30 a.m.–12:30 p.m.	T-VI Montoya Campus

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

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