



ENERAL BULLETIN

1972 Vol. 4 KTI

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	Part-Time	EmploymentDorn	nitory & Food Service	Placement Service	
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	Please send	l a copy of General Informatio	n Bulletin.		
	I want to	visit the Kansas Technical Insti	tute campus.		
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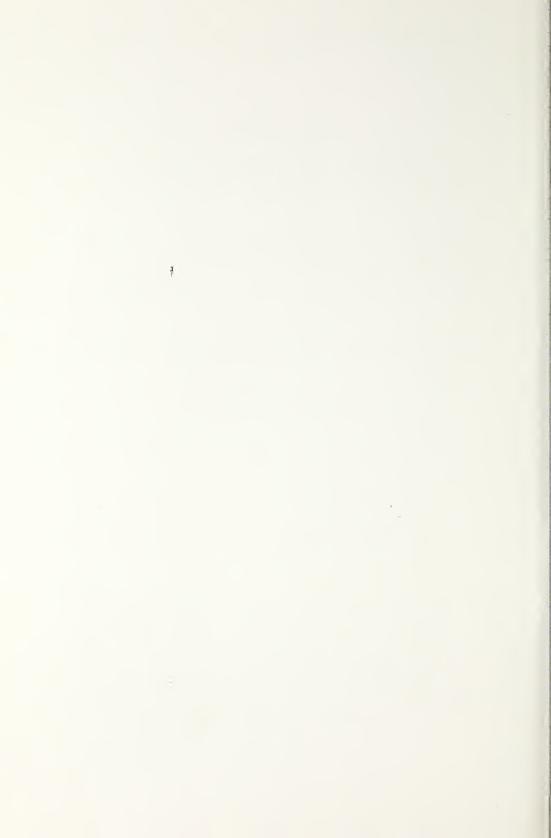
KANSAS TECHNICAL INSTITUTE

Salina, Kansas

GENERAL INFORMATION BULLETIN

Engineering and Science Technology

Volume 4 1972





DEAR FRIENDS:

The real spirit of any educational institution is made up of the student body, the faculty and the educational programs offered. Measured by these factors, Kansas Technical Institute has, in fact, a very real and lively spirit tuned to a modern day Kansas and world, and alert to the rapidly changing face of technology and society.

Our faculty is wise and experienced not only as measured by textbook and theory, but also as measured by years of on-the-job experience which insures that they understand today's world of work and which insures their teaching only current and valid processes and techniques.

Our educational programs are reviewed annually to insure that the programs we offer are, in fact, needed by today's and even tomorrow's employers. We are, and intend to remain, alert to changing educational needs as evidenced by the fact we have now developed and are offering programs in environmental protection.

Our student body is made up of young men and women just like you; I hope you use this bulletin as a guide to the campus and to measure what we can offer you. A real life education for the real world of work, with technology as a lifetime career, awaits you.

The best way to measure what you want as a career against what we offer in terms of an education for that career, is to visit the campus, talk with the faculty and meet the students. I invite you to come and meet the real spirit of Kansas Technical Institute.

James O. Thompson, Jr. President



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Section 1 General Information





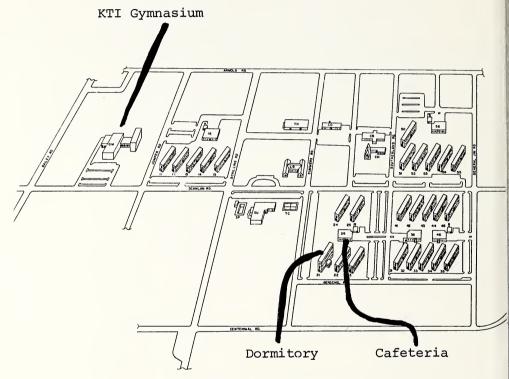
History and Purpose

Kansas Technical Institute, originally named Schilling Institute, was created by the Kansas Legislature in the 1965 General Session. Authorization was granted for the establishment of the Institute on the site of the deactivated Schilling Air Force Base near Salina, Kansas, and the first student body enrolled in the fall of 1966. The first graduates received their degrees in the spring of 1968.

The Institute offers two-year collegiate-level programs in engineering and science technology. Each program is occupationally oriented in that it prepares graduates for immediate employment as technicians in their specialized fields. The Associate of Technology Degree is granted to those persons satisfactorily completing program requirements. One program, Airframe and Powerplant Maintenance, grants the Certificate of Completion to those students who complete course requirements.

The Institute is the only school of its kind in the state of Kansas. The graduate technician fills a very important position as a member of the engineering team of many industries in Kansas and the nation. The need for graduate technicians is growing so rapidly that national estimates predict an acute and growing shortage for

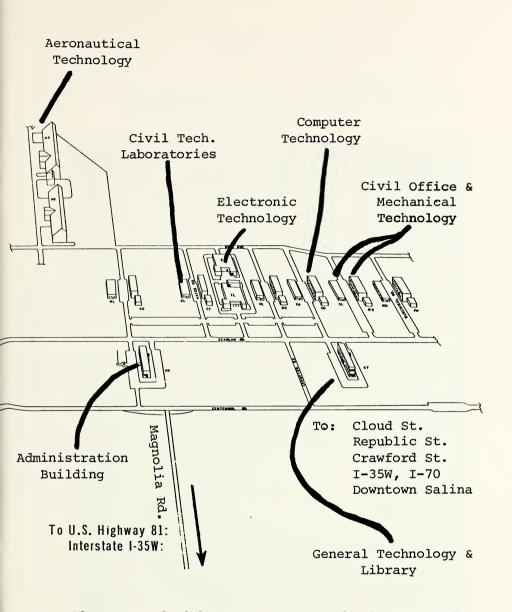
the foreseeable future.



To: U.S. Highway 81 Interstate I-35W

Campus

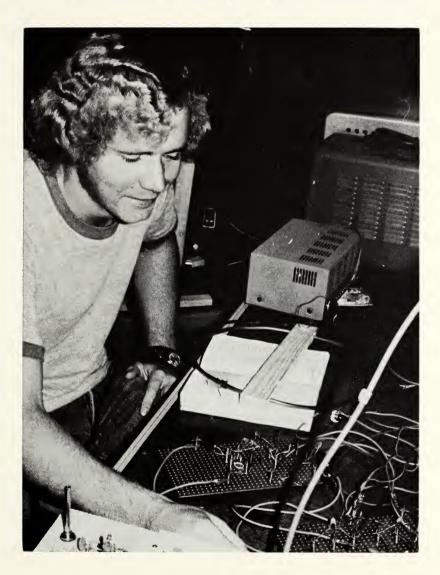
The Kansas Technical Institute campus is located in a suburb in the southwest edge of Salina. It is approximately one-fourth mile west and one-half mile north of the intersection of US-81 Highway and Schilling Road or three miles south of the I-70 and I-35W interchange.



The campus is divided into two major areas: the education complex on the north end consisting of classrooms, laboratory buildings, and aircraft hangars. The second area, approximately one-half mile south of the educational complex, is the residence and athletic area where the residence hall, cafeteria, and gymnasium are located.



Section 2 Admissions and Fees



Admission Procedures

Any person interested in attending Kansas Technical Institute should contact the Director of Public Affairs to obtain an Application for Admission form. All applicants must either hold a diploma from an accredited high school or have passed the General Education Development (GED) test or apply for enrollment as a special student.

The following procedure should be followed to apply for admission to the Institute:

- 1. Submit to the Institute a completed Application for Admission with a \$10 application fee, which is not refundable.
- 2. Have sent directly to the Institute a transcript of high school work. If not a high school graduate, then an official copy of the scores attained on the General Education Development (GED) test.
- Provide completed transcripts of all college level work completed. Each applicant will be notified by mail as to his status. The notification will also include the medical report form and additional information necessary for the enrollment process.

Admission as a Transfer Student

Applicants for admission as a transfer student from an approved university, college, junior college, technical institute, or area vocational-technical school may be accepted if their records indicate the ability to successfully pursue the courses in their chosen curriculum.

The procedure for a transfer student is as follows:

- 1. Provide an Application for Admission form.
- 2. Provide an official transcript from each post-secondary school attended and a copy of the high school transcript.
- 3. If waiver of course requirements is desired prior to enrollment, it is advisable to submit all of the above information to the Director of Student Affairs by not later than thirty days prior to the Institute's enrollment date. All credits will be evaluated to determine if they relate to courses in the chosen field of study. Those courses that do relate and meet the necessary criteria of content and success level will be submitted for approval. A Waiver of Credit form will be issued by the Director of Student Affairs to appropriate department heads for their approval. All courses approved on the Waiver of Credit form will become part of the student's transcript.

Out-of-State Applicants

Out-of-state applicants for admission to Kansas Technical Institute will be required to pay non-resident fees (see fee schedule) and generally must have a good academic rank in their high school graduating class. The residence of students entering Kansas Technical Institute is determined by an act of the Legislature (Sec. 76-2701, Kansas Statutes Annotated, Volume 6) which reads as follows:

"Persons entering the state educational institutions who, if adults, have not been, or if minors, whose parents have not been residents of the state of Kansas for six (6) months prior to matriculation in the state educational institutions, are non-residents for the purpose of payment of matriculation and incidental fees."

Foreign Applicants

Foreign applicants should contact the Director of Student Affairs for information concerning enrollment procedures. Correspondence should begin by not later than six (6) months prior to the desired enrollment date. Foreign students will be considered as non-residents for the purpose of paying student fees.

American College Test (ACT)

All applicants for enrollment will be required to take the American College Testing (ACT) tests battery prior to enrollment. High school students should arrange with their counselor or principal to take the tests during their senior year and request that these scores be sent to the Kansas Technical Institute. Other applicants may contact a local high school or the Student Affairs Office at the Institute for test information on the American College Testing program. The battery is used as a counseling and guidance aid only and is not used as a pre-admission requirement. The ACT college code number assigned to Kansas Technical Institute is 1453.

Medical Examination

A complete medical examination is required of each new student. Applicants who have been accepted for admission at Kansas Technical Institute will be mailed a medical form which should be given to their family physician at the time they appear for a medical examination.

The medical report, filed with the Institute by the student's family doctor, will become a part of the student's confidential file. The purpose of the report is to provide medical history in the event a student requires medical aid while enrolled at Kansas Technical Institute.

Fees and Expenses

The amount a student spends and the actual cost of obtaining an education at Kansas Technical Institute are two different items. A student can anticipate certain fixed expenses, such as enrollment fees, but beyond that, financial outlays depend to a considerable extent on the personal habits and management ability of the student. An estimate of the cost of attending the Institute for two regular semesters for a Kansas resident follows:

Fees Books and Supplies Room and Board (on campus)	150
Total Estimated Cost *	\$1,260

^{*} Does not include expenditures for clothing, laundry, travel, social activities, weekend leals, and miscellaneous expenses.

Enrollment Fees

Fees at Kansas Technical Institute are established by the State Board of Education and are subject to change at any time. Following is a description of the current student fees per semester at the Institute:

Regular Semester Fees	Kansas Resident	Non-Kansas Resident
Incidental Fee		\$360
Student Activities		10 5
Student Chion		
	\$135	\$375
(Interterm cost included in semester fees.)	_	
Students Enrolled in Six Semester Credits or Less	Kansas Resident	Non-Kansas Resident
Incidental Fees (per semester credit) Student Activities *	\$8.50	\$25.50 5.00
Student Union *		2.50
Summer Session Fees		
Incidental Fees (per semester credit)	\$8.50	\$25.50
Student Activities		5.00
Student Union		2.50
Special programs and seminars may be exempt from these fe	es.	

Incidental Fees

The Incidental Fee is used to pay, in part, costs of administration, operation, maintenance, equipment, library books, and other supplies.

Student Activity Fees

The Student Activity Fees are used to financially support student activities, including intramural sports, student organizations, intercollegiate athletics, and student dances.

Student Union Fees

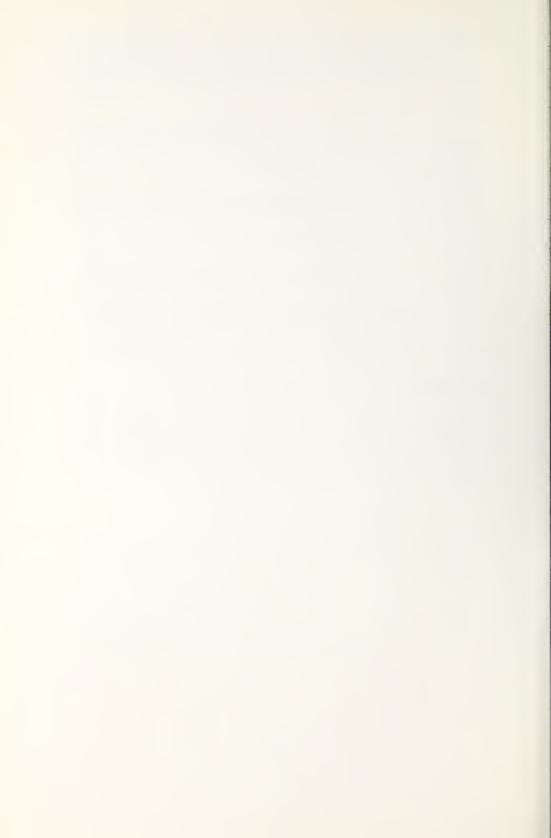
The Student Union Fees are used for the Student Union development and activities.

Vehicle Registration Fees

Students enrolled at the Institute who plan to operate motor vehicles on the campus must register them with the Business Office in the Administration Building. The registration fee is five dollars (\$5) per academic year. The student will be issued an identification sticker permiting parking in all non-restricted parking areas. Violation of traffic and parking regulations will result in progressive fines and, if excessive, may result in dismissal from the Institute.

Refunds

A student who enrolls at Kansas Technical Institute, but who finds it necessary to withdraw from school, is entitled to a refund of enrollment fees as determined by the Office of Student Affairs. The refund schedule allows 80% refund after the first class day. This refund percentage diminishes at a rate of 4% for each class day. After the 20th day, no refund will be allowed.



Section 3 Academic Information



Scope of Programs

The year at Kansas Technical Institute consists of two regular semesters, an interterm, and a summer session. A student who carries a prescribed credit load and who makes satisfactory progress can graduate after the completion of four regular semesters (two years).

Although the interterm and the summer session are not required, many students enroll in them for additional technology enrichment courses, or to satisfy course deficiencies. Each student should consult his faculty advisor to determine whether or not a practical advantage may be gained by attending a summer session or interterm.

Scheduling of Classes

A schedule of classes is established by the faculty for each semester, interterm and the summer session. A copy of the class schedule can be obtained from the Student Affairs Office one week prior to the enrollment date.

In general, classes are scheduled Monday through Friday. Most classes are scheduled between 8:00 a.m. and 5:00 p.m.; however, some classes are scheduled in the evenings to extend the services of instruction to persons who cannot attend classes between the hours of 8 and 5.

Lecture classes are 50 minutes in duration with a ten minute interval between periods. Laboratory classes are generally 1 hour and 50 minutes, but specific courses may hold 2 hours and 50 minute sessions.

Enrolling for Credit or Audit

A student may enroll in any course for credit provided he has met all prerequisite requirements. Students enrolled in a course for credit will take all examinations scheduled for the course. Courses taken for credit will be posted to the student's transcript with the letter grade earned in the course.

A student may enroll in a course for audit with permission from the instructor and upon payment of the appropriate course audit fee. Courses taken for audit will not be posted to the transcript nor is it necessary that a student take the scheduled examinations in the course.

Students may not enroll in a course for audit which they expect to take at a later date for credit. A qualifying examination for credit may not be taken in a course which has previously been audited by the student.

Special Student

A person enrolling without a declared major is considered a special student. Although a degree objective is not necessary at the time of enrollment, a field of study should be selected as early as

possible.

Although the high school diploma or equivalent is generally recognized as a basic requirement for admission, there are conditions which make it permissible to enroll without having the high school diploma or GED. Anyone who enrolls without the equivalent of a high school diploma will be classed as a special student even though he establishes a degree objective.

The educational objectives of each special student will be reviewed on a semester by semester basis in the Office of Academic Affairs. Special students may not apply for candidacy for a degree; however, they may receive a Certificate of Completion of certain

specialized programs.

Special students will pay the same fees as regular students, whether for credit or audit. Any student may enroll in a given course provided he has completed necessary course prerequisites or has prerequisite requirements waived by the Director of Academic Affairs.

Semester Credits

The units of completed work are "semester credits." One semester credit presumes that a student will spend three hours per each week of the semester for academic study. One semester credit of lecture class requires that a student attend one fifty-minute period of lecture each week during the semester and that the student spend approximately two hours each week on homework or outside assignments. One semester credit of laboratory requires a student to spend a minimum of two hours in the laboratory with possible additional outside work.

Student Load

A student may enroll in up to eighteen semester credits of course work without special permission. Students who desire to enroll in more than eighteen credits must obtain written permission from the Director of Academic Affairs. Students may not enroll in more than 18 semester credits their first semester at the Institute. A student with a poor scholastic record or a student who is employed part-time may be counselled to carry a reduced load. (See Reinstatement.)

Any student enrolled in 12 or more semester credits is officially classified as a full-time student.

Class Attendance

Regular and punctual class attendance is important to a high standard of work. The student is expected to recognize the importance of regular class attendance.

Each instructor is responsible for advising the students of the attendance and tardiness criteria in his class. The student is expected to know and comply with each instructor's regulations. It is the student's responsibility to make up any work missed due to the absence.

Examinations

Examinations play a vital part in determining a student's performance in class. Each instructor will schedule a sufficient number of examinations to determine the student's progress in the course.

Final examinations are considered a part of each course and are generally scheduled during the last week of each regular semester, the summer session and the interterm. All students are expected to take a final examination in each course during the scheduled period. In emergency cases, a student may take a final examination at other than the scheduled time.

A list of potential graduating seniors will be prepared by the Director of Academic Affairs during the spring semester of each year. The grade for these students must be determined prior to the final examination period of the spring semester; hence, instructors will arrange to give final exams to potential graduates prior to the regular final examination period.

Grading System

The Institute uses the following grade and grade point system:

Letter	$Type \ of$		(Grade
Grade	Performance		1	Points
Α.	Superior	 	 	4
В.	Above Average	 	 	3
C .	Average	 	 	2
О.	Below Average	 	 	1
F .	Failure to earn credit	 	 	0

A grade of "I" (Incomplete) may be given in special cases where a student was unable to complete all work in a course. The instructor will determine if a student should be assigned an "Incomplete" rather than a letter grade at the end of a semester. In each case where an "I" is assigned, instead of a letter grade, the instructor will advise the student and the Office of Academic Affairs of the date by which the course work must be completed. If the student fails to complete the course requirements within the allotted time,

the grade for the course is automatically assigned on the basis of the work completed.

The grade point average for each student is reported for each semester and as a cumulative average for the entire period of attendance. This average is computed by dividing the total number of grade points earned by the total number of semester credits.

President's Honor Roll

Any student carrying a full-time load (12 hours or more) and earning a 3.0 or better grade point average with no grade below a "C" will be listed on the President's Honor Roll for that semester.

Credit by Special Examination

Any student who feels that past education or experience has given him basic knowledge that is equivalent to a course may take a special examination for that course.

Credit in any subject may be granted by special examination. Permission to take a special examination should be requested through the Director of Student Affairs. Permission is actually granted by the department head of the department offering the particular course.

Upon successfully completing the special examination, the Director of Student Affairs will issue a Waiver of Credit form for all applicable departments to approve. The form will then become part of the student's permanent file and the particular courses noted on the student's transcript.

The fee for taking a special examination for course credit is three dollars (\$3.00) per semester credit.

Withdrawal From Class

Each student is responsible for completing all courses in which he enrolls. He may withdraw from any course within the limits provided below. It is his responsibility to insure that all withdrawal procedures are completed.

A student may withdraw from any course at any time during the semester until two weeks prior to the start of the final examination period. A student who withdraws from a class after Friday (5 p. m.) of the seventh week of the regular semester shall receive a grade of "WD" (Withdrew Passing) or "F" (Failing), depending on his class standing at the time of the withdrawal. A student withdrawing from a class prior to Friday (5 p. m.) of the seventh week of the regular semester will have no record of the class on his transcript. For summer session course drop dates consult the bulletin supplement available from the Student Affairs Office.

Instructors will make a notation on the withdrawal slip indicating that the student's performance in class is either passing or failing at the time of withdrawal.

A student, wishing to withdraw from a class, shall initiate such action with the department head of his major technology. The student will then be advised of the procedure he is to follow to complete the withdrawal action. Unless the withdrawal procedure is completed prior to Friday (5 p. m.) of the seventh week of the regular semester, the student will have a permanent grade posted to his transcript for the class.

Academic Probation and Dismissal

A student is expected to attend class regularly and maintain normal progress toward the completion of the program. Any student who earns less than a 1.8 grade point average in any semester (except his first semester at the Institute) will be placed on academic probation. The probation condition will be removed when the student earns a semester grade point average of 1.8 or better.

Any student on academic probation who earns less than a 1.8 grade point average will be dismissed for academic reasons. Persons dismissed for academic reasons will not be allowed to enroll except with special permission of, and under conditions established by the Academic Standards Committee.

Students enrolled in six (6) or less semester credits will not be subject to probation or dismissal action.

Reinstatement

Students who have been dismissed for academic reasons may petition for reinstatement.

A student desiring to be reinstated will be advised of the procedure by the Office of Academic Affairs and should make all arrangements through that office. Arrangements should be initiated by not later than two working days prior to enrollment.

Students who are reinstated will be on academic probation for the semester in which they are reinstated and may be required to carry a reduced course load.

Repetition of Courses

A course may be repeated to improve a grade of "D" or "F." All grades received in a given course will be shown on the student's transcript; however, the grade received the last time the course is taken will be the grade used for computing the cumulative grade point average.

Graduation Requirements

The State Board of Education is authorized by the Legislature to empower the President to grant the "Associate of Technology" Degree. Any student who plans to obtain the degree should be aware of the following criteria used by the faculty for recommending degree candidates to the President:

The candidate for the degree must:

1. successfully complete or obtain a waiver for each course in his program of study,

2. earn a 2.000 overall grade point average in all courses in his

program of study which are taken at K. T. I.,

- 3. be a student in good standing during his terminal semester at the Institute. (A student on academic probation will be considered to be in good standing if his grade point average is 1.8 or better upon completion of his terminal semester), and
- 4. attend commencement exercises or obtain written permission for graduation in absentia.*

Any student to be considered for graduation shall have successfully completed 15 semester credits in residence at the Institute.

*A written request for graduation in absentia will be made as soon as the candidate becomes aware of circumstances which will prevent his attendance at commencement. Such request will be directed to the Director of Academic Affairs.

Graduation With Honors

Students maintaining a high level of academic achievement are recognized at graduation by Honors and High Honors recognition.

The requirement for graduation with High Honors is that the student shall earn an overall grade point average of 3.75 or above based on a 4.00 point system.

The requirement for graduation with Honors is that the student shall earn an overall grade point average of 3.40 or above.

A grade of "D" or "F" in any course will eliminate any recognition of Honors or High Honors.

In no case will the Honors and High Honors graduates exceed ten percent of the graduating class.



Section 4 Student Welfare and Services



Conduct

The primary goal of Kansas Technical Institute is to prepare its students for rewarding and satisfying careers in their chosen areas of specialization. To attain this goal, the Institute not only provides educational opportunities in the classroom and laboratories, but also provides the means whereby students can develop their individual talents and meet their many non-academic needs.

Students entering the Institute are considered to be mature individuals who are responsible for their own behavior. High standards of personal, ethical, and moral conduct are expected of all students, on campus and elsewhere. The capacity for sound planning and a desire to establish good study and work habits are characteristic of a successful student.

Students are expected to use the Institute facilities with consideration, and to conduct themselves with decorum. Students who refuse to conform to accepted standards of conduct will be dismissed from the Institute.

Counseling

Kansas Technical Institute administrative and faculty personnel are available at all times to counsel students in their educational programs and to help the student who seeks vocational guidance. Students will find that Institute personnel are eager to contribute their training and knowledge to aid students in solving their specific problems.

Each student is assigned a faculty advisor who will work with the student to solve any academic problems he may have. The faculty of the Institute has a great amount of industrial experience that

qualify them to assist students in vocational guidance.

A student's personal or non-academic problems may be discussed with personnel in the Student Affairs office at any time. Of course the student may wish to consult solely with his faculty advisor. In either case, every effort will be made to help students through personal counseling and guidance while they are enrolled in an educational program at Kansas Technical Institute.

Financial Aid

The primary function of the Financial Aid Office is to assist students who are in need of financial aid.

A student may receive aid from the following sources:

Scholarships and Sponsorships

College Work Study

Educational Opportunity Grants

Student Loans

United Student Aid Loans

Federally Insured Student Loans

Emergency Student Loans

Scholarships and Sponsorships

A limited number of grants are available through the Kansas Technical Institute Endowment Association and other sources and vary in amounts from \$100 to \$500 per year. These grants may continue for four regular semesters or until the student graduates, whichever comes first.

College Work Study Program

The College Work Study Program was established to assist students of low income families by providing jobs on campus. These jobs are available in various departments and will permit a student to earn part of his educational expenses. A student may work an average of 15 hours per week while classes are in session, or up to 40 hours per week when classes are not in session. The pay rate is the minimum wage as established by law. The school and the federal government share the cost of the College Work Study Program.

Educational Opportunity Grants

A student may receive a non-obligatory federal grant based on exceptional financial need. These grants will range from \$200 to \$1000 per year and may be renewed as long as eligibility is maintained.

Student Loans

Federally Insured Student Loans (FISL)

Students attending Kansas Technical Institute at least half-time are eligible for a Federally Insured Student Loan from an authorized lending institution. The maximum per academic year is \$1,500. The rate of interest is 7% but if the student's adjusted family income is less than \$15,000 the federal government pays the interest while the student is in school. The total outstanding principal may not exceed \$7,500. Repayment begins 9 months after graduation.

Payments depend on the total amount borrowed during his school years with a minimum payment of \$30.

United Student Aid Funds (USAF)

Loans from an authorized lending institution and guaranteed by United Student Aid Funds may be obtained. This loan is similar to FISL loans in most respects.

Short-Term Emergency Loans

Kansas Technical Institute maintains a loan fund to help students meet emergency situations. Most loans are for 30 days and limited to \$50.00. Students are required to repay the loan during the semester within which the original loan was made.

Financial Aid Application Procedure

A person interested in obtaining financial aid must be enrolled or accepted for enrollment as a full-time student.

Applications for the fall semester should be submitted by the first of March. Students are notified of the financial aid offered around June 1.

Application forms will be mailed to prospective students on request. The application packet consists of:

1. Application for Admission

2. Kansas Technical Institute Financial Aid Application

3. Family Financial Statement (ACT) (also available from most high school counselors)

The Financial Aid Office uses the ACT Family Financial Statement in determining the need of the student. The handling and processing of these statements is done in a most confidential and discreet manner.

After the student and his family complete the financial statement it is submitted to the Financial Aid Office of Kansas Technical Institute along with a check in the amount charged by ACT for this service. The Financial Aid Officer will then review the statement for completeness and forward it to ACT, or the student may wish to send the statement directly to ACT at: Financial Aid Services, American College Testing Program, P. O. Box 1000, Iowa City, Iowa 62240. ACT will then send a detailed financial analysis to the institution. The analysis is done by a computer and will indicate the student's financial need. The Institute Financial Aid Committee uses this analysis as an aid only.

The final evaluation of all applicants is made by the Financial Aid Committee.

Dormitory

Recognizing the benefits to be gained from experience in group living, Kansas Technical Institute provides modern dormitory and dining facilities for students enrolled in a resident instruction program.

All single freshmen students who live beyond commuting distance will be required to live in a dormitory approved by the Institute for a period of two (2) semesters, summer school not included

as an academic semester.

The following exceptions will be allowed:

1. A student who has either attended another institution of higher learning for two (2) semesters, or is a veteran, will be allowed to take residence elsewhere.

2. Special cases including the following:

- a. Students living with relatives who live within commuting distance of Salina. This will require a signed, notarized statement from the student's parent. This form must be obtained from the Student Affairs Office.
- b. Medical reasons, which require a doctor's certification.

c. Other similar situations.

All exceptions in this category require approval by the Director of Student and Public Affairs.

Dormitory rooms are reserved by paying a deposit of \$25.00 which is not refundable after August 15. Reservations, including the deposit, should be made as early as possible. As soon as an applicant's reservation has been confirmed by the Institute, contracts for room and board will be sent to applicants for their signature. Housing regulations and campus rules of conduct will be printed on and attached to the contract and each student must agree to abide by these rules and regulations.

If the student withdraws from the Institute or obtains special permission to move from the dormitory after the beginning of the semester, the contract will be cancelled and a refund will be made according to the refund schedule printed on the reverse side of the contract form. Generally, no refund will be made for students withdrawing during the last six (6) weeks of classes of a semester

or the last three (3) weeks of a summer session.

A damage deposit of \$25.00 is required when a student moves into the dormitory. This deposit will be refunded, if there is no damage to the room, when the resident moves from the dorm.

Dormitory facilities are designed to accommodate two (2) students per room. All rooms are equipped with single beds, adequate storage, and comfortable furniture. Dormitory fees include weekly linen service. Blankets and other incidental room furnishings are supplied by occupants. Kansas Wesleyan will furnish a dormitory room for any Kansas Tech female student who is required to live in a dormitory.

Food Service

The Institute provides a pleasant cafeteria conveniently located near the dormitory complex for the convenience and enjoyment of students, staff and visitors. The preparation of food is under the supervision of qualified dietitians to insure balanced and wholesome meals.

Off-Campus Housing

For those students who are not required to live in the campus dormitory and who wish to seek residence in the local community, there is usually adequate housing available. The Student Affairs Office may post known vacancies or the student may wish to contact a local real estate agency for assistance.

Married Student Housing

The Local Housing Authority has a limited number of houses available for use by qualified married students. A student must be enrolled full-time and meet a maximum net income level for the size of his family. Interested students should contact the Student Affairs Office for details and applications.

Military Draft Status

The United States government adopted a "lottery" type draft induction late in 1969 as a major revision in the draft selection process.

Coupled with a decision to make major deferment changes, the lottery was designed to assure equality in determining who would be called to meet the military manpower needs.

For example, a young man reaching the age of 19 during the year of 1972 would obtain his lottery number from the drawing held on July 1, 1972. Someone reaching the age of 19 during 1973 would receive his number from the 1973 drawing, and so on.

It should be pointed out that once a lottery number has been assigned to a young man in a drawing, he will retain that number until he is no longer subject to the draft.

Purposes

The purposes of random selection are:

—to restrict the obligation of military service primarily to the calendar year following the year of a man's 19th birthday, except in cases of deferments. Previously, eligibility started when a man turned 19 and usually ended with his 26th birthday. Now, if he hasn't been called in the calendar year in which he is I-A and is a member of the prime selection group, it is very unlikely that he will be called.

—to make clear the degree of a young man's likelihood of being called, allowing him to plan his life accordingly.

—to spread the draft evenly among registrants when not everyone is needed.

For additional information, contact the Selective Service Office in your community.

Guidelines for Veterans

The GI Bill which was passed by Congress in 1966 establishes a comprehensive program of governmental assistance to help restore lost educational opportunities for persons who have served on active duty in the Armed Forces for a period of at least 181 consecutive days, any part of which was after January 31, 1955, and who were discharged or released under conditions other than dishonorable. The mechanics of such a program are vast. The following material was prepared in an attempt to better acquaint the individual veteran with those procedures which must be performed either by himself or by the Student Affairs Office at Kansas Technical Institute.

We want the veteran to keep in mind that the Student Affairs Office will assist him in matters relating to the Educational Benefits under the Veterans' Programs. If there are specific problems, veterans should come to the Student Affairs Office or phone 825-0275, Ext. 25.

The following are explanations of procedures and guidelines used in the Veterans' Program. Please read the material carefully.

I. APPLICATION PROCEDURES

Applications for the benefits may be obtained at your Regional Veterans Administration Center. Your application must be in the Veterans Administration Center office in Wichita within 15 days after the enrollment date in order to receive benefits for the beginning of the session. Read your instructions carefully and answer all questions completely. Care must be taken to insure that all necessary documents are included with the application. These may be copies since they are not returned. The following documents must be provided:

- 1. DD-214—this is the separation from active duty.
- Marriage certificate—copy of a public or church record of the marriage.
- 3. Birth certificate—if any children are being claimed for dependency.
- 4. Statement of dependency—if a father or mother are being claimed as dependent upon the applicant, a birth certificate, showing that the applicant is the child of the person being claimed, and a Statement of Dependency (VA 21-509) from the VA are needed.

Application and all necessary documents should be mailed or taken to your Regional Veterans' Administration Center prior to the time you plan to enroll. This will give them ample time to determine your eligibility and issue your Certificate of Eligibility.

II. ENROLLMENT PROCEDURES

When a veteran initially enrolls he should provide both copies of his Certificate of Eligibility to the Student Affairs Office. The Enrollment Certification which is on the back side of the Certificate of Eligibility will then be completed by the Registrar. On all subsequent enrollments, the Registrar will provide the VA with information concerning the veterans course load, address, and other necessary details.

Note: When a veteran wishes to change his place or course of training, he should obtain a special VA form for requesting such a change. If the request is approved, a new Certificate of Eligibility will be issued to the veteran.

III. PROCEDURES FOR REPORTING CHANGES

Any changes in a veteran's address, course load, dependency, educational program, place of training, etc., should be reported to the Student Affairs Office at Kansas Technical Institute immediately. The Veterans' Administration has forms for reporting these changes, or they may be obtained through the Student Affairs Office. In most cases, the school must certify the changes on these forms, and payments will not be released until the school certification is received by the VA.

Note: When a veteran changes his course-load during a part of the month, he will receive the monthly payment for the course load which he was carrying at the beginning of the month. His payments will not be reduced until the beginning of the following month. For example, a veteran who drops from a full-time course load to a three-fourths load during the second week of the month will receive a payment for full-time benefits for the month in which the drop occurs, but will be reduced to the three-fourths rate at the beginning of the following month. Also, when a veteran acquires a dependent, either a wife or a child, he should immediately notify the Veterans' Administration Center, 5500 East Kellogg, Wichita, Kansas 67218, by letter. The date of receipt of his letter claiming a dependent establishes the effective date for payment of that dependent. If the veteran does not furnish proof of the dependent with his letter, he will be asked to do so, at a later date.

IV. GUIDELINES FOR EVALUATING SEMESTER CREDIT— COURSE LOAD EQUIVALENTS

Regular Semester

Course Load	Semester Credits
Full-time	12 or more
% time	9, 10, 11
½ time	6, 7, 8
less than ½ time	5 or less

Summer Semester

Course Load	Semester Credits
Full-time	6 or more
% time	4, 5
½ time	3
less than ½ time	2 or less

The amount of payments is the same as for the regular semester. Payments may be changed by legislation and therefore are not shown in this catalog. Consult your local VA representative for current benefit amounts.

Note: Non-credit deficiency courses may be included in arriving at the course load level.

Health Service

Emergency first aid and minor medical services are provided on the Institute campus. Injuries or illnesses which require the attention of a physician are referred to Salina clinics which perform any medical service required by a student at Kansas Technical Institute. The cost of this service, of course, will be assumed by the student.

A special student health and accident program is available to all students enrolling at Kansas Technical Institute. This program is optional but deserves serious consideration from students who are not covered under some form of medical insurance or for those who wish to supplement their existing coverage. Representatives of the insurance agency will be available to explain and enroll students in the program in conjunction with the Institute's regular enrollment schedule.

Placement Service

Kansas Technical Institute maintains close contact with numerous industries and business firms who are interested in graduates of technical institutes as prospective employees. Students taking advantage of the Institute's Placement Center are given the opportunity to discuss their employment goals with representatives of these firms during the final year of their educational programs.

These discussions may take place on the campus, or if feasible, the student is provided the opportunity to visit the site of the firm itself in order to obtain a clearer picture of the working conditions and operations of the business establishment.

The Placement Center also maintains files of information for resource materials to use in the job pursuit process. References are available on industries and businesses in many cities in the United States. Staff of the Student Affairs Office are available for added guidance and assistance.

The Placement Center does not limit its service to graduates of the institute. Current files of part-time jobs opportunities is maintained for the use of students who are interested in supplementing their income while they are enrolled in their educational program.

Transcript

The transcript is the official record of a student's success at the Institute. The transcript is a record that colleges and employers use to evaluate a student or graduate of the Institute. It must be certified by the Registrar before it will be used as an official record.

Copies of the transcript may be obtained by contacting the Student Affairs Office. A student may obtain up to five copies of his transcript at no charge. Additional copies may be obtained at a charge of fifty cents per copy.

Library Services

A vital part of every technical educational center is the availability of relevant and current library resources. The library serves many functions which contribute toward better academic progress of the student body.

The library houses a vast source of authoritative, current, and relevant technical information. The library provides supplementary reference books which help a student improve his understanding of a wide range of modern technological subject matter. The library at Kansas Technical Institute is attractive, well-lighted and provides a quiet atmosphere for relaxed study.

The collection of current volumes and technical periodicals provides a technical learning center of great value to the Institute.

The library staff are specialists who are available to assist in a student's search for technical information and the general use of the library center. There is a recognized correlation between academic success and effective use of the technical library.

Student Union

The Institute is in the process of developing a Student Union building to house all student activities. The Student Union is financially supported by the fee paid by all students during each enrollment period.

Community Activities

Salina and the surrounding community offers cultural opportunities of a wide variety, including the Community Theater, Marymount Concert Series, Municipal Concert Band, and Kansas Wesleyan Concert Series. Lindsborg, Kansas hosts the annual "Messiah" which is nationally known.

Salina parks provide wooded and landscaped areas, picnic grounds and recreational facilities so essential to a complete community. Indian Rock Park offers a panoramic view of Salina from

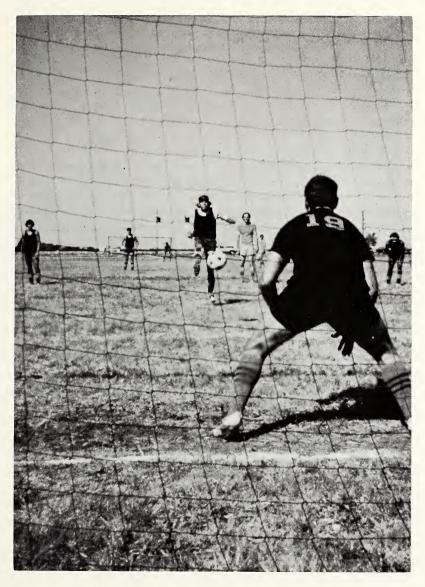
the top of the hill.

Spectator sports programs ranging from college level to little league baseball, including football, basketball, baseball, tennis and track events, are available throughout the year.

There are over 60 churches in Salina representing nearly all denominations and faiths.



Section 5 Student Activities



Outline of Activities

A wide range of student activities is provided for the enjoyment and development of the student. These activities are widely diversified and all students, regardless of their personal interests, may find a group or club which will appeal to their special interests.

Students are urged to take an active role in the Student Governing Association (SGA). The SGA will participate in the development of basic codes of conduct, disciplinary measures, campus activities, and other facets of administrative organization and control. In addition, there is permanent student representation on the KTI President's Administrative Council.

Various social events will be scheduled throughout the year for the social development and enjoyment of students at the Institute. In most cases, the planning and organization of social activities will be the responsibility of representatives from the student body and the SGA.

The student chapter of the American Society of Certified Engineering Technicians (A. S. C. E. T.) is a very active campus organization. The chapter is the first student chapter established for student technicians in the United States. The ASCET chapter provides students an opportunity to become part of what will be their future professional organization.

Students who receive a semester grade point average (GPA) of 3.0 or above for twelve or more semester credits are eligible for membership in the honor fraternity, Tau Omicron Tau. The fraternity performs helpful and honorable services on the campus and gives students an opportunity for leadership and service.

Other campus activities include: photography club, student year-book (Liaison), student newspaper (Technicality), ham radio club, and others that may be of interest to student groups.

Recreation and Intramurals

Recognizing the benefits to be derived from activities other than those connected with formal instruction, Kansas Technical Institute has facilities for a well-rounded program of recreation and entertainment for its students.

Students may participate in intramural competition in such sports as flag football, basketball, softball, volleyball, tennis, bowling, handball, and squash. In some instances, a small fee may be assessed for participating teams or individuals to defray the cost of trophies and other awards of achievement.

In addition to the intramural program, the Institute also has an intercollegiate soccer team that began competition in the fall of 1971. The soccer team participates against colleges in central Kansas thus not requiring extensive travel arrangements.

Participation

Participation in student activities is open to all students who are in good academic standing. Any student on academic probation may not participate in extracurricular activity during the probation period without permission from the Director of Academic Affairs.

Alumni Association

The graduate of the Institute is automatically eligible for membership in the KTI Alumni Association. The Association is organized to provide graduates a means of keeping in contact with each other and to keep informed of events at the Institute. The alumni provide the Institute personnel with much needed information concerning program strengths and weaknesses. Of course a strong alumni organization can provide funds for scholarship programs or other needed functions.





Section 6 Curricula



Academic Departments

Kansas Technical Institute is authorized to provide instruction in a wide field of engineering and science technology. The faculty at the Institute has a standing committee to review the needs for technology education in Kansas and work to develop a program specifically designed to meet those needs.

The Institute enrolled students in five technology programs in the fall of 1966. These five programs, used to initiate engineering technology into the state's system of higher education, have continued to be relevant to the needs of Kansas as evidenced by a statewide study in the fall of 1971.

The six departments of instruction are:

Aeronautical Technology Civil Engineering Technology Computer Science Technology Electronic Engineering Technology General Engineering Technology Mechanical Engineering Technology

Detailed curricula and course descriptions are provided in this bulletin for each of the programs of study taught by these six departments.

Program Options

A variety of program alternatives can be obtained to suit the specific interest of the student. A student entering the Institute may consult with the faculty in the subject area of his special interest. A specific program of study will be selected for the student at the earliest possible time to insure that the student progresses toward a degree objective with the least delay.

Extensive study and planning has resulted in a variety of programs related to ecology and environmental protection. Students interested in these specific areas of instruction should counsel with the Chairman of the Civil Engineering Technology department to determine the specific area most suitable to the student's interest.

Students who desire a less intense specialization but prefer a more general technology education may obtain a degree in General Engineering Technology.

Addendums to this bulletin will be provided, on request, as new program development progresses. Requests for additional information should be directed to: Director of Public Affairs, Kansas Technical Institute, Salina, Kansas 67401.

Consortium (KTI-KW)

Kansas Technical Institute and Kansas Wesleyan have formed a consortium which provides a unique opportunity for students attending either institution. A great advantage is afforded the student because he may attend either institution and benefit from courses offered at both schools.

Each school has its specialities and strengths that can be used to the benefit of the other. The consortium allows the expansion of course offerings and the development of new and innovative programs and program options. The agreement provided for the creation of Environmental Protection Technology and the Aviation Maintenance Management Option of Aeronautical Technology.

Additionally, the Institute and Kansas Wesleyan (KW) have a transfer agreement whereby a KTI graduate may transfer either Electronic or Computer Technology education to KW. In an additional two years the student may receive the Bachelor's Degree in Mathematics or Physical Science.

Mathematics Transition Program

A large number of men and women have the interest and capabilities of a satisfactory career as an engineering technician. For various reasons many of these persons have not considered such a career during their high school experience. Frequently, new students have not completed the mathematics courses that would be most helpful to them in pursuing work in this career field.

The faculty at Kansas Technical Institute has recognized this problem and a transition program in mathematics is provided to assist those who have for some reason recognized that their mathematics ability is less than adequate.

A combination of basic mathematics applications courses and laboratory exercises assist in developing mathematical competence in students who have only a fundamental working ability in math. Each student entering Kansas Technical Institute will be given a Mathematics Placement examination and will be given, if necessary, the special help needed to insure that he develops competence in mathematics. This will allow him to be successful in the mathematics sequence in the technology of his choosing. If he exhibits a competency in mathematics, he may move directly into the prescribed mathematics sequence without having to participate in the mathematics Transition Program.

Aeronautical Technology

The development of the jet aircraft added a new dimension to modern transportation. With aircraft that can fly at Mach-2 (twice the speed of sound), a traveler can leave New York at 7:30 a.m. and arrive at Los Angeles at approximately 7:00 a.m. the same morning. It may seem fantastic, but it is reality. Aircraft are being designed to fly faster and the Federal Aviation Agency is demanding a greater margin of safety in the design, manufacture and maintenance of aircraft.

The rapidly improving aeronautic technology provides a stable and rewarding future for millions of persons who want to work in the field of aviation. Kansas Technical Institute provides sound programs of instruction in a variety of aviation related fields. The facilities are the finest within the midwest and the faculty selected to instruct in these programs are eminently qualified by academic preparation, years of professional experience and the proper certificates issued by the FAA.

Options in

. . Aviation Maintenance

The aircraft maintenance program is fully certificated as an "Aviation Maintenance Technician School # 3344" as designated in Federal Aviation Regulations Part 147. A student who satisfactorily completes this two-year aviation maintenance program will be awarded a Certificate of Completion which will be recognized by the FAA as a document authorizing the graduate to take the federally administered airframe and powerplant (A&P) written examination. Upon passing the exam, the graduate will be a licensed A&P mechanic.

. . Aeronautical Engineering Technology

A person interested in a career in design, development, testing and analysis of aircraft or aircraft components may consider a career as an Aeronautical Engineering Technician. A graduate of this program may receive the Associate of Technology degree and would be qualified to immediately assist Aeronautical Engineers in aircraft design and manufacture. Information on this option may be received from the Department Head, Aeronautical Technology.

. . Aviation Maintenance Management

With ever-increasing restrictions on airport management, there is an increasing demand for graduates of a qualified management program to work in fixed-base operations and air carrier terminals in a variety of management-oriented tasks.

The Aviation Maintenance Management option at KTI is designed to provide management education to persons who already have

attained an intense Aeronautical Technology background. Mechanics may use their background in maintenance and flight training as a significant portion of the requirement for an Associate of Technology Degree.

Aeronautical Technicians will find employment opportunities in

any of the following fields:

- 1. Aircraft manufacture
 - a. Airframe and powerplant maintenance inspection

 - b. Quality controlc. Design and productiond. Plant supervision
- 2. Major Airlines
 - a. Airframe and powerplant maintenance inspection
 - b. Plant supervision
 - c. Airframe modification
- 3. Fixed-Base Operations
 - a. Airframe and powerplant maintenance and inspection
 - b. Airport management
 - c. General aircraft modification

Aviation Maintenance

Airframe and Powerplant Certificate Curriculum Outline

General Se GT 1513 AM 1212 AM 1115 AM 1112 AM 1114	Aviation Mathematics Aircraft Drawings Aircraft Science Aircraft Standards Basic Aircraft Electricity		3 2 5 2 4
Airframe S AM 1324* AM 1225			4 5
AM 1325 AM 1223 AM 2235	Airframe Structures & Repair Aircraft Fluid Power Aircraft Inspection & Assembly		5 5 3 5
AM 1222 AM 2232 AM 2333	Aircraft Welding Aircraft Wood & Fabric Navigation Aids & Communication Systems		2 2 3
Powerplan		2	_
AM 2434 AM 2433 AM 2443 AM 2442 AM 2643 AM 2544 AM 2545	Powerplant Fundamentals Powerplant Induction & Fuel Systems Powerplant Ignition Systems Propellers Powerplant Overhaul Powerplant Operation & Troubleshooting Gas Turbine Powerplants		43323454
	emester credits required to complete certificate requirements time for program completion—two years.	=	=

* AM 1324 Airframe and Powerplant Electrical Systems course content is one-half airframe electrical and one-half powerplant electrical systems.

Aviation Maintenance Management

The field of aviation has many areas that require diverse technical skills. Kansas Technical Institute offers the Airframe and Powerplant Maintenance Program that provides the Aviation Mechanics necessary for both Commercial and Civil Aviation. These people provide a very necessary service but they find they have one basic weakness—fundamental business management.

Kansas Technical Institute has recognized this weakness and has opened a new curriculum for Aviation Maintenance Technicians. The curriculum is in Aviation Maintenance Management and is to be taught on both the Kansas Wesleyan and Kansas Tech campuses. The consortium agreement between Kansas Wesleyan and Kansas Tech has made the curriculum possible.

This curriculum is available to graduates of the KTI Aviation Maintenance curriculum or to individuals who already possess an

F. A. A. Airframe and Powerplant Mechanics License.

Graduates of this curriculum will find an advantage toward obtaining supervisory and management positions with commercial airlines, aircraft companies, corporate business aircraft operators, fixed-base operators, repair stations and governmental flight agencies.

Aviation Maintenance Management

Associate of Technology

Curriculum Outline

Administra	ation	Cred	
* 43:112 * 43:214	Principles of Management Principles of Accounting I		4
GT 1423	Industrial Economics		3
* 43:213 * 43:311	Marketing		$\frac{4}{4}$
			19
Mathemati			
GT 1213	College Algebra		3
Communic	cations (Written and Oral)		
GT 1313	Written Communications		3
GT 1312	Oral Communications		2
GT 1323	Technical Writing		3
m 1 1.	n. l l		8
Technolog *	y Related * Technical Elective	<u>-</u>	_4
	emester credits required for Associate Degree		34
* Kansa	e time for completion of degree requirements—one year. as Wesleyan University.		

Civil Engineering Technology

The general field of Civil Engineering Technology is extremely broad in scope. The field is involved with the construction of highways, railroads, bridges, irrigation and reclamation projects, water power developments, city planning, and other projects ranging from small scale construction jobs to projects involving tremendous capital expenditures.

A Civil Engineering Technician, although highly specialized, must acquire a considerable store of technical knowledge of a variety of subjects. This program will provide the student with a general background in the consulting, construction and highway

industries.

The program will include the study of construction materials and equipment, surveying principles and application, construction methods common to modern structural design, fabrication, industrial relations and economics.

Civil Engineering Technicians have many employment opportunities. Some of these are as follows:

- 1. Construction Industry
 - a. Cost estimator
 - b. Project layout technician
 - c. Instrument technician
 - d. Construction supervisor
 - e. Specification writer
- 2. Consulting Engineering
 - a. Instrument technician
 - b. Cost estimator
 - c. Crew chief (survey party)
 - d. Project supervisor
 - e. Specification writer
 - f. Inspection technician
- 3. Highway Design, Construction and Maintenance
 - a. Materials inspector and analyst
 - b. Photogrammatrist
 - c. Instrument technician
 - d. Cost estimator
 - e. Specifications writer and supervisor

Civil Engineering Technology

Associate of Technology

Curriculum Outline Semester Technical Specialty Credits CL 1011 Introduction to Technology CL 1111 MT 1113 Surveying Instruments Technical Drafting & Design I CL 1123 CL 1221 Plane Surveying 3 Surveying Drafting Materials Sampling & Testing 1 CL 1321 1 CL 1422 Hydraulies & Hydrology CL 2132 Route & Construction Surveying CL 2435 Statics & Strength of Materials CL 2532 Soils & Foundations CL 2632 Construction Methods & Estimating CL 2142 CL 2242 Structural Drafting CL 2443 CL 2444 Structural Design CL 2742 Photogrammetry CL 2930 Problems in Civil (Elective)..... 36 Mathematics GT 1212 GT 1213 College Algebra Analytic Geometry & Calculus I Analytic Geometry & Calculus II GT 1222 GT 2232 2 9 Communications (Written and Oral) GT 1312 GT 1313 GT 1323 Oral Communications 9. Written Communications Technical Writing 3 8

Applied Chemistry

Technical Physics

GT 1413 Industrial Relations

Total semester credits required for the Associate Degree

3

 $\frac{4}{7}$

 $\frac{3}{6}$

66

Physical Science GT 1113 Appl

Technology Related

Average time for completion—two years.

GT 1124

GT 1423

Computer Science Technology

Paralleling the rapid advance in technology in our society has been the development and recognition of the need for trained personnel to work with computer systems. As private industry, government agencies, and the military expand their use of computers, educational institutions must provide programs designed to meet the demands for specially trained personnel with skills and aptitudes for careers in all phases of the computer industry.

The Computer Science Technology program at Kansas Technical Institute has been developed to provide students with the background necessary to qualify them for entrance into the computer

field as programmers and system analysts.

To achieve these objectives, students in Computer Science Technology receive instruction in three areas:

- 1. They are given a sound background in mathematics and science. This provides them with both the skills and the vocabulary to communicate with the people who will require their services.
- 2. They receive extensive experience in writing and processing programs in a variety of computer languages (FORTRAN IV, COBOL, R. P. G., etc.).

3. They study in depth the computer system and peripheral

equipment (IBM 1130 system).

The future of computer applications is difficult to predict. The most promising aspects of Computer Science Technology is the great number of new fields open to technicians.

Computer Science Technicians are needed in the following general fields:

- 1. Engineering
- 2. Education 3. Business
- 4. Medicine
- 5. Law
- 6. Computer/Data Processing

In all of the above fields, some typical employment opportunities are:

- 1. Programmer
- 2. Program analyst
- Systems analyst
 Systems engineer
- 5. Systems supervisor6. Research assistant
- 7. Sales representative

Computer Science Technology

Associate of Technology

Curriculum Outline

Technical	Specialty	Seme Cree	
CP 1112	Introduction to Machine Processing		2
CP 1113 ET 1113	FORTRAN IV Direct Current Circuits		3
CP 1122	Boolean Algebra & Applied Logic		2
CP 1123	COBOL, RGP & CSP		2 3
CP 1222	Computer Science Concepts		2 2 3 4 2 3
CP 2122 CP 2133	PL/Î & ALGOL		2
CP 2133 CP 2134	BAL for 1130 and 360		ى 1
CP 2232	Computer Graphics		2
CP 2233	Statistics & Quality Control		3
CP 2143	Computer System Seminar		3
CP 2444	Analog Computer Methods with Applied Differential Equat	tions	4
			36
Mathemati	ics		
GT 1212	Plane Trigonometry		2
GT 1213	College Algebra		3
GT 1222 GT 2232	Analytic Geometry & Calculus I Analytic Geometry & Calculus II		2 2
G1 2232	Analytic Geometry & Calculus II		
			9
	cations (Written and Oral)		
GT 1312	Oral Communications		2
GT 1313 GT 1323	Written Communications Technical Writing		3
G1 1525	Technical Wilding		
			8
Physical S			
GT 1113			3
GT 1124	Technical Physics		$\frac{4}{}$
			7
Technolog			
GT 1413	Industrial Relations		3
GT 1423	Industrial Economics		3
	•		6
m . 1			<u> </u>
	emester credits required for the Associate Degree		66
Averag	e time for completion—two years.		

Electronic Engineering Technology

Electronics is a rapidly growing science which offers unlimited opportunities for the individual choosing this field as a career. As technology advances, the uses of electronics are expanding into every major industry and are becoming a common part of the lives of every citizen of our nation. Advances in electronics have resulted in the creation of entirely new industries and have accelerated nearly every segment of our economy.

Electronic applications to the fields of medicine, geology, public safety, aeronautics, law enforcement, and missile guidance, to name but a few, have merely scratched the surface of the ultimate potential of the use of electronics in these and other fields. Because of its many facets, the field of electronics needs technicians to perform a

variety of jobs.

Technical education in electronics includes considerable work in mathematics and sciences, study of tubes and diodes, circuitry, transistors, integrated circuits, servo-mechanisms, chemistry, the physics of heating and wave motion, and other related subjects.

Although electronics is a relatively new science, it has become an industrial giant in commerce, industry and national defense.

Electronic Technicians will find career opportunities as follows:

Computer systems technicians
 Missile electronics technicians

3. Communication technicians (LASER and MASER application and development)

Research assistants

5. Electronic engineering aide6. Medical electronic assistant7. Technical sales representative

8. Technical writing

Electronic Engineering Technology

Associate of Technology

Curriculum Outline Semester Technical Specialty Credits ET 1011 ET 1113 MT 1113 ET 1224 ET 1324 Introduction to Technology Direct Current Circuits Technical Drafting & Design I Alternating Current Circuits 3 Applied Electronics I Electronic Measurements Applied Electronics II 4 ET 2434 ET 2535 ET 2631 Electronic Seminar I ET 2041 Electronic Seminar II ET 2743 Pulse Circuits ET 2843 Solid-State Applications Applied Electronics III Problems in Electronics (Elective) ET 2944 ET 2930 0 36 Mathematics GT 1212 GT 1213 GT 1222 College Algebra Analytic Geometry & Calculus I Analytic Geometry & Calculus II GT 2232 2 9 Communications (Written and Oral) GT 1312 2 GT 1313 Written Communications GT 1323 3 Technical Writing 8 Physical Science GT 1113 Applied Chemistry 3 GT 1124 4 7 Technology Related GT 1413 Industrial Relations GT 1423 Industrial Economics 3 6 66 Average time for completion—two years.

Environmental Protection Technology

Rapidly growing public concern over environmental quality has resulted in a dramatic increase in the manpower needed to develop, plan, and implement pollution prevention and control activities. Although mass public concern is relatively recent, the needed technology has been developing for many years. It was begun largely by the concern and efforts of health officers and sanitary engineers in providing safe supplies of drinking water, milk and foods; and by many natural resource and wildlife conservationists. A wide variety of professionals and technicians are now involved in a broad scale program of protecting and restoring the quality of our modern environment.

Environmental protection and control efforts represent a diverse area of work and consequently draw heavily upon a wide variety of occupational skills. Virtually every occupation can be related in some phase to an aspect of environmental protection and resource conservation. The extensive nature of environmental pollutants permit contributions by a wide spectrum of occupations. These occupations have skill levels ranging from entry level operation type jobs to the technician to the PhD levels.

A program in Environmental Protection Technology, closely tied to the Civil Engineering Technology program in existence at KTI, will train the Environmental Technicians necessary to provide the needed technical support for solving the problems of water protection. The Water Protection program is established on an option basis so that the student may select one of several career possibilities. He will be guided in the selection of his courses so that he will be able to perform in the occupational area of his choice.

Career Options and Employment

A Water Protection Technician performs functions in the areas of water systems design, laboratory technician, and environmental inspection. His purpose will be to protect and improve our water supplies. Treatment of the waste water sources is also a very important aspect of the Water Protection Technician and the graduate will have the knowledge of the broad field of water pollution and treatment and the design background necessary to perform a function needed by many agencies.

Employment for the Water Protection Technician will be with:

Federal and State Agencies—work as an inspector or monitor in the field of compliance control assuring that existing or newly legislated pollution standards are followed.

Local Agencies (cities, counties)—assist the engineer in establishing networks of facilities to handle water supplies, sanitary wastes, and storm runoff. Perform laboratory testing to assure compliance with pollution standards.

Consulting Engineers—assist the engineer in design, quantity calculations, and data collection for facilities involving water and waste water.

Laboratory Technician—perform chemical and biological tests on water and waste water to determine information relative to hardness, mineral content, Biochemical Oxygen Demand, and other factors that may affect the public health.

Resident Inspector—observing, checking, and performing tests on construction projects to insure compliance with job specifications and applicable codes.

Environmental Protection Technology

Associate of Technology

Curriculum Outline

Technical		Seme Cred	
CL 1011 CL 1111 MT 1113 CL 1123	Introduction to Technology Surveying Instruments Technical Drafting & Design I Plane Surveying		1 3 3
CL 1422 EP 2133	Hydraulics and Hydrology (General) Hydraulics (Pressure & Weir Flow) Technical Electives (from list)		2 3 22
	Technical Elective List		35
	EP 2233 Microbiology of Water EP 2332 Water Resources and Domestic Supply EP 2333 Domestic Water Treatment EP 2433 Civil Technology Design (Water Systems) EP 2243 Microbiology of Sewage EP 2343 Sewage Treatment Methods EP 2643 Civil Technology Design (Sewage Collection		3 3 3 3 3
	Treatment Systems) CL 2332 Soils (Properties and Classification) CL 2435 Statics and Strength of Materials CL 2242 Structural Drafting CL 2444 Structural Design (Concrete and Steel) CL 2642 Civil Technology Design (Storm Sewers)		3 2 5 2 4 2
Mathemati			
GT 1212 GT 1213 GT 1222 GT 2232	Plane Trigonometry College Algebra Analytic Geometry & Calculus I Analytic Geometry & Calculus II	.	2 3 2 2
Communic	ations (Written and Oral)	_	9
GT 1312 GT 1313 GT 1323	Oral Communications Written Communications Technical Writing		2 3 3
Physical Sc	vience		8
GT 1111 GT 1113 GT 1124	Applied Chemistry Laboratory Applied Chemistry Technical Physics		$\begin{array}{c} 1 \\ 3 \\ 4 \end{array}$
		•	8

y Related Industrial Relations Industrial Economics	
=	6
emester credits required for the Associate Degree	66

General Engineering Technology

Many small to medium-size industries in Kansas have shown a need for a technician who is diverse in skills, since in many cases they are not large enough to fill their staff with specialists from the many areas they require. Jobs such as Inspector, Estimator, Detail Draftsman, Test Technician, Customer Service Technician, Production Planner, and several others, require a broad based education in several areas. Therefore, the General Engineering Technician program will provide the graduates who are broadly trained across the fields of Electronics, Civil, and Mechanical Engineering Technologies and can fill the needs of these industries.

The education of the technician is "things" oriented. He must have the ability to visualize objects and to make sketches and drawings. It requires that he have an aptitude in mathematics. Many jobs require some familiarity with one or more of the skilled trades, although not the ability to perform as a craftsman. Some jobs demand extensive knowledge of industrial machinery, tools, equipment, and processes. Some jobs held by these technicians are supervisory and require both technical knowledge and the ability to supervise people.

Technicians also work in jobs related to production. They usually work in close relationship with an engineer or scientist but are not under close supervision. They may aid in the various phases of production operation, such as working out specifications for materials and methods of manufacture, devising tests to insure quality control of products, or making studies designed to improve the efficiency of a particular operation.

Employment Opportunities

The graduate General Engineering Technician will be qualified to work in the engineering department of any small to large sized industry. Upon graduation he should be qualified for the following job classifications:

Inspector Estimator Detail Draftsman Test Technician Customer Service Technician Methods Technician

Production Planner Technical Writer Quality Control Inspector Survey Party Chief Parts Detailer

General Engineering Technology

Associate of Technology

Curriculum Outline Semester Technical Specialty Credits ET 1113 MT 1113 Technical Drafting & Design I Introduction to General Technology GT 1611 MT 1222 Manufacturing Methods II ET 1224 GT 1633 Alternating Current Circuits Production and Quality Control CL 2435 GT 1643 Electric Power & Devices 38 Technical Electives List CL 1111 CP 1113 FORTRAN IV Boolean Algebra & Logic Technical Drafting & Design II CP 1122 MT 1122 CL 1123 CP 1123 MT 1323 Plane Surveying COBOL, RPG, & CSP
Properties of Materials 3 Applied Electronics I ET 1324

	MT 2132	Graphics in Design
	CP 2134	Bal for 1130 & 360 4
	CP 2232	Computer Graphics 2
	CP 2233	Computer Graphics2Statistics & Quality Control3
	CL 2432	Construction Methods 2
	MT 2433	Elements of Mechanisms
	ET 2434	Electronic Measurements 4
	CL 2435	Structural Design
	ET 2535	Electronic Measurements 4 Structural Design 5 Applied Electronics II 5
	MT 2341	Materials Testing Procedures
	MT 2443	Machine Design
	ET 2743	Pulse Circuits
	ET 2843	Solid State Applications 3
	ET 2944	Applied Electronics III
Mathemat	ics	
GT 1212	Plane Trig	onometry
GT 1213	College Al	gebra
GT 1222	Analytic G	eometry & Calculus I
01 1	Times, the C	
		7
Communic		tten and Oral)
GT 1312	Oral Com	munications 2 ommunications 3
GT 1313	Written C	ommunications
GT 1323		Writing

Applied Chemistry

3

 $\frac{4}{7}$

Physical Science GT 1113 Appl

GT 1124

Industrial I	Relations Economics				
	its required for mpletion—two	iate De	egree .	 =	6 66

Mechanical Engineering Technology

The field of Mechanical Engineering Technology embraces the design, manufacture, and production of mechanical products and the tools, machines, and processes by which they are made; as well as sales and maintenance of such products, tools, and machines.

The Mechanical Engineering Technician is concerned with the development, testing, evaluation, detailing and design of machinery, equipment, instruments, and other mechanical devices along with selection and design of the tooling required to manufacture a proposed product economically. The technician's duties may involve drafting, use of handbooks and tables, calculations of strength and reliability, selection of materials, and cost estimating for the development or modification of the design of components, and subassembly or assembly of almost any type of machine or mechanism. He may conduct performance and endurance tests on various mechanical devices and report the results of the test.

Mechanical Engineering Technicians will find career opportunities as follows:

1. Machine and tool designer

2. Special project designer

3. Evaluation and testing technician

4. Engineering assistant

5. Production and process planning technician6. Research and development technician

7. Cost estimating and technical writing

Mechanical Engineering Technology

Associate of Technology

Curriculum Outline

	Corriction Offline	_
Technical	Specialty	Semester Credits
MT 1011	Introduction to Technology	1
MT 1113	Technical Drafting & Design I	3
ET 1113	Direct Current Circuits	3
MT 1212	Manufacturing Methods I	2
MT 1122	Technical Drafting and Design II	2
MT 1222	Manufacturing Methods II	2
MT 1323	Properties of Materials	3 2 3
MT 2132	Graphics in Design	2
MT 2433	Elements of Mechanisms	3
CL 2435	Statics and Strength of Materials	
MT 2533	Fluid Power	3
MT 2143	Mechanical Design Projects	
MT 2341 MT 2443	Materials Testing Procedures	
MT 2930	Machine Design	3 0
M1 2930	Problems in Mechanical (Elective)	0
		36
Mathemat	ics	30
GT 1212	Plane Trigonometry	2
GT 1212	College Algebra	
GT 1213	Analytic Geometry & Calculus I	2
GT 2232	Analytic Geometry & Calculus II	$\frac{1}{2}$
01 2202	marytic coometry a calculus II	
		9
Communic	cations (Written and Oral)	
GT 1312	Oral Communications	2
GT 1313	Written Communications	
GT 1323	Technical Writing	
	- · · · · · · · · · · · · · · · · · · ·	
		8
Physical Se	cience	
GT 1113	Applied Chemistry	3
GT 1124	Technical Physics	4
0	2	
		7
Technolog	y Related	
GT 1413	Industrial Relations	3
	Industrial Economics	
		6
m . 1		===
	emester credits required for the Associate Degree	66
Average	e time for completion—two years.	

Welding Technical Specialist

(Option of Mechanical Engineering Technology)

The many recent improvements in production methods and materials handling have been the result of breakthroughs in new materials development, new production techniques and more effective quality control and inspection methods. Because of the changes, it is vital to develop a higher degree of technical competence in persons working in materials fabrication and production.

During the past 20 years great advances have been made in welding processes with new and more efficient welding equipment. a greater variety of alloys and a better understanding of the materials being welded. These changes have brought about a greater demand for qualified welders, metals technologists, test technicians

and plant process and planning technicians.

Graduates of the area vocational school welding programs in Kansas should find ready employment as qualified welders within the state. Of equal importance, however, is the demand for persons who can serve as welding inspectors, welding and fabrication supervisors, metals analysts, testing lab technicians and field representatives for welding equipment suppliers.

The Welding Technical Specialist option at Kansas Technical Institute is designed to accept credits for successful area vocational school welding training. A student who has completed a one-year program in welding at an area vocational school can earn sufficient credits to obtain the Associate Degree at KTI in an additional three

semesters.

Graduates of this technical specialty curriculum will find employment opportunities as:

Welding inspectors
 Metals analysts
 Welding supervisors
 Testing lab technicians

5. Field representatives for welding equipment manufacturers

6. Welding production and process planning technician

7. Specifications writer

The following curriculum outline is based on successful completion of a one-year welding program at a Kansas area vocational school. Persons who have less than this amount of vocational training in welding may obtain additional information on waiver of credit from the Chairman, Department of Mechanical Engineering Technology, Kansas Technical Institute.

Welding Technical Specialist

Associate of Technology

Curriculum Outline

	mester redits
Waiver of Credit for Successful Completion of Post-Secondary Weldin	g 20
Training	. 22
Technical Specialty	
MT 1212 Manufacturing Methods I	
MT 1512 Welding Technology I	. 2
MT 1323 Properties of Materials	. 3
MT 1523 Welding Technology II	. 3
MT 1323 Properties of Materials MT 1523 Welding Technology II GT 1633 Production and Quality Control CL 2435 Statics and Strength of Materials MT 2341 Materials Testing Procedures	. 3
MT 2341 Materials Testing Procedures	. 0
Approved Elective	. 1
ippioted ziecuto	
	21
Mathematics	
GT 1212 Plane Trigonometry	. 2
GT 1213 College Algebra	. 3
Communications	
GT 1312 Oral Communications	. 2
GT 1313 Written Communications	. 3
GT 1312 Oral Communications GT 1313 Written Communications GT 1323 Technical Writing	. 3
Physical Science	8
GT 1113 Applied Chemistry GT 1124 Technical Physics	
G1 1124 Technical Physics	. 4
	7
Technology Related	
GT 1413 Industrial Relations	3
Total semester credits required for the Associate Degree	
(Including 22 hours vocational credit)	. 50

Average time for completion—three semesters in addition to welding program at area vocational school.



Section 7 Course Descriptions



Key to Identification of Courses

Courses are listed alphabetically by department codes as follows:

AM-Aviation Maintenance

CL—Civil Engineering Technology

CP—Computer Science Technology

EP—Environmental Protection Technology

ET—Electronic Engineering Technology

GT—General Technology

MT—Mechanical Engineering Technology

The format of the course numbers is the department code plus a four digit number. The digits are explained in the following example:

Year taken Department Earliest possible semester Total semester in curriculum code course can be taken credit

Parentheses at the end of a course description indicate the amount of recitation, laboratory, and semester credits for that course. The AM 1112 example has (1-1-2) which means there is one semester credit of recitation, one semester credit of laboratory, and a two semester credit course total.

Information following the semester credit block indicates **pre- requisites** or **concurrence**, where they may exist. The prerequisite
courses must be taken before the course being described may be
taken. Concurrence means that the course may be taken at the
same time as the course being described.

Example: AM 1223 has prerequisites of AM 1115 and GT 1513 which means that before taking AM 1223 (Aircraft Fluid Power Systems), the student must have completed Aircraft Science (AM 1115) and Aviation Math (GT 1513).

Example: AM 2433 has concurrent course AM 2434 meaning that Powerplant Fundamentals (AM 2434) may be taken at the same time as AM 2433.

Aeronautical Technology

AM 1112 Aircraft Standards

A survey of the organization of the Federal Aviation Administration and the Civil Aeronautics Board. Emphasis will be placed on the regulations, standards, and specifications of each of these organizations. A detailed study of weight and balance procedures will be conducted in the classroom and in the laboratory. (1-1-2) Prerequisite: None

AM 1114 Basic Aircraft Electricity

A basic concept of Direct Current and Alternating Current Circuits, basic laws relating to circuit analysis, and a study of measuring instruments. Concepts of relays, switches, and other basic devices encountered in circuit analysis, trouble shooting and repair. Also includes detailed study of electrical components and systems fundamental to a variety of aircraft active in general aviation. Attention will be devoted to low voltage electrical components of power plants as well as air frame electrical systems. (2-2-4) Prerequisite: None

AM 1115 Aircraft Science

A survey of aircraft nomenclature, theory of flight and aerodynamics, aircraft ground operation and servicing, and aircraft materials and processes. (2-3-5) Prerequisite: None

AM 1212 Aircraft Drawings

The course is designed to teach the student how to recognize and identify each kind of line as it appears in drawings and to interpret the meaning of the lines as they relate to surfaces and details in drawings. The student will make drawings illustrating major repairs or alterations and study the reading and interpretation of blueprints. (0-2-2) Prerequisite: None

AM 1222 Aircraft Welding

Application of physical and chemical principles to various welding techniques of aircraft construction and repair. Manipulative skill development in gas, electric arc and heli-arc welding. (1-1-2) Prerequisite: None

AM 1223 Aircraft Fluid Power Systems

A study of basic fluid mechanics as it applies to practical applications in aircraft systems. Compressible and incompressible fluid systems will be studied. (2-1-3) Prerequisites: AM 1115, GT 1513

AM 1225 Airframe Systems

A study of the airframe systems and components common to various types of general aviation aircraft. (3-2-5) Prerequisite: AM 1115

AM 1324 Airframe and Powerplant Electrical Systems

An advanced study of Direct Current and Alternating Current circuits laws relating to circuit analysis and a detailed study of measuring instruments. Advanced study of relays, switches, and other devices encountered in circuit analysis, trouble shooting and repair. Also includes a detailed study of electrical components and systems used in a variety of aircraft active in general aviation. Attention will be devoted to low voltage electrical components of airframe electrical systems. (2-2-4) Prerequisites: AM 1114, GT 1513

AM 1325 Aircraft Structures and Repair

A study of materials commonly used in airframe structures and the associated study of making structural repairs according to recommended procedures. Skills in sheetmetal and plastics are stressed. (3-2-5) Prerequisite: AM 1115

AM 2232 Aircraft Wood and Fabric

A course designed to acquaint the student with the various fabric coverings used on aircraft and methods used in application of finishes to aircraft surfaces. The course also includes a study of materials commonly used in airframe structures and the associated study of making structural repairs according to recommended procedures. Skills in woodworking are stressed. (1-1-2) Prerequisite: None

AM 2235 Aircraft Inspection and Assembly

A study of the assembly, assembly procedures, manufacturing procedures, and inspection of aircraft components. The course also covers in detail the inspections required in aircraft maintenance, aircraft alterations and inspections governing the issuance of airworthiness certificates, either under the manufacturers type certificate or a supplemental type certificate. (3-2-5) Prerequisites: GT 1513, AM 1212, AM 1115, AM 1114

AM 2333 Navigation Aids and Communication Systems

A survey study of the aids to navigation and communications used in light and intermediate class aircraft. Operation and installation of the various types of equipment will be stressed. (2-1-3) Prerequisite: AM 1114

AM 2433 Powerplant Induction and Fuel Systems

A study of aircraft induction and fuel metering systems including fuels, carburetors, fuel injection systems, superchargers and other induction system components used to insure a dependable and accurate fuel supply at any flight configuration and attitude. (2-1-3) Concurrent: AM 2434

AM 2434 Powerplant Fundamentals

A study of the principles of operation, design features and operating characteristics of reciprocating aircraft engines. Includes the study of radial, in-line and horizontal opposed engines. (3-1-4) Prerequisite: None

AM 2442 Propellers

A study of propeller theory, use, maintenance, and inspection of propellers and related control systems. (1-1-2) Concurrent: AM 2434

AM 2443 Powerplant Ignition Systems

A study of high and low tension ignition systems for today's aircraft. Emphasis will be placed on trouble shooting, repair, and timing of aircraft ignition systems. (2-1-3) Prerequisite: AM 1114; Concurrent: AM 2434

AM 2544 Powerplant Operation and Trouble Shooting

Experience in installation, operation, and removal of reciprocating engines. Engine analysis and diagnosis of malfunctions, including methods of remedy, are items that are fundamental to the operational phase of this course. (2-2-4) Prerequisite: AM 2434

AM 2545 Gas Turbine Powerplants

A study of the aircraft gas turbine engine and its operation. The course is designed to provide the student with a background of practical knowledge of gas turbine fundamentals, operation and maintenance. (2-3-5) Prerequisite: AM 2434

AM 2643 Powerplant Overhaul

Practical experience in overhauling a reciprocating engine. Some experience will be gained on radial engines; however, emphasis will be placed on small opposed engines of a current popular variety. Attention will be devoted to various inspection methods, allowable tolerances, replacement process and assembly. (1-2-3) Prerequisite: AM 2434

Civil Engineering Technology

CL 1011 Introduction to Technology

Seminars, field trips, and library assignments designed to project the student into the world of the technician and to give him an insight into what employers expect of a technician. (1-0-1) Prerequisite: None

CL 1111 Surveying Instruments

An introductory course explaining the use and care of the instruments and tools most commonly used in surveying. This course is used to prepare students for CL 1123, Plane Surveying. (0-1-1) Prerequisite: None

CL 1123 Plane Surveying

A course in the theory and practice of obtaining field measurements for surveying. Emphasis is placed on accuracy and how to avoid or minimize errors and mistakes. (2-1-3) Prerequisite: CL 1111

CL 1221 Surveying Drafting

This course consists of making the various types of maps and plats common to surveying. "Certificates" for property and mortgage surveys, topographic maps, and subdivision plats are prepared. Office calculations as they relate to surveying are also used. (0-1-1) Prerequisite: MT 1113

CL 1321 Materials Sampling and Testing

A study of basic construction materials including concrete and asphalt materials, sampling techniques, and methods of testing to conform with American Society for Testing Materials Specifications are emphasized in the course. (0-1-1) Prerequisite: None

CL 1422 Hydraulics and Hydrology

The principles of forces and pressures due to fluids are studied. The course also deals with the causes and effects of precipitation. Emphasis is placed on the effects of hydrology and hydraulics to drainage and drainage structures. (2-0-2) Prerequisites: GT 1213, GT 1212

CL 2132 Route and Construction Surveying

The study of geometrics as they are applied to the design of highways. The effects of grades, sight distances and design speed are stressed. (2-0-2) Prerequisites: CL 1123, CL 1221

CL 2332 Soils (Properties and Classifications)

This course covers the criteria used in the selection, design and construction of the elements of a structure that transfers its total load to the underlying formation. Physical characteristics of compacted and uncompacted soils, soil bearing qualities and an insight into the design for footings, walls, piers and piling used for foundation purposes. (1-1-2) Prerequisite or concurrent: GT 1222

CL 2435 Statics and Strength of Materials

A study of forces, stresses, structures, and design characteristics of a variety of engineering components. (5-0-5) Prerequisite: GT 1124

CL 2443 Civil Design and Construction

A study of the design and detailing of small structures and highway projects. General topics include drainage structures, flexible pavement and roadway alignment and plans. (2-1-3) Prerequisite or concurrent: CL 2435

CL 2444 Structural Design

A course combining the design of structures in reinforced concrete and structural steel. Basic stress calculations and design concepts are studied for use in either a design or inspection role. (4-0-4) Prerequisite: CL 2435

CL 2532 Construction Methods and Estimating

A study of the basic equipment needs, usage, costs, and quantity determinations for planning and estimating construction projects. Field trips through construction sites and visitation with the inspectors assist in developing reporting procedures and inspection responsibilities. (1-1-2) Prerequisite: CL 1111

CL 2930 Problems in Civil

A course in which advance study is done in the specific area chosen by the student. (1 to 6) Prerequisite: Instructor's consent

CL 2142 Route and Construction Surveying Laboratory

A companion course to CL 2132. Field application in the surveys required for staking and laying out highways, bridges, drainage structures, and buildings. (0-2-2) Prerequisite or concurrent: CL 2132

CL 2242 Structural Drafting

This course emphasizes the methods of detailing reinforced concrete and structural steel in the preparation of construction plans. (0-2-2) Prerequisite: CL 1221

CL 2443 Civil Design and Construction

A study of the design and detailing of small structures and highway projects. General topics include drainage structures, flexible pavement and roadway alignment and plans. (2-1-3) Prerequisite or concurrent: CL 2435

CL 2542 Photogrammetry

An introduction to the principles, equipment, techniques, and applications of using aerial photographs for topographic and planimetric mapping, site location and highway design and construction. (0-2-2) Prerequisite: CL 1123

CL 2642 Civil Technology Design (Storm Sewers)

Surface runoff and collection hydraulics from established data are studied along with grade line layout, detailing, materials and construction methods. (1-1-2) Prerequisite or concurrent: CL 2433

CL 2643 Civil Technology Design (Sewage Collection and Treatment Systems)

A continuation of hydraulics in specific applications to a collection, transporting and treatment system. It includes the use of established data to determine collection requirements, layout and sizing of the system. A study of treatment systems relative to capacities, quantities and effluent will be included. The materials, specifications, sites and construction methods will be integrated into the course at appropriate times to provide clarification and understanding. (2-1-3) Prerequisite: CL 2433

Computer Science Technology

CP 1112 Introduction to Machine Processing

An introduction to data processing equipment including the use of the keypunch, the sorter, and wiring control panels for, and using, the reproducer. Hands-on experience with the above machines as well as some contact with the laboratory's computer system. Design of computer card layouts and output forms. (0-2-2) Prerequisite: None

CP 1113 FORTRAN IV

The description of a digital computing system and the strategy of problemsolving using FORTRAN IV. Including the concepts and properties of algorithms with numerous problems solved by the student. In the laboratory students write, process and debug programs using the computer on an open shop basis. (2-1-3) Prerequisite or concurrent: GT 1212, GT 1213

CP 1122 Boolean Algebra and Applied Logic

This course introduces the student to those fundamental algebraic, logical and combinatoric concepts from mathematics needed in subsequent computer science courses and shows the applications of these concepts to various areas of computer science. Also discusses the organization, logic design and components of digital computing systems. Basic digital circuits, Boolean algebra and combinational logic, data representation and transfer, and digital arithmetic. Digital storage and accessing, control functions, input-output facilities, system organization, and reliability. Description and simulation techniques. (2-0-2) Prerequisite: CP 1112

CP 1123 COBOL, RPG and CSP

A study of two programming languages, COBOL and Report Program Generator (RPG), which are oriented toward data handling and processing tasks. The student will study the structure and details of these languages and perform programming exercises as well as considerable practical applications with the Commercial Subroutine Package (CSP) for FORTRAN. (2-1-3) Prerequisite: CP 1113

CP 1222 Computer Science Concepts

This course is designed to provide the student with the basic knowledge and experience necessary to use computer effectively in the solution of problems and to introduce the student to the relations which hold among the elements of data involved in problems, the structures of storage media and machines, and the methods which are useful in representing structured data in storage, and the techniques for operating upon data structures. (2-0-2) Prerequisite: None

CP 2122 PL/1 and ALGOL

The detailed structure of the compiler languages PL/1 and ALGOL. Emphasis is placed on the language elements, grammars and the adaptation of the programming language to the solution of problems. (1-2-2) Prerequisite: CP 1113

CP 2133 Numerical Methods

Numerical methods necessary for finding solutions to mathematical equations and for analysis of tabulated data. Topics include error analysis, linear systems of equations, numerical integration techniques, numerical solutions of partial differential equations and finite differences. The algorithmic approach and the efficient use of the computer are emphasized. (2-1-3) Prerequisite or concurrent: GT 2232

CP 2134 BAL for 1130 and 360

Designed to teach programming of a digital computer at the machine language and assembly language levels with emphasis on IBM System 1130 and System 360 computers. Simulators, emulators, macro systems and programs with subroutines in other languages will be considered. In the laboratory the student writes, processes and debugs programs using the computer. (2-2-4) Prerequisite: CP 1122

CP 2232 Computer Graphics

Study of the problems in handling graphic information. Input-output and representation will be introduced from the hardware and software points of view. The course is intended to serve both the student interested in specializing in computer graphics and the student who seeks to apply graphic techniques to his particular problem. Topics include display memory, generation of points, vectors, interactive versus passive graphics, analog storage of images on microfilm, digitizing and digital storage, pattern recognition by features, syntax tables, random nets, the mathematics of three-dimensions, projections, and the hidden-line problem, "Graphical programs," computer-aided design and instruction, and animated movies. (0-2-2) Prerequisite: CP 1113

CP 2233 Statistics and Quality Control

An introduction to elementary statistics with emphasis on the application of statistics. Topics include description and representation of sample data, probability, theoretical distributions, sampling, estimating, correlation, regression, CPM, PERT, and computer statistical routines. (2-1-3) Prerequisite or concurrent: GT 1222

CP 2143 Computer Systems Seminar

Detailed study of computer systems currently on the market and their individual merits and drawbacks. Discussion of advanced computer techniques including computer graphics, time-sharing systems, multi-programming, linear programming, systems simulation using CPM, PERT, Monte Carlo techniques, management games and other techniques used in simulating systems. (2-1-3) Prerequisite or concurrent: CP 2134

CP 2444 Analog Computer Methods with Applied Differential Equations

Introduction to analog to digital converters, digital to analog converters, hybrid systems, electronic analog computer systems, and analog systems simulation on the IBM 1130 system. Study of elementary mathematical models involving practical applications of differential equations and their solution on analog and digital computers. (3-1-4) Prerequisites: ET 1113, GT 2232

Environmental Protection Technology

EP 2133 Hydraulics (Pressure and Weir Flow)

A continuation of hydraulics and hydrology in specific applications to water supply systems and sanitary facilities. The laboratory involves experiments with pipe and weir flow applicable to design needs. (2-1-3) Prerequisite: CL 1422

EP 2233 Microbiology of Water

A course designed to help the student visualize the more important biological phenomena encountered in connection with water and provide the opportunity to observe comparable phenomena firsthand in the laboratory. (1-2-3) Prerequisite: GT 1111

EP 2332 Water Resources and Domestic Supply

A continuation of hydrology in the particular applications and developments relative to replenishing processes, storage capacity and natural losses. (2-0-2) Prerequisite: CL 1422

EP 2333 Domestic Water Treatment Methods

A study of the purification methods, objectives and the results that may be expected from each. The laboratory will provide the vehicle to allow firsthand observations of facilities in operation. (2-1-3) Prerequisite: GT 1114

EP 2433 Civil Technology Design (Water Systems)

A continuation of hydraulics in specific applications to a domestic water supply system. It includes distribution requirements, layout and sizing as well as materials, specifications, codes and construction methods. (2-1-3) Prerequisite or concurrent: CL 2433

EP 2243 Microbiology of Sewage

A course designed to help the student visualize the more important biological phenomena encountered in connection with sewage and provide the opportunity to observe comparable phenomena firsthand in the laboratory. (1-2-3) Prerequisite: GT 1114

EP 2343 Sewage Treatment Methods

A study of the different treatment methods, objectives and the results that may be expected from each. The laboratory provides the vehicle for first-hand observations of facilities in operation. (2-1-3) Prerequisite: GT 1114

Electronic Engineering Technology

ET 1011 Introduction to Technology

Seminars, field trips, and library assignments designed to project the student into the world of the technician and to give the student firsthand knowledge of the current need for technicians in industry. (1-0-1) Prerequisite: None

ET 1113 Direct Current Circuits

A beginning course in basic circuit theory. The concept of voltage, current, resistance, capacitance and inductance is applied to various direct current circuits to analyze their behavior. Special attention is given to the application of Thevenins and Norton's theorems and the use of the slide rule in this analysis. (2-1-3) Prerequisite: None

ET 1224 Alternating Current Circuits

The study of alternating current circuits. Analysis of impedance networks from power line through communication frequencies. Laboratory analysis and measurement of impedance networks, using the oscilloscope and other instruments. (2-2-4) Prerequisite: ET 1113

ET 1324 Applied Electronics I

An introduction to active electronic devices using both graphic and mathematical model analysis. Laboratory periods devoted to measurement of device parameters in basic circuit configurations. (2-2-4) Prerequisite: ET 1113

ET 2434 Electronic Measurements

A study of theory and operation of basic electronic instruments. Includes Direct Current and Alternating Current ammeters, voltmeters, impedance bridges, attenuators, filters, etc. Also includes a study of amplifiers as related to sensitive Alternating Current vtvm's, senitive Direct Current vtvm's, oscilloscopes, etc. Laboratory exercises provide experience in the selection of proper equipment for making measurements in electrical and electronic systems as well as acoustical systems. (2-2-4) Prerequisites: ET 1224, ET 1324

ET 2535 Applied Electronics II

The application of electron devices to amplifiers. Emphasis is placed on analysis and design of RC-coupled, transformer coupled and direct coupled amplifiers. Load line analysis, equivalent circuit analysis, frequency response and bode plots are studied. Principles of bias stabilization and characteristics of feedback circuits are included. The family deedback oscillators, tuned circuit coupling and power amplifiers are covered. Laboratory exercises emphasize principles of circuit operation. (3-2-5) Prerequisites: ET 1224, ET 1324

ET 2631 Electronic Seminar I

An industry-related course to prepare the student for his first position. The student designs electronic circuits to a set of specifications. A report is prepared describing the circuits, applications and testing methods. (0-1-1) Prerequisite: ET 1324, ET 1224

ET 2741 Electronic Seminar II

The report developed for ET 2631 is used by the student to develop the electronic hardware to a finished model. The model is tested to the original specifications. A report is prepared showing test results, design changes, instructions on use and application of the circuit. (0-1-1) Prerequisite: ET 2631

ET 2743 Pulse Circuits

Transit analysis of pulse generation as applied to computer circuits, frequency counters and pulse communication systems such as telemetry and transponder systems. The generation and modulation of microwave systems. A study of the equipment necessary for generation, transmission and reception of the short electromagnetic wave. Laboratory experiments measuring pulse width, gitter and other phenomena associated with the application of pulse principles in actual circuits. (2-1-3) Prerequisites: ET 2434, ET 2535

ET 2843 Solid State Applications

A study of modern solid state devices to include bipolar transistors, field effect transistors, unijunction transistors, tunnel diodes, integrated circuits, etc. Course work includes a study of various transistor equivalent circuit models. Frequency response and frequency cooperation is included. Includes non-linear application of solid state devices in multivibrator circuits, blocking oscillators, etc. Laboratory exercises provide reinforcement of classroom work and hand on experience in measurement of solid state circuit parameters. (2-1-3) Prerequisite: ET 2434, ET 2535

ET 2930 Problems in Electronics

A course in which advance study is done in the specific area chosen by the student. (1 to 6) Prerequisite: Instructor's consent

ET 2944 Applied Electronics III

Design and analysis of systems as they pertain to applications ranging from communications and broadcasting to radio navigation and weather satellites. Laboratory work involves design and measurement as well as field trips to representative sites. Review of electrostatic and electromagnetic propagation of energy through the use of working model antennae. Special array for VOR, DME and ADF systems, elementary use of Smith chart. (3-1-4) Prerequisite: ET 2434, ET 2535

General Engineering Technology

GT 0215 Technical Mathematics

A non-credit course in basic mathematics for those students with a weak or non-existent high school mathematics background. A study of algebra and plane geometry taught at a high school level, but at a pace designed to cover the complete 2 or 3 years of high school work in one college semester. Course includes scientific notation, logarithms, and slide rule. (5-2-0) Prerequisite: None

GT 1111 Applied Chemistry Laboratory

Principle of applied chemistry lab method with emphasis on inorganic tests and experiments, for students in Environmental Protection Technology. (0-1-1) Concurrent: GT 1113

GT 1113 Applied Chemistry

A study of the arrangement of matter, the atomic structure, the concepts of chemistry as shown through problem solutions, and energy balances related to interaction of elements. Physical chemistry concepts are included along with an introduction to simplified laboratory procedure in chemical analysis. (3-0-3) Prerequisite: None

GT 1212 Plane Trigonometry

The fundamentals of college trigonometry with emphasis on applications to engineering technology. (2-0-2) Prerequisite: None

GT 1213 College Algebra

The fundamentals of algebra as taught at the college level modified to emphasize applications and de-emphasize theoretical developments. (3-0-3) Prerequisite: None

GT 1312 Oral Communications

A review of oral forms of communicating. Presenting technical papers, giving oral instructions, oral reports and related topics necessary to develop proficiency in the oral presentation of technical material. (2-0-2) Prerequisite: None

GT 1313 Written Communications

A review of the mechanics of technical writing. A study of types of technical writing, documents, reports, forms and other instruments of communication pertinent to the occupation of the technician. Use of the word, sentence and paragraph with emphasis on technical format. Vocabulary building as necessary and other related topics will be included. (3-0-3) Prerequisite: None

GT 1413 Industrial Relations

Analysis of the relationship of technical growth and industrial development to the actions and coordination of various organizations including professional societies, industrial organizations, fraternal and social societies, cooperatives, labor relations groups, and political orders. The cooperation and lack of cooperation of such activities and the national trends in technical and industrial relations is the basis of study most vital to technicians. (3-0-3) Prerequisite: None

GT 1513 Aviation Math

A study of basic mathematics through fundamental algebra including introduction to trigonometry and use of slide rule. Emphasis is placed on application of math in solving problems common to aviation maintenance. (3-0-3) Prerequisite: None

GT 1611 Introduction to Technology

Seminars, field trips and library assignments designed to project the student into the world of the technician and give the student firsthand knowledge of the current need for technicians in industry. (1-0-1). Prerequisite: None

GT 1124 Technical Physics

A quantitative investigation into the fundamentals of mechanics, heat, and sound. The class work and the supportive laboratory are specifically designed to provide the student with an understanding of and a proficiency in measurement and calculation with these principles as they are applied to the solution of technical problems. (3-1-4) Prerequisite or concurrent: GT 1222

GT 1222 Analytic Geometry and Calculus I

A study of functions and their properties including two and three dimensional functions. Definitions and applications will include the following: limits, differential, derivatives, integrals, definite integrals, conics, emphasizing the process of applying the process to technical problems. (2-0-2) Prerequisites: GT 1212, GT 1213

GT 1323 Technical Writing

An extension of GT 1313 (Written Communications) to include advanced study of methods of collection, organization and identification of data, selection of vital data to include in technical reports and the exercise of preparing clear, concise reports. (2-1-3) Prerequisite: GT 1313

GT 1423 Industrial Economics

A quantitative study of economic concepts such as interest, depreciation, taxes and other costs involved in making choices in engineering situations. A brief review of the characteristics of the American economic structure is also presented. (3-0-3) Prerequisite: GT 1213

GT 1633 Production and Quality Control

An approach to production control functions, methods and procedures to include inventory control, master scheduling, estimating and statistical techniques used in control of quality. (2-1-3) Prerequisites: MT 1222, GT 1222, or Instructor's consent

GT 1643 Electric Power and Devices

An approach to technical understanding of the concepts and uses of alternating current power in industry. Strong alternating current theory with emphasis on motor speed controls, phase shifts, control systems, simpler forms of logic switching circuits, process systems with self check, and servo loop principles. Various forms of transducers are examined. Field trips are made to study representative motors and load control systems. (2-1-3) Prerequisite: ET 1224

GT 2232 Analytic Geometry and Calculus II

A continuation of GT 1222, which includes the following: trigonometric derivatives, geometric application of derivatives, maxima and minima, differentials, trigonometric integrals, areas, volumes, centroids, integration techniques emphasizing solution of technical problems. (2-0-2) Prerequisite: GT 1222

Mechanical Engineering Technology

MT 1011 Introduction to Technology

Seminars, field trips and library assignments designed to project the student into the world of the technician and to give the student firsthand knowledge of the current need for technicians in industry. (1-0-1) Prerequisite: None

MT 1113 Technical Drafting and Design I

A beginning course in drafting. The ability to produce accurate and complete working drawings is developed with an appreciation of lettering, free-hand sketching and the proper use of equipment and instruments. Descriptive geometry is used early and frequently in the course. Dimensions, symbols, standards and specifications are studied and stressed. (0-3-3) Prerequisite: None

MT 1212 Manufacturing Methods I

A background of knowledge is provided for various manufacturing materials and fundamental types of manufacturing methods as employed in hot working processes. Practical experience is gained by the student in producing simple molds, cores, and castings, in performing simple are and oxyacetylene welding operations, and basic processes with plastics in manufacturing. (1-1-2) Prerequisite: None

MT 1122 Technical Drafting and Design II

A continuation of MT 1113. As in MT 1113, interpretation, drafting practices and the use of handbooks are important parts of the subject. Emphasis is placed on design application and a more extensive background of principles. Elementary design problems such as machine parts and assemblies, fasteners and supporting devices, production drawings, structural detailing, intersections and developments and graphs and charts are used to prepare the student for instruction in the advanced design course. (0-2-2) Prerequisite: MT 1113

MT 1222 Manufacturing Methods II

Designed to cover the various present-day manufacturing methods as employed in cold working processes. Practical applications give the student opportunity to become familiar with various types of machine tools, tooling, measuring and inspection procedures. Information is presented to introduce numerical control for machine tools and the use of special machines in manufacturing. (0-2-2) Prerequisite: MT 1212

MT 1323 Properties of Materials

Study of physical materials and their adaptability to applications. Emphasis is placed on the study of ferrous and non-ferrous metals. Experience in heat treating, inspection and microscopic examination, and materials testing including both destructive and non-destructive methods are important topics in the course. Plastic deformation, corrosion of metals and wear are also topics of consideration as well as principles of powder metallurgy and the use of non-metallic materials. (2-1-3) Concurrent: GT 1113

MT 1512 Welding Technology I

A study of American Welding Society's Standards, welding symbols, and basic prints of industrial fabrication and manufacturing drawings in the welding industry. The course covers material handling, shop layout and planning, cost estimating for welding. (1-1-2) Prerequisite: Welding background or departmental approval.

MT 1523 Welding Technology II

A study of the types of ferrous and non-ferrous metals related to welding, metallurgical effects of welds, effects of alloying elements, heat treating, corrosion processes, and welding of dissimilar metals. Welding tests, inspection and design include use of dye penetrants, x-ray, magniflux, zyglo, macro-etching, microscopic inspection, destructive and non-destructive testing as prescribed by standard qualification test. (2-1-3) Prerequisite: Concurrent: MT 1323 or departmental approval

MT 2132 Graphics in Design

The applications of specific areas of drafting and design to include welding, tooling, gears, cam, and other mechanical components as well as applying graphic solutions to motion-linkage problems. Also, coverage of basic technical illustration techniques is included. (0-2-2) Prerequisite: MT 1122

MT 2433 Elements of Mechanisms

This application of machine design includes fundamentals of displacement and velocity and acceleration used in analysis and design. Both analytical and graphical methods of problem solving are applied to machine elements, linkages, gear trains, cams, pulleys, parts and combinations of such machine elements. (3-0-3) Prerequisite: GT 1124

MT 2533 Fluid Power

The fundamental study and laboratory experiences of the basic fundamentals of fluid mechanics as applied to fluid power system design, and to give a basic understanding of fluid power language and a knowledge of components available, their design, application, operation and maintenance. Fluid power systems involve both hydraulics and pneumatics applications. (2-1-3) Prerequisite: GT 1124

MT 2930 Problems in Mechanical

Opportunity for advanced study and practical experience with specific problems of the student's choice in field of Mechanical Technology. (1 to 6) Prerequisite: Instructor's consent

MT 2143 Mechanical Design Projects

This final design course emphasizes the application of all previously learned design material. A student must analyze the problem, gather data, prepare preliminary sketches, perform all mathematical calculations, establish working drawings and specifications and prepare final checks to assure that his design is workable. Emphasis is placed upon the selection of specifications and the final check on his work. Proper procedure for preparing specifications and the development of design confidence are major objectives of this course. (1-2-3) Prerequisite or concurrent: MT 2433, MT 2433

MT 2341 Materials Testing Procedures

The applications of various testing methods and instrumentation which are commonly used in the areas of mechanical testing. Provides experience in the testing of material properties and component loading conditions. (0-1-1) Prerequisite or concurrent: CL 2435

MT 2443 Machine Design

An applications course in design including factors which influence the material used in design. The selection of materials and design of parts is based on the analysis of stresses, loading conditions, deformations, vibrations and finish of the completed design project. (3-0-3) Prerequisites: MT 2433, CL 2435

Kansas Wesleyan Course Descriptions

43:112 Principles of Management

A study using behavioral science and decision-making theory with well-established concepts about the work of managers. Areas of study include the role of managers in organizing, planning, leading, decision making, measuring and controlling a business enterprise. Human factors in organizing are given detailed treatment. (4-0-4) Prerequisite: None

43:214 Principles of Accounting I

A study of basic theory and practice of double entry accounting of proprietorships and partnerships. The problem approach is utilized to explain theory. (4-0-4) Prerequisite: None

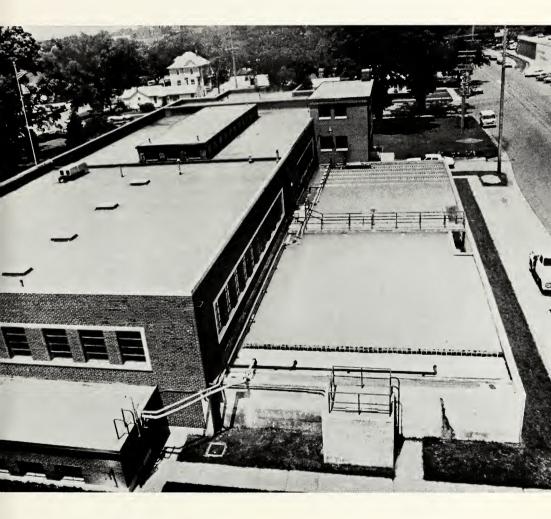
43:213 Marketing

A study of the institutions, organizations, and methods and their development involved in the distribution of goods and service. These activities are considered from the viewpoint of individual business and from the standpoint of the economy as a whole. (4-0-4 Prerequisite: 43:112

43:311 Intermediate Accounting

A further study of business accounting including long-term investments and liabilities, insurance, inventory valuations, product costing, stockholders' equity, asset revaluation and depreciation, and tax allocation. (4-0-4) Prerequisite: 43:214

Section 8 Control of the Institute



Board of Control

State Board of Education

The State Board of Education is charged with the responsibility of overall control of the Kansas Technical Institute. The members of the State Board of Education are:

District 1—Paul Jones, Kansas City, Kansas

District 2—Dorothy O. Ballard, Shawnee Mission

District 3—John W. Frazier, P. E., Topeka (Chairman)

District 4—Dorothy G. Groesbeck, Manhattan

District 5—Harold H. Crist, Scott City

District 6—Mrs. Clarence W. Carlson, Salina

District 7—Will T. Billingsley, Hutchinson

District 8—Harry O. Lytle, Ir., Wichita

District 9—Karl M. Wilson, Coffevville

District 10—Dr. Wm. A. Black, Pittsburg

Advisory Committees

The academic programs at Kansas Technical Institute are designed to meet the special needs of a technically oriented society. Advisory committees have been established to insure that programs continue to be relevant to the needs of industry as viewed by the educator, the professional and technical societies and representatives from industry.

A special committee exists to work with the department head of each technology program at the Institute. Each committee includes representatives from industry, representatives from the professional society, representatives from the American Society of Certified Engineering Technicians and representatives from Baccalaureate degree granting institutions. This combination of talent assures continued technical program relevance.

Academic Committees

A number of academic committees comprised of Kansas Technical Institute faculty, provide a variety of functions to perpetuate academic excellence and relevance. Standing committees and their specific services to the Institute and the State of Kansas are listed.

Academic Standards Committee

Responsibilities:

1. To consider and make recommendations to the administration relative to all events and activities which affect academic quality.

2. Serve as a reinstatement committee for those persons dismissed

from the Institute for academic reasons.

3. To, on the committee's own recognizance, take up, discuss and make recommendations to the administration concerning any official school activity, or to cooperate with any other committee in study and recommendation, where academic standards are concerned.

Course and Curriculum Committee

Responsibilities:

1. Study and investigation of new courses as proposed with a view toward best utilization of faculty and facilities.

2. Study and investigation of new curricula proposed to insure non-duplication of effort and to provide a faculty forum for review of the proposed new curricula prior to recommendations for adoptions.

3. Investigate rationale for proposed changes of existing curricula to insure that such changes are objective and tend toward pro-

gram improvement.

4. Study and resolve curricula conflicts in interdisciplinary course situations.

Class Scheduling Committee

Responsibilities:

To study and recommend specific dates relating to academic scheduling as shown on the academic calendar.

2. To establish a formal schedule of classes and prepare the official class schedule for each semester.

Textbook and Library Committee

Responsibilities:

1. To study and recommend policies concerning textbooks adop-

tion and change for classes at the institute.

To serve as the liaison between the faculty and the bookstore to insure a uniform and orderly procedure for procuring textbooks for classes in ample time for use.

To establish criteria for library rules and procedures including operation, scheduling, material selection and utilization.

Transfer of Credit (Credit Waiver) Committee

Responsibilities:

- 1. To review and appropriate documentary material to determine specific courses within a student's program at the Institute that should be waived.
- 2. To rule on specific requests to waive courses at the Institute and insure that such decisions are properly posted on the student file.

Curriculum Planning Committee

Responsibilities:

1. Continually evaluate and survey state needs and interests relative to the new curriculum development in Engineering Technology.

2. Examine on an annual basis, the relevance of all existing

curricula at the Institute.

President's Advisory Council

Responsibilities:

1. To advise the President concerning establishment or modifica-

tion of Institute policy matters.

2. As the senior Institute committee, to provide efficient and effective communications between the administration, faculty, staff and the student body.

Administration

James O. Thompson, Jr., B. S., M. S.	President
Thomas F. Creech, B. S., M. S Director of Academ	nic Affairs
Lyle D. Jones, B. S Director of Student and Pub	lic Affairs
R. D. Harrison, B. S Physical Plant Super	rintendent

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- Thomas F. Creech, *Director of Academic Affairs*. Professor, M. S. Applied Mechanics, Kansas State University, B. S. Mechanical Engineering, Kansas State University.
- Larry A. Farmer, Professor and Head, *Electronics Technology*. M. S. Adult and Occupational Education, Kansas State University. B. S. Education, Oklahoma State University. A. S. Sayre Junior College.
- Raymond R. Gould, Instructor, General Technology. M. A. Humanities and English, University of Iowa. B. A. English, University of Dubuque.
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- R. D. Harrison, Physical Plant Superintendent. B. S. Industrial Education, West Texas State University.
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- Joseph K. Hill, Professor and Head, Computer Technology. M. S. Adult and Occupational Education, Kansas State University. B. S. Technical Education, Oklahoma State University. A. S. Electrical Engineering, Oklahoma State University.
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Fahim A. Shahid, Instructor, Civil Technology. B. S. Mechanical Engineering, University of Alexandria, Egypt.

James O. Thompson, Jr., President. M. S. Industrial Psychology, Kansas State University. B. S. Experimental Psychology, Kansas State University. Further graduate studies in Operations Research, Case Western Reserve and University of California, Berkeley.

Mrs. Josephine Williams, Instructor, General Technology. M. S. Psychology, Kansas State University. B. A. Psychology, Kansas State University.

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