

General Information



**The
Agricultural and Mechanical
College of Texas**

SPIRIT OF AGGIELAND

**Some may boast of prowess bold
Of the schools they think so grand.
But there's a spirit can ne'er be told,
It's the Spirit of Aggieland.**

**We are the Aggies,
The Aggies are we.
True to each other as Aggies can be.
We've got to fight, boys,
We've got to fight.
We've got to fight for Maroon and White.
After they've boosted all the rest,
Then they will come and join the best.
For we are the Aggies,
The Aggies are we.
We are from Texas A.M.C.**

BULLETIN
OF THE
AGRICULTURAL AND MECHANICAL
COLLEGE OF TEXAS

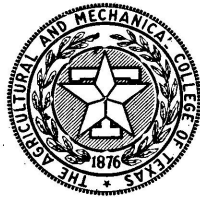
Fifth Series, Vol. 5

May 1, 1949

No. 5

GENERAL INFORMATION

1949-50



COLLEGE STATION

Published monthly by the Agricultural and Mechanical College of Texas.

Entered as second class matter August 7, 1913, at the Post Office at
College Station, Texas, under the Act of August 24, 1912.

DATES TO REMEMBER

First Semester

September 12	Opening day of Freshman Week.
September 16	Registration for new students.
September 17	Registration for old returning students.
September 19	Beginning of classes.
September 24	Last day for adding or dropping courses without penalty.
October 3	Last day for registration for the fall semester.
October 15	A holiday.
November 12	A holiday.
November 18	Mid-semester grade reports.
November 24-26	Thanksgiving recess.
December 23-January 2	Christmas recess.
January 21-27	Semester examinations.

Second Semester

January 30-31	Registration for old students.
January 31	Registration for new students.
February 1	Beginning of classes.
February 7	Last day for adding or dropping courses without penalty.
February 13-17	Religious Emphasis Week.
February 14	Last day for registration for the spring semester.
March 31	Mid-semester grade reports.
April 7-10	Spring recess.
May 27-June 2	Semester examinations.
June 2	Commencement Day.
June 3	Final review.

The Agricultural and Mechanical College of Texas .

Administrative Officers

FRANK C. BOLTON, M.S., LL.D.....*President*

MARION T. HARRINGTON, PH.D.....*Acting Dean of the
College; Dean, School of Arts and Sciences*

HOWARD W. BARLOW, ENG.SC.D.....*Dean, School of
Engineering; Director, Engineering Experiment Station*

CHARLES N. SHEPARDSON, M.S.....*Dean, School of Agriculture*

IVAN B. BOUGHTON, D.V.M.....*Dean, School of
Veterinary Medicine*

IDE P. TROTTER, PH.D.....*Dean, Graduate School*

WALTER L. PENBERTHY, B.S.....*Dean of Men*

HAYDON L. BOATNER, M.S., Colonel, Inf., U.S.A...*Commandant,
School of Military Science*

W. H. HOLZMANN.....*Comptroller*

H. LLOYD HEATON, M.S.....*Registrar, Secretary,
Academic Council*

PAUL S. BALLANCE, B.S., B.L.S.....*Acting Librarian*

J. E. MARSH, B.A., M.D.....*College Physician*

MASON L. CASHION, A.B.....*General Secretary,
Young Men's Christian Association*

W. R. HORSLEY, B.S.F.....*Director, Placement Office*

EVERETT E. MCQUILLEN, M.S.....*Director, Development Fund*

The Agricultural and Mechanical College of Texas

The choice of a profession and the choice of a school in which to begin serious training for that profession are two of the most important choices facing a high school graduate. The Agricultural and Mechanical College of Texas extends a cordial welcome to those of you who are interested in investigating her facilities for that training and to those of you who have already chosen this school to prepare you for your future profession. Her faculty is at your disposal for counsel and guidance, and her facilities will be used completely to give you as thorough an education as is possible in the field of your choice. For your convenience a directory of administrative officers, heads of departments of instruction, and others whom you might like to contact personally has been included at the back of this bulletin. Please feel free to contact them if they can be of assistance to you in any way.

On the following pages of this bulletin you will find a brief history of the College, a statement of the facilities available for your education, and answers to some of the questions most commonly asked by prospective students. There is information concerning each curriculum offered by the various schools of the College so that you may judge for yourself the nature of the work and the possibilities awaiting a graduate in his chosen field. The freshman year of each curriculum is given to show the specific courses studied during that year. If you desire further information, the Registrar will be glad to supply it upon request.

The Agricultural and Mechanical College of Texas was established in 1871, receiving as an endowment 180,000 acres of land from the national government, in accordance with the Morrill Land Grant Act of 1862. It was first opened for the reception of students on October 4, 1876, and from that small beginning has grown until the current enrollment is approximately 8,500 students annually.

The College campus consists of 500 acres, while the experimental farms owned by the College total 9,591 additional acres. The physical plant of the College includes buildings with a total valuation of approximately \$11,000,000, while equipment and lands of the College represent an additional valuation of \$6,000,000. There are numerous buildings used for instructional purposes, 26 dormitories, and two dining halls.

DEGREES OFFERED

On the basis of resident study the following degrees are offered by the College:

1. Bachelor of Arts (B.A.)
2. Bachelor of Science (B.S.)
3. Bachelor of Architecture (B.Arch.)
4. Bachelor of Food Technology (B.F.T.)
5. Bachelor of Petroleum Engineering (B.P.E.)
6. Doctor of Veterinary Medicine (D.V.M.)
7. Master of Education (M.Ed.)
8. Master of Engineering (M.Eng.)
9. Master of Science (M.S.)
10. Doctor of Philosophy (Ph.D.)

In addition, the following professional degrees in engineering are offered to graduates of the College on the basis of acceptable professional experience:

1. Agricultural Engineer (A.E.)
2. Architectural Engineer (Arch.E.)
3. Chemical Engineer (Ch.E.)
4. Civil Engineer (C.E.)
5. Electrical Engineer (E.E.)
6. Mechanical Engineer (M.E.)
7. Petroleum Engineer (P.E.)

CURRICULA

There is one two-year curriculum, pre-veterinary medicine. Its satisfactory completion is prerequisite to application for entrance to the School of Veterinary Medicine. There are 24 curricula extending through four years. Of these the curriculum in veterinary medicine leads to the degree of Doctor of Veterinary Medicine; the curriculum in liberal arts leads to the degree of Bachelor of Arts; the others lead to the degree of Bachelor of Science. The curriculum in architecture covers a period of five years and leads to the degree of Bachelor of Architecture. The five-year curriculum in food technology leads to the degree of Bachelor of Food Technology. The five-year curriculum in petroleum engineering leads to the degree of Bachelor of Petroleum Engineering. Five-year combined courses are also offered in chemical engineering—business, petroleum engineering—business, petroleum engineering—chemical engineering, petroleum engineering—geological engineering, and petroleum engineering—mechanical engineering leading to the degrees of Bachelor of Science in each field. The fifth-year curriculum in management engineering follows one of the four-year curricula in aeronautical,

chemical, civil, electrical, mechanical, or petroleum engineering and leads to the degree of Bachelor of Science in Management Engineering.

Two-Year Curriculum

Pre-Veterinary Medicine

Four-Year Curricula

Aeronautical Engineering
Agriculture
Agricultural Administration
Agricultural Education
Agricultural Engineering
Agricultural Journalism
Animal Science
Business and Accounting
Chemical Engineering
Civil Engineering
Electrical Engineering
Geological Engineering

Industrial Education
Landscape Art
Liberal Arts
Management Engineering
Mechanical Engineering
Military Science
Petroleum Engineering
Plant and Soil Science
Range and Forestry
Science
Veterinary Medicine
Wildlife Management

Five-Year Curricula

Architecture
Chemical Engineering—
Business
Food Technology
*Management Engineering
Petroleum Engineering
Petroleum Engineering—
Business

Petroleum Engineering—
Chemical Engineering
Petroleum Engineering—
Geological Engineering
Petroleum Engineering—
Mechanical Engineering

*NOTE: A degree of Bachelor of Science in Management Engineering may be awarded on the basis of a student's having satisfactorily completed the degree of Bachelor of Science in Aeronautical, Chemical, Civil, Electrical, Mechanical, or Petroleum Engineering as outlined in the general catalogue with the addition of certain prescribed courses.

On the next few pages of this bulletin you will find listed under the various schools a brief discussion of each curricula offered.

THE SCHOOL OF AGRICULTURE

CURRICULA

Two-Year Curriculum

Pre-Veterinary Medicine

Four-Year Curricula

Agriculture

Agricultural Administration

Agricultural Education

Agricultural Engineering

Agricultural Journalism

Animal Science

Landscape Design

Plant and Soil Science

Range and Forestry

Wildlife Management

Five-Year Curriculum

Food Technology

Pre-Veterinary Medicine

This is a two-year curriculum designed as preparation for admission to the School of Veterinary Medicine. Students who fail to gain admission to the School of Veterinary Medicine at the end of four semesters will be dropped from this curriculum. They may transfer to one of the other established degree programs providing that their scholastic record warrants their continuance in the College.

Agriculture

The curriculum in agriculture has as its main objectives the preparation of young men for the business of farming and ranching, including floriculture and ornamental horticulture; for the pursuit of scientific investigation in the field of agriculture; for work with the various governmental and private agricultural agencies; for farm managers; and for teaching in high schools and agricultural colleges. It also affords excellent preparation for young men who intend to enter the field of processing and marketing food and fibre products, including dairy manufacturing, fruits and vegetables, flowers and ornamentals, meats and poultry, and wool and cotton. Systematic training is given in the sciences of biology, chemistry, and entomology, which are fundamental to the study of scientific agriculture, and in technical subjects covering the main divisions of agriculture, including agronomy, animal husbandry, dairy husbandry, dairy manufacturing, entomology, floriculture, horticulture, and poultry husbandry. As shown in the curriculum, the work in the junior and senior years is arranged so as to provide for a choice by the student of one

of eight groups of studies. This arrangement affords the student a wide range of subjects from which to choose his major work.

Agricultural Administration

The curriculum in agricultural administration is designed to prepare students for professional work as agricultural economists, for commercial work with agricultural industries, for the operation of farms and ranches, and for rural social service work.

The first two years are planned to give students the fundamental studies. In the sophomore year students may choose either Group 1 (agricultural economics), Group 2 (farm management), or Group 3 (rural sociology).

The program in agricultural economics affords opportunity for students to prepare themselves for professional work with governmental agencies and private concerns in such capacities as research analysts, teachers, and field representatives. By electing courses in business administration, students may also qualify for various types of work in the commerce of agriculture. Adequate electives are available to enable students to select a number of courses dealing with one farm product with view to becoming specialists in the marketing of that commodity.

The program in farm management is intended to prepare students for the operation of farms and ranches. It includes fundamental subjects in all the fields of agriculture, yet provides enough electives to permit the students to emphasize the study of the particular agricultural enterprises in which they are most interested.

The program in rural sociology affords training in the field of social service work with special emphasis on rural social problems and organization.

Agricultural Education

This curriculum is designed to give the teacher of vocational agriculture the preparation and training in both technical agriculture and education, including practice teaching, required to qualify under the Federal Vocational Education Act.

Graduates of approved institutions having satisfactory training in the sciences underlying the study of agriculture will be awarded the degree of Bachelor of Science in Agricul-

tural Education upon satisfying the following requirements: (1) the curriculum for majors in agricultural education and (2) at least one year's residence.

Agricultural Engineering

The curriculum in agricultural engineering is under the joint supervision of the School of Agriculture and the School of Engineering. Agricultural engineering deals with the application of the fundamental branches of engineering to the peculiar conditions and requirements of agriculture as an industry and as a field of applied science. The term "agricultural engineer" denotes an engineer who has been trained in both engineering and agriculture, with experience in combining the two, and who is qualified to develop, design, organize, and direct engineering work in the agricultural and closely allied industries. It is the work of the agricultural engineer to strive for maximum efficiency and economy in agricultural operations and equipment just as engineers in other branches of the profession seek to promote progress in their respective industries.

In general, agricultural engineering may be broken down into four major phases of activity—farm power and machinery, farm buildings and structures, farm electrification, and soil and water control and conservation which includes drainage, flood control, irrigation, land clearing, soil erosion control, and related problems.

The need for men with this training is being felt more and more as the demand grows for farms better equipped with power machinery, farm buildings and home utilities, and for land reclamation by soil erosion control, drainage, and irrigation.

Graduates of this curriculum are prepared for service with the colleges and the government in teaching, extension, and research work; with government soil erosion control projects; with manufacturers of farm machinery, tractors, and other farm equipment; in advertising, sales, and design work; with engineering and contracting firms doing soil erosion control, irrigation, and drainage work; and as rural electrification specialists.

Agricultural Journalism

The curriculum in agricultural journalism is designed to prepare students for professional careers as agricultural writers and editors, including work on bulletins and magazines as well as on rural and metropolitan newspapers.

The first two years are planned to give students the fundamental studies. The program affords opportunities for students to prepare themselves as specialists in certain phases of agricultural writing but with an adequate background for general journalistic work.

This curriculum is administered by the Department of Journalism in the School of Arts and Sciences.

Animal Science

The demand for qualified leaders in the various fields of science and especially in the agricultural sciences is far in excess of the supply. The need is particularly acute for college teachers, extension leaders, research workers in state and federal (USDA) agricultural agencies, and in industrial laboratories. There is also a demand for qualified agricultural leaders or advisors in foreign countries. To meet this demand the animal science curriculum was developed. This curriculum is designed to give more adequate training in the basic sciences. Those who complete this course of study will be qualified for graduate work in the fields of nutrition, animal breeding, genetics, physiology of reproduction, zoology, biostatistics or related fields, and at the same time may qualify as majors in one of the regular animal curricula in the School of Agriculture. This curriculum may be considered, therefore, as either terminal or as preparation for graduate study.

In order to obtain a major in one of the regular courses in agriculture, the student should select electives in relation to that major.

Landscape Design

The curriculum in landscape design is arranged to help students attain proficiency in the arrangement of ground and water forms for the purpose of securing the greatest returns in human use and enjoyment. The projects developed by landscape designers include private gardens, farmsteads, country estates, public building sites, industrial areas, golf courses, cemeteries, and arboretums. Public recreation areas such as public gardens, playgrounds, and parks of all types are also included in the field of landscape design.

A successful landscape designer must possess or develop an artistic sense, engineering ability, and the fundamentals of architecture in addition to a knowledge of the basic elements of land, water, vegetation, and the forces of nature. He must

possess the ability to present his ideas for design and construction by means of drawings in plan and perspective, as well as by means of written or spoken words.

Graduates are engaged in private practice, in the employ of city, state, and regional planning boards; as managers of city park systems, university campuses, large private estates, memorial park cemeteries, arboretums; in various phases of work with the National Park Service; as teachers; and as designers with many of the larger nurseries.

Plant and Soil Science

Advancements in the field of agriculture are creating a demand for highly trained and specialized personnel. More and more students in agriculture are becoming interested in preparing themselves for graduate study or specialized work. The curriculum in plant and soil science is designed to give more adequate preparation in the basic sciences for those students interested in studies leading to advanced degrees or in preparation for technical work as plant breeders, plant pathologists, plant physiologists, soil scientists, etcetera. This curriculum provides a better foundation for extension, research, or teaching in government branches or in industries.

There is no separate department of plant and soil science. Students interested in soils or in field crops take work in the Department of Agronomy. Those selecting floriculture study in the Department of Landscape Art; and students selecting botany, horticulture, plant physiology and pathology, or range management work in those respective departments.

Range and Forestry

Range management is one of the important professions associated with agriculture, and for those students who wish preparation for service in this major, the Department of Range and Forestry offers a curriculum which emphasizes the following: (1) The importance of the plant sciences through plant and range ecology, (2) the production of livestock on native range and forest areas, (3) the fundamentals of plant and soil conservation on native range lands, and (4) principles and practices of forestry that are associated with range management and management of farm woodlots and other timber areas.

The sciences of zoology, botany, animal husbandry, and agronomy are emphasized to give the student basic information for practical application. The basic educational fields of

mathematics, chemistry, and English contribute to the firm foundation students in this field of study must acquire. The curriculum is unusually broad in scope to train one for the great variety of problems met in the multiple use and conservation of uncultivated lands.

Upon completion of range management training, graduates are prepared to enter the ranch business either as owners or as managers. There are some openings to men trained in this field in commercial enterprises. Graduates often qualify for work as county agricultural agents, with the Experiment Station, or with other state organizations. Men meeting Civil Service requirements are eligible for appointments with the United States Soil Conservation Service, the United States Forest Service, the Bureau of Land Management, the Indian Service, the National Park Service, and other federal agencies. Graduates in this field are needed as teachers and instructors in educational institutions of Texas and elsewhere as well as in other agricultural and range areas.

Wildlife Management

This curriculum includes work in fisheries and wildlife. At the beginning of the sophomore year, the student should elect one of the two options, fisheries or wildlife, because of differences in the basic sciences required. The junior and senior years are largely years of specialization.

This curriculum is designed (1) to train the young men in the art of managing wildlife on the land and maintaining populations at levels consistent with good land use practices and the desirability of the wildlife species involved and (2) to train men for research in taxonomy, distribution, and ecology of fishes, reptiles and amphibians, birds, and animals. Also, opportunities are provided, in cooperation with the Department of Journalism, for training in the field of wildlife journalism.

Upon completion of the wildlife management curriculum, graduates are prepared to enter occupations in the fisheries or wildlife fields, including management, research, and teaching. Men meeting Civil Service requirements are eligible for appointments with the United States Fish and Wildlife Service, the United States Soil Conservation Service, and other federal agencies. Also, graduates are eligible for employment by the various state game and fish commissions. A few positions open from time to time as wildlife managers on private ranches.

The curriculum emphasizes the sciences of zoology, botany, and chemistry but also gives a firm foundation in mathematics, English, and other liberal arts and agricultural courses.

Food Technology

The curriculum in food technology is designed to train students in the technical and scientific problems of food processing and manufacture. The work includes a broad foundation in the chemistry and bacteriology of food products and in the mechanics of food plant operation; and the packaging, storage, and distribution of foods.

This course of study includes a considerable number of elective hours, enabling the student to take a block of electives in the sources, production, processing, inspection, and grading of dairy products; fruit and vegetable products; meat, fish, and poultry products; and miscellaneous foods and beverages.

Graduates in this field should find employment in dairy plants, creameries, dehydrating and freezing plants, food locker plants, and meat products packing plants as well as a variety of miscellaneous food and beverage plants. There is also a need for men trained in this field in the federal and state inspection work and marketing services. Some men will find opportunities in food products research with state and commercial agencies.

There is no separate Department of Food Technology. The subjects included in this curriculum are offered by several departments in the College, but the curriculum and students majoring in it are under the supervision of a Committee on Food Technology appointed from the agricultural teaching staff by the Dean of Agriculture.

**Curriculum in
PRE-VETERINARY MEDICINE**

First Semester	Credit	Second Semester	Credit
Animal Husbandry 107	(2-2) 3	Biology 101	(3-4) 4
General Animal Husbandry		General Botany of Seed Plants	
Biology 105	(2-4) 3	Biology 106	(2-4) 3
General Zoology		General Zoology	
Chemistry 101	(3-3) 4	Chemistry 102	(3-3) 4
General Chemistry		General Chemistry	
English 103	(3-0) 3	English 104	(3-0) 3
Composition and Rhetoric		Composition and Rhetoric	
Freshman Orientation 101	(1-0) 1	Mathematics 103	(3-0) 3
Mathematics 101	(3-0) 3	Plane Trigonometry	
Algebra		Military Science	(1-2) 1
Military Science	(1-2) 1	Physical Education 102	(0-3) R
Physical Education 101	(0-3) R		
	18		18

**Curriculum in
AGRICULTURE**

(For Majors in Agricultural Journalism, Agronomy, Animal Husbandry, Dairy Production, Dairy Manufacturing, Entomology, Horticulture, and Poultry Husbandry.)

Agronomy 105	(2-2) 3	Animal Husbandry 107	(2-2) 3
Fundamentals of Crop Production		General Animal Husbandry	
Biology 107	(2-4) 3	Biology 101	(3-4) 4
Animal Biology		General Botany of Seed Plants	
Chemistry 101	(3-3) 4	Chemistry 102	(3-3) 4
General Chemistry		General Chemistry	
English 103	(3-0) 3	English 104	(3-0) 3
Composition and Rhetoric		Composition and Rhetoric	
Freshman Orientation 101	(1-0) 1	Military Science	(1-2) 1
Mathematics 101	(3-0) 3	Poultry Husbandry 201	(2-2) 3
Algebra		Poultry Production	
Military Science	(1-2) 1	Physical Education 102	(0-3) R
Physical Education 101	(0-3) R		
	18		18

NOTES: 1. Students whose high school records and entrance tests indicate inadequate preparation will omit Biology 107 in the first semester of the freshman year and take Chemistry 101a, English 103a, and Mathematics 101a. Such students will still be required to take Biology 107.

2. Superior students who plan to continue in graduate study should consult their dean about transfer to the curriculum in animal science or plant and soil science.

**For a Major in
FLORICULTURE**

Agronomy 105	(2-2) 3	Animal Husbandry 107	(2-2)
Fundamentals of Crop Production		General Animal Husbandry	
Biology 101	(3-4) 4	or	
General Botany of Seed Plants		Dairy Husbandry 202	(2-2)
Chemistry 101	(3-3) 4	Dairying	
General Chemistry		or	
English 103	(3-0) 3	Poultry Husbandry 201	(2-2) 3
Composition and Rhetoric		Poultry Production	
Freshman Orientation 101	(1-0) 1	Biology 102	(2-3) 3
Mathematics 101	(3-0) 3	Taxonomy of Flowering Plants	
Algebra		Biology 205	(2-3) 3
Military Science	(1-2) 1	Fundamental Plant Morphology	
Physical Education 101	(0-3) R	Chemistry 102	(3-3) 4
	19	General Chemistry	
		English 104	(3-0) 3
		Composition and Rhetoric	
		Military Science	(1-2) 1
		Physical Education 102	(0-3) R
			17

Curriculum in
AGRICULTURAL ADMINISTRATION

(For Majors in Agricultural Economics, Farm Management, and Rural Sociology.)

First Semester		Credit	Second Semester		Credit
Agricultural Economics 105	(3-0)	3	Agronomy 105	(2-2)	3
Introduction to Rural Economy			Fundamentals of Crop		
Biology 107	(2-4)	3	Production		
Animal Biology			Animal Husbandry 107	(2-2)	3
Chemistry 101	(3-3)	4	General Animal Husbandry		
General Chemistry			Biology 101	(3-4)	4
English 103	(3-0)	3	General Botany of Seed Plants		
Composition and Rhetoric			Chemistry 102	(3-3)	4
Freshman Orientation 101	(1-0)	1	General Chemistry		
Mathematics 101	(3-0)	3	English 104	(3-0)	3
Algebra			Composition and Rhetoric		
Military Science	(1-2)	1	Military Science	(1-2)	1
Physical Education 101	(0-3)	R	Physical Education 102	(0-3)	R
		18			18

NOTE: Students whose high school records and entrance tests indicate inadequate preparation will omit Biology 107 in the first semester of the freshman year and take Chemistry 101a, English 103a, and Mathematics 101a. Such students will still be required to take Biology 107.

Curriculum in
AGRICULTURAL EDUCATION

Agronomy 105	(2-2)	3	Animal Husbandry 107	(2-2)	3
Fundamentals of Crop			General Animal Husbandry		
Production			Biology 101	(3-4)	4
Biology 107	(2-4)	3	General Botany of Seed Plants		
Animal Biology			Chemistry 102	(3-3)	4
Chemistry 101	(3-3)	4	General Chemistry		
General Chemistry			English 104	(3-0)	3
English 103	(3-0)	3	Composition and Rhetoric		
Composition and Rhetoric			Military Science	(1-2)	1
Freshman Orientation 101	(1-0)	1	Poultry Husbandry 201	(2-2)	3
Mathematics 101	(3-0)	3	Poultry Production		
Algebra			Physical Education 102	(0-3)	R
Military Science	(1-2)	1			18
Physical Education 101	(0-3)	R			
		18			

NOTE: Students whose high school records and entrance tests indicate inadequate preparation will omit Biology 107 in the first semester of the freshman year and take Chemistry 101a, English 103a, and Mathematics 101a. Such students will still be required to take Biology 107.

Curriculum in
AGRICULTURAL ENGINEERING

Chemistry 101	(3-3)	4	Chemistry 102	(3-3)	4
General Chemistry			General Chemistry		
Engineering Drawing 111	(0-6)	2	Engineering Drawing 124	(2-2)	3
Engineering Drawing			Descriptive Geometry		
English 103	(3-0)	3	English 104	(3-0)	3
Composition and Rhetoric			Composition and Rhetoric		
Freshman Orientation 101	(1-0)	1	Mathematics 104	(4-0)	4
Mathematics 102	(3-0)	3	Analytics		
Algebra			Mechanical Engineering 102	(1-2)	2
Mathematics 103	(3-0)	3	Engineering Problems		
Plane Trigonometry			Military Science	(1-2)	1
Mechanical Engineering 101	(1-2)	2	Physical Education 102	(0-3)	R
Engineering Problems					17
Military Science	(1-2)	1			
Physical Education 101	(0-3)	R			
		19			

NOTE: Students whose high school records and entrance tests indicate inadequate preparation will omit Mathematics 102, 103 and Mechanical Engineering 101 in

the first semester of the freshman year and take Chemistry 101a, English 103a, and Mathematics 111. Such students will still take Mathematics 103 and Mechanical Engineering 101, and their degree requirements will be increased by 3 credit hours.

Curriculum in

ANIMAL SCIENCE

First Semester	Credit	Second Semester	Credit
Animal Husbandry 107	(2-2) 3	Biology 101	(3-4) 4
General Animal Husbandry		General Botany of Seed Plants	
Biology 105	(2-4) 3	Biology 106	(2-4) 3
General Zoology		General Zoology	
Chemistry 101	(3-3) 4	Chemistry 102	(3-3) 4
General Chemistry		General Chemistry	
English 103	(3-0) 3	English 104	(3-0) 3
Composition and Rhetoric		Composition and Rhetoric	
Freshman Orientation 101	(1-0) 1	Mathematics 103	(3-0) 3
Mathematics 101	(3-0) 3	Plane Trigonometry	
Algebra		Military Science	(1-2) 1
Military Science	(1-2) 1	Physical Education 102	(0-3) R
Physical Education 101	(0-3) R		
	18		18

Curriculum in

LANDSCAPE DESIGN

Architecture 101	(1-9) 4	Architecture 102	(1-9) 4
Architecture I		Architecture I	
Biology 101	(3-4) 4	Biology 102	(2-3) 3
General Botany of Seed Plants		Taxonomy of Flowering Plants	
Chemistry 101	(3-3) 4	Chemistry 102	(3-3) 4
General Chemistry		General Chemistry	
English 103	(3-0) 3	English 104	(3-0) 3
Composition and Rhetoric		Composition and Rhetoric	
Freshman Orientation 101	(1-0) 1	Mathematics 101	(3-0) 3
Military Science	(1-2) 1	Algebra	
Physical Education 101	(0-3) R	Military Science	(1-2) 1
	17	Physical Education 102	(0-3) R
			18

Curriculum in

PLANT AND SOIL SCIENCE

Agronomy 105	(2-2) 3	Biology 205	(2-3) 3
Fundamentals of Crop Production		Fundamental Plant Morphology	
Biology 101	(3-4) 4	Chemistry 102	(3-3) 4
General Botany of Seed Plants		General Chemistry	
Chemistry 101	(3-3) 4	English 104	(3-0) 3
General Chemistry		Composition and Rhetoric	
English 103	(3-0) 3	Mathematics 103	(3-0) 3
Composition and Rhetoric		Plane Trigonometry	
Freshman Orientation 101	(1-0) 1	Military Science	(1-2) 1
Mathematics 101	(3-0) 3	Elective	3
Algebra		Physical Education 102	(0-3) R
Military Science	(1-2) 1		
Physical Education 101	(0-3) R		
	19		17

NOTE: Students must select all electives with the advice of the head of the department in which they expect to take their major work.

Curriculum in
RANGE AND FORESTRY

First Semester	Credit	Second Semester	Credit
Animal Husbandry 107	(2-2) 3	Agronomy 105	(2-2) 3
General Animal Husbandry		Fundamentals of Crop	
Biology 101	(3-4) 4	Production	
General Botany of Seed Plants		Biology 102	(2-3) 3
Chemistry 101	(3-3) 4	Taxonomy of Flowering Plants	
General Chemistry		Chemistry 102	(3-3) 4
English 103	(3-0) 3	General Chemistry	
Composition and Rhetoric		English 104	(3-0) 3
Freshman Orientation 101	(1-0) 1	Composition and Rhetoric	
Mathematics 101	(3-0) 3	Mathematics 103	(3-0) 3
Algebra		Plane Trigonometry	
Military Science	(1-2) 1	Military Science	(1-2) 1
Physical Education 101	(0-3) R	Physical Education 102	(0-3) R
	19		17

NOTE: Students whose high school records and entrance tests indicate inadequate preparation will omit Biology 101 in the first semester of the freshman year and take Chemistry 101a, English 103a, and Mathematics 101a. Such students will still be required to take Biology 101.

Curriculum in
WILDLIFE MANAGEMENT

Animal Husbandry 107	(2-2) 3	Agronomy 105	(2-2) 3
General Animal Husbandry		Fundamentals of Crop	
Biology 101	(3-4) 4	Production	
General Botany of Seed Plants		Biology 102	(2-3) 3
Chemistry 101	(3-3) 4	Taxonomy of Flowering Plants	
General Chemistry		Chemistry 102	(3-3) 4
English 103	(3-0) 3	General Chemistry	
Composition and Rhetoric		English 104	(3-0) 3
Freshman Orientation 101	(1-0) 1	Composition and Rhetoric	
Mathematics 101	(3-0) 3	Mathematics 103	(3-0) 3
Algebra		Plane Trigonometry	
Military Science	(1-2) 1	Military Science	(1-2) 1
Physical Education 101	(0-3) R	Physical Education 102	(0-3) R
	19		17

NOTE: Students whose high school records and entrance tests indicate inadequate preparation will omit Biology 101 in the first semester of the freshman year and take Chemistry 101a, English 103a, and Mathematics 101a. Such students will still be required to take Biology 101.

Curriculum in
FOOD TECHNOLOGY

Chemistry 101	(3-3) 4	Biology 101	(3-4) 4
General Chemistry		General Botany of Seed Plants	
English 103	(3-0) 3	Biology 107	(2-4) 3
Composition and Rhetoric		Animal Biology	
Freshman Orientation 101	(1-0) 1	Chemistry 102	(3-3) 4
Mathematics 102	(3-0) 3	General Chemistry	
Algebra		English 104	(3-0) 3
Mathematics 103	(3-0) 3	Composition and Rhetoric	
Plane Trigonometry		Mathematics 104	(4-0) 4
Mechanical Engineering 101	(1-2) 2	Analytics	
Engineering Problems		Military Science	(1-2) 1
Military Science	(1-2) 1	Physical Education 102	(0-3) R
Physical Education 101	(0-3) R		
	17		19

NOTE: Students whose high school records and entrance tests indicate inadequate preparation will omit Mathematics 102, 103 and Mechanical Engineering 101 in the first semester of the freshman year and take Chemistry 101a, English 103a, and Mathematics 111. Such students will still be required to take Mathematics 103 and Mechanical Engineering 101, and their degree requirements will be increased by 3 credit hours.

THE SCHOOL OF ARTS AND SCIENCES

Through the curricula of the School of Arts and Sciences, the College provides opportunity for students to do major work in the liberal arts fields of economics, English, history, journalism, mathematics, and modern languages; to prepare for business careers through the programs in business and accounting; or to prepare for teaching through the programs in education and physical education. The curricula in science permit students to major in the biological sciences (botany, zoology, or entomology) or in one of the physical sciences (chemistry or physics).

Liberal Arts

The curricula in liberal arts leading to the Bachelor of Arts degree offer carefully planned programs of study in the following fields:

- Economics
- English (Language and Literature)
- History (including Government)
- Journalism
- Mathematics
- Modern Languages

The curricula are intended for students who are interested in liberal rather than technological and scientific studies and for those who plan to prepare for the study of law or to prepare for foreign service. The first two years are spent in introductory work in essential fundamental subjects. The purpose of this plan is to give the student breadth of view and to enable him to take a more intelligent part in his own education. During the last two years the student selects a major and a minor field of study and appropriate electives, under the advice and direction of the Dean of the School of Arts and Sciences.

Major and Minor Studies

By April 15 of his sophomore year the student selects a major and a minor field of study, according to the following directions:

1. One of the following departments must be chosen as the field of major study: economics, English, history, journalism, mathematics, or modern languages.

2. For his minor study the student may select one of the above departments other than that of his major study, or one of the following: biology, business and accounting, chemistry, education, entomology, geography, geology, journalism, physical education, physics, psychology, or rural sociology.

3. The remainder of the elective work may be taken in any of the departments indicated above, or other departments of the College, subject to the approval of the Dean of the School of Arts and Sciences.

4. Before graduation the student must complete (in addition to such courses as are prescribed in the freshman and sophomore years) a minimum of from eighteen to twenty-four semester hours in his major study and of twelve semester hours in his minor study.

Requirement in English Composition

Any student passing English 103, 104 without making at least six grade points on the course will be required to take other courses in English composition, in addition to other requirements in English, until he has accumulated a total of six grade points in such courses.

The Foreign Language Requirement

All students are required to complete a minimum of twelve semester hours in one foreign language, except where three units in one language, or two units in each of two languages, are presented for admission, in which case six semester hours of advanced work in one of the languages presented will cover the requirement. The satisfactory completion of four years of a modern foreign language in preparatory school will exempt the student from the language requirement if he can give evidence of an adequate reading knowledge of that language.

Training for Business

The curricula in business and accounting provide the type of training for business careers usually offered in schools of business administration. The freshman year is the same in both curricula. At the beginning of the sophomore year, the student elects the curriculum in business or the curriculum in accounting.

The curriculum in accounting offers a professional course of training for employment in governmental accounting, com-

mercial and industrial accounting, public accounting, and for executive positions requiring specialized training in accounting. Positions in these fields are generally designated as accountant, auditor, cost accountant, internal auditor, tax accountant, controller, and public accountant.

The curriculum in business provides a broad training for business careers. It is designed for those preparing for responsible staff or executive positions and for those planning to establish their own business enterprises. It may be adapted, with the approval of the Head of the Department of Business and Accounting, to specialization in the fields of management, banking, credits, statistics, insurance, finance, investments, advertising, marketing, retailing, transportation, purchasing, and personnel administration.

Each curriculum contains courses essential to general education and permits the election of Spanish or another modern foreign language.

On completion of either curriculum, the students will receive the degree of Bachelor of Science in Business or Accounting, according to the option followed.

Preparation for Teaching

The credit courses in education and physical education provide the necessary professional training for those who plan to teach in secondary schools. All of these, except those entering on vocational agriculture and industrial education, should carefully follow one or another of the following programs:

1. Students following any catalogued program of studies leading to a bachelor's degree may secure a general teacher's certificate valid for four years by electing the following courses: Education 121, 321, 322; History 307; and Psychology 301. Since employment as a teacher will often be contingent on credit for courses in physical education, such students should, if possible, elect Physical Education 415 and one of the following: Physical Education 213, 214, 315, 316.

2. Students who major in education or physical education may follow programs leading either to the B.A. or the B.S. degree, the degree awarded depending on the field in which they prepare to teach and on the inclusion or omission of a foreign language in their undergraduate work. Preparation for teaching in some one of the usual high school fields (commercial work, English, history and social studies, math-

ematics, modern languages, natural sciences) is an essential part of the program for students who major in education or physical education, each of whom will be required to complete as nearly as possible some one of the group of courses so designated in the general catalogue.

Teacher Placement

The Placement Office of the College, with the special cooperation of the School of Arts and Sciences, endeavors to assist graduates and students of the College in securing suitable teaching positions and to assist boards of education and other school officials in securing teachers. While no one is assured of a position, every reasonable effort will be made to place all worthy candidates registered for this service. Information obtained from professors and others is confidential. No charge is made for this service.

Requirement in English Composition

Any student passing English 103, 104 without making at least six grade points will be required to take other courses in English composition, in addition to other requirements in English, until he has accumulated a total of six grade points in such courses.

Science

The curricula in science are planned with the following purposes in view:

1. To prepare students for research in pure science and for practical work in the fields of biology (botany, zoology), chemistry, entomology, and physics, especially as they relate to agriculture, engineering, and other allied industries.
2. To train teachers in science in secondary schools and other institutions of learning.
3. To provide the necessary fundamental preparation for students planning to enter upon the study of medicine and kindred fields.

Major Studies

1. By April 15 of his sophomore year, the student must designate as his major department one of the following: biology (botany, zoology), chemistry, entomology, physics.

2. Before graduation he must complete in his major department a minimum of from 24 to 30 semester hours, not including prescribed subjects. Certain studies from other departments closely allied to his major subject will be required.

Requirement in English Composition

Any student passing English 103, 104 without making at least six grade points on the course will be required to take other courses in English composition, in addition to other requirements in English, until he has accumulated a total of six grade points in such courses.

The Foreign Language Requirement

French or German is to be taken in satisfaction of the foreign language requirement. All students are required to complete a minimum of twelve semester hours in one of these languages, except where at least three units in French or German are presented for admission, in which case six semester hours of advanced work in the same language will satisfy the requirement. The satisfactory completion of four years of either French or German in preparatory school will exempt the student from the language requirement in the course in science if he can give evidence of an adequate reading knowledge of that language.

**Curriculum in
LIBERAL ARTS**

(For Majors in Economics, English, History, Mathematics, and Modern Languages, and Pre-Law.)

First Semester	Credit	Second Semester	Credit
Biology 111	(2-3) 3	Biology 112	(2-3) 3
General Biology		General Biology	
English 103	(3-0) 3	English 104	(3-0) 3
Composition and Rhetoric		Composition and Rhetoric	
Freshman Orientation 101	(1-0) 1	History 106	(3-0) 3
History 105	(3-0) 3	History of the United States	
History of the United States		Mathematics 103	(3-0) 3
Mathematics 101 or 102	(3-0) 3	Plane Trigonometry	
Algebra		Military Science	(1-2) 1
Military Science	(1-2) 1	Modern Language	(3-0) 3
Modern Language	(3-0) 3	French, German, or Spanish	
French, German, or Spanish		Physical Education 102	(0-3) R
Physical Education 101	(0-3) R		
	<hr style="width: 100%; border: 0.5px solid black;"/>		<hr style="width: 100%; border: 0.5px solid black;"/>
	17		16

NOTES: 1. Transfers who have credit for any 6 hours of college biology may substitute such credit for Biology 111, 112.

2. Students who have a good high school record in mathematics and make a satisfactory showing on the mathematics achievement test may enter at once Mathematics 102 instead of Mathematics 101.

For a Major in
JOURNALISM

First Semester	Credit	Second Semester	Credit
Biology 115	(3-3) 4	Chemistry 106	(3-3)
Survey of Biology		General Chemistry	
English 103	(3-0) 3	or	
Composition and Rhetoric		Geology 205	(3-3)
Freshman Orientation 101	(1-0) 1	Elementary Geology	
History 105	(3-0) 3	or	
History of the United States		Physics 211	(3-3) 4
Mathematics 101	(3-0) 3	A Brief Survey of Physics	
Algebra		English 104	(3-0) 3
Military Science	(1-2) 1	Composition and Rhetoric	
Modern Language	(3-0) 3	History 106	(3-0) 3
Spanish Recommended		History of the United States	
Physical Education 101	(0-3) R	Mathematics 110	(3-0) 3
	18	Survey Course in Mathematics	
		Military Science	(1-2) 1
		Modern Language	(3-0) 3
		Spanish Recommended	
		Physical Education 102	(0-3) R
			17

**Curriculum in
ACCOUNTING**

Accounting 101	(3-3) 4	Accounting 102	(3-3) 4
Principles of Accounting		Principles of Accounting	
Biology 115	(3-3) 4	Chemistry 106	(3-3)
Survey of Biology		General Chemistry	
English 103	(3-0) 3	or	
Composition and Rhetoric		Geology 205	(3-3)
Freshman Orientation 101	(1-0) 1	Elementary Geology	
History 105	(3-0) 3	or	
History of the United States		Physics 211	(3-3) 4
Mathematics 101	(3-0) 3	A Brief Survey of Physics	
Algebra		English 104	(3-0) 3
Military Science	(1-2) 1	Composition and Rhetoric	
Physical Education 101	(0-3) R	History 106	(3-0) 3
	19	History of the United States	
		Mathematics 110	(3-0) 3
		Survey Course in Mathematics	
		Military Science	(1-2) 1
		Physical Education 102	(0-3) R
			18

NOTE: Students who desire to take Spanish or another modern foreign language may substitute 6 credit hours of the language for History 105, 106 and continue the language for the 6 elective credit hours in the sophomore year.

Curriculum in

BUSINESS

First Semester		Credit	Second Semester		Credit
Accounting 101	(3-3)	4	Accounting 102	(3-3)	4
Principles of Accounting			Principles of Accounting		
Biology 115	(3-3)	4	Chemistry 106	(3-3)	
Survey of Biology			General Chemistry		
English 103	(3-0)	3	or		
Composition and Rhetoric			Geology 205	(3-3)	
Freshman Orientation 101	(1-0)	1	Elementary Geology		
History 105	(3-0)	3	or		
History of the United States			Physics 211	(3-3)	4
Mathematics 101	(3-0)	3	A Brief Survey of Physics		
Algebra			English 104	(3-0)	3
Military Science	(1-2)	1	Composition and Rhetoric		
Physical Education 101	(0-3)	R	History 106	(3-0)	3
			History of the United States		
		19	Mathematics 110	(3-0)	3
			Survey Course in Mathematics		
			Military Science	(1-2)	1
			Physical Education 102	(0-3)	R
					18

NOTE: Students who desire to take Spanish or another modern foreign language may substitute 6 credit hours of the language for History 105, 106 and continue the language for the 6 elective credit hours in the sophomore year.

Curriculum in

BUSINESS

(BUILDING PRODUCTS MARKETING OPTION)

Accounting 101	(3-3)	4	Accounting 102	(3-3)	4
Principles of Accounting			Principles of Accounting		
Engineering Drawing 111	(0-6)	2	Agricultural Engineering 222	(1-3)	2
Engineering Drawing			Farm Shop		
English 103	(3-0)	3	Chemistry 106	(3-3)	4
Composition and Rhetoric			General Chemistry		
Freshman Orientation 101	(1-0)	1	Engineering Drawing 112	(0-4)	1
Mathematics 101	(3-0)	3	Engineering Drawing		
Algebra			English 104	(3-0)	3
Mechanical Engineering 105	(1-6)	3	Composition and Rhetoric		
Pench Work in Wood			Mathematics 103	(3-0)	3
Military Science	(1-2)	1	Plane Trigonometry		
Physical Education 101	(0-3)	R	Military Science	(1-2)	1
			Physical Education 102	(0-3)	R
		17			18

Curriculum in

EDUCATION

Biology 101	(3-4)	4	Biology 107	(2-4)	3
General Botany of Seed Plants			Animal Biology		
English 103	(3-0)	3	English 104	(3-0)	3
Composition and Rhetoric			Composition and Rhetoric		
Freshman Orientation 101	(1-0)	1	History 106	(3-0)	3
History 105	(3-0)	3	History of the United States		
History of the United States			Mathematics 103	(3-0)	3
Mathematics 101 or 102	(3-0)	3	Plane Trigonometry		
Algebra			Military Science	(1-2)	1
Military Science	(1-2)	1	Modern Language	(3-0)	3
Modern Language	(3-0)	3	French, German, or Spanish		
French, German, or Spanish			Physical Education 102	(0-3)	R
Physical Education 101	(0-3)	R			16
		18			

Curriculum in
PHYSICAL EDUCATION

First Semester	Credit	Second Semester	Credit
Biology 111	(2-3) 3	Biology 112	(2-3) 3
General Biology		General Biology	
English 103	(3-0) 3	Chemistry 106	(3-3) 4
Composition and Rhetoric		General Chemistry	
Freshman Orientation 101	(1-0) 1	Education 121	(3-0) 3
History 105	(3-0) 3	An Introduction to Education	
History of the United States		English 104	(3-0) 3
Mathematics 101	(3-0) 3	Composition and Rhetoric	
Algebra		History 106	(3-0) 3
Military Science	(1-2) 1	History of the United States	
Rural Sociology 205	(3-0) 3	Military Science	(1-2) 1
Principles of Sociology		Physical Education 102	(0-3) R
Physical Education 101	(0-3) R		17
	17		

CURRICULA IN SCIENCE
For Majors in
BIOLOGY AND ENTOMOLOGY

Biology 101	(3-4)	Biology 102	(2-3)
General Botany of Seed Plants		Taxonomy of Flowering Plants	
or	4 or 3	or	
Biology 105	(2-4)	Biology 106	(2-4) 3
General Zoology		General Zoology	
Chemistry 101	(3-3)	Chemistry 102	(3-3)
General Chemistry		General Chemistry	
or		or	
Chemistry 103	(3-4) 4	Chemistry 104	(3-4) 4
General Chemistry		General Chemistry	
English 103	(3-0) 3	English 104	(3-0) 3
Composition and Rhetoric		Composition and Rhetoric	
Freshman Orientation 101	(1-0) 1	Mathematics 103	(3-0) 3
Mathematics 101	(3-0) 3	Plane Trigonometry	
Algebra		Military Science	(1-2) 1
Military Science	(1-2) 1	Modern Language	(3-0) 3
Modern Language	(3-0) 3	French or German	
French or German		Physical Education 102	(0-3) R
Physical Education 101	(0-3) R		17
	19 or 18		

Studies Preparatory to
MEDICINE, DENTISTRY, AND RELATED FIELDS
Premedical and Predental Program

Biology 105	(2-4) 3	Biology 106	(2-4) 3
General Zoology		General Zoology	
Chemistry 103	(3-4) 4	Chemistry 104	(3-4) 4
General Chemistry		General Chemistry	
English 103	(3-0) 3	English 104	(3-0) 3
Composition and Rhetoric		Composition and Rhetoric	
Freshman Orientation 101	(1-0) 1	Mathematics 103	(3-0) 3
Mathematics 101	(3-0) 3	Plane Trigonometry	
Algebra		Military Science	(1-2) 1
Military Science	(1-2) 1	Modern Language	(3-0) 3
Modern Language	(3-0) 3	French or German	
French or German		Physical Education 102	(0-3) R
Physical Education 101	(0-3) R		17
	18		

Program Preparatory to
CERTIFICATE AS MEDICAL TECHNOLOGIST

First Semester	Credit	Second Semester	Credit
Biology 105	(2-4) 3	Biology 106	(2-4) 3
General Zoology		General Zoology	
Chemistry 103	(3-4) 4	Chemistry 104	(3-4) 4
General Chemistry		General Chemistry	
English 103	(3-0) 3	English 104	(3-0) 3
Composition and Rhetoric		Composition and Rhetoric	
Freshman Orientation 101	(1-0) 1	Mathematics 103	(3-0) 3
Mathematics 101	(3-0) 3	Plane Trigonometry	
Algebra		Military Science	(1-2) 1
Military Science	(1-2) 1	Modern Language	(3-0) 3
Modern Language	(3-0) 3	French, German, or Spanish	
French, German, or Spanish		Physical Education 102	(0-3) R
Physical Education 101	(0-3) R		17
	18		

For a Major in

CHEMISTRY

Biology 111	(2-3) 3	Biology 112	(2-3) 3
General Biology		General Biology	
Chemistry 101	(3-3)	Chemistry 102	(3-3)
General Chemistry		General Chemistry	
or		or	
Chemistry 103	(3-4) 4	Chemistry 104	(3-4) 4
General Chemistry		General Chemistry	
English 103	(3-0) 3	English 104	(3-0) 3
Composition and Rhetoric		Composition and Rhetoric	
Freshman Orientation 101	(1-0) 1	Mathematics 104	(4-0) 4
Mathematics 102	(3-0) 3	Analytics	
Algebra		Mechanical Engineering 101	(1-2) 2
Mathematics 103	(3-0) 3	Engineering Problems	
Plane Trigonometry		Military Science	(1-2) 1
Military Science	(1-2) 1	Physical Education 102	(0-3) R
Physical Education 101	(0-3) R		17
	18		

For a Major in

PHYSICS

Biology 111	(2-3) 3	Biology 112	(2-3) 3
General Biology		General Biology	
Chemistry 101	(3-3)	Chemistry 102	(3-3)
General Chemistry		General Chemistry	
or		or	
Chemistry 103	(3-4) 4	Chemistry 104	(3-4) 4
General Chemistry		General Chemistry	
English 103	(3-0) 3	English 104	(3-0) 3
Composition and Rhetoric		Composition and Rhetoric	
Freshman Orientation 101	(1-0) 1	Mathematics 104	(4-0) 4
Mathematics 102	(3-0) 3	Analytics	
Algebra		Mechanical Engineering 101	(1-2) 2
Mathematics 103	(3-0) 3	Engineering Problems	
Plane Trigonometry		Military Science	(1-2) 1
Military Science	(1-2) 1	Physical Education 102	(0-3) R
Physical Education 101	(0-3) R		17
	18		

THE SCHOOL OF ENGINEERING

CURRICULA

Four-Year Curricula

Aeronautical Engineering	Geology
Chemical Engineering	Industrial Education
Civil Engineering	Management Engineering
Electrical Engineering	Mechanical Engineering
Geological Engineering	Petroleum Engineering

Five-Year Curricula

Architecture	Petroleum Engineering—
Chemical Engineering—	Chemical Engineering
Business	Petroleum Engineering—
*Management Engineering	Geological Engineering
Petroleum Engineering	Petroleum Engineering—
Petroleum Engineering—	Mechanical Engineering
Business	

General Statement

The courses of study outlined under the various engineering curricula leading to a degree in engineering are planned to provide training in mathematics and the sciences, and in the application of these subjects to the solution of technological problems in the several engineering fields. These courses are professional engineering courses and are not training courses for any of the mechanical or manipulative skills. The curricula are planned to provide preparation for research, design, operation management, testing, or maintenance of engineering projects. With the exception of architecture, geology, and industrial education, all curricula are the same through the freshman year.

Aeronautical Engineering

The profession of aeronautical engineering includes the technical activities associated with design, manufacture, maintenance, and testing of aircraft, and also aeronautical research.

*NOTE: A degree of Bachelor of Science in Management Engineering may be awarded on the basis of a student's having satisfactorily completed the degree of Bachelor of Science in Aeronautical, Chemical, Civil, Electrical, Mechanical, or Petroleum Engineering and additional required courses.

The curriculum in aeronautical engineering includes sound preparation in mathematics, physics, chemistry, English, and economics. The junior and senior years are devoted largely to the professional courses in aerodynamics, aircraft structures, and aircraft design. The opportunity to elect courses in a desired specialty is provided in the senior year.

Excellent facilities are provided on the campus and at the College-owned Easterwood Airport. The airport is one of the best in the Southwest and offers unequalled facilities for flight training and flight test work. A new large wind tunnel is also located at the airport.

Graduates of the course are well fitted for positions in many other fields of engineering. Students trained in aerodynamics and the design of high-strength, light-weight structures are in demand in many industries.

Architecture

The program in architecture is designed primarily to prepare young men for professional careers in the design and construction of buildings.

The method of teaching is that of individual criticism accompanied by careful direction in the use of the library and in materials of construction. The work of the first two years is common and is designed to give the student fundamental training in the techniques of drafting and an appreciation and understanding of the elementary principles of design and construction. The work of the upper years is built around the larger problems of architecture which, in many instances, become individual student projects.

Two options are offered: I, Design Option; II, Construction Option. The program is the same during the first two years. This makes it possible for the student to defer his decision until the beginning of his junior year, when he can more intelligently select his course of study for his upper years. Both options are five-year courses. Option I leads to the degree of Bachelor of Architecture; Option II, to the degree of Bachelor of Science in Architectural Construction.

While the programs are designed primarily to prepare young men for professional careers in architecture and building construction, the training forms a good foundation for those who may wish to enter other fields. Graduates find their way into the profession as draftsmen, designers, estimators, superintendents of construction, and develop careers as architects, contractors, and city and regional planners.

The department is a member of the Association of Collegiate Schools of Architecture, is on the approved list of schools accepted by the Texas State Board of Architectural Examiners, and is accredited by the National Architectural Accrediting Board.

Chemical Engineering

Chemical engineering is that branch of engineering concerned with the development and application of manufacturing processes in which chemical or certain physical changes of materials are involved. These processes may usually be resolved into a coordinated series of unit physical operations and unit chemical processes. The work of the chemical engineer is concerned primarily with the design, construction, and operation of equipment and plants in which series of these unit operations and processes are applied. Chemistry, physics, and mathematics are the underlying sciences of chemical engineering, and economics is its guide in practice.

Chemical engineering became a separate division of engineering with the growth of strictly chemical industries, and it is now recognized as one of the important divisions of engineering, dealing with combustion of fuels, heat treatment of metals and alloys, the preparation of water for potable and industrial use, the refining of petroleum and cotton seed oil, the development of electric furnace products, portland cement, lime gypsum, plaster, heavy chemical, soaps, rubber, corn products, textiles, paper, artificial leather and silks, food products, and other products.

The work of the chemical engineer is the changing of raw materials into finished products with the greatest efficiency and economy. He substitutes a rigid control of processes for guess work and uncertainty and increases the productivity of labor by supplying more efficient processes where the standard and quality of the finished product are revised and the amount of seconds and rejections is reduced. The chemical engineer must also be able to modify a process in order to adapt it to commercial conditions and to select his material for construction with special reference to its use. His work is distinct from that of the chemist on the one hand and the mechanical engineer on the other, though he must have a thorough training in both chemistry and engineering.

The curriculum in chemical engineering is planned to prepare students for the design, construction, and operation of industries in which materials undergo chemical and physical

change. The unit operations, such as fluid flow, heat flow, evaporation, drying, distillation, gas absorption, filtration, crushing and grinding, and size separation are basic studies that may be applied to any industry. General chemical processes are also included in the laboratory and classroom work. Research in both of these divisions is fostered by cooperative projects with the Texas Engineering Experiment Station and industrial organizations of the State.

As chemical engineering treats of the processes whereby materials undergo a chemical and physical change, it is apparent that a large number of diversified industries have use for the chemical engineer, not only in the operation and control of processes but in the design of special equipment. Many chemical engineers enter the research laboratory, investigating processes in the laboratory and supervising their operation in the plants, considering carefully the controlling interest of cost as a factor in all industrial operations.

In addition to the regular four-year course in chemical engineering, it is possible for a student to spend an additional year and receive two degrees. Five-year curricula are available in chemical engineering combined with petroleum engineering or with business. They lead to a Bachelor of Science degree in both Chemical Engineering and Petroleum Engineering or a Bachelor of Science degree in both Chemical Engineering and Business.

Chemical Engineering—Business

The five-year curriculum in chemical engineering—business leads to a Bachelor of Science degree in both Chemical Engineering and Business. This curriculum includes all the courses required in the four-year chemical engineering and the four-year business curricula and will provide the student with an excellent technical background as well as a sound business foundation.

Chemical Engineering—Petroleum Engineering

The five-year curriculum in chemical engineering—petroleum engineering leads to a Bachelor of Science degree in both Chemical Engineering and Petroleum Engineering. This curriculum includes all of the courses required in the four-year chemical engineering and the four-year petroleum engineering curricula and is intended to provide a background so that the graduate may have the necessary fundamentals to en-

gage in the refining, natural gasoline, development, production, transportation phase of the petroleum industry, or in allied industries which employ similar techniques or materials.

Civil Engineering

The curriculum in civil engineering has for its object the thorough grounding of young men in the underlying principles of engineering, with such training in the art of putting these principles into practical use as will enable the graduate to give satisfactory service in an engineering organization immediately upon graduation.

During the first three years the student is given training in subject matter common to all civil engineering courses, such as surveying, highway engineering, mechanics, strength of materials, hydraulics, and stress analysis. In the fourth year he is given an opportunity to specialize moderately in structural engineering, highway engineering, hydraulic engineering, or municipal and sanitary engineering.

Study in either field will fit the student for any of the lines of work open to civil engineers, among which may be mentioned the following: professional practice in surveying; water supply, sewerage and sewage disposal; railway locations; construction and maintenance; the design and construction of dams, reservoirs, canals, foundations, buildings, bridges, and other structures; design, construction, and maintenance of roads and pavements; planning and execution of sanitary measures for rural and urban communities; administration of city business as city manager; research work in colleges or government bureaus; technical service of various kinds in the industries, leading to executive positions.

Courses in cost estimating and construction methods make it possible for students who are interested in the construction field to specialize to some extent in the field of construction. In addition to undergraduate courses in foundations, graduate courses in soil mechanics are available.

Electrical Engineering

The curriculum in electrical engineering is designed to give the student thorough training in the principles of direct and alternating current phenomena and of electronics. It provides training in all the subjects fundamental to the general practice of engineering, in the theory of electricity, and in the application of the theory to practical problems in engineering.

The work of the first three years includes courses in mathematics, chemistry, physics, drawing, and mechanics which are common to all branches of engineering. Electrical engineering subjects begin in the sophomore year and continue in increasing amount through the junior and senior years. Much emphasis is put on the fundamental principles of electricity, but the fundamentals are vitalized with illustrations of their application in engineering practice. Some opportunity for specialization is offered in the senior year with electives in radio and communication engineering, power machinery, and industrial electronics. These courses tend to impress more firmly on the students' minds the principles already covered and to give the student specific information about some branch of electrical engineering.

Electrical engineering offers broad opportunities for young men with proper training. Graduates in this course may find employment in any of the following fields: construction and operation of generating stations and electric power systems, installation and operation of electrical equipment in industrial plants, manufacture and sale of electrical equipment, geophysical exploration in the petroleum industry, rural electrification and the application of electricity to agriculture, radio communications, television, telephone and telegraph systems, illumination, urban and trunk line transportation systems, aircraft electrical installations, teaching, and research.

Recently the application of electron tubes to the control of all sorts of processes in industry, as well as in communications and television, has resulted in what is known as the field of electronics. While this field is especially promising and new developments in it are constantly being made, it should be pointed out that it is not something distinct and apart from electrical engineering, but it is merely the newest of the many fields in which electrical engineers work. The course in electrical engineering prepares its graduates for work in electronics which includes radar and other recent war developments.

A branch of the American Institute of Electrical Engineers and a branch of the Institute of Radio Engineers have been organized among the students of the College. These afford a means of keeping students in touch with the latest developments in the electrical and communication fields.

Geology

Training in geology is designed to prepare the student in the fundamentals of the earth sciences. These include the

study of rocks, minerals, fossils, earth structures, the physical features of the earth's surface, and the economic application of this knowledge.

The curriculum is broad, yet it allows the student the choice of a major in geology, geology with a geophysics option, or geological engineering. A major in any one of these three leads to the degree of Bachelor of Science in a normal period of four years.

Major in Geology

This curriculum is designed for the student who approaches geology as a science, with the inherent obligation of exploring, observing, analyzing, inquiring, classifying, describing, and finally interpreting the record and the content of the rocks. It is based upon the related sciences of chemistry, physics, mathematics, and biology. It prepares a man either for general geological investigation or for graduate study in geology.

Geology, Geophysics Option

This curriculum is designed for the student who plans to apply geology to the physical measurement of earth structures, especially to exploration geophysics. The training prepares a man to use geology with an organization that uses seismic, gravimetric, magnetic, electric, or other techniques of geophysical surveying. Emphasis is placed on structural geology, physics, mathematics, and related fundamentals of engineering.

Geological Engineering

The curriculum in geological engineering provides training in the fundamental principles of engineering as well as specialized training in geology. Although this course is designed primarily for the student who expects to be employed as a petroleum geologist, the curriculum is such that the graduate is also qualified for work with railroads, public utilities, construction, ceramic, and other companies in which a knowledge of both geology and engineering is desirable.

Industrial Education

In general the industrial education curriculum under Group 1 aims to prepare young men for the following types of occupations:

Employees in industrial relations departments of industries which include such work as employee training, employment, personnel, and accident prevention. (Students preferring to enter this field will elect subjects dealing with management, personnel, and labor problems.)

Teachers of industrial arts subjects in junior, senior, or technical schools. (Industrial arts in these schools include such subjects as laboratory of industry, electrical work, metal work, woodwork, technical drawing, plastics, and other craft courses.)

Teachers of occupational courses and sponsors of guidance, safety, and personnel programs in public schools.

The industrial education curriculum under Group 2 is intended for teachers, supervisors, and directors for the vocational industrial schools and classes of Texas. Since the men completing this course are to qualify as teachers under the State Plan for Vocational Education, a candidate for a degree must satisfy the requirements for one of the classes of vocational teachers as specified in the State Plan.

Management Engineering

Surveys have shown that some seventy-five per cent of all engineering graduates are sooner or later employed in fields other than their specialty in college. Many of these engineers who are no longer doing strictly engineering work have moved into executive positions where their background knowledge of engineering principles is invaluable, but where their pressing need is knowledge of the principles of management. As the executive's responsibility grows, it becomes necessary for him to have a working knowledge of accounting principles, including cost accounting, of scientific planning and control of production, of what constitutes an efficiently performed job, of the intricacies of human relations in industry, of personnel problems in general, and of effective administrative technics. These phases and similar phases of managing an enterprise are emphasized in all the curricula of management engineering.

Industry is in need of young men who have a technical background which informs them of the nature of the technological forces, who have in addition an adequate knowledge of the details of organizing and operating an enterprise, and who are cognizant of the human and humane elements involved. The curricula in management engineering are designed with these needs in mind.

Four-Year Curriculum

The four-year curriculum leading to the degree of Bachelor of Science in Management Engineering covers the basic engineering subjects founded on the physical sciences which are common to most engineering curricula. Specialized fields of study in management engineering, also called industrial engineering, include the principles of organizing and operating an industrial enterprise, of devising efficient methods of production, and of handling personnel. A foundation is laid with the intention of providing substantial aid to young engineers seeking greater responsibilities.

Five-Year Curricula

Since there is an insistent and growing demand for men versed in the fundamentals of other branches of engineering and also in the fundamentals of executive control, there are offered five-year curricula designed for students who wish training in management and in aeronautical, chemical, civil, electrical, mechanical, or petroleum engineering. Thus, in five years the student may complete the requirements for two Bachelor of Science degrees, one in his preferred specialty of engineering and the other in the field of management. The completion of the requirements for these two degrees should admirably prepare the engineering graduate for rapid advancement.

These curricula are largely the outgrowth of the rapid industrialization of Texas and the Southwest, a process in part due to the tendency toward the decentralization of industry from the older industrial areas and in part due to the economic advantages of Texas. While the opportunities in the industries of Texas are emphasized, graduates are finding employment in all parts of the nation.

Mechanical Engineering

The breadth of the field of mechanical engineering is such that extensive specialization in undergraduate work is impossible and undesirable. Industry needs mechanical engineers for such a variety of work that it is deemed wise to make the curriculum broad but very fundamental.

Practice work in pattern shop, foundry, machine shop, and welding is designed to instruct in methods rather than to develop skill.

During the senior year it is possible for the student to elect courses in definite fields, such as refrigeration, internal combustion engines, aeronautics, automotive engineering, and air conditioning.

Training in habits of accurate analysis and logical thinking, the prerequisites of a good engineer, is emphasized.

Engineering work may be grouped into **design, construction, and erection and maintenance** of machinery of all kinds, such as machine tools, automobiles, airplanes, marine machinery, power plant equipment, oil well machinery, internal combustion engines, air conditioning equipment, welding equipment, woodworking machinery, and iron and steel producing equipment.

A **design engineer** may work in nearly any industry where the basic required knowledge of design is the same as that of another, but the specialized knowledge of the industry's products must be quite different. A designer of air conditioning equipment might know very little about the design of steam boilers, steam turbines, machine tools, jigs, or fixtures. The specialized knowledge is gained largely in the industry.

Every machine, instrument, or piece of equipment produced by any manufacturing plant involves the knowledge of materials, machines, equipment, tools, and processes. Here again the mechanical engineer is needed.

Erection and maintenance engineers are needed in every plant and building where a considerable amount of machinery and equipment is used. The water systems, the air conditioning and refrigeration equipment, the elevators, the installation and replacement of production machines, and the like create demands for skilled engineers.

Among the industries that employ large numbers of mechanical engineers are air conditioning concerns, oil companies, power plants, and all types of manufacturers. Sales engineers are probably as much in demand as any other group.

Petroleum Engineering

The curricula in petroleum engineering are intended to prepare students for the petroleum industry and particularly for those branches which have to do with drilling, production, and transportation of petroleum as well as with the natural gas industry.

Six courses in petroleum engineering are available to the students in this department: (1) A regular four-year curriculum in petroleum engineering, which leads to a degree of Bachelor of Science; (2) A five-year curriculum in petroleum engineering, which leads to a degree of Bachelor of Petroleum Engineering; (3) A five-year curriculum in petroleum engi-

neering—business, which leads to a Bachelor of Science degree in both Petroleum Engineering and Business; (4) A five-year curriculum in petroleum engineering—chemical engineering, which leads to a Bachelor of Science degree in both Petroleum Engineering and Chemical Engineering; (5) A five-year curriculum in petroleum engineering—geological engineering, which leads to a Bachelor of Science degree in both Petroleum Engineering and Geological Engineering; (6) A five-year curriculum in petroleum engineering—mechanical engineering, which leads to a Bachelor of Science in both Petroleum Engineering and Mechanical Engineering.

The five-year courses include all of the subjects given in the four-year curriculum.

The four-year curriculum in petroleum engineering includes sufficient training in civil, mechanical, and electrical engineering to prepare the graduate for the application of engineering principles to the petroleum industry. Courses in geology give an understanding of the geological structures and conditions favorable for petroleum deposits. To the basic subjects are added courses in petroleum engineering which illustrate the application of engineering principles to the type of problems met in the petroleum industry and which also give some understanding of the technique of the industry. Emphasis is placed on thorough grounding in the fundamentals rather than on application to particular problems.

The five-year curriculum in petroleum engineering is designed primarily for those students interested in petroleum research. In addition to the subjects given in the four-year course, additional mathematics, physics, chemistry, and research courses in petroleum engineering are presented.

Petroleum Engineering—Business

The five-year curriculum in petroleum engineering—business leads to a Bachelor of Science degree in both Petroleum Engineering and Business. This curriculum includes all the courses required in the four-year petroleum engineering and the four-year business curricula and will provide the student with an excellent engineering background particularly applicable to the development, production, and transportation phases of the petroleum industry as well as a broad business foundation applicable to any industry.

Petroleum Engineering—Chemical Engineering

The five-year curriculum in petroleum engineering—chemical engineering leads to a Bachelor of Science degree in both Petroleum Engineering and Chemical Engineering. This

curriculum includes all of the courses required in the four-year petroleum engineering and the four-year chemical engineering curricula and is intended to provide a background so that the graduate may have the necessary fundamentals to engage in refining, natural gasoline, development, production, or transportation phase of the petroleum industry.

Petroleum Engineering—Geological Engineering

The five-year petroleum engineering—geological engineering course includes all of the subjects given in the four-year petroleum engineering course and all of the subjects in the four-year geological engineering course. This course is intended to give a student interested in geology a background in engineering and the application of geology and engineering to the petroleum industry.

Petroleum Engineering—Mechanical Engineering

The five-year curriculum in petroleum engineering—mechanical engineering leads to Bachelor of Science degrees in both Petroleum Engineering and Mechanical Engineering. The scope of the work in the petroleum industry is so broad and so varied that it is desirable for the man who expects to enter this field to have a very comprehensive training. This course is designed to give such breadth of training by including the essential courses in both the petroleum and mechanical curricula. The production, transportation, and refining of oil involves the generation and utilization of power, the design and operation of mechanical equipment, the principles of heat transfer, and the handling of men and finances. Thus, a five-year curriculum combining the two courses was deemed desirable.

Curriculum in
ARCHITECTURE

First Semester	Credit	Second Semester	Credit
Architecture 101	(1-9) 4	Architecture 102	(1-9) 4
Architecture I		Architecture I	
English 103	(3-0) 3	English 104	(3-0) 3
Composition and Rhetoric		Composition and Rhetoric	
Freshman Orientation 101	(1-0) 1	Mathematics 116	(4-0) 4
Mathematics 102	(3-0) 3	Plane Trigonometry and	
Algebra		Analytics	
Mechanical Engineering 101	(1-2) 2	Mechanical Engineering 102	(1-2) 2
Engineering Problems		Engineering Problems	
Mechanical Engineering 105	(1-6) 3	Mechanical Engineering 106	(1-6) 3
Bench Work in Wood		Cabinet Making	
Military Science	(1-2) 1	Military Science	(1-2) 1
Physical Education 101	(0-3) R	Physical Education 102	(0-3) R
	17		17

Curriculum in
ENGINEERING

(With the exception of architecture, geology, and industrial education, the curricula for all engineering programs are identical in the freshman year.)

Chemistry 101	(3-3) 4	Chemistry 102	(3-3) 4
General Chemistry		General Chemistry	
Engineering Drawing 111	(0-6) 2	Engineering Drawing 112	(0-4) 1
Engineering Drawing		Engineering Drawing	
English 103	(3-0) 3	Engineering Drawing 124	(2-2) 3
Composition and Rhetoric		Descriptive Geometry	
Freshman Orientation 101	(1-0) 1	English 104	(3-0) 3
Mathematics 102	(3-0) 3	Composition and Rhetoric	
Algebra		Mathematics 104	(4-0) 4
Mathematics 103	(3-0) 3	Analytics	
Plane Trigonometry		Mechanical Engineering 102	(1-2) 2
Mechanical Engineering 101	(1-2) 2	Engineering Problems	
Engineering Problems		Military Science	(1-2) 1
Military Science	(1-2) 1	Physical Education 102	(0-3) R
Physical Education 101	(0-3) R		18
	19		

Curriculum in
GEOLOGY

Chemistry 101	(3-3) 4	Biology 105	(2-4) 3
General Chemistry		General Zoology	
Engineering Drawing 111	(0-6) 2	Chemistry 102	(3-3) 4
Engineering Drawing		General Chemistry	
English 103	(3-0) 3	Engineering Drawing 124	(2-2) 3
Composition and Rhetoric		Descriptive Geometry	
Freshman Orientation 101	(1-0) 1	English 104	(3-0) 3
Mathematics 102	(3-0) 3	Composition and Rhetoric	
Algebra		Mathematics 104	(4-0) 4
Mathematics 103	(3-0) 3	Analytics	
Plane Trigonometry		Military Science	(1-2) 1
Mechanical Engineering 101	(1-2) 2	Physical Education 102	(0-3) R
Engineering Problems			18
Military Science	(1-2) 1		
Physical Education 101	(0-3) R		19

Curriculum in
INDUSTRIAL EDUCATION

(Group 1)
For General Industries and
Industrial Arts Teachers

First Semester	Credit	Second Semester	Credit
Engineering Drawing 111	(0-6) 2	Chemistry 106	(3-3) 4
Engineering Drawing		General Chemistry	
Engineering Drawing 127	(1-3) 2	Engineering Drawing 112	(0-4) 1
Industrial Freehand Sketching		Engineering Drawing	
English 103	(3-0) 3	Engineering Drawing 124	(2-2) 3
Composition and Rhetoric		Descriptive Geometry	
Freshman Orientation 101	(1-0) 1	Engineering Drawing 128	(0-2) 1
Industrial Education 105	(1-5) 3	Methods of Industrial	
Wood Craft		Reproduction	
Mathematics 101	(3-0) 3	English 104	(3-0) 3
Algebra		Composition and Rhetoric	
Mathematics 103	(3-0) 3	Industrial Education 106	(1-5) 3
Plane Trigonometry		Sheet Metal	
Mechanical Engineering 201	(0-3) 1	Mechanical Engineering 202	(0-3) 1
Welding and Foundry		Welding and Foundry	
Military Science	(1-2) 1	Military Science	(1-2) 1
Physical Education 101	(0-3) R	Physical Education 102	(0-3) R
	<u>19</u>		<u>17</u>

THE SCHOOL OF VETERINARY MEDICINE

The School of Veterinary Medicine is organized into seven departments: Veterinary Anatomy, Veterinary Bacteriology and Hygiene, Veterinary Medicine and Surgery (includes Veterinary Clinics), Veterinary Parasitology, Veterinary Pathology, Veterinary Physiology and Pharmacology, and Veterinary Research. In addition to the sixty semester hours required in preliminary training, the course of study involves credits on 148 credit hours with suitable grades obtained in standard colleges. All credit for veterinary subjects must be obtained in a veterinary school, college, or university accredited and recognized by the American Veterinary Medical Association and the Bureau of Animal Industry, United States Department of Agriculture. The objective of the School of Veterinary Medicine is that training in all departments will be adequate in every phase and will meet the approval of the Committee on Education of the American Veterinary Medical Association. It is understood that in registration for subjects they be sequential and meet with the approval of the Faculty of the School of Veterinary Medicine. The basic, business, and professional training is of such a nature that graduates from the School of Veterinary Medicine are qualified to administer and advise in matters of diseases of farm and ranch animals, including poultry, pet animals, zoo animals, wild life fur-bearing animals, and public health, particularly the inter-transmission of diseases of animals and people. Authoritative training is given in milk hygiene (inspection) and meat hygiene (inspection).

Veterinarians find many opportunities for private practice of their profession in Texas. Texas has 500,000 farms with livestock, hundreds of ranches for livestock production including poultry, and millions of owners of pet animals. All of these activities require veterinary service, and they have certain public health aspects that require correlation with the health of the people.

The Bureau of Animal Industry, United States Department of Agriculture, employs many veterinarians in its divisions of Administration, Animal Diseases, Animal Husbandry, Animal Nutrition, Bio-Chemistry, Tick Eradication, Virus Serum Control, Field Inspection, Meat Inspection, Packers and Stock Yards, Pathological, Tuberculosis, and Zoology.

Federal, state, county, municipal, and proprietary organizations employ veterinarians on their boards of health and for meat and milk inspection. State livestock sanitary commissions employ veterinarians for administrative, technical, and field work.

Veterinarians are commissioned in the Veterinary Corps, United States Army.

Veterinarians find many opportunities for employment in agricultural experiment stations, research institutions, the United States Public Health Service, medical foundations, with producers of biologics and pharmaceutical preparations, and with manufacturers of feed stuffs. There are many opportunities for veterinarians with investment companies, insurance companies and trusts, and in veterinary and agricultural colleges.

Enrollment in the freshman year in the School of Veterinary Medicine is limited by the facilities of the College to a definite number of Texas residents each year. Selection within the quota is based on scholastic record, professional aptitude, and such tests and examinations as it may seem necessary to require. Admission to the preliminary training course does not carry any assurance that a student will be admitted to the freshman year in Veterinary Medicine unless his qualifications place him within the quota to be admitted. Full completion of the preliminary training requirements with satisfactory grades is a prerequisite for admission to the freshman year of the School of Veterinary Medicine or to the veterinary courses of that year.

For information concerning the pre-veterinary program, see the School of Agriculture.

GENERAL INFORMATION

Where is the A. and M. College of Texas located, and how do I reach it? How do I get to the A. and M. Annex?

The Agricultural and Mechanical College of Texas is located at College Station, Brazos County, Texas, 100 miles north of Houston, 100 miles east of Austin, and 170 miles south of Dallas. It is served by the Southern Pacific and Missouri Pacific Railroads, with convenient connections to all parts of the State; by bus lines; and by Pioneer Airlines, which maintain a terminal about twelve miles from the campus. A modern system of paved highways affords direct communication with the principal cities and towns of the State.

The A. and M. Annex is located on Highway 21 about seven miles west of Bryan and about twelve miles from the

main campus. Bus service from Bryan to the Annex is maintained for the convenience of faculty and students alike with busses running every hour.

What is the A. and M. Annex?

The A. and M. Annex was established as an emergency measure in the fall of 1946 to provide facilities for the large number of students desirous of entering A. and M. College and to care for the ex-servicemen who were returning in great numbers to resume their educations, which had been interrupted by the war. Classroom space on the main campus was not adequate to care for these needs, and it was felt that the freshman class could be taught as well at the Annex as on the main campus. Consequently a part of Bryan Army Air Field was leased from the government and converted into use as a part of this college. Laboratories were provided; living quarters were improved; and instructional facilities duplicating those at the campus as closely as possible were established. Members of the regular College faculty were designated to teach full or part-time at the Annex. Each dean has a representative at the Annex to advise with the students of his school, and branch offices have been established there for the Dean of the College, Dean of Men, Registrar's Office, Fiscal Office, and such others as are necessary. It is not a college campus in the traditional sense, but with the splendid cooperation of both faculty and students it has enabled many more students to complete their work than could have done so otherwise. Over 4,000 students have completed their freshman year at the Annex and moved on to the main campus for their advanced work.

How do you get from the Annex to Bryan and from the Annex to the main campus?

Bus service is available between the Annex and Bryan with busses running every hour. Busses also run between Bryan and the main campus every hour, more frequently on week-ends. For such activities as intercollegiate athletic events, military reviews, Town Hall programs, and other miscellaneous activities, the College provides direct transportation to and from the campus.

Where will I be located, on the campus or at the Annex?

If you are a high school graduate entering a college for the first time, you will be located at the Annex unless you are assigned to the campus at the request of the Athletic Depart-

ment. Unless you have completed as many as 15 semester hours of college work, you will be assigned there as a student. If you can live in Bryan or elsewhere with close relatives, you will be assigned to attend classes at the Annex, for classroom space and not dormitory space is the problem on the campus.

May I live out in town, or do I have to live in a College dormitory?

Students are required to live in College-operated housing facilities, though permission may be granted by the Chief of Housing to a student to live off the campus with near relatives.

How do I make application to enter?

Any person who wishes to enter the College should write to the Registrar, Agricultural and Mechanical College of Texas, College Station, Texas, for formal application blanks. The student should fill out the application sheet in his own handwriting, have his high school superintendent or principal fill out the entrance certificate, and return both forms to the Registrar. When admission requirements have been satisfied, the Registrar will then send the applicant a physical examination form to be filled out by his personal physician and a letter of acceptance. The physical examination form is to be completed and sent to the College Physician, and the entrance card must be brought to the College for use in registration. It is of the highest importance that credentials be submitted in advance. If this cannot be done, the applicant should bring them at the opening of the session, for admission **will not be granted** without the presentation of full credentials. If the applicant has been enrolled in any other college, he must present a complete and official transcript from that institution no matter how short the period of attendance.

All applicants for admission to the College must be of good moral character, at least sixteen years old, and free from contagious or infectious diseases.

What are the methods of admission?

The most common method of admission is by certificate of graduation from an accredited secondary school, with a minimum of fifteen approved units.

Another method is by passing the entrance examinations which are held for those interested at the beginning of each

semester. Anyone interested in entering by this method should notify the Registrar well in advance of registration.

The third method is by individual approval, which means that an applicant over twenty-one years of age who has not recently attended school and who cannot satisfy the entrance requirements in full may be admitted after personal interview simply by making official application and furnishing evidence that his preparation is substantially equivalent to that required of other applicants and that he possesses the ability and seriousness of purpose necessary to pursue his studies with profit to himself and to the satisfaction of the College.

A transfer student from another college must present with his formal application an official and complete transcript from each institution attended showing honorable dismissal from that institution, and a marked catalogue showing the college courses referred to in the transcript. In addition, he must have maintained a grade point average of 1.00 or better on all courses undertaken during each of his last two semesters of attendance. The same average applies to work done during summer school. A non-resident student must have maintained a grade point average of 1.5 or better.

A limited number of young men over twenty-one years of age may be admitted to the College as special students, not candidates for a degree. If you wish further particulars concerning this method of admission, contact the Registrar, who will be glad to assist you with your problem.

What high school units must I have completed to take the course of study I wish?

The distribution of units required for admission to any particular school of the college is shown on the next page. Suppose you have chosen a major in business as your objective. Then you would be in the School of Arts and Sciences and the number of required units as shown in List A is 3 in English, 1 in algebra, 1 in plane geometry, 2 in social science, 1 in natural science, and 7 in elective subjects from the group shown in List B, making a total of 15 units.

LIST A—DISTRIBUTION OF UNITS REQUIRED FOR ADMISSION

School of—	Number of Units Required in—						
	English	Algebra	Plane Geom.	Social Science	Natural Science	Elective Subjects	Total
Agriculture:							
All curricula except Agricultural Engineering	3	1	1	1	1	8	15
Agricultural Engineering	3	1½	1	1	1	7½	15
Arts and Sciences:	3	1	1	2	1	7	15
Engineering:							
All curricula except Industrial Educ.	3	1½	1	2	1	6½	15
Industrial Education	3	1	1	2	1	7	15

LIST B—ELECTIVE UNITS

	Units		Units
English (4th unit)	1	Natural Sciences:	
Mathematics:		Biology	1
Advanced Algebra 1/2 or 1	1½ or 1	Botany	1
Solid Geometry	1½	Chemistry	1
Trigonometry	1½	General Science	1
Advanced Arithmetic	1½	Physics	1
Social Sciences:		Physiography	1½
Ancient History	1	Physiology	1/2 or 1
Modern History	1	Zoology	1
English History	1/2 or 1	Vocational Subjects:	
American History	1/2 or 1	Agriculture	1 to 4
Texas History	1/2	Bookkeeping	1
World History	1	Drawing	1 to 4
Civics	1/2 or 1	Com. Arithmetic	1½
Economics	1/2	Commercial Law	1/2
Foreign Languages:		Com. Geography	1½
Latin	2 to 4	Shop Work	1 to 4
French	2 to 4	Journalism	1
German	2 to 4	Stenography and	
Spanish	2 to 4	Typing	1
		Public Speaking	1/2 or 1

- NOTES:
1. At least $1\frac{1}{2}$ units of algebra are required as preparation for the first semester of mathematics regularly scheduled in the freshman year of engineering. Students will be admitted to these curricula with 1 unit of algebra, but they must take Mathematics 101 in the first semester instead of Mathematics 102. The degree requirements for such students will be increased by 3 credit hours. Students with a good record in high school algebra who pass a satisfactory placement test in algebra may substitute Mathematics 102 for Mathematics 101.
 2. Students who plan to enter the School of Engineering should complete physics, solid geometry, and 2 units of algebra as a part of their course of study in high school.
 3. A maximum of 4 units in vocational subjects will be accepted for admission to the School of Arts and Sciences and the School of Engineering; for admission to the School of Agriculture a maximum of 5 such units will be accepted.
 4. The mathematics entrance requirement for all curricula in the School of Agriculture, with the exception of agricultural engineering, may be satisfied with 2 units of high school algebra. Admission into the agricultural engineering curriculum requires $1\frac{1}{2}$ units of algebra and 1 unit of plane geometry.

Are nonresident high school graduates eligible for admission?

A limited number of applicants will be accepted from nearby states so long as facilities may be available. Such students in addition to satisfying all admission requirements must rank in the upper half of their graduating classes.

How and when do I reserve a room?

As soon as you have been accepted for admission, you will be mailed a room reservation request card, which should be filled out as directed and returned to the Fiscal Office with a check or money order for \$6.00 for room reservation fee and key deposit. The Fiscal Office will forward a receipt for your deposit to the Chief of Housing, who will communicate with you concerning a room assignment. The room reservation fee will be credited to you as part of your first installment of room rent upon your registration in September or February. Should you decide it will be impossible for you to register, you may cancel your reservation not later than August 15 for the fall semester and January 15 for the spring semester, and your fee will be returned. Cancellations made after these dates will result in a forfeit of the reservation fee.

Any inquiries you may have regarding your assignment or choice of roommate should be directed to the Office of the Chief of Housing.

What kind of a grading system does A. and M. use?

The student's semester grade in a course is based upon recitation, written exercises, quizzes, laboratory work, and final examinations. The weight assigned to each of these factors is in the main determined by the head of the department.

There are four passing grades signifying various degrees of accomplishment. Grade points are awarded on the basis of these grades.

Grade	Description	Range (Inclusive)	Grade Points per Semester Hour
A	Excellent	100-92	3
B	Good	91-84	2
C	Fair	83-76	1
D	Passing	75-70	0

The lowest passing grade is 70. There is one failing grade, F, below 70, indicating work of unsatisfactory quality. An F grade may be removed only by repeating the work satisfactorily in class.

The temporary grade "Inc." (Incomplete) indicates that the student has completed the course with the exception of a major quiz, final examination, or other work. This grade 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 done has been of a quality acceptable for the completion of the course. For an undergraduate student the privilege of completing such work is limited to the end of the first month of his succeeding semester in college; otherwise the final grade is F, and the student must repeat the course in order to receive credit, unless for good reason the Dean of the College grants an extension of time.

Permission to remove the grade "Inc." received because of absence from a quiz or examination is granted only on receipt of official notice that the absence was authorized or evidence that the cause for the absence prevented making normal preparation to take the quiz or examination before the close of the semester.

When a student resigns or is dropped one week after the beginning of a semester, or any time thereafter, the Registrar will call for his grades and enter on his permanent record the symbol WP after each course in which he is passing and WF after each course in which he is not making a passing grade. All WF's and F's will be taken into account in determining his grade point average thereafter unless for cause the Executive Committee directs otherwise.

What is a "Distinguished Student"?

One of the highest academic honors a student can attain is to be designated as a "Distinguished Student". At the end of each semester, students who have no grade below C, who

have completed during the semester at least 16 semester hours, and who have a grade point average of not less than 2.25 grade points per credit hour for the semester, shall be designated as "Distinguished Students".

What penalties are there for failure to keep up in class work?

At mid-semester and at the end of each semester, a scholastic deficiency list is prepared of all students who have passed less than 10 hours and/or made less than 10 grade points. When a student's name first appears on the Scholastic Deficiency List, the cause of the low grades will be investigated and he may be dropped from the rolls of the College if the deficiency warrants, or he may be placed on scholastic probation of such terms as the dean of his school may designate.

Am I required to take military science and physical education?

All first and second year students are required to take basic military science and Physical Education 101, 102, 201, 202 as a part of the freshman and sophomore work unless excused by the faculty. Transfer students above the classification of freshman will not be required to take military science. They will also be given exemption for one semester of required physical education for each semester of satisfactorily completed work at the other institution. Depending upon the time spent in the service of the Armed Forces, ex-servicemen may not be required to take military science or physical education. To establish any exemption, they should file a photostatic or certified copy of their discharge or separation papers in the Registrar's Office as soon after acceptance or after entering school as they can conveniently do so. Any student exempt from basic military science is required to take History 307 before graduation.

How much will it cost me to attend A. and M.?

Each student is required to pay the following fees to the Fiscal Department during the first and second semesters:

	First Semester	Second Semester
Matriculation Fee	\$ 25.00	\$ 25.00
Medical Service Fee	5.50	5.00
Student Activities Fee	8.20	9.00
Board	145.20	146.40
Room Rent	45.00	42.00
Laundry	13.30	13.50
Room Key Deposit, returnable	1.00	
Total.....	\$243.20	\$240.90

New students will also have the following expenses when registering for the first time:

Supplementary items to the uniform issued	
by the Government	\$50.00
Physical education uniform	18.00
Expenses of Freshman Week	6.60
	<hr/>
Total	\$74.60

The cost of textbooks and supplies varies with the course of study the student selects and with the quality he chooses to use. For an estimate let us assume that you buy all new books and the best quality of drawing instruments and slide rule where they are required. The College Exchange Store estimates the cost of textbooks and equipment for a year as follows for a course of study in one of the schools indicated:

School of Agriculture	\$ 30.00—\$ 60.00	depending upon the major selected (Agricultural Engineers see School of Engi- neering)
School of Arts & Sciences	\$ 25.00—\$ 40.00	liberal arts
	\$ 50.00	business and accounting
	\$ 50.00—\$ 60.00	science
School of Engineering	\$100.00—\$125.00	

The purchase of some used books will reduce the cost considerably in all schools, and the purchase of drawing instruments and a slide rule of cheaper quality will materially reduce the cost for an engineer. It should be remembered, however, that an engineer will use his drawing instruments and slide rule throughout his college career, and the purchase of adequate equipment originally may prove to be an economy in the end.

Personal incidental expenses will vary with the student's means, of course, but from \$100.00 to \$200.00 should be sufficient.

How will expenses differ for a day student?

The expenses for a day student are the same as those for other students with the exception of board, laundry, room rent, and room key deposit.

How should I pay my fees?

Payments to the Fiscal Department should be made by cashier's check or money order, payable to the Agricultural and Mechanical College of Texas. All checks, money orders, and drafts are accepted subject to final payment. Personal checks will not be accepted.

Those of you who would find it more convenient may pay the fees to the Fiscal Department in installments according to the following plan:

First Semester—

Amount due at time of registration, September 16.....	\$ 95.50
Amount due October 1-18	55.80
Amount due November 1-21	45.60
Amount due December 1-21	46.30
Total	<u>\$243.20</u>

Second Semester—

Amount due at time of registration, January 30-31....	\$ 76.70
Amount due February 1-20	45.95
Amount due March 1-20	46.00
Amount due April 1-20	72.25
Total	<u>\$240.90</u>

Are refunds made if a student has to leave school?

Any student withdrawing officially (a) during the first week of class work in a semester will receive a refund of four-fifths of the matriculation fee and medical fee; (b) during the second week of class work, three-fifths; (c) during the third week of class work, two-fifths; (d) during the fourth week of class work, one-fifth; (e) after the fourth week of class work, nothing. No refunds will be made until ten days have elapsed from the time the fees were paid.

A refund of board and laundry payment will not be made unless there is a consecutive absence of not less than ten days due to illness of the student or a member of his family, or for some other unavoidable cause.

No deductions will be made from charges for board, laundry, and room rent in case of entrance within ten days after the opening of a semester, nor will a refund be made in case of withdrawal during the last ten days of a semester or the last ten days for which payment is made.

What is meant by matriculation fee?

The matriculation fee, fixed by State law, includes the cost of necessary classroom and laboratory supplies and entitles the student to the usual college privileges, including the use of the library.

What does the student activities fee include?

This fee is for the support of student activities. It includes subscription to the Battalion newspaper, admission to all athletic events, the College annual, and the use of the swimming pool.

What kind of medical care is provided?

The services of the College Medical Department become available to the student as soon as he has registered. Besides providing medical care and advice at all times during the college session, the Department treats cases of acute illness as they appear and supervises the maintenance of healthful living conditions at the College.

The College Hospital, a modern brick building with 150 beds for patients, is staffed by two doctors, twelve nurses, two technicians, and other assistants. Students are given hospitalization, including room, board, general nursing service, doctor's service, and medicine. An x-ray department, clinical laboratory, and physiotherapy department are available at all times.

At the A. and M. Annex a clinic staffed by two registered nurses is maintained. Since these nurses have living quarters adjacent to the clinic, they are available at any time in case of an emergency. Cases of a minor nature are treated at the clinic, while those of a more serious nature are taken by College ambulance to the College Hospital.

What does the medical service fee cover?

The medical service fee covers the professional services of the college physician and the hospital staff. Surgical operations and charges for consultation with outside physicians requested by parents are not included in the medical fee.

Who is a nonresident student?

The residence status of a student is determined at the time of his first registration in the College, and his residence is not changed by his sojourn at A. and M. College as a student except as provided by law.

In compliance with the State law, the matriculation fee for nonresident students is \$150.00 per semester. A nonresident student is hereby defined to be a student of less than twenty-one years of age, living away from his family and whose family resides in another state, or whose family has not resided in Texas for the twelve months immediately preceding the date of registration; or a student of twenty-one years of age or over who resides out of the State or who has not been a resident of the State twelve months subsequent to his twenty-first birthday or for the twelve months immediately preceding the date of registration. A nonresident student registering for less than twelve credit hours is required to pay a matriculation fee of \$12.50 per credit hour.

The term "residence" means "legal residence" or "domicile"; and the term "resided in" means "domiciled in."

The legal residence of one who is under twenty-one years of age is that of the father. Upon death of the father, the legal residence of the minor is that of the mother. Upon divorce of the parents, the residence of the minor is determined by the legal residence of the person to whom custody is granted by the court. In the absence of any grant of custody, the residence of the father continues to control. Upon death of both parents, the legal residence of the minor continues to be that of the last surviving parent until he becomes twenty-one unless he makes his home with his grandparents, whereupon their residence is controlling.

A student under twenty-one years of age shall not be classified as a resident student until his parent shall have maintained legal residence in this state for at least twelve months. A student under twenty-one years of age whose parent leaves the State and establishes legal residence in another state shall be classified as a nonresident student. It shall be the responsibility and duty of the student to submit legal evidence of any change of residence.

All individuals who have come from without the State of Texas and who are within the State primarily for educational purposes are classified as nonresidents. Registration in an educational institution in the State is evidence that residence is primarily for educational purposes even though such individuals may have become qualified voters, have become legal wards of residents of Texas, have been adopted by residents of Texas, or have otherwise attempted to establish legal residence within the State.

A student twenty-one years of age or older who comes from without the State and desires to establish a status as a

resident student must be a resident of the State for a period of at least twelve months other than as a student in an educational institution and must have the intention of establishing a permanent residence within the State during that entire period.

All aliens shall be classified as nonresident students except that an alien who has applied for naturalization in the United States and has received his first citizenship papers shall have the same privilege of qualifying as a resident student as a citizen of the United States. The twelve months' residence required to establish the status of a resident student shall not begin until after such first citizenship papers have been issued to the alien.

Members of the Army, Navy, or Marine Corps of the United States who are stationed in Texas on active military duty shall be permitted to enroll their children by paying the tuition fees and charges provided for resident students without regard to the length of time such member of the Armed Service shall have been stationed on active duty within the State. This provision shall extend only during active military service in Texas; and upon such member of the Armed Service being transferred outside the State of Texas, his children shall be classified as to residence under the second paragraph of these regulations. Any student claiming the privilege of this section shall submit at each registration a statement by the commanding officer of the post or station at which his parent is on active duty verifying the fact of his parent's military status.

It shall be the responsibility of the student to pay the correct fee at the beginning of each semester or term for which he may register, and a penalty of \$5.00 shall be assessed for failure to pay the proper fee.

Who is responsible for the supervision and discipline of students?

The over-all supervision of student life is the responsibility of the Dean of Men. The Professor of Military Science and Tactics is Commandant of Cadets and is directly responsible for the discipline and control of the Cadet Corps, while the supervision of civilian students is the direct responsibility of the Dean of Men.

The student government of the College is carried out through the Student Senate, composed of 43 student senators representative of each group in the student body.

How do I obtain permission to leave the campus or Annex for week-end trips?

Each member of the cadet corps is eligible for one week-end pass every four weeks. The request should be made to the Commandant.

How can I secure part-time employment?

To become eligible for such employment or for operation of any of the student agencies or concessions, you must have been admitted to the College by the Registrar and have an accepted application on file with the Student Labor Office. Continued eligibility for employment is contingent on satisfactory performance of work and on the ability of the student to maintain a good scholastic standing. Ordinarily only those students whose financial resources are limited may be considered for employment. No student should expect to earn more than one third of his expenses, and first-term students should not plan to do outside work unless it is absolutely necessary. For more specific information, contact Mr. George Long, Director of Student Labor, 106 Goodwin Hall.

Where will I live at the Annex, and what will I need to bring with me for my room?

If you are assigned to the Annex, you will live in one of the army barracks. The College has made every effort to convert them into comfortable places for students to live and study. Approximately twenty boys are usually housed in one of these barracks. Each has his own bed, mattress, desk, and chair, and he shares a chest of drawers. You will need to bring with you or obtain after your arrival a study lamp, a waste basket, a pillow, and whatever you want in the way of linens, such as towels, sheets, pillow cases, bedspread, and blankets. If you are housed in a College dormitory, you will be required to furnish the same articles.

Due to the number living in one barracks, the College exerts extra effort to insure quiet conditions in the barracks during study hours. However, if you prefer, you may attend a supervised study hall in your area in the evenings if you find that you can study more efficiently there.

Am I allowed to have a radio in my room?

Yes, you may have a radio or a record player. The only requirement is that the volume be kept low enough not to bother others nearby. Record players are not to be used dur-

ing study hours, and radios must be kept at low volume then or not used at all if others are bothered by their use. The same regulations apply on the campus.

Am I allowed to have a car?

Yes, you may have a car subject to the regulations set up by the College. Any car must be registered in the Office of Campus Security within 48 hours of the time it is brought onto the campus; and while not in use, your car must be parked in the parking areas provided for student motor vehicles.

What religious services are held?

The churches bordering the campus constitute a large religious force ministering to the spiritual needs of the students. Their respective programs are adapted to the special needs of students; and every effort is made through the regular program of worship services, Sunday Schools, young people's organizations, and personal conferences by the church leaders to stimulate clear and constructive thinking in this important field. One week during each year is officially designated as Religious Emphasis Week in which the entire College cooperates in making it possible for an outstanding religious leader to address voluntary convocations of the students and for the denominations to sponsor intensive religious programs in their respective churches.

At the Annex each denomination has its own Sunday School exercises, while a group of the churches from the main campus have a cooperative plan whereby a union service is held in the chapel at the Annex by the pastor or assistant pastor from one of the campus churches. Those denominations participating rotate speakers. If they prefer, students may attend church services in Bryan or at the College churches. During Religious Emphasis Week the Annex has its own speaker who holds morning and evening services and is available for conferences with those students desiring them.

The Y.M.C.A. has a complete program established at the Annex. The freshmen have their own Y.M.C.A. cabinet, and the Assistant Secretary of the Y.M.C.A. at the campus works with them.

What library facilities are there at the Annex?

A part of one of the buildings at the Annex has been set aside as the library, and students will find there all of the books and periodicals they need as reference material in their courses.

If I am at the Annex, will I have any opportunity to participate in student publications?

If you have had high school experience in journalism or if you are interested in gaining some practical experience in newspaper writing, you are urged to join the staff of the student newspaper in your freshman year. Students who begin work as freshmen or sophomores as a rule become paid employees in editorial capacities during their senior year. The Annex students publish their own paper daily Monday through Friday, and once a week they have a full page in **The Battalion**, the paper published on the main campus. Representatives of the Student Publications Office meet with the freshmen to give them training in newspaper writing and publication.

What clubs are there to which I may belong?

Boys from the same home town often form clubs, and various technical groups form clubs, such as the Biology Club, Agronomy Society, etc. The members of these technical clubs are invited to the main campus to meet with the large corresponding club once during each semester.

If I am at the Annex, can I become a member of any of the various musical organizations?

Yes, you can belong to the Singing Cadets, the Aggie Band, or the Aggieland Orchestra. The director of the Singing Cadets, Mr. W. M. Turner, or his assistant, meets regularly with the boys interested in singing. They have their own organization and sing at various programs during the year.

Lt. Col. E. Vergne Adams, who directs the famous Texas Aggie Band, also directs the freshman band at the Annex. This band of approximately 100 pieces plays for all military formations at the Annex and at the numerous athletic events.

The Annex branch of the Aggieland Orchestra has played for several dances at the Annex and for several club dances. Boys trained in it have become prominent members of the campus Aggieland Orchestra.

What recreational facilities are there at the Annex?

A wide variety of recreational activity is available at the Annex. There is a theater, which shows pictures twice a week. A well equipped gymnasium affords the opportunity to participate in such indoor sports as boxing and basketball, while a complete intramural program of outdoor activities is established. The Annex has its own teams in various sports which schedule games with other local teams. The outdoor

swimming pool is available whenever the weather permits. The Student Center is a spacious lounge equipped with comfortable furniture for relaxation. A piano, record player, pool tables, and other types of equipment for recreation are available.

What is Town Hall, and how do I attend the programs if I am at the Annex?

Each year the College sponsors a series of entertainments in Guion Hall known as Town Hall. Season tickets are for sale at the beginning of the school year, and the price for each performance is small in comparison with the quality of entertainment offered. During the past season the Don Cossack Chorus, Phil Spitalny's All Girl Orchestra, Alec Templeton, Gladys Swarthout, and the San Antonio Symphony Orchestra were heard. Next year's program promises to be equally as good. The College furnishes direct transportation to and from the campus for those Annex students desiring to attend.

Are dances held at the Annex?

Yes, some dances and parties are held at the Annex, though the annual Freshman Ball is held on the main campus just as any other of the large dances.

Where do freshman athletes stay?

Those freshman athletes so designated by the Athletic Department are housed on the main campus so that they may be trained under the direct supervision of the Athletic Department. They are subject to the same regulations as freshmen at the Annex. These athletes form the official Freshman Team of the A. and M. College of Texas and compete with the freshman teams of other institutions.

What is the football schedule for the 1949 season?

September 17	Villanova	College Station
September 24	Texas Technological College	San Antonio
October 1	University of Oklahoma	Norman
October 8	Louisiana State University	Baton Rouge
October 15	Texas Christian University	Fort Worth
October 22	Baylor University	College Station
October 29	University of Arkansas	Fayetteville
November 5	Southern Methodist Univ.	College Station
November 12	Rice Institute	Houston
November 24	University of Texas	College Station

Will we have yell practice at the Annex?

Yes, you will have yell practice at the Annex just as they have it on the main campus. You will elect your own yell leaders, and at each practice one of the yell leaders from the campus will meet with you.

Is there an advisory program for freshmen?

Yes, there is a well-rounded advisory program for freshmen. All new students are required to report a week in advance of the beginning of classes for Freshman Week. During this period they are given a series of examinations, the results of which are used for advisory and placement purposes. Included among these examinations are a psychological test, an interest locator test, and five achievement tests. Any student whose scores on his tests indicate that he may have difficulty in pursuing the course he has chosen is advised to register in special sections designed to fit his particular needs. In addition to the testing program, the advisory program includes group conferences and individual conferences with deans and advisors. Each student is required to have at least one conference prior to his actual registration for class work. Other phases of the program include orientation by the Dean of Men with regard to College regulations and military organizations.

All freshmen are required also to take a vocational guidance course during their first semester in the College. This course, Freshman Orientation 101, is designed to assist the student in personal adjustment and in selecting a vocational career by means of lectures, visual aids, and demonstrations. A portion of the instruction is provided by the representatives of the deans of the several schools.

Is there a veteran's advisor?

The A. and M. College of Texas has provided a full-time employee to serve as Veterans Advisor and assist ex-service-men and their families with their problems. His office, which is located in Room 102 of Goodwin Hall, is especially equipped to assist in the advisement on personal matters and with applications for "G. I. Bill" benefits, admission to the College, selection of courses, clearing insurance and service pay difficulties, and receiving disability pay. The Veterans Advisor and his staff are sincerely interested in every problem of the veteran and welcome his inquiries by correspondence or by personal office calls.

DIRECTORY

Individual	Position	Office
F. C. Bolton	President of the College	204 Academic Building
M. T. Harrington	Acting Dean of the College; Dean of the School of Arts and Sciences	107 Academic Building
H. W. Barlow	Dean of the School of Engineering	210 Petroleum Eng. Bldg.
C. N. Shepardson	Dean of the School of Agriculture	200 Agricultural Building
I. B. Boughton	Dean of the School of Veterinary Medicine	100-101 Veterinary Hosp.
Ide P. Trotter	Dean of the Graduate School	126 Administration Bldg.
W. L. Penberthy	Dean of Men	102 Goodwin Hall
Col. H. L. Boatner	Commandant	2-3 Ross Hall
W. H. Holzmann	Comptroller	3 Administration Bldg.
H. L. Heaton	Registrar	115 Administration Bldg.
Harry Boyer	Chief of Housing	100 Goodwin Hall
Taylor Wilkins	Veteran's Advisor	104 Goodwin Hall
J. E. Marsh	College Physician	College Hospital
J. P. Abbott	Assistant to Dean of College—In Charge of A. and M. Annex	300 Academic Building
M. L. Cashion	Secretary of Young Men's Christian Association	Y.M.C.A. Building
George Long	Director of Student Labor	106 Goodwin Hall
R. G. Perryman	Secretary to Scholarships Committee	Registrar's Office, Administration Bldg.
E. V. Adams	Band Director	Dormitory 11
W. M. Turner	Director of Singing Cadets and Aggieland Orchestra	Music Hall
R. H. Stiteler	Football Coach	West Side of Stadium
Marty Karow	Basketball Coach; Baseball Coach	West Side of Stadium
F. G. Anderson	Track Coach	West Side of Stadium

DIRECTORY—(Continued)

Individual	Position	Office
E. E. Brush	Aeronautical Engineering Department	Aero. Eng. Building
L. P. Gabbard	Agricultural Economics and Sociology Dept.	401 Agricultural Bldg.
E. R. Alexander	Agricultural Education Department	107 Agr. Eng. Building
F. R. Jones	Agricultural Engineering Department	215 Agr. Eng. Building
J. E. Adams	Agronomy Department	310 New Agr. Exp. Sta. Building
J. C. Miller	Animal Husbandry Department	221 Animal Ind. Bldg.
Ernest Langford	Architecture Department	400 Academic Building
C. M. Lyman	Biochemistry and Nutrition Department	124 Animal Ind. Building
C. C. Doak	Biology Department	26 Science Hall
T. W. Leland	Business and Accounting Department	22 Building A
J. D. Lindsay	Chemical Engineering Department	308 Petroleum Building
F. W. Jensen	Chemistry Department	116 Chemistry Building
S. R. Wright	Civil Engineering Department	14 Nagle Hall
I. W. Rupel	Dairy Husbandry Department	213 Agricultural Bldg.
W. H. Delaplane	Economics Department	315 Academic Building
G. B. Wilcox	Education and Psychology Department	102 Academic Building
M. C. Hughes	Electrical Engineering Department	114 Bolton Hall
W. E. Street	Engineering Drawing Department	E Anchor Hall
T. F. Mayo	English Department	317 Academic Building
H. G. Johnston	Entomology Department	100 Old Agr. Exp. Sta. Bldg.
C. B. Godbey	Genetics Department	303 Animal Ind. Building
G. W. Schlesselman	Geography Department	112 Chemistry Building
S. A. Lynch	Geology Department	121 Geology Building
S. R. Gammon	History Department	211 Academic Building
G. W. Adriance	Horticulture Department	307 Agricultural Bldg.

DIRECTORY—(Continued)

Individual	Position	Office
C. H. Groneman	Industrial Education Department	105 M. E. Shops Bldg.
D. D. Burchard	Journalism Department	105 Bizzell Hall
A. F. DeWerth	Landscape Art Department	201 Agr. Eng. Building
V. M. Faires	Management Engineering Department	Austin Hall
W. L. Porter	Mathematics Department	221 Academic Building
C. W. Crawford	Mechanical Engineering Department	103 Fermier Hall
H. L. Boatner	Military Science Department	2-3 Ross Hall
J. J. Woolket	Modern Languages Department	119 Academic Building
S. R. Wright	Municipal and Sanitary Engineering Dept.	14 Nagle Hall
Harold Vance	Petroleum Engineering Department	106 Petroleum Building
C. E. Tishler	Physical Education Department	Gymnasium
J. G. Potter	Physics Department	22 Physics Building
A. A. Dunlap	Plant Physiology and Pathology Department	105 Old Exp. Sta. Bldg.
J. H. Quisenberry	Poultry Husbandry Department	300 Agricultural Building
V. A. Young	Range and Forestry Department	2nd Floor Agr. Eng. Bldg.
J. H. Milliff	Veterinary Anatomy Department	103 Francis Hall
F. P. Jaggi	Veterinary Hygiene Department	Veterinary Hospital
A. A. Lenert	Veterinary Medicine and Surgery Department	Veterinary Hospital
R. D. Turk	Veterinary Parasitology Department	102 Francis Hall
R. C. Dunn	Veterinary Pathology and Bacteriology Dept.	Veterinary Hospital
P. W. Burns	Veterinary Physiology and Pharmacology Dept.	203 Francis Hall
W. B. Davis	Wildlife Management Department	3rd Floor Agr. Eng. Bldg.

CALENDAR 1949

JANUARY

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

FEBRUARY

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

MARCH

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

APRIL

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

MAY

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

JUNE

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

JULY

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

AUGUST

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

SEPTEMBER

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

OCTOBER

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

NOVEMBER

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

DECEMBER

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

1950

JANUARY

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

FEBRUARY

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

MARCH

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

APRIL

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

MAY

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

JUNE

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

JULY

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

AUGUST

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

SEPTEMBER

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

OCTOBER

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

NOVEMBER

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

DECEMBER

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

