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BULLETIN OF

# LAMAR STATE COLLEGE OF TECHNOLOGY



ANNUAL CATALOG ISSUE FOR

LAMAR SCHOOL OF VOCATIONS

1960-1961

# BULLETIN OF LAMAR STATE COLLEGE OF TECHNOLOGY

BEAUMONT, TEXAS

VOL. X

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NO. 7

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# TENTH ANNUAL CATALOG ISSUE

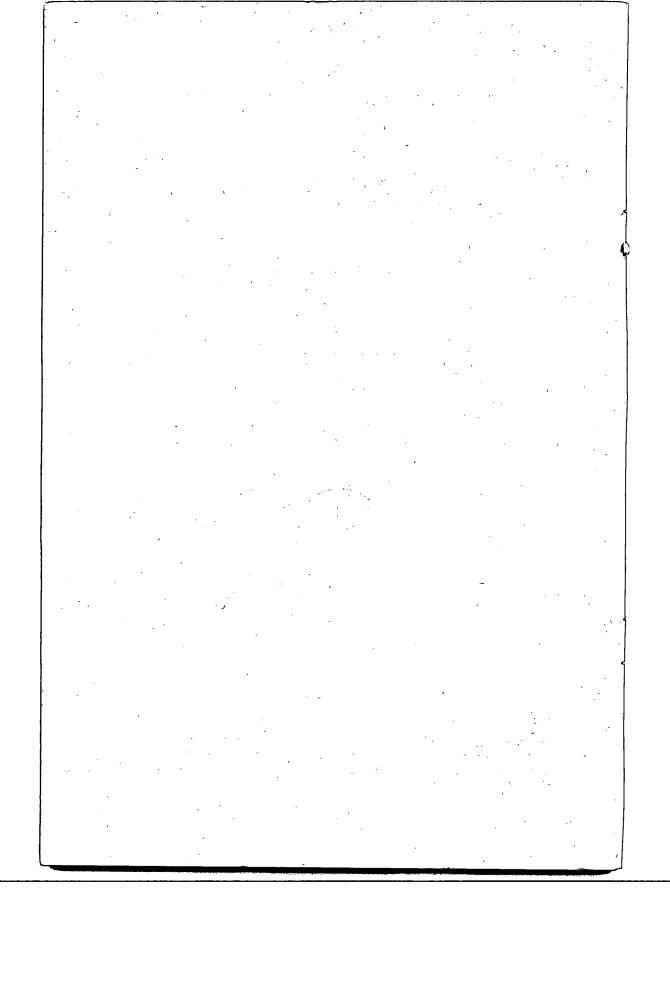
With Announcements for 1960-61

For The

LAMAR SCHOOL OF VOCATIONS



The course, tuition and fees, and all other conditions and policies set forth in this 1960-61 Catalog Issue shall be and are hereby put into effect as of SeSptember 1, 1960, and shall remain in effect, with such conditions and alterations as may be duly authorized by the Board of Regents, until a new Catalog Issue is published.



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# CALENDAR

# LAMAR STATE COLLEGE OF TECHNOLOGY

# Lamar School of Vocations

# Calendar for 1960-61

# Fall Semester, 1960

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. 1300	
Sept. 11 Sunday, noon	Dormitories open
Sept. 12 Monday, 9 a.m.	School of Vocations faculty meeting
Sept. 12 Monday, 1 p.m.	Meeting of general faculty
Sept. 12 Monday, 6 p.m.	Registration of evening classes
Sept. 13 Tuesday, 9 a.m.	School of Vocations faculty meeting
Sept. 13 Tuesday, 1:30 p.m.	School of Vocations faculty meeting
Sept. 13 Tuesday, 6 p.m.	Registration for evening classes
Sept. 14 Wednesday, 8 a.m.	Registration of freshmen
Sept. 14 Wednesday, 1 p.m.	Orientation of freshmen
Sept. 14 Wednesday, 6 p.m.	Registration for evening classes
Sept. 15 Thursday, 8 a.m.	Registration of readmitted students
Sept. 15 Thursday, 1 p.m.	Registration of readmitted students
Sept. 15 Thursday, 6 p.m.	Registration for evening classes
Sept. 16 Friday, 8 a.m.	Classes begin
Sept. 16 Friday, 5 p.m.	Last day for registration without late fee.
	A late fee of \$2 is charged for registration
	after this date.
Oct. 3 Monday, 5 p.m.	Twelfth Class Day
Nov. 17 Thursday, 4 p.m.	Unsatisfactory work reports due
Nov. 23 Wednesday, 10 p.m.	Thanksgiving holidays begin
Nov. 24 Thursday, 10 p.m.	Dormitories close for Thanksgiving
	holidays
Nov. 27 Sunday, 12 noon	Dormitories re-open
Nov. 28 Monday, 7 a.m.	Dining hall opens
Nov. 28 Monday, 8 a.m.	Classes resumed after Thanksgiving
Deal 90 Mars I am do	holidays
Dec. 20 Tuesday, 10 p.m.	Christmas holidays begin
Dec. 21 Wednesday, 8 a.m.	Dining hall closes
Dec. 21 Wednesday, 10 a.m.	Dormitories close
1961	
Jan. 3 Tuesday, 12 noon	Dormitories open after Christmas

		7.	1 1:1
			holidays
Jan.	4	Wednesday, 7 a.m.	Dining hall
Jan.	4	Wednesday, 8 a.m.	Classes resu
Jan.2	23-25	Monday-Wednesday	Final exam
Jan.	26	Thursday, 12 noon	All semeste
	,		office

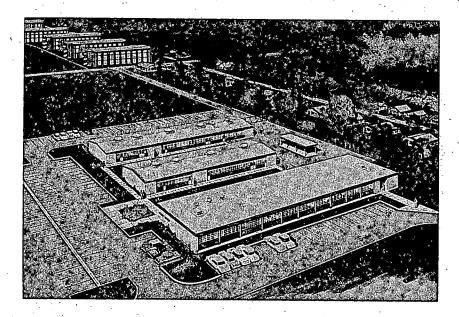
Dormitories open after Christmas holidays
Dining hall opens
Classes resumed after Christmas holidays
Final examinations
All semester grades due in Vocations

# Spring Semester, 1961

	Jan. 30	Monday, 9 a.m.	Vocations faculty meeting
i	Jan. 30	Monday, 1:30 p.m.	Vocations faculty meeting
	Jan. 30	Monday, 6 p.m.	Registration for evening classes
	Jan. 31	Tuesday, 8:30 a.m.	Registration of freshmen
	Jan. 31	Tuesday, 6 p.m.	Registration for evening classes
		Wednesday, 8:30 a.m.	Registration of sophomore students
	Feb. 1	Wednesday, 6 p.m.	Registration for evening classes
		Thursday, 8 a.m.	Classes begin
		Thursday, 6 p.m.	Registration for evening classes
	Feb. 2	Thursday, 9 p.m.	Last date for registration without penalty
	Feb. 17	Friday, 5 p.m.	Twelfth Class Day
	Mar. 28	Tuesday, 4 p.m.	Unsatisfactory work reports due in Voca
	•		tions, office
	Mar. 30	Thursday, 7 p.m.	Dining hall closes for Easter holidays
		Thursday, 10 p.m.	Easter holidays begin
		Friday, 10 a.m.	Dormitories close
	Apr. 3	Monday, 12 noon	Dormitories open
		Tuesday, 7 a.m.	Dining hall opens
	Apr. 4	Tuesday, 8 a.m.	Classes resume after Easter holidays
	May 22-2	4 Monday-Wednesday	Final examinations
	May 25	Thursday, 12 noon	All semester grades due in Vocations
			office
	May 26	Friday, 7 a.m.	Dining hall closes
		Friday, 9 a.m.	Graduation Exercises
		. 1	•

# Summer Session, 1961

Tun	£	Monday, 8 a.m.	Registration of all students
		_	0
Jun.	7	Tuesday, 8 a.m.	Classes begin
Jun.	7	Tuesday, 5 p.m.	Last date for registration without penalty
Jun.	9	Friday, 4 p.m.	Fourth class day
Aug.	25	Friday, 8 a.m.	Final examinations
Aug.	26	Saturday, 10 a.m.	Dining hall and dormitories close



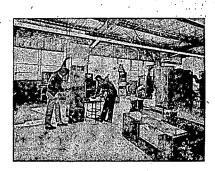
# LAMAR SCHOOL OF VOCATIONS

The 35 year old Lamar School of Vocations, a part of Lamar State College of Technology, which has provided trade and technical education for thousands of Texas men and women is housed in this all new and modern plant which was completed in 1959. The three buildings comprise approximately 33,000 square feet of floor space. Classrooms and laboratories are provided for instruction in Diesel Engines, Industrial Electricity and Electronics, Machine Shop, Refrigeration and Air Conditioning, Vocational Nursing and Welding.







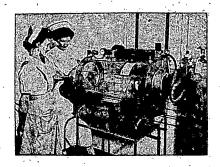


Learn a Trade at Lamar

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 mechanical trades. The objective of the Lamar School of Vocations is to offer men and women an effective and economical means for learning one of these trades in a relatively short period of time.

trades in a relatively short period of time.

Trade Preparatory courses are offered in Diesel Engines, Industrial Electricity, Machine Shop, Refrigeration and Air Conditioning, Vocational Nursing and Welding. These courses have been planned to provide the proper balance between shop practice, where the skills of the trade are acquired, and class work where the related knowledge of the trade is learned. Three hours of shop practice is provided for each two hours spent in the related classes. All of these courses with the exception of Vocational Nursing require 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 trade knowledge and skills to enable an individual to secure employment and advance in his chosen trade or occupation. Trade preparatory training also enables a person to obtain employment in many fields that are closely allied with the trade in which he has been trained.

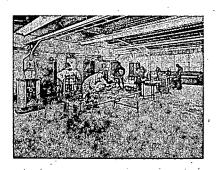
For the young person possessing the aptitude and ability, the Trade Preparatory program of the Lamar School of Vocations offers the most efficient and economical means of entry into an industrial vocation.

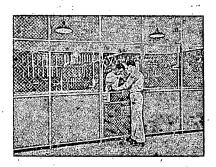
Night classes, listed in this catalog as Apprentice Training, Distributive Education, Supervisor Training and Trade Extension are offered for employed persons who desire to improve themselves in their respective trades or occupations. These courses offer the employed person the opportunity of improving their occupational knowledge and skills by attending classes one or two nights each week.

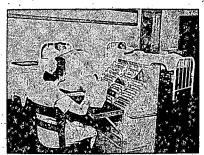












# THE FACULTY

# OFFICERS OF ADMINISTRATION

F. L. McDONALD, A.B., M.A., M.S., Ph.D., President

O. B. ARCHER, B.S., M.S., Vice-President and Dean

G. A. WIMBERLY, B.S., Comptroller

H. C. GALLOWAY, JR., B.S., M.Ed., Business Manager

MRS. BESS NEAL GENTRY, B.S., M.Ed., Dean of Women

DAVID BOST, B.A., M.J., Dean of Student Life

CELESTE KITCHEN, B.A., M.Ed., Registrar

E. E. MILLER, B.S., M.S., Director, Lamar School of Vocations

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

# FACULTY

HARDY D. AKIN, Instructor of Real Estate, 1949 LL.B., University of Texas

A. MORRIS ALBRIGHT, Instructor of Insurance, 1959 B.B.A., University of Texas

LEO ANGELE, Instructor of Pipefitting, 1958

MRS. DOROTHY J. BECKER, R.N., Instructor of Vocational Nursing, 1952

Registered Nurse, State of Texas

EDGAR BERLIN, Instructor of Industrial Supervision, 1958 B.A., LL.B., University of Texas

DON C. BLACK, Instructor of Pipefitting, 1958

WALTER J. BLANCHARD, Instructor of Industrial Supervision, 1956

HERMAN W. BLANTON, Instructor of Real Estate, 1959

WILBUR B. BICKLEY, Instructor of Appliance Repair, 1958

PAUL E. BRIMLOW, Instructor of Real Estate, 1958

MRS. RHODA BROCK, R.N., Instructor of Vocational Nursing, 1952
Registered Nurse, State of Texas

GILBERT E. BROOKE, Instructor of Industrial Purchasing, 1955

ROY BROWN, Instructor of Industrial Supervision, 1959

D. W. CAMPBELL, Instructor of Pipe Layout, 1959
Pipe Draftsman

GUS A. CARLSEN, Instructor of Machine Shop, 1946 I.E., Arlington State College

GEAROLD R. COPPINS, Instructor of Electricity, 1954

M. A. CORMIER, Instructor of Welding, 1956

TARLTON J. DAIGLE, Instructor of Electricity, 1951 B.S., Southwestern Louisiana Institute

HAROLD O. DANIELS, Instructor of Industrial Instruments, 1956

LINDY DENNIS, Instructor of Pipefitting, 1958

JOSEPH E. DE JEAN, Instructor of Advertising, 1958

B.A., Louisiana State University

WALLACE DOMINGUE, Instructor of Electricity, 1956

PERSHING DUGAS, Instructor of Plumbing, 1957

GEORGE DUNCAN, Instructor of Industrial Supervision, 1957

J. SAM EBANKS, Instructor of Insurance, 1957

Chartered Life Underwriter

CHARLES L. ELDRIDGE, Coordinator of Supervisor Training, 1956

B.S., M.Ed., Louisiana State University

DENIS M. FLUKER, Instructor of Retailing, 1958

ROGER F. FRENCH, Instructor of Bookkeeping, 1959

B.S., M.Ed., Southwest Texas State College

MAX G. GREINER, Instructor of Real Estate Finance, 1956 B.B.A., Texas A. & M. College

PHIL V. HALL, Instructor of Real Estate, 1951

WILLARD J. HALL, Instructor of Real Estate, 1955

FRED L. HANSCOM, Instructor of Industrial Supervision, 1954

RALPH E. HARDEN, Instructor of Industrial Supervision, 1955

WILLIAM HARTFORD, Coordinator of Trade Extension Training, 1947

ROBERT I. HAUGHT, Instructor of Blueprint Reading, 1949

B.S., Howard Payne College

G. W. HAYES, Instructor of Transportation, 1955

OSWALD J. HAYES, Coordinator of Apprentice Training, 1947

C. L. HENDERSON, Instructor of Related Subjects, 1951

B.S., Sam Houston State College

M.Ed., University of Houston

EDWIN H. HILL, Instructor of Estimating Building Costs, 1958

JOE HOLBERG, Instructor of Automotive Mechanics, 1960

GLENN HOLST, Instructor of Electricity, 1951

NORMAN JENSEN, Instructor of Carpentry, 1952

MRS. ANN C. KEEN, Instructor of Vocational Nursing, 1958

Registered Nurse, State of Texas

HOLLIS W. KEENAN, Instructor of Pipefitting, 1955

JOHN KELLEY, Instructor of Pipefitting, 1952

MERLE KELLY, Instructor of Transportation, 1958

B.B.A., M.B.A., University of Houston

Licensed ICC Practitioner

W. L. KELLY, Instructor of Estimating Building Costs, 1956

WALTER KENESON, Instructor of Electricity, 1956

WALTER L. KNIGHTEN, Instructor of Industrial Supervision, 1955 B.A., University of Texas

HENRY A. LAMPERT, JR., Instructor of Refrigeration, 1958 B.S., University of Houston

R. J. LAWRENCE, Instructor of Radio and Television, 1958

GAINES E. LEE, Instructor of Drafting, 1955

THOMAS R. LEWIS, Instructor of Mathematics, 1956

LOUIS LICHENSTEIN, Instructor of Small Engines, 1959

DAVID E. LOW, JR., Instructor of Electricity, 1955

SAM LUCIA, Instructor of Diesel Engines, 1954

BILLIE L. McLENDON, Instructor of Diesel Engines, 1949 B.S., M.Ed., University of Houston

GEORGE I. MARTIN, Instructor of Transportation, 1955 B.S., University of West Virginia

JOSEPH H. MANDRY, Instructor of Retailing, 1957

MONROE MAY, Instructor of Pipefitting, 1954

RICHARD F. MEYER, Instructor of Insurance, 1958

BUFORD F. MOORE, JR., Instructor of Oil & Gas Brokerage, 1960 B.S., University of Houston

PEGGY COLE MULLIN, Instructor of Retailing, 1953

B.A., University of Texas

ROBERT A. MURPHY, Instructor of Sheetmetal Work, 1948

ROBERT E. MYERS, Instructor of Plumbing, 1958

ARTHUR E. NALL, Instructor of Real Estate, 1948

FORREST NELSON, Instructor of Carpentry, 1948

RALPH H. NIX, Instructor of Pipefitting, 1950

A. R. NEUMANN, Instructor of Insurance, 1956

B.A., Rice Institute
C. J. PINKSTON, Instructor of Automotive Mechanics, 1959

C. A. PROCTOR, Instructor of Insurance, 1958

B.S., Rice Institute

HENRY RILEY, Instructor of Welding, 1957

JACK RILEY, Instructor of Electricity, 1950

NORMAN H. SANDERS, Instructor of Business Speech, 1956

B.A., M.A., Baylor University

J. C. SHANKLES, Instructor of Welding, 1952

CHARLES B. SMALLWOOD, Instructor of Commercial Law, 1957

TOM V. SMELKER, Instructor of Real Estate, 1958

B.B.A., University of Texas

FLOYD C. SMITH, Instructor of Investments, 1958 B.B.A., University of Texas

W. H. SMITH, Instructor of Automatic Controls, 1958

MAX K. SNIFFEN, Instructor of Industrial Supervision, 1953 B.A., Purdue University

SAMUEL L. SPARKS, Instructor of Retailing, 1960

RICHARD F. STEWART, Instructor of Consumer Finance, 1957

ELLIS THOMPSON, Instructor of Refrigeration, 1956

MAX V. TRENCK, Instructor of Industrial Supervision, 1949

AUBRY S. TUCKER, Instructor of Machine Shop, 1955

B.S., Arkansas A. & M. College

J. W. TUREK, Instructor of Dental Assisting, 1958

D.D.S., University of Texas

G. H. PERRY VAN ZANDT, Instructor of Industrial Supervision, 1954

CHARLES H. WEINBAUM, JR., Instructor of Insurance, 1955

B.S., Texas A. & M. College

Chartered Property Casualty Underwriters

PETER B. WELLS, Instructor of Taxation in Business, 1955

LL.B., Harvard University

CLIFFORD O. WILLIAMS, Instructor of Industrial Instruments, 1955

DOUGLAS WILLIAMS, Instructor of Insurance, 1955

WILLIAM E. WILSON, Instructor of Savings and Loan, 1957

B.A.A., University of Texas

WILBUR A. WOMACK, Instructor of Millwrighting, 1958

HUGH WRIGHT, Coordinator of Distributive Education, 1949

B.S., University of Houston

W. A. YANKIE, Instructor of Industrial Instruments, 1949
Refinery Instrument Technician

## **GENERAL INFORMATION**

## Location

Lamar School of Vocations is a part of Lamar State College of Technology, a state supported college 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 situated on an 85-acre tract facing the Beaumont-Port Arthur Highway in southeastern Beaumont, Texas.

The city of Beaumont has a population of approximately 125,000 with adequate schools, shopping districts, churches and transportation to satisfy the needs of a thriving industrial community.

### History

Lamar College was founded in 1923 by the South Park Independent School District as South Park Junior College, and it was operated under this name until 1932. Classes were conducted in the South Park High School Building and its student body was about 250.

In 1932, a separate plant and equipment were provided by the South Park Independent School District; the name changed to Lamar College; and several new policies were inaugurated which resulted in a rapid growth increasing the student enrollment to about 500.

In 1940, it became apparent that Lamar had reached the limit of its possible expansion under its existing set-up. Consequently, the Beaumont Young Men's Business League sponsored a successful election for the purpose of creating a Union Junior College District, voting bonds with which to construct a new Lamar plant, and electing a Board of Trustees to govern the College.

By authority of the Legislature and the Governor of the State of Texas, Lamar College became Lamar State College of Technology, a four-year co-educational college, on September 1, 1951

# 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**

In pursuance of the provisions of the act creating Lamar State College of Technology, the Board of Regents of the College has established the following objectives for the institution:

- 1. To offer courses leading to the degree of Bachelor of Science in various fields of engineering, science, management, business, health, social science, music and homemaking.
- 2. To offer terminal courses of less than four years duration leading directly to employment in various vocational, technical, and business fields.

- 3. To offer pre-professional training in various fields which may be transferred without loss of credit to other colleges and universities.
- 4. To offer courses in general education which will serve to prepare young men and women for the responsibilities of citizenship in a free society.
- 5. To offer courses and programs during the evening hours to meet the needs of adults.

# **Buildings and Grounds**

The Lamar plant consists of sixteen major buildings. They are: Liberal Arts, Auditorium, Biology-Geology, Business, Dining Hall, Anthony F. Lucas Engineering, McDonald Gymnasium, Home Economics, Library, Chemistry, Music, Engineering Annex, Vocations, Science, Student Union, and New Administration.

In addition, there are: Fine Arts Center, Athletic Field House, Campbell, Combs, Gray, and Morris Halls, three apartment buildings for married couples, health center, swimming pool, tennis courts, practice fields, President's Home, Superintendent of Grounds' Home, and miscellaneous storage buildings.

The entire plant is valued in excess of \$8,000,000.

# The Library

The Main Library is housed in a separate building located between the Liberal Arts and Science buildings. This building has reading rooms, a large reference room, a film supply room, microfilm reader room, and other auxiliary library facilities for students and faculty.

# Accreditation

All courses offered by the Lamar School of Vocations are accredited by the Texas Education Agency.

# **Intramural Sports Program**

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

# Bookstore

In order to reduce the cost of textbooks and 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 owner-ship.

All policies of the Bookstore are intended to provide textbooks and supplies at minimum cost.

### Cafeteria

The College owns and operates a cafeteria located on the campus. The cafeteria maintains a snack bar in the Union Gymnasium Building where sandwiches, soft drinks, and ice cream are available.

# Testing and Placement Service

The Testing and Placement Service is located in Room 108 of the Administration building and is open 7:45 a.m. to 5:00 p.m. Monday through Friday.

This Center provides testing service for those who want it. Those wishing to use this service pay a reasonable fee depending upon the testing program desired.

Placement service is also provided at this Center and is available to all students, faculty, and former students. Prospective employers are invited to call or write this Testing and Placement Center for assistance in securing qualified part-time or full-time personnel.

# Student Part-Time Work

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 Placement.

# **Student Activities**

Student life at the college includes many activities in addition to those connected with the courses of study. Some students are socially inclined and find an opportunity for the development of their interest in clubs and social affairs of the year. A wide assortment of opportunities of this nature is available. Others are interested in athletics and physical activities. For these there is a variety of 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.

# **Community Activities**

Lamar desires to serve its community by sponsoring such community activities as lecture series, musical and stage productions, athletic meets, and other similar activities. Every effort will be made to serve the community in this respect as much as possible during the coming year.

# **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.

# **Ex-Students Association**

An association of ex-students of Lamar was formed in the fall of 1943. Membership in this association is open to all former students, whether graduates or not. The Ex-Student Association promotes in every way possible the best interests of the College.

# **Entering Dates**

Courses and schedules have been arranged so that students may enter Lamar three times per year. The approximate entering dates are June 1, September 15 and February 1. The current College Calendar gives information regarding registration periods and exact entering dates.

# Student Handbook

A handbook is available for each student. It contains information on campus activities and covers such subjects as "How to Study," a listing of all social, service, honorary, and professional clubs and other similar information

# **SCHOLARSHIPS**

Many interested organizations and citizens annually give to deserving students a large number of scholarships which are awarded on a basis of merit. Generally, these scholarships are for tuition and fees only; however, in some cases they provide for textbooks and other expenses. Anyone interested in applying for a scholarship may obtain additional information concerning the program from the Chairman of the Scholarship Committee.

# Valedictorian 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 the \$50,00 tuition.

# Students with Physical Handicaps: (Vocational Rehabilitation)

The State Board of Vocational Education through the Vocational Re-

habilitation 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, 302 Walton Building, Austin, Texas. The Beaumont office is located at 444 Weiss Building.

### **Health Center**

The College maintains a Health Center for the use of students who become ill 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 a registered nurse.

It is not possible for the College to provide unlimited medical service. Special medicines, examinations, treatments, X-ray examinations and laboratory tests must be paid by the student. However, no charge is made for care in the Health Center up to ten days each semester. A small additional fee for drugs, supplies and special services may be charged students required to rmain in the Health Center for more than ten days.

The Health Center is conveniently located to all dormitories. It is adequately staffed and equipped for treating the acute illnesses and minor injuries that ordinarily are found among students. It is not intended that the Center will provide care for students requiring surgery or the services of specialists. In these latter cases, every effort will be made by the College physician or nurse in charge to notify the parents or guardians of the students' needs.

The College assumes no responsibility for continued medical care for students having chronic diseases. These students should arrange for the care of a private physician located in Beaumont or vicinity.

In the event the Health Center is filled to capacity, the College is not under obligation to provide hospital service elsewhere. However, College officials consider that the Health Center has sufficient beds to care for all normal needs

Students who are ill should report promptly to the Center for diagnosis and treatment. They will not be treated in the dormitory or in rooming houses. The College will take appropriate disciplinary action against students who refuse to report for medical advice when ill.

# GENERAL REGULATIONS

# Conditions of Admission

... Meeting requirements as outlined below are necessary for admission to Day-Trade Preparatory Courses:

- A minimum entrance age of 16 years is required of students applying for admission.
- 2. Evidence of graduation from an accredited high school.

- 3. Persons 21 years of age or over who have not graduated from an accredited high school may be admitted upon individual approval by the Director of The Lamar School of Vocations. A minimum age of 18 for discharged military personnel is acceptable.
- 4. Transfer from an accredited school of vocations.
- 5. All students must be of good moral character.

Meeting requirements as outlined below are necessary for admission to Trade Extension, Apprentice, Distributive Education and Supervisor Training Courses:

- 1. A minimum age of 18 years is required for admission.
- 2. Employed persons may enroll in classes in which the instruction given is confined to that which is supplementary to the daily employment of the workers enrolled. To be considered supplementary to the daily employment, the instruction must be such as will increase the skill or knowledge of the worker in the trade or industrial pursuit in which he is employed. This may improve his ability in the work that he is doing; help him to keep abreast of technological and economic changes in his occupation; or assist him to qualify for advancement in the field of work in which he is engaged.

An interpretation would indicate that these courses are not preparatory in character. They are not designed to train workers in a trade or occupation other than the one in which they are daily employed.

Admission to these classes is based upon a statement by the student which shall include, (1) the name and address of his employer,
 (2) his payroll designation, and (3) a brief description of the duties of his daily employment.

# **Course Numbering**

Semester of a course are numbered separately, and each number contains three figures. The first digit indicates the rank of the course; 1 means that it is for freshmen, 2 for sophomores, 7 for trade extension students and 8 for apprentice training students. The second figure indicates the number of semester hours credit. The third figure usually indicates the order in which the course is taken, and is selected by the department concerned.

The letter a, b, c, or d, following course numbers indicates one semester hour of credit in each case, and full credit for such numbered courses will be granted only when the series is complete. The letter A following a course number indicates the first half of the course, the letter B indicates the last half

Katigoria (1997), Albania (1997), Katigoria (1997)

# **Grading Systems**

The semester grade of a student in a specific course is based upon recitation, written exercises, both oral and written tests, and the final examination. The final examination has a value of one-third of the final grade and the proportionate value of the other factors is determined by the instructor in charge of the course.

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The four passing grades with the Grade Points awarded for each are listed below:

Grade	Description	Range	Gr. Pts. per	Sem. Hr.
Α	Excellent	90-100	3	
В	Good	80-89	· 2	
С .	Fair	70-79	1	
D	Passing	65-69	0	

Any grade below 65 is failing and is recorded as an F. A grade of F requires satisfactory repeating of a course before any credit is awarded.

The grade "Inc." (Incomplete) is a temporary grade. It indicates that the student has satisfactorily completed the course with the exception of a major quiz, other work, or the final examination. A grade of "Inc." is given only when the deficiency is due to authorized absence or other cause beyond the control of the student and when the work already completed has been of acceptable quality.

A semester grade of "Inc." must be removed before the end of the first month of the student's succeeding semester in the Lamar School of Vocations. A C average is required for graduation.

### **Grade Reports**

Mid-Semester Report: A preliminary report of the student's progress is sent to the parent or guardian approximately nine weeks after the beginning of each semester.

Semester Reports: A report of the student's work is sent directly to the parent or guardian at the conclusion of the semester.

Once a passing grade is made by a student, the grade cannot be raised without repeating the course.

# **Grade Points**

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

# Reports

Reports are sent out to parents and guardians at the end of each semester. Mid-semester reports are sent out by the Director of the Lamar School of Vocations to parents and guardians of students doing work below the passing grade (D). A failing grade reported at the mid-semester period represents the average grade to date of the student in the given course.

Students over 21, married or veterans may have grades sent directly to them if the Registrar is so notified.

# Honor List

At the end of each semester the Director'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. These lists are known as honor lists for the semester and are made out in order to give recognition to those students whose scholastic rank is high and to encourage all students to improve their scholastic standing.

The "Distinguished Student" list is made up of the "A" honor list plus those on the "B" honor list who have at least 4 A's on twelve or more semester hours of work and no grade lower than B.

## Class Attendance and Absences

- 1. Regular and punctual attendance in all classes and laboratories, as scheduled, is required.
- 2. An absentee permit will be granted when students represent the college in any approved activity.
- 3. During a semester a student may be absent from class without penalty according to the following schedule:
  - (1) Seven credit hour "shop" courses—5 absences.
  - (2) Five credit hour "theory" courses—5 absences.
  - (3) Four credit hour courses—4 absences.
  - (4) Three credit hour courses—3 absences.
  - (5) Two credit hour courses—2 absences.
  - (6) Three tardies will be considered as one absence.
  - (7) If one half of a class is missed it is to be considered as the equiva-
  - lent of one absence.
    4. Students may "walk" a class without penalty, if the instructor has
- not appeared in the classroom by the conclusion of a ten minute period beginning with the "tardy" bell. The "second" bell sginals the actual beginning of the class period.

  5. Students who are not in the room when the last bell rings will be
- 5. Students who are not in the room when the last bell rings will be counted as late. If a student misses more than half of the class, he is counted absent. Three late reports count as one absence.
- 6. Absences may be excused by the Director of the School of Vocations, in cases of illness, death in the family or for other very good reasons.

# **Changing Schedules**

No course may be added, changed or dropped without the permission of the Director of the School of Vocations. Usually a course may not be added after the first week of the semester (first 2 days of summer session). Likewise, section changes may not be made after a like period unless the change involves one instructor only. See college calendar.

# Withdrawals

A student wishing to withdraw for the remainder of a semester, or term, should fill out a "Request for Withdrawal" form in the Office of the School of Vocations after clearing all financial obligations, and re-

turning all uniforms, books, laboratory equipment and other materials to the point of original issue.

The director will then issue a Drop-Add-Withdrawal form in triplicate and distribute one copy each to the Registrar, and the Business Manager.

On application the Office of the Business Manager will return such fees as are returnable according to the schedule shown under the "Fees" section of this catalog. This return will be made only to the person withdrawing.

A student who leaves without an official withdrawal will receive a grade of "F" in all courses, and will forfeit all returnable fees. If the withdrawal is officially made, the student's record shows "Withdrawal" only except as shown under "Withdrawal to Enter Military Service."

# Withdrawal to Enter Military Service

A student who withdraws after 10 weeks of a semester to enter military service, will receive credit for all courses in which a grade of "C" or better is being made at time of withdrawal. A notation of "Drop" will be made for all courses in which the student is not passing at time of withdrawal.

The student must petition for granting of credit on the approved form and must enter military service within 15 days of withdrawal.

## Class Attendance Probation

Whenever a student accumulates an excessive number of absences and investigation indicates that at least some of these absences were avoidable, the student may be placed on Class Attendance Probation. If an additional avoidable absence occurs the student may be dropped from the rolls of the College. Instructors are expected to report promptly any absence of such a student.

## Scholastic Probation

A student not making acceptable scholastic progress may be placed on scholastic probation if such procedure seems advisable but if a student makes less than nine semester hours and nine grade points scholastic probation becomes automatic.

A student on scholastic probation must attend all classes without fail and must show seriousness of purpose at all times. Failure to do so is sufficient cause for dismissal.

A student may be removed from scholastic probation at the end of any semester if acceptable scholastic progress has been made during that semester.

# Disciplinary Probation

A student may be placed on disciplinary probation for unacceptable behavior at any time or place. The Dean of Men or the Dean of Women may
classify behavior as unacceptable and may set the period of probation subject
to the approval of the Dean. 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 Dean.

Possession or use of alcoholic liquors on the campus is forbidden by law and the guilty student is subject to immediate dismissal as well as criminal prosecution. Possession or use of such liquors at any college sponsored function is classified as unacceptable behavior.

# Scholastic Progress

- 1. Regular. A student is making regular scholastic progress when his cumulative record shows a grade point average of at least 1.0 on all courses taken provided that the semester hours are accumulated at a rate which will allow graduation in the usual allotted time for the training objective of the student.
- 2. Acceptable. A student not making regular scholastic progress may be making acceptable scholastic progress if the cumulative record shows reasonable evidence that the training objective will be reached in the normal number of semesters (supplemented by intervening summer sessions) remaining in his program of study.

# Registration Procedure

The first step in registration is to provide the School Director with an Application for Admission. Application forms are furnished by the Office of the School of Vocations.

After receipt of the application, the Director will notify applicant of date, hour and place for registration. Prompt appearance at the appointed time and place will accelerate the registration procedure for the student. Advisors, program makers, and detailed directions for completion of registration will be provided.

It is strongly recommended that the new student consult the Director of the school before beginning of the semester so that an appropriate program of study may be planned.

Registration is completed by payment of tuition and fees.

Students who expect to attend under the Veterans' Benefit Plan should secure a certificate of eligibility from the Veterans' Administration before registration. The Veterans' Office of Lamar or the local Veterans' Administration Office will help in securing this certificate.

No one may register after the last date for registration for credit shown on the official calendar.

# Admission to Class

The only way to become a member of a class is to register for it through the regular registration procedure. After fees are paid an admission card for each lecture and laboratory class is issued to the student by the Office of the Business Manager and these cards must be used as tickets of admission to the courses for which the student is registered. The instructor's class roll is made up from these admission cards.

No admission will be permitted nor grade given unless the instructor has an official class admission card for the student.

# 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 enters or of the year

at he end of which he graduates, or that of any intervening catalog. The catalog selected is subject to the approval of the Director of the Division.

The catalog year shall be considered as beginning with the Long Session in September. 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 four 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 institute and 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.

# Minimum Class Enrollment

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

## **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.

# Classification of Students

Students are classified as Freshmen, Sophomores, Unclassified, and Special. For the purpose of determining eligibility to hold certain offices and for other similar reasons, students are classified as follows:

Freshman: A regularly enrolled student with all entrance requirements met who has completed fewer than thirty semester hours.

Sophomor: A regularly enrolled student who has completed a minimum of thirty hours with thirty grade points.

Unclassified: Those students who do not wish to work toward a certificate or who do not meet entrance requirements.

Special Students: Those who do not expect to earn a certificate from Lamar. Special students are required to meet all entrance requirements.

# Full Time Students

A student taking twelve or more semester hours, is classified as a full time student.

### Change of Address

A change in home or Beaumont address should be immediately reported to the Office of the Director.

# Discipline

The College authorities assume that any student eligible for admission to the College is familiar enough with the ordinary rules of conduct for ladies and gentlemen to need no definite disciplinary regulations. The College reserves the right to place on disciplinary probation or to dismiss any student at any time for sufficient cause.

Any activity sponsored by any group of Lamar students recognized as such must conform to accepted behavior requirements of the College. The officers of the particular group are held responsible for the behavior of the participants in the sponsored activity. Failure to maintain this standard of behavior may subject the group to suspension of all social activities for as much as one long session.

# Eligibility for Extra-Curricular Activities

An extra-curricular activity 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 extra-curricular activity provided such student has a grade point average of at least 1 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.

# Eligibility for Intercollegiate Activities

A high school graduate who has been admitted as a regular student and who is registered for a minimum of twelve semester hours is eligible for intercollegiate athletics in the Lone Star Conference of which Lamar is a member.

Further competition in intercollegiate athletics depends upon the student's ability to carry a minimum of twelve semester hours and to pass at least 9 semester hours with at least 9 grade points.

For further details on eligibility for intercollegiate athletics the student is directed to make inquiry of the Director of Athletics.

# Organization of Clubs

Any group of Lamar students may organize a club on the campus if the objectives of the club are worthwhile.

In order to have faculty approval, clubs must meet the following requirements:

- 1. Membership must be limited to Lamar students.
- 2. Objectives must be worthwhile.
- 3. Must have a faculty sponsor.
- 4. Official list of officers and sponsor for the current semester must be on file in the Dean's Office.

### Official Summons

An official summons from any administrative office, Division Director, or Department Head of the College 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.

# 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 Criminal Statutes in the State of Texas.

## Telephone Service

Public telephone pay stations have been installed in the Administration, Engineering, Home Economics, Union and Vocations Buildings. Students are expected to use these telephones for their personal calls. Office telephones are for the use of faculty and administrative personnel only. Incoming telephone calls for students are transmitted to the students between classes only, except in cases of emergency.

# STUDENT ACTIVITIES

# Student Government

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

# Newspaper

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

# College Annual

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

# Student Handbook

The Cardinal Call is a handbook published primarily for the benefit of new students. Pertinent information concerning the college and student activities is given in this publication.

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# **Artist Course**

The Artist Course Committee is made up of students and faculty. The committee annually arranges for the presentation in the college auditorium of a number of programs by professional artists and entertainers.

# Student Union

The Student Union, located in the front part of the Union Gymnasium

Building, serves as a meeting place for students between classes and as a place for students to hold their parties and other social functions. Facilities are available for serving refreshments and for carrying out a complete program of college and social life.

# **Student Organizations**

The 34 student organizations currently active on the campus offer student membership in one or more service, professional, religious, social or mutual interest clubs.

### 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 to exceed total fees, should be made payable to Lamar State College of Technology and will be accepted subject to final payment.

# **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.

# **Fees Summary**

Resident Students (Texas)

Semes Hours		Mat. Fee	S.S. Fee	Bldg. Use Fee	Property Deposit	Total			
12	50.00	3.00	15.50	8.00	7.00	83.50 -	1	Lab	fee
11	47.00	3.00	15.50	8.00	7.00	80.50	٠,,	-,,,	"
10	43.00	3.00	15.50	8.00	7.00	76.50	,,	_ ,,	, ,,
9	39.00	3.00	15.50	8.00	7.00	72.50	"	<b>"</b> ".	,,
8	35.00	3.00	15.50	8.00	7.00	68.50	,,	,,	,,
7	31.00	1.10	5.40	4.00	4.00	45.50	,,	,,	,,
6	27.00	1.10	5.40	4.00	4.00	41.50	"	,,	,,
5	23.00	1.10	5.40	4.00	4.00	37.50	,,	,,	** .
4	19.00	1.10	5.40	4.00	4.00	33.50	,,	. ,,	,,
3 or 1	ess 15.00	1.10	5.40	4.00	4.00	29.50	,,	"、	,,

Non-resident Students (out of Texas)

Semester Hours	Tuition	Mat. Fee	S.S. Fee	Bidg. Use Fee	Property Deposit	Total		• , .	
12	200.00	3.00	15.50	8.00	7.00	233.50	+	Lab	fee
11	183.00	3.00	15.50	8.00		216.50	,,		, ,,
10	167.00	3.00	15.50	8.00	7.00	200.50	,,,	,,	**
9	150.00	3.00	15.50	8.00	7.00	183.50	99.	**	.**
8	133.00	3.00	15.50	8.00	7.00	166.50	99	. ,,	"
7	117.00	1.10	5.40	4.00	4.00	131.50	,,	,,	"
6	100.00	1.10	5.40	4.00	4.00	114.50	***	99	**
5	83.00	1.10	5.40	4.00	4.00	97.50	٠,,	,,'	· , · · ·
4	66.00	1.10	5.40	4.00	4.00	80.50	,,	<b>,,</b> .	,,
3 or less	50.00	1.10	5.40	4.00	4.00	64.50	**	"	"

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

# **Laboratory Fees**

The laboratory fee in all laboratory courses is \$4.00 per semester

## Miscellaneous Fees

Certificate of Completion	4.00
Late Registration	
Returned Checks	2.00
Transcript Fee	.50

# Fines 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.

# 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.

# Exemption 1. Scholarships to High School Honor Graduates

The highest ranking student in the graduating classes of fully affiliated Texas high schools will be entitled to a scholarship at Lamar State College of Technology. The scholarship is valued at \$50.00 and must be utilized during the long session immediately following graduation.

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

Men and women who are citizens of Texas and who were inducted in the Armed Forces in Texas 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 exempted from payment of tuition 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.

# Refund of Fees

Any student withdrawing officially will receive a refund on his registration and service fee according to the following schedule:

### Long Session

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

Application for refund must be made to the Business Manager by the student after he has officially withdrawn, but not later than the end of the current semester.

It takes about 60 days to process these refunds.

## HOUSING

# **Board and Room**

Students at Lamar State College of Technology are required to live in one of the college dormitories and to take their meals in one of the college dining halls.

The only exceptions to this regulation are:

- (1) Students who live with parents or relatives.
- (2) Married students who live with their wives and husbands.
- (3) Students whose health conditions demand special services.
- (4) Students whose part-time employment conflicts with the College meal service hours.
- (5) Students for whom no housing is available when all dormitories have been filled. In such cases these students will be permitted to live in approved housing off campus until the beginning of a semester in which dormitory space becomes available.

The Dean of Men and the Dean of Women will review all requests for permission to live off the campus. The College reserves the right to require campus residence of any student.

Dormitories for men and women were completed in 1954, 1955, 1958 and 1959. These ultra-modern halls are three stories high, each floor housing 36 students, organized into units for purposes of self-government, intramural athletics and social life.

Students live in suites for six. Each suite consists of two large bedrooms, two study rooms and bath. Each room has a dial telephone for intercampus and Beaumont exchange calls.

# Costs

Charges for board and room for the nine month term is \$620. Charges for a full semester may be paid at the beginning of school, or for the convenience of those who desire a monthly plan, payments may be made as follows:

September\$70.00	February\$75.00
October 70.00	March 75.00
November 70.00	April 75.00
December 40.00	May 75.00
January 70.00	,
First Semester\$320.00	Second Semester\$300.00

If the monthly pay plan is followed, payments must be made on the first day of each semester and between the first and fifth of all other months.

When students move into a dormitory, they automatically enter into a contract for room and board for the fall and spring semesters, unless they officially withdraw from college or obtain special permission from the Dean of Student Life to live elsewhere.

No refunds of September or February payments will be made to students who withdraw from the dormitory systems. Students who are given official permission to withdraw during other months may obtain pro-rata refunds for meal tickets after presenting proper withdrawal documents to the Comptroller. No refunds will be made on room rent for a partial month.

# Summer Term

Charges for board and room for each six-week summer term are \$112.50. This is payable at time of admission to the dormitory.

Some of the rooms are air-conditioned for the summer months. The extra charges for air-conditioned rooms for each six-week period is as follows: Two student rooms add \$10 per student; Three student rooms add \$7 per student.

# Changes in Rates

The College reserves the right to change room and board rates with ten days notice.

# Reservations

To reserve a room in the dormitory, direct a request to the Dean of Student Life, Lamar State College of Technology, Beaumont, Texas. A check for \$20 must accompany the reservation request. Room reservations may be cancelled with full refund until three weeks prior to the first day of classes. No refund will be made on cancellations received after this date. Dormitory residents will be refunded deposits, less any breakage charges, at the end of the year. If a student moves from a dormitory at any time other than the end of the semester, the \$20 deposit will not be refunded.

All unclaimed rooms in the dormitory system will be declared vacant and the \$20 deposit will be forfeited at 6:00 p.m. on the last day of registration unless a student gives the Dean of Student Life written instructions to hold the room for a longer period.

# For Married Couples

Located on the campus and owned and operated by the College are a limited number of accommodations for married couples who have no children.

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Three new modern fire proof, three-storied buildings, each accommodating 35 couples, are now available. Each apartment consists of kitchenette, bath, 2 clothes closets and combination living room-bedroom. These apartments are completely furnished with fold-away beds, living room furniture, dinette set, kitchen stove, refrigerator, and window fan. There is also a central laundry with automatic washers and dryers.

These apartments rent for \$585 for the nine months period. This rental includes all utilities except telephones. Renters may make direct arrangements with the telephone company if they desire telephone service.

A reserved parking space goes with each apartment and is leased to the renter at \$6 for the nine months period.

For the convenience of students who wish to pay rentals by the month, the charges may be arranged in nine equal payments of \$65 each.

For information regarding these apartments, write the Business Manager. A \$20 deposit is required to reserve an apartment. For those reserving apartments for the fall term, the first payment of \$65 is due by September 5. If this first payment is not received by September 5, the apartment will not be held and the deposit will be forfeited.

Some of the apartments can be air-conditioned from April 15 to October 15 upon request of the occupant. An additional \$20 per month is charged for this service during the months of operation.

# SCHOOL OF VOCATIONS

The School of Vocations offers a curriculum of vocational subjects through two general programs: (1) Trade Preparatory Courses, and (2) the Extended Day Program, for persons desiring to attend a part-time program of study.

Trade Preparatory Courses are offered in the following departments: (1) Diesel Engines, (2) Electricity and Electronics, (3) Machine Shop, (4) Refrigeration, and Air-Conditioning (5) Vocational Nursing, and (6) Welding. 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 evening courses 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 five broad classifications as follows: (1) Apprentice Training, for those employed as apprentices in the skilled trades, (2) Distributive Education, consisting of classes for those engaged in retailing, wholesaling or service occupations, (3) Trade Extension or courses for tradesmen of journeyman grade, (4) Courses for persons employed in Industrial Supervision and Leadership and (5) Conferences and Short Courses.

# TRADE PREPARATORY COURSES

Programs of Study
Full-time Trade Preparatory

# **DIESEL ENGINES**

A two year course of study leading to a Certificate of Completion in Diesel Engines and employment as a diesel mechanic or in one of the many occupations dealing with the selling, installation, operation, maintenance and repairing of diesel engines.

First Year	Second Year
Diesel Engines 171-17214	Diesel Engines 271-27214
Diesel Engines 151-15210	Diesel Engines 251-25210
Math. 131-132 6	Math. 231-232 6
Basic Com. 121-122 4	Job Relations 221-222 4
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# INDUSTRIAL ELECTRICITY

A two year course of study leading to a Certificate of Completion and employment as an electrician or in one of the allied trades or occupations.

First Year	Second Year
Electricity 171-17214	Electricity 271-27214
Electricity 151-15210	Electricity 251-25210
Math. 131-132 6	Math. 231-232 6
Basic Com. 121-122 4	Job Relations 221-222 4
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# MACHINE SHOP PRACTICE

A two-year course of study leading to a Certificate of Completion in Machine Shop Practices and employment in the trade or an allied trade or occupation.

First Year	Second Year
Machine Shop 171-17214	Mach. Shop 271-27214
Mach. Shop 151-15210	Mach. Shop 251-25210
Math. 131-132 6	Math. 231-232 6
Basic Com. 121-122 4	Job Relations 221-222 4
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# REFRIGERATION AND AIR-CONDITIONING

A two-year course of study leading to a Certificate of Completion and employment as a refrigeration serviceman or in one of the allied trades or occupations dealing with the selling or servicing of refrigeration equipment, parts and supplies.

	Second Year
Refrigeration 171-17214	Refrigeration 271-27214
Refrigeration 151-15210	Refrigeration 251-25210
Math. 131-132 6	Math. 231-232 6
Basic Com. 121-122 4	Job Relations 221-222 4
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# WELDING

A two-year course of study leading to a Certificate of Completion in Welding and employment as a welder or in a trade or occupation requiring knowledge of welding and welding equipment and supplies.

First Year	Second Year
Welding 171-17214	Second Year Welding 271-27214
Welding 151-15210	Welding 251-25210
Math. 131-132 6	Math. 231-232 6
Basic Com. 121-122 4	Job Relations 221-222 4
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# VOCATIONAL NURSING

The objective of this program of study is to prepare the student for the examination of the State Board of Vocational Nursing. Passing the State Board examination will entitle the person to use the title Licensed Vocational Nurse.

The vocational nursing program at Lamar Tech comprises four months of intensive classroom and laboratory study and eight months of study in the patient situation in the hospitals that are affiliated with the vocational nursing program. The student is allow 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 hospital for the twelve months training period.

Short unit courses are also offered for the employed vocational nurse. These courses are usually offered at night for the convenience of the employed vocational nurse.

First Semester	Second Semester
131—Professional Adjustment	172—Vocational Nursing Arts
141—Nutrition	182—Vocational Nursing Practices
151—Vocational Nursing	Third Semester
171—Vocational Nursing Arts	173—Vocational Nursing Arts
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# COURSE DESCRIPTIONS

Basic Communications 121. 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. Credit: 2 semester hours.

Basic Communications 122. 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. Credit: 2 semester hours.

Diesel Engines 151. A study of the diesel cycle, its advantages and applications. The basic problems of operations and the design and construction of the diesel are studied. Credit: 5 semester hours.

Diesel Engines 152. A basic study of the maintenance and repair problems of the diesel engine. The checking of bearing clearances and the installation of piston rings is stressed. Prerequisite: Diesel Engines 151. Credit: 5 semester hours.

Diesel Engines 251. A comprehensive study of diesel fuels and lubricating oils. The electrical and gasoline starting systems are also stressed. Prerequisite: Diesel Engines 152. Credit: 5 semester hours.

Diesel Engines 252. This course provides a study of fuel injection systems, engine tune-up and trouble shooting. Prerequisite: Diesel Engines 251. Credit: 5 semester hours.

Diesel Engines 171. 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. Credit: 7 semester hours.

Diesel Engines 172. 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: Diesel Engines 171. Credit: 7 semester hours.

Diesel Engines 271. 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 this course. Prerequisite: Diesel Engines 172. Credit: 7 semester hours.

Diesel Engines 272. The final course in a series of four shop courses on the diesel engine. This one will stress the servicing and repairing of fuel injector and governors, the tune-up of the engine and the diagnosing of engine troubles. Prerequisite: Diesel Engines 271. Credit: 7 semester hours.

Electricity 151. A study of the basic laws and fundamental theories of electricity, including series and parallel circuits, power, resistance,

line drop, efficiency, illumination and magnetism. Credit: 5 semester hours.

Electricity 152. Electromagnetism and conductor calculations will serve as an introduction to a thorough study of direct current motors, generators and control equipment including distribution systems. Prerequisite: Electricity 151. Credit: 5 semester hours.

Electricity 251. This course of study covers alternating current and its application and use in A. C. motors, alternators and control equipment, both single and polyphase. Transformers and connections are thoroughly studied. Prerequisite: Electricity 152. Credit: 5 semester hours.

Electricity 252. The application of theory to practical work on meters and instruments as used in the calculation of power circuits and power factor. Transformer windings, AC control circuits, electronic theory and practices are covered. Prerequisite: Electricity 251. Credit: 5 semester hours.

Electricity 171. This course is designed to familiarize the student with the tools and materials of the electrical trade as well as the basic shop skills. Lighting and signal wiring is practiced and proper safety practices in handling electricity are emphasized. Credit: 7 semester hours.

Electricity 172. All types of modern residential and commercial wiring systems are used in this course and shop methods of testing, repairing and maintaining electrical appliance and equipment are practiced. Prerequisite: Electricity 171. Credit: 7 semester hours.

Electricity 271. Diagnosis of motor and control equipment will be practiced here and the rewinding, repairing of motors, coils and transformers will from the major skills developed in this course. Prerequisite: Electricity 172. Credit: 7 semester hours.

Electricity 272. Practice in the modern installation, testing, repairing and maintenance of polyphase motors, controls, neon signs and electric meters. Emphasis is placed on commercial electronic circuits and control devices. Prerequisite: Electricity 271. Credit: 7 semester hours.

Job Relations 221. A course designed 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. Credit: 2 semester hours.

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

Machine Shop 151. 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. Credit: 5 semester hours.

Machine Shop 152. 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: Machine Shop 151. Credit: 5 semester hours.

Machine Shop 251: A detailed study of lathe and bench work and the details of the various operations. The progressive study of blueprint reading and sketching will be continued. Prerequisite: Machine Shop 152. Credit: 5 semester hours.

Machine Shop 252. A more detailed study 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: Machine Shop 251. Credit: 5 semester hours.

Machine Shop 171. The first of 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. Credit: 7 semester hours.

Machine Shop 172. The objective of this course is the developing 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: Machine Shop 171. Credit: 7 semester hours.

Machine Shop 271. 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: Machine Shop 172. Credit: 7 semester hours.

Machine Shop 272. Machine shop jobs and operations requiring the student to work to close tolerances is done in this course. Tool and cutter grinding and heat treatment of steel will be emphasized. Prerequisite: Machine Shop 271. Credit: 7 semester hours.

Mathematics 131. This course provides a study of addition, subtraction, multiplication and division of common fractions and decimals. Percentage, ratio and proportion are also included. Credit: 3 semester hours.

Mathematics 132. Area of surfaces, squares, rectangles, triangles, hexagons, octagons, ring sections, etc. Square root of numbers is also a part of the course. Prerequisite: Mathematics 131. Credit: 3 semester hours.

Mathematics 231. 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: Mathematics 132. Credit: 3 semester hours.

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

Refrigeration 151. A study of the basic laws and fundamental theories of mechanical refrigeration and air-conditioning. This course will also include a

thorough study of the construction and operating principles of compressors. Credit: 5 semester hours.

**Refrigeration 152.** Liquid control valves and motor controls are studied. Application to various types of refrigeration and air-conditioning equipment is studied. Prerequisite: Refrigeration 151. Credit: 5 semester hours.

Refrigeration 251. This course includes a study of the fundamental thermo-dynamics that are basic to a thorough knowledge of refrigeration and air-conditioning. Prerequisite: Refrigeration 152. Credit: 5 semester hours.

Refrigeration 252. Modern practices in installation, checking, maintaining, and repairing domestic and commercial refrigeration and air-conditioning equipment. Prerequisite: Refrigeration 251. Credit: 5 semester hours.

Refrigeration 171. This course is designed to familiarize the student with the tools and supplies of the trade of the refrigeration and air-conditioning repairman. Cleaning, disassembly and assembly of compressors and other equipment form a large part of this course. Credit: 7 semester hours.

Refrigeration 172. Checking, installing, and repairing of various liquid control valves and motor controls are studied. Disassembly and assembly of refrigeration and air-conditioning equipment is continued. Cutting, bending, flaring of tubing using conventional tools and methods. Soft soldering and silver soldering are also taught. Prerequisite: Refrigeration 171. Credit: 7 semester hours.

Refrigeration 271. The student will disassemble and assemble complete refrigeration and air-conditioning systems. Skill will be attained in such operations as evacuating the entire system and drying, using various refrigerants charging a system, checking refrigerative action of units, removing refrigerant and purging air. Prerequisite: Refrigeration 172. Credit: 7 semester hours.

Refrigeration 272. An advanced course in the installation, checking, maintenance and repairing of refrigeration and air-conditioning equipment. Emphasis is placed on diagnosing and correcting equipment failures. Prerequisite: Refrigeration 271. Credit: 7 semester hours.

Vocational Nursing 131. Nursing history and ethics are studied with an objective of fitting the vocational nurse into the professional team. Credit: 3 semester hours.

Vocational Nursing 141. Nutritional needs and methods of feeding the sick. Credit: 4 semester hours.

Vocational Nursing 151. A study of pediatric, obstetrical, medical and surgical nursing and caring for the chronically ill. Credit: 5 semester hours.

Vocational Nursing Arts 171: Basic procedure methods for caring for the sick. Credit: 7 semester hours.

Vocational Nursing Arts 172. Applying nursing arts to patient's needs. Credit: 7 semester hours.

Vocational Nursing Arts 173. Clinical application of nursing arts to patient's needs. Credit: 7 semester hours.

Vocational Nursing Practices 182. Consists of 40 hours per week of supervised vocational nursing practice in affiliated hospitals. Credit: 8 semester hours.

Vocational Nursing Practices 183. Consists of 40 hours per week of supervised vocational nursing practice in affiliated hospitals. Credit: 8 semester hours.

Welding 151. 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. Credit: 5 semester hours.

Welding 152. The study of tools, materials and processes as related to welding is continued. Layout work will be stressed in this course. Prerequisite: Welding 151. Credit: 5 semester hours.

Welding 251. The heliarc process of welding and its application to various metals will be studied. Prerequisite: Welding 152. Credit: 5 semester hours.

Welding 252. Advanced layout work on plate and pipe with further study of the application of the metallurgy of welding. Prerequisite: Welding 251. Credit: 5 semester hours.

Welding 171. 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. Credit: 7 semester hours.

Welding 172. Pipe welding will be added to the continued practice on plate. Use of the "roundabout" in cutting pipe. The student will weld T's, Y's, reducers, flanges, etc. Acetylene welding on various metals and alloys will be done. Prerequisite: Welding 171. Credit: 7 semester hours.

Welding 271. Continuation of practice in welding ferrous metals. The heliarc process will be introduced with limited practice in welding aluminum and other alloys. Prerequisite: Welding 172. Credit: 7 semester hours.

Welding 272. Continuation of practice in the welding of metals by the heliarc process. Extensive practice in pipe welding will also be provided. Prerequisite: Welding 271. Credit: 7 semester hours.

## APPRENTICE TRAINING

Related Training Courses for Apprentices: These courses are planned and operated to provide the apprentice, in the various trades, with an opportunity to complete the 144 clock hours of related study per year as required by the apprenticeship agreement. The student will study the 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 to his on-the-job training. Each numbered course meets for 72 clock hours and carries 4 semester hours of credit. A sufficient number of courses will be

planned and offered to provide the apprentice with the opportunity to attend classes 144 hours per year for the full term of his apprenticeship.

All courses offered in this department are listed below:

Carpentry 841, 842, 843, 844, 845, 846, 847, 848.

Electricity 841, 842, 843, 844, 845, 846, 847, 848.

Machine Shop 841, 842, 843, 844, 845, 846, 847, 848.

Millwright 841, 842, 843, 844, 845, Welding 741, Machine Shop 151, 152.

Pipefitting 841, 842, 843, 844, 845, 846, 847, 848, Welding 741, 742.

Plumbing, 841, 842, 843, 844, 845, 846, 847, 848, 849, Welding 741.

Sheetmetal Work 841, 842, 843, 844, 845, 846, 847, 848.

Carpentry 841—An orientation to the carpentry trade. Ethics and history of the trade. Credit: 4 semester hours.

Carpentry 842-Basic tools, their care and use. Credit: 4 semester hours.

Carpentry 843—Types and selection of materials used by carpenters. Credit: 4 semester hours.

Carpentry 844—Reinforced concrete slabs and foundation layouts. Builders mathematics involved in foundation work. Credit: 4 semester hours.

Carpentry 845—Roof framing and fabrication, Various problems in roof work are solved. Credit: 4 semester hours.

Carpentry 846—Interior finish and trim including floors, cabinets and built-ins. Credit: 4 semester hours.

Carpentry 847—Blueprint reading and sketching. Specifications, contracts and local building codes are covered. Credit: 4 semester hours.

Carpentry 848—Estimating job costs and quantities. Taxes, insurance, working problems and safety are discussed. Credit: 4 semester hours.

Electricity 841—Introduction to apprenticeship. The basic laws and theories of electricity, electrical units of measurements, Ohm's law and simple circuits are studied. Credit: 4 semester hours.

Electricity 842—Batteries and electrolytic action, magnets and magnetism, and current induction. The tools and materials of the trade are studied. Credit: 4 semester hours.

Electricity 843—Installation of generators, motors and lighting circuits. Credit: 4 semester hours.

Electricity 844—Measuring instruments and theories of magnetic and electrical circuits. Vectors and phase relationships in AC circuits are studied. Credit: 4 semester hours.

Electricity 845—Characteristics of AC circuits, inductance, reactance, capacitance and power factor. Credit: 4 semester hours.

Electricity 846—Types, service and Code requirements of transformers. Basic electronics and AC motor controls. Credit: 4 semester hours.

Electricity 847—Electrical blueprint reading and sketching. Credit: 4 semester hours.

**Electricity 848**—City, State and National Electrical codes and laws. Credit: 4 semester hours.

Machine Shop 841-842—A study of the hand and machine tools of the modern machine shop. This course will include blueprint reading and shop sketching. Credit: 4 semester hours for each numbered course.

Machine Shop 843-844—Blueprint reading and sketching will be continued. Set-ups for various jobs will be studied. Credit: 4 semester hours for each numbered course.

Machine Shop 845-846—The progressive study of blueprint reading and sketching will be continued. A detailed study of the operations of the basic machines will be made. Credit: 4 semester hours for each numbered course.

Machine Shop 847-484—A study will be made of the basic metallurgy, a continuation of blueprints and sketching. The special machines are also studied. Credit: 4 semester hours for each numbered course.

Millwright 841—Terminology of the millwright's trade. Hand tools and their proper care. Credit: 4 semester hours.

Millwright 842—Use of precision tools. Micrometers, precision levels and dial indicators. Credit: 4 semester hours.

Millwright 843—Machine trade blueprint reading and trade mathematics. Credit: 4 semester hours.

Millwright 844—Setting and alignment of pumps, motors and conveyor systems. Special shaft work will be studied. Credit: 4 semester hours.

Millwright 845—Shop sketching, advanced machine trade blueprint reading and trade mathematics. Credit: 4 semester hours.

Pipefitting 841—Orientation, history and ethics of the pipefitting trade. Measuring tools and trade math. Credit: 4 semester hours.

Pipefitting 842—Trade terminology of tools and materials. Proper use and care of holding, cutting and threading tools for pipe. Credit: 4 semester hours.

Pipefitting 843—Trade mathematics, offset problems and various solutions. Credit: 4 semester hours.

Pipefitting 844—Trade mathematics, areas, pressures, volumes, densities and specific gravity. Credit: 4 semester hours.

Pipefitting 845—Rigging and safety. Knots, hitches, cables and splices.

Ladders and scaffolding. Credit: 4 semester hours.

Pipefitting 846—Industrial blueprint reading. Material take-off and specifications. Credit: 4 semester hours.

Pipefitting 847—Sketching for fabrication and erection. Credit: 4 semester hours.

Pipefitting 848—Advanced blueprint reading and sketching. Credit: 4 semester hours.

Pipefitting 849—Study of refrigeration and air conditioning piping and service. Credit: 4 semester hours.

Plumbing 841—History, ethics, and laws pertaining to the plumbing trade. Credit: 4 semester hours.

Plumbing 842—A study of the tools and materials used in plumbing. Credit: 4 semester hours.

Plumbing 843—Sketching and estimating for plumbing systems. Credit: 4 semester hours.

Plumbing 844—Blueprint study and "take-off" problems. Credit: 4 semester hours.

Plumbing 845—Mathematics of the plumbing trade. Credit: 4 semester hours.

Plumbing 846—Problems pertaining to lead and soldering as found in the plumbing trade. Credit: 4 semester hours.

Plumbing 847—Installation of cast iron, soil and vent lines. Credit: 4 semester hours.

Plumbing 848—Problems in designing plumbing systems. Credit: 4 semester hours.

Plumbing 849—A study of the 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. Credit: 4 semester hours.

Sheetmetal 841—Orientation to the trade, trade mathematics and simple geometric construction. Credit: 4 semester hours.

Sheetmetal 842—Parallel line developments, tools, machines and materials. Credit: 4 semester hours.

Sheetmetal 843—Job relations and safe practices. Geometric drawing and development of simple patterns. Credit: 4 semester hours.

Sheetmetal 844—Development of cones and pyramids using radial line layouts. Power tools, rigging and fastening devices. Credit: 4 semester hours.

Sheetmetal 845—Trade mathematics, symbols, formulas, graphs and right triangle formulas. Credit: 4 semester hours.

Sheetmetal 846—Use of triangulation in laying out irregular forms. Credit:

Sheetmetal 847—Sheetmetal blueprint reading and sketching. Credit: 4 semester hours.

Sheetmetal 848—Advanced pattern drafting and short methods. Building codes and laws. Credit: 4 semester hours.

#### DISTRIBUTIVE EDUCATION

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

- D. Edu. 121-Techniques of professional selling. Credit: 2 semester hours.
- $\mathbf{D.}$  Edu. 122—Techniques of effective letter writing. Credit: 2 semester hours.
  - D. Edu. 123-Public Relations in business. Credit: 2 semester hours.
- D. Edu. 124—Estimating building costs in new home construction. Credit: 2 semester hours.
  - D. Edu. 125—Business record keeping. Credit: 2 semester hours.
- D. Edu. 126—Analyzing material for new home construction. Credit: 2 semester hours.
  - D. Edu. 127-Human relations in business. Credit: 2 semester hours.
  - D. Edu. 128-Modern Fabrics. Credit: 2 semester hours.
  - D. Edu. 129-Techniques of advertising. Credit: 2 semester hours.
  - D. Edu. 221-Commercial Law. Credit: 2 semseter hours.
- D. Edu. 222—Obligations and rights under legal agreement. Credit: 2 semester hours.
- D. Edu. 223—A course in speech to assist the business person in vocabulary building, diction, and voice improvement. Credit: 2 semester hours.
- D. Edu. 224—Procedures for the industrial purchasing agent. Credit: 2 semester hours.
- D. Edu. 225—Interior decoration for salespersons. Credit: 2 semester hours.
- D. Edu. 226—A problem course in interior decoration for salespeople. Prerequisite: D. Edu. 225. Credit: 2 semester hours.
  - D. Edu. 227—Federal tax problems in business. Credit: 2 semester hours.
- D. Edu. 228—Credit procedures in a retail establishment. Credit: 2 semester hours.
- D. Edu. 229—Procedures and practices in consumer finance. Credit: 2 semester hours.
- D. Edu. 321—Service station operation and management. Credit: 2 semester hours.

- D. Edu. 322—Automotive service operation and management. Credit: 2 semester hours.
- D. Edu. 323—An advanced study of purchasing procedure used by the industrial purchasing agent. Credit: 2 semester hours.
- **D. Edu. 324**—Display of merchandise with emphasis on the preparation of show cards and other advertising materials. Credit: 2 semester hours.
- **D. Edu. 325**—The techniques of preparing business and technical reports. Including collecting, organizing, preparing, and documenting report materials. Credit: 2 semester hours.
  - D. Edu. 326-Personnel management. Credit: 2 semester hours.
- D. Edu. 327—Basic principles of sound investments. Credit: 2 semester hours.
  - D. Edu. 328-Business English. Credit: 2 semester hours.
  - D. Edu. 329-Building material merchandising. Credit: 2 semester hours.
  - D. Edu. 421-Consumer finance management. Credit: 2 semester hours.
- $\boldsymbol{D}.$  Edu. 422—Beauty Shop operation and management. Credit: 2 semester hours.
- D. Edu. 423—The economic growth and recent trends in business finance. Credit: 2 semester hours.
  - D. Edu. 424—Sales management. Credit: 2 semester hours.
  - D. Edu. 425-A study of personal finance. Credit: 2 semester hours.
- D. Edu. 426—Procedures in the operation of PBX boards. Credit: 2 semester hours.

The following study courses lead to the Insurance Institute Certificate. These courses are set up in accordance with the standards recommended by the Insurance Institute of America, Inc.

Ins. 121—An introductory study of the general principles of insurance. An I.I.A. study course. Credit: 2 semester hours.

Ins. 122—Principles of fire, marine, and allied lines insurance. An I.I.A. study course. Credit: 2 semester hours.

Ins. 123—Principles of casualty insurance and surety bonding. An I.I.A. study course. Credit: 2 semester hours.

Ins. 124-Techniques of selling insurance. Credit: 2 semester hours.

Ins. 131—General principles of insurance, including insurance office procedures. Credit: 3 semester hours.

Ins. 132—Accident and sickness insurance. Credit: 3 semester hours.

Ins. 133—Policies and procedures of life insurance agency management. Credit: 3 semester hours.

Ins. 134—Life insurance sales management principles. Credit: 3 semester hours.

Ins. 221—Insurance claims and adjustments. Credit: 2 semester hours.

Ins. 222—A problems course on the rating of fire coverage and its allied lines. Credit: 2 semester hours.

Ins. 223—Rating of all coverages in casualty insurance with a study of problems encountered by the local agent. Credit: 2 semester hours.

Ins. 224—Problems involved in the rating of insurance on automobiles and commercial carriers. Credit: 2 semester hours.

Ins. 225—A composite course on special lines. Included are Inland, Marine, Workmen's Compensation, Hospitalization and Accident, Extended Coverage and Bonds. Credit: 2 semester hours.

The following are study courses leading up to the Chartered Property Casualty Underwriter designation. These courses are set up according to the standards advocated by the American Institute of Property and Liability Underwriters. Inc.

Ins. 331A-331B—The principles and practices of insurance. C.P.C.U. study courses, Formerly Ins. 341. Credit: 3 semester hours for each numbered course

Ins. 332A-332B—Principles and practices of insurance. C.P.C.U. study courses. Formerly Ins. 342. Credit: 3 semester hours for each numbered course.

Ins. 333-334—A review of general commercial law with a study of insurance law including construction of insurance contracts. C.P.C.U. study courses. Credit: 3 semester hours for each numbered course.

Ins. 335-336—A comprehensive study of accounting, finance, and agency management. C.P.C.U. study courses. Credit: 3 semester hours for each numbered course.

Ins. 337-338—General education, including economics, government, social legislation with emphasis on English usage. C.P.C.U. study courses. Formerly Ins. 343. Credit: 3 semester hours for each numbered course.

The following are study courses leading to the Chartered Life Underwriters designation. These courses are set up according to the standards recommended by the American College of Life Underwriters.

Ins. 431—Life insurance and annuities. A C.L.U. study course. Formerly Ins. 441. Credit: 3 semester hours.

Ins. 432—Business life insurance, accident, and sickness, group insurance and pensions. A C.L.U. study course. Formerly Ins. 442. Credit: 3 semester hours.

Ins. 433—Law, trusts, and taxes with emphasis on the construction of the life insurance contract. A C.L.U. study course. Formerly Ins. 443. Credit: 3

semester hours.

Ins. 434—Financial institutions, corporation finance, and investments. A C.L.U. study course. Formerly Ins. 444. Credit: 3 semester hours.

Ins. 435—The practice of life underwriting. A C.L.U. study course. Formerly Ins. 445. Credit: 3 semester hours.

Oil & Gas Brokerage 222—Oil and gas laws of Texas. Credit: 2 semester hours.

Oil & Gas Brokerage 223—Petroleum geological information as it pertains to oil and gas properties on the Texas Gulf Coast. Credit: 2 semester hours.

Real Estate 121—An introduction to the real estate business: Credit: 2 semester hours.

Real Estate 122—Principles and practices in real estate brokerage. Credit: 2 semester hours.

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

Real Estate 222—An advanced course in appraising. The income approach to value through residential technique. Credit: 2 semester hours.

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

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

Real Estate 225—Problems that confront the broker in his daily work. Prerequisite: Real Estate 122. Credit: 2 semester hours.

Real Estate 226—Principles of selling as applied to real estate. Credit: 2 semester hours.

Real Estate 227-Real estate management. Credit: 2 semester hours.

The following courses lead to the American Savings & Loan Institute Achievement Award, Standard Diploma and Graduate Diploma. These courses are set up in excess of the minimum standards advocated by the American Savings & Loan Institute.

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

Savings & Loan 132—Principles and practices of savings and loan associations. Credit: 3 semester hours.

Savings & Loan 133—Principles of customer relations. Credit: 3 semester hours.

Savings & Loan 134—Teller's duties and responsibilities. Credit: 3 semester hours.

Savings & Loan 135—Bookkeeping and accounting as applied to the savings and loan association. Credit: 3 semester hours.

Savings & Loan 136—Practice in keeping a set of savings and loan accounting records based on recording typical savings and loan transactions. Credit: 3 semester hours.

Savings & Loan 137—Real estate law and its application to the day to day operations of a savings and loan association. Credit: 3 semester hours.

Savings & Loan 138—A continuation of real estate law including mortgages, wills, administration of estates, taxes and community property. Credit: 3 semester hours.

Savings & Loan 139—The principles and practices used in the appraisal of residential property. Credit: 3 semester hours.

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

Savings & Loan 232-233—Types of financial institutions and their interrelationship. Credit: 3 semester hours for each numbered course.

Savings & Loan 234—Fundamental principles of real estate. Credit: 3 semester hours.

Savings & Loan 235—A study of the real estate business, including operating a brokerage business. Credit: 3 semester hours.

Savings & Loan 236—Preparation of effective business letters and reports. Credit: 3 semester hours.

Savings & Loan 237—Effective speaking for savings and loan employees. Credit: 3 semester hours.

Savings & Loan 238—Specialized accounting situations encountered in the savings and loan business. Credit: 3 semester hours.

Savings & Loan 239—Business English. Credit: 3 semester hours.

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

Savings & Loan 332—Negotiable Instruments as they apply to the savings and loan business. Credit: 3 semester hours.

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

Savings & Loan 334—Federal tax laws and their application to the savings and loan business. Credit: 3 semester hours.

Savings & Loan 335—A general course in home construction. Including planning construction and materials. Credit: 3 semester hours.

Savings & Loan 336—A detailed study of home construction. Including the details of construction and accepted construction procedure. Credit: 3 semester hours.

Savings & Loan 337—Insurance as it applies to the savings and loan business. Credit: 3 semester hours.

Savings & Loan 431—The investment market as it applies to the savings and loan association. Credit: 3 semester hours.

Savings & Loan 432—Corporate stocks and bonds, including the buying and selling of securities. Credit: 3 semester hours.

Savings & Loan 433—A study of all aspects of family finance. Designed to enable the savings and loan association employee to advise customers about their personal finances. Credit: 3 semester hours.

Savings & Loan 434—Theory, law, and operation pertaining to savings accounts. Credit: 3 semester hours.

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

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

Transportation 232—Types of transportation, related facilities and freight rates and tariffs. Prerequisite: Transportation 131. Credit: 3 semester hours.

**Transportation 233—Principles and practices of traffic management. Pre-**requisite: Transportation 232. Credit: 3 semester hours.

Transportation 234—A course in I.C.C. Law. The application of the Interstate Commerce Commission and procedures before the Interstate Commerce Commission. Prerequisite: Transportation 131, 232, and 233. Credit: 3 semester hours.

Transportation 235—I.C.C. Law. Prerequisite: Transportation 234. Credit: 3 semester hours.

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

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

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

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

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

#### FOOD SERVICE TRAINING

Food Sanitation and Service Program—A practical training program in sanitation and service designed to meet the needs of food service personnel in school lunchrooms, restaurants, cafeterias, drive-ins, and industrial cafes. A 12-hour course taught in the establishment.

Dining Room Service Program—A training program designed for waiters and waitresses engaged in formal dinner service.

**Hospital Food Service**—A course in food service training for hospital dietary departments.

Luncheonette Service—A course in sanitation and service for soda fountain and lunch counter employees.

#### CONFERENCES AND WORKSHOPS

#### Real Estate Institute

An annual conference for real estate dealers and allied professions. A program of outstanding speakers discuss subjects of vital interest to the real estate business.

## Institute of Retailing

A number of short courses for selling, service and management personnel of retail stores. Public announcement will be made of these institutes.

## School Lunchroom Program

A practical workshop specializing in employee-employer relations, nutrition and menu planning, lunchroom sanitation, and quality and quantity cooking. Designed for directors, managers, and workers.

#### INDUSTRIAL SUPERVISION

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

A Certificate in Supervision is awarded upon completion of twelve credit hours from the following list of courses:

Industrial Supervision 711—Effective Speaking. This is a participation course planned to overcome fear and self-consciousness while addressing a group and to provide knowledge of basic speaking principles and experience in effective speaking. Credit: 1 semester hour.

Industrial Supervision 712—Conference Leadership. Techniques of conference leading. Conducting a conference provides each student with an oppor-

tunity to practice these techniques. Credit: 1 semester hour.

Industrial Supervision 713—Human Relations. The skills supervisors need in getting results through the people they supervise and how to handle problems in human relations are developed in a practical manner. Credit: 1 semester hour.

Industrial Supervision 714—Techniques of Job Instruction. Methods of instruction based on the laws of learning which will enable the supervisor to teach others the related technology and manipulative skills of his job or trade. Credit: 1 semester hour.

Industrial Supervision 715—Hospital Supervision. Techniques of supervision, the training of employees, human relations, motivation and discipline for hospital supervisory personnel. Credit: 1 semester hour.

Industrial Supervision 716—Job Methods Improvement. Basic principles and procedures necessary to improve the methods of doing a job. Credit: 1 semester hour.

Industrial Supervision 717—The Elements of Supervision. Methods and techniques of supervision applied to supervision of industrial personnel. Credit: 1 semester hour.

Industrial Supervision 720 Speed Reading. This is an intensive training program designed to improve reading speed and comprehension. Scientific instruments and effective techniques for improving reading speed are used. Credit: 2 semester hours.

Industrial Supervision 721—Human Relations. This course develops in a practical way the skills and techniques of personnel supervision. Credit: 2 semester hours.

Industrial Supervision 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. Credit: 2 semester hours.

Industrial Supervision 723—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. Credit: 2 semester hours.

Industrial Supervision 724—Safety for Supervisors. Safety costs, cause of accidents, the function of safety inspections, the elimination of specific hazards, fire prevention, investigation of accident and methods for minimizing their frequency and severity. Credit: 2 semester hours.

Industrial Supervision 725—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. Credit: 2 semester hours

Industrial Supervision 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. Credit: 2 semester hours.

Industrial Supervision 727—Written Communications. This course provides practical experience in those 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. Credit: 2 semester hours.

Industrial Supervision 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. Credit: 2 semester hours.

Industrial Supervision 729—Industrial Psychology. Human differences, methods of applying practical phychology to the handling of men, the use of testing methods, and such factors as morale, group attitudes, motivation, frustration, fatigue and application of psychological studies to human behavior on the job. Credit: 2 semester hours.

Industrial Supervision 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. Some of the topics included are new employees, interviewing, job methods, training, safety, human relations, grievances, motivation and discipline. Credit: 3 semester hours.

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

Industrial Supervision 733—Supervisory Methods in Municipal Administration. Modern methods and techniques of supervision within the various departments, divisions, and offices of city government. Some of the topics covered are: role of the administrator, organization problem, personnel administration, training, public relations, finance planning, etc. Credit: 3 semester hours.

Industrial Supervision 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. Credit: 3 semester hours.

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

Industrial Supervision 736—Personnel Management. The principles and practices of personnel management with emphasis on the procurement, devel-

opment, maintenance and utilization of the labor forces. Credit: 3 semester

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

Industrial Supervision 822—Production Planning and Control. This course is based on an analysis of the most important tested methods of production management, and is specifically designed to help supervisors and executives improve their performance in the areas of production forecasting, planning and control. Credit: 2 semester hours.

Industrial Supervision 823—Cost Reduction Course. Methods for carrying out a comprehensive, continuing cost reduction and control program. It owes much of its effectiveness to the fact that it shows how to get all levels of supervisory management solidly behind the cost reduction effort—how to get supervisors to think of cost control as an integral part of the over-all job, rather than a short term project. Credit: 2 semester hours.

Industrial Supervision 824—Supervisory Development Course. This course is designed to train supervisors in proven management principles and techniques that they can put right to work in their everyday jobs. Credit: 2 semester hours.

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

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

# Conferences

Conferences are held in the spring for both Management and Labor groups, at which outstanding speakers discuss important current problems of general interest. Short conferences on specific subjects are held throughout the school year whenever they are warranted.

## Library Service

A reference library of books, pamphlets, periodicals, and films on Labor and Management subjects is available to students, instructors, and industrial and labor organizations.

# TRADE EXTENSION

Trade Extension Courses for Journeymen: 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 trade extension courses are planned for workers of journeyman grade and enrollment is confined 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:

Appliance Service & Repair 731, 732

Automatic Controls 731, 732

Automotive Mechanics, 731, 732, 733, 734

Blueprint Reading 741, 742

Carpentry 741

Compressors 731

Dental Assisting 731, 732 -

Drafting 741, 742

Electricity 741, 742, 743, 744

Industrial Electronics 741, 742

Industrial Instruments 741, 742, 743

Law Enforcement 731, 732

Layout 741, 742

Medical Assisting 731, 732

Pipefitting 741, 742

Plant Maintenance 731, 732

**Practical Mechanics 741** 

Pumps 731

Slide Rule 720

**Small Engines 731** 

Television 741, 742

Welding 741, 742

Appliance Service & Repair 731—Repair and service of the small house-hold appliances. Credit: 3 semester hours.

Appliance Service & Repair 732—Repair and service of major home appliances. Credit: 3 semester hours.

Automatic Controls 731—All types of gas heating controls are studied. "Trouble-shooting" of gas systems. Credit: 3 semester hours.

Automatic Controls 732—Installation, service and repair of air conditioning controls. Credit: 3 semester hours.

Automotive Mechanics 731—Operation of the small garage. Waste control, customer relations, bookkeeping problems, inventory and other problems of the small garage will be studied: Credit: 3 semester hours.

Automotive Mechanics 732—Installation, servicing and repairing of automobile air conditioning units. Credit: 3 semester hours.

Automotive Mechanic 733—Diagnosing and correction of ignition system failures. Use of various checking instruments. Credit: 3 semester hours.

Automotive Mechanics 734—Components of the modern power transmission and its more common failures. Credit: 3 semester hours.

Blueprint Reading 741—A study of lines, views, symbols and dimensions involved in reading blueprints and shop sketches. Practice in making freehand sketches of simple objects. Credit: 3 semester hours.

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

Carpentry 741—Blueprint reading and mathematics of the carpentry trade. Sectional views, details, bills of material and estimating the cost of jobs will be stressed. Credit: 4 semester hours.

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

Dental Assisting 731—Professional ethics, terminology and procedures. Credit: 3 semester hours.

Dental Assisting 732—Care of equipment and practice in chair assisting. Credit: 3 semester hours.

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

Drafting 742—Practice in technical drawing with problems in orthographic projection and isometric sketching. Credit: 4 semester hours.

Electricity 741—The basic laws and fundamental theories of electricity are covered in this course. Series and parallel circuits, power resistance and efficiency will be studied. Credit: 4 semester hours.

Electricity 742—Transformers, automatic controls, relay and distribution systems, trouble shooting and application of motors. Credit: 4 semester hours.

Electricity 743—Types of wiring, installation of wiring and fixtures, specail installations and special equipment as specified by the National Electric Code. Credit: 4 semester hours

Electricity 744—A study of cost estimates for electrical work. "Take off" work from blueprints and specifications in which codes and methods peculiar to the electrical trade are studied. Credit: 4 semester hours.

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

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

Industrial Instruments 741—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. Credit: 4 semester hours.

Industrial Instruments 742—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. Credit: 4 semester hours.

Industrial Instruments 743—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. Credit: 4 semester hours.

Law Enforcement 731—Duties of the peace officer are studied. Traffic control, investigation procedure and Texas Criminal Code are stressed. Credit: 3 semester hours.

Law Enforcement 732—Specialized branches of law enforcement. Arrest and seizure, identification, accident investigation and pertinent federal laws are covered. Credit: 3 semester hours.

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

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

Medical Assisting 731—Professional ethics, duties and procedures for the medical assistant. Credit: 3 semester hours.

Medical Assisting 732—Terminology of medical offices, record keeping, use and care of equipment will be stressed. Credit: 3 semester hours.

Pipefitting 741—A basic course in pipefitting stressing blueprint reading and sketching. Credit: 4 semester hours.

Pipefitting 742—Methods of fabricating pipe is 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. Credit: 4 semester hours.

Plant Maintenance 731—General refinery and petrochemical plant maintenance. Credit: 3 semester hours.

Plant Maintenance 732—An advanced course dealing with special plant problems. Credit: 3 semester hours.

Practical Mechanics 741—A course covering selection and use of hand tools and the smaller power tools. Proper procedures for the mechanical trades are emphasized. Credit: 4 semester hours.

Pumps 731—The application, care and operation of centrifugal, rotary and reciprocating pumps and the study of direct and belt drives, reduction gears and special increases is covered in this course. Credit: 3 semester hours.

Slide Rule 720—Use of the slide rule in solving everyday work problems. Credit: 2 semester hours.

Small Engines 731—The operation and repair of the small two and four cycle engine. Diagnosis and "trouble shooting" will be emphasized. Credit: 3 semester hours.

Television 741—Basic theory of vacuum tubes and other component parts of the modern television receiver. Credit: 4 semester hours.

Television 742—Advanced circuit tracing procedures. Special problems of color reception are covered. Credit: 4 semester hours.

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

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

## **Short Course**

A two-day short course on Industrial Instruments is held each Spring. The leading instrument companies display their newest equipment and outstanding men in this field give lectures and demonstrations in the installation, operations, maintenance and repair of industrial instruments.

