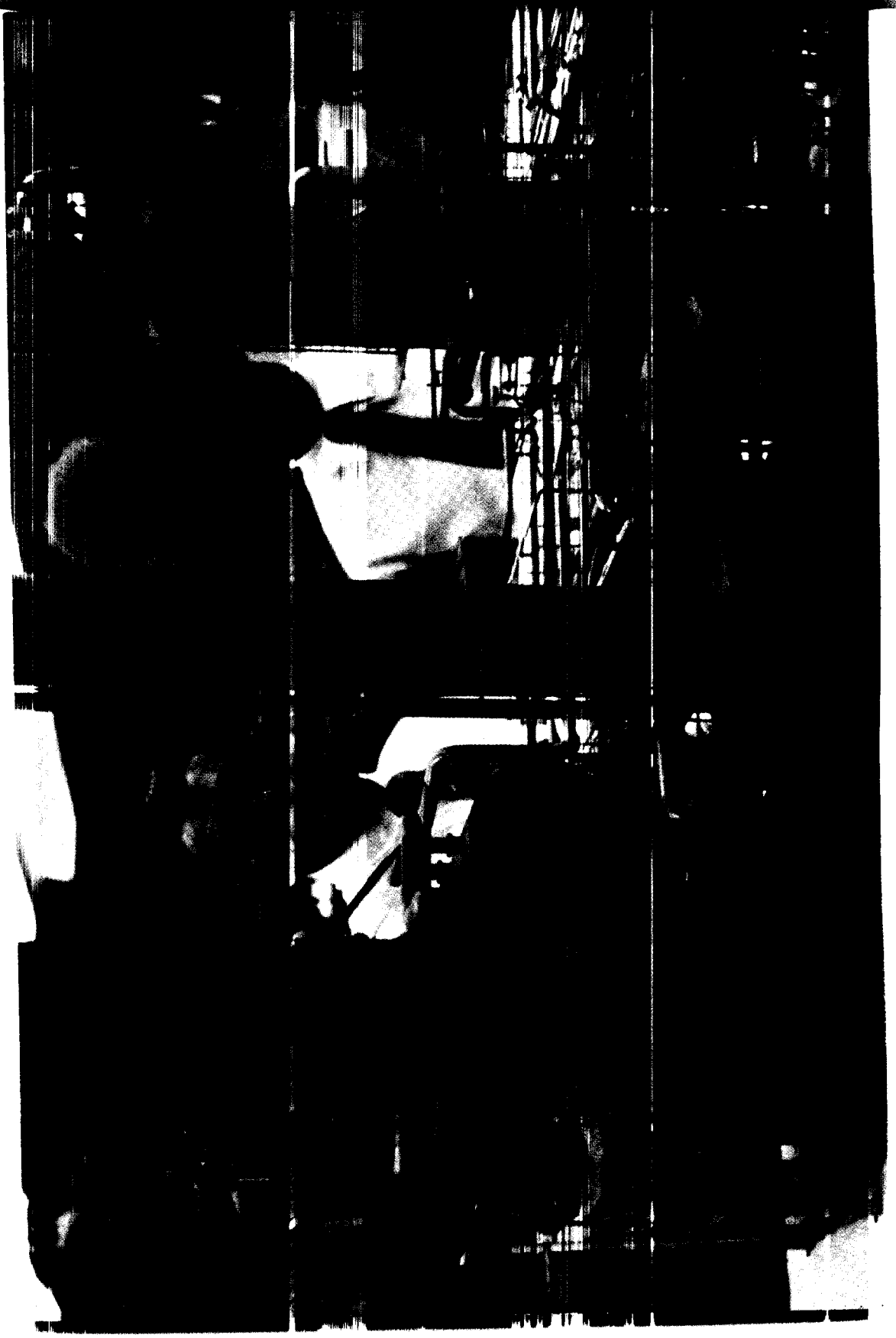
BULLETIN OF

LAMAR STATE COLLEGE OF TECHNOLOGY

SCHOOL OF TECHNICAL ARTS

1971-1972



BULLETIN OF
LAMAR STATE COLLEGE OF TECHNOLOGY

BEAUMONT, TEXAS

VOL. XXI MARCH, 1971 NO. 8

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SEVENTEENTH ANNUAL CATALOG ISSUE

With Announcements for 1971-72

for the

School of Technical Arts

12 Hours more when getting a AAS degree after a certificate. Completion has been getting AAS has to be in the same field

Lamar State College of Technology is an equal educational opportunity institution; its students, faculty, and staff members are selected without regard to their race, color, creed, sex, or national origin, consistent with the Assurance of Compliance with Title VI of the Civil Rights Act of 1964.

The course, tuition and fees, and all other conditions and policies set forth in this catalog issue shall be subject to change without notification.

CALENDARS FOR 1971 AND 1972

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LAMAR STATE COLLEGE OF TECHNOLOGY

Fall Semester for 1971

Aug.	24	Tuesday		Meeting for new faculty. General faculty meeting. Dormitories open.
	25	Wednesday		Dining halls open. Registration of students who have completed entrance procedures.
	26-27	Thurs.-Fri.		Continued registration.
	30	Monday	8:00 a.m.	Classes begin.

Registration after this date limited to available classes.	Late registration (penalty fee charged). Payment of fees is part of registration.

Sept.	1	Wednesday		Last date for registration or for adding courses.
	14	Tuesday		Twelfth day of classes.
	15-Nov. 22			Period of application for December graduation.
Oct.	18-22	Mon.-Fri.		Mid-semester week.
	25	Monday		Mid-semester grades due in Office of Admissions and Records.
Nov.	5	Friday		Last date for dropping courses or for withdrawing without penalty.
	8	Monday		Open counseling period.
	19	Friday		Last date for approval of December graduation.
	24	Wednesday		Dining halls close. Dormitories close.
			10:00 p.m.	Thanksgiving holidays begin.
	28	Sunday	12:00 noon	Dormitories open.
	29	Monday		Dining halls open.
			8:00 a.m.	Classes resume.
Dec.	6-Feb. 25			Period of application for May graduation.
Dec.	7	Tuesday		Last date for dropping courses or withdrawing.
	13-17	Mon.-Fri.	9:00 a.m.	Final date for submitting semester grades for graduating seniors to Office of Admissions and Records.
				Last class day.

Dec.	18	Saturday		Commencement exercises.
	21	Tuesday	12:00 noon	Final date for submitting semester grades other than for graduating seniors to Office of Admissions and Records.

Spring Semester for 1972

Jan.	11	Tuesday		General faculty meeting. Dormitories open.
	12	Wednesday		Dining halls open. Registration for students who have completed entrance procedures.
	13-14	Thurs.-Fri.		Continued registration.
	17	Monday	8:00 a.m.	Classes begin.

Registration after this date limited to available classes.	Late registration (penalty fee charged). Payment of fees is part of registration.

	19	Wednesday		Last date for registration or for adding courses.
Feb.	1	Tuesday		Twelfth class day.
Mar.	3	Friday		Last date for approval of May graduation.
	6-10	Mon.-Fri.		Mid-semester week.
	13	Monday		Mid-semester grades due in Office of Admissions and Records.
	24	Friday		Last day for dropping or withdrawing without penalty.
Mar.	24	Friday		Dining halls close. Dormitories close.
			10:00 p.m.	Spring holidays begin.
April	2	Sunday	12:00 noon	Dormitories open.
	3	Monday		Dining halls open.
			8:00 a.m.	Classes resume. Open counseling period.
May 1-June 23				Period of application for August graduation.
May	2	Tuesday		Last date for dropping courses or withdrawing.

May	12	Friday	9:00 a.m.	Final date for submitting semester grades for graduating seniors to Office of Admissions and Records.
	13	Saturday		Commencement exercises.
	15-19	Mon.-Fri.		Restricted social activities.
	19	Friday		Last class day.
	23	Tuesday	12:00 noon	Final date for submitting semester grades other than for graduating seniors to the Office of Admissions and Records.

Summer Session, 1972

First Term

June	4	Sunday		Limited operation of dormitories.
	5	Monday		Dining halls open. Registration.
	6	Tuesday	8:00 a.m.	Classes begin.

Registration after this date limited to available classes.	Late registration (penalty fee charged). Payment of fees is part of registration.

	7	Wednesday		Last day for registration or for adding courses.
	9	Friday		Fourth class day.
	27	Tuesday		Last date for dropping courses or withdrawing without penalty.
	30	Friday		Last day for approval of August graduation.
July	4	Tuesday		Independence Day holiday.
	11	Tuesday		Last date for dropping courses or withdrawing.
	12	Wednesday		Last class day.
	15	Saturday	12:00 noon.	Term grades due in Office of Admissions and Records.

Second Term

July	13	Thursday		Registration.
	14	Friday	8:00 a.m.	Classes begin.
		Registration after this date limited to available classes.		Late registration (penalty fee charged). Payment of fees is part of registration.
	17	Monday		Last date for registration or for adding courses.
	19	Wednesday		Fourth class day.
Aug.	1	Tuesday		Last date for dropping courses or withdrawing without penalty.
	14	Monday		Last date for dropping courses or withdrawing.
	18	Friday		Last class day.
			9:00 a.m.	Final date for submitting term grades for graduating seniors to Office of Admissions and Records.
				Dining halls close.
				Dormitories close.
	19	Saturday		Commencement exercises.
			12:00 noon	Term grades other than for graduating seniors due in Office of Admissions and Records.

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BOARD OF REGENTS

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Garland F. Shepherd, Vice-Chairman ..... Beaumont, Texas

A. H. Montagne, Secretary ..... Orangefield, Texas

J. B. Morris, Chairman Emeritus ..... Beaumont, Texas

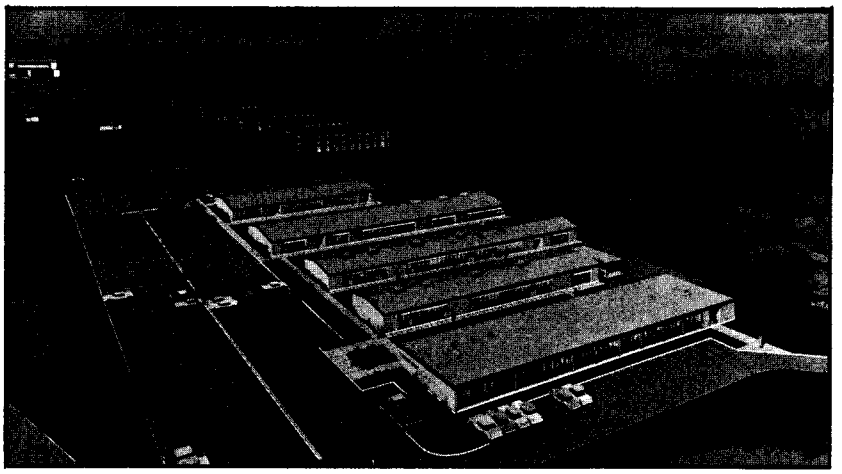
Bryan D. Beck, Jr. ..... Beaumont, Texas

Cecil Beeson ..... Orange, Texas

W. Sam Monroe ..... Port Arthur, Texas

Pat Peyton, Jr. ..... Beaumont, Texas

J. L. Smith ..... San Augustine, Texas



SCHOOL OF TECHNICAL ARTS

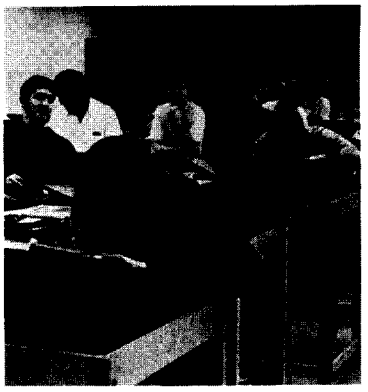
The School of Technical Arts (formerly the School of Vocations) is a part of the Lamar State College of Technology and has provided technical and industrial education for thousands of Texas men and women. It is housed in an all-new, modern plant with five buildings having more than 80,000 square feet of space. Modern facilities are provided for instruction in Data Processing, Diesel Engines, Drafting, Industrial Electricity and Electronics, Instrumentation, Machine Shop, Mid-management, Police Science, Refrigeration and Air Conditioning, Vocational Nursing, and Welding.

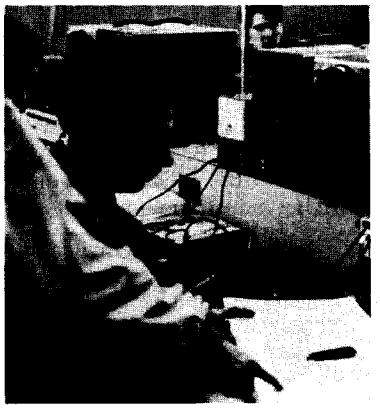
Location

The School of Technical Arts is located in the heart of industrial Southeast Texas at Beaumont. The principal industries in the area are oil refining, shipping, ship building, rubber manufacturing and other related industries. Rice farming and ranching are the chief agricultural pursuits.

The campus is adjacent to the Beaumont-Port Arthur Highway in southeastern Beaumont. With a population of approximately 120,000, Beaumont has modern schools, churches, and shopping districts to serve the thriving industrial community.

In the metropolitan Beaumont area are the cities of Port Arthur, Orange, Vidor, Port Neches, Nederland and Groves, all within 25 miles and forming the heart of the Gulf Coast area with an estimated population of more than 350,000.





Learn a Trade at Lamar

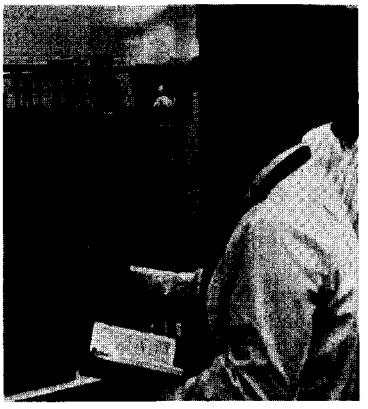
The rapid expansion of our national economy has increased many times the number of employment opportunities for those possessing the knowledge and skills of the industrial and technical occupations. The objective of the School of Technical Arts is to offer men and women an effective and economical means for learning one of these occupations in a relatively short period of time.

Preparatory courses are offered in Data Processing, Drafting, Diesel Engines, Industrial Electricity and Electronics, Instrumentation Machine Shop, Mid-management, Police Science, Refrigeration and Air Conditioning, Vocational Nursing, and Welding. These courses have been planned to provide the proper balance between practice, where the skills of the occupation are acquired, and classroom work, where the necessary related knowledge is learned. Three hours of practice are provided for each two hours spent in the related classes.

All of these with the exception of Vocational Nursing requires full-time attendance for a period of eighteen months. The Vocational Nursing course requires twelve calendar months for completion.

Completion of one of these courses should provide sufficient knowledge and skills to enable an individual to secure employment and to advance in his chosen vocation. Preparatory training in the industrial-technical occupations also enables a person to obtain employment in many fields which are allied to the one for which he has been trained.

For the young person, possessing the aptitude and ability, the programs of the School of Technical Arts offer a most efficient and economical means of entry into an industrial or technical vocation.



History

South Park Junior College was established in 1923. The college was organized and controlled by the South Park Independent School District, and classes were conducted in the South Park High School Building. Enrollment increased from about 125 in 1923 to 300 in 1931.

In 1932, the name of the institution was changed to Lamar College. At this time separate facilities were provided, additional equipment was purchased and new policies were instituted. By 1939, enrollment was approximately 640.

In 1940, Lamar Union Junior College District was created, and Lamar College was separated from the South Park Independent School District. Bonds were voted and new facilities were constructed on the site of the present main campus.

A movement to expand Lamar College into a four-year state-supported school culminated in the creation of Lamar State College of Technology on September 1, 1951. Since that time the curriculum has been expanded and liberalized to include many areas of study, and many additional facilities have been provided. Enrollment has increased until there are now more than 10,000 students enrolled.

The college offered graduate work in specified fields beginning in the academic year of 1960-61, extension work became an integral part of the college program in 1964, and a doctor of engineering program was added in 1970.

Government

The government of the college is vested in a board of nine regents appointed by the Governor and approved by the Senate for terms of six years. The direction of academic affairs is delegated by the Board of Regents to the President, administrative officers, and faculty.

Objectives

The basic objective of the School of Technical Arts is to help students equip themselves for effective living and for responsible citizenship in our society by offering educational programs and training which will extend their basic knowledge, encourage their continued development, and give them marketable skills. In working toward this goal, the school encourages students to assume a major share of responsibility for the development of their potentialities and for utilization of their abilities, for their own purposes and for the good of society.

In order to stimulate students to have open minds, emphasis is placed upon the development of creative and scientific thinking for the solution of problems in the social and physical environment of their time. An effort is also made to provide guidance that will encourage the students to reach mature and responsible decisions, whatever the nature of the problems they may encounter.

The School of Technical Arts recognizes it obligation to make available to the community all the opportunities implicit in its function as a part of Lamar State College of Technology. In an effort to achieve this goal, the specific objectives of the school are:

1. To provide certificate programs designed to prepare individuals for semi-professional employment.
2. To provide education and training leading directly to employment in specific vocations.
3. To provide guidance services that will assist individuals in making appropriate vocational choices.

Building and Grounds

Located on a campus of approximately 200 acres and valued in excess of $38,000,000, the Lamar plant includes many new and functional buildings of modern design. These structures include:

Administration Building, Art Building, Biology Building, Bookstore, Business Building, Chemistry Buildings, Dining Halls A and B, Education Building, Educational Services Center, Engineering Buildings, Geology Building, Health Center, Home Economics Building, Liberal Arts Building, Library, McDonald Gymnasium, Music-Speech Building, Physics Building, Post Office Building, Science Lecture Auditorium, Student Affairs Building, Student Center, Technical Arts Buildings, Theatre/Gallery and Women's Health and Physical Education Building.

The Richard W. Setzer Student Center, opened in 1971, represents an investment of almost $3,000,000 in expansion, renovation, and furnishing of the former Student Union Building. Refurbishing of the Student Affairs Building (formerly Liberal Arts) and Engineering Buildings 1 and 2 has been completed also.

On-campus dormitories include Brooks Hall, Gentry Hall and Gray Hall for women; Campbell Hall, Combs Hall, Morris Hall, Plummer Hall, and Shivers Hall for men. Also, three apartment buildings for upper class students and the married couples are included in the residence hall system.

The President, Associate Dean of Student Affairs, and Director of the Physical Plant have homes on the campus.

A football stadium seating 17,150 and planned eventually to accommodate 38,500; an athletic field house, athletic practice fields, Olympic swimming pool, 14 tennis courts, track and field stadium, and a four-building maintenance complex are also located on campus.

Dining Hall

The college owns and operates two dining halls located on the main campus. Also, dining halls are maintained for residents of Brooks, Gentry, Plummer, and Shivers Halls.

In addition to the snack bars located in the Student Center, the School of Technical Arts provides facilities where sandwiches, soft drinks and light lunches are available.

The Library

In support of the continuously expanding college programs, the Lamar Library has developed a strong collection. Approximately 25,000 volumes are added annually to the present 220,000 volumes, and over 3,000 periodicals are received. Library resources are further enriched by some 25,000 state and federal documents and microfilm materials.

Library hours are 7:30 to 11 p.m. Monday through Thursday; 7:30 to 5 p.m. Friday; 8 a.m. to 5 p.m. Saturday; and 2 to 11 p.m. Sunday. Hours between sessions and on holidays are posted.

Bookstore

For the convenience of faculty and students, the college operates its own bookstore where supplies and books, new and used, may be purchased.

Used books which are currently approved may be sold to the bookstore at prices much better than such books would ordinarily bring. Books which must be discontinued for very good reasons are not purchased by the Bookstore except at a salvage price.

The Bookstore reserves the right to require the seller to prove his ownership.

Health Center

The college maintains a Health Center for the use of students during the long term or summer session.

Two types of service are available: (1) out-patient service for those who have minor ailments but who do not require constant supervision, and (2) infirmary service for those who are in need of the continued attention of the College physician or of nursing care.

Scholarships

Lamar State College of Technology offers a scholarship to the highest ranking graduate of each fully affiliated high school of Texas. Each scholarship exempts the holder from payment of $50.00 tuition per semester. Other scholarships supported by industries, organizations and individuals are available upon application.

Students with Physical Handicaps:

The State Board of Vocational Education through the Vocational Rehabilitation Division, offers assistance on tuition to students who have certain physical disabilities, provided the vocational objective selected by the disabled persons has been approved by a representative of the Division.

Application for Vocational Rehabilitation assistance should be made to the nearest rehabilitation office or to the Director of Vocational Rehabilitation, 612 Littlefield Building, Austin, Texas 78711. The Beaumont office is located in 1110 Goodhue Building.

Veterans Education

Lamar Tech holds a contract for educating veterans under the Vocational Rehabilitation Law, known as Public Law Number 16, and is an approved college for veterans under Public Law Number 346 and Public Law Number 550. The vocational training has been especially prepared for those who wish to establish themselves in business and industry in the Sabine-Neches area.

Veterans who are interested in continuing their education under federal laws providing such training are directed to secure information and aid in planning their college work by consulting the Office of Veterans' Education, Educational Services Building.

Part-time Employment

The college and many local businesses and industries provide a number of part-time jobs which enable worthy students to earn part or all of their expenses while attending college. Applicants should contact the Director of Financial Aids and Awards.

Ex-Students Association

An association of former students of Lamar actively promotes the best interests of the college. Membership in this association is open to all ex-students, whether graduates or not. The Executive Secretary maintains an office on the campus.

ADMISSION REQUIREMENTS

Admission

The requirements outlined below must be met for admission to Trade Preparatory courses:

1. A minimum entrance age of 16 years.
2. Evidence of graduation from an accredited high school.
3. Application for individual approval for persons 21 years of age or over who are not high school graduates and for persons of 18 years who are discharged military personnel.
4. Transfer with transcript from an accredited vocational-technical school.

The following requirements are necessary for admission to Trade Extension, Apprentice Training, Distributive Education and Industrial Supervision:

1. A minimum entrance age of 18 years.
2. Employment in trade or industry for which supplementary instruction would increase the skill or knowledge of the worker.
3. Submission of a statement by the student which shall include (a) the name and address of his employer, (b) his payroll designation, and (c) a brief description of the duties of his daily employment.

Registration Procedures

The student of Technical Arts follows the procedures for admission and registration followed by all students of the college.

Application for admission should be made well in advance of the expected enrollment date—six months in advance if possible, but no less than three weeks. All required admission forms should be addressed to the Dean of Admissions and Records, Lamar State College of Technology, Lamar Tech Station, Box 10009, Beaumont, Texas 77705.

The following information on procedures will be adequate for most students of Technical Arts, but if additional information is needed, the college Bulletin No. 6 may be consulted.

1. File official application for admission (form attached to back of this catalog). Inclusion of the social security number is required on this form.
2. Submit the Health Data Form properly executed by a physician (form attached to back of this catalog). This form is not required of extended day students.

3. Submit transcript of high school record directly to the Dean of Admissions and Records (note address above).
4. The Scholastic Aptitude Test (SAT) of the College Entrance Examination Board (CEEB) is not required for Technical Arts students with the exception of those applying for Vocational Nursing programs.
5. Students wanting dormitory accommodations should file an application for room reservations with the Assistant Dean of Students for Housing, Lamar State College of Technology, Lamar Tech Station, Box 10041, Beaumont, Texas 77705. A $50.00 room deposit is required.

Registration is completed by payment of tuition and fees, and no one may register after the last date for registration for credit shown on the official calendar

FEES AND EXPENSES

Payment of Fees

Lamar State College of Technology reserves the right to change fees in keeping with acts of the Texas Legislature.

A student is not registered until all his fees are paid in full. Payment may be made by check, money order, or currency. Checks and money orders, not in excess of total fees, should be made payable to Lamar State College of Technology and will be accepted subject to final payment. Checks and drafts deposited with Federal Reserve banks cannot be handled through regular bank collection channels if received without the magnetic ink (MICR) transit number. The new electronic processing demands such magnetic ink encoding. The college will not accept counter checks or "changed" checks.

Fees Summary

Resident Students (Texas)

Semester Hours	Tuition	S.S. Fee*	Bldg. Use Fee	Total + Laboratory Fees
12 or more	$ 50.00	$ 30.00	$ 26.00	$106.00 + Lab Fee
11	47.00	30.00	26.00	103.00 " " "
10	43.00	30.00	26.00	99.00 " " "
9	39.00	30.00	26.00	95.00 " " "
8	35.00	30.00	26.00	91.00 " " "
7	31.00	16.00	13.00	60.00 " " "
6	27.00	16.00	13.00	56.00 " " "
5	23.00	16.00	13.00	52.00 " " "
4	19.00	16.00	13.00	48.00 " " "
3 or less	15.00	16.00	13.00	44.00 " " "

Non-Resident Student (out of Texas)

Semester Hours	Tuition	S.S. Fee*	Bldg. Use Fee	Total + Laboratory Fees
12 or more	$200.00	$ 30.00	$ 26.00	$256.00 + Lab Fee
11	183.00	30.00	26.00	239.00 " " "
10	167.00	30.00	26.00	223.00 " " "
9	150.00	30.00	26.00	206.00 " " "
8	133.00	30.00	26.00	189.00 " " "
7	117.00	16.00	13.00	146.00 " " "
6	100.00	16.00	13.00	129.00 " " "
5	83.00	16.00	13.00	112.00 " " "
4	66.00	16.00	13.00	95.00 " " "
3 or less	50.00	16.00	13.00	79.00 " " "

*For summer session students, the student service fee is $10.00 per term. Extended day Technical Arts students are exempt from the Student Service fee.

These fees have been approved by appropriate acts of the Legislature of the State of Texas.

Student Responsibility for Residence Classification

The responsibility of registering under the proper residence classification is that of the student, and if there is any possible question of his right of classification as a resident of Texas, it is his obligation, prior to or at the time of his registration, to raise the question with the Dean of Admissions and Records and have his status officially determined.

Every student who is classified as a resident student who becomes a non-resident at any time by virtue of a change of legal residence by his own action or by the person controlling his domicile is required to notify the Dean of Admissions and Records.

Students failing to comply with the residency provisions of the state tuition bill (Art. 2645c, V.C.S. as amended 1957) are subject to penalties as set forth in the law and/or appropriate disciplinary action.

Laboratory Fee

For all courses in which the combined credit of lecture and laboratory is from 1 to 3 semester hours, a laboratory fee of $2.00 is charged for each semester. For such courses in which the credit is 4 semester hours or more, the laboratory fee is $4.00 per semester.

Parking Fee

Charges for parking on campus are made at the time a student is registered. In each instance, a student's parking fee is honored up to the end of the current fiscal year, which is August 31.

Registration of an automobile in September is $10.00. The February fee is $6.00. A student registering for the first Summer Session is charged $4.00, and for the second Summer Session the fee is $2.00.

Only one registration is required for one school year.

Returned Check Fees

If a check is returned unpaid, the student is automatically suspended from college, but may re-enter upon redemption of the check plus payment of the return check fee of $2.00.

Special Fees

Fees for courses for which special plans must be prepared and for which specialists must be secured as instructors will be set for each such course by the college administration subject to the approval of the president.

Miscellaneous Fees

Certificate of Completion	$4.00
Late Registration	5.00
Returned Checks	2.00
Re-entry Fee	5.00
Transcript Fee	.50
Photo Identification	1.00
Swimming Pools (suits and towels)	2.00

Health and Accident Insurance

Additional health and accident coverage providing protection over and beyond that given by the health center is available at registration for students carrying nine or more semester hours. The fee is $30.00 (estimated). For their protection and welfare this (or similar) insurance is required of all foreign students.

Exemption 1. Scholarships to High School Honor Graduates

The highest ranking student in the graduating class of a fully affiliated Texas high school will be entitled to a scholarship valued at $100.00. This scholarship must be utilized during the long session immediately following graduation.

Exemption 2. Ex-Service Men of World War I or World War II

Men and women who are citizens of Texas who served in the Armed Forces in World War I or World War II and were honorably discharged therefrom and who are not eligible for educational benefits provided for veterans of the United States Government, are exempt from tuition and laboratory fees, but not from other fees. To obtain this exemption, the service record, discharge papers, or other necessary papers must be presented at the time of registration.

The above exemption also extends to children of members of the Armed Forces who were killed in action or died while in the service in World War II.

Summary of Registration Expenses

Each student must study carefully his own budget. It is possible to attend Lamar on a very modest sum and yet participate in all important phases of the college program. To assist in planning registration expenses, the following estimate is furnished as a guide:

Full-time Student (12 or more semester hours):

Tuition, matriculation, building use, laboratory fees	$106.00 + lab fees
Books and incidentals (estimated)	35.00
Health Insurance (if desired)	30.00
Parking fee (if desired)	10.00
Total (estimated)	$181.00 + lab fees

Part-time Student (6 semester hours):

Tuition, matriculation, building use, and laboratory fees	$ 56.00 + lab fees
Books and incidentals (estimated)	12.00
Parking fee (if desired)	10.00
Total (estimated)	$ 78.00 + lab fees

The tuition fee varies with the semester hours carried so that the total is less or more than this estimate, according to the schedule shown in the section, "Fees Summary."

Refund of Fees

Any student withdrawing officially will receive a refund on tuition, student service, laboratory and private lesson fees according to the following schedule:

Long Session

1. During the first two weeks of the semester, 80 per cent.
2. During the third week of the semester, 60 per cent.
3. During the fourth week of the semester, 40 per cent.
4. During the fifth week of the semester, 20 per cent.

Summer Session

1. During the first week of the semester, 60 per cent.
2. After first week no refund.

No refunds are made when dropping courses.

Application for refund must be made to the Vice-President of Finance after the student has officially withdrawn, but not later than the end of the current semester or summer session.

It takes about 30 days to process these refunds.

Fire and Breakage Loss

All library fines, breakage or loss of equipment charges, or other charges must be paid before a transcript of credit or a permit to re-enter college will be issued.

The college reserves the right to make a special assessment against any student guilty of inexcusable breakage or loss of instructional equipment or other college property.

STUDENT HOUSING

The student housing program at Lamar is designed to supplement the academic program of instruction by providing opportunities for social and intellectual development and recreation in a pleasant living environment. A professional staff is on hand to work with students in planning and executing residence hall programs and to serve as advisors and counselors to students.

A variety of room accommodations and meal plans are available to meet the needs of the individual student.

Students who do not feel that the residence hall programs meet their personal needs may elect to find living accommodations off-campus.

Policies

The following policies will govern the operation of residence halls in 1971-72.

1. Students may request private rooms, or rooms with one or two roommates. Unfurnished rooms will be available at reduced cost in selected housing units. All students who live in college housing must participate in one of the three meal plans offered. Rates for room and board are given below.
2. Residence hall room assignments will be made on a contract lease basis, cancellable by the student at the end of any given semester. If a student removes himself from the housing system prior to the end of the semester, no refund of room rent or deposit will be made and the student will honor his contractural agreement for food service for the balance of the semester. Except for fractional parts of a month, rent refunds will be made to occupants moving from the married students apartments.
3. Under the guidance of the Student Affairs Division, the various residence halls councils, elected by the residents, will have the responsibility for enacting and enforcing rules and regulations governing their respective residence halls.
4. Within certain limitations, rooms may be decorated to suit individual tastes, including the painting of walls in some units. Prior approval of the Assistant Dean of Students for Housing is required.
5. A $50 deposit will be required of all residents, to serve as a guarantee of reservation and to be applied against any damage to college facilities chargeable to the student. The amount of the deposit must total $50 at the start of each semester; *i.e.*, any charge against the deposit must be reimbursed to the deposit fund to bring it up to $50 prior to occupancy for the ensuing semester.

Direct inquiries regarding all housing (accommodations, charges, room reservations, board, etc.) to: Housing Office, Lamar State College of Technology, P.O Box 10041, Lamar Tech Station, Beaumont, Texas 77705.

6. Dormitory residents will be responsible for replacement or repair of any college property entrusted to them which may be damaged, whether such damage is caused by the occupant or a guest.

7. Payment for damages to any area of the dormitory will be required of the individual student responsible for the damages.

8. In the event responsibility for damages to lounges, hallways, stairways, and other areas cannot be determined, all residents will share equally in the cost of replacement or repair.

9. Women's housing units normally close at 12 midnight Sunday through Thursday and at 2 a.m. on Friday and Saturday nights. Parental consent for special late permissions, and general overnight and week-end permissions will be honored.

10. Residents of the Lamar Apartments will be allowed to have visitors of the other sex in their apartments during prescribed hours. This so-called "open housing" plan is available only in the apartments. In addition to married couples, apartment units may be leased by juniors, seniors, and graduate students who are 21 years of age, or whose parents sign an "open housing consent" form.

11. Rules governing "open housing" will be drafted and enforced by the residence hall council of the Lamar Apartments, in cooperation with the Student Affairs staff.

12. Possession and/or use on campus of alcoholic beverages, marijuana, or any illegal drug is a violation of college regulations, and violators will be subject to disciplinary action, including removal from the institution and prosecution through the civil and/or criminal courts.

13. Students whose general behavior warrants disciplinary action may forfeit their privilege of remaining in the college residence halls.

14. The college reserves the right to inspect student rooms at any time.

Rates

Room rent for the semester must be paid in advance, but may be paid in installments (see below). If an installment plan is chosen, the initial payment is due at check-in. Students may not alternate board plans during the semester.

Type of Facility (Cost per Student per Semester)	With Air-conditioning	Without Air-conditioning
Regular dormitories:		
Single occupancy	$ 325.00	$ 300.00
Double occupancy	220.00	200.00
Triple occupancy	160.00	145.00
Two-room suites:		
2 students per suite	325.00	300.00
3 students per suite	255.00	233.00
Apartments (with kitchen):		
Married student	375.00	350.00
Two students (each)	250.00	225.00
One student	None	350.00
Apartments (without kitchen):		
Two students (each)	220.00	200.00
One student	375.00	350.00

(A reduction of $45 per year per room will be allowed for rooms rented unfurnished.)

Meal Plans*

A. **Full Board Plan**: Provides three meals per day, except Sunday evening. Meal stickers are not transferrable. Lost stickers will be replaced for a small fee. Payment may be made in advance for the semester, or the student may elect to follow a payment schedule.

The total cost for either the fall or spring semester is $262.50.

B. **Partial Board Plan**: The student contracts to purchase a minimum of four meal coupon books per semester. Each book contains coupons for 41 meals, priced at $50 per book, for a total of 164 meals at $200 per semester. Coupons may be used at any meal, in any dining hall (Plummer & Gentry Halls by invitation only).

Direct inquiries regarding all housing (accommodations, board, etc.) to: Housing Office, Lamar State College of Technology, Lamar Tech Station, P.O. Box 10041, Beaumont, Texas 77705.

C. **Cash Coupon Plan**: The student contracts to purchase four cash coupon books, each valued at $50, for a total of $200 per semester. Coupons will be of varying demoninations and may be used in any campus

*All meal prices subject to 4¼% sales tax.

manual food service facility for purchases at a la carte prices (Plummer & Gentry Halls by invitation only).

Conditions Governing the Partial Board Plan and Cash Coupon Plan: Coupons are transferrable and may be used to "treat" guests. No refunds will be made for books lost or damaged beyond recognition. Coupons must be used in the semester of issue. Unused coupons are not redeemable. Coupons purchased during the fall semester will expire on December 17, 1971, coupons purchased during the spring semester will expire on May 19, 1972. Coupon books may be purchased at any time prior to the dates listed below, but purchases must be made by the dates indicated:

Payment Schedule for Partial Board/Cash Coupon Plans

Fall Semester*		Spring Semester*	
#1-August (check-in)	$ 50.00	#1-January (check-in)	$ 50.00
#2-September 21	50.00	#2-February 8	50.00
#3-October 19	50.00	#3-March 7	50.00
#4-November 16	50.00	#4-April 4	50.00
Total Fall	$200.00	Total Spring	$200.00

RESERVATIONS AND ASSIGNMENTS

Reservations

To reserve a room in the residence halls or an apartment, direct a request to the Housing Office, Lamar State College of Technology, P.O. Box 10041, Lamar Tech Station, Beaumont, Texas 77705. **A check or money order for $50.00 must accompany the reservation request. Reservations may be cancelled with full refund until three weeks prior to the first day of classes. No refunds will be issued on cancellations received after this date.**

All unclaimed rooms will be declared vacant and the deposit forfeited at 6:00 p.m. on the last day of registration unless the student gives the Student Housing Office written instructions to hold the room for a longer period. Residents will be refunded deposits, less any breakage or cleaning charges, at the end of a semester on proper withdrawal from the housing unit. The deposit will not be refunded if the student moves from the housing system prior to the end of a semester.

Assignments

Permanent assignments cannot be made until the student reports for check-in. The College reserves the right to assign students to specific apartments, dormitories, and rooms. Students may request certain apartments, dormitories, and rooms, and all possible consideration will be given each request. Students already living in college-owned housing units have the first choice of rooms and apartments the following semester.

*All meal prices subject to 4¼% sales tax.

SUMMER SCHOOL HOUSING

Dormitories

Brooks Hall (women) and Shivers Hall (men) are utilized by the college for the two summer sessions. Room and board charges (to be paid at the beginning of each session) are as follows:

	Full Board Plan	Cash Coupon Plan
Double occupancy (with air conditioning)		
Room rent	$ 73.50	$ 73.50
Board	74.43 + tax	72.00 + tax
Total (each session)	$167.93 + tax	$145.50 + tax
Single occupancy (with air conditioning)		
Room rent	$108.50	$108.50
Board	94.43 + tax	72.00 + tax
Total (each session)	$202.93 + tax	$180.50 + tax

Apartments

A limited number of apartments for single men, women and married students are available in the summer. Charges are as follows:

	With Air-Conditioning	Without Air-Conditioning
Single students (each session)		
Double occupancy	$ 77.00	$ 62.00
Single occupancy	None	116.50
Married students (each session)	$125.00	$116.50

Board plans are optional for apartment residents. An apartment occupant interested in a board program should consult the board rates for dormitory residents to get an estimate of the cost.

Direct inquiries regarding all housing (accommodations, charges, room reservations, board, etc.) to: Housing Office, Lamar State College of Technology, P.O. Box 10041, Lamar Tech Station, Beaumont, Texas 77705.

ACADEMIC REGULATIONS

Course Numbering

Each course has an individual alpha-numeric code. The alpha part indicates the subject area. Each number contains three figures. The first digit indicates the rank of the course (1 means that it is for freshmen, 2 for sophomores). The second figure indicates the number of semester hours credit. The third figure usually indicates the order in which the course is taken. Certain courses can be taken in two parts as indicated by numerals in parenthesis following a course number, such as 181 (141-142).

Exceptions to the course numbering structure described above are found in the Adult Education Department where the first digit of many courses is 3, 4, 5, 7, and 8.

Admission to Class

The only way to become a member of a class is to register for it through the regular registration procedure.

Class Attendance and Absences

1. Regular and puncutal attendance in classes and laboratories is expected.
2. An absence or a late attendance is classified as approved or unapproved.
   (1) A student having an approved absence may make up examinations and written assignments.
   (2) A student having an unapproved absence does not have the privilege of makeup.
   (3) Makeup of laboratory assignments is not permitted.
3. For college sponsored activities, the sponsor, coach, teacher, or supervisor submits to the Dean of the School of Technical Arts a list of participating students, and a make-up permit is issued. The absences then become approved absences.
4. Absences are counted from the first meeting of the class.
5. All make-up work must be completed within ten days following the return to classes after absences.
6. Students who accumulate as many as 3 consecutive absences or who jeopardize their class work by irregular attendance are to be reported to the Dean.
7. Students who continue poor attendance may, at the discretion of the Dean, be dropped from the rolls of the class and given the grade of F.

Changing Schedules

No course may be added, changed or dropped without the permission of the Dean of the School of Technical Arts. Usually a course may not be added after the first week of the semester (first 2 days of summer session).

Withdrawals

A student wishing to withdraw for the remainder of the semester or summer term, should fill out a Withdrawal Petition in triplicate in the office of his academic dean. He must clear all financial obligations and return all uniforms, books, laboratory equipment and other materials to the point of original issue.

Three copies of the withdrawal form signed by the Dean of Technical Arts, the Director of Library Services, and an Associate Dean of Students, are presented to the Office of Admissions and Records by the student.

On application before the end of the semester or summer session the comptroller will return such fees as are returnable according to the schedule shown under the "Fees" section of the bulletin. This refund is made only to persons withdrawing and only if requested before the end of the current semester or summer session.

If a withdrawal is made before the end of the tenth week (third week of summer term), or if the student is passing at the time of withdrawal, a grade of W is issued for each course so affected. A grade of F is issued for all courses not being passed at time of withdrawal after this penalty-free period.

A student may not withdraw within three days of the beginning of final exam week.

A student who leaves without an official withdrawal will receive a grade of F in all courses and forfeit all returnable fees.

Enforced Withdrawal Because of Illness

The Director of the Health Center and the Vice-President of Student Affairs on the advice of competent medical personnel may require withdrawal or deny admission of a student for health reasons (mental or physical)

ACADEMIC PROGRESS

Classification of Students

Students are classified as freshmen, sophomores, unclassified and special with these considerations:

Freshman: has met all entrance requirements and has completed fewer than thirty semester hours.

Sophomore: has completed a minimum of thirty hours with thirty grade points.

Unclassified: does not wish to work toward a certificate or does not meet entrance requirements.

Special: does not expect to earn a certificate but must meet all entrance requirements.

Grading System

A–	Excellent	W–	Withdrawn
B–	Good	Q–	Course was dropped
C–	Satisfactory	S–	Credit
D–	Passing	U–	Unsatisfactory; no credit
F–	Failure	NG–	No grade
I–	Incomplete		

The grade of W or Q is given if the withdrawal or drop is made before the penalty date or if the student is passing at the time of withdrawal or drop.

The grade of I is given when any requirement of the course, including the final examination, is not completed. Incomplete work must be finished during the next long semester or the Office of Admissions and Records must change the I grade to the grade of F. The course must then be repeated if credit is desired.

The instructor may record the grade of F for a student who is absent from the final examination and is not passing.

Semester grades are filed with the Office of Admissions and Records. A grade may not be recorded for a student not regularly enrolled in a course during the semester covered. A grade may not be corrected or changed without the written authorization of the instructor giving the grade. The written instruction for a grade change should be accompanied by a statement explaining the reason for the change.

Grade Points

For the purpose of computing grade averages, grade points are assigned as follows: to the grade of A, 4 points; to B, 3 points; to C, 2 points; to D, 1 point, and F, 0 points. A student's grade-point average is obtained by multiplying the number of semester credit hours of each grade by the grade points assigned to the grade and dividing the sum of these by the total number of semester hours of all work taken, whether passed or failed.

Credit for a course in which the grade of S is given is not included in computation of the grade-point average. A student is not given credit for the grades of NG or U nor are the semester hours used in computing the grade-point average.

Reports

Reports on grades are mailed at the end of each semester or summer term. Reports on student work are sent at mid-semester. Upon written request to the Office of Admissions and Records, married students may have grades sent directly to them.

Honor List

At the end of each semester the Dean's Office prepares a list of all the students who have no grades below A and a second list of all students who have no grades below B.

Scholastic Probation and Suspension

Students are expected to make acceptable scholastic progress toward their training objective. Students who fail to make such progress and accumulate grade point deficiencies may be placed on scholastic probation or suspension.

All students with a grade-point deficiency at the end of any regular semester shall be placed on scholastic probation and continued on probation as long as a deficiency exists.

All full-time students with a grade-point deficiency of 25 or more grade points at the end of any regular semester shall be suspended. A student returning from an academic suspension must continue to reduce his grade-point deficiency until the deficiency is eliminated. Should he fail to reduce his deficiency in any one semester, he will be suspended.

Graduation under a Particular Catalog

A student may complete his work for graduation according to the requirements of the catalog of the year in which he is accepted as a major by a department.

The catalog year shall be considered to begin with the long session in August. Students entering for the first time in the summer session are subject to the catalog for the long session immediately following.

Failure to complete the requirements for graduation within two years after the entering date will require the student to graduate under the regulations effective for the current graduating class.

The college reserves the right to make effective, during the course of a student's work toward graduation, any new ruling which may be necessary for the general good of the college and to substitute courses currently offered for those no longer offered.

GENERAL REGULATIONS

New Courses

In order to meet changing educational requirements, the college reserves the right to **add any needed courses at any time without regard to the listing of such courses in the catalog.** It is expected that listing of these courses will appear in the next catalog issue.

The right to change numbers in order to indicate changes in semester hours credit is also reserved for the reason above. Elsewhere in this catalog under "Course Numbering" is a further explanation of this policy.

Minimum Class Enrollment

The college reserves the right not to offer any courses listed in this catalog unless there are at least twelve students who register for the course.

Official Summons

An official summons from any administrative office takes precedence over all other college activities of the student and should be answered promptly on the day and hour designated. Failure to heed this official summons may subject the student to serious disciplinary action.

Discipline

Students of Lamar State College of Technology are expected to conduct themselves in a mature manner, conforming to values and moral standards of good society. They are expected to obey the laws of the land and the regulations of the college. They are further expected to assume full responsibility for the consequences of their actions. Students should be aware of these expectations when they choose to enroll at Lamar State College of Technology.

Disciplinary procedures, specific college rules and regulations, and statements of student rights and responsibilities are published each year in the Student Handbook, available from the office of the Vice President of Student Affairs.

Disciplinary Probation

A student may be placed on disciplinary probation for unacceptable behavior at any time or place. The Dean of Students may classify behavior as unacceptable and may set the period of probation. The student has the privilege of appealing the decision to the Disciplinary Committee of the college. This appeal is made through the office of the Vice-President of Student Affairs.

Hazing

Lamar State College of Technology is opposed to hazing in all of its various forms and will discipline all offenders in the spirit of the statutes

governing this offense, as set forth in Chapter 4-A of Title 15 of **Vernon's Statutes in the State of Texas.**

Eligibility for Extracurricular Activities

An extracurricular is understood to be any activity representing the student body, any student organization, any department or division organization or any activity representing the college.

Any full-time student not on disciplinary or scholastic probation who is regularly registered is eligible to become a candidate or to hold student office or to represent the college in any extracurricular activity provided such student has a grade-point average of at least 2.0 for both the whole of his college work completed at Lamar and that of the preceding semester.

For the purpose of establishing eligibility, two six-week summer terms may count as one semester.

Transfer students have the same eligibility as freshman students until completion of one semester at Lamar.

STUDENT ACTIVITIES

Student life at the college includes many activities in addition to those connected with the courses of study. Some students find an opportunity for the development of their interests in clubs and social affairs. Others participate in athletics and physical activities, such as intercollegiate and intramural sports. Still others may be interested in dramatics, music, publications, student government, or religious life, in all of which there are opportunities for participation under faculty guidance and cooperation.

Student Government

All full-time students are automatically members of the Student Association at Lamar State College of Technology. Officers of the association and representatives of the various schools and organizations are elected annually and make up the Association's executive body known as the Student Government. The Association offers the student an opportunity to promote and to participate in self government and to manage a well-rounded program of student activities.

Publications

The Redbird, the official college newspaper, is published regularly by a staff organized by a faculty sponsor. The publication serves both as a medium of training and as a source of information. Any student is eligible to become a staff member.

The Cardinal is the official yearbook of Lamar State College. Any student is eligible to become a staff member. Those interested are urged to apply.

The Student Handbook is published primarily for the benefit of new students. Pertinent information concerning the college and student activities is given in this publication.

The Student Directory is published annually by the college. It contains a listing of the names, addresses, and telephone numbers of the student association, the faculty, and the administration.

Pulse, a student literary magazine, is published each semester by a student staff supervised by a faculty sponsor for the English Department. Any currently enrolled student may submit manuscripts for possible publication.

Artist and Drama Series

The Artist and Drama Series Committee is made up of students and faculty. The committee annually arranges for the presentation of a number of programs by professional artists and entertainers. Outstanding personalities and companies which have been presented under the sponsorship of the committee include Bennett Cerf, William L. Laurence, Paul Draper, Albert Dekker, the General Platoff Don Cossack Chorus and Dancers, Sir John Gielgud, and Carlos Montoya.

The Student Center

The Richard W. Setzer Student Center provides facilities for recreation and leisure and is the campus center of extracurricular activities. The recently completed addition, costing approximately $2 500,000, was opened in 1971. It includes lounges, snack bars, recreation areas, bookstore, ballrooms, barbershop, meeting rooms, and facilities for student organizations. Offices for Student Government, activities program counselors, and the Center's director are located there.

Student Organizations

The 105 student organizations currently active on the campus offer membership in one or more service, professional, religious, social, and mutual interest clubs. For further information, consult the Student Handbook.

Intramural Sports Program

Under the supervision of the director of intramural sports, the Department of Physical and Health Education offers an intramural program with opportunities for participation in recreational physical activities. Participation is voluntary.

SCHOOL OF TECHNICAL ARTS

The School of Technical Arts offers a curriculum of vocational-technical subjects through two general programs: (1) Trade Preparatory courses, and (2) the Adult Education programs.

Trade Preparatory courses are offered in the following departments:

1. Industrial—machine shop, welding, diesel engines, refrigeration and air conditioning.
2. Technical—data processing, drafting, electricity and electronics, and instrumentation technology.
3. Health Services—vocational nursing.
4. Related Arts—mid-management and police science.

The courses offered in the several departments of trade-preparatory work are designed to give the student trade training prior to his entrance into a skilled trade or occupation. Completion of one of these courses should provide the student with sufficient knowledge and skill to enter and advance in his chosen vocation or any one of a large number of closely allied occupations.

Extension and extended day classes are provided throughout the fall and spring semesters for employed persons who desire to extend their occupational knowledge of skills in the trade in which they are employed. These are grouped into two broad classifications (1) Part-time Trade Preparatory, and (2) Adult Education. The latter includes:

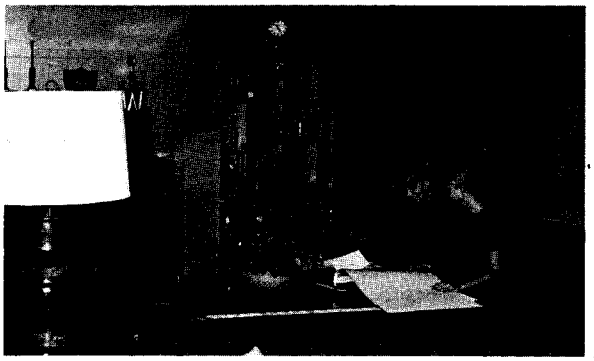
a. Apprenticeship Training for those employed as apprentices in the skilled trades.

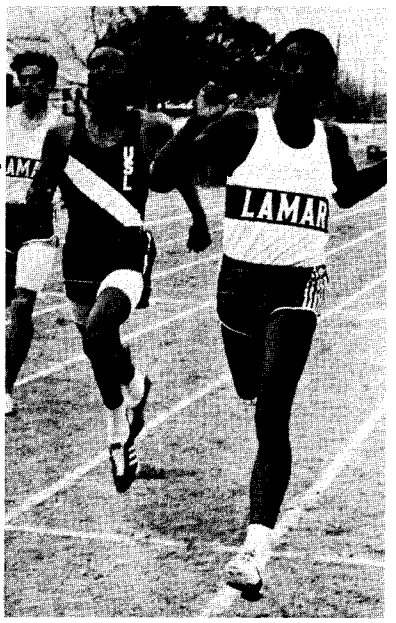
b. Distributive Education for those engaged in retailing, wholesaling, real estate, or similar service occupations.

c. Trade Extension for tradesmen of journeyman grade.

d. Industrial Supervision for persons employed in industry in supervisory or leadership capacities.

e. Conferences and/or short courses for those individuals or groups with specific requests and/or needs.

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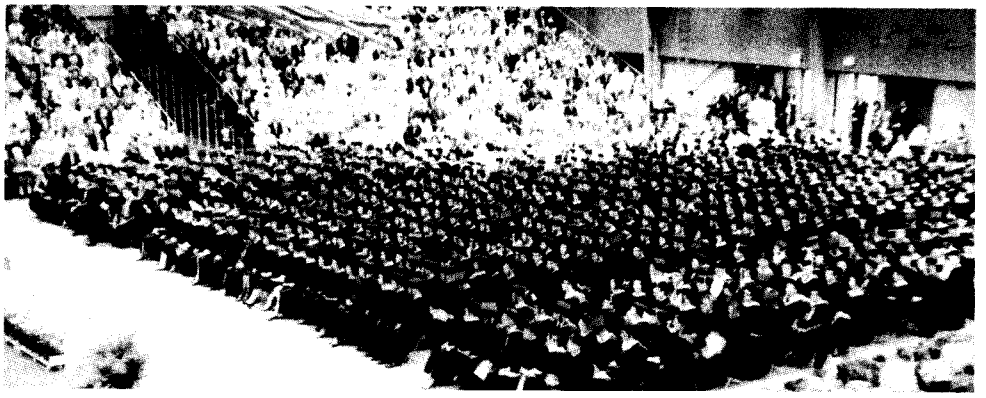


INDUSTRIAL DEPARTMENT

M. Paul Roy, Department Head

Diesel Engines
Machine Shop
Refrigeration and Air Conditioning
Welding

DIESEL ENGINES

Instructors–Sam Lucia, James H. Smith, Doyle Bice.

The two-year course of study leads to a Certificate of Completion and employment as a diesel technician. The completion of the course may also lead to one of the many occupations dealing with the selling, installation, operation, and maintenance and repair of diesel engines.

Program of Study

First Year		Second Year	
DE 181-182	16	DE 281-282	16
DE 151-152	10	DE 251-252	10
Mth 131-132	6	Mth 231-232	6
BC 131-132	6	JR 221-222	4
Electives (By Approval)	4	Electives (By Approval)	4
	42		40

Diesel Engines (DE)

131–Diesel Engines. Ignition systems, ignition requirements, battery ignition, magneto design and construction, magneto service practices, and impulse couplings. Prerequisite: Ele 121. Class: 3 hours. Credit: 3 semester hours.

132–Diesel Engines. Charging circuit, D-C generator, A-C alternator, output controls (regulators). Prerequisite: Ele 121. Class: 3 hours. Credit: 3 semester hours.

151–Diesel Cycle Application. The diesel cycle, its advantages and applications. The basic problems of operations and the design and construction of the diesel engines are studied. Class: 5 hours. Credit: 5 semester hours.

152–Maintenance and Repair Problems. Maintenance and repair problems of the diesel engine. The checking of bearing clearances and the installation of piston rings is stressed. Prerequisite: DE 151. Class: 5 hours. Credit: 5 semester hours.

181 (141-142)–Maintenance and Repairs. This is the first in a series of four shop courses on the installation, operation, maintenance and repair of diesel engines. The correct usage of hand tools and precision instruments is developed in this course. Practice in the correct procedures for the disassembly and assembly of the diesel engine is provided. Class: 1 hour. Laboratory: 14 (7) hours. Credit: 8 (4) semester hours.

182 (143-144)—Maintenance, Repair, Inspection and Checking. Maintenance and repair of diesel engines. Inspecting and checking parts for wear and the refitting and replacing of bearings and piston rings is stressed. Prerequisite: DE 181 or 141 and 142. Class: 1 hour. Laboratory: 14 (7) hours. Credit: 8 (4) semester hours.

221—Diesel Engines. Fluid-power systems, fluid-power plumbing, hydraulic fluids, pumps and motors, cylinders, pressure accumulators, fluid reservoirs and fluid filtration. Prerequisite: DE 151 and 152. Class: 2 hours. Credit 2 semester hours.

222—Diesel Engines. Pressure, flow and directional control valves, servo systems, industrial hydraulic circuits, hydraulic applications, symbols, electrical devices, efficiency and pneumatic powered pump. Prerequisite: DE 221. Class: 2 hours. Credit: 2 semester hours.

251—Diesel Fuel and Lubrication. A comprehensive study of diesel fuels and lubricating oils. Basic electricity, electrical and gasoline starting systems are also stressed. Prerequisite: DE 152. Class: 5 hours. Credit: 5 semester hours.

252—Fuel Injection Systems. Fuel injection systems, hydraulics and its applications, engine tune-up and trouble-shooting. Prerequisite: DE 251. Class: 5 hours. Credit: 5 semester hours.

281 (241-242) Fuel and Lubrication Systems. A study of the fuel and lubricating systems and how they are serviced and repaired. Blowers and superchargers will also be serviced and repaired in the course. Prerequisite: DE 182 or 143 and 144. Class: 1 hour. Laboratory: 14 (7) hours. Credit: 8 (4) semester hours.

282 (243-244)—Servicing and Repairing of Fuel Injectors and Governors. The final course in a series of four shop courses on the diesel engine. This one will stress the servicing and repairing of fuel injectors and governors, hydraulic repair and trouble-shooting, the tuning-up of the engine and the diagnosing of engine troubles. Prerequisite: DE 281 or 241 and 242. Class: 1 hour. Laboratory: 14 (7) hours. Credit: 8 (4) semester hours.

Small Engines (SE)

131—Small Engines. The operation and repair of small internal combustion engines. Diagnosis and "trouble-shooting" will be emphasized. Class: 3 hours. Credit: 3 semester hours.

MACHINE SHOP PRACTICE

Instructors—Gus A. Carlsen, M. Paul Roy, Emmett S. Black.

The objectives of this two-year course of study include occupational training and preparation for entry into the machinist trade or a closely allied occupation. The overall view of instruction is aimed at enabling the graduate to better meet the duties and responsibilities of his chosen occupation. A Certificate of Completion is awarded students who successfully finish the program of study.

Program of Study

First Year		Second Year	
MS 181-182	16	MS 281-282	16
MS 151-152	10	MS 251-252	10
Mth 131-132	6	Mth 231-232	6
BC 131-132	6	JR 221-222	4
Electives (By Approval)	4	Electives (By Approval)	4
	42		40

Machine Shop Practice (MS)

133—Machine Shop. Practice in the use of hand and machine tools of the modern machine shop. Laboratory 6 hours. Credit: 3 semester hours.

151—Hand and Machine Tools, Blueprint Reading and Sketching. A study of the hand and machine tools of the modern machine shop. This course will include blueprint reading and sketching, bench work and jobs that are commonly done on the lathe and drill press. Class: 5 hours. Credit: 5 semester hours.

152—Milling Machines and Grinders, Blueprint Reading and Sketching. Various types of milling machines and grinders with set-ups for various jobs to be performed on each will be studied. Blueprint reading and sketching will be continued. Prerequisite: MS 151. Class: 5 hours. Credit: 5 semester hours.

181 (141-142)—Development of Skills in Use of Hand and Machine Tools. The first in a series of four shop courses. This one is designed to acquaint the student with the hand and machine tools used in the modern machine shop. Class: 1 hour. Laboratory: 14 (7) hours. Credit: 8 (4) semester hours.

182 (143-144)—Continuation of Development of Skill in Use of Hand and Machine Tools. The objective of this course is the development of skills in the use of the various hand and machine tools of the modern machine shop. The various jobs performed on the engine lathe and shaper will be

stressed. Prerequisite: MS 181 or 141-142. Class: 1 hour. Laboratory: 14 (7) hours. Credit: 8 (4) semester hours.

251—Measuring Tools; Bench Work; Lathe and Drill Press. Lathe and bench work and the details of the various operations. The progressive study of blueprint reading and sketching will be continued. Prerequisite: MS 152. Class: 5 hours. Credit: 5 semester hours.

252—Shaper, Planer, Millers, Grinders and Hydraulic Systems. Use of the various hand and machine tools involved in the drilling, turning, planing, milling, shaping and grinding of metals. This course will also provide study in basic metallurgy and a continuation of blueprint reading and sketching. Prerequisite: MS 251. Class: 5 hours. Credit: 5 semester hours.

281 (241-242)—Development of Skills in Use of Lathe Drill and Bench Work. Jobs and processes performed on the milling machine will be stressed in this shop course. The student will also do elementary burning, acetylene welding and brazing. Prerequisite: MS 182 or 143-144. Class: 1 hour. Laboratory: 14 (7) hours. Credit: 8 (4) semester hours.

282 (243-244)—Development of Skills in Use of Grinders, Millers, Planers and Shapers. Machine shop jobs and operation requiring the student to work to close tolerances are performed in this course. Tool and cutter grinding and heat treatment of steel will be emphasized. Prerequisite: MS 281 or 241-242. Class: 1 hour. Laboratory: 14 (7) hours. Credit: 8 (4) semester hours.

REFRIGERATION AND AIR CONDITIONING

Instructors– Ellis Thompson, John W. Crawley, John C. Wilson, John S. Read.

This program covers a two-year course of study leading to a Certificate of Completion and employment as a refrigeration and air conditioning technician in one of the allied trades or occupations dealing with the selling or servicing of refrigeration equipment, parts and supplies.

Program of Study

First Year		Second Year	
RAC 181-182	16	RAC 281-282	16
RAC 151-152	10	RAC 251-252	10
Mth 131-132	6	Mth 231-232	6
BC 131-132	6	JR 221-222	4
Electives (By Approval)	4	Electives (By Approval)	4
	42		40

Refrigeration and Air conditioning (RAC)

151—Basic Laws of Refrigeration. The basic laws and fundamental principles of refrigeration, heat, heat transfer, thermometry, thermodynamic processes, compression cycle, compressor construction and lubrication, refrigerant metering devices, and component parts of the refrigeration cycle. Class: 5 hours. Credit: 5 semester hours.

152—Electric Devices Used. Electrical devices used with refrigeration equipment absorption systems, cycle diagrams, cooling loads, system balance, cycling controls, refrigerants, pressure drop and refrigerant piping, low temperature, dual temperatures, defrosting, multiplexing coils and compressors, capacity control methods. Commercial and industrial refrigeration problems are a part of the course. Prerequisite: RAC 151. Class: 5 hours. Credit: 5 semester hours.

181 (141-142)—Methods of Evacuating, Dehydrating and Charging Refrigerant Circuits. Identification and correct use of tools and materials used in working with refrigerated equipment. Correct methods of evacuating, dehydrating, and charging refrigerant circuits. Disassembly and repairing of compressors, controls, and copper tube work. Safe practices in refrigeration work. Class: 1 hour. Laboratory: 14 (7) hours. Credit: 8 (4) semester hours.

182 (143-144)—Repairing and Servicing Refrigerant, Hermetic Commercial Systems. Repairing and servicing absorption refrigerant systems. Diagnosing and repairing complete hermetic systems; installing, checking, and repairing commercial refrigeration systems. Prerequisite: RAC 181 or 141 and 142. Class: 1 hour. Laboratory: 14 (7) hours. Credit: 8 (4) semester hours.

251—Summer and Winter Air Conditioning. Refrigeration for summer air conditioning, comfort conditions, cooling and heating load estimating, psychrometric properties of air, estimating the conditioned air supply, heat pumps and automobile air conditioning. Prerequisite: RAC 152. Class: 5 hours. Credit: 5 semester hours.

252—Air Distribution Systems. Year-round air conditioning analysis. Air distribution systems, selection of grills, registers, ducts, fans and filters. Automatic control of year-round systems. Water for air conditioning, cooling towers, piping, pumps, and gas-fired absorption air conditioning equipment. Cost estimates and codes. Prerequisite: RAC 251. Class: 5 hours. Credit: 5 semester hours.

281 (241-242)—Installation and Repair of Forced Air Heating Systems. Skills in the correct use of air conditioning tools, materials, and instruments. Automobile air conditioning servicing. Disassembly and assembly of complete air conditioning systems. Prerequisite: RAC 182 or 143 and 144. Class: 1 hour. Laboratory: 14 (7) hours. Credit: 8 (4) semester hours.

282 (243-244)—Installation, Maintenance and Repair. The installation, maintenance and repair of air conditioning, gas heating, and heat pumps. Servicing water-cooled equipment and cooling towers. Installing and checking resistance in air ducts. Prerequisite: RAC 281 or 241 and 242. Class: 1 hour. Laboratory: 14 (7) hours. Credit: 8 (4) semester hours.

WELDING

Instructors–J. C. Shankles, Carey B. Wesley, Ronald I. Marble.

The objective of this two-year course of study is to prepare the student for a career in the fields of industrial and construction welding, either as a skilled welder or in a trade or occupation requiring knowledge of welding and welding equipment and supplies. Skills of common welding practice and most of today's new welding techniques and equipment are taught in Lamar's modern shops while the technical subjects corresponding to the welding fields are studied in the classroom. Upon graduation or completion of the program, the student will be awarded a Certificate of Completion.

Program of Study

First Year		Second Year	
Wld 181-182	16	Wld 281-282	16
Wld 151-152	10	Wld 251-252	10
Mth 131-132	6	Mth 231-232	6
BC 131-132	6	JR 221-222	4
Electives (By Approval)	4	Electives (By Approval)	4
	42		40

Welding (Wld)

131–Welding. Arc welding, acetylene welding and cutting. Laboratory: 6 hours. Credit: 3 semester hours.

132–Welding. Arc welding. Laboratory: 6 hours. Credit: 3 semester hours.

151–Study of Tools, Materials and Processes. Tools and materials will be studied in their relation to various jobs and processes of the welder's trade. Blueprint reading and sketching are also studied. Class: 5 hours. Credit: 5 semester hours.

152–Study of Tools, Materials, and Processes. The study of tools, materials and processes as related to welding is continued. Layout work will be stressed in this course. Prerequisite: Wld 151. Class: 5 hours. Credit: 5 semester hours.

181 (141-142)–Operation of Acetylene and Arc Welding Tools and Equipment. Setting-up and operation of acetylene and arc welding tools and equipment comprise the major part of this course. The student will weld in all positions on several types of materials. Class: 1 hour. Laboratory: 14 (7) hours. Credit: 8 (4) semester hours.

182(143-144)—Butt Plate Welding and Test Qualification. Continuation of practice in welding ferrous metals. The student will qualify for passing Navy and other types of welding tests. Prerequisite: Wld 181 or 141 and 142. Class: 1 hour. Laboratory: 14 (7) hours. Credit: 8 (4) semester hours.

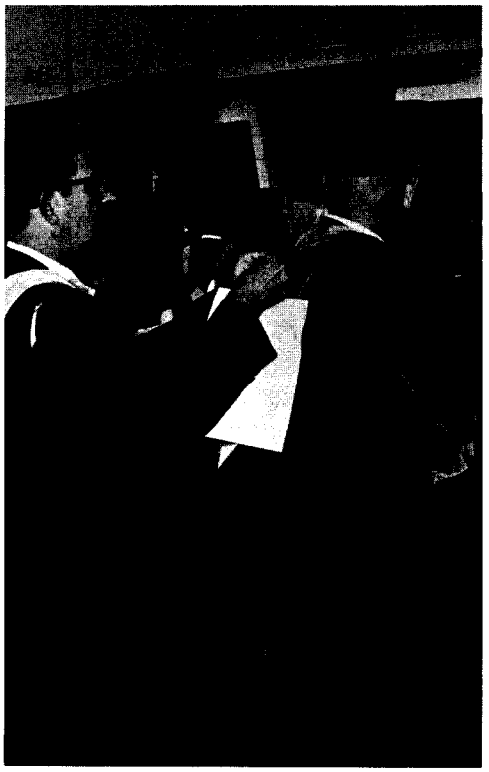
251—T.I.G., M.I.G., Submerged Arc, and Special Welding Applications. The heliarc, micro-wire, submerged arc and innershield processes of welding and their application to various metals will be studied. Prerequisite: Wld 152. Class: 5 hours. Credit: 5 semester hours.

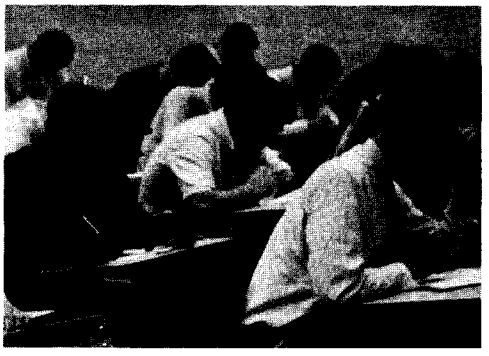
252—Introduction to Metallurgy and Special Welding Applications. Advanced layout work on plate and pipe with further study of the application of the metallurgy of welding. Prerequisite: Wld 251. Class: 5 hours. Credit: 5 semester hours.

281 (241-242)—Pipe Layout and Introduction to Heliarc. Pipe welding will be added to the continued practice on plate. Use of the "round-about" in cutting pipe. The student will weld T's, Y's, reducers, bull plugs, flanges, etc. The heliarc process will be introduced with practice in welding aluminum and other alloys. Prerequisite: Wld 182 or 143 and 144. Class: 1 hour. Laboratory: 14 (7) hours. Credit: 8 (4) semester hours.

282 (243-244)—Extensive Pipe Welding; Continuation of T.I.G., M.I.G., and Submerged Arc. Continuation of practice in welding metals by the heliarc, micro-wire, submerged arc and inner-shield process. Extensive practice in pipe welding will also be provided. Prerequisite: Wld 281 or 241 and 242. Class: 1 hour. Laboratory: 14 (7) hours. Credit: 8 (4) semester hours.

741-742—See Trade Extension section of this catalog.





TECHNICAL DEPARTMENT

R. J. Lawrence, Department Head

Data Processing
Technical Drafting
Industrial Electricity and Electronics
Industrial Instrumentation

DATA PROCESSING

Instructors–Allen G. Melton, Harry L Williams, Vina Yvonne Sloan, William C. Peters, Lynnwood M. Clark.

The objective of this two-year course of study is to prepare the student for a career in the fields of computer programming and operations. Before a student will be admitted to this program of study, he must submit a passing grade on an aptitude test that will measure his ability to perform successfully in this field. Upon completion of the program, the student will be awarded a Certificate of Completion.

Program of Study

First Year		Second Year	
DPC 121	2	DPC 271-253	12
DPC 122-131	5	DPC 272-274	14
DPC 141-142	8	Mth 237-238	6
DPC 161-171	13	JR 221-222	4
Mth 136-137	6		36
BC 131-132	6		
	40		

Data Processing (DPC)

121–Introduction to Data Processing. A survey of data processing from its beginning up to the present. The student will also be introduced to internal data representation, file concepts, record layouts, and an overview of the programming languages he will encounter in later courses. Class: 2 hours. Credit: 2 semester hours.

122–Unit Record Machines. A study of the 026 and 029 keypunch, 082 sorter, 085 collator, and 514 reproducer. The student will learn how to use each of the machines in performing operations using punched cards. Laboratory: 4 hours. Credit: 2 semester hours.

131–System Design. Fundamentals of system design analysis and documentation. Problems in designing, analyzing, changing an existing system, and implementation. Class: 3 hours. Credit: 3 semester hours.

141–Elementary Accounting. Double-entry accounting practices and procedures applied to special journals, accounts, working papers, subsidiary records, and the preparation of financial statements for a sole proprietorship with an introduction to partnerships. Class: 3 hours. Laboratory: 2 hours. Credit: 4 semester hours.

142—Elementary Cost Accounting. Accounting for material, labor, and overhead under job cost, process cost, and standard cost systems. Prerequisite: DPC 141 or consent of the instructor. Class: 3 hours. Laboratory: 2 hours. Credit: 4 semester hours.

161—FORTRAN. A study of the FORTRAN (FORmula TRANslator) programming language. Progressive techniques are developed through problem definition, flow charting, coding, documentation, and execution. Class: 3 hours. Laboratory: 6 hours. Credit: 6 semester hours.

171—COBOL. A study of the COBOL (COmmon Business Oriented Language) programming language. Progressive techniques are developed through problem definition, flow charting, coding, documentation, and program execution. Class: 4 hours. Laboratory: 6 hours. Credit: 7 semester hours.

253—Project. Project assignments governed by the student's need and ability. Prerequisite: DPC 161 and DPC 171. Laboratory: 10 hours. Credit: 5 semester hours.

271—RPG—NEAT/3. A study of the RPG (Report Program Generator) and NEAT/3 programming languages. RPG will be covered the first half of the semester and NEAT/3 will be covered the last half of the semester. Progressive techniques are developed through problem definition, flow charting, coding, documentation, and program execution. Class: 4 hours. Laboratory: 6 hours. Credit: 7 semester hours.

272—Computer Business Applications. Defining problems for business application and programming the solutions using primarily the COBOL language. Prerequisite: DPC 171. Class: 4 hours. Laboratory: 6 hours. Credit: 7 semester hours.

274—Operating Systems. A study of operating systems and their use in third generation computers. Utilities, sorts and merges will also be covered. Prerequisite: consent of the instructor. Class: 4 hours. Laboratory: 6 hours. Credit: 7 semester hours.

TECHNICAL DRAFTING

Instructors–Ralph K. Mock, Myron M. Myrick, Donald Hart, Iris S. Droddy, Hyman K. Taylor, Tom M. Christian.

Engineering draftsmen prepare precise drawings and specifications from sketches, field notes, and other information furnished by an engineer or designer. The majority of draftsmen specialize in some particular field of work such as piping, structural, architectural or machine manufacturing.

This drafting technology is designed to provide basic technical information required for entry into this occupation. As engineering and scientific occupations grow, more draftsmen will be required as supporting personnel.

Upon completion of the two-year program, the student will be awarded a Certificate of Completion.

Program of Study

First Year		Second Year	
Dft 181-182	16	Dft 281-282 or 283	16
Dft 151-152	10	Dft 251-252 or 253	10
Mth 131-135	6	Mth 231-232	6
BC 131-132	6	JR 221-222	4
Electives*	4	Electives*	4
	42		40

*By approval

Drafting (Dft)

111—Freehand Drafting. A course designed to develop illustrative and graphic communication skills, with emphasis on presenting information effectively by using diagrams, drawings, prints, sketches, graphs, and charts drawn freehand and employing commonly available drawing aids such as straight edges, squared and graph paper, and similar aids. Laboratory: 3 hours. Credit: 1 semester hour.

121—Drafting. Principles of multiview drawings combined with lettering and drafting techniques. Class: 2 hours. Credit: 2 semester hours.

151—Instruments and Materials for the Professional Draftsman. Instruments and materials of the professional draftsman. The course will include geometric constructions, orthographic projections, sections, conventions, various methods of pictorial drawing and other technology as required in the profession. Class: 5 hours. Credit: 5 semester hours.

152—A.S.M. Standards, Pipe and Fitting Designs. A study of pipe and fittings, designs, symbols and specifications, sizing process lines and process symbols. Drafting of flow diagrams, vessels, heat exchangers, pumps, instruments, compressors and mechanical equipment. Prerequisite: Dft 151 or 181. Class: 5 hours. Credit: 5 semester hours.

181 (141-142)—Comprehensive Laboratory Course in Basic Drafting Procedures and Skills. This is the first in a series of four courses in the use of drafting instruments, freehand and mechanical lettering, conventional signs and symbols, orthographic projection and pictorial drawing. This is a comprehensive laboratory course in basic drafting procedures and skills and is planned as a preparation for the three succeeding courses which will provide practice in the skills required in specialized types of drafting. Class: 1 hour. Laboratory: 14 (7) hours. Credit: 8 (4) semester hours.

182 (143-144)—Drafting of Piping for Processing Systems, Flow Diagrams, Vessels, Heat Exchange, Compressor and Mechanical Equipment. A study of pipe and fittings, designs, symbols, and specifications, sizing process lines and process symbols. Drafting of flow diagrams, vessels, heat exchangers, pumps, instruments, compressors, and mechanical equipment. Prerequisite: Dft 181 or 141 and 142. Class: 1 hour. Laboratory: 14 (7) hours. Credit: 8 (4) semester hours.

251—A.I.S C. Specifications and Standards. A.I.S.C. specifications and standards, basic strength of materials, structural theory and data. Detailing structure members and connections. Prerequisite: Dft 152. Class: 5 hours. Credit: 5 semester hours.

252—Architectural Drafting Techniques. Architectural drafting techniques, symbols for materials, symbols used in plans, elevations, plumbing and electrical symbols, foundations, floor plans, roof plans, and other technology will be included in this course. Prerequisite: Dft 251. Class: 5 hours. Credit: 5 semester hours.

253—Study of Machine Components. A study of machine components, including cams and fasteners, jigs and fixtures. Emphasis will be placed on design principles and techniques. Prerequisite: Dft 281. Class: 5 hours. Credit: 5 semester hours.

281 (241-242)—Drafting of Plans, Sections, Details and A.I.S.C. Specifications for Industrial Structures. Drafting of plans, sections, and details and A.I.S.C. specifications for industrial structures which will include structural steel, pipe and concrete reinforcing rods. Prerequisite: Dft 182 or 143 and 144. Class: 1 hour. Laboratory: 14 (7) hours. Credit: 8 (4) semester hours.

282 (243-244)—Architectural Drafting. Drafting of plans for construction in wood, metals and masonry. The course will include foundations, floor and roof plans, window and door sections, and other details of construction. Prerequisite: Dft 281 or 241 and 242. Class: 1 hour. Laboratory: 14 (7) hours. Credit: 8 (4) semester hours.

283—Drafting of Machine Components. Drafting machine components, including cams and fasteners, jigs and fixtures. Graphical application of detail and assembly drawings of small machines. Theory and practice includes a study of design characteristics. Prerequisite: Dft 281. Class: 1 hour. Laboratory: 14 hours. Credit: 8 semester hours.

733, 734, 741, 742—Drafting. See Trade Extension section of this catalog.

INDUSTRIAL ELECTRICITY AND ELECTRONICS

Instructors–Robert J. Lawrence, Lenox Sigler, Gearold R. Coppins, T. J. Daigle, Marvin H. Hogan, Jerry L. Wilson, Eugene C. Broussard, Leslie Walley, Horace Epperhart.

The objective of this two-year course of study is to develop an understanding of the underlying theories, technical information, safety factors, and related occupational information to assure sound judgments and proper procedures needed as an electronics technician trainee in related trades or industry.

Program of Study

First Year		Second Year	
IEE 181-182	16	IEE 281-282	16
IEE 151-152	10	IEE 251-252	10
Mth 133-134	6	Mth 233-234	6
BC 131-132	6	JR 221-222	4
Electives (By Approval)	4	Electives (By Approval)	4
	42		40

Industrial Electricity and Electronics (IEE)

121–Electricity. See Apprentice Training section of this catalog.

151–Basic Laws and Fundamental Theories of Electricity. Ohm's law and power, simple series and parallel d-c circuits, combination circuits, application of Kirchoff's laws and d-c meters, conductors insulators and resistors, magnetism and electromagnetic induction. Class: 5 hours. Credit: 5 semester hours.

152–Alternating Voltage and Current Fundamentals. Inductance, inductive reactance, and inductive circuits, capacitance, capacitive reactance, and capacitive circuits, alternating current circuits, series and parallel resonance, fundamental principles and characteristics of electron tubes and transistors. Prerequisite: IEE 151. Class: 5 hours. Credit: 5 semester hours.

162–Electrical Circuit – AC and DC. A study of the basic laws pertaining to series and parallel circuits, reactance, impedance, and polyphase systems. Co-requisite: II 152. Class: 3 hours. Laboratory: 6 hours. Credit: 6 semester hours.

181 (141-142)—The Tools, Materials, and Basic Shop Skills of the Electrical Trade. Lighting and signal wiring, electronic components and symbols, familiarization with hand tools used in electronics, VTVM and milliammeter familiarization, fundamentals d-c circuits and analysis by voltage, current, and resistance measurements. Class: 1 hour. Laboratory: 14 (7) hours. Credit: 8 (4) semester hours.

182 (143-144)—Introduction to Electronics. Familiarization with the oscilloscope and the audio and r-f signal generators, construction, experimentation, and analysis of a-c circuits containing inductance, capacitance, and resistance, a-c series and parallel resonant circuits. Prerequisite: IEE 181 or 141 and 142. Class: 1 hour. Laboratory: 14 (7) hours. Credit: 8 (4) semester hours.

248—Electronics Application. A study of the application of basic electronic principles in devices such as transducers, recorders, analytical instruments, data storage and retrieval apparatus and consideration of the various means for utilizing frequency as analog of some variable. Class: 3 hours. Laboratory: 2 hours. Credit: 4 semester hours.

251—Alternating Current Motors and Alternators. The theory and operation of vacuum tube amplifiers, transistor amplifiers, audio circuits, radio frequency circuits, oscillators and power supplies. Prerequisite: IEE 152. Class: 5 hours. Credit: 5 semester hours.

252—The Theory and Operation of Modulation and Transmitters. Transmitter circuits, antennas and transmission lines, principles of receivers, superheterodyne receivers, receiver circuits, industrial electronics. Prerequisite: IEE 251. Class: 5 hours. Credit: 5 semester hours.

267—Elementary Electronics. A study of the elementary electronic principles, components and devices. Class: 3 hours. Laboratory: 6 hours. Credit: 6 semester hours.

281 (241-242)—Basic Laboratory Experiments. Experimentation and analysis of power supplies, triode vacuum tube characteristics, the triode as d-c and a-c amplifier, audio voltage and power amplifiers, transistor familiarization and basic transistor circuit arrangements. Prerequisite: IEE 182 or 143 and 144. Class: 1 hour. Laboratory: 14 (7) hours. Credit: 8 (4) semester hours.

282 (243-244)—Industrial Laboratory Experiments. Experimentation and analysis of a-f and r-f oscillators and specialized circuitry employing vacuum tubes and solid state devices, specialized industrial electronics circuitry using gaseous rectifiers, thyratrons, syncrogenerators and motors, and electronic control systems. Prerequisite: IEE 281 or 241 and 242. Class: 1 hour. Laboratory: 14 (7) hours. Credit: 8 (4) semester hours.

Industrial Electronics (IE) 141, 142, 731, 741, 742, 743—See Trade Extension section of this catalog.

INDUSTRIAL INSTRUMENTATION

The objective of this two-year course in instrumentation technology is to develop a technician capable of problem solving in basic design, installation, and maintenance of complex instruments and automatic control systems.

Students completing this course should qualify for employment as operations, maintenance, or research technicians. Excellent opportunities may also be available as instrument shop foremen or supervisors.

Program of Study

First Year		Second Year	
II 151-152	10	II 261-262	12
II 161-IEE 162	12	IEE 267-248	10
II 121-Dft 111	3	II 251-242	9
Mth 133-134	6	II 211-234	4
BC 131-132	6	JR 221-222	4
	37		39

Industrial Instrumentation (II)

121—Instrumentation Shop Practice. A laboratory course designed to provide practical information on the application of basic theories to industrial instruments; instrument construction, tests, and accepted test procedures; and safety precautions which must be observed when working on instruments. Co-requisite: II 161. Laboratory: 4 hours. Credit: 2 semester hours.

151—Instrumentation Physics I. A study of the basic principles of physics, emphasizing mechanics and heat, with particular emphasis on those principles embodied in the design of mechanical indicating and sensing devices. Class: 3 hours. Laboratory: 4 hours. Credit: 5 semester hours.

152—Instrumentation Physics II. A study of electrical principles, sound, light, magnetic theory, and elementary electronics. Co-requisite: IEE 162. Class: 3 hours. Laboratory: 4 hours. Credit: 5 semester hours.

161—Mechanical Measuring Principles. A study of the more common sensing devices and components employed for the measurement of temperature, pressure, flow and related phenomena. Co-requisite: II 151. Class: 3 hours. Laboratory: 6 hours. Credit: 6 semester hours.

211—Calibration and Standardization. A laboratory course designed to illustrate the philosophy of measurement and control, emphasizing the meaning of validity, sensitivity of control devices, units of measurement, and levels of accuracy and traceability. Laboratory: 2 hours. Credit: 1 semester hour.

234—Instrumentation Project. A laboratory project to promote individual initiative and projective responsibility, involving all the major concepts gained in previous and current courses. Class: 1 hour. Laboratory: 4 hours. Credit: 3 semester hours.

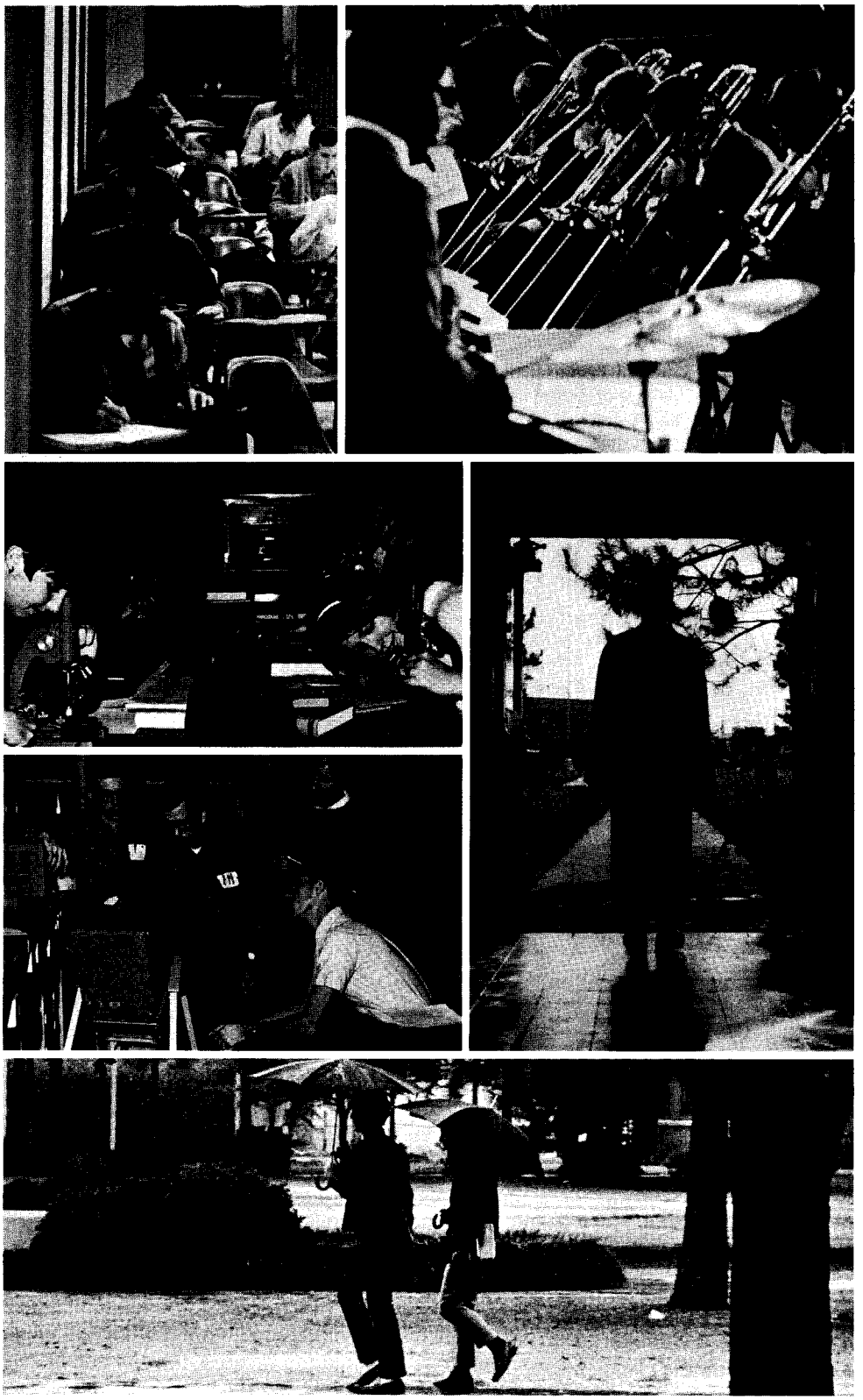
242—Computer Principles and Systems. A course to familiarize the student with both analog and digital computers for measurement, comparison logging, and control. Class: 3 hours. Laboratory: 2 hours. Credit: 4 semester hours.

251—Control Principles and Telemetry. The effects of resistance, capacitance, and transportation lag on a control system are examined; pneumatic, hydraulic, and electrical controllers are studied; and methods for transmitting signals and creating responses at a distance are considered. Class: 3 hours. Laboratory: 4 hours. Credit: 5 semester hours.

261—Electrical Measuring Principles. A study of the basic types of transducers employing electrical and electronic energy; photoelectric, potentiometric, and position-responsive devices are considered. Class: 3 hours. Laboratory: 6 hours. Credit: 6 semester hours.

262—Control System Analysis: A study of the response of systems to instrumental control based upon consideration of the system components; negative and positive feedback along with the implications of closed loop control are covered. Class: 4 hours. Laboratory: 4 hours. Credit: 6 semester hours.

741, 742, 743—See Trade Extension section of this catalog.



HEALTH SERVICES DEPARTMENT

Dolores Jones, Director of Vocational Nursing

Vocational Nursing
Nurse Assistant

VOCATIONAL NURSING

Instructors–Dolores Jones, Norma M. Aycock, Bernice Sturrock, Edna Mary Terrell, Ann Keen, Faye N. Stone, Cornie Fletcher, Virginia Rudloff, Nina Adkins, Peggy Benton.

The objective of this program of study is to prepare the student to become an efficient bedside nurse in the hospital and the home. Upon successful completion of the course, the graduate is eligible to take the examination given by the State Board of Vocational Nurse Examiners to become a Licensed Vocational Nurse (L.V.N.).

The vocational nursing program at Lamar Tech comprises four months of classroom study and laboratory study and eight months in the patient situation in the hospitals that are affiliated with the vocational nursing program. The student is allowed a stipend for maintenance during the eight months of study in the hospitals.

This is a full-time educational program and will require the student to spend approximately forty hours per week in the classroom or in the hospital for the twelve months training program.

Program of Study

First Semester

VN 121	2
VN 122	2
VN 133	3
VN 144	4
VN 175	7
	18

Second Semester

VN 136	3
VN 137	3
VN 186	8
VN 187	8
	22

Third Semester

VN 138	3
VN 139	3
VN 188	8
VN 189	8
	22

Vocational Nursing (VN)

121–Ethics. Personal and vocational adjustments, community health. Class: 2 hours. Credit: 2 semester hours.

122–Nutrition and Diet Therapy. Nutrition in health and disease. Class: 2 hours. Credit: 2 semester hours.

133–Pharmacology. Administration of medicines, common emergency needs. Class: 3 hours. Credit: 3 semester hours.

136—Medical Nursing. General care of medical patients. Class: 3 hours. Credit: 3 semester hours.

137—Surgical Nursing. General care of surgical patients. Class: 3 hours. Credit: 3 semester hours.

138—Obstetrical Nursing. General care of mothers and newborn infants. Class: 3 hours. Credit: 3 semester hours.

139—Pediatric Nursing. General care of sick children. Class: 3 hours. Credit: 3 semester hours.

144—Anatomy and Physiology. Body structure and functions. The life span, family life and introduction to conditions of illness. Class: 4 hours. Credit: 4 semester hours.

175—Nursing Arts. Vocational nursing skills for home or hospital. Class: 2 hours. Laboratory: 10 hours. Credit: 7 semester hours.

186—Clinical Laboratory. General care of medical patients. Hospital practice 20 hours. Class: 3 hours. Laboratory: 10 hours. Credit: 8 semester hours.

187—Clinical Laboratory. General care of surgical patients. Hospital practice 20 hours. Class: 3 hours. Laboratory: 10 hours. Credit: 8 semester hours.

188—Clinical Laboratory. General care of mothers and newborn infants. Hospital practice 20 hours. Class: 3 hours. Laboratory: 10 hours. Credit: 8 semester hours.

189—Clinical Laboratory. General care of sick children. Hospital practice 20 hours. Class: 3 hours. Laboratory: 10 hours. Credit: 8 semester hours.

Nurse Assistant (NPE)

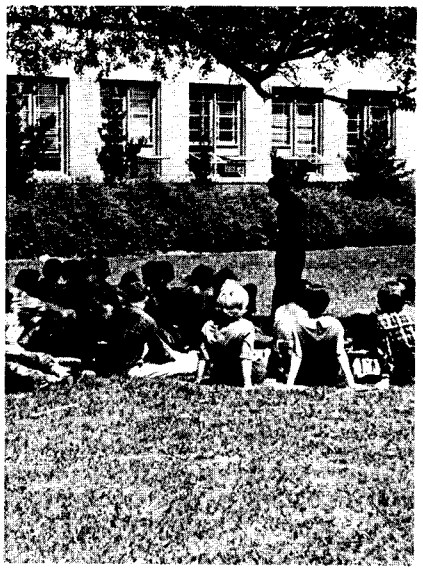
The objective of this program is to prepare the student for the first level of bedside nursing in hospitals and nursing homes. The program of study includes simple nursing procedures as performed by the nurse assistant.

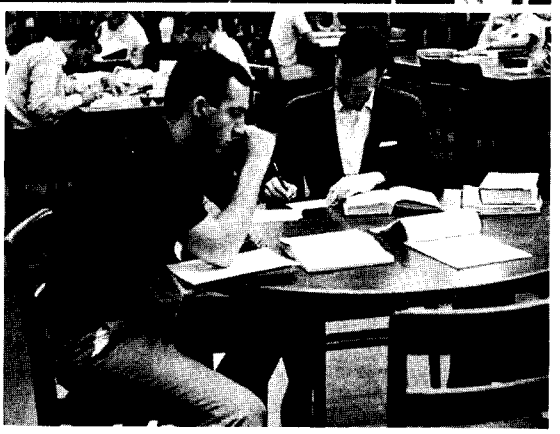
Applicants interested in this course should be between the ages of 18 and 60 and should obtain a health card. Educational requirements consist of completion of the tenth grade in high school or successful passing of the General Educational Development Test.

Upon completion of the course the graduate is eligible for the first level of employment in a hospital or nursing home.

231—Nursing Procedures. Procedures for nurse assistants. Class: 1 hour. Laboratory: 4 hours. Credit: 3 semester hours.

233—Nursing Procedures. Procedures for hospital orderlies. Class: 1 hour. Laboratory: 4 hours. Credit: 3 semester hours.



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RELATED ARTS DEPARTMENT

Walter W. Turman, Acting Department Head

Mid-management

Police Science

Basic Communications, Mathematics, and Job Relations

MID-MANAGEMENT

Coordinator–Ray Ayres. *Instructors*–David Rogers Nelson III, Sherman Guyon.

Cooperative mid-management education alternates periods of academic study with periods of off-campus employment, which enables the student to gain more meaningful, integrated experiences. The program enriches the student's total education by blending theory and work experience, which makes his study more relevant to him. While working, career goals may be formulated and modified.

The objectives of the mid-management program are (1) to develop fundamental skills, knowledge, attitudes and experiences, and (2) to prepare the student for decision-making positions as foremen, supervisors, or junior executives in business and industry.

A cooperative plan with members of the industrial and business community allows the student to attend classes in related courses and, at the same time, to obtain valuable work experience while earning a salary. The place of employment becomes a training station, and it serves as a laboratory for on-the-job development of skills. Industrial and business leaders serve as sponsors; they teach management techniques, and they give periodic grades for student performance.

Although mid-management is a terminal program, variations from the basic pattern are possible, and the student may arrange to continue his studies, including further study toward a bachelor's degree. When the two-year program is completed, the student is awarded a Certificate of Completion.

Program of Study

First Year		Second Year	
MM 131-132	6	MM 231-232	6
MM 141-142	8	MM 241-242	8
MM 111-112	2	MM 211-212	2
Eng 131-132 (or BC 131-132)	6	MA 231 (or Acc 231)	3
Mth 134-1341 (or Mth 136-137)	6	JR 221-222 (or IS 838-839)	4
Electives*	6	IS 731 (or BA 331)	3
		Electives*	6
	34		32

*Electives must relate to the student's career objective and are subject to approval of the mid-management faculty.

Mid-Management (MM)

111, 112, 211, 212—Mid-Management Seminar. A one-hour seminar is held in conjunction with the internship. Class: 1 hour. Credit: 1 semester hour.

131—Introduction to Management. A study of the major characteristics of human behavior, with special emphasis on abilities, motivation, adjustment, mental life, and social behavior. Class: 3 hours. Credit: 3 semester hours.

132—Principles of Management. A general theory of management presented within the framework of the traditional managerial functions. A basic course for the study of more advanced and specialized aspects of business administration. The course includes a one-hour seminar. Prerequisite: MM 131. Class: 3 hours. Credit: 3 semester hours.

231—Personnel Management. A behavioral approach to the management of human resources in business enterprises. The fundamentals of human relations and organizational behavior will be used to structure an understanding of the managerial problems of recruitment, selection, training, promotion, and termination of personnel. Supervision of the work force will be considered in relation to theories of motivation, communication, and leadership. The course includes a one-hour seminar. Prerequisite: MM 132. Class: 3 hours. Credit: 3 semester hours.

232—Administrative Policy. Fundamental considerations and procedures followed in business policy formulation and administration. Managerial structure; company objectives; coordination of departmental policies; organization of personnel; reappraisals, The course includes a one-hour seminar. Prerequisites: MM 231. Class: 3 hours. Credit: 3 semester hours.

Managerial Accounting (MA)

231—Principles of Accounting. Procedures and techniques used in recording business transactions and preparing financial statements. Journalization; posting; statement preparation; controlling accounts and subsidiary ledgers; adjusting and closing entries; voucher system. Class: 3 hours. Credit: 3 semester hours.

232—Principles of Accounting. Continuation of MA 231 with special attention given the financial statements; cash and receivables; fixed assets; pre-paid expenses; liabilities; capital stock and related owners' equity; manufacturing accounting; installment sales; branch accounts. Class: 3 hours. Credit: 3 semester hours.

POLICE SCIENCE

Instructors–Alvin Futch, Michael E. Hollomon.

It is the purpose of this program to provide a two-year college level course of study to qualify young men and women for employment in the field of law enforcement.

The curriculum is designed to cover all phases of law enforcement with supporting courses in oral and written communication skills. During the fall semester, second-year Police Science students will work 15 hours per week under the supervision of a law enforcement agency.

Program of Study

First Year		Second Year	
PS 131-134	6	PS 231-237	6
PS 132-135	6	PS 232-238	6
BC 131-132	6	PS 233-236	7
PS 130-133	6	PS 235-239	7
Dft 111 (second semester)	1		
	25		26

Police Science (PS)

130–Accident and Emergency Care. Skills to be used in the treatment of injuries in an emergency situation; including emergency childbirth and other situations frequently encountered by police. Award of American Red Cross Standard Certificate upon completion. Class: 2 hours. Laboratory: 2 hours. Credit: 3 semester hours.

131–Police Administration. The principles of organization, administration and functioning of police departments to include personnel policies, operation of division policy, and command of the department as a whole. Class: 3 hours. Credit: 3 semester hours.

132–Introduction to Law Enforcement. The philosophy and history of law enforcement. Included is a survey of police problems and crimes, organization and jurisdiction of local, state, and federal enforcement agencies and a survey of professional qualifications and opportunities. Class: 3 hours. Credit: 3 semester hours.

133–Police Community Relations. The role of the individual officer in achieving and maintaining public support, human relations, public information; relationships with violators and complainants. Class: 3 hours. Credit: 3 semester hours.

134—Juvenile Procedures. Juvenile criminal behavior will be studied to provide an insight into causal factors, precipitating forces, and opportunities for the commission of criminal or delinquent acts. The techniques, responsibilities, and capabilities of police organization in the area of delinquency prevention will be developed. Class: 2 hours. Laboratory: 2 hours. Credit: 3 semester hours.

135—Traffic Law. State vehicle requirements and related laws; routine traffic duties of an officer; traffic accident investigation techniques and reports; special traffic problems; traffic supervision; the traffic court; case preparation from incident to final disposition through court. Class: 3 hours. Credit: 3 semester hours.

231—Criminal Law. This course covers a brief history and philosophy of modern law which includes the structures, definition and application of commonly used penal statutes and leading case laws. It also includes a review of the elements of crimes, laws of arrest, search and seizure. Class: 3 hours. Credit: 3 semester hours.

232—Criminal Investigation. Theories and concepts of the investigator's role in modern criminal investigation, developing sources of information, the collection and preservation of evidence, and preparation of reports are developed. Class: 2 hours. Laboratory: 2 hours. Credit: 3 semester hours.

233—Criminology. Crime as a form of deviant behavior; nature and extent of crime; past and present theories; evaluation of prevention, control, and treatment programs. Class: 3 hours. Credit: 3 semester hours.

237—Criminal Evidence and Court Procedure. Examination of the rules governing the admissibility of evidence as they affect the law enforcement officer in the administration of criminal justice, including study of the rules of evidence, kinds and degrees of evidence and their application in the legal processes from arrest to final disposition of case. Class: 3 hours. Credit: 3 semester hours.

238—Introduction to Criminalistics. Physical evidence, collection, identification preservation, and transportation; crime laboratory capability and limitations; examination of physical evidence to the extent supported by existing or available facilities. Class: 3 hours. Credit: 3 semester hours.

239—Defensive Tactics and Firearms. The legal aspects, safety precautions and restrictions covering the use of firearms; firing of pistol, protection against persons armed with deadly and dangerous weapons; demonstration and drill in unarmed control. Class: 2 hours. Laboratory: 2 hours. Credit: 3 semester hours.

245-246—Law Enforcement Internship. A work experience to increase student understanding of law enforcement administration and operation; the internship is initiated by the school in an agency, and both college and agency supervise and direct the student's program. Laboratory: 15 hours. Credit: 4 semester hours per semester.

BASIC COMMUNICATION, MATHEMATICS, AND JOB RELATIONS

Instructors–William Hartford, Joe I. Juarez, Jerry B. Moseley, Beryl R. McKinnerney, Michael D. Wilson, Walter W. Turman, Edmon C. Wright.

The objectives of these courses are (1) to develop student competence in the areas of reading, applied grammar, applied mathematics, and public speaking that will insure his or her success in getting and holding a job; (2) to correct early learning experiences through individual instruction.

Basic Communications (BC)

131–Basic Communications. The objective of this course is to prepare the student to speak and write correctly. Subject matter will be taken from the work being done by the student in the shops and will include the terminology and nomenclature of his trade, letter writing and oral and written reports. Class: 3 hours. Credit: 3 semester hours.

132–Basic Communications. The preparation of specifications, inventories, orders for supplies, tools and equipment, and the use of the telephone and telegraph in connection with the trade of the student will be stressed. Class: 3 hours. Credit: 3 semester hours.

Mathematics (Mth)

131–Mathematics. Application of mathematical processes to particular trade problems. Direct and inverse ratios, proportions and means. Prerequisite: 2 units of high school mathematics or equivalent. Class: 3 hours. Credit: 3 semester hours.

132–Mathematics. Shop and trade applications of mensuration formulae. Derivation and use of frequently used constants. Prerequisite: Mth 131. Class: 3 hours. Credit: 3 semester hours.

133–Mathematics. Slide-rule and powers of ten; introduction to algebra; addition, subtraction, multiplication, and division of monomials and polynomials; solution of simple and simultaneous linear equations; transposing electrical and electronic formulae. Class: 3 hours. Credit: 3 semester hours.

134–Mathematics. Generation and measurement of angles; trigonometric functions of acute angles; use of slide-rule and trig tables for finding functions; solution of right triangles; periodic functions; rectangular and polar vectors, "J" factor, vector algebra. Prerequisite: Mth 133. Class: 3 hours. Credit: 3 semester hours.

135—Mathematics. Use of Smoley's Tables by the draftsman. Prerequisite: Mth 131. Class: 3 hours. Credit: 3 semester hours.

136-137—Data Processing Mathematics. Introduction to business mathematics, algebra, number systems, probability, and matrix algebra, for data processing students. Prerequisite: Mth 136 required for enrollment in Mth 137. Class: 3 hours. Credit: 3 semester hours per semester.

147—Data Processing Mathematics. Introduction to business mathematics, algebra, and number systems, with FORTRAN applications for data processing students. Prerequisite: Mth 136. Class: 4 hours. Credit: 4 semester hours.

231—Mathematics. Volume of cylinders, cones and rings. The lateral surface and height of the same objects are calculated. Miscellaneous problems for each trade. Practical algebra is also taught in this course. Prerequisite: Mth 132. Class: 3 hours. Credit: 3 semester hours.

232—Mathematics. The essentials of trigonometry, strength of materials, work and power problems and speed ratios of pulley and gears are taught in this course. Prerequisite: Mth 231. Class: 3 hours. Credit: 3 semester hours.

233—Mathematics. Practical application of mathematics and slide-rule to the solution of direct and alternating current circuits, simple series, and parallel, and to alternating current resonant circuits. Prerequisite: Mth 134. Class: 3 hours. Credit: 3 semester hours.

234—Mathematics. Common and natural systems of logarithms; solution of logarithmic and exponential equations; practical application of logarithms to RC and RL circuits; to the db gain and loss of amplifiers, and to antennas and transmission lines. Prerequisite: Mth 233. Class: 3 hours. Credit: 3 semester hours.

235—Mathematics. Use of Smoley's Tables by the draftsman. Prerequisite: Mth 135. Class: 3 hours. Credit: 3 semester hours.

236—Data Processing Mathematics. Use of miscellaneous tables and mathematical formulas commonly used in the drafting room. Prerequisite: Mth 235. Class: 3 hours. Credit: 3 semester hours.

237—Data Processing Mathematics. Extension of matrix algebra and introduction to calculus for data processing students. Prerequisite: Mth 137. Class: 3 hours. Credit: 3 semester hours.

238—Mathematics. Extension of matrix algebra and introduction to calculus for data processing students. Prerequisite: Mth 237. Class: 3 hours. Credit: 3 semester hours.

247—Data Processing Mathematics. Introduction to probability, statistics, interest and annuities with FORTRAN application. Prerequisite: Mth 136. Class: 4 hours. Credit: 4 semester hours.

248—Data Processing Mathematics. Introduction to calculus with FORTRAN applications. Prerequisite: Mth 136. Class: 4 hours. Credit: 4 semester hours.

Job Relations (JR)

221—Job Relations. Planned to supplement the technical education of the student with a practical understanding of the personal problems encountered in his association with employers and fellow employees. Class: 2 hours. Credit: 2 semester hours.

222—Job Relations. A factual presentation of trade unionism and state and federal legislation as they affect the man on the job. Class: 2 hours. Credit: 2 semester hours.

ADULT EDUCATION DEPARTMENT

Norman E. Lowrey and James D. Spencer, Coordinators

Apprentice Training

Distributive Education

Industrial Supervision

Trade Extension

Short Courses and Conferences

APPRENTICE TRAINING

Related training courses for apprentices are offered to provide the apprentice, in the various trades, with an opportunity to complete a minimum of 144 clock hours of related study per year as required by the apprenticeship agreement. The student will study related mathematics, science, blueprint reading, drafting and estimating that is a part of his trade. A study will also be made of the tools, materials, various processes and constructions, which are a part of the training that is supplementary fo his on-the-job training. A sufficient number of courses will be offered to provide the apprentice with the opportunity to attend classes 144 hours per year for the full term of his apprenticeship.

Courses offered in this department are listed below:

Bricklaying 141, 142, 241, 242, 341, 342.

Carpentry 141, 142, 241, 242, 341, 342, 441, 442.

Electricity 121, 131, 132, 133, 134, 231, 232, 233, 234, 331, 332, 333, 334, 431, 432, 433, 434.

Ironworking 141, 142, 241, 242, 341, 342.

Millwright 141, 142, 241, 242, 341.

Plumbing 131, 132, 133, 134, 231, 232, 233, 234, 331, 332, 333, 334, 431, 432, 433, 434, 531, 532.

Bricklaying (Bri)

141—Bricklaying. History, description, types, special units, color and texture of the various types of brick, stone and tile used in the trade of bricklaying. Properties, description, uses, workability, bond, durability and mixtures for mortar. Class: 4 hours. Credit: 4 semester hours.

142—Bricklaying. Tools and equipment, their safe use, care and operation. Accessories used in bricklaying. Study of welding equipment. Class: 4 hours. Credit: 4 semester hours.

241—Bricklaying. Trade mathematics, plan and blueprint reading and trade sketching. Class: 4 hours. Credit: 4 semester hours.

242—Bricklaying. Construction details, demonstration and practice in spreading mortar, laying brick to line, layout and erection of walls and corners using various construction methods, brick piers, chimneys with single and double flues, setting sills and copings. Class: 4 hours. Credit: 4 semester hours.

341—Bricklaying. Use, care and operation of builders level and transit, and welding equipment. Continuation of blueprint reading, specifications, construction details. Class: 4 hours. Credit: 4 semester hours.

342—Bricklaying. Estimating for the bricklaying trade, continuation of practice described in Bri 242. Class: 4 hours. Credit: 4 semester hours.

Carpentry (Ca)

141—Carpentry. An orientation to the carpentry trade. Ethics and history of the trade. Class: 4 hours. Credit: 4 semester hours.

142—Carpentry. Basic tools, their care and use. Class: 4 hours. Credit: 4 semester hours.

241—Carpentry. Types and selection of materials used by carpenters. Class: 4 hours. Credit: 4 semester hours.

242—Carpentry. Reinforced concrete slabs—and foundation layouts. Builders' mathematics involved in foundation work. Class: 4 hours. Credit: 4 semester hours.

341—Carpentry. Roof framing and fabrication. Various problems in roof work are solved. Class: 4 hours. Credit: 4 semester hours.

342—Carpentry. Interior finish and trim including floors, cabinets and built-ins. Class: 4 hours. Credit: 4 semester hours.

441—Carpentry. Blueprint reading and sketching. Specifications, contracts and local building codes are covered. Class: 4 hours. Credit: 4 semester hours.

442—Carpentry. Estimating job costs and quantities. Taxes, insurance, working problems and safety are discussed. Class: 4 hours. Credit: 4 semester hours.

711, 721, 731, 741, 751—Carpentry Workshop. See Trade Extension section of this catalog.

Electricity (Ele)

121—Electricity. Electrical terminology, electricity and magnetism, series and parallel circuits, electrical power measurement (A-C and D-C), principles of the generator, motor and induction. Class: 2 hours. Credit: 2 semester hours.

131-132—Electricity. Introduction to apprenticeship. The basic laws and theories of electricity, electrical units of measurements, Ohm's law and simple circuits are studied. Class: 3 hours. Credit: 3 semester hours per semester.

133-134—Electricity. Batteries and electrolytic action, magnets and magnetism, and current induction. The tools and materials of the trade are studied. Class: 3 hours. Credit: 3 semester hours per semester.

231-232—Electricity. Generators, motors and lighting circuits. Class: 3 hours. Credit: 3 semester hours per semester.

233-234—Electricity. Measuring instruments and theories of magnetic and electrical circuits. Vectors and phase relationships in AC circuits are studied. Class: 3 hours. Credit: 3 semester hours per semester.

331-332—Electricity. Characteristics of AC circuits, inductance, reactance, capacitance and power factor. Class: 3 hours. Credit: 3 semester hours per semester.

333-334—Electricity. Types, service and code requirements of transformers. Basic electronics and AC motor controls. Class: 3 hours. Credit: 3 semester hours per semester.

431-432—Electricity. Electrical blueprint reading and sketching. Class: 3 hours. Credit: 3 semester hours per semester.

433-434—Electricity. City, state and national electrical codes and laws. Class: 3 hours. Credit: 3 semester hours per semester.

Ironworking (Irw)

141—Ironworking. Introduction to apprenticeship. Basic tools and nomenclature, trade terminology. Safety practices. Class: 4 hours. Credit: 4 semester hours.

142—Ironworking. The proper care and use of rigging equipment. Hoist signaling. Class: 4 hours. Credit: 4 semester hours.

241—Ironworking. Power hoisting equipment. Class: 4 hours. Credit: 4 semester hours.

242—Ironworking. Blueprint reading, trade mathematics and basic sketching. Class: 4 hours. Credit: 4 semester hours.

341—Ironworking. Structural steel materials. Structural steel shapes. Class: 4 hours. Credit: 4 semester hours.

342—Ironworking. Field and shop fabrication practices. Class: 4 hours. Credit: 4 semester hours.

Millwright (Mil)

141—Millwright. Terminology of the millwright's trade. Hand tools and their proper care. Class: 4 hours. Credit: 4 semester hours.

142—Millwright. Use of precision tools, Micrometers, precision levels and dial indicators. Class: 4 hours. Credit: 4 semester hours.

241—Millwright. Machine trade blueprints reading and trade mathematics. Class: 4 hours. Credit: 4 semester hours.

242—Millwright. Setting and alignment of pumps, motors and conveyor systems. Special shaft work will be studied. Class: 4 hours. Credit: 4 semester hours.

341—Millwright. Shop sketching, advanced machine trade blueprint reading and trade mathematics. Class: 4 hours. Credit: 4 semester hours.

Plumbing (Plu)

131-132—Plumbing. History, ethics, and laws pertaining to the plumbing trade. Class: 3 hours. Credit: 3 semester hours per semester.

133-134—Plumbing. A study of the tools and materials used in plumbing. Class: 3 hours. Credit: 3 semester hours per semester.

231-232—Plumbing. Sketching and estimating for plumbing systems. Class: 3 hours. Credit: 3 semester hours per semester.

233-234—Plumbing. Blueprint study and "take-off" problems. Class: 3 hours. Credit: 3 semester hours per semester.

331-332—Plumbing. Mathematics of the plumbing trade. Class: 3 hours. Credit: 3 semester hours per semester.

333-334—Plumbing. Problems pertaining to lead and soldering as found in the plumbing trade. Class: 3 hours. Credit: 3 semester hours per semester.

431-432—Plumbing. Installation of cast iron, soil and vent lines. Class: 3 hours. Credit: 3 semester hours per semester.

433-434—Plumbing. Problems in designing plumbing systems. Class: 3 hours. Credit: 3 semester hours per semester.

531-532—Plumbing. A study of city and state plumbing codes. Special emphasis is placed on revisions and changes. This course is usually offered those advanced apprentices who contemplate taking the State Examination for License. Class: 3 hours. Credit: 3 semester hours per semester.

DISTRIBUTIVE EDUCATION

This is a program of courses providing specialized training in selling or transferring goods and service occupations. The courses are for employed people desiring to supplement their regular occupational training and experience.

Distributive Education (DEd)

121—Distributive Education. Techniques of professional selling. Class: 2 hours. Credit: 2 semester hours.

122—Distributive Education. Effective letter writing. Class: 2 hours. Credit: 2 semester hours.

123—Distributive Education. Public relations in business. Class: 2 hours. Credit: 2 semester hours.

124—Distributive Education. Estimating building costs in new home construction. Class: 2 hours. Credit: 2 semester hours.

125—Distributive Education. Business record keeping for small business. Class: 2 hours. Credit: 2 semester hours.

126—Distributive Education. Hotel and motel management. Class: 2 hours. Credit: 2 semester hours.

127—Distributive Education. Human relations in business. Class: 2 hours. Credit: 2 semester hours.

128—Distributive Education. Charm and poise for businesswomen. Class: 2 hours. Credit: 2 semester hours.

129—Distributive Education. Techniques of advertising. Class: 2 hours. Credit: 2 semester hours.

131—Distributive Education. Hotel and motel operation and management. Class: 3 hours. Credit: 3 semester hours.

132—Distributive Education. Law office procedure for secretaries. Structure of the various courts, pleadings, appellate work, and various criminal and civil practices procedures are presented. A general view of commercial law practices. Class: 3 hours. Credit: 3 semester hours.

133—Distributive Education. Basic speaking principles for retail and wholesale management and future management personnel. Class: 3 hours. Credit: 3 semester hours.

135—Distributive Education. A preparatory course in techniques of professional selling. Class: 3 hours. Credit: 3 semester hours.

221—Distributive Education. Commercial law. Class: 2 hours. Credit: 2 semester hours.

222—Distributive Education. Obligations and rights under legal agreement. Class: 2 hours. Credit: 2 semester hours.

223—Distributive Education. Business mathematics. Percentages, discounts, interest computation and all the basic mathematics required in retail store operation. Class: 2 hours. Credit: 2 semester hours.

225—Distributive Education. Interior decoration for salespersons. Class: 2 hours. Credit: 2 semester hours.

226—Distributive Education. A problem course in interior decoration for salespeople. Prerequisite: DEd 255. Class: 2 hours. Credit: 2 semester hours.

227—Distributive Education. Federal tax problems in business. Class: 2 hours. Credit: 2 semester hours.

228—Distributive Education. Credit and collection procedures in a retail establishment. Class: 2 hours. Credit: 2 semester hours.

231—Distributive Education. Interior design rendering. Layout and drawing techniques used in presenting scale drawings of proposed interior layouts are taught for salespeople. Class: 3 hours. Credit: 3 semester hours.

234—Distributive Education. Hotel-motel management, accounting and control. Class: 3 hours. Credit: 3 semester hours.

235—Distributive Education. Hotel-motel management, from office operation to housekeeping. Class: 3 hours. Credit: 3 semester hours.

326—Distributive Education. Personnel management. Class: 2 hours. Credit: 2 semester hours.

327—Distributive Education. Basic principles of investments. Class: 2 hours. Credit: 2 semester hours.

328—Distributive Education. An advanced course in charm and poise for businesswomen. Class: 2 hours. Credit: 2 semester hours.

329—Distributive Education. Building material merchandising. Class: 2 hours. Credit: 2 semester hours.

421—Distributive Education. Consumer finance management. Class: 2 hours. Credit: 2 semester hours.

423—Distributive Education. The economic growth and recent trends in business finance. Class: 2 hours. Credit: 2 semester hours.

424—Distributive Education. Sales management. Class: 2 hours. Credit: 2 semester hours.

426—Distributive Education. Purchasing and merchandising in retail management. Class: 2 hours. Credit: 2 semester hours.

427—Distributive Education. Principles of retailing. Class: 2 hours. Credit: 2 semester hours.

428—Distributive Education. Financial control and operations analysis in retail management. Class: 2 hours. Credit: 2 semester hours.

429—Distributive Education. Advertising, public relations and customer service in retail management. Class: 2 hours. Credit: 2 semester hours.

434—Distributive Education. Procedures for the buyer or purchasing agent. Class: 3 hours. Credit: 3 semester hours.

437—Distributive Education. State and city sales tax. Problems in business directly related to the tax problem. Class: 3 hours. Credit: 3 semester hours.

521—Distributive Education. Photo equipment sales and service designed to aid or up-grade sales personnel dealing with photo equipment and supplies. Class: 2 hours. Credit: 2 semester hours.

522—Distributive Education. Clarifying the computer. Looking at the world of data processing through the eyes of a general businessman. Class: 2 hours. Credit: 2 semester hours.

Insurance (Ins)

The following courses are set up according to the recommendations of the societies indicated and lead to the certificates and charters listed:

Insurance Institute Certificate (Insurance Institute of America): Ins 131, 132, 133, 1322

Chartered Property Casualty Underwriter (American Institute of Property and Liability Underwriters, Inc.): Ins 331, 332, 333, 334, 335, 336, 337, 338, 339, 3311

Chartered Life Underwriter (American College of Life Underwriters): Ins 421, 422, 423, 424, 425, 426, 427, 428

131—Insurance. An introductory study of the general principle of insurance. (I.I.A.21). Class: 3 hours. Credit: 3 semester hours.

132—Insurance. Accident and sickness insurance. (I.I.A.22). Class: 3 hours. Credit: 3 semester hours.

133—Insurance. Principles of casualty insurance and surety bonding. (I.I.A. 23). Class: 3 hours. Credit: 3 semester hours.

134—Insurance. General agency management, including insurance office procedures. Class: 3 hours. Credit: 3 semester hours.

135—Insurance. Accident and sickness insurance. Class: 3 hours. Credit: 3 semester hours.

1322—Insurance. Principles of fire, marine, and allied line insurance. An I.I.A. study course. Class: 3 hours. Credit: 3 semester hours.

231—Insurance. Health and hospitalization insurance. Class: 3 hours. Credit: 3 semester hours.

331—Insurance. Insurance principles and practices including a comprehensive analysis of casualty and surety contracts. (C.P.C.U. I). Class: 3 hours. Credit: 3 semester hours.

332—Insurance. Insurance principles and practices including a comprehensive analysis of property, marine and life contracts. (C.P.C.U. I). Prerequisite: Ins 331. Class: 3 hours. Credit: 3 semester hours.

333—Insurance. Analysis of insurance functions; including formation of companies, rate making, underwriting and reinsurance. (C.P.C.U. II). Class: 3 hours. Credit: 3 semester hours.

334—Insurance. Specialization in claim adjusting, risk management and/or underwriting. (C.P.C.U. II). Prerequisite: Ins 333. Class: 3 hours. Credit: 3 semester hours.

335—Insurance. General education, including economics, government, social legislation with emphasis on English usage. (C.P.C.U. III). Class: 3 hours. Credit: 3 semester hours.

336—Insurance. General education, including economics, government, social legislation with emphasis on English usage. (C.P.C.U. III). Prerequisite: Ins 335. Class: 3 hours. Credit: 3 semester hours.

337—Insurance. A review of general commercial law with a study of insurance law including construction of insurance contracts. (C.P.C.U. IV). Class: 3 hours. Credit: 3 semester hours.

338—Insurance. Commercial law with a study of insurance law including construction of insurance contracts. (C.P.C.U. IV). Prerequisite: Ins 337. Class: 3 hours. Credit: 3 semester hours.

339—Insurance. Comprehensive study of accounting, finance and insurance agency management. (C.P.C.U. V). Class: 3 hours. Credit: 3 semester hours.

3311—Insurance. Accounting, finance, and insurance agency management. (C.P.C.U. V). Prerequisite: Ins 339. Class: 3 hours. Credit: 3 semester hours.

421—Insurance. Individual life and health insurance. (C.L.U. I). Class: 2 hours. Credit: 2 semester hours.

422—Insurance. Life insurance law and company operations. (C.L.U. I). Prerequisite: Ins 421. Class: 2 hours. Credit: 2 semester hours.

423—Insurance. Group insurance and social insurance. (C.L.U. II). Class. 2 hours. Credit: 2 semester hours.

424—Insurance. Pension planning. (C.L.U. II). Prerequisite: Ins 423. Class: 2 hours. Credit: 2 semester hours.

425—Insurance. Income, estate, and gift taxation. (C.L.U. III). Class: 2 hours. Credit: 2 semester hours.

426—Insurance. Investments and family financial management. (C.L.U. III). Prerequisite: Ins 425. Class: 2 hours. Credit: 2 semester hours.

427—Insurance. Accounting and finance. (C.L.U. IV). Class: 2 hours. Credit: 2 semester hours.

428—Insurance. Economics. (C.L.U. IV). Prerequisite: Ins 426. Class: 2 hours. Credit: 2 semester hours.

Real Estate (REs)

121—Real Estate. Texas Realtors' Institute Course I. The course deals primarily with residential properties and covers the essentials of real estate brokerage. Class: 2 hours. Credit: 2 semester hours.

122—Real Estate. Texas Realtors' Institute Course II. The course introduces the student to tax free exchanges, and the marketing, construction, management, appraisal and financing of commercial properties. Advance sales and administration techniques are included in the program. Case studies of actual real estate board problems will be presented. Prerequisite: REs 121. Class: 2 hours. Credit: 2 semester hours.

123—Real Estate. Texas Realtors' Institute Course III. It provides an advanced approach to the student's needs designed to instruct the student in the development of investment property, the establishment of a personal estate and advanced appraisal. Prerequisite: REs 122. Class: 2 hours. Credit: 2 semester hours.

221—Real Estate. Methods of appraising real property with emphasis on residential property. Class: 2 hours. Credit: 2 semester hours.

222—Real Estate. An advanced course in appraising which covers the income approach to value through residual techniques. Class: 2 hours. Credit: 2 semester hours.

223—Real Estate. Methods of financing real property. Class: 2 hours. Credit: 2 semester hours.

224—Real Estate. Law as it pertains to real property transactions. Class: 2 hours. Credit: 2 semester hours.

225—Real Estate. Problems that confront the broker in his daily work. Class: 2 hours. Credit: 2 semester hours.

227—Real Estate. Real estate management. Class: 2 hours. Credit: 2 semester hours.

228—Real Estate. Principles and techniques of residential appraising. Class: 2 hours. Credit: 2 semester hours.

Savings and Loan (SL)

The following courses lead to the American Savings & Loan Institute Achievement Award, Standard Diploma and Graduate Diploma.

131—Savings & Loan. A review of savings and loan fundamentals. Class: 3 hours. Credit: 3 semester hours.

231—Savings & Loan. Savings and loan management. Class: 3 hours. Credit: 3 semester hours.

331—Savings & Loan. Commercial law and its application to the savings and loan business. Class: 3 hours. Credit: 3 semester hours.

333—Savings & Loan. Economics from the viewpoint of the savings and loan business. Class: 3 hours. Credit: 3 semester hours.

Transportation (Trs)

121—Transportation. Shipping and receiving procedures. The day to day problems in transportation encountered by small business. Class: 2 hours. Credit: 2 semester hours.

131—Transportation. Introduction to the fundamentals of transportation. Class: 3 hours. Credit: 3 semester hours.

132—Transportation. Principles of traffic and transportation. Class: 3 hours. Credit: 3 semester hours.

331—Transportation. Procedures in the rating of freight. Class: 3 hours. Credit: 3 semester hours.

332—Transportation. An advanced study in the rating of freight. Class: 3 hours. Credit: 3 semester hours.

333—Transportation. The process and procedure of analyzing freight rates. Class: 3 hours. Credit: 3 semester hours.

334—Transportation. Procedures in the classification of freight. Class: 3 hours. Credit: 3 semester hours.

335—Transportation. Procedures in freight loss and damage claims. Class: 3 hours. Credit: 3 semester hours.

The following courses are designed primarily to prepare candidates for Certificate of Membership in the American Society of Traffic and Transportation.

431—Transportation. Economics and its application to production and distribution. Class: 3 hours. Credit: 3 semester hours.

432—Transportation. Principles of traffic and transportation management. Class: 3 hours. Credit: 3 semester hours.

433—Transportation. General education including marketing, government, geography, business organizations and finance. Class: 3 hours. Credit: 3 semester hours.

434—Transportation. Interstate Commerce Law and Regulation. Class: 3 hours. Credit: 3 semester hours.

435—Transportation. The preparation of documented report of a specific aspect of transportation or traffic management. Class: 3 hours. Credit: 3 semester hours.

436—Transportation. Principles and practices of foreign trade. Class: 3 hours. Credit: 3 semester hours.

INDUSTRIAL SUPERVISION

This series of courses is planned for business and industrial supervisory personnel. The content of the courses offered covers the entire range of supervisory responsibilities. Each class meeting is carefully planned to be of maximum usefulness on the job. Employment in business or industry in a supervisory or leadership position is a prerequisite to registration in supervisory courses.

A Certificate of Supervision is awarded upon completion of eighteen credit hours from the following list of Industrial Supervision courses.

Industrial Supervision (IS)

722—Supervisory Leadership. The incident process as used in this course provides experience in handling case problems and in analyzing real supervisory situations. Motivation of employees, development of leadership qualities, utilization of authority, and handling of labor relations problems are studied. Class: 2 hours. Credit: 2 semester hours.

726—Industrial Economics. The function of tools, workers, management, and investors in the American industrial system. The course also includes discussions of the place of government in the economy, the significance of profits, costs, wages, and money and a study of personal financial planning. Class: 2 hours. Credit: 2 semester hours.

727—Written Communications. The course provides practice in the areas of writing involved in the supervisor's job. The purpose is to develop clarity in written communications, such as memos, reports, letters, orders and records. Class: 2 hours. Credit: 2 semester hours.

728—Industrial Relations. A survey of the industrial relations functions in an industrial organization. Topics include employment, merit rating, job placement, public relations, counseling and training. Class: 2 hours. Credit: 2 semester hours.

731—Fundamentals of Supervision. Methods and techniques of supervision; included are basic skills for the beginning supervisor as well as new ideas and broader concepts for the more experienced. Topics included are new employees, interviewing, job methods, training, safety, human relations, grievances, motivation and discipline. Class: 3 hours. Credit: 3 semester hours.

732—Effective Speaking. This is a participation course where one learns to overcome fear and self-consciousness in addressing a group, develops knowledge of basic speaking principles, and gains experience in effective speaking. Class: 3 hours. Credit: 3 semester hours.

733—Supervisory Methods in Municipal Administration. Modern methods and techniques of supervision within the various departments, divisions, and offices of city government. Class: 3 hours. Credit: 3 semester hours.

734—Management Course in Supervision. Methods and techniques of supervision from the executive viewpoint. Topics included are organizations and management, control of waste, manpower, machines and material, getting cooperation, communications, human relations, controlling accidents and selected management problems. Class: 3 hours. Credit: 3 semester hours.

735—Labor Relations. Company policy, labor history, legislation and labor unions, the labor contract, grievances and arbitration are included in this course. Class: 3 hours. Credit: 3 semester hours.

736—Personnel Management. The principles and practices of personnel management with emphasis on the procurement, development, maintenance and utilization of the labor forces. Class: 3 hours. Credit: 3 semester hours.

737—Industrial Organization and Management. An advanced course in management. The course presents management functions in detail, so that inter-relationships of functions of the organization are revealed. Class: 3 hours. Credit: 3 semester hours.

738—Industrial Sociology. A study of the social structure of modern large-scale industry and its relation to society. Class: 3 hours. Credit: 3 semester hours.

739-7311—Industrial Communications. Basic information and techniques for effectively communicating with employees, management, customers and the public. Some of the topics covered in the course are logical and creative thinking, making a speech, dictating, telephoning, writing, and letter and report writing. Prerequisite: IS 739 required for enrollment in IS 7311. Class: 3 hours. Credit: 3 semester hours.

821—Conference Leadership. Techniques of conference leadership. Active participation in conducting a conference provides each student with an opportunity to practice these techniques. Class: 2 hours. Credit: 2 semester hours.

825—Wages and Salary Administration. Problems involved in wage and salary administration including labor legislation, wage criteria, wage payment plans and job evaluation. Class: 2 hours. Credit: 2 semester hours.

826—Job Evaluation. Job evaluation systems and techniques. Problems of installing a program of job evaluation. Actual cases are studied. Class: 2 hours. Credit: 2 semester hours.

828—Effective Speaking. The second of two courses to further develop poise, self-confidence, and skill in effective speaking. Class: 2 hours. Credit: 2 semester hours.

829—Techniques of Job Instruction. Methods of instruction based on the laws of learning which enable the supervisor to teach others the related technology and manipulative skills of his job or trade. Class: 2 hours. Credit: 2 semester hours.

830—Management for Engineers. Industry and business firms decision-making processes in the day-by-day workings of an industry or business both as an economic organization and as a coordinate institution made up of individual participants. Class: 3 hours. Credit: 3 semester hours.

832—Job Methods Improvement. Basic principles and procedures necessary to improve the method of doing a job. Class: 3 hours. Credit: 3 semester hours.

833—Cost Reduction. Methods for carrying out a comprehensive, continuing cost reduction and control program including how to get all levels of supervisory management solidly behind the cost reduction effort and how to get supervisors to think of cost control as an integral part of the overall job, rather than a short-term project. Class: 3 hours. Credit: 3 semester hours.

834—Safety for Supervisors. Safety costs, cause of accidents, the function of safety inspections, the elimination of specific hazards, fire prevention, investigation of accidents and methods for minimizing their frequency and severity. Class: 3 hours. Credit: 3 semester hours.

835—Labor Law. The Taft-Hartley and other federal and state laws in the field of labor-management relations and how they affect the foreman and supervisor in industry and business. Class: 3 hours. Credit: 3 semester hours.

836-837—Industrial Psychology. Methods of applying practical psychology to the handling of men; the use of testing methods; consideration of such factors as morale, group attitudes, motivation, frustration, and fatigue; and application of psychological studies to human behavior on the job. Prerequisite: IS 836 required for enrollment in IS 837. Class: 3 hours. Credit: 3 semester hours per semester.

838-839—Human Relations. This course develops in a practical way the skills and techniques of personnel supervision. Prerequisite: IS 838 required for enrollment in IS 839. Class: 3 hours. Credit: 3 semester hours per semester.

TRADE EXTENSION

These courses are designed to satisfy the needs of specific groups of workers from the trades and may cover one or several blocks of related information, skills and processes. All enrollment is limited to that group of tradesmen. Certificates will be given for the successful completion of certain courses or series of courses that pertain to the same subject.

Trade extension courses which may be offered are listed below:

Automotive Workshop (AW) 711, 721, 731, 741, 751.

Blueprint Reading (BR) 741, 742.

Carpentry Workshop (CW) 711, 721, 731, 741, 751.

Compressors (Com) 731.

Drafting (Dr) 733, 734, 741, 742.

Industrial Electronics (IE) 141, 142, 731, 741, 742, 743.

Industrial Instruments (II) 741, 742, 743.

Law Enforcement (LE) 761.

Layout (Lo) 741, 742, 751.

Metallurgy (Mt) 731.

Pipefitting (Pip) 741.

Plant Maintenance Workshop (PM) 711, 721, 731, 741, 751.

Plant Operations (PO) 741.

Pumps (Pu) 731.

Radiologic Technology (Ra) 721, 7211, 722, 724, 731, 733, 742, 743, 744.

Refinery Operations (RO) 731.

Surveying Workshop (SW) 711, 721, 731, 741, 751.

Welding (Wld) 741, 742.

Course Descriptions

AW 711, 721, 731, 741, 751—Automotive Workshop. Courses designed to advance the technical competence of persons engaged in the maintenance and repair of automotive equipment. For each workshop, a description of subject to be covered will be indicated. Class: 1-5 hours. Credit: 1-5 semester hours.

BR 741—Blueprint Reading. A study of lines, views, symbols and dimensions involved in reading blueprint and shop sketches. Practice in making freehand sketches of simple objects. Class: 4 hours. Credit: 4 semester hours.

BR 742—Blueprint Reading. Reading blueprints for a specific trade. Class: 4 hours. Credit: 4 semester hours.

CW 711, 721, 731, 741, 751—Carpentry Workshop. Designed to advance the technical competence of participants. For each workshop, a description of the particular area of study will be indicated. Class: 1-5 hours. Credit: 1-5 semester hours.

Com 731—Compressors. The application, operation and maintenance of air and gas compressors, proper installation and power requirements. Class: 3 hours. Credit: 3 semester hours.

Dr 733—Drafting. A course in drafting technology. Covers use of sliderule and strength of materials. AISC & ASME codes are used. Class: 3 hours. Credit: 3 semester hours.

Dr 734—Drafting. Trigonometrics solution of right triangles using Smoley's Tables and geometric projection principles. Class: 3 hours. Credit: 3 semester hours.

Dr 741—Drafting. Principles of drafting with stress on correct use of instruments. Class: 4 hours. Credit: 4 semester hours.

Dr 742—Drafting. Methods and practice in drafting for journeymen workers in specific trades. Class: 4 hours. Credit: 4 semester hours.

IE 141—Industrial Electronics. Functions of tubes, resistors, capacitors, and inductances in basic circuits of rectifiers, amplifiers and relays for industrial application. Class: 4 hours. Credit: 4 semester hours.

IE 142—Industrial Electronics. Circuits and special components involved in the electronic control of industrial power. Class: 4 hours. Credit: 4 semester hours.

IE 731—Industrial Electronics. Circuits and components used in electronic communication equipment. Class: 3 hours. Credit: 3 semester hours.

IE 741—Industrial Electronics. Functions of tubes, resistors, capacitors and inductances in basic circuits or rectifiers, amplifiers and rectifiers, amplifiers and relays for industrial application. Class: 4 hours. Credit: 4 semester hours.

IE 742—Industrial Electronics. Circuits and special components involved in the electronic control of industrial power. Class: 4 hours. Credit: 4 semester hours.

IE 743—Industrial Electronics. Transistor circuits and their commercial application. Prerequisite: IE 741 and 742. Class: 4 hours. Credit: 4 semester hours.

II 741—Industrial Instruments. A study of the physical and chemical laws affecting pressure and temperature measuring and recording instruments.

The operation and application of instruments for controlling manufacturing processes is covered. Class: 4 hours. Credit: 4 semester hours.

II 742—Industrial Instruments. The basic control theory and methods for obtaining various control effects are studied. Practical industrial installations of control systems, controller adjustments and checking and testing procedures are stressed. Class: 4 hours. Credit: 4 semester hours.

II 743—Industrial Instruments. A review of basic electricity including components and basic laws. A study is made of electron tubes, elementary electronic circuits, and some of the more generally used electronic instrument circuits. Class: 4 hours. Credit: 4 semester hours.

LE 761—Law Enforcement. Orientation of the police officer, police service as a career, community relations, police ethics, arrest, search and seizure, rules of evidence, criminal law, criminal investigation, field interrogation and interviews, case preparation, court appearance and conduct, handling juveniles, patrol methods and procedures, mechanics of arrest, crowd control, defensive tactics, firearms training, traffic supervision; field trip to Texas Prison System, Huntsville. Prerequisite: Enrollees must be employed as full-time law enforcement officers. Class: 13 hours. Laboratory: 27 hours. (4 week schedule). Credit: 6 semester hours.

Lo 741—Layout. A study of the tools, materials and procedures of sheet metal and plate layout work. Geometric construction used in layout work will be studied and applied. Class: 4 hours. Credit: 4 semester hours.

Lo 742—Layout. The use and application of Smoley's Tables in layout work. Class: 4 hours. Credit: 4 semester hours.

Lo 751—Layout. The use and application of opitcal alignment instruments in the setting and aligning of rotary equipment, *i.e.*, compressors, pumps, conveyors, etc. Class: 5 hours. Credit: 5 semester hours.

Mt 731—Metallurgy. The welding characteristics of various metals and alloys. Class: 3 hours. Credit: 3 semester hours.

Pip 741—Pipefitting. Methods of fabricating pipe are studied. The use of layout tools, full scale layout methods and practices, layout of miters and saddles and the use of the steel square in pipe layout is stressed. Class: 4 hours. Credit: 4 semester hours.

PM 711, 721, 731, 741, 751—Plant Maintenance Workshop. Designed to advance the technical competence of participants. For each workshop, a description of study will be indicated. Class: 1-5 hours. Credit: 1-5 semester hours.

PO 741—Plant Operation. Efficient use of modern refinery and petrochemical plant processing equipment. Class: 4 hours. Credit: 4 semester hours.

Pu 731—Pumps. The application, care and operation of centrifugal, rotary and reciprocating pumps and the study of direct and belt drives,

reduction gears and special increases are covered in this course. Class: 3 hours. Credit: 3 semester hours.

Ra 721—Radiologic Technology. Anatomy and physiology. Class: 2 hours. Credit: 2 semester hours.

Ra 7211—Radiologic Technology. Physics, darkroom, chemistry and technique. Class: 2 hours. Credit: 2 semester hours.

Ra 722—Radiologic Technology. Physics, principles of radiographic exposure. Class: 2 hours. Credit: 2 semester hours.

Ra 724—Radiologic Technology. Equipment maintenance and general review. Class: 2 hours. Credit: 2 semester hours.

Ra 731—Radiologic Technology. Orientation and elementary radiation protection, professional ethics, principles of radiographic exposure, radiographic positioning, and film critique. Class: 3 hours. Credit: 3 semester hours.

Ra 733—Radiologic Technology. Protection of patient and personnel, special procedures, and topographic anatomy. Class: 3 hours. Credit: 3 semester hours.

Ra 742—Radiologic Technology. Positioning, film critique, common procedures using contrast media, nursing procedures, and pediatrics. Class: 4 hours. Credit: 4 semester hours.

Ra 743—Radiologic Technology. Position, principles of exposure, and film critique. Class: 4 hours. Credit: 4 semester hours.

Ra 744—Radiologic Technology. Radiation therapy, film critique, intraoral radiography, medical and surgical diseases, and administration. Class: 4 hours. Credit: 4 semester hours.

RO 731—Refinery Operation. A course covering the operating procedures involved in the modern refinery and chemical plant. Class: 3 hours. Credit: 3 semester hours.

SW 711, 721, 731, 741, 751—Surveying Workshop. Lectures, demonstrations, and practice designed to advance the technical competence of persons engaged in the various fields of surveying. A description of material to be covered will be published for each workshop. Class: 1-5 hours. Credit: 1-5 semester hours.

Wld 741—Welding. Correct use of welding equipment. Arc welding in all positions. Laboratory: 4 hours. Credit: 4 semester hours.

Wld 742—Welding. Arc welding in all positions on plate and pipe. Horizontal and overhead positions are stressed. Laboratory: 4 hours. Credit: 4 semester hours.

SHORT COURSES AND CONFERENCES

Management conferences are held each spring and are primarily designed for first line supervisors. The conference features prominent speakers who address their remarks to a theme selected and announced by a planning committee.

Firemen's Training School is offered in late spring or summer. Modern methods of fighting industrial and residential fires are demonstrated and practiced. Manufacturers of fire fighting chemicals and equipment display and demonstrate their equipment.

Nursing Home Administration courses are offered to satisfy the State Board of Licensure's requirement for taking the exam as well as annual upgrading requirements after licensing.

Other short courses and seminars will be offered if requested by groups of individuals or organizations.

OFFICERS OF ADMINISTRATION

FRANK A. THOMAS, JR., B.S., M.S., PhD., President

THOMAS T. SALTER, B.S., M.Ed., Ed.D., Vice-President of Extended Services

GUS A. CARLSEN, I.E., Acting Dean, School of Technical Arts

G. A. WIMBERLY, B.S., Assistant to the President

H. C. GALLOWAY, JR., B.S., M.Ed., Vice-President of Finance

DAVID BOST, B.A., M.J., Ph.D., Vice-President of Student Affiars

GEORGE E. McLAUGHLIN, B.S., Dean of Students

NORRIS KELTON, B.A., M.A., Dean of Admissions and Records

ELMER G. RODE, B.B.A., M.Ed., Associate Dean of Admissions and Records

JOE B. THRASH, B.S., M.A., Director, Testing and Placement and Veterans Education

GARLAND W. LOVELACE, B.S., M.Ed., Vocational Counselor

EUGENE W. CARPENTER, B.S., Director, Traffic and Safety

JESS R. DAVIS, B.B.A., M.Ed., Director, Student Financial Aid

OSCAR BAXLEY, B.B.A., Business Manager

RUSSELL DeVILLIER, Director of College Information

R. B. THOMAS, B.S., M.A., Ph.D., Director of Library Services

WILLA V. NEWTON, Senior Secretary, School of Technical Arts

HAZEL MARKS, Secretary, School of Technical Arts

FACULTY

(Full-Time)

NINA ADKINS, Instructor I of Vocational Nursing, 1970
Registered Nurse, State of Texas
B.S.N., University of New Mexico

NORMA M. AYCOCK, Instructor I of Vocational Nursing, 1962, 1970
Registered Nurse, State of Texas

RAY AYRES, Instructor II of Mid-Management, Coordinator of Mid-Management Training, 1969, 1970
B.A., Austin College
M.A., North Texas State University

DOYLE BICE, Instructor I of Diesel Engines, 1969, 1970
Certificate of Competion, Lamar State College of Technology
Chief Engineer, U.S. Maritime Service

EMMETT S. BLACK, Instructor II of Machine Shop, 1964, 1970

EUGENE G. BROUSSARD, Instructor I of Industrial Electricity & Electronics, 1969, 1970

GUS A. CARLSEN, Acting Dean, School of Technical Arts, 1942, 1970
I.E., Arlington State College

TOM M. CHRISTIAN, Instructor II of Drafting, 1970
B.S., Georgia Institute of Technology

GEAROLD R. COPPINS, Instructor II of Industrial Electricity & Electronics, 1954, 1970

JOHN W. CRAWLEY, Instructor I of Refrigeration & Air Conditioning, 1967, 1970

T. J. DAIGLE, Instructor II of Industrial Electricity & Electronics, 1951, 1970
B.S., University of Southwestern Louisiana

IRIS S. DRODDY, Instructor I of Drafting, 1970

CORNIE FLETCHER, Instructor I of Vocational Nursing, 1969, 1970
Registered Nurse, State of Texas

ALVIN FUTCH, Instructor III of Law Enforcement, Coordinator of Law Enforcement, 1969, 1970
B.S., Southeastern State Teachers College

DONALD HART, Instructor II of Drafting, 1969, 1970
B.S., M.Ed., Sam Houston State University

WILLIAM HARTFORD, Instructor II of Job Relations, 1947, 1970

MARVIN H. HOGAN, Instructor I of Industrial Electricity & Electronics, 1970

MICHAEL E. HOLLOMON, Instructor II of Police Science, 1970
B.B.A., Lamar State College of Technology

DOLORES JONES, Instructor III of Vocational Nursing, Director of Vocational Nursing, 1962, 1970
Registered Nurse, State of Texas

JOE I. JUAREZ, Instructor II of Basic Communications, 1968, 1970
B.F.A., University of Houston
B.S., Lamar State College of Technology
M.Ed., University of Houston

ANN KEEN, Instructor I of Vocational Nursing, 1958, 1970
Registered Nurse, State of Texas

ROBERT J. LAWRENCE, Instructor II of Industrial Electricity & Electronics, Head, Technical Department, 1958, 1970

GARLAND W. LOVELACE, Vocational Counselor, 1970
B.S., Lamar State College of Technology
M.Ed., Stephen F. Austin State University

NORMAN E. LOWREY, Coordinator of Adult Education, 1967

SAM LUCIA, Instructor IV of Diesel Engines, 1954, 1970

RONALD I. MARBLE, Instructor I of Welding, 1967, 1970
C.C., Lamar State College of Technology

BERYL R. McKINNERNEY, Instructor II of Mathematics, 1970
B.S., Tarleton State College

ALLEN G. MELTON, Instructor I of Data Processing, 1967, 1970
B.S., Lamar State College of Technology

RALPH K. MOCK, Instructor II of Drafting, 1966, 1970

JERRY B. MOSELEY, Instructor I of Basic Communications, 1969, 1970
B.S., M.Ed., Lamar State College of Technology

MYRON M. MYRICK, Instructor I of Drafting, 1967, 1970
Senior Engineering Technician

DAVID ROGERS NELSON III, Instructor I of Mid-Management, 1971
B.S., Lamar State College of Technology

VINA YVONNE RICKEY, Instructor II of Data Processing, 1970
B.S., Oklahoma State University

M. PAUL ROY, Instructor II of Machine Shop, Head, Industrial Department, 1963, 1970

VIRGINIA RUDLOFF, Instructor I of Vocational Nursing, 1970
Registered Nurse, State of Texas

J. C. SHANKLES, Instructor II of Welding, 1952, 1970

LENOX SIGLER, Instructor II of Industrial Electricity & Electronics, 1965, 1970

JAMES H. SMITH, Instructor I of Diesel Engines, 1968, 1970
C.C., Lamar State College of Technology

JAMES D. SPENCER, Coordinator of Adult Education, 1970
B.S., M.Ed., Texas A&M University

FAYE N. STONE, Instructor I of Vocational Nursing, 1969, 1970
Registered Nurse, State of Texas

BERNICE STURROCK, Instructor I of Vocational Nursing, 1963, 1970
Registered Nurse, State of Texas

EDNA MARY TERRELL, Instructor I of Vocational Nursing, 1968, 1970
Registered Nurse, State of Texas

ELLIS THOMPSON, Instructor II of Refrigeration & Air Conditioning, 1956, 1970

WALTER W. TURMAN, Instructor II of Mathematics, Acting Head, Related Arts Department, 1967, 1970
B.S., East Texas State University
M.A., Texas A&M University

CAREY B. WESLEY, Instructor II of Welding, 1966, 1970
C.C., Lamar State College of Technology

HARRY L. WILLIAMS, Instructor I of Data Processing, 1968, 1970
B.S., Stephen F. Austin State University

JERRY L. WILSON, Instructor II of Industrial Electricity & Electronics, 1970
B.S., Lamar State College of Technology

MICHAEL D. WILSON, Instructor I of Basic Communications, 1970
B.S., Lamar State College of Technology

(Part-Time)

JACK C. AULBAUGH, Instructor of Real Estate, 1966
B.S., Lamar State College of Technology

PEGGY BENTON, Instructor of Vocational Nursing, 1968
Registered Nurse, State of Texas

HERMAN BLANTON, Instructor of Real Estate, 1965

VIRGINIA K. BROWN, Instructor of Interior Design, 1967

LYNNWOOD M. CLARK, Instructor of Related Subjects, 1970
B.S., Lamar State College of Technology

BILL L. COLDREN, Instructor of Surveying, 1970
B.A. , Texas Christian University
B.S., M.S., The University of Oklahoma

H. O. DANIELS, Instructor of Industrial Instruments, 1956

BERTRAND R. DIONNE, Instructor of Industrial Supervision, 1966
B.A., The University of Texas

RAYMOND EDWARDS, Instructor of Plant Maintenance, 1969

DOUGLAS EGAN, Instructor of Millwright, 1968

J. B. ENER, Instructor of Real Estate, 1963

HORACE EPPERHART, Instructor of Industrial Electricity & Electronics, 1970

SHERMAN GUYON, Instructor of Mid-management, 1969
B.A., University of Houston

ROY E. HARRISON, Instructor of Industrial Electricity & Electronics, 1969
B.A., B.S., Kansas State Teachers College

ARTHUR G. HATCH, Instructor of Surveying, 1970

TOMMY G. HILL, Instructor of Carpentry, 1969

KENNETH C. HOLT, Instructor of Carpentry, 1969

MARVIN E. HOWE, Instructor of Ironworking, 1969

FRANK JAMESON, Instructor of Real Estate, 1969

BILLIE B. KENNEDY, Instructor of Related Subjects, 1970
B.A., Sam Houston State University

NEIL C. KERR, Instructor of Welding, 1970

BERNARD KLEIN, Instructor of Insurance, 1970
B.A., William Marsh Rice University

ARNOLD LABOVE, Instructor of Ironworking, 1966

GAINES LEE, Instructor of Drafting, 1955

ELTON E. LUCE, SR., Instructor of Plumbing, 1969

WALTER P. MANSFIELD, Instructor of Carpentry, 1969

CALVIN McKAY, Instructor of Industrial Supervision, 1966
B.S., University of Southwestern Louisiana

SOLON A. MOTT, Instructor of Blueprint Reading & Layout, 1969
B.S., The University of Texas

WILLIAM C. PETERS, Instructor of Data Processing, 1967

JOHN S. READ, Instructor of Refrigeration & Air Conditioning, 1970

BILL E. RICE, Instructor of Carpentry, 1970

R. A. ROLLANS, Instructor of Carpentry, 1967

RUFUS C. SHAVER, Instructor of Carpentry, 1969

DARRELL D. SHINE, Instructor of Surveying, 1970

VERNON SMITH, Instructor of Transportation, 1970

ELINOR STOFFER, Instructor of Legal Secretary, 1970

ELMER C. TAIT, Instructor of Bookkeeping and Accounting, 1965
B.B.A., Texas A&M University
Certified Public Accountant

HYMAN K. TAYLOR, Instructor of Drafting, 1968

PAUL THAMES, Instructor of Carpentry, 1968

MAX V. TRENCK, Instructor of Industrial Supervision, 1952

LESLIE WALLEY, Instructor of Industrial Electricity & Electronics, 1970

JOHN C. WEST, Instructor of Layout, 1969
B.S., Drexel Institute of Technology

JOHN C. WILSON, Instructor of Refrigeration and Air Conditioning, 1970
B.S., Texas A&M University

FRED H. WININGER, Instructor of Ironworking, 1960

ROBERT G. WOLFE, Instructor of Industrial Electricity & Electronics, 1967
B.S., Louisiana Polytechnic Institute

HUGH WOOD, Instructor of Refinery Operations, 1970

EDMON C. WRIGHT, Instructor of Related Subjects, 1970
B.S., Lamar State College of Technology

LOUIS D. WRIGHT, Instructor of Interior Design, 1969

FACULTY COUNCILS AND COMMITTEES

1970-1971

COUNCILS

Faculty Advisory Council: Robert Achilles (70-71), H. A. Barlow (70-71), Katherine Bell (70-71), Esther Churan (70-71), Roy Biser (70-72), Claude Boren (70-72), Richard Cherry (70-71), Nancy Darsey (70-72), William Hartford (70-72), Ann Keen (70-71), Ray Moore (70-72), Henry Rule (70-71), Arthur Stelley (70-71), Anthony Tennissen (70-71), Charles Wilbanks (70-71), Leonard Yates (70-72), Fred Young (70-72).

Administrative Advisory Council: David Bost, H. C. Galloway, A. J. Johnson, Norris Kelton, M. L. McLaughlin, Thomas Salter, G.A. Wimberly.

Academic Council of Deans: A. J. Johnson, Chairman; W. B. Brentlinger, L. B. Cherry, E. S. Hayes, Norris Kelton, Gus Carlsen, J. D. Landes, M. L. McLaughlin, P. B. Williams, E. B. Blackburn, Ex Officio: R. B. Thomas.

Graduate Council: E. B. Blackburn, Chairman; W. W. Bennett, Claude Cheek, James Cooke, Mary Jane Haskins, Walker James, Claude Monroe, Wesley Norton, Jack Renfrow, Bruce Rogers, Manfred Stevens, Charles Turco, Norman Weed, Roger Yerick. Ex Officio: R. B. Thomas.

Teacher Education Council: M. L. McLaughlin, Chairman; Arnold Anderson, Vernon Crowder, Marsha Daggett, Walter Dezelle, Katherine Elsey, Nelda Garcia, Vernon Griffin, Keith Hansen, Paul Isaac, Philip Latimer, John Lockhart, Robert Olson, Robert O'Neill, William Pearson, J. G. Shepherd, Michael Warren, Robert Wheeler, Lois Wilson. Ex Officio: Howard Adams, E. B. Blackburn, A. J. Johnson, E. Lee Self.

Student Advisory Council: Warren Arthur, Rodney Baldere, Jeri Bell, Becky Camfield, Linda DeCorte, Lateal Duke, Cindy Freeman, Pat Gibbs, Don Niccolini, Mike Phillips, Linda Saunders, Lavanne Scott, Rick Scott, Robert Stakes.

Undergraduate Council: Adrian Anderson, Harold Baker, Luther Beale, Wendell Bean, R. O. Bennett, W. B. Brentlinger, Otto Brown, Claude Cheek, Irving Dawson, Leroy Ellis, H. E. Eveland, Harry Frissell, David Gates, Delbert Gibson, Norma Hall, Mary Harp, James Hawker, E. S. Hayes, J. B. Higgins, Belle Holm, C. D. Kirksey, Philip Latimer, Nora Leitch, R. A. McAllister, Conrad Mang, Oliver Monk, George Parks, Charles Partin, Carl Rigney, Robert Rogan, Jeremiah Stark, George Tims, Michael Warren, Roger Yerick. Ex Officio: Joseph Reho, R. B. Thomas, Elmer Rode, J. B. Welch, George McLaughlin, Michael Wynn.

COMMITTEES

Admissions and Credits: Ali Ali (70-71), Darrell Davis (70-72), George deSchweinitz (70-72), Jean Dorrell (70-71), Bob Frederick (70-71), Paul Holmes (70-72). Ex Officio: George McLaughlin, A. J. Johnson.

Artist and Drama Series: Co-Chairmen, Mary Barrett (70-71) and Henry Rule (70-72); Gus Carlsen (70-71), Patrick Harrigan (70-71), Rae Gremillion (70-71), Andres Ordono (70-72), Eleanor Sladczyk (70-71), JoAnn Stiles (70-72), Joe Watt (70-72). Ex Officio: Talmadge Armstrong. Students: Duane French, Tom Higgins, Susan Hogan, Becky Sitton, Bruce Taylor, Glen Watz.

College Discipline: David Bost, Supervisor; Ray Ayres (70-72), B. R. Barrington (70-72), George Bryan (70-71), Jean Hudson (70-71), Delmas Hybarger (70-72), Nadine Jenkins (70-71), Hubert Kaszynski (70-71), William MacDonald (70-72), Robert Madden (70-72), Harry Mei (70-71), Jerry Moseley (70-71), James Pearson (70-72), David Taylor (70-71), A. W. Yeats (70-71). Ex Officio: George Tims Roger Yerick. Students: Sammy Accardo, Carla Bennett, Martha Brown, Becky Camfield, Fred Cummings, Dickie Day, Mike LeJune, Don Nanninga, Bubba Pate, Tommy Paulsel, Bruce Smith, Bruce Taylor, Ronny Whitehead, Pay Williams.

Commencement: A. J. Johnson, Chairman; Lyle Bohrer (70-72), James Lane (70-71), William Matthews (70-71), Don Robinson (70-72), Arney Strickland (70-72), Ruth Werner (70-71). Ex Officio: Faculty marshals, Registrar. Students: Becky Crampton, Joan Elliott, Jimmy Jordan.

Computer Services: Bobbie Waldron, Chairman; Robert Barnes (70-72), Kenneth Briggs (70-72), Bennie Gilchriest (70-71), Eugene Martinez (70-72), Allen Melton (70-71), Alfred Steiert (70-71), John Whittle (70-71).

Faculty Tenure: Saul Aronow (71), Lyle Bohrer (72), Ann Jones (73), Robert Madden (72), Harry Mei (71), Dan Rogas (71), William Tucker (73).

Foreign Student: George McLaughlin, Chairman; Raymond Drenan (70-72), Vernon Glass (70-71), Donald Hart (70-71), B. R. Henry (70-71), Jerry Newman (70-72), William Pampe (70-71), Don Williams (70-72). Students: Pedra Ast, Eduardo Boetsch, Mahood Dideban, Mukesh P. Gandi.

Guidance: Co-Chairmen, H. E. Eveland (70-71), Irvin Reis (70-72); Howard Adams (70-72), Mary Baker (70-71), Jay Collier (70-71), Fred Farrar (70-72), William Fitzgerald (70-71), Marilyn Georgas (70-72), Garland Lovelace (70-72). Ex Officio: Otto Flocke, Gus Carlsen. Students: Diann Coleman, Larry McCollouch, Mike Neu.

Health and Safety: Floyd Crum, Chairman; Kenneth Dorris (70-72), George Goetz (70-71), Robert Gunn (70-72), Mary Harp (70-72), White Jacobs (70-71), Dolores Jones (70-71), Joe Juarez (70-71), Mattie Londow (70-71), Marianella Permenter (70-72), Joseph Pizzo (70-72), Annette Platt (70-72), Raymond Satterwhite (70-71), J. B. Stevens (70-71), Michael Wilson (70-72). Students: Debbie Collins, Bill Cronin, Vicki Dean, Bobby Dickinson, Robin Mers, Linda Poindexter.

High School Career Day: Co-Chairmen, Garland Lovelace (70-71) and Joseph Reho (70-72); John Bruyere (70-71), Howell Gwin (70-71), Claude Monroe (70-72), William Roberts (70-72), J. D. Spencer (70-71), Joseph Truncale (70-71), Charles Wilbanks (70-72).

Homecoming Advisory Committee: Paul Taylor, Chairman; Therlene Boyett, Claude Burke, Jane Davidson, Vernon Griffin, James Harvey, Ewell Hindman, Joseph Lambert, Norman Lowery, Jack Martin, Mary Menendez, Vernice Monroe, Reta Parrish, Chester Runnels, Ann Shaw, James Simmons. Students: Tom Allardyce, Becky Camfield, Danny Cappel, Dale Coulthard, Jane Davidson, Sharon Davis, Barbara Franklin, Paula Griffin, Judy Hammond, Pam Haussner, Melanie Jemison, Lanie Klein, Becky LeBlanc, Mike Neu, Linda Poindexter, Darryl Tramonte.

Insurance: Elvis Davis, Chairman; Saul Aronow (70-71), Diane Baker (70-71), John Ellis (70-72), James Hopper (70-71), Paul Holmes (70-71), Larry Patterson (70-72), Michael Wilson (70-72). Ex Officio: G. A. Wimberly, H. C. Galloway.

Intercollegiate Athletics: H. E. Eveland, Chairman; Richard Cherry (70-71), Dock DeMent (70-72), Delmas Hybarger (70-71), Joseph Lambert (70-73), George Parks (70-72), Paul Roy (70-73). Student: Mark Ludwig. Ex Officio: Russell Long, Conference Representative; J. B. Higgins, Director of Athletics; Belle Holm, Dept. Head, Physical Education for Women.

Lamar Forum: W. B. Brentlinger, Supervisor; Lyle Bohrer, Alvin Futch, Charles Hawkins, Bradley Hogue, Thomas Parriott, J. J. Ramsey, Joan Setzer. Ex Officio: Carl Frommherz, Talmadge Armstrong. Students: Sammy Accardo, Harold Baker, Dickie Day, Duane French, Pat Gibbs, Tom Higgins, Mike LeJune, Gary Looper, Mark Ludwig, Tom Middleton, Brian Owen, Bonnie Ritter, Bruce Taylor, Tanya Walker.

Library: Margaret Cameron, Chairman; Edna Brooks (70-71), Betty Coody (70-71), Richard Cherry (70-71), Winfred Emmons (70-72), Jerry Moseley (70-72), Irvin Reis (70-72), William Pampe (70-72).

Research: Charles Turco, Director of Research and Programs; William Boughton (70-72), Walter Dezelle (70-71), Frederic Jelen (70-71), Sam Parigi (70-71), Beeler Satterfield (70-72), Robert Wheeler (70-72). Alternates: Billy Barrington, Wendell Bedichek, Gloria Massey, Jerry Newman, Richard Price, Norman Weed.

Resident Classification Appeals: Robert Dingle, Chairman; Lawrence Bell, Leon McGraw, Robert Rogan, Bill Tipton, Walter Turman, Jeannette Vaughn, David Zink.

Scholarship and Awards: Co-Chairmen Ann Harmon (70-71) and H. A. Barlow (70-72); L. D. Bell (70-71). E. A. Eads (70-72), Charles Hawkins (70-72), Rebecca Hill (70-71), Henry Hutchings (70-72). Charles Wiley (70-71). Ex Officio: Otto Flocke, Jess Davis. Students: Pat Breaux, Linda Waggoner, Tanya Walker.

Social-Courtesy Committee: Co-Chairmen Vera Campbell (70-71) and R. B. Thomas (70-72); Virginia Anderson, Joan Brenizer, Flonelle Greer, Dolores Jones, Ann Keen, Marilyn Krause, Michael Laidacker, Robert LeJune, John Mades, Alouisia Moore, Billy Payne, Genevieve Pearce, Claudia Perry, Antonio Pineda, Dana Ransom, Dan Rogas, E. L. Self, Ann Shaw, Rosa Mae Syler, Mary Terrell, Jeannette Vaughn, Julia Walther, Pat Weaver,

Marjorie Wheeler, Betty Winney, Naaman Woodland. Ex Officio: President, Lamar Tech Women's Club and Student President, Home Economics Honor Society.

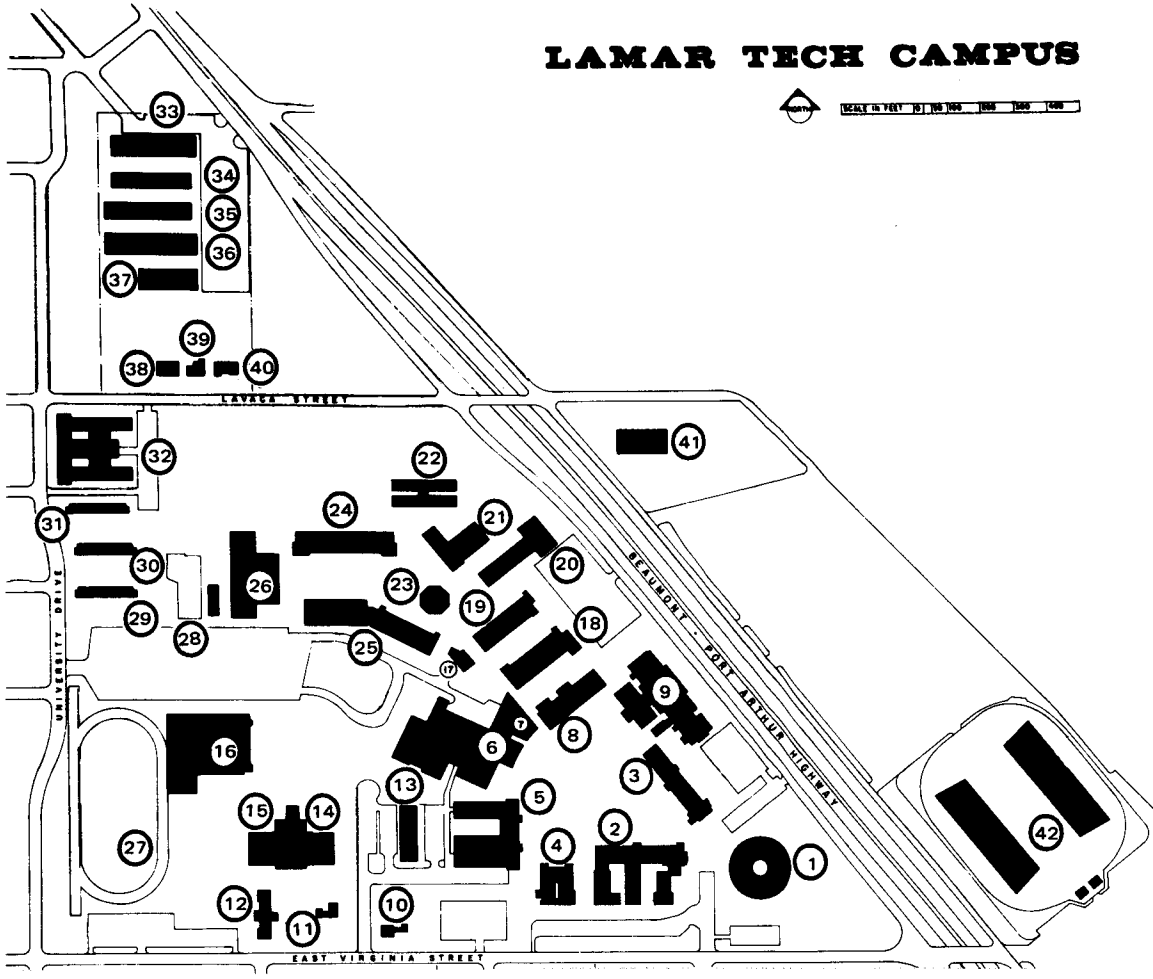
Student-Faculty Relations: Kenneth Briggs, Chairman; Jewel Blanton, Gus Carlsen, Sterling McGuire, J. J. Ramsey, Walter Sutton, Don Williams. Students: D. Collins, F. Cummings, S. Hogan, L. Lucas, H. B. Sallee, B. Taylor, R. Wright.

Student Organizations: George McLaughlin, Chairman; Floyd Crum (70-71), Marsha Daggett (70-72), Joe Fields (70-72), Sam Lucia (70-71), Elizabeth Meeks (70-71), Ray Moore (70-71), Don Robinson (70-72).

Student Publications: Robert Wilkerson, Chairman; Winifred Emmons (70-71), Robert Gay (70-72), Fred Jacob (70-71), John Kramer (70-71), Larry Patterson (70-72), Betty Winney (70-72). Students: Janet Coffey, Bob Dickinson, Mike Gracey, Judy Hammond, Debbie Heckman, Mike Ramsey.

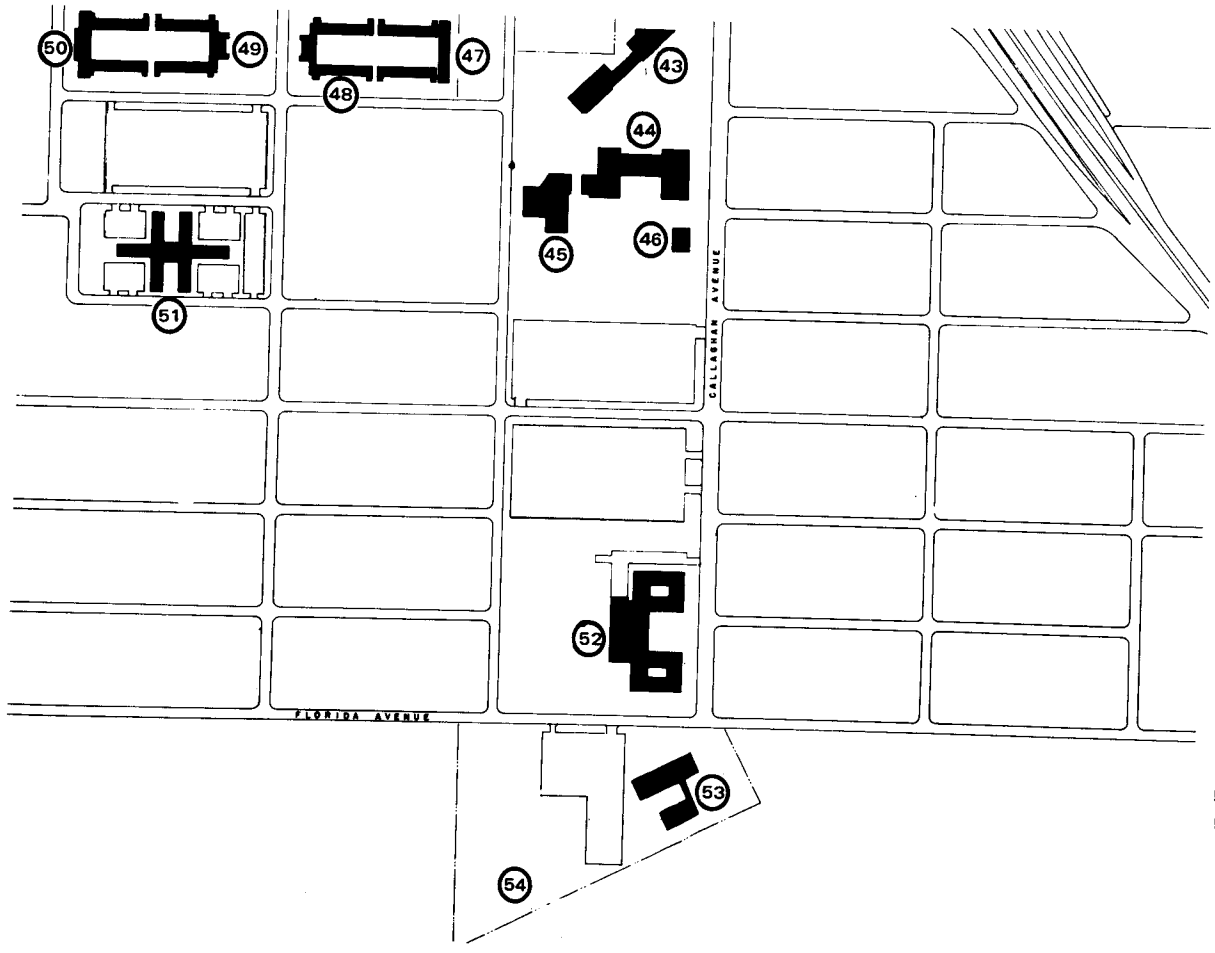
United Appeals: Thomas Salter, Chairman; E. W. Abbott, Ray Ayres, Oscar Baxley, Myrtle Bell, Roy Biser, W. B. Brentlinger, George Bryan, Charles Butler, Sterling Crim, Floyd Crum, Nancy Darsey, Jane Davidson, Kenneth Dorris, E. O. Eisen, Fred Farrar, R. A. Gay, Rae Gremillion, E. S. Hayes, Belle Holm, Michael Laidacker, J. E. Lane, Llewella Lusk, Conrad Mang, Eugene Martinez, Oliver Monk, Leroy Myers, Jerry Newman, George Parks, Reta Parrish, Robert Rogan,D Dan Rogas, Bruce Rogers, Henry Rule, Walter Sutton, David Taylor, B. R. Waldron, Pat Weaver, Norman Weed, Marjorie Wheeler, Preston Williams, Leonard Yates.

LAMAR TECH CAMPUS



LEGEND

1. ADMINISTRATION BUILDING
2. ENGINEERING NO. 1
3. STUDENT AFFAIRS
4. HOME ECONOMICS
5. ENGINEERING NO. 2
6. STUDENT CENTER
7. BOOKSTORE
8. PHYSICS
9. LIBRARY
10. HOME-DEAN OF MEN
11. PRESIDENT'S HOME
12. HEALTH CENTER
13. POST OFFICE
14. DINING HALL A
15. DINING HALL B
16. MEN'S PHYSICAL EDUCATION
17. MECHANICAL PLANT
18. GEOLOGY
19. BUSINESS
20. MUSIC - SPEECH
21. THEATRE
22. ART
23. SCIENCE AUDITORIUM
24. BIOLOGY
25. CHEMISTRY
26. WOMEN'S PHYSICAL EDUCATION
27. TRACK



28. SWIMMING POOL
29. LAMAR APARTMENTS NO. 1
30. LAMAR APARTMENTS NO. 2
31. LAMAR APARTMENTS NO. 3
32. GENTRY HALL
33. TECHNICAL ARTS BUILDING NO. 1
34. TECHNICAL ARTS BUILDING NO. 2
35. TECHNICAL ARTS BUILDING NO. 3
36. TECHNICAL ARTS BUILDING NO. 4
37. TECHNICAL ARTS BUILDING NO. 5
38. NURSERY SCHOOL
39. HOME MANAGEMENT
40. BUILDING SUPERINTENDENT'S HOME
41. MAINTENANCE BUILDING
42. CARDINAL STADIUM
43. ENGINEERING NO. 3
44. LIBERAL ARTS
45. EDUCATION
46. MECHANICAL PLANT
47. MORRIS HALL
48. COMBS HALL
49. CAMPBELL HALL
50. GRAY HALL
51. PLUMMER HALL
52. BROOK'S & SHIVER'S HALLS
53. EDUCATIONAL SERVICES CENTER
54. STADIUM

— NOTES —

— NOTES —

What Is a Technician?

"Technicians who work with engineers and scientists are among the fastest growing occupational groups in the United States. In recent years, the needs of the Nation's defense program, added to those of the expanding civilian economy, have greatly intensified the demand not only for engineers and scientists but also for technical workers with less training."

• • •

"Technicians are utilized in virtually every activity where technical know-how is required. One of their largest and best known areas of employment is research, development, and design work. Technicians in this type of activity who have titles such as laboratory technicians, physical science aide, or engineering aide generally serve as direct supporting personnel to engineers or scientists. They conduct laboratory experiments or tests; setup, calibrate, and operate instruments; and make calculations. They may work on the fabrication and assembly of experimental equipment and development of models, do drafting and in some instances do design work.

"Technicians in jobs related to production usually follow a course laid out by the engineer or scientist, but they often work without close supervision. They may aid in the various phases of the production planning, such as working out specifications regarding materials and methods of manufacture. Sometimes technicians serve as production supervisors or inspectors, perform tests to insure quality control of products, or make motion and time studies designed to improve the efficiency of operations. They may also perform liaison work between departments such as research or engineering and production.

"In the installation, operation, and maintenance of complex machinery and equipment, technicians often handle or supervise work that might otherwise have to be done by engineers.

"Technicians may also be employed as supervisors of construction projects, as technical representatives of manufacturers seeking to aid the customer in achieving maximum utilization of technical products, or as technical writers of specifications and manuals."*

**Employment Outlook for Technicians.* A Report Prepared by the Veterans Administration in Cooperation with the United States Department of Labor, March 1958, pp. 1-2.

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