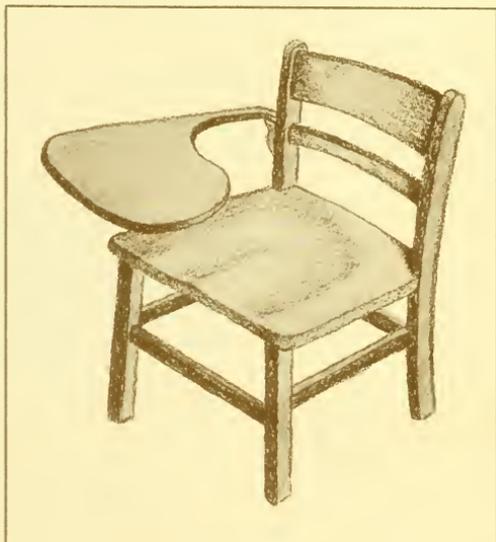


**DURHAM
TECHNICAL
INSTITUTE
BULLETIN
1975-76**





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DURHAM TECHNICAL INSTITUTE BULLETIN 1975-1976

The provisions of this publication are not to be regarded as an irrevocable contract between the student and Durham Technical Institute. The Institute reserves the right to make changes in the regulations, courses, fees, and other matters of policy and procedure as and when deemed necessary. The Institute further reserves the right, at any time, to request the student to withdraw when it considers such action to be in the best interest of the Institute.

College Calendar 1975-1976

FALL QUARTER 1975

August 18 - September 18	Monday - Friday	Student Advisement Period For Day & Evening Students
September 23	Tuesday	Late Advisement For New And Returning Students
September 8 - 18	Monday - Friday	Registration For Returning Day and Evening Students
September 12 - 18	Monday - Friday	Registration For New Day and Evening Students
September 29 - 30	Monday - Tuesday	Registration For New Day and Evening Students
September 29	Monday	Late Registration, Late Fee Charged
October 1	Wednesday	Classes Begin
October 3	Friday	Drop-Add Begins
October 10	Friday	Last Day to Drop Course
November 27 - 28	Thursday - Friday	Last Day to Drop Course With W Grade
December 16	Tuesday	Thanksgiving Holidays
December 17 - January 1	Monday - Friday	Classes End
January 2	Friday	Christmas Holidays
		Faculty and Staff Return to Work

WINTER QUARTER 1976

November 10 - December 11	Monday	Student Advisement Period Begins
December 8 - 12	Monday - Friday	Registration For Returning Day and Evening Students
December 10 - 12	Wednesday - Friday	Registration For New Day and Evening Students
December 10	Wednesday	Last Day Curriculum Students May Be Accepted For Winter Quarter
January 5-6	Monday - Tuesday	Late Registration, Late Fee Charged
January 5	Monday	Classes Begin
January 7	Wednesday	Drop-Add Begins
January 9	Friday	Last Day to Add Course
January 16	Friday	Last Day to Drop Course With W Grade
March 19	Friday	Classes End

SPRING QUARTER 1976

February 16	Monday	Student Advisement Period Begins
March 8 - 12	Monday - Friday	Registration For Returning Day and Evening Students
March 10 - 12	Wednesday - Friday	Registration For New Day and Evening Students
March 10	Wednesday	Last Day Curriculum Students May Be Accepted For Spring Quarter
March 29 - 30	Monday - Tuesday	Late Registration, Late Fee Charged, Classes Begin
March 29	Monday	Drop-Add Begins
March 31	Wednesday	Last Day to Add Course
April 2	Friday	Last Day to Drop Course With W Grade
April 9	Friday, Monday	Easter Holidays
April 16 & 19	Friday, Monday	Classes End - Graduation
June 18	Friday	

SUMMER QUARTER 1976

May 10	Monday	Student Advisement Period For Day and Evening Students
June 7 - 11	Monday - Friday	Registration For Returning Day and Evening Students
June 9 - 11	Wednesday - Friday	Registration For New Day and Evening Students
June 9	Wednesday	Last Day Curriculum Students May Be Accepted For Summer Quarter
July 5	Monday	Classes Begin
July 5 - 7	Tuesday - Wednesday	Late Registration, Late Fee Charged
July 6	Tuesday	Classes Begin
July 8	Thursday	Drop-Add Begins
July 12	Monday	Last Day to Add Course
July 19	Monday	Last Day to Drop Course With W Grade
September 20	Monday	Classes End

TABLE OF CONTENTS

Durham Technical Institute	4
Institutional Life	9
Admissions	14
Academic Program	22
Expenses and Financial Aid	30
Curriculum	40
Learning Resources Center	132
Continuing Education	136
Directories	153
Index	159

DURHAM TECHNICAL INSTITUTE





The origin of Durham Technical Institute is both interesting and involved. In the original sense the history of the Institute may be traced back to June 1948, when a program of Practical Nursing was established under the Vocational and Adult Education Department of the Durham City Schools. Numerous terminal adult education programs were developed in the years that followed. Such programs included Mechanical Drafting, Architectural Drafting, and Electronics Technology. Courses, which in most cases were operated at night, were conducted in the classrooms and laboratories at Durham High School and at Hillside High School. Admission requests to these programs and tuition rates were essentially the same then as they are today.

By 1957, when the North Carolina General Assembly authorized a small appropriation to establish a limited number of area schools to be known as Industrial Education Centers, Durham already had a vigorous program in adult education underway. Along with various adult education programs, many short courses were offered in elementary education for adults. Courses to upgrade the skills of workers in a variety of trades were also offered.

As a result of the Assembly's appropriation, a challenge went out to the various county school administrative units in the state to provide a separate educational facility that would provide for the educational needs of a whole area's population. A new comprehensive curriculum was to be devised for citizens in need of education and technical skills required to advance satisfactorily in the world of work.

Durham was among the first counties in the state to meet this challenge and in June 1958, the residents of the county made \$500,000.00 available to purchase the site and to erect the initial building of the Institute. Durham Industrial Education Center officially opened its doors on September 5, 1961, with thirty-four full time students enrolled in the programs of Automotive, Mechanical, or Electronics Technology. The institution continued to operate as an industrial education center until February 4, 1965, when the State Board of Education officially designated that henceforth it be properly indentified as a technical institute. On March 30, 1965, the Board of Trustees authorized that the name of the institution be changed to Durham Technical Institute. The Institute is a charter member of the North Carolina Department of Community Colleges.

LOCATION

Located in the eastern section of the City of Durham, Durham Technical Institute sits on a nineteen acre campus at the edge of North Carolina's famed Research Triangle Park. Easy access to the Institute's Lawson Street location can be gained by taking the Briggs Street exit of the Durham East-West Expressway. The location of the Institute, within easy driving distance of Raleigh, Chapel Hill, and Downtown Durham, provides for the student numerous museums, libraries, parks, churches, and other cultural opportunities which supplement the campus environment.



ACCREDITATION AND MEMBERSHIPS

- American Association of Junior Colleges
- American Technical Education Association
- North Carolina Association of Colleges and Universities
- Southern Association of Colleges and Schools
- Southern Association of Junior Colleges
- North Carolina State Board of Education
- North Carolina State Board of Opticians
- North Carolina State Department of Community Colleges
- North Carolina Board of Nursing
- Council on Dental Education of the American Dental Association
- National Academy of Opticianry
- Joint Review Committee for Inhalation Therapy in Consonation American Medical Association

ENROLLMENT

Durham Technical Institute, in keeping with the two-county area it serves, is ever expanding. The Institute operates both day and night classes; these being offered both on and off campus. The curriculum now contains seventeen major programs with twelve of these leading to an Associate in Applied Science Degree. Durham Tech's student body is composed of over 2,000 students with approximately 1,100 males and 900 females. Twenty-one states and 5 foreign countries are represented. Nearly 98 percent of the student body is from North Carolina.

CURRICULUM

Curriculum offerings for Durham Technical Institute students consist of seventeen programs. Twelve programs are of two year duration while five programs may be completed in a years study. One program requires two quarters to complete.

PROGRAMS

Programs of study are listed as follows by division:

- **ALLIED HEALTH**
Dental Laboratory Technology
Mental Health Associate
Opticianry
Pharmacy Technician
Respiratory Therapy
- **BUSINESS EDUCATION**
Accounting
Business Administration
Business Data Processing
General Office Technology
Library Technology
Secretarial Science
- **ENGINEERING AND INDUSTRIAL EDUCATION**
Architectural Drafting
Automotive Mechanics
Electronics Engineering Technology
Electronics Servicing
Machinist
- **GENERAL EDUCATION**
Police Science
- **NURSING EDUCATION**
Practical Nurse Education

RESIDENCE HALLS

Durham Technical Institute has no dormitories or other boarding facilities. The Institute is not responsible for the location or supervision of housing facilities. Students who live too far away to commute will need to secure their own living quarters in the Durham area. Students may wish to use classified newspaper advertisements and/or employ the services of a realtor in their search for satisfactory housing.

PHILOSOPHY

Realizing that the future of American democracy depends upon an educated and responsible citizenry, Durham Technical Institute conceives as its purpose the development of the individual toward the attainment of his maximum potential in life. Durham Technical Institute was established to make more readily available a higher educational opportunity distinct from traditional academic education as well as to inspire an active desire for continuing personal development. Financially and geographically, Durham Tech is available to all youth and adults who would not otherwise have this educational opportunity.

Durham Technical Institute is an instrument of service for the community as a whole. It takes advantage of its relationship to the community in order that students and faculty may use the community as their workshop for learning. Students at Durham Tech are given the opportunity to learn the art of living in group relationships as well as the art of earning a living.

Durham Technical Institute strives to be highly flexible in its offerings so as to provide as many educational opportunities as possible for specialized training by means of the "open door placement" policy. More specifically, Durham Tech attempts to accept the individual where he is and strives to provide him an opportunity to pursue an educational program toward the attainment of his career goal.

PURPOSE

Within the scope and meaning of the North Carolina General Statute 115a creating and supporting the Institute and the guidelines established by the North Carolina Department of Community Colleges, it is the purpose of this institution through its facilities and services, to offer educational opportuni-

ties meaningful to the needs of the individual and related to his future in the world of work. The Institute, being comprehensive in its purpose, endeavors to meet those objectives by providing:

- Post-secondary occupational education to develop skills and knowledge in its students for employment as qualified technicians and skilled craftsmen.
- A wide array of technical and vocational programs which are designed to improve and upgrade employed workers in their present job situations. Special attention is given to the training and educational needs of new and existing industry.
- Numerous programs and courses which afford adult citizens in our community opportunities to continue their education through the elementary and secondary level as well as courses for vocational interest and personal growth.



INSTITUTIONAL LIFE



STUDENT GOVERNMENT

The Student Government Association was organized in the 1965-66 academic year. A new Student Government Association Constitution was ratified by student vote on March 29, 1972. The Student Government Association serves the following purposes:

- coordinating and regulating student activities;
- providing procedural guides for creating new student organizations;
- providing an opportunity for student participation in making policies concerning student affairs;
- providing a framework with which students may work to improve the school;
- serving as an agency to stimulate civic responsibility, profitable use of leisure time and a spirit of fellowship among students; and
- developing, encouraging and assisting with the enforcement of definite campus regulations that affect the whole student body.

The Student Council is composed of elected representatives from each curriculum. Officers of the Student Council are elected by the student body at large in the spring quarter.

The Constitution of the Student Government Association is printed in the Student Handbook. Each student should be thoroughly familiar with the Constitution and the Student Handbook.

The organization and function of an effective Student Government Association is dependent entirely upon student initiative, interest, and leadership.

STUDENT PUBLICATIONS

Students have the opportunity to participate in the publication of a campus and institute yearbook. The

yearbook project offers an opportunity to obtain valuable experience in editing, art, layout, photography, and business management. The newspaper provides opportunity for self expression and creativity through the functions of news gathering, writing, reporting, editing, layout, art, photography, and business management. These activities operate as divisions of the student government. All students who are interested in working on the yearbook or newspaper staff should contact the Director of Student Activities.

STUDENT ORGANIZATIONS

Students who are interested in organizing departmental clubs, organizations, or fraternities should select temporary officers and obtain a faculty sponsor or adviser. Procedures for the formation of new clubs and organizations are indicated in the Student Government Association Constitution.

Organizations:

Tau Eta Sigma—a dental laboratory technology fraternity promoting excellence in the dental laboratory technology occupation. Membership consists of charter, student, faculty, alumni, and honorary members of the dental laboratory technology profession.

Phi Beta Lambda—a national business education organization for students enrolled in a business curriculum. It is designed to bridge the gap between the business world and the members' entrance into the labor force after graduation from a post-secondary institution.

Future Secretaries Association—The charter chapter of the Future Secretaries Association at Durham Technical Institute was established in the Fall of 1972. The FSA has as major objectives the following: to stimulate interest in the secretarial profession, to develop a better understanding of secretarial responsibilities, and to assist in providing the basics necessary for preparation of future office workers.

SPORTS AND RECREATION

Student athletes may participate in an inter-scholastic basketball program with members of the Piedmont Athletic Conference (PAC). Bowling, golf, and tennis are available for students who enjoy them as recreational activity. Informal, intramural basketball and volleyball programs are also available. Informal recreational equipment may be checked out at the student center upon presentation of a current, valid I.D. Card.

STUDENT CENTER

The Student Center, centrally located in the original building, is the refreshment and social area for students. The snack bar offers a variety of soft drinks, sandwiches, candy, and coffee. Tables and chairs are provided so that students may relax. A limited number of lockers are provided on a first come-first served basis which may be used to store books, supplies, and other items. The center is open from 7:30 a.m. until 10:00 p.m. daily, Monday through Thursday, and 7:30 a.m. until 5:00 p.m. on Friday.



COUNSELING AND GUIDANCE

Effective counseling is an ongoing process that begins with the placement interview and continues throughout the student's enrollment. It is not confined to the narrow role of helping serious "problem" cases, although every effort is made to help students who have academic or personal problems; rather, it is directed toward helping all students develop their individual capabilities to the fullest extent. Durham Tech recognizes that the student can develop personal initiative and responsibility for planning his future only to the extent that he has knowledge about himself and the goals he has set.

ORIENTATION

Orientation is a continuing process which begins at the time of the student's initial contact with Durham Tech and continues until he is enrolled in class.

Each student receives pre-admissions information and counseling to enable him to enter a study program which is appropriate to his interests and abilities. Group orientation sessions are conducted during registration periods to orient the student to the requirements, regulations, facilities, and personnel of the instructional department; and to provide information concerning student activities.



FACULTY ADVISORS

At the time of initial enrollment, each student is assigned a faculty advisor in his major curriculum area. The advisor assists the student in planning his program and in selecting appropriate courses. He is available throughout the student's enrollment to offer advice and assistance.

Each student and his advisor have full responsibility for keeping account of his progress in his curriculum program. This includes being aware of his cumulative grade point average, course failures, courses repeated, and graduation requirements.

ACHIEVEMENT RECOGNITION

Durham Technical Institute encourages superior achievement in scholarship. Graduating students with the highest overall grade point average in both Associate Degree programs and Diploma programs are given special recognition at Commencement.

ATTENDANCE

The curricula of Durham Technical Institute consists of highly condensed courses designed to impart the maximum of "know how" and "know why" to the student in his preparation for the world of work. Each session of each class or laboratory is designed to build upon the information learned in the previous sessions. Prompt attendance to all scheduled classes, laboratory periods and examinations, therefore, is expected of all students or continuity will be lost. Absences and tardies are classified in one of the two categories, excused or unexcused. Excused absences are usually honored for one of the following reasons:

- 1) Death or severe illness in the immediate family.
- 2) Personal illness or accidents.

The instructor of any particular class or laboratory has the authority to judge whether absences or tardies incurred by the student are excusable or have interfered with satisfactory learning of the course. The instructor may require extra work and evidence that the student has caught up with the required work in special cases or may at his discretion drop a student from a course, if he feels that the time lost cannot be made up.

STUDENT REGULATIONS

A complete description of the regulations pertaining to student responsibilities and rights, traffic regulations, use of alcoholic beverages and drugs, and other areas of student life are contained in the "student handbook" which is distributed at the time of acceptance to Durham Technical Institute. Regulations found in the "student handbook" and in other official statements are binding on all students. Applicants and students who have questions about student regulations are invited to contact the Student Services Office.

DISMISSAL AND DISCIPLINARY PROCEDURE

A student may be suspended or dismissed from Durham Technical Institute for violation of established standards of conduct. Any violation should be reported to the Security Officer and the Dean of Student Services. A student may be suspended by the President for violation of the conduct regulations until a fair and impartial hearing can be conducted by the Judiciary Committee. The President may accept or reject any decision of the Judiciary Committee. The student will have the right to appeal a decision of the Judiciary Committee to the President and Board of Trustees of the Institute. The decision of the Board of Trustees will be final.

JUDICIARY COMMITTEE AND APPEALS PROCEDURE

The Judiciary Committee, composed of faculty and student members, is the official judicial committee appointed by the President to hear cases involving

violation of the established standards of student conduct. If a student violates a student conduct regulation, he may be suspended until a fair and impartial hearing can be conducted by the Judiciary Committee. The Dean of Student Services will conduct an investigation of the violation, collect all available evidence, and a hearing request will be referred to the President who will authorize a Committee hearing. The Committee Co-Chairman or Presiding Officer will schedule an early date, time, and location for the hearing and will advise the student defendant in written communication of the charges, evidence supporting the charges, his procedural rights, and will provide proper notice of the judicial hearing date, time, and location.

A student appearing before the committee has the right of assistance in his defense by an advisor of his choice. The student will be given the opportunity to testify and to present evidence and witnesses. He may hear and question adverse witnesses. The Committee will not consider statements against the defendant unless he has been advised of their content and who made them. All matters upon which a decision may be based must be introduced into evidence at the judicial hearing. Copies of the written decision will be forwarded to the President and the Dean of Student Services by the Committee Co-Chairman. The President may accept or reject any decision of the Judiciary Committee. The Dean of Student Services will advise the defendant in writing of the committee's decision and the President's action. The student has the right to appeal the committee decision in writing to the Institute President. The ultimate appeal authority is the Institute Board of Trustees. The decision of the Board of Trustees is final.

ADMISSIONS



Durham Technical Institute operates under the "open door" admissions policy as established by the North Carolina Department of Community Colleges. Admission to the Institute is open to virtually all persons eighteen years of age or older or to those who are not enrolled in public school. Programs of study are offered in Adult Basic and Adult High School Education, non-credit preparatory and personal interest courses, Continuing Education courses, and curriculum programs in Occupational Education.

Curriculum programs are offered in the areas of Allied Health, Business, Nursing, and Engineering and Industrial Education, and General Education. Curriculum programs are available to high school graduates or to those who possess a high school equivalency education.

The admissions process includes the initial application, transcripts of all secondary and post secondary work, placement tests, a counseling conference, and in certain instances a health examination. All applicants should be in reasonably good health with no physical or mental defects which would preclude successful completion of a proposed program of study.

Applicants are encouraged to complete the admissions process as soon as possible. High school students should apply early during their senior year. Other persons may apply at any time; however, admission will depend upon the individual situation. All data should be on file at least one month prior to the beginning of the quarter in which the student plans to enroll.

Placement in various programs of instruction is selective and particular emphasis is placed on vocational guidance. Through counseling conferences, prior to admission, applicants may obtain assistance in establishing realistic goals. Educational achievement, employment experience, placement

test results, and mental and physical health factors are used in determining an individual's potential for success in a given instruction program.

When an evaluation of an applicant's aptitudes, previous educational records, previous experiences, and interests reveals a lack of readiness to enroll in a specific curriculum, he may be advised to enroll in the Learning Resources Center preparatory program, high school credit courses, or he may be advised to reevaluate his occupational and educational goals. When an applicant has achieved sufficient preparation through preparatory studies, he may be admitted into a specific curriculum.

The Institute reserves the right to refuse admission to an applicant if it appears that such action is in the best interest of the Institute and/or the applicant.

Application forms and detailed information on instructional programs may be obtained by writing the Admissions Director. The Admissions Office is open Monday through Friday from 8 a.m. to 5 p.m. throughout the year. Appointments may be made by calling 919-596-8293 or writing the Admissions Office.

SPECIFIC ADMISSION PROCEDURE

Application

The applicant should submit a properly completed application form to the Admissions Office for the quarter in which he desires to enroll. All admission requirements should be completed one month prior to anticipated enrollment. Early application is recommended to allow adequate time for processing and to increase the opportunity for entry into programs of limited enrollment capacity.

Transcripts

Official transcripts are required from the high school and all post-secondary institutions attended.

Applicants who have earned equivalency certificates should write: State GED Administrator, Department of Community Colleges, Raleigh, North Carolina 27611, and request that a transcript, certifying high school equivalency be forwarded to the Admissions Office. NOTE: Applicants for Practical Nurse Education must submit two (2) official transcripts or letters certifying high school equivalency. Individuals who do not have a high school diploma or equivalency education may complete a high school equivalency program at Durham Technical Institute. Inquiries concerning the Adult High School Education Program should be directed to the Student Services Division.

Placement Testing

Each applicant is required to take a series of placement examinations. The test results are used in helping the prospective student to assess his aptitude and achievement in relation to his interests and desires. This information provides an additional basis for placement of the individual in an appropriate curriculum program. In exceptional cases, where an applicant resides out of North Carolina, the individual may be permitted to take the placement tests (at his expense) at a nearby testing agency. Applicants must make their own arrangements for such testing. Applicants who are unable to keep an appointment should immediately notify the Admissions Office to arrange another appointment.

Counseling Conference

After initial admissions requirements and placement tests are completed, a counseling conference is conducted. The conference will involve a discussion and analysis of the applicant's proposed choice of curriculum in relation to his educational preparation, test scores, health factors, work experience, interests, motivation, and career objec-

tives. Applicants who are unable to keep a conference appointment should immediately notify the Admissions Office to arrange another appointment.

Acceptance

Each applicant is notified in writing of his admission to a program of study.

Orientation and Registration

Pre-registration and orientation are conducted by each instructional department prior to the fall quarter. The summer orientation and pre-registration schedule provides the opportunity to pre-register and a general orientation to the objectives, regulations, opportunities, and instructional personnel of each department as well as information about student activities. Fall registration dates and registration dates for each quarter are specified in the School Calendar. Students are assisted in completing registration by their curriculum advisors, essential information is inspected and collected by the Office of Registration and Records, and tuition and fees are paid to the Business Office. Students who register after the announced registration date(s) will be charged a \$5.00 late registration fee. Late registration is not permitted after the date listed in the School Calendar.

OUTLINE OF ADMISSION PROCEDURE

1. Obtain catalogue and application.
2. Read catalogue thoroughly.
3. Complete application and send to Institute.
4. Ask high school counselor to send Institute a copy of your transcript. If you have had any education after high school graduation, have transcript of such work sent to the Institute. Practical Nurse Education applicants need to send two transcripts.

5. Contact the Director of Admissions at least one month before enrollment if you wish to transfer credit from an accredited institution of higher education.
6. Receive acknowledgment from Institute that your application has been received.
7. Letter from Institute scheduling placement testing.
8. Placement Testing.
9. Counseling conference.
10. Acceptance to program of study.

CURRICULUM ADMISSION REQUIREMENTS

Basic Admission Requirements

The basic admission requirement to any curriculum program is a high school diploma or equivalency education. Admission to certain curriculum programs with limited capacity is selective and/or competitive and early application is required to be considered for admission. Due to the specialized nature of certain technical programs additional requirements are necessary as follows:

Dental Laboratory Technology

Dental Laboratory Technology requires substantive aptitude in finger and hand dexterity. All applicants are given a wax carving test. Enrollment in Dental Laboratory Technology courses is not permitted without concurrent enrollment in required related and general education courses.

Electronics Technology

Applicants should have had high school physics with laboratory or equivalent prior to entry.

Police Science

Police Science applicants are required to have a complete physical examination. Applicants should

meet the entry requirements for employment as a Police Officer. Contact the Police Science Program Coordinator or a law enforcement agency for such requirements.

Practical Nursing

Practical Nurse applicants are required to have a complete physical examination. In addition all nursing applicants are required to submit proof of a dental examination and a schedule of disease immunizations.

Respiratory Therapy

Respiratory Therapy applicants are required to have a complete physical examination. Admission requirements for Respiratory Therapy must be completed by March 15.

Mathematics Skills

All students entering Associate Degree or Diploma Programs at Durham Technical Institute need to have general mathematics skills. These skills are:

- Arithmetic operations with integers.
- Arithmetic operations with fractions (including mixed numbers and decimal numbers).
- Arithmetic operations with percents and percentage problems.
- Arithmetic operations with signed numbers.

It is essential that students entering ELECTRONICS ENGINEERING TECHNOLOGY have mathematics skills sufficient to cope with engineering technology courses. It is expected that students entering this curriculum have completed Algebra I in high school or equivalent courses. Applicants for this program will be tested to determine proficiencies in general math and basic algebra prior to entering the first math course, MAT 101E. Deficiencies in math skills possibly can be made up as

indicated below; however, the time for reviewing and acquiring mathematics skills is limited.

Students entering the OPTICIANRY, POLICY SCIENCE, RESPIRATORY THERAPY, and DENTAL LABORATORY TECHNOLOGY curriculums are expected to be proficient in general mathematics and will find skills in basic algebra very helpful. These students will normally register for MAT 101B or MAT 101D or MAT 101P.

Students entering DATA PROCESSING are required to take MAT 101A which assumes general math skills and will cover basic algebra background may be advised to take MAT 111.

Students entering **Diploma Programs** that include mathematics courses will have a review of arithmetic operations and introduction to algebra in the fall quarter.

Students who are deficient in mathematics skills, either because they have not had the proper courses or because they lack competence, must acquire these skills before beginning the fall quarter to maintain normal progress in their curriculum.

It is possible to acquire needed mathematics skills at Durham Technical Institute by enrolling in a preparatory mathematics course offered during the summer quarter or by enrolling in the Learning Resources Center at the Institute.

Students who enter the fall quarter and **are still deficient in mathematics skills** will be required to acquire these skills before entry into required mathematics courses can be allowed.

More specific information concerning mathematics requirements may be obtained from the Director of Admissions.



EVENING CURRICULUM AND SPECIAL STUDENT ADMISSION

Admission requirements for full-time evening curriculum applicants are identical to the requirements for day applicants unless otherwise specified. Part-time evening curriculum and special student applicants are not required to complete the standard admission procedures and requirements. However, when a special student completes 12 credit hours and desires to pursue a degree or diploma curriculum program, he must complete all standard admission requirements to be officially admitted to such program. These requirements include high school completion. Application for Admission, secondary and post-secondary school transcripts, placement tests, and any supplementary curriculum admission requirements.

TRANSFERS

Transfer students are welcomed at Durham Technical Institute. Procedures for transferring to the Institute are similar to those for freshmen. Any student in good standing at a fully accredited institution of higher education is eligible for acceptance.

Grades of "C" or better are accepted along with course work in which credit (on a credit/no credit basis) or pass (in a pass/fail system) has been received. Grades of "D" may be accepted in some cases upon departmental approval. If requested, course work from other institutions will be reviewed by the Admissions Office.

SPECIAL STUDENTS

Special students are those who are enrolled for course credit but who do not plan to pursue a Diploma or Associate Degree. Such applicants must submit an application for admission to be admitted to a day program and will normally be required to meet the prerequisites for the course work or demonstrate a necessary level of competence. A Special Student may pursue course work up to a maximum of 12 credit hours. Upon application for a curriculum program to earn an Associate Degree or Diploma, all institutional and departmental admission requirements must be completed.

CONDITIONAL STATUS

Any curriculum student who registers late and has not completed the admission requirements and procedures is identified as a conditional student. Those students so identified must complete all admission requirements immediately following enrollment.

COURSE AUDIT

Students who desire to audit a course(s) must secure approval from their faculty advisor. Those persons interested in auditing a course(s) who are not enrolled at the Institute must contact the Registrar. Auditors receive no credit and are not required to attend classes or take examinations. The fee for auditing is identical to the regular cost of the course.

FOREIGN STUDENTS

Durham Technical Institute is authorized under Federal law to enroll non-immigrant alien students. Students enrolling under this classification will be treated as nonresident with respect to tuition and fees and cannot be classified as a resident.

An immigrant alien is subject to the same considerations as a citizen and may establish North Carolina residence in the same manner as any other non-resident.

All foreign applicants must submit evidence of adequate financial resources to support them throughout their educational program. Durham Technical Institute cannot provide financial aid for foreign students.

All foreign applicants must also present evidence of adequate proficiency in the English language as well as sufficient aptitude and previous educational preparation to succeed in a specific educational program.

ADVANCED STANDING

Durham Technical Institute permits admission with advanced standing for transfer students from member institutions of the North Carolina Department of Community Colleges. Credit will be approved for all required courses which the student satisfactorily completed at the member institution.

Durham Technical Institute will accept satisfactorily completed courses for transfer credit from accredited institutions of higher education. The content of such courses must closely parallel those for which credit is sought at the Institute. An official transcript of the student's previous post-secondary work must be submitted well in advance of the proposed date of enrollment.

The Office of Admissions must initiate and approve all transfer credits and each application for advanced standing will be evaluated according to the individual situation.

It is the responsibility of each transfer student to contact the Office of Admissions at least one month prior to enrollment to determine the amount and type of approved transfer credit.

CREDIT BY EXAMINATION

Advanced standing may be approved by examination. This examination will be administered by the division or department concerned. This examination may be based on high achievement in secondary schools, private commercial schools, military service, or work experiences. Students seeking advanced standing through "Credit by Examination" should contact the Student Services Office for in-

itiation of action.

To receive grade points for a course, a student must register for a course and be examined by the department concerned. Upon successfully completing the examination, the examination grade will be recorded on the student's permanent record in the normal manner.

Prior to registration a course may be waived through evaluation of the student's experiences and/or written examination by the department concerned. Grade points will not be accumulated for a waived course. No registration fee will be required for students who are allowed to waive a course or courses.





ACADEMIC PROGRAM





DEGREE PROGRAMS

Durham Technical Institute offers an Associate in Applied Science Degree in those two-year technical curriculums approved by the North Carolina State Board of Education and the Department of Community Colleges. Associate degree programs vary from six to seven quarters in length with normal academic progress.

DIPLOMA PROGRAMS

Durham Technical Institute will grant diplomas when a student successfully completes any of the occupational trade level curricula. These programs can be completed in four quarters (12 months) with normal academic progress.

CERTIFICATES

Any student enrolled in a curriculum of less than 12 months duration will receive a certificate certifying completion and attendance. Students enrolled in a non-credit course through the Continuing Education Division will receive a certificate of completion.

RESIDENCE REQUIREMENTS

Students transferring from other technical institutes, community colleges, colleges, or universities must complete at least one-fourth of the total quarter hours required in residence, to be eligible to receive a degree or diploma from Durham Technical Institute.



GRADING SYSTEM

Grade reports showing student progress are issued at the end of each quarter. Each course a student completes successfully earns both quarter hour credits and quality points.

Letter grades given and their equivalents in quality points are:

A	4.00	C	2.00
B	3.00	D	1.00
		F	.00

Grades mean: A, "Superior"; B, "Above Average"; C, "Average"; D, "Below Average"; F, "Failure".

Other report abbreviations and their meanings are:

I "Incomplete". This temporary grade is assigned at the discretion of the instructor for incomplete course work. Hours are not counted for the quarter to which assigned. An incomplete may be removed or replaced only at the discretion of the instructor.

Students may not reregister for a course graded as incomplete until he has received a grade in that course.

Students must complete requirements for and receive a grade in an incomplete course during the next quarter the student is registered, subsequent to the quarter in which the incomplete was received.

W "Withdrew". Official permission to withdraw from a course within the first two weeks of the quarter. No grade point penalty is incurred.

WP "Withdraw Passing". Official permission to withdraw from a course with a passing grade within the third through the eighth week of the quarter. No grade point penalty is incurred.

WF "Withdrew Failing." Official permission to withdraw from a course with a failing grade within the third through the eighth week of the quarter. Failure penalty is incurred in the same manner as for the grade of "F". Withdrawal from courses is not permitted from the ninth week until the end of the quarter. An official withdrawal during this time period will receive a "WF". Failure penalty is incurred in the same manner as for the grade of "F".

AU "Audit". Enrollment as a non-credit student. Academic credit may be withheld when a student has not cleared obligations with the Business Office or Learning Resources Center.



CHANGE OF SCHEDULE

A student must first confer with his faculty advisor about schedule changes. The student must then obtain a drop-add form from the Student Services Division. With the approval of the faculty advisor and the Student Services Office a student may drop or add courses within limits. The adding of courses will not be permitted after the first five days of classes in a regular quarter or after the first three days of classes in a six weeks summer term.

Courses dropped prior to the end of the first two weeks of a regular quarter or the first two weeks during a summer term will receive a grade of "W". Courses officially dropped within the third through the eighth week will receive a grade of "WP" or "WF" depending upon whether the student is passing or failing.

Withdrawal from courses is not permitted from the ninth week until the end of the quarter. An of-

ficial withdrawal during this time period will receive a grade of "WF".

Class schedules will not be rearranged to permit early dismissal nor will social activities be scheduled during class hours.

COURSE LOAD

Students enrolled for 12 or more quarter hours are identified as full-time students. A student may enroll for up to 20 quarter hours depending upon his capability as evaluated by his faculty advisor. No student will be permitted to enroll for more than 20 quarter hours. Students who encounter serious academic difficulty are advised to attempt only a part-time course load. Students who work on a job in excess of 3 hours per school day are strongly advised to enroll for less than a full-time course load. Students carrying less than a full-time course

load should not expect to graduate within the normal time limit.

COURSE REPEAT

When a course failure is repeated, the first attempt will be omitted from the computation of the cumulative grade point average and only the second grade, whether "F" or higher, will count. If a course is repeated a third time, both the second and third grades will be used in the computation. All "F's" remain on the permanent record.

FAILURE REGULATION

A student who fails any required course in his major curriculum must repeat the course until a passing grade is attained to be eligible to graduate with the Associate Degree or the diploma.



REQUIREMENTS FOR GRADUATION

Annual graduation exercises are held at the close of the spring and summer quarters. Summer graduation is an informal event. An overall grade point average of 2.0 (C) is required to graduate. All outstanding obligations to the Business Office and Learning Resources Center must be cleared to be eligible for graduation.

Each student must apply to the Student Services Division for a degree or diploma at the beginning of the quarter preceding the completion of a program. Students who complete their programs at the close of the spring and summer quarters are encouraged to participate in the graduation exercises. Students who complete their work at the close of the fall and winter quarters may elect to participate in the spring graduation exercise.

All candidates for graduation must pay a \$5.00 graduation fee to cover the cost of the diploma and cover. Students who participate in the spring graduation exercise must pay a \$10.00 graduation fee to cover the cost of diploma, cover, and cap and gown apparel rental. Graduation fees are collected at registration for the quarter in which a student expects to complete program requirements. No refunds can be made.

Graduation exercise participants who find that they cannot attend due to unusual circumstances must present justifiable reasons in writing to the Director of Student Activities.

WITHDRAWAL REGULATIONS

Any student who wishes to withdraw from the Institute or from a specific course must officially withdraw through the Student Services Division.

Any student who plans to withdraw must first discuss his plans with his faculty advisor. The student must then consult with a counselor in the Student Services Division where an official withdrawal



form can be obtained. The form must be signed by the student's advisor and instructors and then returned to the Registrar's Office for approval and signature. Finally, the student must present his completed withdrawal form to the Business Manager for signature.

Students who officially withdraw prior to the end of the first two full weeks of a quarter will receive grades of "W". Students who officially withdraw after the first two weeks of a quarter will receive grades of "WP" or "WF" depending upon whether the student is passing or failing.

Students who withdraw unofficially will receive a failing grade for all courses and must apply for readmission to the Admissions Office. Readmission will be considered on an individual basis.

READMISSION

Any student who voluntarily and officially withdraws from the Institute and later wishes readmittance must contact the Student Services Division. Readmission conditions will depend upon the individual circumstances, but generally a student is eligible to return at such time as he can work out an appropriate course schedule.



A former student will not be readmitted until he has met all former and current expense obligations to any program or activity under the administrative jurisdiction of the Institute.

Any student who is financially indebted to the Institute by failure to completely meet any outstanding debt such as the following: tuition, bookstore, library, activity, uniform, graduation, promissory note, equipment or supplies debt, or any required payment to the Institute will not be eligible for re-entrance nor acquire any transcript until such indebtedness is completely cleared. Any indebtedness to this institution will make one ineligible to enter any other institution of the Community College System of North Carolina.

TRANSCRIPTS

Official transcripts of scholastic records pertaining to attendance at Durham Technical Institute are issued upon student request. One transcript is furnished free of charge. Additional copies are issued for one dollar (\$1.00) each. Payment is to be made with the request and the request is to be directed to the Office of Records and Registration.

ADDRESS OR NAME CHANGE

The Office of Records and Registration should be notified immediately in case of an address or telephone number change. Female students should notify the office of any name change upon marriage.

TRANSFER OF CREDIT

Appalachian State University

Business and Engineering Technology graduates may transfer to the Bachelor of Technology Degree Program at Appalachian State University. This program is designed primarily to train vocational and technical instructors for technical institutes or community colleges and technicians with a broad educational background for industry and business.

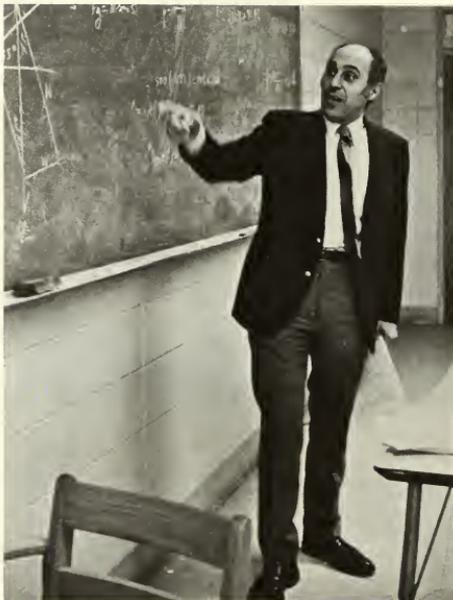
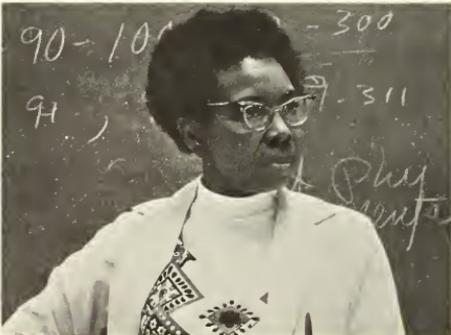
Campbell College

Business Administration, Police Science, and Allied Health graduates are eligible to transfer to Campbell College. Business Administration graduates may pursue the Bachelor of Business Administration Degree. Police Science graduates may earn the Bachelor of Special Studies Degree in Police Science. Allied Health graduates of Opticiancy, Respiratory Therapy, and Dental Laboratory Technology may earn the Bachelor of Health Science Degree.

East Carolina University

Engineering Technology graduates may transfer to East Carolina University to earn a Bachelor of Science Degree in Technical Teacher Education. The degree may be earned within two or three academic years depending upon the graduate's technical and non-technical credits.

Police Science graduates may apply for the Bachelor of Science Degree Program in Correctional Services. Admission to the program is granted on an individual basis.



Elon College

Any Associate Degree graduate may transfer all credits to the Bachelor of Arts in Applied Arts or Bachelor of Science in Applied Science at Elon College. Transfer students must complete the general education and elective requirements to fulfill the total hours required for graduation. The program of study will be tailored for graduation. The program of study will be tailored to the students major at Durham Technical Institute.



Fayetteville State University

Associate in Applied Science Degree graduates may transfer as juniors to Fayetteville State University and earn a Bachelor's Degree in several programs of study.

Mars Hill College

Graduates of Dental Laboratory Technology, Respiratory Therapy, and Opticianry may enter the Bachelor of Science Degree Program in Allied Health at Mars Hill College.

North Carolina Central University

Any Associate Degree graduate may transfer as a junior to North Carolina Central University to pursue a Bachelor of Science Degree in Post-Secondary

Teacher Education. Graduates of Electronics Engineering Technology may transfer to the Bachelor of Science Degree program in Physics.

North Carolina Wesleyan College

Graduates of several Associate Degree programs are eligible to earn a Bachelor of Science in Technology Degree at North Carolina Wesleyan College. The approved programs are Accounting, Business Administration, Business Data Processing, Electronics Engineering Technology, General Office Technology, and Secretarial Science.

Police Science graduates may transfer to the Bachelor of Science in Police Science Degree program.

Old Dominion University

Graduates of Electronics Engineering Technology may enter the Bachelor of Science Degree Program in Engineering Technology at Old Dominion University.

St. Augustine's College

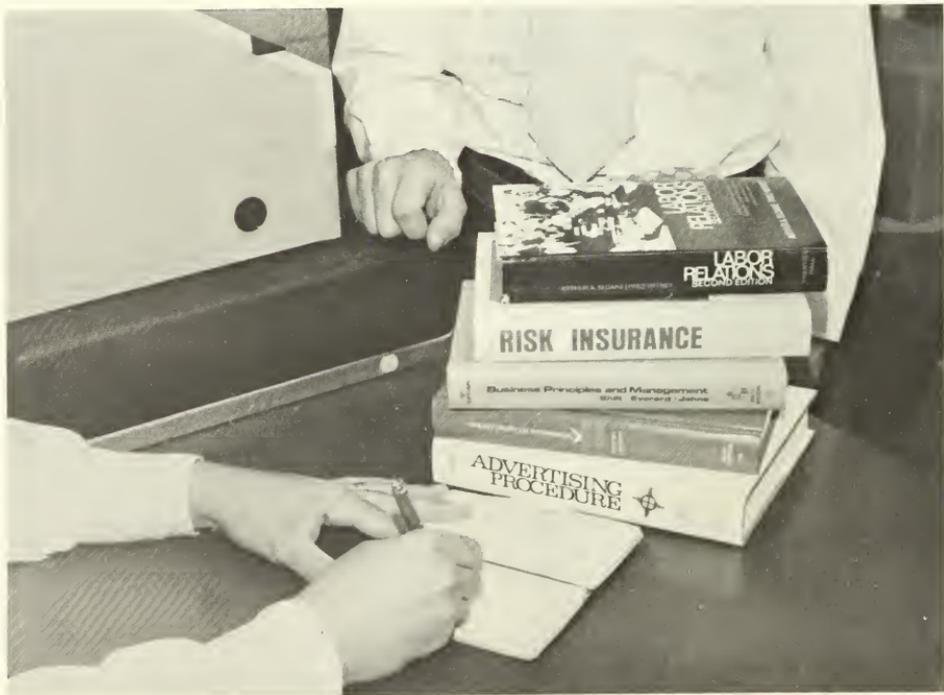
Associate Degree graduates may enter St. Augustine's College to earn a Bachelor's Degree in a variety of curriculum programs.

UNC-Charlotte

Electronics Engineering Technology graduates who meet the other admission requirements may enter the University of North Carolina at Charlotte as a junior in Computer-Electronics Technology or Mechanical Technology. After satisfactory completion of the prescribed two-year curriculum the student will receive a Bachelor of Engineering Technology Degree.

Police Science graduates are eligible to enter the Bachelor of Science Degree Program in Law Enforcement and Administration at the University of North Carolina at Charlotte.

EXPENSES & FINANCIAL AID



Durham Technical Institute is a non-profit institution. Tuition, fees, and other general charges paid by the student cover less than one-tenth of the Institute's instructional and operational expenses.

As a member of the North Carolina Community College System, the state provides funds for administrative and instructional equipment, supplies, materials, salaries, travel costs, clerical expenses, library books, and part of other costs. There are certain federal acts providing funds or matching funds to qualifying institutions and such funds are procured as supplemental to the total State allocations.

The local board of county commissioners provide funds from Durham County's general tax levies to acquire land, erect buildings, and to maintain and operate the buildings and sites. These funds amount to approximately ten percent.

RESIDENT STATUS FOR TUITION PAYMENT

To qualify for in-state tuition a legal resident must have maintained his domicile in North Carolina for at least the 12 months immediately prior to his classification as a resident for tuition purposes. In order to be eligible for such classification, the individual must establish that his or her presence in the state during such twelve-month period was for purposes of maintaining a bona fide domicile rather than for purposes of mere temporary residence incident to enrollment in an institution of higher education; further, (1) if the parents (or court-appointed legal guardian) of the individual seeking resident classification are (is) bona fide domiciliaries of this state, this fact shall be prima facie evidence of domiciliary status of the individual applicant and (2) if such parents or guardian are not bona fide domiciliaries of this state, this fact shall be prime facie evidence of non-domiciliary status of the individual.

No person shall lose his in-state resident status by serving in the armed forces outside of the State of North Carolina.

A person who, by virtue of bona fide legal residence in North Carolina for the requisite 12 months, has been classified as a resident for tuition purposes but who, while enrolled in a State institution of higher education in North Carolina, loses North Carolina legal residence, shall continue to enjoy the in-state tuition rate for a statutory grace period. This grace period shall be measured from the date on which the culminating circumstances arose that caused loss of legal residence and shall continue for 12 months: provided that if the 12-month period ends during a semester or academic term in which such a former resident is enrolled at a State institution of higher education, such grace period shall extend, in addition, to the end of that semester or academic term.

Any spouse of a North Carolina resident shall be entitled to in-state tuition rates at the beginning of the next succeeding academic period.

Any person who by virtue of marriage to a North Carolina resident thereby acquires, by operation of law, a bona fide legal residence in North Carolina shall be eligible for in-state tuition rates at a time calculated in one of the following ways which earlier confers such eligibility:

- (1) If the original North Carolina resident spouse had maintained such legal residence for a period of at least 12 months immediately prior to the marriage, the newly resident spouse shall first be eligible for the in-state rate at the next succeeding semester, term, or quarter following the date of marriage;

- (2) If the original North Carolina resident spouse had not maintained such legal residence for a period of at least 12 months immediately prior to the marriage, the newly resident spouse shall first be eligible for the in-state rate at the next succeeding semester, quarter, or term following expiration of 12 months of legal residence by the original resident spouse.

Responsibility and Rights of Students: Your current residential classification, for purposes of applicable tuition rates, is required to be changed if, since original establishment of your current classification, your state of legal residence has changed.

- (1) If you currently are classified as a non-resident for tuition purposes, it is your right to petition for a change in classification to that of resident if you claim that you are now, and, for at least the twelve-month period immediately preceding the date of such petition, have been a legal resident of the State of North Carolina. If it is determined that in fact you have been a legal resident for the required twelve-month period, the effective date change in applicable tuition rates shall be the next semester, quarter, or term following the date of change in facts which required the change in classification.
- (2) If you currently are classified as a resident for tuition purposes, it is your obligation to petition for a change in classification to that of a nonresident if you have reasonable basis for believing that change in facts requires such a change in classification. Failure to fulfill this obligation may result in appropriate discipli-

nary action including, but not necessarily limited to, cancellation of enrollment. If it is determined that in fact you have become a nonresident, the effective date of change in applicable tuition rates shall be the next semester, quarter, or term following the date of change in facts which required the change in classification.

Copies of the applicable North Carolina law and institutional regulations which govern such classification determinations are available in the Learning Resources Center for inspection upon request. You are responsible for being familiar with the contents of these two sources of regulation. Any student is responsible for supplying all information requested by the institution in connection with the classification process. Failure to comply with all requests for information prescribed by the institution shall be attended by the following consequences:

- (1) In the context of an initial classification inquiry affecting a prospective enrollee, the student shall be classified a non-resident for tuition purposes;
- (2) In the context of a reclassification petition initiated by the student to acquire a change from nonresident to resident status, the student shall continue to be classified a nonresident for tuition purposes;
- (3) In the context of a reclassification inquiry anticipating a change from resident to non-resident status for tuition purposes, the student may be subjected to disciplinary action, including, but not limited to cancellation of registration and enrollment or dismissal.

Knowing falsification of any response made to any institutional request for information may subject the individual to disciplinary action, including dismissal from the institution, at the option of the institution.

Any student who believes that he is eligible for reclassification of residence should consult his divisional counselor in the Student Services Division for a determination.

TUITION AND FEES

All tuition and fees are **due** and payable at the Business Office on the official **day(s) of registration**. Partial payments or credits are not accepted unless previous arrangements have been made and approved by the Business Manager. Students are to initiate such needs with the Student Services Division prior to any attempt to register.

There is no required payment nor any tuition deposit necessary prior to the official day(s) of registration. However, students desiring to pay in advance may do so providing arrangements are made with both the Student Services and Business Offices.

No part of a check made payable to the Institute will be given to a student except at the written request of the one who makes the remittance. The written request must be mailed directly to the Business Manager.

TUITION FEE BASIS

All tuition and fee charges are approved by the North Carolina State Board of Education. Tuition charges are for credit hours enrolled. Credit hours are comprised as follows: one class hour equals one credit hour; two laboratory hours equal one credit hour; three shop hours equal one credit hour. The \$2.75 / 11.45 per credit hour tuition rate applies to all regularly enrolled students including those assigned to organized developmental classes which prepare students to enter curriculum classes.

RESIDENT TUITION

All vocational, technical and audit students enrolled for twelve or more credit hours are charged a maximum tuition fee of \$33.00 per quarter. Resident students enrolled for eleven or less credit hours per quarter are charged a part-time student rate of \$2.75 per credit hour enrolled per quarter.

NON-RESIDENT TUITION

Tuition fees for any student whose legal residence is outside North Carolina are approximately five times the resident rate. Students living with relatives in this state whose parent or guardian do not reside in North Carolina will pay tuition fees at the non-resident rate. Full-time non-resident students enrolled for twelve or more credit hours will be charged a maximum of \$162.50 per quarter. Tuition fees for non-resident students enrolled for eleven or less credit hours are \$11.45 per credit hour enrolled per quarter. Audit and special students who are non-residents will be charged at the same rate as the non-resident curriculum student.

ACTIVITY FEE

The State Board of Education provides that a fee up to \$28.00 per academic year per student (\$7.00 per four quarters or \$9.00 per three quarters) may be established as a local student activity fee. The Student Government Association of Durham Technical Institute has approved a \$1.00 activity fee per quarter for day curriculum students. At present, no activity fee is charged students enrolled in summer session. The activity fee is required of all day curriculum students enrolled for nine or more credit hours in the fall, winter, and spring quarter. This fee is used for the purpose of providing athletic and intramural activities equipment and supplies as well as publications and/or activities the Student Government Association shall so determine. The amount of the activity fee is subject to change and could vary from quarter to quarter.

TYPICAL FALL QUARTER EXPENSES

	N. C. Resident	Non-Resident
Tuition	\$33.00	\$162.50
Activity Fee	1.00	1.00
Insurance (Optional)	2.00	2.00
Books and Supplies Estimate	60.00	60.00
TOTAL	\$96.00	\$225.50

TYPICAL SPRING QUARTER EXPENSES

	N. C. Resident	Non-Resident
Tuition	\$33.00	\$162.50
Activity Fee	1.00	1.00
Books and Supplies Estimate	60.00	60.00
Graduation Fee	10.00	10.00
TOTAL	\$104.00	\$233.50

Students in the curriculums or programs listed below will have additional estimated expenses as indicated:

Practical Nursing—\$20.00 (Uniform Deposit)—1st Quarter

Dental Laboratory Technology—\$160.00 (Instructional Kits)—1st Quarter; \$185.00 (Gold)—2nd Quarter; \$185.00 (Gold)—6th Quarter

Auto Mechanics—\$150.00 (Tools)—2nd Quarter; Uniform **\$25.00**.

Respiratory Therapy—\$25.00 (Uniforms); \$18.00 (Stethoscope)

Drafting—\$25.00 (Instructional Kit)—1st Quarter

Opticianry—\$60.00 (Instructional Kit)—5th Quarter

LATE REGISTRATION FEE

Registration schedules are set for specific days and certain definite procedures are required.

A student has not completed registration until all of the required steps are taken. It is the student's responsibility to seek and then to follow the necessary procedures. Payment of tuition and fees is a required step in the procedure.

Any student who fails to complete registration for all classes and to make the required payment of expenses and fees on the prescribed registration day(s) according to the official school calendar will be charged a late registration fee of \$5.00. This applies to all students with no exceptions—day, evening, full-time, part-time, special, and audit enrollees.

Those with anticipated financial difficulties should contact the Student Services Division, in person, well in advance of the registration deadline. **Only** the Business Office will approve any special arrangements, payments and credits concerning any late payments. The Business Manager will approve or disapprove any request for exemption of the late registration fee.

GRADUATION FEE

A Graduation Fee of \$10.00 will be due and payable to the Business Office when a curriculum student applies for a degree or diploma. This fee covers the cost of the diploma, the rental of a cap and gown, and any other graduation expense for which the Institute or the state are eligible to pay. The fee is usually payable at registration during the Spring Quarter. The fee is required prior to graduation but the student should know that he is eligible to graduate before paying. It is not refundable. Those graduating other than at the Spring Graduation Exercises and who will not wear caps and gowns are required to pay only a \$5.00 Graduation Fee.

REFUND POLICY

Tuition refund for students shall not be made unless the student is, in the judgment of the institution, compelled to withdraw for unavoidable reasons. In such cases, two-thirds ($\frac{2}{3}$) of the student's tuition may be refunded if the student withdraws within ten (10) calendar days after the first day of classes as published in the school calendar. Tuition refunds will not be considered after that time. Tuition refunds will not be considered for tuitions of five dollars (\$5.00) or less, unless a course or curriculum fails to materialize due to no fault of the student.

There is no refund on such yearly payments as activity fee, insurance premium fee, graduation fee for cap, gown, and diploma once it is ordered, and special fees such as for late registration.

In all refund cases, the student must initiate his withdrawal through the Student Services Division. The Business Office will make the allowable refund only after written request is received from the Student Services Division.

BOOKS AND SUPPLIES

Most of the student's necessary textbooks, supplies, instruments, and materials may be acquired from the Institute's student supply store. The student supply store is operated on a cash basis and there is no refund on books and supplies. The total cost for books and supplies varies with each program; however, most students should anticipate spending approximately \$60.00 per quarter for necessary texts and materials. Students should meet each class at least once before attempting to purchase texts and materials. Programs in Allied Health, Nursing, Drafting, and Automatics require special items and/or instructional kits which may vary from quarter to quarter.

NURSING UNIFORM DEPOSIT

Nursing students enrolling for their first quarter (or re-enrolling) are required to make a \$25.00 uniform deposit. This deposit is payable, along with the other required fees and tuition, at the Business Office during the day(s) of registration.

The uniform deposit entitles each Nursing student to use four (4) sets of uniforms. Nursing caps are not included, but can be acquired from the Institute's student supply store.

Should the student complete the requirements for graduation and return all uniforms in satisfactory condition, the uniform deposit will be paid to the State to cover the required cost of taking the State Nursing Board Examination. In this case there is no refund. However, the deposit is refundable to those who leave school and are not eligible to take the State Examinations and who return all uniforms in satisfactory condition.

INSURANCE

A student may become covered for expenses incurred for accidents associated with school activities for \$2.00 per year. This group insurance coverage is for the entire school year. It is highly recommended that students take advantage of this coverage, especially those students in Automotives, Dental, Electronics, Opticianry, Respiratory Therapy, and those taking laboratory work in Chemistry, Physics, and Machine Shop. The insurance charge is optional and payment may be made upon registering for Fall Quarter. It is not refundable.

Neither the Institute nor the State of North Carolina carries insurance to cover any student for accidents or otherwise.

The \$2.00 fee is for policy coverage commencing in September and terminating in August of each year. Policy coverage is available at registration time of any quarter, however the coverage is only

through August of each year. Any student who engages in any intramural sports activity, organized basketball, work study program, or as a cheerleader is encouraged to take advantage of this accident insurance coverage.

SCHOLARSHIPS

American Fund for Dental Education — these scholarships range from \$500 to \$650 per year and are awarded to students in Dental Laboratory Technology. First and second year students are eligible to apply. Scholarship selections are made by the Scholarship Award Committee of the American Fund for Dental Education. Applications may be obtained from the Director of Financial Aid or by writing to the American Fund for Dental Education, 211 East Chicago Avenue, Chicago, Illinois, 60611. Deadline for filing is July 1. Annual awards are announced in August.

National Licensed Practical Nurse Education Foundation — a limited number of \$250 scholarships are awarded by this organization. Applicants should apply to the Director of Financial Aid.



National Association for Practical Nurse Education and Service — applicants interested in this scholarship should contact the Director of Practical Nurse Education at the Institute.

North Carolina Society of Accountants — awards \$250.00 a year scholarships to North Carolina residents who desire to enter the public practice of accounting upon completion of their education. Applications may be obtained from the North Carolina Society of Accountants Scholarship Foundation, Box 10387, Raleigh, North Carolina, 27605. Applications must be completed by April 15th to be eligible for a scholarship for the following academic year.

Women in Construction — sponsors two annual scholarships for Architectural Drafting students who are residents of Durham County. Interested applicants should contact the Director of Financial Aid.

Eving Optimist Club of Durham — provides a scholarship for an Auto Mechanics student who is a resident of Durham County. Interested applicants should contact the Director of Financial Aid.

City of Durham — Sponsors a scholarship program for members of the Durham Police Department who are selected to enroll in Police Science. Prospective applicants may obtain information at the City of Durham Personnel Office.

National Academy of Opticianry — sponsors a \$500 scholarship available to Opticianry students. Further information may be obtained from the Director of Financial Aid.

Ladies Auxiliary Guild of Prescription Opticians — offers scholarships for Opticianry students. Contact the Director of Financial Aid as to status of this award.

S. Galeski Opticianry Scholarship Fund — sponsors a \$500 scholarship available to Opticianry students. Interested applicants should contact the Director of Financial Aid.

Altrusa Club — periodically offers scholarships. Contact the Director of Financial Aid for more information.

Pilot Club — periodically offers scholarships. Contact the Director of Financial Aid for more information.

North Carolina Department of Veterans Affairs — sponsors scholarships for children of certain disabled or deceased veterans. Apply to the agency at Box 2187, Raleigh, North Carolina, 27602.

LOANS

Long-term Loans are generally awarded upon the basis of need or scholarship. Information may be obtained from the Director of Financial Aid.

Insured Student Loans — Financial assistance is available through the Insured Student Loan Program which is administered by the College Foundation, Inc. Legal residents of North Carolina who have been accepted for enrollment or those who expect to enroll for the second year may apply for a loan. Students may borrow up to \$625 per quarter and up to \$1,875 per year or up to an aggregate of \$3,750 for a total of two years. Repayment of principal and interest at the rate of 7% begins nine months after the student ceases to carry a full time course load. Minimum repayment period may not exceed ten years. The Insured Student Loan Program is authorized by the Higher Education Act of 1965 as amended. Loans are insured by the State Education Assistance Authority.

Durham Technical Institute Loan Fund — small loans for emergency temporary financial situations at the time of registration are available from an institutional loan fund made possible by donations from local business and industry. The maximum loan may not exceed the cost of tuition and fees. No interest is charged. Apply to the Director of Financial Aid.

PROGRAMS AND GRANTS

Law Enforcement Education Program — provides financial aid to individuals enrolled or accepted for enrollment in law enforcement degree programs. Students and in-service law enforcement officers who are enrolled or accepted for enrollment in Police Science Technology are eligible to apply to the Director of Financial Aid for assistance under the Law Enforcement Education. Grants for tuition and fees are available only to students who are officers of publicly-funded law enforcement agencies enrolled in or accepted for enrollment on a full-time or part-time basis and who agree to remain in service of the law enforcement agency employing them for a two year period following completion of their educational program.

Basic Educational Opportunity Grant — This program is a Federal Aid program designed to provide financial assistance to those who need it to attend post-high school educational institutions. The amount of each grant is based on the Family Contribution and two other factors (1) the amount of funds actually available for the Program, and (2) the cost of your education, since the grant cannot exceed one-half that cost. The amount of the grant would decrease as the Family Contribution increases. Applicants who meet the following requirements may be eligible for a grant: (1) you plan to enroll for the first

time in a post-high school program at an eligible college, university, vocational or technical school; (2) you will be attending school on a full-time basis; and (3) you are a United States citizen or are in the United States for other than a temporary purpose and intend to become a resident. Individuals who have attended a post-high school educational institution at any time before April 1, 1973 are ineligible. Applications may be obtained from your high school counselor, your local Post Office, or from the Director of Financial Aid.

Work-Study Program — a limited number of eligible full-time students may be employed up to a maximum average of 15 hours per week by the Institute under the Work-Study Program. Work-Study students may be employed up to a maximum of 40 hours per week during the summer if they are not enrolled during such period and plan to resume full-time studies the following quarter. Interested students should apply to the Director of Financial Aid.

Supplemental Educational Opportunity Grant — A limited number of Supplemental Educational Opportunity Grants are available for eligible full-time students of exceptional financial need who, for the lack of financial means of their own or of their family, would be unable to enter or remain in an institution of higher education without such assistance. Grant recipients must earn the required matching share through employment in the Work-Study Program or the grant may be matched by funds received from the Basic Educational Opportunity Grant Program.

Social Security Benefits — Some students may qualify for financial assistance through their parent's Social Security benefits. Those seeking such aid should first contact their local Social Security office.

Veterans Education Benefits — Durham Technical Institute is approved by the Veterans Administration for Educational Assistance Benefits or enrollment in all curriculum programs.

Veterans who plan to attend under any of the veterans' training laws, and dependents of deceased or disabled veterans who expect to enroll under the War Orphans Educational Assistance Act should contact their Veterans Service Office in advance of registration.

The veteran should obtain an application for Educational Benefits from the local Veterans Service Office. The student should deliver the completed application, his Form DD214, and a certification of Change in Dependency Status to the office of the Veterans Coordinator. These documents will then be forwarded along with an Enrollment Certificate to the Veterans Administration Regional Office. All completed applications should be in the Office of the Veterans Coordinator at least 30 days prior to anticipated enrollment.

The Veterans Administration requires a minimum of 12 quarter hours in Associate Degree programs for full-time benefits. The following minimum contact hours are required for full-time benefits in one-year Diploma Programs: Architectural Drafting—25 hours, Auto Mechanics, and Practical Nurse Education—30 hours. When in any quarter the total weekly contact hours for which a one-year Diploma student is registered are fewer than the minimum government requirements, a student may enroll on request for additional instructional hours deemed by the institution to be consistent with the study program and appropriate for the student to make up the required minimum contact hours. Month-

ly certification of attendance is also required of one-year Diploma students.

Vocational Rehabilitation Assistance — Certain handicapped students are eligible for aid administered through the Division of Vocational Rehabilitation, N.C. Department of Public Instruction. Those who seek such aid should make application to the local Division of Vocational Rehabilitation.

Durham-Orange Manpower — unemployed, underemployed, or disadvantaged individuals may qualify for assistance in selected occupational education programs. Inquiries should be directed to the Durham-Orange Manpower Office.

Duke University Medical Center — provides an educational advancement program for their employees who may enroll in Institute programs. Inquiries should be directed to the Paths for Employee Programs (PEP) office located in the Bell Building adjacent to Duke Medical Center.

Other previous financial assistance grant sources include: Home Savings and Loan Association, Young Women's Club of Youngsville, Inter-Church Council for Social Service, Gulf Oil Corporation, N. C. Chapter of Soil Conservation, the Armenian General Benevolent Union, N. C. Commission for the Blind, and the National Secretaries Association.

CURRICULUM



ACCOUNTING

AIMS

The curriculum is designed to offer students the necessary accounting theories and skills for entry into the accounting profession.

The specific objectives of the Accounting Curriculum are to develop competencies of understanding the fundamental principles of accounting, understanding the principles of organization and management in business operations, and the interpretation and analysis of financial data for management's use in decision making.

BUS 101 Introduction to Business 5 hours

Prerequisite: None.

A survey of the business world with particular attention devoted to the structure of the various types of business organization, methods of financing, internal organization, and management.

BUS 110 Office Machines 4 hours

Prerequisite: None.

A general survey of business and office machines. Student will receive training in techniques, processes, operation and application of the ten-key adding machines, full keyboard adding machines, and calculator.

BUS 115 Business Law 3 hours

Prerequisite: None.

An introductory course to the field of law in gen-

eral and business law in particular. Briefly exposes the student to the U.S. legal system and looks at criminal law and the law of torts. Also included is an in depth analysis of the law of contracts.

BUS 116 Business Law 3 hours

Prerequisite: BUS 115.

This second course in business law covers agency law, commercial paper, personal property and bailments, law of sales and insurance, and labor law.

BUS 120 Accounting 6 hours

Prerequisite: MAT 104.

Principles, techniques and tools of accounting, for understanding the mechanics of accounting. Collecting, summarizing, analyzing, and reporting information about service and mercantile enterprises, to include practical application of the principles learned.

BUS 121 Accounting 6 hours

Prerequisite: BUS 120.

A study of partnership and corporation accounting including a study of payrolls, federal and state taxes. Emphasis is placed on the recording, summarizing and interpreting of data for management control rather than on bookkeeping skills. Accounting services are shown as they contribute to the recognition and solution of management problems.

BUS 222 Intermediate Accounting 6 hours

Prerequisite: BUS 121.

Thorough treatment of the field of general accounting, providing the necessary foundation for specialized studies that follow. The course includes among other aspects, the balance sheet, income and surplus statements, fundamental processes of recording, cash and temporary investments, and analysis of working capital.

BUS 223 Intermediate Accounting 6 hours
Prerequisite: BUS 222.

Additional study of intermediate accounting with emphasis on investments, plants and equipment, intangible assets and deferred charges, long-term liabilities, paid-in capital, retained earnings, and special analytical processes.

BUS 225 Cost Accounting 4 hours
Prerequisite: BUS 121.

Nature and purposes of cost accounting; accounting for direct labor, materials, and factory burden; job cost, and standard cost principles and procedures; selling and distribution cost; budgets, and executive use of cost figures are studied.

BUS 226 Managerial Accounting 6 hours
Prerequisite: BUS 223.

A study of financial statements, the interpretation of financial data, and an explanation of how accounting data are used in planning and controlling business activities.



BUS 227 Accounting Theory 4 hours
Prerequisite: BUS 121.

Accounting Theory is designed to provide a frame of reference in the theory of income, in asset valuation, in the history of accounting thought, and as a general survey in the field of financial accounting. It is also designed to enable the student through the processes of inductive and deductive reasoning to obtain a better understanding of the many controversial topics in the area of accounting theory and to evaluate critically these abstract points of view.

BUS 229 Taxes 4 hours
Prerequisite: BUS 121.

Application of federal and state taxes to various businesses and business conditions. A study of the following taxes: income, payroll, intangible, capital gain, sales and use, excise and inheritance.

BUS 269 Auditing 4 hours
Prerequisite: BUS 121.

Principles of conducting audits and investigations including detailed procedures for: collecting financial and operating procedure data; preparation of indexed working papers, summarizing data for comparative financial statements and issuance of final audit reports.

ECO 102 Economics 3 hours
Prerequisite: None.

The fundamental principles of economics including the institutions and practices by which people gain a livelihood. Included is a study of the laws of supply and demand and the principles bearing upon production, exchange, distribution, and consumption both in relation to the individual enterprise and to society at large.

ECO 104 Economics

3 hours

Prerequisite: ECO 102.

Greater depth in principles of economics, including a penetration into the composition and pricing of national output, distribution of income, international trade and finance, and current problems.

BDP 101 Introduction to Data Processing

4 hours

Prerequisite: None.

Fundamental concepts and operational principles of data processing systems, as an aid in developing a basic knowledge of computers, prerequisite to the detailed study of particular computer problems.

MAT 104 Mathematics of Finance

3 hours

Prerequisite: MAT 101G or equivalent.

This course stresses the fundamentals of math as applied to business operations. It starts with the treatment of simple discount; develops gradually and logically through the topics of compound interest, annuities with their many applications, bonds, depreciation; and other topics related to finance in a business environment.

**MAT 214 Statistics**

5 hours

Prerequisite: MAT 104.

A study of the theory and application of statistics. Experience is given in the association and use of statistical techniques in the prediction and estimation of the outcome of experiments related to practical problems in accounting.

**ACCOUNTING CURRICULUM
DAY**

FIRST QUARTER		CREDIT	FOURTH QUARTER		CREDIT
BUS 101	Introduction to Business	5	BDP 101	Intro. to Data Processing	4
BUS 110	Office Machines	4	BUS 116	Business Law	3
ECO 102	Economics	3	BUS 225	Cost Accounting	4
ENG 100	Communication Skills	2	BUS 229	Taxes	4
*MAT 104	Math of Finance	3	ENG 103	Communication Skills	2
SECOND QUARTER			FIFTH QUARTER		
BUS 120	Accounting	6	BUS 222	Intermediate Accounting	6
ECO 104	Economics	3	BUS 226	Managerial Accounting	6
ENG 101	Communication Skills	5	ENG 206	Business Communication	3
	Technical Elective	3	MAT 214	Statistics	5
THIRD QUARTER			SIXTH QUARTER		
BUS 115	Business Law	3	BUS 223	Intermediate Accounting	6
BUS 121	Accounting	6	BUS 227	Accounting Theory	4
ENG 102	Communication Skills	2	BUS 269	Auditing	4
	Technical Elective	3		General Education Elective	3
	General Education Elective	3			

Minimum total hours of credit to graduate: 106.

- * Those students who do not pass the Mathematics pretest section of the Admissions Test will be required to take Mathematics 101A as a prerequisite to MAT 104 Mathematics of Finance.

**ACCOUNTING
EVENING**

FIRST QUARTER		CREDIT	FIFTH QUARTER		CREDIT
BUS 101	Introduction to Business	5	BUS 116	Business Law	3
ENG 100	Communication Skills	2	BUS 222	Intermediate Accounting	6
MAT 110	Business Math	5	*MAT 104	Math of Finance	3
SECOND QUARTER			SIXTH QUARTER		
BUS 239	Marketing	5	BUS 223	Intermediate Accounting II	6
ENG 101	Communication Skills	5	ENG 203	Communication Skills	2
	General Education Elective	3	MAT 214	Statistics	5
THIRD QUARTER			SEVENTH QUARTER		
BUS 115	Business Law	3	BUS 110	Office Machines	4
BUS 120	Accounting	6	BUS 226	Managerial Accounting	6
ECO 102	Economics	3	ENG 206	Business Communications	3
FOURTH QUARTER			EIGHTH QUARTER		
BUS 121	Accounting	6	BDP 101	Introduction to Data Processing	4
ECO 104	Economics	3	BUS 225	Cost Accounting	4
ENG 102	Communication Skills	3	BUS 229	Taxes	4
NINTH QUARTER					
	BUS 227	Accounting Theory			4
	BUS 269	Auditing			4
		Business Elective			3
		General Education Elective			3

* Those students who do not pass the Mathematics pretest section of the Admissions Test will be required to take Mathematics 101A as a prerequisite to MAT 104 Mathematics of Finance.

ARCHITECTURAL DRAFTING**Aims**

This curriculum is designed to prepare students to enter the field of architectural drafting. The first quarter contains courses basic to all fields of drafting. The second, third, and fourth, quarters contain specialization and related courses that prepare one to enter architectural drafting and related occupations.

Each course is designed to enable an individual to advance rapidly in drafting proficiency upon entering the field of work. Courses are arranged in sequence to develop drafting skills and proficiency in mathematics and science. The draftsman associates with many levels of personnel—administrators, architects, engineers, skilled workmen—and must be able to communicate effectively with them. Courses designed to develop knowledge and skills in communication, are provided to assist the student in developing understanding and confidence in relations with other persons.

DFT 1121 Drafting 7 hours
Prerequisite: None.

An introduction to drafting and the study of drafting practices. Selection, use and care of instruments, single-stroke lettering, freehand sketching consisting of orthographic and pictorial drawings. Orthographic projection, reading and instrument drawing of dimensioning and note practices. Methods of reproducing drawings. Study of residential planning, room arrangements, windows, doors, etc.

DFT 1123 Architectural Drafting I 7 hours
Prerequisite: DFT 1121, DFT 1146.

Drafting of residence plans, elevations, and wall sections, schedules, electrical, plumbing heating and air conditioning.

DFT 1124 Architectural Office Practices 3 hours
Prerequisite: DFT 1121.

A study of human relationships in an architectural or engineering office; the organization of such offices; relationships with contractors, subcontractors, material suppliers and governmental agencies; the organization and preparation of working drawings and specifications.

DFT 1133 Architectural Drafting II 7 hours
Prerequisite: DFT 1123.

Introduction to commercial construction. Design of a small office building or manufacturing plant, including drawings of footings, foundation walls, structural framework, floorplans, elevations, wall sections, and schedules. Lab credit may be given for appropriate outside employment by the instructor.

DFT 1146 Architectural Materials, Methods, and Mechanical Equipment 5 hours
Prerequisite: None.

Study of basic constructional materials as used in architectural structures. The economic values, limitations, budget, and codes. Field trips to construction sites. Building code requirements. Reading and interpretation of working drawings by engineers. Standards of materials.

DFT 1147 Independent Project 4 hours
Prerequisite: DFT 1123.

Drafting independent project approved by the instructor, or at least twelve hours of outside employment a week at an architect's or engineer's office.

DFT 1148 Architectural Drafting III 7 hours
Prerequisite: DFT 1133, DFT 1146.

Continuation of project begun in DFT 1133 in-

cluding design of electrical, plumbing, heating, and air conditioning systems for the structure. Lab credit may be given for appropriate outside employment approved by the instructor.

DFT 1149 Independent Project 3 hours
Prerequisite: DFT 1147.

Continuation of project began in DFT 1147, or at least nine hours of outside employment a week at an architect's or engineer's office.

CIV 1102 Trigonometry and Surveying 6 hours
Prerequisite: MAT 1105.

Trigonometric ratios solving problems with right triangles, using tables, and interpolating solution of oblique triangles using law of sines and law of cosines and graphs of the trigonometric functions. Basic surveying instrumentation and study of topography together with field trips and drafting room application of the material.



ARCHITECTURAL DRAFTING

FIRST QUARTER			CREDIT	THIRD QUARTER			CREDIT
DFT	1121	Drafting	7	DFT	1124	Architectural Office Practices	3
DFT	1146	Arch., Mat. & Methods, Mechanical Equipment	5	DFT	1133	Architectural Drafting	7
ENG	1101	Communication Skills	2	DFT	1147	Independent Project	4
MAT	1101	Fundamentals of Mathematics	5				

SECOND QUARTER			CREDIT	FOURTH QUARTER			CREDIT
DFT	1123	Architectural Drafting	7	DFT	1148	Architectural Drafting	7
ENG	1102	Communication Skills	3	DFT	1149	Independent Project	3
MAT	1105	Mathematics for Draftsmen	4	CIV	1102	Trigonometry and Surveying	6
PHY	1100	Applied Science	4				

AUTOMOTIVE MECHANICS

Aims

The automotive program consists of two separate phases. Automotive Mechanics I is a four quarter program designed to provide competent automotive mechanics who have basic knowledge and skills needed to inspect, diagnose, repair and adjust automotive vehicles. The second phase of automotive mechanics is designed for a student who is an automotive mechanics program graduate (minimum of six units) from a secondary school, a graduate of the Durham Technical Institute Automotive Mechanics I or an equivalent program, or for the student who has two or more years experience in the automotive industry. Entrance into this two quarter program is at the discretion of the automotive mechanics program coordinator. The second phase of automotive curriculum enlarges your knowledge and skill gained in automotive mechanics I and prepares the graduate for entry into a specialized field within the automotive industry. Further study and experience in specialized fields of automotive repair is enhanced by cooperative work training.

AUT 1101 Auto Servicing

5 hours

Prerequisite: None.

This course explains correct methods of chassis lubrication and how to check major units of an automobile using a preventative maintenance schedule. To complete this course, each student must remove, repair, static balance and replace tires. He must also pack front wheel bearings, check cooling systems, install thermostats and antifreeze. Each student must also service a transmission, change engine oil, check shock absorbers, fan belts, batteries, and master cylinders.



AUT 1102 Brakes

5 hours

Prerequisite: None.

This is a study of various braking systems, both drum and disc type, employed on automobiles and light trucks. Emphasis is placed on how they operate, on proper adjustment, and on repairing each type of system. To complete this course, each student must remove, overhaul and replace brake shoes, disc brake pads, wheel cylinders, master cylinders and calipers. He must also re-condition brake drums and rotors as well as bleed a hydraulic brake system.

**AUT 1103 Fuel and Exhaust Systems**

6 hours

Prerequisite: None.

This is a study of fuel and exhaust system failures and how to correct these problems. To successfully complete this course, each student must diagnose and repair failures on carburetors, fuel pumps and gasoline tanks. Through additional performance tests, each student must remove and replace all parts of an automobile's exhaust system.

AUT 1104 Electrical I: Basic Starting and Charging Systems

4 hours

Prerequisite: None.

This course will introduce and explain how these two Automotive systems function. Using test equipment, each student must diagnose and repair problems in components such as starters, batteries, wiring, generators, alternators and regulators to pass this course.

AUT 1105 Automotive Air Conditioning

4 hours

Prerequisite: None.

This course is an introduction to the principles of refrigeration and a study of the assembly of the components of this system. Each student must correctly discharge and charge a live system, name the parts of that system and their functions as well as troubleshoot minor problems in refrigeration systems to meet the requirements of this course.

AUT 1106 Chassis

6 hours

Prerequisite: None.

Three main areas of automotive repair are covered in this course: front wheel alignment, dynamic wheel balancing and replacement of suspension components. To successfully complete this course, each student must align a minimum of two vehicles correctly, dynamic balance a set of tires and wheels, and replace suspension parts such as shock absorbers, ball joints, idler arms and tie rod ends.

AUT 1107 Electrical II: Emission Control Tune-up 6 hours

Prerequisite: None.

This course is a study of automotive ignition and emission control systems. Emphasis is placed on diagnosing, with modern test equipment, malfunctions in these units. To successfully complete this course, each student must perform the following tasks correctly on two separate performance tests: complete major tune up including valve adjustment, diagnose and repair ignition malfunctions, tests and adjust or repair emission control systems.

AUT 1108 Diesel Engines Seminar 3 hours

Prerequisite: None.

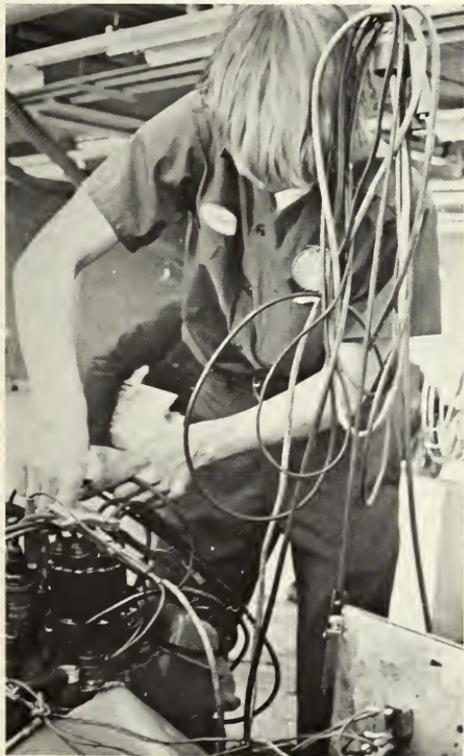
This course introduces the principles and functions of the diesel engine. It will also include field trips to local shops servicing diesel equipment.

AUT 1109 Systems Troubleshooting 5 hours

Prerequisite: A minimum of one of the following: AUT 1102, AUT 1103, AUT 1104, AUT 1105, AUT 1106, AUT 1107.

This course permits the student to select areas of study that will make him more proficient in specialized phases of Automotive repairs. Approved areas include brakes, fuel systems, electrical testing, front wheel alignment, power trains, air conditioning and others by prior arrangement. To successfully complete this course, each student must complete performance tests in his selected area to demonstrate he has a salable skill in his speciality area.



**AUT 1110 Power Trains**

5 hours

Prerequisite: None.

This course includes principles and functions of clutches, manual transmissions driveshafts and differential assemblies. To complete this course, each student must remove, disassemble, assemble and replace a minimum of one clutch assembly, manual transmission, universal joint and differential assembly.

AUT 2101 Power Trains

6 hours

Prerequisite: AUT 1110.

A study of automotive transmission principles and functions. To successfully complete this course, each student must remove and replace at least one automatic transmission in a live vehicle. Each student must also disassemble and assemble correctly at least four different automatic transmissions.

AUT 2102 Internal Combustion Engines

6 hours

Prerequisite: AUT 1108.

This course is a study of automotive engines, their construction and operation. Special tools, measuring devices, and overhaul procedures are introduced. To successfully complete this course, each student must correctly test an engine for mechanical problems using a vacuum gauge, a compression gauge and a cylinder leakage tester. Each student must also perform a complete valve service on a cylinder head and disassemble-assemble a live engine in shop.

AUT 2103 Electronic Charging and Ignition Systems

2 hours

Prerequisite: AUT 1107.

This is a study of electronic charging and ignition systems including transistor ignition and transistor regulators. To successfully complete this course, each student must pass performance tests on installation, troubleshooting and maintenance of these systems.

AUT 2104 Foreign Car Servicing 5 hours
Prerequisite: AUT 1109.

This course is a study of electrical systems, brakes and accessories which are common to vehicles of foreign manufacturing. Disassembly repair and assembly of the rotary engine is also included in this course. To complete this course, each student must pass performance tests in all of these major areas.

AUT 2105 Shop Planning 3 hours
Prerequisite: BUS 1103.

To successfully complete this course, each student will plan and design an automotive repair shop. Research work for this project includes visits to local repair shops and talks with local supervisors concerning problems encountered in in shop planning.

AUT 2106 Cooperative Training 2 hours
Prerequisite: Instructors permission.

Each student will work at a local dealership or repair shop for 11 weeks. This gives each one an opportunity to apply classroom theory to practical job applications. It may also give each student leads on finding future employment.

Cooperative education also helps students develop general and specific skills, knowledge and attitudes, particularly those not readily available in the school's facility.

ABS 1101 Basic Auto Science 3 hours
Prerequisite: None.

This is an introduction to physical laws and principles found in the design engineering and performance of an automobile. To meet the requirements of this course, each student will perform ordered experiments to demonstrate selected laws of nature. Labs will utilize automotive parts, equipment and facilities.

BUS 1103 Small Business Seminar 3 hours
Prerequisite: None.

An introduction to the business world in the Automotive industry. This course will point out problems of business operation, basic business laws, business forms and records, financial problems, ordering and inventorying. It will also discuss equipment and office layout, methods of improving business and employer-employee relationships.

MAT 1101 A Applied Mathematics 3 hours
Prerequisite: None.

To successfully complete this course, each student must demonstrate his ability to correctly use decimals, percentages, ratios, whole and mixed numbers and fractions. This ability to perform will be evaluated through performance tests using shop type problems.

WLD 1129 Basic Welding 1 hour
Prerequisite: None.

Safe and correct methods of assembling and operating oxy-acetelene and arc welding equipment is explained in this course. Each student will surface weld, bronze weld, silver-solder and flame cut metals using correct procedures to fulfill the minimum requirements of this course.



AUTOMOTIVE MECHANICS I

FIRST QUARTER	CREDIT	THIRD QUARTER	CREDIT
AUT 1101 Auto Servicing	5	AUT 1105 Air Conditioning	4
AUT 1102 Brakes	5	AUT 1106 Basic Chassis	6
ENG 1101A Communication Skills	5	AUT 1107 Electrical II: Emission Control	6
MAT 1101 Applied Math	3	Tune-Up	

SECOND QUARTER	CREDIT	FOURTH QUARTER	CREDIT
AUT 1103 Fuel and Exhaust Systems	6	AUT 1108 Diesel Engines Seminar	3
AUT 1104 Electrical I: Basic Starting and Charging Systems	4	AUT 1109 Systems Troubleshooting	5
ABS 1101 Auto Basic Science	3	AUT 1110 Power Trains	5
WLD 1129 Welding	1	BUS 1103 Small Business Seminar	3

AUTOMOTIVE MECHANICS II*

FIRST QUARTER	CREDIT	SECOND QUARTER	CREDIT
AUT 2101 Power Trains	6	AUT 2104 Foreign Car Servicing	5
AUT 2102 Engines	6	AUT 2105 Shop Planning	3
AUT 2103 Electronic Charging and Ignition Systems	2	AUT 2106 Cooperative Training (20 hours per week)	2

* Entry into Automotive Mechanics II is at the discretion of the Automotive Mechanics Program Coordinator.

BUSINESS ADMINISTRATION

AIMS

This two-year curriculum is designed to prepare students for employment in occupations common to business. Instruction is aimed at preparing the student in many phases of administrative work that will be encountered in the average business. Specific objectives are to develop the following competencies; understanding of the principles of organization and management in business operations; understanding our economy through study and analysis of the role of production and marketing; knowledge in specific elements of accounting, finance, and business law; understanding and skill in effective communication for business; knowledge of human relations as they apply to successful business operations in a rapidly expanding economy.

BUS 101 Introduction to Business 5 hours
Prerequisite: None.

A survey of the business world with particular attention devoted to the structure of the various types of business organization, methods of financing, internal organization, and management.

BUS 102 Typewriting (Elective) 4 hours
Prerequisite: None.

Introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts.

BUS 110 Office Machines 4 hours
Prerequisite: None.

A general survey of business and office machines. Students will receive training in techniques, pro-

cesses, operation and application of the ten-key adding machines, full keyboard adding machines, and calculator.

BUS 115 Business Law 3 hours
Prerequisite: None.

An introductory course of the field of law in general and business law in particular. Briefly exposes the student to the U. S. legal system and looks at criminal law and the law of torts. Also included in an in-depth analysis of the law of contracts.

BUS 116 Business Law 3 hours
Prerequisite: None.

This second course in business law covers agency law, commercial paper, personal property and bailments, law of sales, and insurance and labor law.

BUS 120 Accounting 6 hours
Prerequisite: MAT 110.

Principles, techniques and tools of accounting for understanding the mechanics of accounting. Collecting, summarizing, analyzing, and reporting information about service and mercantile enterprises, to include practical application of the principles learned.

BUS 121 Accounting 6 hours
Prerequisite: BUS 120.

A study of partnership and corporation accounting including a study of payrolls, federal and state taxes. Emphasis is placed on the recording, summarizing and interpreting of data for management control rather than on bookkeeping skills. Accounting services are shown as they contribute to the recognition and solution of management problems.

BUS 123 Business Finance 3 hours
Prerequisite: None.

Includes a study of the financing of business units, as individuals, partnerships, corporations, and trusts. A detail study is made of short-term, long-term, and consumer financing.

BUS 124 Personal Finance 3 hours
Prerequisite: None.

A study of personal and family financial problems. Emphasis will center on family budgeting, savings, real estate, stock market and other investment avenues.

BUS 210 Investment Analysis 3 hours
Prerequisite: None.

A basic study of the securities market with emphasis stocks, bonds, mutual funds, and investment management.

BUS 229 Taxes 4 hours
Prerequisite: BUS 121.

Application of federal and state taxes to various businesses and business conditions. A study of the following taxes: income, payroll, intangible, capital gain, sales and use, excise and inheritance.

BUS 232 Sales 3 hours
Prerequisite: None.

A study of retail, wholesale and specialty selling. Emphasis is placed upon mastering and applying the fundamentals of selling. Preparation for and execution of sales demonstrations required.

BUS 233 Personnel Management (Elective) 3 hours
Prerequisite: None.

Principles of organization and management of personnel, procurement, placement, training, performance checking, supervision, remuneration, labor relations, fringe benefits and security.

BUS 235 Business Management 3 hours
Prerequisite: None.

Principles of business management including overview of major functions of management, such as planning, staffing, controlling, directing, and financing. Clarification of the decision-making function versus the operating function. Role of management in business-qualifications and requirements are studied.



BUS 239 Marketing (Elective) 5 hours
Prerequisite: None.

A general survey of the field of marketing, with a detailed study of functions, policies, and institutions involved in the marketing process.

BUS 243 Advertising 4 hours
Prerequisite: None.

The role of advertising in a free economy and its place in the media of mass communications. A study of advertising appeals; product and market research; selection of media; means of testing effectiveness of advertising. Theory and practice of writing advertising copy for various media.

BUS 245 Retailing (Elective) 3 hours
Prerequisite: None.

A study of the role of retailing in the economy including development of present retail structure, functions performed, principles governing effective operation and managerial problems resulting from economic and social trends.

BUS 247 Business Insurance 3 hours
Prerequisite: None.

A presentation of the basic principles of risk insurance and their application. A survey of the various types of insurance is included.

BUS 271 Office Management 3 hours
Prerequisite: None.

Presents the fundamental principles of office management. Emphasis on the role of office management including its functions, office automation, planning, controlling, organizing and actuating office problems.

BUS 272 Principles of Supervision 3 hours
Prerequisite: None.

Introduces the basic responsibilities and duties of the supervisor and his relationship to superiors, subordinates, and associates. Emphasis on securing an effective work force and the role of the supervisor. Methods of supervision are stressed.

BUS 273 Fundamentals of Real Estate 5 hours
Prerequisite: None.

This course covers the basic fundamentals of real estate. Topics to be covered include brokerage, agreements of sale, deeds, financing, mortgages, judgments, valuation and appraisal, and lease laws. Upon satisfactory completion of this course students are eligible to take the Real Estate Broker's Examination.

BUS 274 Labor Relations (Elective) 3 hours
Prerequisite: None.

An introduction to the history of the labor movement in the United States. A close look will be taken at major legislation affecting workers and the collective bargaining process.



**ECO 102 Economics**

3 hours

Prerequisite: None.

A study of the fundamental principles of economics including the institutions and practices by which people gain a livelihood. Included is a study of the laws of supply and demand and the principles bearing upon production, exchange, distribution, and consumption both in relation to the individual enterprise and to society at large.

ECO 104 Economics

3 hours

Prerequisite: ECO 102.

Greater depth in principles of economics, including a penetration into the composition and pricing of national output, distribution of income, international trade and finance, and current economic problems.

BDP 104 Introduction to

4 hours

Data Processing Systems

Prerequisite: None.

Fundamental concepts and operational principles of data processing systems, as an aid in developing a basic knowledge of computers, prerequisite to the detailed study of particular computer problems.



**BUSINESS ADMINISTRATION
DAY**

FIRST QUARTER		CREDIT	FOURTH QUARTER		CREDIT
BUS 101	Introduction to Business	5	BUS 116	Business Law	3
BUS 110	Office Machines	4	BUS 123	Business Finance	3
ECO 102	Economics I	3	+ * BUS 247	Business Insurance	3
ENG 100	Communication Skills	2	BDP 101	Intro to Data Processing	4
MAT 110	Business Math	5	ENG 103	Communication Skills	2
SECOND QUARTER			FIFTH QUARTER		
BUS 120	Accounting I	6	BUS 124	Personal Finance	3
BUS 243	Advertising	5	+ * BUS 233	Personnel Management	3
ECO 104	Economics II	3	BUS 235	Business Management	3
ENG 101	Communication Skills	5	ENG 206	Business Communication	3
				General Education Elective	3
THIRD QUARTER			SIXTH QUARTER		
BUS 115	Business Law	3	+ * BUS 210	Investments	3
BUS 121	Accounting II	6	BUS 229	Taxes	4
BUS 232	Sales	3	BUS 271	Office Management	3
+ * BUS 274	Labor Relations	3	BUS 272	Principles of Supervision	3
ENG 102	Communication Skills	3		General Education Elective	3

- * The following courses may be substituted for the courses marked above: BUS 102 Typing, BUS 239 Marketing, BUS 245 Retailing, and BUS 273 Real Estate.
- + Any course in Accounting, Business Data Processing, General Office Technology, or Secretarial Science may be substituted for the courses marked above.
- o Those students who do not pass the mathematics pretest section of the Admissions Test will be required to take mathematics 101G Technical Mathematics as a pre-requisite for Mathematics 110 Business Math. Minimum total credit hours to graduate: 102.

**BUSINESS ADMINISTRATION
EVENING**

FIRST QUARTER		CREDIT	FIFTH QUARTER		CREDIT
BUS 101	Introduction to Business	5	BUS 110	Office Machines	4
°MAT 110	Business Math	5	BUS 123	Business Finance	3
ENG 100	Communication Skills	2	+ *BUS 274	Labor Relations	3
			ENG 103	Communication Skills	2

SECOND QUARTER		CREDIT	SIXTH QUARTER		CREDIT
BUS 243	Advertising	5	BUS 116	Business Law	3
ENG 101	Communication Skills	5	BUS 124	Personal Finance	3
	General Education Elective	3	+ *BUS 247	Business Insurance	3
			BUS 272	Principles of Supervision	3

THIRD QUARTER		CREDIT	SEVENTH QUARTER		CREDIT
BUS 115	Business Law	3	+ *BUS 210	Investments	3
BUS 120	Accounting	6	+ *BUS 233	Personnel Management	3
ECO 102	Economics I	3	BUS 235	Business Management	3
			ENG 206	Business Communication	

FOURTH QUARTER		CREDIT	EIGHTH QUARTER		CREDIT
BUS 121	Accounting II	6	BUS 229	Taxes	4
ECO 104	Economics II	3	BUS 232	Sales	3
ENG 102	Communication Skills	3	BDP 101	Introduction to Data Processing	4

NINTH QUARTER

BUS 271	Office Management	3
	General Education Elective	3

* The following courses may be substituted for the courses marked above: BUS 102 Typing, BUS 239 Marketing, BUS 245 Retailing, and BUS 273 Real Estate.

+ Any course in Accounting, Business Data Processing, General Office Technology, or Secretarial Science may be substituted for the courses marked above.

° Those students who do not pass the Mathematics pretest section of the Admissions Test will be required to take Mathematics 101G Technical Mathematics as a pre-requisite for Mathematics 110 Business Math.

Minimum total credit hours to graduate: 102

BUSINESS DATA PROCESSING**AIM**

This curriculum is designed to give the student an understanding of the principles of business operation, experience with techniques and handling business data, functional competence in the application of data processing systems, and experience in computer programming of business records and accounts, inventory, sales, and income and expenditures essential to business and management decisions.

Emphasis is upon business data processing and use of machines in solving business problems.

BDP 101 Introduction to Data Processing 4 hours
Prerequisite: None.

An introductory course in computers for the student who plans to pursue data processing as a career and for the student who desires a general non-technical knowledge of data processing terminology, history, and concepts.



BDP 102 Logic and Decision Making 3 hours
Prerequisite: None.

An introductory course in programming logic. The study of the resolution of problems into flowcharts and various standard business formats. A study of abstract and real decision making as applied to programming.

BDP 110 Assembler Language Programming I 5 hours
Prerequisite: BDP 101, BDP 102, MAT 101.

The initial course in basic assembler language, programming for the IBM 370 system. Study includes rules, specifications for standard and decimal instructions in an operations system environment. Student will solve elementary arithmetic, input-output, and business problems by writing several programs in the language.

BDP 111 Assembler Language Programming II 5 hours
Prerequisite: BDP 110.

An applications course in assembler language. The student will write several programs dealing with standard business program operations.

BDP 201 COBOL I 4 hours
Prerequisite: BDP 101, BDP 102, MAT 101.

The introductory course in Common Business Oriented Language (COBOL). Material covered will include the structure, rules and procedure syntax for the language using the American National Standard version compiler. Laboratory work will include exercises in developing program logic and the writing of COBOL programs to solve arithmetic and common business operations problems.

BDP 202 COBOL II 4 hours
Prerequisite: BDP 201.

An advanced course in COBOL with emphasis on



more sophisticated programming techniques. Material will cover one, two, and three level tables and sequential file usage on disk or tape. The student will write several programs utilizing these techniques and devices.

BDP 203 COBOL II 4 hours
Prerequisite: BDP 202.

The student will study file processing as it pertains to sequential file organization, creation and maintenance. Also included are studies in indexed-sequential and random file organizations, sub-programming techniques, the sort verb, and special debugging features. The student will write several programs utilizing these techniques as they relate to normal business operations.

BDP 210 PL-1 Programming Language 4 hours
Prerequisite: BDP 101, BDP 102, MAT 101.

An introductory course in PL-1 programming, laboratory exercises will include writing programs to solve arithmetic and/or business problems.

BDP 215 Computer Systems I 3 hours
Prerequisite: BDP 101, BDP 102, 2nd year status

A status of computer systems and the concept of file devices, file organization, job control language and program libraries.

BDP 216 Computer Systems II 3 hours
Prerequisite: BDP 215.

An application of the concepts gained in BDP 215 in the field or management or information.

BDP 220 Systems and Procedures 4 hours
Corequisite: BDP 215.

A course in systems analysis covering its scope, types of investigation, file design, documentation and justification of designs, implementation, controls and security, hardware and software considerations.

BDP 230 Data Processing Project 5 hours
Prerequisite: Last quarter standing and instructor permission.

Individual project assignments to be completed

by the student. The results of the project will show agility with skills acquired in previous course work. Assignment will be designed by the instructor.

BDP 242 Applied Business Systems 4 hours
Prerequisite: BDP 220.

A follow-up course to BDP 220 in which the student will apply principles previously established and develop a small business computer system; i.e., a payroll system, general ledger system, and inventory system.

BDP 243 FORTRAN IV Programming 4 hours
Prerequisite: BDP 101, BDP 102, MAT 101.

A study of the FORTRAN IV compiler language. Study and laboratory exercises will include solving mathematical or business problems.

BDP 224 Basic RPG 4 hours
Prerequisite: BDP 101, BDP 102, MAT 101.

A study of basic RPG programming with study and laboratory exercises devoted to developing program logic within the RPG framework. Students will write programs commonly used in support of business operations.

BDP 299 Special Topics in Data Processing Credits Arranged
Prerequisite: Instructors Permission.

An independent study with assistance from the instructor in any area of business data processing of interest to the student.

BUS 101 Introduction to Business 5 hours
Prerequisite: None.

A survey of the business world with particular attention devoted to the structure of the various types of business organization, methods of financing, internal organization, and management.

BUS 120 Accounting 6 hours

Prerequisite: MAT 106.

Principles, techniques and tools of accounting, for understanding the mechanics of accounting. Collecting, summarizing, analyzing, and reporting information about service and mercantile enterprises, to include practical application of the principles learned.

BUS 121 Accounting 6 hours

Prerequisite: BUS 120.

A study of partnership and corporation accounting including a study of payrolls, federal and state taxes. Emphasis is placed on the recording, summarizing and interpreting of data for management control rather than on bookkeeping skills. Accounting services are shown as they contribute to the recognition and solution of management problems.

ECO 102 Economics 3 hours

Prerequisite: None.

The fundamental principles of economics including the institutions and practices by which people gain a livelihood. Included is a study of the laws of supply and demand and the principles bearing upon production, exchange, distribution, and consumption both in relation to the individual enterprise and to society at large.

ECO 104 Economics 3 hours

Prerequisite: ECO 102.

Greater depth in principles of economics, including a penetration into the composition and pricing of national output, distribution of income, international trade and finance, and current economic problems.

MAT 104 Math of Finance 5 hours

Prerequisite: MAT 101G or equivalent.

This course stresses the fundamentals of math as applied to business operations. It starts with the treatment of simple interest and simple discount; develops gradually and logically through the topics of compound interest, annuities with their many applications, bonds, depreciation; and other topics related to finance in a business environment.

MAT 214 Statistics 5 hours

Prerequisite: MAT 104.

A study of the theory and application of statistics. Experience is given in the association and use of statistical techniques in the prediction and estimation of the outcome of experiments related to practical problems in business data processing. Practical experience is gained in the utilization of computers in the statistical solution of problems.



**BUSINESS DATA PROCESSING
DAY**

FIRST QUARTER		CREDIT	FOURTH QUARTER		CREDIT
BDP 101	Intro to Business Data Processing	4	BDP 243	Fortran IV Programming	4
BDP 102	Logic & Decision Making	3	+BUS	Business Elective	5
ENG 100	Communication Skills	2	ENG 203	Communication Skills	2
°MAT 101A	Technical Mathematics	5			

SECOND QUARTER			FIFTH QUARTER		
BDP 201	Cobol	4	BDP 110	Assembler	5
BUS 120	Accounting	6	BDP 215	Computer Systems	3
ECO 102	Economics	3	MAT 214	Statistics	5
ENG 101	Communication Skills	5			

THIRD QUARTER			SIXTH QUARTER		
BDP 202	Cobol	4	BDP 216	Computer System	3
BUS 121	Accounting	6	BDP 220	Systems & Procedures	4
ENG 102	Communication Skills	3	* BDP	Data Processing Elective	4
PSY 102	General Psychology	3	+BUS	Business Elective	5

SEVENTH QUARTER

BDP 230	Data Processing Project	5
* BDP	Data Processing Elective	4
* BDP	Data Processing Elective	4

* Data Processing Electives may be selected from the following courses: BDP III Assembler II; BDP 203 COBOL III; BDP 210 PL-1 Programming; BDP 242 Applied Business Systems; BDP 244 Basic RPG Programming.

+ Recommended Business Electives are: BUS 101 Introduction to Business; MAT 104 Math of Finance; MAT 110 Business Mathematics.

° MAT 101 pre-supposes training in Algebra. Students who have not had Algebra prior to entering DTI must take MAT 111.

**BUSINESS DATA PROCESSING
EVENING**

FIRST QUARTER		CREDIT	FIFTH QUARTER		CREDIT
BDP 101	Intro to Data Processing	4	BDP 110	Assembler Language	5
BDP 102	Logic & Decision Making	3	ENG 203	Communication Skills	2
ENG 100	Communication Skills	2	MAT 214	Statistics	5
°MAT 101	Technical Mathematics	5			
SECOND QUARTER			SIXTH QUARTER		
BDP 201	Cobol	4	BDP 215	Computer Systems	3
BUS 120	Accounting	6	*BDP	Data Processing Elective	4
ECO 102	Economics	3	MAT 104	Math of Finance	3
			PSY 102	General Psychology	3
THIRD QUARTER			SEVENTH QUARTER		
BDP 202	Cobol	4	BDP 216	Computer Systems	3
BUS 121	Accounting	6	BDP 220	Systems & Procedures	4
ENG 101	Communication Skills	5	*BDP	Data Processing Elective	4
FOURTH QUARTER			EIGHTH QUARTER		
BDP 243	Fortran IV Programming	4	BDP 230	Data Processing Project	5
BUS 101	Introduction to Business	5	ECO 104	Economics	3
ENG 102	Communication Skills	3	*BDP	Data Processing Elective	4

* Data Processing electives may be selected from the following courses: BDP 111 Assembler II; BDP 203 COBOL III; BDP 210 PL-1 Programming; BDP 242 Applied Business Systems; BDP 244 Basic RPG Programming.

° MAT 101 pre-supposes training in Algebra. Students who have not had Algebra prior to entering DTI must take MAT 111.

DENTAL LABORATORY TECHNOLOGY**AIM**

The Dental Laboratory Technology curriculum prepares a person to enter the dental health field trained in the art and science of fabricating artificial dental restorations for the dental profession.

The objectives of this program are to prepare the student for employment as either a general laboratory technician or as a specialist in removable prosthetics (complete and partial dentures) or fixed prosthetics (crowns and bridges).

Dental technology courses include classroom study and laboratory time for manipulative application.

Candidates should have a high degree of manual dexterity, good color perception, and enjoy detailed work.

DEN 101 Dental Anatomy and Physiology 6 hours

Prerequisite: None.

An introduction to anatomy of the head and neck, physiology of occlusion with special emphasis on anatomy of the individual teeth and surrounding tissues. The laboratory portion includes drawings of each tooth, from central incisors through the second molar on one side of the upper and lower arches. Fourteen teeth are carved in wax, with special emphasis on reproducing natural tooth anatomy.

DEN 104 Dental Materials 3 hours

Prerequisite: None.

A study of the composition, properties, and uses of nonmetallic dental materials such as gypsum products, impression materials, plastics, waxes and duplicating materials. The laboratory exercises are designed to illustrate the properties and uses of the materials studied and the results of proper and improper manipulation.

DEN 106 Complete Denture Techniques 2 hours

Prerequisite: None.

A study of the basic techniques for complete denture construction. Laboratory phase includes construction of base plates and occlusion rims and mounting complete denture casts on an adjustable articulator.

DEN 107 Complete Denture Techniques 4 hours

Prerequisites: DEN 101, DEN 104, DEN 106.

A continuing study of the fabrication of complete dentures using anatomic teeth on an adjustable articulator. Emphasis is placed on balanced articulation.



DEN 108 Partial Denture Techniques 5 hours

Prerequisites: DEN 101, DEN 104, DEN 111.

A study of basic techniques used in fabrication of cast removable partial dentures frameworks. Laboratory phases include fundamentals of survey and design, constructing refractory casts, forming the wax pattern, investing and casting the frameworks utilizing chrome-nickel alloy.

DEN 109 Partial Denture Techniques

Prerequisite: DEN 108.

A continuing study of the fabrication of various types of temporary removable appliances including wrought-metal. Laboratory procedures including bending and assembling wrought clasps, and the fabrication of combination wrought and cast metal frame-works.

DEN 111 Dental Metallurgy 3 hours

Prerequisite: DEN 104.

DEN 111 is a study of gold and base metal alloys and their application to dentistry. Course content will include physical and mechanical properties, crystalline and wrought structures, solidification process, investments, methods of casting, soldering, heat treatment, metallurgical testing and specific brands of alloys used in dentistry.

DEN 113 Cast Inlay and Crown Techniques 6 hours

Prerequisites: DEN 101, DEN 104.

A study of techniques for fabricating cast restorations and an introduction to terminology specific to inlays and crowns. Casts and dies are prepared from impressions on which simple and complex inlays, full and three quarter cast crowns are constructed.

DEN 115 Crown and Bridge Techniques 4 hours

Prerequisite: DEN 113.

A study of techniques for the construction of acrylic jacket crowns, acrylic veneer crowns, and



fixed bridges of various designs utilizing metal with veneer facings.

DEN 116 Crown and Bridge Techniques 5 hours

Prerequisite: DEN 115.

A continuing study of the physical properties of veneering materials including techniques for construction of fixed bridges in the anterior and posterior regions utilizing flatback facings.

DEN 201 Advanced Complete Denture Techniques 5 hours

Prerequisite: DEN 107.

A study of complete denture techniques that include utilization of the facebow transfer and central bearing devices. Included in this phase are the principles and procedures for immediate denture construction and refitting of complete dentures.

DEN 204 Partial Denture Techniques 3 hours

Prerequisite: DEN 109.

A continuing study of partial denture techniques that include construction of all metal removable partial dentures using tube teeth and flatback facings. Tooth selection, set-up flasking, processing, and finishing and polishing are included.



DEN 205 Advanced Partial Denture Techniques 5 hours
Prerequisite: DEN 204.

A study of advanced techniques in removable partial denture design. Laboratory exercises include the use of precision attachments, and advanced clasping techniques.

DEN 207 Advanced Crown and Bridge Techniques 3 hours
Prerequisite: DEN 116.

A study of techniques for the construction of bridges combining resins and gold framework using the plastic build-up veneering material.

DEN 209 Jurisprudence and Ethics Seminar 3 hours
Prerequisite: None.

A study of the legal and ethical aspects of dental laboratory practice, dentist-laboratory relationship, and business aspects of operation and managing a dental laboratory. Guest speakers and field trips are utilized.

DEN 211 Ceramic Techniques 5 hours
Prerequisites: DEN 101, DEN 104, DEN 111, DEN 207.

A study of the physical properties and manipulation of porcelain for porcelain jacket crowns. Laboratory phase includes the preparation of dies, adaption of platinum matrix, firing, glazing, and personalization.

DEN 212 Advanced Ceramic Techniques 6 hours
Prerequisite: DEN 211.

The study of advanced techniques for bonding porcelain to precious metal and various methods of personalizing porcelain used in bridge construction.

DEN 213 Dental Laboratory Practice 2 hours

Prerequisites: DEN 201, DEN 204, DEN 207.

The fabrication of appliances from casts and prescriptions supplied by the School of Dentistry, University of North Carolina. The dentist-laboratory technician relationship is fostered.

DEN 214 Advanced Dental 3 hours

Laboratory Practices

Prerequisite: DEN 213.

Further practice in fabrication of advanced appliances from casts and prescriptions supplied by the School of Dentistry, University of North Carolina. Continued emphasis on ethical dentist-laboratory relations.

PS 101D Physical Science of 6 hours

Dental Materials

Prerequisite: None.

A study of the basic physical and chemical principles encountered in work with dental materials. Included are introductory inorganic and organic chemistry with special emphasis on the metallic elements and those compounds with physical properties advantageous to dental work. Physical principles include those which cause stress, strain, distortion, or potential stability or instability in dental materials.



DENTAL LABORATORY TECHNOLOGY

FIRST QUARTER		CREDIT	FOURTH QUARTER		CREDIT
DEN 101	Dental Anatomy & Physiology	6	DEN 109	Partial Denture Techniques	4
DEN 104	Dental Materials	3	DEN 116	Crown & Bridge Techniques	4
DEN 106	Complete Denture Techniques	2	ENG 102	Communication Skills	3
ENG 100	Communication Skills	2			
PS 101D	Physical Science of Dental Materials	6			

SECOND QUARTER			FIFTH QUARTER		
DEN 107	Complete Denture Techniques	4	DEN 201	Advanced Partial Denture Techniques	5
DEN 111	Dental Metallurgy	3	DEN 204	Partial Denture Techniques	3
DEN 113	Cast Inlay and Crown Techniques	6	DEN 207	Advanced Crown & Bridge Elective	3
MAT 101D	Technical Math	5			

THIRD QUARTER			SIXTH QUARTER		
DEN 108	Partial Denture Techniques	5	DEN 205	Advanced Partial Denture Techniques	5
DEN 115	Crown & Bridge Techniques	4	DEN 211	Ceramic Techniques	5
ENG 101	Communication Skills	5	DEN 213	Dental Laboratory Practice Elective	2 3

SEVENTH QUARTER		CREDIT
DEN 209	Jurisprudence & Ethics Seminar	3
DEN 212	Advanced Ceramic Techniques	6
DEN 214	Advanced Dental Lab Practice	3
ENG 203	Communication Skills	2

ELECTRONICS ENGINEERING TECHNOLOGY AIMS

The Electronics Curriculum provides a basic background in practical applications of electronics and in electronics related theory. Courses are designed to present content in an order that will provide the student with progressive levels of job related skills and knowledge. The curriculum is designed so that completion at various skill levels should prepare an individual to work as a service technician, an assistant to engineers, or as liaison between the engineer and the skilled craftsman.

Students successfully completing all requirements in the first four (4) quarters of the program will receive a diploma in Electronics Servicing. The objective of the Diploma program is to develop competent service technicians who are able to service, trouble shoot and repair electronic equip-

ment, and/or work as testing technicians on equipment or subassembly trouble shooting, testing, and repair. Those students who successfully complete all requirements in the eight (8) quarter curriculum gain the Associate in Applied Science Degree in Electronics Engineering Technology. In addition, certificates may be awarded, on request, to any student who does not complete all requirements but successfully completes any quarters work.

A unique feature of this program over the traditional Electronics Program is the additional course offerings in Electromechanical Systems, a Data Processing course designed for electronic applications, and an option in the eighth quarter of choosing one of three technical electives for further skill development.



ELC 101 Introduction to Electricity 6 hours
Prerequisite: None.

Elementary principles of electricity including basic electric units, Ohms Law, Kirchhoffs Law, network theorems, magnetic, basic electrical measuring instruments, inductance, sine-wave analysis, and non-resonant resistive, inductive, and capacitive networks.

ELC 102 Fundamentals of Electricity 6 hours
Prerequisites: ELC 101, MAT 100E.

Series and parallel resonant-circuit analysis, resonant and non-resonant transformer analysis, basic diode power supply analysis, introduction to non-linear resistive control devices, and introduction to electro-mechanical devices.

ELC 104 Systems Servicing 5 hours
Prerequisites: ELM 101, ELN 105, or permission of the instructor.

An introduction to servicing of Electromechanical and Electronic Systems. Topics to include operation, servicing, preventive maintenance and safety dealing with typical systems.

ELC 201 Construction of Electronic Devices 3 hours
Prerequisite: ELN 216, ELN 218.

Construction of small subassemblies and minor appliance. Included will be the procedures for constructing and testing electronic devices.

ELM 101 Electromechanical Systems I 5 hours
Prerequisite: ELC 102.

An introduction to basic electromechanical devices, components and circuits in practical industrial applications; understanding of simple and advance electromechanical circuits such as switches, solenoids, relays, etc. Fundamentals of motors and generators.





ELM 202 Electromechanical Systems II 6 hours

Prerequisite: ELM 101

Advance treatment of electromechanical devices, such as motors and their controls, generators, voltage and power equipment. Safety in dealing with such equipments is stressed.

ELN 100 Introduction to Electronics 3 hours

Prerequisite: ELC 101.

An introduction and overview of the field of electronics, development and history of the field; and introduction to various electronic circuits, their use and operation.

ELN 105 Introduction to Active Devices 6 hours

Prerequisite: ELC 102, ELN 100.

A study in depth of the electrical characteristics of vacuum tubes and transistors. Basic parameters and applications of each type device to the three configurations of a three-terminal, two-port system will be included.

ELN 205 Application of Active Devices I 6 hours

Prerequisite: ELN 105.

Practical applications of vacuum tubes and transistor to basic audio amplifiers, radio frequency amplifiers, detectors, modulators, and oscillators.

ELN 216 Pulse and Wave Shaping Circuits 6 hours

Prerequisite: ELN 205.

Broadband amplifiers, magnetic amplifiers, multivibrators, wave-shaping techniques chopper amplifiers, clipper and clamper circuits are subjects of study.

ELN 218 Application of Active Devices II 6 hours

Prerequisite: ELN 205.

Study of pulse circuits, wave shaping and transient analysers and active devices. Differentiating circuits, integrated circuits, electronic logic circuits, and introduction to digital techniques.

ELN 220 Electronic Systems I 6 hours

Prerequisite: ELN 216, ELN 218.

A block diagram course investigating numerous electronic systems. Modules or blocks of various circuits already studied are arranged in various manners to produce complex electronic systems. AM, FM, and Single Sideband transmitters and receivers, multiplexing, TV transmitters and receivers, pulse-modulated systems, computers, telemetry, navigational systems, sonar and radar will be considered.

ELN 240 Digital Electronics 6 hours
Prerequisite: ELN 216.

An exploration into the methodology of counting and computing, various computer techniques will be investigated, including non-sinusoidal waveforms, binary, and decade counters, industrial counters, readout devices, logic circuits, arithmetic circuits, storage devices, input-output devices, computer control, analog and digital converters.

ELN 245 Electronic Design Project* 5 hours
Prerequisite: ELN 220.

Student are required to design and construct a project approved by the instructor. Includes selection of project, design, construction, and testing of completed project. Projects may include AM or FM transmitters or receivers, amplifiers, test equipment, control devices, simple counters, lasers, masers, etc.

ELN 250 Electronic Systems II* 5 hours
Prerequisite: ELN 220.

A continuation of ELN 220. A study of advanced circuits and systems such as simple side band, UHF techniques, waveguides, antennas, transmission lines, and radio frequency propagation.

**EDP 120 Fortran IV for
Electronics Applications** 4 hours
Prerequisite: Electronic Major, ELN 105, MAT 102E, or permission of the instructor.

An introductory course in data processing and computer programming using the FORTRAN IV language. Study and lab exercises will be directed toward solving problems normally encountered in electronic technology.

DFT 101 Engineering Drawing 3 hours
Prerequisite: None.

The field of Engineering Drawing is introduced

as the student beings a study of drawing principles and practices for print reading and describing objects in the graphic language of Engineering. Basic skills and techniques of drawing include: use of drafting equipment, lettering, freehand orthographic and pictorial sketching, geometric construction, orthographic instrument drawing of principal views, standards and practices of dimensioning.

DFT 201 Electronic Drafting 2 hours
Prerequisite: DFT 101 or equivalent.

Constructing and interpreting electrical drawings, diagrams, and schematics; system drawings and construction of charts, etc.

MEC 101 Machine Processes I 3 hours
Prerequisite: None.

An introductory course designed to acquaint the student with basic hand tools, safety procedures and machine processes of our modern industry. It will include a study of measuring instruments, characteristics of metals and cutting tools. The student will become familiar with the lathe by performing selected operations such as turning, facing, threading, drilling, boring, and reaming.

* Technical Electives



ELECTRONICS ENGINEERING TECHNOLOGY
 (Eight Quarters)
ELECTRONIC SERVICING
 (First Four Quarters)

FIRST QUARTER		CREDIT	FIFTH QUARTER		CREDIT
DFT 101	Engineering Drawing	3	ELM 202	Electromechanical Systems	6
ELC 101	Intro to Electricity	6	ELN 205	Application of Active Devices	6
ENG 100	Communication Skills	2	ENG 203	Communication Skills	2
MAT 100E	Technical Mathematics	5		General Elective	3

SECOND QUARTER			SIXTH QUARTER		
ELC 102	Fundamentals of Electricity	6	ELN 216	Pulse & Wave Shaping	6
ELN 100	Intro to Electronics	3	ELN 218	Application of Active Devices	6
ENG 101	Communication Skills	5	PHY 201	Physics	5
MAT 101E	Technical Mathematics	5			

THIRD QUARTER			SEVENTH QUARTER		
ELM 101	Electromechanical Systems	5	DFT 201	Electronics Drafting	2
ELN 105	Intro to Active Devices	6	ELN 220	Electronics Systems	6
MAT 102E	Technical Mathematics	5	PHY 202	Physics	5
				General Elective	3

FOURTH QUARTER			EIGHTH QUARTER		
EDP 120	Fortran IV for Electronics Applications	4	ELC 201	Construction of Electronic Devices	3
ELC 104	Systems Servicing	5	ELN 240	Digital Electronics	6
ENG 102	Communication Skills	3		*Technical Elective	5
MEC 101	Machine Processes	3			

* Technical Electives may be chosen from ENN 245, ELN 245, MAT.

GENERAL OFFICE TECHNOLOGY**AIM**

The General Office Technology curriculum offers a clerical program coupled with basic business courses designed to develop a variety of necessary skills for employment in the business world. Specialized course work in skill areas is supplemented by related courses in mathematics, accounting, business law, and personal improvement.

BUS 101 Introduction to Business 5 hours

Prerequisite: None.

A survey of the business world with particular attention devoted to the structure of the various types of business organization, methods of financing, internal organization, and management.

BUS 102 Typewriting 4 hours

Prerequisite: None.

Introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, and tabulation.

BUS 103 Typewriting 4 hours

Prerequisite: BUS 102 or the equivalent. Speed requirement, 30 words per minute for three minutes.

Instruction emphasizes the development of speed and accuracy with further mastery of correct typewriting techniques. These skills and techniques are applied in tabulation, manuscript, correspondence, and business forms.

BUS 104 Typewriting 4 hours

Prerequisite: BUS 103 or the equivalent. Speed requirement, 40 words per minute for five minutes.

Emphasis on production typing problems and speed building. Attention to the development of the student's ability to function as an expert

typist, producing mailable copies. The production units are tabulation, manuscripts, correspondence, and business forms.

BUS 110 Office Machines 4 hours

Prerequisite: None.

A general survey of business and office machines. Students will receive training in techniques, processes, operation and application of the ten-key adding machines, full keyboard adding machines, and electronic calculators.

BUS 112 Filing 5 hours

Prerequisite: None.

Fundamentals of indexing and filing, combining theory and practice by the use of miniature letters, filing boxes and guides. Alphabetic, Geographic, Subject, and numeric filing are reviewed.

BUS 115 Business Law 3 hours

Prerequisite: None.

An introductory course to the field of law in general and business law in particular. Briefly exposes the student to the U.S. legal system and looks at criminal law and the law of torts. Also included is an in-depth analysis of the law of contracts.

A general course designed to acquaint the student with certain fundamentals and principles of business law, including contracts, negotiable instruments, and agencies.

BUS 120 Accounting 6 hours

Prerequisite: MAT 110.

Principles, techniques and tools of accounting for understanding the mechanics of accounting. Collecting, summarizing, analyzing, and reporting information about service and mercantile enterprises, to include practical application of the principles learned.

BUS 121 Accounting 6 hours
Prerequisite: BUS 120.

A study of partnership and corporation accounting including a study of payrolls, federal and state taxes. Emphasis is placed on the recording, summarizing and interpreting of data for management control rather than on bookkeeping skills. Accounting services are shown as they contribute to the recognition and solution of management problems.

BUS 183 Terminology and Vocabulary 3 hours
Prerequisite: None.

Technical terminology and vocabulary as it is used in business offices is introduced in this course.

BUS 205 Advanced Typewriting 4 hours
Prerequisite: BUS 104. Speed requirement, 50 words per minute for five minutes.

Emphasis is placed on the development of individual production rates. The student learns the techniques needed in planning and in typing projects that closely approximate the work appropriate to the field of study. These projects include review of letter forms, methods of duplication, statistical tabulation, and the typing of reports, manuscripts and legal documents.

BUS 209 Production and Speed Building 4 hours
Prerequisite: BUS 205.

A course designed to bridge the gap between classroom and office for the typist. Emphasizes speed building on straight copy and increased skill in production, utilizing material closely related to the actual office situation.

BUS 210 ABC Shorthand 4 hours
Prerequisite: None.

A course designed to prepare the student to take shorthand at a speed of 60-80 words a minute.

Material used will enable the business student to handle general office dictation of a minor nature.

BUS 212 Machine Transcription 4 hours
Prerequisites: BUS 205, ENG 204.

A study and practice course in the use of transcribing machines in business dictation. Proficiency in word usage, correct grammar, and letter styles will be emphasized.



BUS 213 Office Procedures 4 hours
Prerequisites: BUS 205, ENG 204.

Designed to acquaint the student with the responsibilities encountered by a general office worker during the work day. These include the following: receptionist duties, handling the mail, telephone techniques, travel information, telegrams, office records, purchasing of supplies, office organization, and insurance claims.

BUS 215 Office Application 6 hours
Prerequisites: BUS 110, BUS 205, BUS 207 or 212, BUS 213.

In this course students are assigned to work in a business, technical, or professional office for six hours per week. The objective is to provide actual work experience for students and an opportunity for the practical application of the skills and knowledge previously learned.

BUS 229 Taxes 4 hours
Prerequisite: BUS 121.

Application of federal and state taxes to various businesses and business conditions. A study of the following taxes is included: income, payroll, intangible, capital gain, sales and use, and inheritance.

BUS 271 Office Management 3 hours
Prerequisite: None.

Presents the fundamental principles of office management. Emphasis on the role of office management including its functions, office automation, planning, controlling, organizing and actuating office problems.

ECO 102 Economics 3 hours
Prerequisite: None.

The fundamental principles of economics including the institutions and practices by which people gain a livelihood. Included is a study of the laws of supply and demand and the principles bearing upon production, exchange, distribution, and consumption both in relation to the individual enterprise and to society at large.

BDP 101 Introduction to Data Processing Systems 4 hours
Prerequisite: None.

Fundamental concepts and operational princi-

ples of data processing systems, as an aid in developing a basic knowledge of computers, prerequisite to the detailed study of particular computer problems.





**GENERAL OFFICE TECHNOLOGY
DAY**

FIRST QUARTER		CREDIT	FOURTH QUARTER		CREDIT
BUS 101	Introduction to Business	5	BDP 101	Intro to Data Processing	4
BUS 102	Typewriting	4	BUS 205	Advanced Typewriting	4
BUS 183	Terminology & Vocabulary	3	ECO 102	Economics	3
ENG 100	Communication Skills	2	ENG 103	Communication Skills	2
°MAT 110	Business Math	5	*	Elective	3
SECOND QUARTER			FIFTH QUARTER		
BUS 103	Typewriting	4	BUS 212	Machine Transcription	4
BUS 115	Business Law	3	BUS 213	Office Procedures	4
BUS 120	Accounting	6	BUS 229	Taxes	4
ENG 101	Communication Skills	5	ENG 206	Business Communications	3
PSY 112	Personal Development	3	*	Elective	3
THIRD QUARTER			SIXTH		
BUS 104	Typewriting	4	BUS 209	Production & Speed Building	4
BUS 110	Office Machines	5	BUS 210	ABC Shorthand	5
BUS 112	Filing	5	BUS 215	Office Application	6
BUS 121	Accounting	6	BUS 271	Office Management	3
ENG 103	Communication Skills	3			

° Those students who do not pass the mathematics pretest section of the Admissions Test will be required to take Mathematics 101G Technical Mathematics as a pre-requisite for Mathematics 110 Business Math.

* General Office Technology students may select for elective any courses offered in any business curriculum or Social Science.

Total hours required for graduation: 113

**GENERAL OFFICE TECHNOLOGY
EVENING**

FIRST QUARTER		CREDIT	FOURTH QUARTER		CREDIT
BUS 101	Intro to Business	5	BDP 101	Intro to Data Processing	4
BUS 102	Typewriting	4	BUS 229	Taxes	4
ENG 100	Communication Skills	2	ENG 103	Communication Skills	2
°MAT 110	Business Math	4	*	Elective	3
SECOND QUARTER			FIFTH QUARTER		
BUS 103	Typewriting	4	BUS 115	Business Law	3
BUS 120	Accounting	6	BUS 205	Advanced Typewriting	4
ENG 101	Communication Skills	5	ENG 206	Business Communications	3
			*	Elective	3
THIRD QUARTER			SIXTH QUARTER		
BUS 104	Typewriting	4	BUS 212	Machine Transcription	4
BUS 110	Office Machines	4	BUS 213	Office Procedures	4
BUS 121	Accounting	6	BUS 271	Office Management	3
ENG 103	Communication Skills	3	ECO 102	Economics	3
SEVENTH QUARTER			CREDIT		
BUS 183	Terminology & Vocabulary	3			
BUS 209	Production & Speed Building	4			
BUS 210	ABC Shorthand	4			
BUS 215	Office Application	6			
PSY 112	Personal Development	3			

Students may take fewer hours each quarter if desired.

- ° Those students who do not pass the mathematics pretest section of the Admissions Test will be required to take Mathematics 101G Technical Mathematics as a pre-requisite for Mathematics 110 Business Math.
- * General Office Technology students may select for elective any courses offered in any business curriculum or Social Science.

Total hours required for graduation: 113.



LIBRARY TECHNOLOGY

AIM

The Library Technology program is designed to prepare persons for employment in various types of libraries-public, school, academic, government, and industry. The curriculum provides a background of general education and basic library skills to prepare interested students to enter library work above the level of clerk while the Practicum introduce the student to a variety of on-the-job library experiences. The library content courses are not designed to transfer as library science courses in professional degree programs at accredited library schools; however, the library courses will be helpful as background for students desiring to enter the profession and the business courses will provide a background for further business training. Thus the graduate of the Library Technology program is afforded a variety of career opportunities.

AUD 104 Audiovisual Equipment 3 hours
Prerequisite: None.

An introduction to the nature and use of audiovisual materials. Emphasis is on the operation of equipment and the communication characteristics of the various non print media.

AUD 105 Introduction to A/V Production 3 hours
Prerequisite: None.

An intensive study of the necessary laboratory work so that the students will be capable of producing materials such as 2" x 2" slides, transparencies, audio tapes, and dry mount materials suitable for use in learning environments. The student will also be able to operate various components of video tape recording systems to assist in the production of video taped programs.

LIB 205 Practicum 3 hours
Prerequisite: LIB 204.

Continuation of supervised practice. Six hours per week of practice work in an approved location.

LIB 207 Seminar 2 hours
Prerequisite: None.

A group discussion seminar on current library work-oriented problems and personal development. Emphasis is placed on the responsibilities of the Library Technical Assistant as a member of the Library staff.

BUS 102 Typewriting 4 hours
Prerequisite: None.

Introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts.

BUS 103 Typewriting 4 hours
Prerequisite: BUS 102 or the equivalent. Speed requirement, 30 words per minute for three minutes.

Instruction emphasizes the development of speed and accuracy with further mastery of correct typewriting techniques. These skills and techniques are applied in tabulation, manuscript, correspondence, and business forms.

BUS 110 Office Machines 4 hours
Prerequisite: None.

A general survey of business and office machines. Students will receive training in techniques, processes, operation and application of the ten-key adding machines, full keyboard adding machines, and calculator.

LIB 101 Introduction to Libraries and Information Centers 4 hours
Prerequisite: None.

General background and philosophy of informa-

tion service, including a brief history of libraries and information centers and their recent developments. Introduction to administration; organization of materials, functions and uses of information centers, and terminology. A study of the duties and qualifications of the personnel who staff these centers.

LIB 102 Selection and Ordering of Media Materials 3 hours
Prerequisite: None.

Policies and practices of acquisition of various kinds of materials, information relative to their sources, and the techniques of ordering. Includes borrowing films and film rentals, interlibrary loan materials, microfilm, etc.

LIB 103 Basic Reference Materials 3 hours
Prerequisite: None.

Study of general and special reference works and other basic sources of information. This course also includes practice in preparation of simple bibliographies (emphasizing correct form) of all kinds of media.

LIB 201 Introduction to Cataloging and Classification 4 hours
Prerequisite: None.

Routine aspects of simple cataloging. Includes study of the organization of media collections, bibliographic searching for cataloging information, practice in descriptive cataloging, production and filing of catalog cards, and physical preparation of materials for use.

LIB 202 Media Circulation Procedures 3 hours
Prerequisite: None.

Study of the principles of various circulation systems and their attendant procedures. Supervised performance of routines that are common to information centers, such as scheduling, record keeping, inventory, shelving, filing, processing and mending materials, and handling equipment.

LIB 203 Practicum 3 hours

Prerequisite: None.

Student will be placed in an approved location for six hours per week of supervised learning experiences under a professional librarian or media specialist, putting into practice the various skills learned.

LIB 204 Practicum 3 hours

Prerequisite: None.

Continuation of supervised practice. Six hours per week of practice work in an approved location.

LIBRARY TECHNOLOGY**FIRST QUARTER**

			CREDIT
LIB	101	Intro To Libraries & Information Centers	4
BUS	102	Typewriting	4
ENG	100	Communication Skills	2
MAT	101	Technical Math	5

FOURTH QUARTER

			CREDIT
AUD	105	Intro to AV Production	3
BUS	110	Office Machines	4
ENG	103	Communication Skills	2
POL	103	State and Local Government	5

SECOND QUARTER

LIB	102	Selection and Ordering Media Materials	3
BUS	103	Typewriting	4
ENG	101	Communication Skills	5
MAT	110	Business Math	5
		Elective	3

FIFTH QUARTER

LIB	103	Basic Reference Materials	3
LIB	203	Practicum	3
SOC	102	Principles of Sociology	5
		Elective	3

THIRD QUARTER

AUD	104	Audiovisual Equipment	3
LIB	201	Intro to Classifications and Cataloging	4
ENG	102	Communication Skills	3
PSY	102	General Psychology	5
		Elective	3

SIXTH QUARTER

LIB	202	Media Circulation Procedures	3
LIB	204	Practicum	3
HUM	201	Intro to Western Culture	4
		Elective	3

SEVENTH QUARTER

LIB	205	Practicum	3
LIB	207	Seminar	2
GEO	201	Geography	4
		Elective	3

CREDIT

Total credit hours required for graduation: 106.

MACHINIST

AIM

The aim of this one-year program is to develop competent machine tool operators and entry level set-up persons. Graduates will be proficient in the operation of basic machine tools and will be able to make set-ups.

MEC 1111 Materials 3 hours

Prerequisite: None.

Discussion of ferrous metals; their origin and use. Properties of various alloys, their use and machining characteristics. Theory of alloying, heat treatment; classification of steels and magnets.

MEC 1112 Materials 3 hours

Prerequisite: None.

Discussion of nonferrous materials used in industry. Composition and characteristics of aluminum, copper, and lead alloys. Discussion of man made materials, their use and machining characteristics.

MEC 1114 Manufacturing Processes 5 hours

Prerequisite: None.

A review of modern manufacturing processes, their advantages and limitations. Visits to appropriate plants augment instruction.

MEC 1201 Machine Shop 4 hours

Prerequisite: None.

An introductory course designed to acquaint the student with basic hand tools, safety procedures and machine processes of our modern industry. It will include a study of measuring instruments, characteristics of machines and cutting tools. The student will become familiar with basic machine tools by performing selected operations.



MEC 1202 Machine Shop 7 hours

Prerequisites: MEC 1201 or equivalent.

Advanced operations of lathe, drilling, boring and grinding machines. Study of the types of milling machines, cutters, jigs and fixtures, and accessories used in a modern industrial plant. Safety in the operational shop is stressed.

MEC 1203 Machine Shop 7 hours

Prerequisite: MEC 1202 or equivalent.

Use of machine tools in the manufacturing of tools, jigs, fixtures and dies. Principles of planning, set-ups and quality resistance. Gauge parts, tolerances, and mass production of components. Twenty hours of work in a well equipped machine shop can be accepted as credit for this course.

MEC 1204 Machine Shop 7 hours

Prerequisite: MEC 1203.

Continuation of MEC 1203. Students will work on independent projects. Twenty hours of work a

week in a well equipped machine shop can be accepted as credit for the course.

DFT 1201M Mechanical Drafting 3 hours

Prerequisite: None.

Interpretation and reading of blueprints. The basic principles of various prints, sketches, diagrams, lines, views, dimensions, and notes.

DFT 1202M Mechanical Drafting 3 hours

Prerequisite: DFT 1201M or equivalent.

Further interpretation of blueprints as used in industry. Introduction to drafting principle, sketching and preparation of simple drawings.

WLD 1129 Basic Welding 3 hours

Prerequisite: None.

Safe and correct methods of assembling and operating welding equipment. Practice in surface welding, brazing, silver-soldering and flame cutting applicable to mechanical repair and assembly. Principles of electric welding.

MACHINIST

FIRST QUARTER	CREDIT	THIRD QUARTER	CREDIT
DFT 1201M Mechanical Drafting	3	ENG 1102 Communication Skills	3
ENG 1101 Reading Improvement	2	MEC 1114 Manufacturing Processes	4
MAT 1101G Technical Mathematics	5	MEC 1203 Machine Shop	7
MEC 1111 Materials	3	PHY 1121M Applied Science	4
MEC 1201 Machine Shop	4		

SECOND QUARTER

DFT 1202M Mechanical Drafting	3
MAT 1202M Technical Mathematics	5
MEC 1112 Materials	3
MEC 1202 Machine Shop	7

FOURTH QUARTER

MAT 1103 Shop Mathematics	3
MEC 1204 Machine Shop	7
PHY 1122A Applied Science	4
WLD 1129 Basic Welding	3

MENTAL HEALTH ASSOCIATE**AIM**

The Mental Health Associate Program is designed to provide full-time employees in mental health settings with the knowledge, skills, and understandings that will enable them to optimally function in the role of mental health worker. The program seeks to provide training for middle-level mental health workers in a 102-hour curriculum consisting of courses in arts and sciences, specialized courses in mental health work, and supervised clinical training.

Course work provides a foundation of knowledge from mental health, sociology, psychology, and group dynamics. Laboratory and clinical experiences provide opportunities to develop human relations skills, to gain an overview of mental health services provided by various types of facilities, and to develop understanding of the role of mental health associates within the framework of a team approach to comprehensive mental health services. The program is designed to facilitate the education of full-time employees; hence, the curriculum is pursued only by students on a part-time basis. The Associate in Applied Science Degree is awarded upon successful completion of the program.

MHA 100 Mental Health Orientation 4 hours
Prerequisite: None.

Orientation to the policies, procedures, and practices commonly accepted in mental health institutions; and introduction to the basic patient care principles and techniques underlying good patient care in meeting the needs of patients during observation, ambulation, and mild mentally ill stages. Included will be clinical lab and/or ward experiences.

MHA 111 Introduction to Mental Health 4 hours
Prerequisite: MHA 100.

An overview of the history, current concepts and trends in mental health. Emphasis is given to the current comprehensive community approach to mental health and to the various disciplines within the field of mental health.

MHA 112 Group Processes I 2 hours
Prerequisite: MHA 100 or permission of Program Coordinator.

An introduction to interpersonal concepts and problems of communications in interpersonal transactions. Exploration of one's attitudes and feelings as related to the interactions of the individual in an unstructured group experience.

MHA 112P Practicum I 2 hours
Prerequisite: (or co-requisite): MHA 112.

The student will spend six hours per week in clinical laboratory experiences under the supervision of a qualified instructor. Emphasis will be on the application of concepts and principles from related course content.

MHA 113 Group Processes II 2 hours
Prerequisite: (or co-requisite): MHA 112.

A continued study of interpersonal relationships in small group interactions. Self-awareness and awareness of others by being involved in a group experience. Introduction of structural group exercises designed to focus on various aspects of content and process of behavior.

MHA 113P Practicum II 2 hours
Prerequisite: SOC 103 and PSY 211, co-requisite MHA 113.

The student will spend six hours per week in a clinical laboratory for specific social problems such as alcoholism, drug addiction, and childhood personality disorders under the supervision of a

qualified faculty member. Emphasis will be on the application of theoretical concepts and principles from related course content and development of patient care plans.

MHA 114 Social Agency Interviewing 5 hours
Prerequisite: MHA 111 or permission of Program Coordinator.

Study of purpose, structure, focus, and techniques employed in effective interviewing. Laboratory experiences provide opportunities for observation, practice, recording, and summarizing personal histories under faculty supervision.

MHA 210 Group Dynamics I 2 hours
Prerequisite: MHA 113.

Study of group dynamics, transactional theory of groups, role playing, psycho-drama, and activities therapy. A continuation of MHA 113.

MHA 210P Practicum III 2 hours
Prerequisite (or co-requisite): MHA 210.

A study of the application of occupational and recreational techniques and skills. Each student will spend six hours per week learning new skills, teaching activities to patients and developing programs of activities in a therapeutic setting under the supervision of a qualified faculty member.

MHA 211 Group Dynamics II 1 hour
Prerequisite: MHA 210.

The final formal experiences of the student. Attention is given to the development of the student's ability to communicate with others as well as facilitate communication between others.

MHA 211P Practicum IV 2 hours
Prerequisite: MHA 211.

The student will be assigned for six hours per week in a faculty supervised clinical laboratory for admissions, diagnosis, and preliminary treat-

ment procedures, or other areas of special, individual interest.

MHA 215 Selected Clinical Experiences 6 hours
Prerequisite: On approval of advisor.

Students are provided with clinical experiences designed to develop insight and expertise in selected areas of human services. Clinical experiences must be approved by the program coordinator.

MHA 220 Introduction to Occupational and Recreational Therapy 3 hours
Prerequisite: MHA 111 or permission of Program Coordinator.

Overview of the types of activities utilized as therapeutic techniques, with particular emphasis on the purpose of each, ways of creating and holding interests in the ability and the role of the associate in assisting patients to participate.

ENG 100 Communication Skills 2 hours
Prerequisite: None.

Required of all entering, a foundation course which is taught for full credit toward graduation. Through this course, the student is thoroughly acquainted with philosophy, purpose, service, and academic policies of Durham Technical Institute. The course begins a guidance procedure through which the student defines his interests, aptitudes, goals, and the procedure for his attainment of these goals. Writing and speaking are accented in problem-solving activities.

ENG 101 Communication Skills 5 hours
Prerequisite: ENG. 100.

The course has two major segments. One part of the course emphasizes speaking and listening skills, simple grammar, and clause pair relationships. The other part of the course works to improve reading versatility, and the student is given a choice in the reading topics he chooses to consider.

ENG. 102 Communication Skills 3 hour

Prerequisite: ENG. 101.

This course emphasizes the paragraph while accenting some sophisticated aspects of grammatical structure. The student considers two major areas: The logic of comprehension and methods of paragraph development. The student progresses toward writing a total piece.

ENG. 203 Communication Skills 2 hours

Prerequisite: ENG. 102.

This course deals with those particular types of writing which are pertinent to the students' curriculum. In addition to these specialized forms of written communication, the course includes a unit which prepares the student to apply for a job. This unit includes resumes, applications, and interviews.

PSY 102 General Psychology 5 hours

Prerequisite: None.

A study of the various fields of psychology; the developmental process; motivation; emotion; frustration and adjustment; mental health; attention and perception; problems of group living. Attention is given to applications of these topics to problems of study, self-understanding and adjustment to the demands of society.

PSY 120 Growth and Development 5 hours

Prerequisite: PSY 102.

A study of the basic principles of physiological and psychological growth stages of child from conception through adolescence.

PSY 211 Behavior Disorders 5 hours

Prerequisite: PSY 102.

A study of general patterns of disordered behavior with emphasis on biological and environmental causal factors and human coping mechanisms.

PSY 225 Introduction to Psychological Testing 3 hours

Prerequisite: PSY 102.

Introduction to psychological tests; nature and application of standardized tests; illustrations of widely used tests; methods of administering, scoring, and interpreting test results.

SOC 102 Principles of Sociology 5 hours

Prerequisite: None.

An introductory course in the principles of sociology. An attempt to provide an understanding of culture, collective behavior, community life, social institutions, and social change. Presents the scientific study of man's behavior in relation to other men, the general laws affecting the organization of such relationships and the effects of social life on human personality and behavior.

SOC 103 Social Problems 5 hours

Prerequisite: SOC 102.

A study of the nature and extent of major social problems of contemporary society, with emphasis given to such problems as family disorganization, crime and delinquency, minority groups, industrialization, and urbanization.

SOC 212 Marriage and the Family 3 hours

Prerequisite: SOC 102.

The study of the origin and development of the family as a social institution with emphasis on courtship, marriage, parenthood, family relationships and problems of the contemporary American family.

In addition to the above listed required courses, students must select a minimum of 27 elective hours. Also, electives may be selected from course offerings in the areas of business, sociology, and psychology with the permission of the program coordinator.

BIO 102 Anatomy and Physiology 5 hours
Prerequisite: None.

A study of the structure and normal functions of the human body and its related systems with emphasis upon the inter-related functions of various parts and systematic processes in the development of basic physiological principles.

MED 150 Pharmacology 3 hours
Prerequisite: None.

The course will provide the student with a comprehensive knowledge of medications used in mental health settings.

PSY 222 The Exceptional Child 5 hours
Prerequisite: PSY 102.

A survey course with special emphasis on the mentally retarded and emotionally disturbed child. Social, educational and psychological needs of the exceptional child are studied.

PSY 223 The Addictive Personality 5 hours
Prerequisite: PSY 102.

A survey of environmental and physical factors that differentiate the addict. Stress is given the theories of cause and treatment.

PSY 226 Using Tests to Understand Child Development 5 hours
Prerequisite: PSY 102.

Survey of psychometric tests related to development; proper use of tests and their interpretation; signs and screening methods for developmental disabilities; reasons for referral; methods of developmental assessment.

PSY 230 The Psychology and Physiology of Aging 3 hours
Prerequisite: PSY 102.

A survey course concerning the physical and psy-

chological changes occurring in the late middle age with emphasis on the care and treatment of the aged in our society.

PSY 250M Behavior Modification 5 hours
Prerequisite: PSY 102.

Designed to provide direct treatment staff with a working knowledge of learning principles and the application of these principles to the behavioral problems presented by institutionalized patients. The material will be presented in a lecture-discussion format supplemented by films. Each class member will be required to analyze how he or she might employ the learning principles discussed in class in his or her work with patients.

PSY 250R Behavior Modification 5 hours
Prerequisite: PSY 102.

Introduction to the principles of behavior modification, definition and measurement of behavior, principles of reward, punishment, token economies. Orientation is toward relevance of these principles for the training and management of retardates.

PSY 253 Mental Retardation 5 hours
Prerequisite: None.

Theories of Retarded Development; concepts of mental deficiency, developmental disability, learning disability, etiology-neurological, metabolic, genetic, cultural-familial, treatments in area of current problems and issues.

PSY 254 Mental Retardation 5 hours
Prerequisite: PSY 253.

A continued study of mental retardation; evaluation and treatment; institutional, community, state, and federal resources for rehabilitation.

OPTICIANRY

AIM

Opticianry is the art of applying the science of optics to the making and fitting of lenses and devices to aid in providing comfortable and efficient vision. The science of optics is a branch of physics which is concerned with the study of light; the nature and properties of light, the role of light in vision, and with the geometry of reflection and refraction of light by lenses. Your job as an optician or ophthalmic dispenser will be to measure, adapt and fit eye glasses or contact lenses to the human face as well as aiding or correcting visual (which pertains to the eye) peculiarities. You will be a specialist in the science of ophthalmic optics and will apply your knowledge, both technical and mechanical, to the production of lenses according to prescriptions written by the ophthalmologist or optometrist. You will be a member of the "eye health team" and will deal directly with the patient who is in need of your professional services.

After graduation from this two year program many employment opportunities are open. In North Carolina graduates are eligible to take the North Carolina Opticians Examination and become licensed opticians. In those states not at present requiring a license, a graduate may immediately open his own business if he or she so desires. Also, without having a license, the graduate is qualified to perform as a branch manager of a wholesale laboratory, a technician in a wholesale laboratory, or an optical goods salesman. All of these opportunities are open to the graduate and each carries a good financial return.

OPT 101 Theoretical Optics

4 hours

Prerequisite: None.

Basic concepts of manufacturing modern ophthalmic spherical lenses and prisms will be studied

with an introduction to light refraction, the metric system, and the dioptric system. Emphasis is placed on focal lengths and deviation of light by fundamental ophthalmic equations and computations. Circle relationships, the history and development of glass and the requirements of ophthalmic glass are studied.

OPT 102 Theoretical Optics

2 hours

Prerequisites: OPT 101, OPT 111.

Computation and specification for cylindrical lenses for astigmatism will be studied in theory. Ophthalmic formulas and trigonometric relationships will be employed in the calculation of cylinder powered lenses. Toric transposition, corrected spherical curves, and focal powers involving thick lenses will also be studied.

OPT 103 Theoretical Optics

2 hours

Prerequisites: OPT 102, OPT 112.

The history of bifocals from 'Ben Franklin' to modern ophthalmic reading segments and trifocals for the presbyopic patient will be stressed. Different types, sizes, and settings of multifocal lenses for the patient are included. Study of accommodation for near and intermediate distances will introduce the student to physiology of the eye.

OPT 104 Theoretical Optics

2 hours

Prerequisites: OPT 103, OPT 113.

Spherical, prismatic, and cylindrical lenses are reviewed and ophthalmic theory is continued.

OPT 111 Mechanical Optics

2 hours

Prerequisite: None.

The student will apply the introductory optical theory for wholesale production of spherical and prismatic lenses. Laboratory instruction will include techniques of lens marking, blocking, using abrasive compounds, grinding, polishing, and

inspecting lens surfaces and refractive powers. The student will learn the use of hand spindle machines, automatic polishing machines, diamond lap automatic lens curve generating machines, and the lensometer/certometer. Emphasis is placed on care of grinding tools, machinery, and on accuracy.

OPT 112 Mechanical Optics

2 hours

Prerequisite: OPT 111.

Laboratory beginning with surfacing of cylindrical lenses, plus curves, trueing of both spherical and cylindrical laps, and continuation of spherical and prismatic lens surfacing will be studied.





- OPT 113 Mechanical Optics** 2 hours
Prerequisite: OPT 112.
Calculations and surfacing procedures for bifocals, trifocals, and special lenses for high refractive errors, including the cataract, are performed in the ophthalmic laboratory.
- OPT 114 Mechanical Optics** 2 hours
Prerequisite: OPT 113.
Laboratory emphasis is placed on accuracy and speed for laboratory surfacing operations. The student is introduced to finishing operations such as hand edging, beveling, and heat treating.
- OPT 199 Plastic Lenses** 2 hours
Prerequisite: None.
History of plastic lenses introduced. Theory and guide to plastic lenses with the application of lap selection, tints, and dyes.
- OPT 204 Theoretical Optics** 2 hours
Prerequisite: Opt 104.
Instruction in this course will cover prisms, different types of prisms, definitions, use of Prentice's Rule and thickness computation. Decentration to avoid or create prism, image jump, object displacement and vertical imbalance of single vision and bifocal lenses will be extensively discussed with an in depth application of Prentice's Rule. Toric and flat transposition, crossed cylinders and the optical cross will be covered.
- OPT 205 Theoretical Optics** 2 hours
Prerequisites: OPT 204, OPT 214.
A continuation of OPT 204 with the addition of cylinder powers in oblique meridians, applications of many of the available multifocal lenses, both glass and plastic, lens abbreviations and corrected curves.
- OPT 206 Theoretical Optics** 2 hours
Prerequisites: OPT 205, OPT 215.
Spectral transmission and absorption characteristics of modern ophthalmic glass and plastic will be discussed and their applications reviewed. Repeated emphasis on proper use of base curve selections and the various availability lens charts, with a complete review of all formulas and their applications.
- OPT 214 Mechanical Optics** 2 hours
Prerequisite: OPT 114.
A continuation of basic finishing operations which include checking, marking, cutting, edging, and leveling of lenses, and insertion of lenses into zylonite frames. Applications of Prentice's Rule in figuring decentration to create or avoid prism, compound prisms and bifocal surfacing and finishing. Instrument and machine maintenance.
- OPT 215 Mechanical Optics** 2 hours
Prerequisite: OPT 214.
Layout and finishing of multifocal lenses, lens insertion into all available styles, zylonite, metal and combination frames. Basic instruction in mounting lenses on rimless and semi-rimless mounting, heat-treating procedures, and instrument and machine maintenance.
- OPT 216 Mechanical Optics** 2 hours
Prerequisite: OPT 206.
Intensified work in all phases of finishing operations, including automatic leveling with special emphasis on rimless and semi-rimless work. Safety lenses and heat-treating procedures are studied.
- OPT 231 Ophthalmic Dispensing** 7 hours
Prerequisite: Completion of First Year.
Introduction, history, and evolution of the present day professional optician. Topics included are: development of spectacles, measuring de-

VICES, dispensing procedures, the use of lenses, neutralizing instruments, prescription interpretation and analysis, determination of facial and spectacle measurements and requirements, methods and use of devices in determining pupillary distances, and the criteria of comfortable and optically well-fitted glasses. Practice fitting and dispensing the plastic-type spectacles is included.

OPT 232 Ophthalmic Dispensing 6 hours
Prerequisite: OPT 231.

Clinical practice and individual instruction in fitting, adjusting, and general dispensing of spectacles. The use of all ophthalmic pliers and the related dispensing devices required in fitting each specific style of eyewear, single vision, multifocal, prism and anisometropic prescription analysis. Professional ethics of opticianry and office procedures are studied.

OPT 233 Ophthalmic Dispensing 6 hours
Prerequisite: OPT 232.

A continuation of instruction and clinical practice in dispensing all types of spectacles. Analysis of complex and unusual prescriptions and the dispensing procedures in these cases. Instruction in fitting special types of spectacles including: cataract, telescopic, bi-centric, monocular, microscopic, vocational, avocational, sports, safety, stenopaic, ptosis crutch, subnormal vision and others. Frame analysis for the patient's needs, dependent upon intended use and present day vogue, vertex, distance measurements and prescription compensation. Office management and credit sales with field trips to several ophthalmic product manufacturing plants are also included.

OPT 241 Anatomy of the Eye 2 hours
Prerequisite: None.

A detailed study of the composition of the eye and its associated structures such as orbit lids, lacrimal apparatus, and muscles.

OPT 242 Physiology of the Eye 2 hours
Prerequisite: OPT 241.

A detailed study of the function of the eye and its associated structures. Also included is a study of accommodation and presbyopia, refractive errors and their correlation, binocular vision, eye muscle imbalance, and common eye diseases.

OPT 261 Contact Lenses 3 hours
Prerequisite: None.

History, development and manufacture of contact lenses, anatomical data of the eye with emphasis on the cornea, study of appropriate application of contact lenses when they are indicated and contraindicated to the instruments used followed by theory of contact lenses and optics of contact lenses.



OPT 273 Seminar

1 hour

Prerequisite: None.

Ethics of the profession; job opportunities; State Board Examinations of the various states; variations in state laws; review of first-year technical courses in preparation for North Carolina State Board Examination are covered in this course.

PHY 108 Geometric Optics

5 hours

Prerequisite: PHY 107.

A basic study of the nature and theory of light. Instruction will include but will not be limited to the following: luminous sources and propagation of light, concept of rays, pencils, and beams, Huygens construction of a wavefront, principles of photometry, reflection at plane and spherical mirror surfaces, also refraction at plane surfaces and refraction of a single ray through a prism, minimum deviation, effects and measurements of grazing incident and emergent rays. Demonstration and discussion of Youngs interference experiments to be performed by students to correlate theory.

PHY 109 Geometric Optics

5 hours

Prerequisite: PHY 108.

A continuation of Geometric Optics 108. Topics to be covered but not limited to the following will include: Refraction through thin lenses, refraction power, object-image relationship, lens gauge constant, refractions through thick lenses, power of cylinder lenses, effect of spherocylindrical lens combinations, optical instruments, defects of lenses, lens coating and polarization of light, optical system of the eye, magnification of optical systems, and retinal magnification. Selected experiments are to be performed by the students to correlate theory.



OPTICIANRY

FIRST QUARTER

OPT 101	Theoretical Optics	4
OPT 111	Mechanical Optics	2
ECO 102	Economics	3
ENG 100	Communication Skills	2
MAT 101	Technical Mathematics	5

CREDIT**FOURTH QUARTER**

OPT 104	Theoretical Optics	2
OPT 114	Mechanical Optics	2
OPT 199	Plastic Lenses	2
PHY 109	Geometric Optics	5
	Elective	3

CREDIT**SECOND QUARTER**

OPT 102	Theoretical Optics	4
OPT 112	Mechanical Optics	2
ENG 101	Communication Skills	5
MAT 102	Technical Mathematics	5
PHY 107	General Physics	4

FIFTH QUARTER

OPT 204	Theoretical Optics	2
OPT 214	Mechanical Optics	2
OPT 231	Ophthalmic Dispensing	7
OPT 241	Ocular Anatomy	2
ENG 203	Communication Skills	2

THIRD QUARTER

OPT 103	Theoretical Optics	2
OPT 113	Mechanical Optics	2
CHM 111	Chemistry	5
ENG 102	Communication Skills	3
PHY 108	Geometric Optics	5

SIXTH QUARTER

OPT 205	Theoretical Optics	2
OPT 215	Mechanical Optics	2
OPT 232	Ophthalmic Dispensing	6
OPT 242	Physiology of the Eye	2
	Elective	3

SEVENTH QUARTER

OPT 206	Theoretical Optics	2
OPT 216	Mechanical Optics	2
OPT 233	Ophthalmic Dispensing	6
OPT 261	Contact Lenses	3
OPT 273	Seminar	1

PHARMACY TECHNICIAN

AIM

The aim of this two-quarter program is to provide a technician qualified to perform a variety of technical duties related to preparing and dispensing drugs in accordance with standard procedures and laws under the supervision of a registered pharmacist. In hospitals, Pharmacy Technicians transcribe physicians' medication orders, fill orders to be checked by pharmacists, and deliver them. The Pharmacy Technician must be capable of preparing admixtures of intravenous solutions, maintaining control drug distribution, pricing and ordering drugs, and preparing bulk formulations. Additional duties require the replenishing of pharmaceutical supplies and medications on patient care units, filing prescriptions, and maintaining patient profile records. The first of its kind in the community college systems of the southeastern United States, the Pharmacy Technician program has been designed to answer the increased need for technical, supportive personnel to carry out the routine functions in the dispensing of drugs to hospital inpatients and ambulatory patients.

BIO 1100 Physiopathology

4 hours

Prerequisites: CHM1100.

This course involves a comprehensive study of human physiology with specific emphasis upon the disruption of normal physiology by various disease processes. Included is a general study of anatomy and physiology with introductions into the causes of disease, inflammation processes, resistance, transmission, and abnormal cellular structure and function. Each organ system will be handled individually with time spent in covering the common diseases and abnormalities associated with each system.



**BUS 1100 Typing**

4 hours

Prerequisite: None.

An introduction to the touch typewriting system with emphasis on correct techniques, master of the keyboard, simple business and pharmaceutical correspondence, tabulation, manuscripts, medication labels, and drug records and ordering forms.

CHM 1100 General Chemistry

4 hours

Prerequisite: None.

A study of introductory inorganic and organic chemistry with emphasis on the stoichiometric relationships and theories suitable for the practical application in pharmacy technology. Included is a general study of chemical measurement techniques, fundamental chemical concepts, structure and classification of the elements, chemical and formula compounds, bonding, reactions and equations, molecular and equivalent weights, solutions and concentration theory, ionization and acid-base chemistry, and hydrocarbon and biochemical compounds and formulas.

ENG 1100 English

3 hours

Prerequisite: None.

An introduction to medical and pharmaceutical terminology. Emphasis is placed on basic communication skills of speaking, listening, and writing with application to the specific course of study.

MAT 1100 Pharmaceutical Mathematics

5 hours

Prerequisite: None.

Basic operations with integers, common fractions and decimal fractions, percentages, ratios and proportion, basic algebraic operations, equations, and exponents. Included will be a detailed study of metrology, metric system (mainly weight and volume), apothecary and avoirdupois sys-

tems, unit conversions, and equivalencies. Direct emphasis will be placed on pharmaceutical problems and calculating medication formulas and dosages.

PHM 1100 Pharmacology 3 hours
Prerequisite: CHM 1100.

An introductory study of drug products, how drugs prevent or interfere with disease processes, including the most commonly encountered drugs in each therapeutic category. The sequence of study of therapeutic categories is coordinated with the sequence of study of the organ systems and disease processes covered in BIO 1100. Emphasis is placed on the generic and trade names of the common drugs and to give the common drugs and to give the student an appreciation for the use and importance of drug in treating different disease states.

PHM 1101 Hospital Pharmacy for Pharmacy Technicians 3 hours
Prerequisite: CHM 1100.

A study of the technical procedures for the safe and accurate preparation and dispensing of

drugs, including the procuring, compounding, packaging, and labeling of drugs and the theory and practice behind dispensing of these drugs to hospital inpatients and ambulatory patients. The objective is to prepare students to perform these activities under the supervision of a pharmacist. The topic sequence is coordinated with practical experiences in the Hospital Pharmacy Practicum.

PHM 1102/P Hospital Pharmacy Practicum 8 hours
Prerequisites: PHM 1100, PHM 1101.

A laboratory designed to give the student on-the-job training in a variety of actual hospital pharmacy settings, with practical experiences in study areas covered in PHM 1101. Exposure to several hospital pharmacies in the Raleigh-Durham-Chapel Hill area provides the student experience in several drug dispensing systems.

PHARMACY TECHNICIAN

FIRST QUARTER

BUS 1100	Typing	4
CHM 1100	Chemistry	4
ENG 1100	Communication Skills	3
MAT 1100	Pharmaceutical Mathematics	5

CREDIT

SECOND QUARTER

BIO 1100	Physiology Pathology	4
PHM 1100	Pharmacology	3
PHM 1101	General Hospital Pharmacy	3
PHM 1104P	Hospital Pharmacy Practicum	8

CREDIT

POLICE SCIENCE**AIM**

The program is designed to provide occupational training for the individual who has a definite interest in and adaptability to a law enforcement career. It offers practical, technical, and general instruction to meet requirements of various law enforcement agencies and provides the student with skills, knowledge, and attitudes, necessary for employment at operational or management levels.

PSC 101 Introduction to Law Enforcement 5 hours
Prerequisite: None.

A general course designed to familiarize the student with a philosophy and history of law enforcement, including its legal limitations in a democratic republic, a survey of the primary duties and responsibilities of the various law enforcement agencies, delineation of the basic processes of justice, an evaluation of law enforcement's current position, and an orientation relative to law enforcement as a vocation.

PSC 110 Police Role in Crime and Delinquency 5 hours

Prerequisite: None.

The study is primarily concerned with scientific efforts to understand crime and to understand man in relation to crime phenomena. It deals with those definitions and formulations of crime and criminals which an adaptation system of criminology must be based. It examines the law as the basic framework within which social deviations of a peculiar character assume their functions as criminal acts and those broad principles upon which a science of criminology must rest.

PSC 115 Criminal Law 5 hours
Prerequisite: None.

Designed to present a basic concept of criminal law and create an appreciation of the rules under which one lives in our system of government.

PSC 201 Traffic Planning and Management 5 hours
Prerequisite: None.

A study which covers the history of the traffic enforcement problem and gives an over-view of the problem as it exists today. Attention will be given to the 3 E's and legislation, the organization of the traffic unit, the responsibilities to the traffic function of the various units within the law enforcement agency, enforcement tactics, evaluation of traffic program effectiveness, and allocation of men and materials.

PSC 205 Criminal Evidence 5 hours
Prerequisite: PSC 115.

Instruction covers the kinds and degrees of evidence and rules governing the admissibility of evidence in court.

PSC 210 Criminal Investigation 5 hours
Prerequisite: PSC 115.

This course introduces the student to fundamentals of investigation, crime scene search, recording, collection and preservation of evidence, sources of information, interview and interrogation, case preparation and court presentation, and the investigation of specific offenses such as arson, narcotics, sex, larceny, burglary, robbery and homicide.

PSC 211 Introduction to Criminalistics 5 hours
Prerequisite: PSC 210.

Continuation of the study of criminal investigation including a general survey of the methods and techniques used in modern scientific investi-

gation of crime, with emphasis upon the practical use of these methods by the students. Laboratory techniques will be demonstrated and the student will participate in actual use of the scientific equipment.

PSC 215 Fingerprints and Photography 5 hours
Prerequisite: None.

This is a general course consisting of specialized study of fingerprints as a means of positive identification in law enforcement work. The course involves the history of fingerprints, basic patterns, and the Henry system of classification. Training in classification and filing with practical problems as well as taking of fingerprints and handling simple latent fingerprint patterns receive major emphasis.

Also included is a general course in the utilization of crime scene photography techniques and equipment. These are tailored toward the introduction of the student to 4 x 5 crown and speed-graphic cameras, the fingerprint camera, the 35 mm. camera, lens setting, proper film and basic developing process.

PSC 220 Police Organization and Administration
Prerequisite: PSC 101. 5 hours

Introduction to principles of organization and administration, discussion of service functions; e.g., personnel management, police management, training, communications, records, property maintenance and miscellaneous services.

PSC 225 Criminal Procedure 5 hours
Prerequisites: PSC 205, PSC 210.

This course is designed to provide the student with a review of court systems, procedures from incident to final disposition; principles of constitutional, federal, state and civil laws as they apply to and affect law enforcement.



POLICE SCIENCE TECHNOLOGY

FIRST QUARTER			CREDIT	FOURTH QUARTER			CREDIT
PSC	101	Intro to Law Enforcement	5	PSC	115	Criminal Law	5
ENG	100	Communication Skills	2	PSC	201	Traffic Planning and Management	5
MAT	101P	Technical Mathematics	5	CHM	101P	Chemistry	5
PSY	102	General Psychology	5	ENG	203	Communication Skills	2
SECOND QUARTER				FIFTH QUARTER			
PSC	220	Police Organization and Administration	5	PSC	205	Criminal Evidence	5
ENG	101	Communication Skills	5	PSC	210	Criminal Investigation	5
POL	102	Government-National	5	PSC	215	Fingerprints & Photography Elective	3
SOC	102	Principles of Sociology	5				
THIRD QUARTER				SIXTH QUARTER			
PSC	110	Police Role in Crime and Delinquency	5	PSC	211	Intro to Criminalistics	5
POL	103	Government-State and Local	5	PSC	225	Criminal Procedure	5
POL	202	Constitutional Law	5	PSY	103	Adolescent Psychology Elective	3
ENG	102	Communications Skills	3				

PRACTICAL NURSE EDUCATION

AIM

The aim of Practical Nurse Education is to prepare qualified persons for participation in care of patients of all ages, in various states of dependency, and with a variety of illness conditions.

Students are selected on the basis of demonstrated aptitude for nursing, as determined by pre-entrance tests, interviews with faculty members, high school record, character references, and reports of medical and dental examinations.

There are four classes operating simultaneously, i.e., a new class enters each quarter and a class graduates each quarter. An individual accepted into the program of Practical Nurse Education may enter in September, January, March, or July (see calendar for exact dates).

Throughout the one-year program the student is expected to continuously acquire knowledge and understanding related to nursing and the biological and social sciences and to develop skills related to nursing practice, communications, interpersonal relations, and use of good judgement. Evaluation of student performance consists of tests on all phases of course content, evaluation of clinical performance, and evaluation of adjustment to the responsibilities of nursing. A passing score is required on all graded work, plus demonstrated progress in application of nursing skills to actual patient care.

Graduates of accredited programs of practical nurse education are eligible to take the licensing examinations given by the North Carolina Board of Nursing. This examination is given twice each year, usually in April and September. A passing score entitles the individual to receive a license and to the legal title "Licensed Practical Nurse." The license must be renewed annually. The Licen-

sed Practical Nurse can apply for licensure in other states on the basis of a satisfactory examination score, without repeating the examination.



NUR 1101 Fundamentals of Nursing 10 hours
Prerequisite: None.

This course provides a sequence of planned learning experiences designed to develop the basic knowledge, understanding, and skills of nursing care. It is also directed toward aiding the development of skills in human relationship; imparting knowledge of the importance of recognizing physical hazards in the environment of the individual; learning to observe, identify, report, and record significant information accurately and objectively. The health team, trends in nursing and the legal responsibilities of a nurse are incorporated into this course. Laboratory experiences will be provided at Hillhaven Convalescent Center.

NUR 1102 Body Structure and Function 8 hours
Prerequisite: None.

In this course basic concepts of human structure and function are stressed. The nursing student will also be exposed to fundamental pathological conditions associated with each body system. Principles of microbiology concerning health and disease will also be presented.

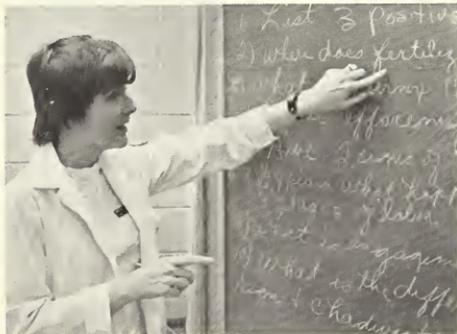
NUR 1103 Nutrition & Diet Therapy 4 hours
Prerequisite: None.

This course provides practical knowledge of good nutrition and some knowledge of diet therapy as well as a background and accurate information on basic nutrition and the nutritional needs of the body. Modification of the diet to meet nutritional needs in special situations is emphasized.

NUR 1104 Medical-Surgical Nursing I 7 hours
Prerequisites: NUR 1101, NUR 1102, NUR 1103, ENG 1101.

This course focuses on the scientific principles underlying nursing care of patients with medical

and surgical conditions. Emphasis is placed upon the application of knowledge and development of nursing skills. Learning activities for all units are patient-centered and correlate theory and practice. Community resources, diet therapy concepts of mental health and pharmacology are integrated throughout the course.



NUR 1105 Medical-Surgical Nursing II 6 hours
Prerequisite: NUR 1104.

A continuation of Medical-Surgical Nursing I with continued expansion of previously acquired knowledge and principles in the study and care of the adult patient. The role of the nurse is focused on caring for patients with problems associated with body disturbances which interfere with proper nutrition, proper elimination and maintenance of fluid and electrolyte balance.

NUR 1106 Medical-Surgical Nursing III 7 hours
Prerequisite: NUR 1105.

This course places emphasis on advanced nursing skills essential to meeting physical, psychological and social needs of patients with major medical and surgical problems. Study of the related nutrition, pharmacology, psychology, and legal aspects and treatments are integrated throughout the course.

NUR 1107 Maternal & Child Health Care I 6 hours
Prerequisite: NUR 1102.

This course is designed to help the student understand the needs of the mother through a normal maternity cycle. The child's basic care needs are explored from birth through adolescence. Common pathological conditions of the child are discussed as they affect basic nursing care.

NUR 1108 Maternal & Child Health Care II 4 hours
Prerequisite: NUR 1107.

A continuing development of principles of maternal child nursing with emphasis on health teaching, evaluation and comprehensive nursing care. The complications and pathological conditions of maternity, infancy, childhood, and adolescence are considered.

NUR 1109/1 Clinical Experience (Medical Nursing)
4 hours

Prerequisites: NUR 1101, NUR 1102, NUR 1103.
Clinical application is designed to introduce the student to individualized nursing care of medical patients. It presents a physiological analysis of the cause of disease and explores common behavioral responses to illness.

NUR 1109/2 Clinical Experience (Surgical Nursing)
4 hours

Prerequisites: NUR 1101, NUR 1102, NUR 1103.
The surgical-nursing segment provides clinical application of knowledge and skills learned in the classroom by giving direct pre-operative and post-operative care in the hospital.

NUR 1110 Pharmacology I 1 hour
Prerequisite: MAT 1101N.

This course is designed to provide basic and current information on drugs and their administration. The objective of the course is to enable the nurse to become aware of the therapeutic use, actions, effects, precautions, and contraindications of drugs in order to give nursing care.

NUR 1111 Pharmacology II 3 hours
Prerequisite: NUR 1110.

Further study of drugs used in the diagnosis, cure, or prevention of disease. Emphasis is placed on sources of drug information, site of drug action, factors that affect the action of medications, types of medications and the routes of administration.

NUR 1112 Vocational Relationships and Adjustments to Nursing 7 hours
Prerequisite: None.

This course includes current trends in nursing, legal and ethical responsibilities and nursing care of patients with complex problems in all

areas. This course is based on knowledge acquired from previous nursing courses, and includes complete problems in planning, implementing and evaluating nursing care for a group of patients. Disaster emergency nursing will be included.

NUR 1114/1 Clinical Experience (Medical Nursing)
5 hours

Prerequisite: NUR 1109.

This course is designed to build upon principles of previous courses and to provide opportunities for determining the needs of patients during the acute and chronic phases of illness. Planned experiences are provided in medical units of the hospital. Team nursing is supplemented by student participation in independent study, problem solving sessions, student presentation and selected patient care assignments.

NUR 1114/2 Clinical Experience (Surgical Nursing)
5 hours

Prerequisite: NUR 1109.

This course provides opportunities for increased knowledge and understanding of nursing care required when caring for the surgical patient.



The emphasis is on total patient care and nursing skills needed when caring for the pre-operative as well as the post-operative. Presentation of nursing care plans and problem solving sessions are also included.

NUR 1114/3 Clinical Experience (Obstetrical Nursing)
5 hours
Prerequisite: NUR 1109.

This course covers the complete maternity cycle and growth and development of the newborn. Emphasis is placed on nursing needs of patients during pregnancy, labor and delivery, puerperium and nursing needs of the newborn. Instruction is augmented by clinical conferences and supervised clinical practice.

NUR 1114/4 Clinical Experience (Pediatric Nursing)
5 hours
Prerequisite: NUR 1109.

This course is designed to assist the nursing student to attain knowledge and concepts of the child in health and disease. Varying situations in the hospital are offered in the care of the children. Special emphasis is placed on family-centered care and individual needs of children.



PRACTICAL NURSE EDUCATION

FIRST QUARTER		CLASS	SCHOOL LAB	HOSPITAL LAB	CREDIT
NUR	1101	Fundamentals of Nursing	8 5	0	10
NUR	1102	Body Structure and Function	8 0	0	8
NUR	1103	Nutrition and Diet Therapy	4 0	0	4
ENG	1101N	Reading Improvement	2 0	0	2
MAT	1101N	Math Skills for Nursing	3 0	0	3
SECOND QUARTER					
NUR	1104	Medical & Surgical Nursing	6 3	0	7
NUR	1107	Maternal & Child Health	5 3	0	6
NUR	1110	Pharmacology	1 0	0	1
NUR	1109	Clinical Experience	0 0	12	4
THIRD QUARTER					
NUR	1105	Medical & Surgical Nursing	6 0	0	6
NUR	1108	Maternal & Child Health	4 0	0	4
NUR	1111	Pharmacology	2 3	0	3
*NUR	1114	Clinical Experience	0 0	15	5
FOURTH QUARTER					
NUR	1106	Medical & Surgical Nursing	6 1	0	7
NUR	1112	Vocational Relationships & Adjustments to Nursing	6 2	0	7
*NUR	1114	Clinical Experience	0 0	15	5

- * Clinical experiences are spread over the third and fourth quarters. Each student is scheduled for two (2) rotations per quarter.

Because of the complexity of some of the aspects of Practical Nurse Education, and because human lives and health are involved, a grade lower than "C" on theory or clinical experience will not be acceptable in the Practical Nurse Education Program. Any grade below "C" will constitute a failure and that quarter must be repeated with a grade of "C" or higher as a prerequisite for the next quarter's work.

RESPIRATORY THERAPY**AIM**

The aim of this two-year program is to provide respiratory therapists who are expert in the therapeutic uses of aids to the breathing process such as medical gases, oxygen administering apparatus, humidity and aerosol devices, positive pressure ventilation, mechanical airways, and cardiopulmonary resuscitation. Due to the increasing incidence of respiratory diseases and the increasingly complex modalities used in the treatment and diagnosis of these diseases the field of respiratory therapy is one of the fastest growing allied health specialties in the United States.

As therapeutic and diagnostic procedures are applied to outpatients and inpatients to elderly and infants, to the chronically ill as well as acutely ill, the respiratory therapist is an asset to both the hospital and physician.

Clinical experience is provided for the student at Duke University Medical Center and Watts Hospital. Upon satisfactory completion of the required curriculum, the student will be eligible to sit for the national registry examination given by the National Board for Respiratory Therapy.

RTH 101 Respiratory Therapy Theory and Procedures 4 hours

Prerequisite: None.

An introduction to hospital course covers ethics, professionalism, professional organizations, and history of Respiratory Therapy. Also, physical properties, piping, storage, safety standards, flow and pressure regulation of medical gases will be covered. Basic anatomy and physiology of the respiratory system including oxygen transport by the blood will also be covered.

RTH 101/P Respiratory Therapy Clinical Practice 1 hour
Corequisite: RTH 101.

Course provides orientation to hospitals, observation of storage, piping and safety standards related to medical gases. Lectures by members of various departments of the hospitals describing their role in the health care team will be attended by the students.

RTH 102 Respiratory Therapy Theory & Procedures 4 hours
Prerequisite: RTH 101, RTH. 101/P.

Properties and production of therapeutic vapors and aerosols, physical examination of the chest, clinical signs and symptoms indicating or contraindicating oxygen and/or aerosol therapy, techniques and procedures applied in the administration of oxygen and aerosol therapy will be covered. Laboratory sessions involve the complete examination and demonstration of equipment utilized in the application of the therapeutic procedures and techniques covered.

RTH 102/P Respiratory Therapy Clinical Practice 2 hours
Prerequisite: RTH 101, RTH. 101/P.

Under supervision, students will be required to select and apply appropriate oxygen-aerosol therapy based on student-instructor evaluation of individual patients. Evaluation will involve physical examination of the chest and observation of clinical signs and symptoms as related to specific types of therapy required.

RTH 103 Respiratory Therapy Theory and Procedures 4 hours
Prerequisite: RTH 102, RTH. 102/P.

An introduction to the indications contraindications, physiology mechanics of mechanical ventilation and airway maintenance as related to

IPPB. Laboratory sessions will require students to disassemble and reassemble various positive pressure breathing devices and accessories to assure student exposure to mechanical functions of each device. In addition, cardiopulmonary resuscitation will be studied as to theory, procedure, and technique.

RTH 103/P Respiratory Therapy

Clinical Practice 4 hours

Prerequisite: RTH 102, RTH. 102/P.

Under supervision, students will administer positive pressure breathing treatments and practice airway maintenance. Students will demonstrate proficiency in the review and interpretation of patient history and physician orders, educating the patient, making necessary clinical observations, evaluating effectiveness of therapy, and properly recording therapy administered.

RTH 201 Respiratory Therapy Theory and Procedures

4 hours

Prerequisites: RTH 103, RTH. 103/P

An introduction to ventilators and monitoring devices, procedures and techniques indications and contraindications as specifically related to prolonged assisted and controlled mechanical ventilation. Laboratory sessions require students to disassemble and reassemble ventilators and monitoring devices to assure student exposure to specific classifications, functions, and problems unique to each device.

RTH 201/P Respiratory Therapy

Clinical Practice 5 hours

Prerequisite: RTH 103, RTH. 103/P

Under supervision, students are introduced to the clinical application of mechanical ventilators and involves student-instructor evaluation of patients, election and application of ventilators,

physiological monitoring, making necessary clinical observations and comparing patient status with laboratory reports.

RTH 202 Respiratory Therapy Theory and Procedures

4 hours

Prerequisite: RTH 201, RTH. 201/P.

A continuation of theory and procedures related to mechanical ventilation with emphasis on interpretation and application of blood gas values, physiologic monitoring and weaning procedures and techniques.



RTH 202/P Respiratory Therapy

Clinical Practice

5 hours

Prerequisite: RTH 201, RTH. 201/P

Continued clinical application of prolonged mechanical ventilation. Student will demonstrate proficiency, with minimal supervision, in the selection and application of ventilators, interpretation and evaluation of blood gas values, and weaning procedures and techniques. Also, under supervision, students will be subject to performing cardiorespiratory resuscitation.

RTH 203 Respiratory Therapy Theory and

Procedures

4 hours

Prerequisite: RTH 202, RTH. 202/P

Designed to cover respiratory care as specifically related to medicine, pediatrics, general and thoracic surgery. Bronchopulmonary drainage, cardiopulmonary rehabilitation, blood gas and pulmonary function instrumentation will also be covered.

RTH 203/P Respiratory Therapy

Clinical Practice

5 hours

Prerequisite: RTH 202, RTH. 202/P

Clinical rotations in specialty areas to include surgical, medical and pediatric intensive care units will be scheduled. Arterial punctures, pulmonary function testing, cardiorespiratory rehabilitation, and cardiorespiratory resuscitation will be practiced.

RTH 204 Respiratory Therapy Theory and

Procedures

4 hours

Prerequisite: RTH 203, RTH. 203/P

A preview of all modalities of therapy previously covered with emphasis on progressive phases of cardiorespiratory disease processes and appropriate therapy for each phase. Student will de-

monstrate understanding of the inter-relationship of diseases and their treatment as related to specialty areas.

RTH 204/P Respiratory Therapy

Clinical Practice

5 hours

Prerequisite: RTH 203, RTH. 203/P

A course requiring the student to demonstrate overall proficiency at every level of clinically applied respiratory therapy. In addition, student must exhibit proficiency in the realm of interpersonal relationships, decision making and independence necessary to prove clinical competence.

RTH 205 Respiratory Therapy Internship 11 hours

Prerequisite: Successful completion of all RTH courses or permission of the program coordinator.

During this course the students will function essentially as student therapists while rotating through all clinical affiliates and will perform under the supervision of the clinical instructors who will continuously evaluate their progress. This course will provide a transitional period between academic and actual working conditions.



RTH 210 Respiratory Therapy Seminar 2 hours
 Corequisite: RTH 203, RTH 203/P

The first of two courses introducing the student to research and evaluation methodology of new equipment and techniques applied in the field of Respiratory Therapy. Students will be assigned equipment or technical topics to be researched and presented the following quarter. Faculty, physicians and other individuals will present topics of interest.

RTH 211 Independent Research in Respiratory Therapy 2 hours
 Prerequisite: RTH 220

Course requires students to present final research projects to staff, faculty and students of the Respiratory Therapy curriculum.

RTH 212 Respiratory Therapy Seminar 3 hours
 Prerequisite: Permission of program coordinator

Students will research and present to their classmates and instructor topics selected by the instructor. These topics will include new concepts and equipment used in the practice of respiratory therapy and concurrently review fundamental respiratory therapy concepts and equipment.

RTH 220 Department Administration and Personnel Supervision 3 hours
 Prerequisite: Permission of program coordinator.

Course introduces students to management and supervisory principles. Emphasis will be placed on departmental management, personnel supervision, and an introduction to hospital administration.

RTH 251 Assessment and Treatment of Cardiorespiratory Abnormalities 3 hours
 Prerequisite: RTH 202, MED 150

Course is composed of a series of instructory lectures concentrating on the abnormalities of

the respiratory system that the respiratory therapist will encounter frequently. This will comprise all aspects of respiratory therapy; initial assessment of the patient and re-evaluation of the course of the disease. The primary objectives is to enable the student to anticipate, understand, and treat patients with abnormalities of their cardiorespiratory system.

BIO 103 Cardiorespiratory Anatomy & Physiology 3 hours

Prerequisite: BIO 102

A detailed study of the structural and functional integration of the respiratory system in conjunction with the circulatory system. Factors involved in respiration mechanics of respiration, ventilation, pulmonary circulation, tissue metabolism, oxygen transport, and carbon dioxide elimination will be included.

NUR 101 Nursing Arts 3 hours

Prerequisite: None

Classroom activities are planned to assist students in development of knowledge, understanding, appreciation, and attitudes basic to effective nursing of patients of all ages and backgrounds with nursing needs arising both from the individuality of the patient and from inability for selfcare as a result of a health deviation. The student is encouraged to develop beginning skills in analysis of patient needs, both through classroom study of hypothetical patient situations and through planned patient experience in the clinical environment. Beginning skills in nursing methods are developed through planned laboratory experiences, followed by related practice in actual patient care.

RESPIRATORY THERAPY

FIRST QUARTER		CREDIT	FIFTH QUARTER		CREDIT
RTH 101	Theory and Procedures	4	RTH 202	Theory & Procedures	4
RTH 101/P	Clinical Practice	1	RTH 202/P	Clinical Practice	5
*BIO 101	General Biology	4	ENG 203	Communication Skills	2
CHM 101/G	Chemistry	4	MED 250	Pathology	4
ENG 100	Communication Skills	2	PSY 102R	General Psychology	3
NUR 101	Nursing Arts	3	SOC 102R	General Sociology	3
SECOND QUARTER			SIXTH QUARTER		
RTH 102	Respiratory Therapy	4	RTH 203	Theory & Procedures	4
RTH 102/P	Clinical Practice	2	RTH 203/P	Clinical Practice	5
BIO 102	Anatomy & Physiology	5	RTH 210	Seminar	2
CHM 102/G	Chemistry	4	RTH 251	Assessment and Treatment of Cardiorespiratory	
ENG 101	Communication Skills	5		Abnormalities	3
*MAT 102	Mathematics	5			
THIRD QUARTER			SEVENTH QUARTER		
RTH 103	Theory & Procedures	4	RTH 204	Theory & Procedures	4
RTH 103/P	Clinical Practice	4	RTH 204/P	Clinical Practice	5
BIO 103	Cardiorespiratory Anatomy & Physiology	3	RTH 211	Independent Research in Respiratory Therapy	2
ENG 102	Communication Skills	3	RTH 220	Department Administration & Personnel Supervision	3
MED 150	Pharmacology	3			
PHY 101/G	Physics	4			
FOURTH QUARTER			EIGHTH QUARTER		
RTH 201	Theory & Procedures	4	RTH 205	Internship	11
RTH 201/P	Clinical Practice	5	RTH 212	Seminar	3
BIO 201	Microbiology	5			
PHY 102/G	Physics	4			

* Students who are weak in Science and/or Mathematics will be required to take BCP 110 Unified Science and/or MAT 101B Mathematics prior to the beginning of the freshman year. A total number of 145 quarter hours are required for graduation.

SECRETARIAL SCIENCE**AIM**

This curriculum provides training in the accepted procedures, required by business, industrial, legal, and professional areas, and enables persons to become proficient soon after employment in their particular fields.

The curriculum is designed to offer students the necessary secretarial skills in typing, dictation, transcription, and terminology for employment in business, medical, legal, and technical areas. The special training in secretarial subjects is supplemented by related courses in mathematics, accounting, business law, and personal development.

BUS 101 Introduction to Business 5 hours
Prerequisite: None.

A survey of the business world with particular attention devoted to the structure of the various types of business organization, methods of financing, internal organization, and management.

BUS 102 Typewriting 4 hours
Prerequisite: None.

Introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, and tabulation.

BUS 103 Typewriting 4 hours
Prerequisite: BUS 102 or the equivalent. Speed requirement, 30 words per minute for three minutes.

Introduction emphasizes the development of speed and accuracy with further mastery of correct typewriting techniques. These skills and techniques are applied in tabulation, manuscript, correspondence, and business forms.

BUS 104 Typewriting 4 hours
Prerequisite: BUS 103 or the equivalent. Speed requirement, 40 words per minute for five minutes.

Emphasis on production typing problems and speed building. Attention to the development of the student's ability to function as an expert typist, producing mailable copies. The production units are tabulation, manuscript, correspondence, and business forms.

BUS 106 Shorthand 4 hours
Prerequisite: None.

A beginning course in the theory and practice of reading and writing shorthand. Emphasis is on phonetics, penmanship, word families, brief forms, and phrases.

BUS 107 Shorthand 4 hours
Prerequisite: BUS 106 or the equivalent.

Continued study of theory with greater emphasis on diction and elementary transcription.

BUS 108 Shorthand 4 hours
Prerequisite: BUS 107.

Theory and speed building. Introduction to office style dictation. Emphasis on development of speed in dictation and accuracy in transcription.

BUS 110 Office Machines 4 hours
Prerequisite: None.

A general survey of business and office machines. Students will receive training in techniques, processes, operation and application of the ten-key adding machines, full keyboard adding machines, and electronic calculator.

BUS 112 Filing 5 hours
Prerequisite: None.

Fundamentals of indexing and filing, combining theory and practice by the use of miniature letters, filing boxes and guides, Alphabetic, Geographic, Subject, and Numeric filing are reviewed.

BUS 115 Business Law 5 hours
Prerequisite: None.

An introductory course to the field of law in general and business law in particular. Briefly exposes the student to the U. S. legal system and looks at criminal law and the law of torts. Also included is an in-depth analysis of the law of contracts.

BUS 120 Accounting 6 hours
Prerequisite: MAT 110.

Principles, techniques and tools of accounting, for understanding of the mechanics of accounting. Collecting, summarizing, analyzing, and reporting information about service and mercantile enterprises, to include practical application of the principles learned.

BUS 183 Terminology and Vocabulary 3 hours
Prerequisite: None.

Technical terminology and vocabulary as it is used in business offices is introduced in this course.

BUS 205 Typewriting 4 hours
Prerequisite: BUS 104. Speed Requirement, 50 words per minute for five minutes.

Emphasis is placed on the development of individual production rates. The student learns the techniques needed in planning and in typing projects that closely approximate the work appropriate to the field of study. These projects include review of letter forms, methods of duplica-

tion, statistical tabulation, and the typing of reports, manuscripts and legal documents.

BUS 206 Dictation and Transcription 4 hours
Prerequisite: BUS 206.

Designed to develop skill taking dictation and transcribing at the typewriter. The course includes a review of the dictation of familiar and unfamiliar material at varying rates of speed. A minimum dictation rate of 100 words per minute for five minutes on new material is required.

BUS 207 Dictation and Transcription 4 hours
Prerequisite: BUS 206.

Covering material appropriate to the course of study, the student develops the accuracy, speed, and technical vocabulary that will enable the student to meet the stenographic requirements necessary for an executive secretary. A minimum dictation rate of 110 words per minute for five minutes on new material is required.

BUS 209 Speed Building and Production 4 hours
Prerequisite: BUS 205.

A course designed to bridge the gap between classroom and office for the typist. Emphasis speed building on straight copy and increased skill in production, utilizing material closely related to the actual office situation.

BUS 213 Office Procedures 5 hours
Prerequisite: BUS 205.

Designed to acquaint the student with the responsibilities encountered by a general office worker during the work day. These include the following: receptionist duties, handling the mail, telephone techniques, travel information, telegrams, office records, purchasing of supplies, office organization, and insurance claims.

BUS 212 Office Application 6 hours

Prerequisites: BUS 110, BUS 205, BUS 207 or BUS212, BUS 213.

In this course students are assigned to work in a business, technical, or professional office for six hours per week. The objective is to provide actual work experience for students and an opportunity for the practical application of the skills and knowledge previously learned.

BUS 271 Office Management 3 hours

Prerequisite: None.

Presents the fundamental principles of office management. Emphasis on the role of office management including its functions, office automation, planning, controlling, organizing and actuating office problems.

**ECO 102 Economics** 3 hours

Prerequisite: None.

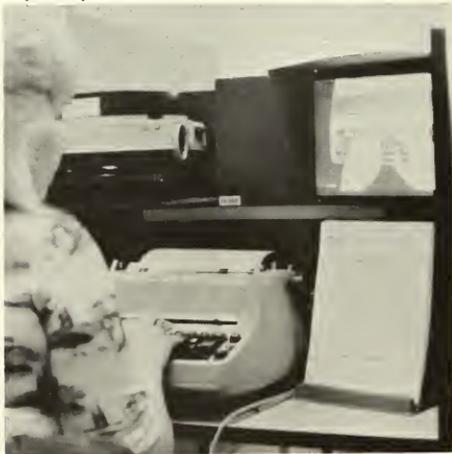
The fundamental principles of economics including the institutions and practices by which people gain a livelihood. Included is a study of the laws of supply and demand and the principles bearing upon production, exchange, distribution, and consumption both in relation to the individual enterprise and to society at large.

BDP 101 Introduction to Data Processing Systems

4 hours

Prerequisite: None.

Fundamental concepts and operational principles of data processing systems, as an aid in developing a basic knowledge of computers, prerequisite to the detailed study of particular computer problems.



**SECRETARIAL SCIENCE
DAY**

FIRST QUARTER		CREDIT	FOURTH QUARTER		CREDIT
BUS 102	Typewriting	4	BUS 112	Filing	5
BUS 106	Shorthand	4	BUS 205	Advanced Typewriting	4
BUS 183	Terminology and Vocabulary	3	BUS 206	Shorthand	4
ENG 100	Communication Skills	4	ECO 102	Economics	3
+ MAT 110	Business Math	5	ENG 103	Communication Skills	2
<hr/>					
SECOND QUARTER			FIFTH QUARTER		
BUS 103	Typewriting	4	BDP 101	Intro to Data Processing	3
BUS 107	Shorthand	5	BUS 115	Business Law	3
BUS 120	Accounting	6	BUS 207	Shorthand	4
ENG 101	Communication Skills	5	BUS 213	Office Procedures	4
PSY 112	Personal Development	3	ENG 206	Business Communications	3
<hr/>					
THIRD QUARTER			SIXTH QUARTER		
BUS 101	Introduction to Business	5	BUS 209	Production and Speed Building	4
BUS 104	Typewriting	4	BUS 215	Office Application	6
BUS 108	Shorthand	4	BUS 271	Office Management	3
BUS 110	Office Machines	4	*	Elective	3
ENG 102	Communication Skills	3			

- * Secretarial Science students may select for elective any course offered in any business curriculum or Social Science.
- + Those students who do not pass the mathematics pretest section of the Admissions Test will be required to take Math 101G Technical Mathematics as a prerequisite for Math 110 Business Mathematics.
- o Total hours required for graduation: 111. Students may take fewer hours per quarter if desired.

**SECRETARIAL SCIENCE
EVENING**

FIRST QUARTER	CREDIT	FOURTH QUARTER	CREDIT
BUS 102 Typewriting	4	BDP 102 Intro to Data Processing	4
BUS 106 Shorthand	4	BUS 110 Office Machines	4
+MAT 110 Business Math	5	BUS 206 Shorthand	4
ENG 100 Communication Skills	2	ENG 103 Communication Skills	2
SECOND QUARTER		FIFTH QUARTER	
BUS 101 Introduction to Business	5	BUS 112 Filing	5
BUS 103 Typewriting	4	BUS 205 Advanced Typewriting	4
BUS 107 Shorthand	4	BUS 207 Shorthand	4
ENG 101 Communication Skills	5	ENG 206 Business Communications	3
THIRD QUARTER		SIXTH QUARTER	
BUS 104 Typewriting	4	BUS 115 Business Law	3
BUS 108 Shorthand	4	BUS 209 Production & Speed Building	4
BUS 120 Accounting	6	BUS 213 Office Procedures	4
ENG 102 Communication Skills	3	BUS 271 Office Management	3
SEVENTH QUARTER			
	BUS 183 Terminology & Vocabulary	3	
	BUS 215 Office Application	6	
	ECO 102 Economics	3	
	PSY 112 Personal Development	3	
	* Elective	3	

* Secretarial Science students may select for elective any course offered in any business curriculum or Social Science.

+ Those students who do not pass the Mathematics pretest section of the Admissions Test will be required to take Math 101G Technical Mathematics as a prerequisite for Math 110 Business Math.

o Total hours required for graduation: 111. Students may take fewer hours each quarter if desired.

GENERAL EDUCATION

The aim of general education is threefold: to provide basic support courses in mathematics and English; to provide special support courses in mathematics, English, the physical and behavioral sciences; and to provide a variety of elective courses. The elective system provides students an opportunity to select courses which supplement their program or provide avenues to other interests.

ABS 1101 Automobile Basic Science 3 hours

Prerequisite: None.

Science for auto mechanics based on the use of experimental data obtained from systems on the automobile from which basic scientific principles are drawn.

BCP 100 Integrated Basic Science No Credit

An introductory course designed for students with little or no background in the sciences; Biology, Chemistry, and Physics. Emphasis is placed more on understanding how rather than why and in helping the student to associate general scientific principles within respective discipline. This course is not to be considered a part of the formal curriculum, but a means of improving weaker students prior to the beginning of each freshman year.

BIO 101 General Biology 4 hours

Prerequisite: None.

An introduction to biology; Man and his place in the biological world; human anatomy and physiology; with special emphasis on the cellular aspects of structure and function and the dissection of vertebrates.

BIO 102 Anatomy-Physiology 5 hours

Prerequisite: BIO 101

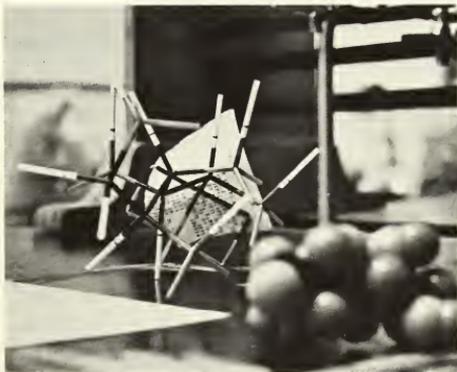
A study of the functional and structural components of the human body, their relationships

and integrations as organ systems, with emphasis on the physiology of the nervous, cardiopulmonary and excretory systems and studies on fluid-electrolyte balance and pH regulation.

BIO 201 Microbiology 5 hours

Prerequisite: BIO 101

Introduction to microorganisms, their presence and function in our environment. Primary emphasis will be upon those organisms commonly found in respiratory infections. Bacteriologic control mechanisms as related to asepsis, clinical isolation and detection and identification of pathogenic agents will also be studied.



CHM 101G Chemistry 4 hours

Prerequisite: None.

Study of the physical and chemical properties of substances; chemical changes; elements, compounds, gases; chemical combination; weights and measurements; theory of metals; acids, bases, salts, solvents, solutions, and emulsions.

CHM 101P Chemistry

5 hours

Prerequisite: MAT 101P.

Study of physical and chemical properties of substances; elements, compounds, gases, weights and measurements; theory of metals, acids, bases, salts, solvents, solutions, and emulsions. In addition, there will be an emphasis on investigative chemistry involving alcohols, poisons, heavy metals, proteins, drugs and their presence and use in society.

CHM 102G Biochemistry

4 hours

Prerequisite: CHM 101G.

A continuation of CHM 101G. Introduction to organic chemistry with emphasis being placed on biochemical systems found in the vertebrates. Acid-base balance, buffer systems, study of carbohydrates, electrolytes, and electrolysis as they apply to vertebrate physiology.

CHM 111 Chemistry

5 hours

Prerequisite: MAT 101B.

An introductory chemistry course involving chemical terminology, atomic structure, properties of elements and compounds, and the functions of the periodic table. Special consideration will be given properties of compounds involving glass (silicon dioxide), metals, dyes, cements, plastics, polishing agents, and protective lens coating.

ECO 108 Consumer Economics

3 hours

Prerequisite: None.

Designed to help the student deal with the complicated and changing American and world economy. The student identifies his own resources of time, energy, and available capital and learns to manage these so that he reaches a desired goal.

ENG 100 Communication Skills

2 hours

Prerequisite: None.

Required of all entering, a foundation course

which is taught for full credit toward graduation. Through this course, the student is thoroughly acquainted with philosophy, purpose, services, and academic policies of Durham Technical Institute. The course begins a guidance procedure through which the student defines his interests, aptitudes, goals and the procedure for his attainment of these goals. Writing and speaking are accented in problem-solving activities.

**ENG 101 Communication Skills**

5 hours

Prerequisite: ENG 100.

The course has two major segments. One part of the course emphasizes speaking and listening skills, simple grammar, and clause pair relationships. The other part of the course works to improve reading versatility, and the student is given a choice in the reading topics he chooses to consider.

ENG 102 Communication Skills

3 hours

Prerequisite: ENG 101.

This course emphasizes the paragraph while accenting some sophisticated aspects of grammatical structure. The student considers two major areas: The logic of composition and methods of paragraph development. The student progresses toward writing a total piece.

ENG 120 -129 Guided Readings 2 hours

Part of the 101 sequence which can stand alone as an elective. The topics offered will vary each quarter, depending upon the available staff and the student demand. Guided readings are handled on a seminar basis.

**ENG. 201 Developing Reading Advancement** 3 hours

Prerequisite: ENG 102 or permission of the instructor.

Designed to teach useful comprehension reading skills by providing the student with lessons and exercises which develop a versatile approach to reading. This course accents both literal and critical comprehension, and it is designed as an enrichment course taught in an individualized manner.

ENG 203 Communication Skills 2 hours

Prerequisites: ENG 102; for Business Division curricula, ENG 206.

This course deals with those particular types of writing which are pertinent to the student's curriculum. In addition to these specialized forms of written communication, the course includes a unit which prepares the student to apply for a job. This unit includes resumes, applications, and interviews.

ENG 206 Business Communication 3 hours

Prerequisite: ENG 102.

Develops skills and techniques needed in writing business communications. The course puts special emphasis on sales letters and business reports.

ENG 1101 Reading Improvement 2 hours

Prerequisite: None.

A foundation course to acquaint the student with the philosophy, purpose, services, and academic policies of Durham Technical Institute. The course begins a guidance procedure through which the student defines his interests, aptitudes, and goals. Writing and speaking will be accented.

ENG 1101A Communication Skills 5 hours

Prerequisite: None.

Accents fundamental, manipulative skills of communication with a game-technique, showing the development of problems, their sources, and their solutions. Following an initial orientation to the institute, the student immediately deals with problem situations, ranging from direction - giving to long-range planning.

ENG 1101N Reading Improvement 2 hours

Prerequisite: None.

Teaches the student basic reading and study techniques. The course emphasizes greatly medical

terminology, especially concerning the functions of prefixes, suffixes, and root elements. The course parallels the topics covered in the nursing curriculum.

ENG 1102 Communication Skills 3 hours
Prerequisite: ENG 1101.

Designed to promote effective communication through correct language usage in speaking and writing. This course accents the processes of group communication.

GEO 201 Geography 4 hours
Prerequisite: None.

Studies the major geographical regions of the world. The student studies the human response to climates, natural resources, industrialization, and other environmental factors.

HUM 100 Visual Literacy 3 hours
Prerequisite: None.

Deals with nonverbal aspects of communication. The student explores as much of that which can be considered visual language as possible. Rather than trying to suggest one set solution for the interpretation and control of visual language, this course strives to expose the students to a variety of methods of composition and design, hoping to enable the student to expand this method of human interaction.

HUM 101 Introduction to Western Culture 4 hours
Prerequisite: None.

Designed to acquaint the student with a number of key aspects of the cultural tradition in which he lives. While Americans come from varied ethnic backgrounds the culture of northwestern Europe dominates our society. Elements as basic as American thought patterns and mores, are inherited, not invented, and this course deals with their origins and development.



MAT 101A Technical Mathematics 5 hours
Prerequisite: None.

A fundamental course in algebra. This course includes the following topics: signed numbers, exponent laws, algebraic fractions, linear equations, the rectangular coordinate system, and evaluation of formulas. As this is an individualized course, students will be pretested to determine their entry level. Students with a weak background in mathematics may remove deficiencies by study prior to entry in the course. Otherwise, additional study requiring extra time will be necessary upon enrollment in the course.

**MAT 101B Technical Math**

5 hours

Prerequisite: None.

This course develops fundamental algebraic operations including exponents, evaluation of formulas, solution of linear equations, and the rectangular coordinate system. The practical application to the uses of the slide rule is stressed along with scientific notation, basic geometric types, trigonometric definitions, and the trigonometric solutions of right triangles. As this is an individualized course, students will be pretested to determine their entry level. Students with a weak background may remove deficiencies by study prior to entry in the course. Otherwise, additional study requiring extra time will be necessary upon enrollment in the course.

MAT 101D Technical Math

5 hours

Prerequisite: None.

This course develops fundamental algebraic operations including: The exponents laws, evaluation of formulas, solution of linear equations and the rectangular coordinate system. The practical application of the mathematics of measurement is stressed along with the uses of the slide rule and scientific notation. As this is an individualized course, students will be pretested to determine their entry level. Students with a weak background in mathematics may remove deficiencies by study prior to entry in the course. Otherwise, additional study requiring extra time will be necessary upon enrollment in the course.

MAT 101E Technical Math

5 hours

Prerequisite: None.

This course is a review of basic algebra operations including: signed numbers, exponents laws, solution of linear equations and linear systems, rectangular coordinate system, and evaluation of formulas. Stress is placed on calculating of practical problems including the ratio and proportion problems. The course introduces basic trigonometry.

As this is an individualized course, students will be pretested to determine their entry. Students with a weak background in mathematics may remove deficiencies by study prior to entry in the course. Otherwise additional study requiring extra time will be necessary upon enrollment in the course.

MAT 101G Technical Math

5 hours

Prerequisite: None.

This course or its equivalent is required of all students who must take Business Mathematics (MAT 110). The student will receive an extensive review of arithmetic, including operations with



whole numbers, fractions, and decimals. There will be much practice in computing with percents since working with percents is a major part of a Business Mathematics course. The Business Mathematics teacher will **not** teach arithmetic, but will expect the student to provide correct answers with the use of arithmetic.

MAT 101P Technical Math 5 hours
Prerequisite: None.

This course, developed for police science students, includes a review of general math skills, signed numbers, and basic algebra. As this is an individualized course, students will be pretested to determine their entry level. Students with a weak background in mathematics may remove deficiencies by study prior to entry in the course. Otherwise, additional study requiring extra time will be necessary upon enrollment in the course.

MAT 101R Technical Math 5 hours
Prerequisite: None.

This course develops basic algebraic operations including exponents, linear equations, linear

systems, graphing, proportion and variation. Also the use of the slide rule along with scientific notation is emphasized.



MAT 102 Technical Math 5 hours
Prerequisite: MAT 101B.

A continuation of MAT 101. Advanced algebraic and trigonometric topics including quadratics, logarithms, determinants, progressions and binomial expansion, complex numbers, solution of oblique triangles and graphs of the trigonometric functions are studied in depth.

MAT 102E Technical Math 5 hours
Prerequisite: MAT 101E.

Advanced algebraic and trigonometric topics which include quadratic equations, fractional exponents and radicals, rational and irrational numbers, complex numbers and their application to electrical circuits, trigonometric functions for angles over 90 degrees, interpolation of tables, slide rule solutions of right triangles (S, ST, and T scales), law of sines and cosines, and emphasis on the graphs of trigonometric functions, especially the sine function. Vectors and vector addition are included.

MAT 102R

5 hours

Prerequisite: MAT 101R.

This is a continuation of MAT 101. More advanced algebraic and trigonometric topics are studied including exponents, quadratic equations, exponential graphs, logarithms, trigonometric functions, solution of triangles, sine graph, etc.

MAT 103E

5 hours

Prerequisite: MAT 102E.

A continuation of the application of complex numbers (algebraic, vector, and polar form) to electrical circuits. Logarithms, number bases, and analytic geometry are studied. Calculus is introduced.

**MAT 110 Business Mathematics**

5 hours

Prerequisite: None.

This course is designed to raise the student's level of mathematical proficiency and to develop skills in problem solving so that the student may easily handle any mathematical assignments in his other courses and in a work situation. The major areas of study will be in mathematics of merchandising, mathematics of finance, and mathematics of accounting procedures.

MAT 111 Algebra

5 hours

Prerequisite: MAT 101G.

Basics of algebra, linear equations, graphs, fractional equations, radical expressions, and quadratic equations. This course is to be taken by students in accounting and business data processing whose background in algebra is insufficient.

MAT 201 Introduction to Calculus

5 hours

Prerequisite: MAT 102E or Equivalent

The study of differential and integral calculus, applied to electronics problems.

MAT 205 Calculus and Boolean Algebra

5 hours

Prerequisite: MAT 103E.

This course continues with calculus with both differential and integral calculus being studied. Application to electrical problems is emphasized. The basic laws and theorems of Boolean Algebra are included.



MAT 1101 Applied Mathematics 3 hours
Prerequisite: None.

Integers. Basic operations with integers: addition, subtraction, multiplication, division. Common fractions. Basic operations with common fractions: Basic operations with decimal fractions: Addition, subtraction, multiplication, division. Conversion of fractions to decimals, and decimals to fractions. Percentage and averages. Measurement.



MAT 1101G Technical Mathematics 5 hours
Prerequisite: None.

This is a basic foundation course for further study in math courses. Included are integer arithmetic, fractions, decimals, ratio and proportion, percentages, signed numbers, and introduction to basic algebra. This course may be waived by examination or math placement test prior to registration. Students who completed a similar course cannot receive additional credit for this course.

MAT 1101N Math Skills For Nurses 2 hours
Prerequisite: None.

This course is primarily designed to prepare PNE students to solve drug and solutions problems. Included are: basic math review, fraction to decimal conversions, metric measurement, ratio and proportion, and percentage problems.

MAT 1102 Algebra 5 hours
Prerequisite: MAT 1101.

Algebraic symbols, positive and negative quantities. The four basic algebraic operation: addition, subtraction, multiplication, division. Equations, Ratio and proportion, exponents, radicals, formulas.

MAT 1102M Technical Mathematics 5 hours
Prerequisite: MAT 1101G or MAT 101G.

Algebraic definitions and operations, powers and exponents, formulas, linear equations and rectangular coordinate system, ratio and proportion. Basic Logarithms, Fundamentals of Geometry, Trigonometric functions, trigonometric tables, solutions of the right triangle. Students who completed a similar course cannot receive additional credit for this course.

MAT 1103 Geometry and Trigonometry 5 hours
Prerequisite: MAT 1102

Points, lines, angles. Circles and parts of circles.

Triangles, parallelograms, trapazoids. Solids: prisms, cylinders, pyramids. Congruence and symmetry. Geometric constructions; applications of geometric constructions. Right triangle, functions of the right triangle. Trigonometric tables, interpolation, solution of right and acute triangles.

MAT 1103M Shop Mathematics 3 hours
Prerequisite: MAT 1102 or equivalent.

Mathematics applied in the machine trades. Calculation of tapers, angles, pitch, threads, gears and use of shop mathematical tables.

MAT 1105 Math for Draftsmen 4 hours
Prerequisite: MAT 1101, DFT 1121.

Basics of algebraic operations (addition, subtraction, multiplication, and division), fractions, letter representations, factoring, ratio and proportion; solutions of first degree and simultaneous equations; exponents, logarithms, tables and interpolation. Plane and descriptive geometry, including geometric construction and graphic solution of problems involving points, lines, planes, and angles. Geometric principles applied to structures.

MED 150 Pharmacology 3 hours
Prerequisite: BIO 102.

The course will provide the student with a comprehensive knowledge of medications used in Respiratory Therapy. Emphasis will be placed on the techniques to be observed that will assure safe administration of all therapeutic drugs.

MED 250 Pathology 4 hours
Prerequisite: BIO 201.

This course will focus particular attention on the pathogenesis of respiratory and cardiovascular diseases. The etiology of diseases as related to body systems will be studied in the class.

PHY 101G Physics 4 hours
Prerequisite: MAT 101.

A fundamental course covering the physical principles of matter. Liquids, gases, and their laws will be studied as they relate to physiologic mechanisms. Laws: Thermodynamics and bio-energetics.

PHY 102G Physics 4 hours
Prerequisite: PHY 101G.

Basic theories of electricity, types of electricity, methods of production, transmission and application of electrical principles which effect maintenance and development of respiratory apparatus.



- PHY 107 General Physics** 4 hours
Prerequisite: None.
General physics for opticianry students to prepare them for courses in Geometric Optics. Includes discussion of units and measurements, motion, force and momentum, gravitational and electrical force, energy and work, oscillations and waves.
- PHY 110 Descriptive Astronomy** 3 hours
Prerequisite: None.
A elementary course in descriptive astronomy and includes a study of the solar system, stars, galaxies and the universe as a whole on a non-mathematical basis. It also includes a study of instruments and techniques of astronomers. Outdoor viewing and field trips to the Morehead Planetarium will be a part of the course.
- PHY 201 Physics** 5 hours
Prerequisite: None.
An introduction to physical principles and their application in industry. Topics in this course include measurements; properties of solids, liquids and gases.
- PHY 202 Physics** 5 hours
Prerequisite: PHY 201
Topics introduced in this course are heat and thermometry; principles of force, motion, work, energy and power; strength of materials; radiation.
- PHY 1100 AD Applied Science** 4 hours
Prerequisite: None.
A course in applied physical principles. Topics include measurement; properties of materials; heat and thermometry; basic electricity and circuits; force, energy, work and power.
- PHY 1121E Applied Science** 4 hours
Prerequisite: None.
An introduction to physical principles and their industrial applications. Properties of solids, liquids and gases; basic electrical principles; heat; force, motion, work, energy and power.
- PHY 1121M Applied Science** 4 hours
Prerequisite: None.
An introduction to physical principles and their application in the machine industry. Topics in this course include measurements; properties of solids, liquids, and gases; basic electrical principles.
- PHY 1122M Applied Science** 4 hours
Prerequisite: PHY 1121 or equivalent
Topics include heat, heat transfer, specific heat and the relation of working of materials. Principles of force, fraction, resistance, work, energy, power and torque; electrical motors, power transfer.
- POL 102 Government - National** 5 hours
Prerequisite: None.
Studies the historical development and current structure of the American government. Topics which this course examines are English and colonial background, the articles of confederation, the federal constitution, the federal union, states rights, federal powers and political parties.
- POL 103 Government - State and Local** 5 hours
Prerequisite: Pol 102.
Studies the organization of state and local governments, the relationship between state and federal powers, and the functions and duties of the branches. The student deals with problems of administration, legal procedures, law enforcement, police power, taxation, revenues, and appropriations. Special attention is given to North Carolina government.

POL 201 United States Government 3 hours
Prerequisite: None.

Studies the organization and functioning of the national government. The student considers the basic concepts underlying the governmental structure and the powers, procedures, and problems of the branches.

POL 202 Constitutional Law 5 hours
Prerequisite: None.

An intensive study and analysis of the United States Constitution and court decisions which interpret the Constitution; a study of court decisions which determine the admissibility of evidence in criminal cases and which affect police procedures; and a consideration of the criminal procedure process with emphasis on the role of Law Enforcement in this process.



PSY 101 Introduction to Psychology 3 hours
Prerequisite: None.

Helps the student understand himself in relationship to his environment. This is a survey course designed for students who desire a basic understanding of the principles of general psychology. This course is conducted on an informal lecture-discussion basis and is recommended as a foundation course for students who plan further study in psychology.

PSY 102 General Psychology 5 hours
Prerequisite: None.

Helps the student understand himself in relationship to his environment. This is an in depth survey course which gives a background in the principles of general psychology.

PSY. 102R General Psychology 3 hours
Prerequisite: None.

A study of the various fields of psychology; the development process; motivation; emotion; frustration and adjustment; mental health; attention and perception; problems to group living. Attention is given to application of these topics to problems of study, self-understanding and adjustment to the demands of society.

PHY 103 Adolescent Psychology 5 hours
Prerequisite: PSY 101 or PSY 102.

Studies the nature and source of the problems of adolescents in the Western Culture. The students consider the physical, emotional, social intellectual, and personality development of the adolescent. The course is conducted on an informal contract basis and allows each student to choose activities which he wishes to pursue.

PSY 112 Personality Development 3 hours
Prerequisite: None.

Guides the student toward seeing the impor-

tance of his own development. The physical, intellectual, social, and emotional aspects of personality development are studied, and the student begins a program of exercises geared for self-improvement.

PSY 204 Abnormal Psychology 3 hours
Prerequisite: PSY 102.

Surveys behavioral disorders of psychological origin. Particular emphasis is on the relationships existing between the disorders and their causes. The detection and treatment of these disorders receives lesser consideration.

PSY 206 Applied Psychology 3 hours
Prerequisite: PSY 101 or 102

Studies those principles of psychology which will assist the student in dealing with inter-personal relationships in a job-situation. Students consider motivation, feelings, and emotions in problem situations. By studying personal and group dynamics, the student learns to apply principles of mental health to adjustment problems as both workers and a member of a general community.

PSY 1101 Human Relations 3 hours
Prerequisite: None.

Broadens the student's understanding of man's behavioral patterns, his relationships with his fellow men, and his environment, and the methods he uses to adjust. The course is a study of the basic principles of human behavior.

SOC 102 Principles of Sociology 5 hours
Prerequisite: None.

Introduces the principles of Sociology. This course provides a basis for understanding collective behavior, community life, social institutions, and social change. The student deals with the scientific study of man's behavior in relation to other man, the general laws affecting the organization of these relationships, and the effects of social life on personality and behavior.

SOC 102R Principles of Sociology 3 hours
Prerequisite: None.

An introductory course in the principles of sociology. An attempt to provide and understanding of culture, collective behavior, community life, social institutions and social change. Presents the scientific study of man's behavior in relation to other men, the general laws affecting the organization of such relationships and the effects of social life on human personality and behavior.

SOC 201 Principles of Sociology 3 hours
Prerequisite: None.

Introduces the principles of sociology, providing a basis for understanding collective behavior, community life, social institutions, and social change. Man's behavior patterns, the laws affecting his organization of society, and how social life governs personality and behavior.

SSC 201 Social Science 3 hours
Prerequisite: None.

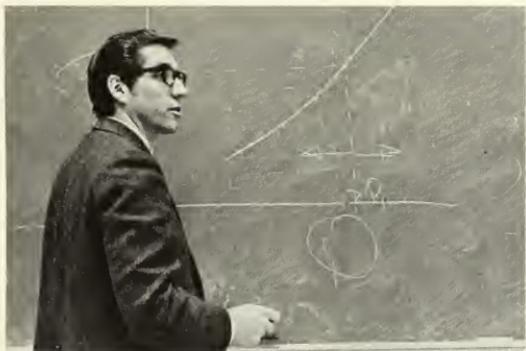
Studies the social science with emphasis on anthropology, psychology, history, and sociology. This course shows the integration of all the social sciences and how each discipline contributes to the total environment.

SSC 202 Social Science 3 hours
Prerequisite: SSC 201.

Continues a study of the social sciences emphasizing economics, political science, and social problems.

SSC 205 American Institutions 3 hours
Prerequisite: None.

Studies the effect American social, economic, and political institutions share on the individual as a citizen and a worker. The course dwells upon current, local, national, and global problems viewed in the light of our political and economic heritage.



LEARNING RESOURCES CENTER

In keeping with the philosophy of Durham Technical Institute, the Learning Resources Center has as its role the following objectives; providing an organized and readily accessible collection of media learning materials needed to meet the individual, institutional, and instructional needs of students, faculty and community; a LRC staff that is qualified, concerned, and involved in serving the needs of students, faculty and community; and encouraging innovation in learning and instruction by providing facilities and resources which will make these objectives possible.

In creating this role for the Center, the Institute has moved away from the traditional view of a library as a collection of books, to a Center where learning occurs. Stress is placed on moving information to the individual, not on collecting information, thus the collection of materials is open shelf and open stack. This easy access fosters an informal learning atmosphere. In the Learning Resources Center the individual is able to explore any field of knowledge which will enhance his potential and at the same time be relevant specifically to him.

The means of exploration are through active participation in the classroom, as well as through self-directed study and the use of individualized resources. Trained staff members are available to direct the individual in finding and interpreting the print and non-print media which relate to his individual needs.

The Learning Resources Center is open from 8 a. m. to 10 p. m. on Monday thru Thursday and 8 a. m. to 5 p. m. on Friday. The facilities of the Center are available to all persons in the community.

INDIVIDUALIZED INSTRUCTION LAB

The Individualized Instruction Lab serves both the community and the student body of Durham Technical Institute by providing self-study programmed instruction in almost any subject area. The fact that each student in the Lab functions as an individual class means that competition is eliminated and that each student works at his own educational level and at his own speed. Through the use of a variety of learning materials and with the help of the Lab Coordinators, almost any individual goal may be achieved.

GENERAL INFORMATION - ADMISSION

Any adult who has reached the age of eighteen (18) and is not enrolled in public school may enroll in the Lab. Applications for admission are available in Student Services.

LOCATION

The Individualized Instruction Lab is located within the Learning Resources Center and the hours of service are the same as those of the LRC - 8:00 a.m. until 10:00 p.m. Monday thru Thursday and 8:00 a.m. until 5:00 p.m. on Friday. The LRC is closed on the weekend.

FEES

There is no charge to attend the Individualized Instruction Lab.

DECORUM

The same rules and regulations of conduct and dress apply to the students in the Individualized Instruction Lab that apply to any student at Durham Technical Institute. Students may not eat, drink, or smoke in the Lab. The LRC is a place for study. Students are expected to observe reasonable quiet at all times.

PARKING STICKERS

Students who attend the Lab during the day and use the student parking areas must display a DTI parking sticker on their vehicle. These stickers may be obtained from Student Services or from one of the Coordinators in the Lab.

TUTORIAL SERVICES

Tutorial Services are available to any student enrolled in a curriculum program at Durham Technical Institute. The tutorial program is supervised and coordinated by the Staff Coordinators of the Individualized Instruction Lab.

ATTENDANCE AND SCHEDULES

Attendance in the Individualized Instruction Lab is not required. This means that the time students spend in the Lab may vary depending on work schedules or other obligations. Upon enrolling, each student is asked to establish what he feels his attendance schedule will be. Students do not need to call the Lab for short term absences. Since students names are dropped from the roll after an absence of thirty days, it is helpful if students who plan to be out of school for more than that notify someone on the ILL staff.

LIBRARY SERVICES

The library is a major element of the Learning Resources Center. Two main functions of the library are service and instruction. Service is providing whatever learning materials, assistance, and guidance are required by the user. Instruction is assisting the user to inquire, to search, and to find a commitment to make his true education a reality. To this end the Library continues to develop a collection of both print and non printed learning materials particularly adapted to the objectives and curriculum of the Institute with new materials being added continually. This unification of resources

provides better service for student and faculty. Individual carrels invite browsing and the pursuit of non-academic interest as well as curriculum requirements. A reader printer for use with microfilm and microfiche and a copying machine for reproducing other materials are available.

Students, faculty, and the community are urged to become familiar with the Library and are encouraged to suggest titles for purchase.

Hours of operation for the Library is 8 a.m. - 10 p.m. Monday - Thursday and Friday from 8 a.m. - 5 p.m.

AREAS OF STUDY

Any adult who wishes to learn may find a place in the Individualized Instruction Lab. Courses offered in the Lab include those in the areas of basic adult education, adult high school programs, and general interest. Many students come to the Lab to review before entering a curriculum at DTI or other schools and technical institutes. For many people who may have been out of school for some time, high school deficiencies in some areas may be removed by working in the Lab.

Specific courses to be taken in the Lab will be recommended by one of the Coordinators based on the student's educational objective. The time required to complete any course in the Lab depends on the student's beginning level, his ambition, and the amount of time he spends studying in the Lab.

Some of the courses available in the Lab are listed below. It should be understood, however, that this list is far from complete. New materials are constantly being added.

COURSES AVAILABLE

BUSINESS

Accounting
 Business Math
 Marketing
 Economics
 Introduction to Data Processing
 Bookkeeping
 Gregg Shorthand
 ABC Shorthand

GENERAL INTEREST

Reading Improvement
 Effective Study Skills
 Learning Through Association
 The Smile of Success
 Introduction to Music
 French I & II
 German I & II
 Spanish I & II

LANGUAGE ARTS

English Grammar
 English Composition
 Spelling
 Vocabulary Development
 Dictionary Skills
 Literature
 Poetry

MATHEMATICS

Basic Arithmetic
 Modern Math
 Algebra I
 Algebra II
 Plane Geometry
 Solid Geometry
 Trigonometry
 Calculus
 Metrics

SCIENCE

General Science
 Biology
 Chemistry
 Physics
 Astronomy
 Basic Electronics

SOCIAL STUDIES

American History
 World History
 Sociology
 Map & Globe Skills
 Civics

*All courses need not be taken in their entirety.
 Parts of programs may be extracted to "tailor
 make" courses for specific individual objectives.

CONTINUING EDUCATION



Education is a process that continues throughout an individual's life. The recent rapid developments in technology have made it imperative that individuals make purposeful plans in order that they might keep abreast of these developments both in the societal and physical changes that have taken place. It is the Institute's aim to afford the individual the opportunity to develop to his fullest potential in whatever areas of vocational and cultural levels that he desires. In this way the Institute helps to build a more functional person which our rapid changing democratic society demands if our society is to preserve those things that are important and change those things that need changing.

The Institute offers to any adult the opportunity to continue his education regardless of his background, be he illiterate or a P.H.D. One individual might like to take a course in Conversational German, Creative Thinking, or Modern Math; another individual might wish to learn to read and write the English language; and still another might wish to improve his job skills in electronics, auto mechanics, or nursing. The Department of Continuing Education stands ready to help you pursue all of these things.

GENERAL INFORMATION

Admission

Any adult who has reached the age of eighteen (18) and is not enrolled in public school is eligible to enroll.

Class Locations

A number of adult classes are held on the Institute campus. Classes are also conducted in Durham and Orange counties whenever a sufficient number of students have indicated an interest and adequate facilities are available.

Course Scheduling

Classes are scheduled when there is a sufficient demand for a particular course or courses and when facilities and a qualified instructor can be found.

The Institute publishes quarterly a schedule of course offerings. Additional courses may be scheduled upon request. Persons wishing to take courses should contact the Office of Student Services.

Fees

A \$3.00 registration fee is charged for Continuing Education Classes. Such fees, when charged, are due and payable at the first class session. Additional charges may be required for certain classes offered by Continuing Education. Books and supplies are available through the Institute bookstore. When classes meet at community centers the Institute's bookstore makes it possible for books to be purchased at the community center.

Attendance

Adults are expected to attend class regularly. Attendance records are maintained by class teachers.

Certificates and Diplomas

Certificates are awarded students meeting requirements for any of the classes and programs for adults.

Continuing Education Units

Continuing Education Units are awarded for some courses. A continuing education unit is defined as "ten contact hours of participation in an organized continuing education experience under responsible sponsorship, capable direction, and qualified instruction."

AREAS OF STUDY

PERSONAL INTEREST

In this area the Institute offers the individual an opportunity to attain skills for personal use and general education to broaden the individual culturally. Classes are begun at any time fifteen (15) or more individuals register for a course. Some of the current courses offered are listed below:

Personal Income Tax	Investments
Medical Terminology	Motorcycle Tune Up
Interior Decoration	Small Engine Repair
Speed Reading	Woodworking
Auto Tune Up	Drawing And Sketching
Sewing	Aviation Ground School

ADULT HIGH SCHOOL EDUCATION PROGRAMS

Durham Technical Institute operates three programs designed to upgrade adults in the area of academic education. They are: Adult Basic Education (ABE), Adult High School Equivalency (GED), and Adult High School Diploma Programs. All three programs operate on main campus and in off-campus facilities in Durham and Orange counties. On-campus programs operate in the Learning Resources Center. Off-campus programs operate in Adult Education centers in Durham, Chapel Hill and Hillsborough. All programs make extensive use of a variety of learning materials with the materials selected to accommodate varied student differences.

Beginning with the Adult Basic Education Program, this outline shows the sequence of programming through high school graduation. Students completing the Adult Basic Education Program have three options open to them. They may (1) terminate their education at grade eight, or they may (2) enroll in the high school program and work towards either an Adult High School Diploma or (3) the High School Equivalency Certificate.

Durham Technical Institute and the participating school systems in the Durham Tech service area have entered into a cooperative agreement covering the High School Diploma program. The purpose of this agreement is to provide the testing, guidance, and instruction which will enable the adult student to complete the requirements for and be awarded the adult high school diploma. Durham Technical Institute certifies satisfactory completion of the requirements and the respective school system issues the diploma.

In addition to the High School Diploma program, a second high school program option is open to Durham Tech students. This program, commonly called the High School Equivalency or GED Program, offers to the student high school levels courses in the fields of English, Social Studies, Sciences and Mathematics. Upon completion of the required academic work, students working toward the high school equivalency certificate take the General Education Development Test administered by the Student Services Division of Durham Technical Institute. The diploma is issued.

For admission to the Adult High School Education program, a person must be at least 18 years of age. Upon written recommendation of the local school superintendent, individual public school drop-outs between the ages of 16 and 18 may be admitted as students with special needs. The student is responsible for acquiring a release from the public school system prior to enrollment. No person under 18 years of age will be admitted to the program without a written release from the Superintendent of Schools.

Each student will be given a reading placement test. If his score indicates less than eighth (8th) grade level, he will be enrolled in an Adult Basic Education class (ABE Level I-grades 1 through 4; or ABE Level II-grades 5 through 9). If his score in-

icates eighth grade or higher, he will be enrolled in the appropriate level Adult High School Program. The student must demonstrate an average eighth grade reading level before he will be admitted to the High School Program. Students who have completed any high school level previously must furnish a transcript of work completed.

On-Campus Classes

For admission to on-campus high school classes, all applicants must apply to the Admissions Office. A counselor will be assigned to each applicant for the purpose of completing the application and orientation as to the nature of the program. Upon completion of the application, the student will be assigned to a Multimedia Specialist in the Learning Resources Center. The Multimedia Specialist will administer the placement tests, work with students in the selection of an appropriate program and materials, and assist the student in scheduling of course work.

Off-Campus Classes

Announcements of off-campus high school classes giving location and time schedule are published quarterly. Persons wishing to enroll in an off-campus class may register at the class location. The quarterly bulletin will be sent to applicants upon request. Classes are held at the following locations: Lincoln Continuing Education Center, Chapel Hill; Orange County Continuing Education Center, Hillsborough.

Fees

No fees shall be charged a student enrolled in the Adult High School program in the Learning Resources Center and the Orange County Continuing Education Center in Hillsborough.

There is a three dollar (\$3.00) registration fee charged each academic quarter for students enrolling in the Adult High School program in off campus

classes. There is no fee for Adult Basic Education classes and classes held at the Orange County Continuing Education Center located in Hillsborough.

OCCUPATIONAL EDUCATION EXTENSION

An occupational extension course is a short course which does not count toward a diploma or degree, but for which a certificate of completion is given. Occupational extension classes are designed to meet the general or specific occupational needs of employees in business, industry, governmental agencies, and other public institutions. The training provided is of an upgrading or updating nature. Any adult 18 years old or older who needs training or re-training, or who can otherwise profit from the proposed course, may be enrolled. Classes vary in length; are held whenever instructor, space, and funds are available; and are conducted both day and night; and are taught by part-time instructors selected by the Institute.

Major areas of emphasis are as follows:

- Distribution and Marketing Extension
- Health Occupations Extension
- Occupational Home Economics Extension
- Occupational Office Extension
- Technical Extension
- Trades and Industry Extension
- Apprenticeship Programs
- New and Expanding Industry Training

Course offerings in the major areas listed above fall into one of two categories: Individual Occupational Classes and Special Occupational Programs.

INDIVIDUAL OCCUPATIONAL CLASSES

Most occupational extension offerings are flexible in that course content is tailored to meet specific individual or group needs. Classes are initiated as the need is indicated by surveys, interviews, request. Examples of individual occupational extension classes offered in the past are as follows:

Blueprint Reading for the Parachute Industry
 Blueprint Reading and Math for Masans
 Brick Masonry
 Caulking
 D C Electricity
 Drafting, Basic
 Drafting, Advanced
 Electricity, Basic
 Electricity and Electronics, Basic
 Electronics, Basic
 Machine Shop
 National Electric Code
 Oil Burner Service
 Plumbing Theory and Code
 Radio and TV Service and Repair
 Small Gasoline Engines
 Statistics and Trend Forecasting, Basic
 Welding
 Public Speaking
 Research Machining and Design
 Production Reporting
 Techniques of Merchandising
 Fundamentals of Real Estate
 Ambulance Attendant Training
 Quantity Food Production Management
 First Aid
 Introduction to PL/1 Programming
 Introduction to System/360
 Business English
 Medical Terminology
 Beginning Typing
 Refresher Typing
 Advanced Typing
 Bank Public Relations and Marketing (American Institute of Banking)
 Analyzing Financial Statements (American Institute of Banking)
 Overview of Pharmacy
 Equipment Use and Care (School Food Service)
 Organization and Personnel Management (School Food Service)
 Pre-Partitioned and Pre-Casted Cycle Menus (School Food Service)
 Nutrition and Menu Planning (School Food Service)

Certified Life Underwriter, Part I
 Certified Life Underwriter, Part II
 Commercial Law (American Institute of Banking)
 Accounting I (American Institute of Banking)
 Effective Speaking (American Institute of Banking)
 Money and Banking (American Institute of Banking)
 Introduction to Economics
 Oral Communications (American Institute of Banking)
 Principles of Bank Operations (American Institute of Banking)
 Effective Business Correspondence
 Home Nursing
 Human Relations and Communications for Head Nurses
 Nurse Assistant
 Pharmacology Theory for the Licensed Practical Nurse
 Pharmacology Math for the LPN
 Parcelain Fused to Gold
 Pre-Pharmacology for the LPN
 Pre-Pharmacology Math for the LPN
 Creative Activities and Safety for Young Children
 Health, Safety, and Creative Activities for Young Children
 Nature and Scope of Day Care
 Pre-School Guidance Activities
 Sewing-Alterations and Tailoring
 Use of Audio-Visual Aids to Better Understand Children
 College Accounting
 Library Science for Aides (New Careers)
 Typing-Library Aides (New Careers)
 Gregg Shorthand Refresher
 Fundamentals of Computing Systems
 Bookkeeping
 Engineering and Business Writing
 Surveying, Basic
 VASCAR
 Auto Electric Tune-Up
 Automatic Transmissions
 Blueprint Reading
 Blueprint Reading for Construction Trades

This list could be endless. Almost any occupational subject can be taught at any achievement level if the following sequence takes place:

- (1) Fifteen to twenty individuals indicate a desire to take a specific course.
- (2) The Institute finds a qualified part-time instructor to teach the proposed class and secures adequate classroom facilities.
- (3) At least fifteen individuals register to begin the course.
- (4) An active attendance of seven or more for each meeting.

SPECIAL OCCUPATIONAL PROGRAMS

In an attempt to meet the more specialized needs of various organizations Durham Technical Institute offers the following Special Occupational Programs:

- Management Development Training
- Hospitality Training
- Law Enforcement Training
- Fire Service Training
- Apprenticeship Training
- New and Expanding Industry Training

MANAGEMENT DEVELOPMENT TRAINING

Management Development Training is an educational program designed to upgrade the competency of Supervisory and Midmanagement level personnel.

Durham Technical Institute is aware of the need for training supervisors in industry, business, institutions, and other types of organizations. Because of this awareness, Management Development Training Programs have been made available to supervisors through a wide variety of courses. Some courses are short while others range up to sixty-nine hours in length. Some are basic for all supervision, while others offer instruction for certain special interests.

The current Management Development Program consists of twenty-six well prepared courses which, in many instances, can be taught almost verbatim. Each course of training described herein serves one or more of the following purposes: to help develop potential supervisors to assume full supervisory responsibilities; to prepare present supervisors for advancement to greater responsibilities; to improve abilities of supervisors at all levels; and most importantly, to make supervisors and potential supervisors more proficient in their present assignments. A supervisor may pursue as many of the courses as he desires and thereby afford himself an opportunity for extensive training. Emphasis has been placed on group dynamics and creative problem-solving techniques.

Courses

MDP 1 Principles of Supervision 48 hours

This course presents basic and general principles of effective supervisory techniques. The course is divided into seven (7) parts which include: Fundamentals of Supervision, Relationships on the Job, Communications, How to Train Employees, Performance and Job Evaluation, Job Management, and Work Improvement. This course may be taken in its entirety or individual parts.

MDP 2 Job Relations Training 10 hours

This course is concerned with the fundamentals of Human Relations. It is, perhaps, the most popular and meaningful of all MDP courses. The course content is divided into five (5) distinct sections which include: The Foundation of Human Relations, Bases for Decisions, The Four-Step Problem Solving Methods, Taking Preventive Action, and Importance of Getting the Facts. It is highly recommended for all phases of management.

MDP 3 Science of Human Relations 18-20 hours

This course relates to the development of the Science of Humanics. Emphasis is given to the following topics: Machines and the Human Element, The Personal Needs That Stimulate Behavior, Leadership and Supervision, Factors Influencing Attitudes, The Foundation of Business, Employer-Employee Relations, and Techniques for Handling People. Several case studies are reviewed and discussed at length. This course is strongly recommended for new and present supervisors in charge of hourly employees.

MDP 4 Art of Motivating People 22 hours

This course is designed to show the importance of properly motivated employees in relation to production. Emphasis is placed on specific problems in the area of motivation. A further value derived from this course is that of providing the opportunity for self-evaluation for those responsible for motivating others.

MDP 5 Economics in Business and Industry 22 hours

Training in Economics gives the supervisor a better understanding of the American Free Enterprise System. Included in this course are: The Five (5) Basic Principles of Capitalism, The Function of Government and Its Responsibility to People, The Laws of Supply and Demand, Wages and Productivity, and The Profit Motive.

MDP 6 Effective Communications 22 hours

Emphasis in this course is placed on clear and forceful oral, written, and implied communications. It will provide supervisors with an opportunity to improve their effectiveness in day-to-day communications with employees and fellow supervisors through face-to-face contact.

MDP 7 Effective Writing 22 hours

This course is designed to help supervisors improve their writing skills with the use of reports, letters, and memoranda which are necessary in daily operation. Fundamentals of sentence structure and elements of clear, concise, and correct writing will be emphasized.

MDP 8 Effective Speaking 15 hours

This course emphasizes the theory and practice of the art of self-expression. A step-by-step guide is provided for the supervisor to follow in helping him overcome fear and self-consciousness when addressing a group.

MDP 9 Speed Reading 20 hours

The objectives of this course are to broaden the span of perception and recognition, and to increase the speed and comprehension in reading for those in business and industry whose jobs require much reading.

MDP 10 Work Measurement 22 hours

The Work Measurement course is designed to acquaint the supervisor with the purposes and uses of time and motion studies. Areas of discussion include: Production Standards, Wage Rates, Job Standards, Incentives, Base Rates, and Various Employee Ratings.

MDP 11 Job Methods 10 hours

Emphasis in this course is placed on the importance of finding more efficient ways of completing daily tasks. Each participant is given an opportunity to study and submit a proposed method improvement project.

MDP 12 Conference Leadership Training 10 hours

This course is designed to aid the supervisor when presiding over groups through sessions in group dynamics. Each participant is given an opportunity to serve in the role of a conference leader.

MDP 13 Instructor Training* 15 hours

This course will provide the future supervisor-instructor with an approved method of instruction based on the basic principles of learning which will enable him to teach others the related technology or manipulative skills of his trade.

* An instructor training program is available for those who desire to teach in the MDP program.

MDP 14 Creative Thinking 22 hours

The aim of this course is to improve attitudes and thinking abilities of supervisors, to develop a strong motivation to utilize one's creative potential, to develop curiosity in problem solving, and to gain openmindedness toward ideas of others.

MDP 15 Industrial Safety and Accident Prevention 22 hours

This course offers the supervisor a systematic approach to a better understanding and scope of safety and accident prevention problems. Attention is given to preventive safety measures and understanding the causes of accidents and injuries. It is an OSHA approved training course.

MDP 16 Industrial First Aid 10 hours

This course is designed to give the basics of first-aid techniques to supervisors who will be confronted with injuries from accidents likely to occur in the work area. To be Red Cross certified, instruction is done by a certified Red Cross instructor, multi-media materials may be used in an (8) hour course.

MDP 17 Employee Evaluation and Interviewing 12 hours

This course provides fundamental information and basic guides for setting up and using a sound employee evaluation program in relation to what is expected of the supervisor. It also gives the supervisor some insight into the problems of talking to the employee about his or her evaluation. This interview procedure includes preparation, opening statements, directing the conversation, tact, and closing the interview. This course should give the supervisor another useful tool in dealing with the people who work with him.

MDP 18 Job Analysis Training 12 hours

This course is designed to familiarize the supervisor with techniques necessary to gather facts about the specific operations and responsibilities of the job and what it entails. These include such areas as mental ability, skill, and physical requirements.

MDP 19 Management Primer 44 hours

This course is designed primarily for supervisors in mid-management positions. It is meant as an introduction to managerial thinking. It will make a contribution toward better performance by helping participants see their problems more clearly in terms of accepted management practices. Eleven (11) parts are covered in this course: Management and Production, Enterprise Organization, Human Relations in Management, Personnel Administration, Controls and Supervision, Production Management, Procurement and Inventory, Financial Management, Distribution and Sales, Research and Public Relations, and Records and Reports.

MDP 20 Job Instruction Training 12 hours

This course is something every supervisor is responsible for. It covers such points as (1) how to get a thorough analysis of the job to be taught, (2) how to develop skills in the art of teaching, (3) an understanding of the individual as a learner, and (4) an appreciation of the employee's part in the organization. All supervisors are teachers of a type, but few really know how to perform this function adequately. Therefore, the need for this course.

MDP 21 Supervision in Hospitals 40 hours

Hospitals represent the fourth largest business in North Carolina. A training course, similar to MDP 1, has been developed specifically for hospital supervisors. This series covers supervisory areas of human relations, leadership, job methods, housekeeping, and training subordinates. The course may be taken as a block or in units, depending on the needs of the participants.

MDP 22 Motion and Time Study (For Supervisors) 10 hours

This course is designed to give the supervisor certain basic information and knowledge which will help him understand and appreciate the importance of Motion and Time Study principles. Through this course the supervisor should be able to initiate and carry out simple Time and Motion Studies, and also to help the engineering staff when such a study is done, both physically and when instructing the employees.

MDP 23 Transportation and Traffic Management 69 hours

The purpose of this course is to acquaint the participant with the important phases of Transportation and Traffic Management-classification of freight and freight classification, principles

of freight rates and tariffs, shipping documents and their application, special freight services, freight claims, construction and filing of tariffs, switching, routing, warehousing and distribution, materials handling, technical tariff interpretations, import and export traffic, construction and application of the Interstate Commerce Act and practice and procedure before the Interstate Commerce Commission.

MDP 24 Principles of Business and Industrial Management 38-56 hours

The purpose of this course is to develop in supervisors, managers, and potential supervisors and managers the basic understanding of: The forms, purposes, and organizational types of businesses and industries; the relationships among owners, managers, workers, and the public and their respective functions; the understanding and development of employee relations; and the knowledge of suitable and efficient internal organizations and operations.

MDP 25 Labor Laws for Supervisors 12 hours

This course introduces the supervisors to the important labor laws so that they may know the legal responsibility of supervisors and what legal protection is available to business and its employees.

MDP 26 Pre-Supervisory Training 28 hours

This course is designed to prepare those employees who are being considered for supervisory positions. Employers should select their key employees as participants in this program. Major topics covered are Personnel Relations, Organization, and Job Responsibility. The objective of this course is to give industry and business a training program designed to develop a pool of qualified employees from which to select supervisory personnel. It is not a complete training program.

HOSPITALITY TRAINING

The Hospitality Education Program is one answer to North Carolina's need for more trained personnel in the area of food, lodging, recreation, and travel information. This program has three primary objectives:

1. To provide employers with well-trained personnel to operate their business.
2. To develop within individuals skills that will qualify them for better employment opportunities.
3. To provide better hospitality services to the citizens of North Carolina and visitors to the State.

Hospitality Education courses are arranged and scheduled in accordance with the needs of the industry.

FOOD SERVICE COURSES

(1) Commercial Food Preparation and Service

Food Service Selling 20 hours
A course dealing with the responsibilities of a waiter or waitress from the time he walks on the job until his day's work is done. Much emphasis is placed on the fact that the good waitress is a dignified sales person rather than a "hash slinger." Every good sales person needs certain essential job knowledge and this course is designed to help the waitress develop the knowledge and attitudes necessary to do an effective job.

Basic Quantity Cooking 150 hours
A course dealing with principles of interpreting menus, menu terms, recipes, measurements and other data relative to the cooking profession. Skill in selection, preparation, and serving foods, also purchasing food, and keeping records of supplies and expenses. To capitalize on native food handling talent to insure a profitable profession.

Food and Beverage Purchasing* 20 hours
A summary of knowledge and principles of quantity food buying that would take years to learn by experience. Tells the importance of purchase specifications and how to write them.

Food and Beverage Management and Service* 20 hours

This course is designed for those who have a sincere desire to prepare themselves for entry or advancement in a very complex field requiring a balanced blending of knowledge and skills in food, its preparation, its merchandising and service, buttressed by a good and sound knowledge of financial and business practices.

Food and Beverage Controls* 20 hours
This course deals with each step in the production and merchandising of food with special emphasis on calculating costs, establishing standards and production planning.

Food Service Supervision for Hospital Personnel 90 hours

This course consists of classroom instruction and 6 months of supervised experience in a hospital kitchen. It is designed to provide a standardized educational program for food service supervisors which will qualify them to assume the responsibilities delegated to them by the dietitian and prepare them to meet the performance level of the current concept of supervisory leadership in their respective areas. Upon successful completion of this course the food service supervisor is eligible for membership in the Hospital, Institution, and Education Food Service Society.

*This course offered in co-operation with the American Hotel-Motel Association.

(2) School Food Service Training Courses

Overview of School Food Services 60 hours
The prerequisite course for all school service personnel. A basic orientation course presenting the history of school feeding, characteristics of a good program, personnel and human relations, nutrition and menu planning, organization and management; purchasing, storing, preparation and serving of food; sanitation and safety.

Nutrition and Menu Planning [Prerequisite Course I]
60 hours

A course for all school food service personnel in depth of the role in nutrition of protein, fats, carbohydrates, minerals, and vitamins; factors in developing good food habits; dietary needs of children and youth; advanced work in planning and evaluating menus.

Course outline available for classroom use or in combination with ETV and classroom.

Use and Care of Equipment [Prerequisite Courses I and II] 60 hours

A course for all school food service personnel in general care and safety in the use of equipment; specific use and care of large and small pieces of food service equipment; inventory and maintenance records.

Quantity Food Preparation [Prerequisite Courses I, II, & III] 60 hours

A course for all school food service personnel with experience in methods of quantity food preparation which retain nutritive values; use of standardized recipes; use of weights and measures; use and care of equipment; timing, selection, preparation and service of foods for the school lunch.

HOTEL-MOTEL MANAGEMENT

Introduction to Hotel Management* 20 hours
This course is an introduction to the hotel business, its departments, its responsibilities and the opportunities for creative employment it offers.

Motel-Motor Hotel Management* 20 hours
This course is designed to make the student more aware of the scope of managerial responsibility in the motel industry. Effort is made to develop within the student a familiarity with various technical requirements, a basic knowledge of the working problems of inn-keeping, and a better understanding of the total effort and work experience required to successfully operate today's motel.

Front Office Procedures* 20 hours
This is a course dealing with front office management, routines and accounting plus crucial material on human relations and public relations.

Hotel-Motel Accounting* 20 hours
This course deals with basic accounting terms, practices and statements in common use in hotels, and the use of accounting information in making management decisions.

Hotel-Motel Law* 20 hours

- The purpose of this course is
- To illustrate the consequences of lack of foresight in the innkeeper's managerial functions.
 - To supply sufficient information to understand the attitudes of the courts when an innkeeper is involved in a litigation.
 - To create an awareness of the many responsibilities which the law imposes upon the innkeeper.

*This course offered in co-operation with the American Hotel-Motel Association.

Human Relations* 20 hours

This is a course illustrating the principles of Business psychology and the many ways in which employees and guests react to each other. Improved employee cooperation and guest relations are stressed.

Supervisory Development* 34 hours

This course deals with how to train and how to supervise. Emphasis is placed on the department heads' responsibility in communicating with people, training employees, controlling costs and improving methods.

Communications* 20 hours

This course has been designed as an overview of the uses and techniques of communication with particular reference to the innkeeping industry. It can be beneficial to employees at any level of the organization, but should be especially helpful to those having managerial responsibilities. Special emphasis and attention is given to:

- (a) The theory of communication
- (b) Application of communication principles to basic management functions
- (c) Effective listening
- (d) Improving reading ability
- (e) Developing speaking skills
- (f) Communicating on the job
- (g) Writing better letters
- (h) Audio-visual communication techniques

Supervisory Housekeeping* 20 hours

This course deals with the housekeeper's executive responsibilities, with emphasis on employee training and record keeping.

Produced in cooperation with the National Executive Housekeepers Association, this course carries credit toward NEHA's own program for accreditation.

Maintenance and Engineering* 24 hours

This course deals with essential technical information on electronics, air conditioning, plumbing, heating, electricity, acoustics, elevators and other equipment necessary to establish preventive maintenance routines and to make necessary operating decisions.

Maid Training 20 hours

This course stresses the importance of the maid to the overall operation of a hotel or motel. Much emphasis is placed on techniques for doing the job more quickly, more effectively and with less effort.

How to Organize Work 10 hours**TRAVEL SERVICE****Travel Information** 4-10 hours

These courses are set up to fit the local situation and may vary in length. Great stress is placed on the importance of travel service to the overall economy of the area. Visual aids are used to illustrate what there is to see and do in the area. Often these courses are used to motivate the community to develop its travel potential and to point out the need for trained personnel in the Hospitality Industry.

Service Station Selling (15-20)

This course is designed to assist gasoline service station attendants to improve their selling techniques and thereby render better customer service. Much emphasis is given to the importance of knowing the area in order to answer customer questions and give good travel directions.

*This course offered in co-operation with the American Hotel-Motel Association.

Personality Development 10 hours

Customer Relations 10 hours

HOSPITAL TRAINING

Hospital Human Relations 20 hours

This course is designed to train personnel who are responsible for keeping the hospital clean and sanitary. All of the basic problems of hospital house-keeping are covered with a good breakdown of what should be done daily and what can be done only periodically. There is much information on techniques for doing the job more effectively and with maximum efficiency.

Hospital House Keeping 40 hours

Custodial Training 40-400 hours

Modified Diets 20 hours

LAW ENFORCEMENT TRAINING

The goal of the law enforcement training program of the Department of Community Colleges is to promote and provide adequate training and education courses in the legal and technological fields that will keep law enforcement officers abreast of these advancements and, at the same time, aid them in moving toward professionalization. More specifically, the objectives are:

- (1) To provide an adequate, well-rounded program in law relative to police subjects and human relations with emphasis on practical application. This affords the new officer the necessary job knowledge and skills to carry out his task of protecting lives and property and maintaining peace and tranquility; and at the same time, providing a foundation for future specialized training.
- (2) To coordinate and provide series of specialized training programs for law enforcement officers such as supervisor's training, and comprehensive seminar presentations.

Courses

Introduction to Police Science 120 hours

A program in law, applied police subjects, special courses, communicative skills, and human relations. The program may be offered on a basis of 6 hours per day, 5 days per week, for 4 weeks; or 5 hours per day, 5 days per week, for 5 weeks. It may also be offered one course at a time on an updating, upgrading basis; whereby, the class meets one or two nights a week over a designated period of time.

Each of the 15 divisions of the Introduction to Police Science is a separate and distinct course within itself and requires differential instructional knowledge and ability. Therefore, a course description is submitted for each of them. Introduction to Police Science Science (120 hours) is transferable for credit to the Police Science degree program.

Courts and Law 6 hours

Course covers: History of law enforcement, constitutional law, state and local government, and evolution of the law.

Elements of Offenses 24 hours

Course covers: Use of legal and research materials, general principles of criminal law, crimes against the person, crimes against property, crimes against public morality and decency; against the state and public justice; against the public peace and safety; general police regulations.

Law of Arrest 9 hours

Course covers: Introduction, arrest with a warrant, arrest without a warrant, use of force, escape and rearest, rights and duties after arrest, and jurisdiction of officers.

Search and Seizure 3 hours

Course covers: Constitutional bases, search with a warrant, search without a warrant, and illegally obtained evidence.

Evidence

6 hours

Course covers: Evidence in general, legislative power to prescribe rules and fix weight of evidence, jurisdiction and venue, kinds of evidence, hearsay rule, evidence distinguished from proof, the burden of proof, opinion evidence, rules of admissibility, judicial notice, privileges, and collection and preservation of evidence.

General Criminal Investigation

12 hours

Course covers: Original complaint, crime scene searches-identification and preservation, interrogation and interview, scientific aids, and descriptions of persons.

Special Courses

6 hours

Course covers: Report writing, note taking, records systems, records completion, concise report writing, and first aid.

Motor Vehicle Law

18 hours

Course covers: Motor vehicle law in general, driver license law, rules of the road, traffic direction and control, enforcement techniques, accident investigation, emergency vehicle operation, Financial Responsibility Act of 1957; size, weight and equipment regulations.

Liquor Laws

3 hours

Course covers Liquor laws in general, manufacture of intoxicating liquor, possession of intoxicating liquor, use of intoxicating liquor, transportation, jurisdiction and general powers of the Alcoholic Board of Control, drunkenness and other liquor offenses.

State Parole Board

3 hours

Course covers: parole systems and parole laws.

Court Structure and Procedure

6 hours

Course covers history and development of courts, officers of the court-courtroom demeanor and testimony in court.

Juveniles

6 hours

Course covers: types of juvenile cases most frequently encountered, cause of juvenile misbehavior, effects of gangs, and neighborhood conditions on juveniles, legal restrictions upon treatment of juveniles, juvenile probation laws, the juvenile and his parents, police procedure in juvenile cases, disposition and follow-up of juvenile cases, juvenile traffic offenders, juvenile sex offenders, adults contributing to delinquency of juveniles, the functions of local facilities and agencies, and prevention of juvenile delinquency.

Law Enforcement Procedures

6 hours

Course covers pursuit driving; raids and road-blocks; patrol procedures; riots, unlawful assemblies and crowd control; defensive tactics and weapons and fire-arms safety.

Police Administration

6 hours

Course covers: fundamentals of supervision and administration.

Human and Public Relations

6 hours

Course includes: development of the speaking voice, pronunciation and enunciation, kinds of oral communication, diction and delivery, group discussion, taking part in group discussion and conference meetings and interviews.

Supervision for Law Enforcement Personnel

120 hours

Officers will cover such subjects as principles of police administration, the police supervisor, development of a police supervisor, decision making, human relations, leadership, role of the supervisor in training, evaluation, performance rating, personnel complaints, discipline and control of personnel, planning, report writing, and public relations. Supervision for Law Enforcement Personnel (120 hours) is transferable for credit to the Police Science degree program.

Chemical Tests for Alcohol Operator's Training Course* 68 hours

Studies covered in this course are mathematics and metric system; scientific concepts; pharmacology and physiological effects of alcohol; background and history of chemical testing; theory of breath test instruments; maintenance of breath test instruments; simulated courtroom situation; introduction to supervision of chemical test programs.

Chemical Tests for Alcohol Operator's Retraining Course* 28 hours

Studies covered in this course are: mathematics and metric system; scientific concepts; pharmacology and physiological effects of alcohol; background and history of chemical testing; theory of breath test instruments; maintenance of breath test instruments; simulated courtroom situation; introduction to supervision of chemical test programs.

Coping With the Drinking Driver* 8 hours

A course to aid every law enforcement officer in North Carolina to recognize, arrest and prosecute the persons who drive upon the highways while they are under the influence of alcohol and drugs.

Chemical Tests for Alcohol Supervisor's Training Course*

Studies covered in this course are: mathematics and metric system; scientific concepts; pharmacology and physiological effects of alcohol, background and history of chemical testing; theory of breath test instruments; maintenance of breath test instruments; simulated courtroom situation; introduction to supervision of chemical test programs.

Traffic Accident Investigation* 30 hours

Course covers: The various laws of physics as they apply to traffic accidents, determining speed from brake marks, making collision diagrams, witness interrogation and hit-and-run investigations.

Fingerprint Identification* 30 hours

Course covers: Search, classifying and filing of fingerprints; developing latent fingerprints and presenting fingerprint evidence in court.

Firearms Training* 30 hours

Course covers: Firearms safety and firearms proficiency with the revolver, shotgun, rifle and gas gun, with some emphasis placed on gas grenades and projectiles.

Riot and Crowd Control* 30 hours

Course covers: Philosophy of crowds, laws pertaining to riots and unlawful assemblies, riot control formulations and use of special weapons.

Curriculum credit may be allowed on an individual basis in the Law Enforcement courses above.

FIRE SERVICE TRAINING

Firefighting is becoming more complex. With the demands of technological and economic changes, the fireman's problems increase- ranging from the technical to the psychological, from the area of mechanical equipment to the area of human relations. Confronting him are situations virtually non-existent a few years ago, and his responsibilities demand a continuous program of training and education. The following objectives have been established for the Fire Service Training Program:

- (1) To teach the fireman safe habits and the correct techniques for using tools and equipment on the fire ground.
- (2) To develop the fireman's initiative and judgment.
- (3) To train firemen to accept individual responsibility.
- (4) To teach the fireman the technical information and the skills necessary to perform selected operations on the fire ground.
- (5) To teach the fireman the importance of planning jobs and operations for greater accuracy and efficiency of operation.

- (6) To develop in the fireman self-reliance and confidence in his ability.
- (7) To present to the fireman a variety of experiences and problems which will develop his ability to master the practical problems that he will encounter in the service.

Courses

Ambulance Attendant Training 22 hours

Designed to develop understanding of and appreciation for the role of the ambulance attendant in the care and transportation of the sick and injured. Classroom discussions include principles related to administering emergency aid to victims in selected situations, to safe transportation of the sick or injured, and to safe operation of the ambulance. Student experiences include supervised practice in applying splints, in using resuscitation techniques, in applying dressings, and in positioning and transporting victims with a variety of conditions.

Hospital Fire Training

The reason for a fire drill, fire protection and drill for hospital, chemistry of fire, classification and types of firefighting appliances, rescue and evacuation techniques.

Fire Science Technology

A 108 quarter-hour curriculum consisting of English, math, science, and fire technologies.

Home Fire Safety

Suggestions for protecting a house from fire, the fire triangle, definition and control of fires by classification, fire extinguishers, rescue practices and techniques, and home safety check list.

Arson and Unlawful Burning

Firemen's responsibility in unlawful burnings, finding the point of origin, determining the cause of fire, identification of incendiary fires, searching fire scene, types of fire setters and modes of operation, techniques for collecting, protecting and preserving

evidence, questioning witnesses, and appearing in court.

The Company Officer

Introduction to fire service organization, the fire department, officership, the company officer, training fire company personnel, human relations, public relations, the fireman's responsibility in arson detection, and codes.

Introduction To Firefighting 42 hours

Introduction to the fire service, forcible entry practices, portable fire extinguisher practices, fire service rope practices, fire apparatus practices, fire stream practices, fire hose practices, ventilation practices, ladder practices, salvage and overhaul practices, rescue practices, protective breathing equipment, firefighting procedures, and course postmortem.

Fire Service Training 120 hours

Major titles of the course are: forcible entry, rope practices, portable fire extinguishers, ladder practices, hose practices, salvage and overhaul practices, fire stream practices, fire apparatus practices, ventilation, rescue practices, protective breathing equipment, and firefighting procedures.

APPRENTICESHIP TRAINING

Under General Statute 115 A, enacted in 1963, the institutions under the Department of Community Colleges have been given the responsibility for conducting the related training for apprentices in North Carolina. The major objective for related instruction for apprentices is to teach the apprentice that part of the technical related information pertaining to his trade which can best be taught in the classroom. Other objectives include the development of ability to apply technical related information, the involvement of proper attitudes and human relations, and the adjustment to social problems encountered in the world of work.

The following apprentice classes have been offered:

- a. Electrical Apprentice
- b. Mould-Maker Apprentice
- c. Sheetmetal Apprentice
- d. Carpentry Apprentice
- e. Bricklayer Apprentice

NEW AND EXPANDING INDUSTRY TRAINING

Durham Technical Institute in cooperation with the Industrial Services Division of the North Carolina Department of Community Colleges may provide state-sponsored industrial training and related service for:

1. **New Industry.** Industry locating in North Carolina from another state.
2. **Expanding Industry.** Local industry expanding its North Carolina facilities, either building another plant or expending additional capital for expanding present capacity, that is, additional equipment, manpower, and/or space. This training applies only to **new jobs** created through expansion.

One of the basic objectives of Durham Technical Institute is to stimulate the creation of more challenging and rewarding jobs for the people of our area by providing a customized training service to new and expanding industries. Subject to only minimal limitations, this institution, in cooperation with the Industrial Services Division of the State Department of Community Colleges, will design and administer a special program for training and production manpower required by any new or expanding industry creating new job opportunities in North Carolina.

This program includes the following services:

1. Consultation in determining job descriptions; defining areas of training; and in prescribing appropriate course outlines, training schedules, and materials.

2. Selecting and training of instructors. These instructors may be recruited from the company and from outside sources.
3. Payment of instructors' wages for the duration of the training program.
4. Provision of suitable space for a temporary training facility prior to the completion of the new plant, should such temporary space be required. This may be space with Durham Technical Institute or leased space in the community.
5. Assumption of installation costs of equipment in the temporary training facility.
6. Payment for one-half the cost of non-salvageable materials expended in the training program.

The purpose of this service is to help a new or expanding industry meet its immediate manpower needs and to encourage such industry to develop a long-range training program of its own to satisfy its continuing replacement and retraining needs.

SENIOR CITIZEN SERVICES

Durham Technical Institute is committed to fulfilling its obligations to the senior citizens of its service area. Through the Continuing Education Division, the Institute offers various courses designed to upgrade the education and skills of persons who are employed in institutional settings for the aged as well as persons who care for the elderly in their homes.

In addition, the Institute makes available a wide variety of personal interest courses of a general nature for the senior citizens as well as courses designed specifically for the senior citizens.

Individuals or agency representatives interested in establishing courses for the senior citizen should contact the Continuing Education Division of Durham Technical Institute.

Senior citizens are also invited to enroll in Associate Degree and Diploma programs.

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 WORTH E. NORMAN, Jr., B.S., Registrar
 L. A. VEASEY, B.S., Accountant

EDWARD L. ADAMS, Human Resources Program
 A.B., University of North Carolina at Chapel Hill;
 M.M., East Carolina University.

JULIUS ALKER, Engineering and Industrial Educa-
 tion Division Chairman
 B.A., State University of New York at Buffalo;
 A.M., Harvard University; Ph.D., University of
 Nebraska.

NANCY D. AVERY, Instructor in Mathematics
 B.A., University of North Carolina at Chapel Hill.

ERNEST L. BADGETT, Division Chairman of General
 Education
 B.A., St. Andrews College; M.A. Appalachian
 State University.

ANGELYN W. BATTLE, R.N., Instructor in Nursing
 Education
 B.S., A. & T. State University.

PAUL G. BEAM, Instructor in Respiratory Therapy
 B.S., Indiana University of Pennsylvania

BETSY T. BELL, R.N., Nursing Education Clinical Co-
 ordinator
 Watts Hospital School of Nursing.

KAY L. BOWMAN, Director, Individualized Instruc-
 tion Lab
 A.B., University of North Carolina at Greensboro.

EUGENE E. BRAY, Instructor in English
 B.A., M.A.T., University of North Carolina at
 Chapel Hill.

CAROLYN G. BROWN, R.N., Instructor in Nursing
 Education
 B.S., Winston-Salem State University.

- DONALD L. CARTER, Coordinator of HRD
B.S., East Carolina University; M.Ed., North Carolina State University.
- FREDERICK CASTROVINCI, Instructor in Respiratory Therapy
B.A., C. W. Post College; A.A.S., Durham Technical Institute.
- JEAN U. CHAMPION, Instructor in Data Processing
B.S., North Carolina State University.
- JOHN CHRISTOPHER, Instructor in Mathematics
B.A., M.A.T., University of North Carolina at Chapel Hill.
- JOAN P. CLARK, R.N., Instructor in Nursing Education
A.D., Chowan College.
- GARY P. CLAYTON, Instructor in Opticianry
A.B., University of North Carolina at Chapel Hill; A.A.S., Durham Technical Institute.
- M. YATES COATES, Instructor in Dental Laboratory Technology
- LEONA A. CROCKETT, R.N., Instructor in Nursing Education
B.S., North Carolina Central University.
- BARBARA H. CRYER, Instructor in Reading
A.B., University of Georgia; M.Ed., Northwestern University.
- MARK D. CURRIN, Instructor in Dental Laboratory Technology
A.A.S., Durham Technical Institute; Certified Dental Technician.
- RUBY A. DASHER, Individualized Instruction Lab Coordinator.
Undergraduate work at Fisk University.
- CHARLENE B. DAYE, Instructor in Business Education
B.S., M.S., North Carolina Central University.
- ALICE A. CRAWFORD, Individualized Instruction Lab Coordinator
B.A., University of North Carolina at Greensboro.
- FRANK K. deTORONY, Instructor in
M.S., Ludovika Technical Academy; M.E.E., Polytechnical University; Ph.D., General Staff Academy; Licensed Professional Engineer.
- WILLIAM H. DUBBS, Respiratory Therapy Coordinator
B.S., East Stroudsburg State College; B.S., Indiana University of Pennsylvania.
- FRANCIS A. ERVIN, Allied Health Department Chairman
A.S., Central College; O.D., Illinois College of Optometry; Licensed Optometrist.
- BARBARA S. FERRELL, Technical Services Librarian
A.B., M.L.S., North Carolina Central University.
- CAROLYN B. FISHER, Individualized Instruction Lab Instructor
B.S., University of North Carolina at Greensboro.
- DENNIS L. GADDIS, Automotive Coordinator
Lincoln Technical Institute; B.S., Purdue University.
- THOMAS C. GILCHRIST, Counselor/Coordinator
Curriculum Programs
B.S., North Carolina Central University.
- JOHN E. GILMORE, JR., Instructor in Automotives
B.S., North Carolina State University; Certified Master Mechanic. A.A.S., Durham Technical Institute.
- LOUISE J. GOOCHE, R.N., Nursing Education Classroom Coordinator
B.S., A. & T. State University; M.A., North Carolina Central University.

- JOHN D. GOODWYN, Instructor in Dental Laboratory Technology
A.A.S., Durham Technical Institute; Certified Dental Technician.
- ROBERT H. GUNTER, Instructor in Dental Laboratory Technology
B.S., Old Dominion University; Certified Dental Technician; M.Ed., North Carolina Central University.
- CARL A. HAGGARD, JR., Instructor in Business Education
B.B.A., Wake Forest University.
- AMELIA H. HARRISON, Instructor in English
A.A., Peace College; A.B., University of North Carolina at Chapel Hill; M.A., North Carolina State University.
- ROBERTA L. HAVNER, Instructor in Business Education B.S., M.S., Oklahoma State University.
- BARBARA P. HAYES, R.N., Instructor in Nursing Diploma, Lincoln School of Nursing; B.S., North Carolina Central University.
- GARY D. HENDERSON, Recruiter/HRD
B.A., North Carolina Central University.
- RONALD H. HILBERT, Business Administration Coordinator
B.A., University of Virginia.
- ESTHER W. HODGES, Secretarial Science and General Office Technology Coordinator
B.S., George Peabody College; M.Ed., North Carolina State University.
- GLORIA D. HORNE, Instructor
B.A., North Carolina Central University.
- BARBARA M. HOTTELLING, R.N., Instructor in Nursing Education
B.S., University of North Carolina at Chapel Hill.
- LYNNE N. JENKINS, Accounting Coordinator
B.S., East Carolina University; M.Ed., University of North Carolina at Greensboro.
- ALBERT D. JERNIGAN, Business Education Division Chairman
B.S., University of North Carolina at Chapel Hill; M.Ed., North Carolina State University.
- LINDA C. JOHNSON, R.N., Instructor in Nursing Education
Watts Hospital School of Nursing.
- GEORGIA A. JONES, Nursing Education Division Chairman
B.S., Meharry Medical College; M.Ed., North Carolina State University.
- LEWIS G. KECK, Library Technology Coordinator
B.F.A., College Conservatory of Music of Cincinnati; B.A., University of Cincinnati; M.Ed., Xavier University; M.S.L.S., University of North Carolina at Chapel Hill.
- LOUISE KOSLOFSKY, Mental Health Coordinator.
B.A., Oakland University; M.Ed., University of North Carolina at Chapel Hill
- DONALD R. KRITSCH, Instructor in Science
B.A., M.A., Indiana University.
- GROVERY W. LOWERY, Instructor in Dental Laboratory Technology
B.S., University of North Carolina at Chapel Hill; Certified Dental Technician.
- SUSAN Q. MACE, Humanities Coordinator
B.A., William Smith College; M.A.T., The Johns Hopkins University.
- BARBARA A. MERTZ, Instructor in Opticianry
A.A.S., Durham Technical Institute.
- EDWARD E. MOORE, Instructor in Business Education
B.S., North Carolina Central University.
- VICKIE A. NEWSOME, Instructor in Social Sciences
B.A., North Carolina Central University.
- SHEILA H. O'BRIANT, Instructor in Social Sciences

- B.A., St. Andrews College; M.A.T., University of North Carolina at Chapel Hill.
- BARBARA B. PAGE, Learning Lab Coordinator Undergraduate Study at Radford College.
- JAMES L. PAINTER, Electronics Coordinator A.A.S., College of the Albermarle; B.S., North Carolina State University.
- RANOVA S. PENDERGRAFT, R.N., Instructor in Nursing Education
B.S., A. & T. State University.
- ROBERT L. POTTER, Instructor in Business Education A.A., Hampton Junior College; B.S., Florida A & M University; LLB, North Carolina Central University
- CATHRYN S. PORTARO, Instructor in Business Education
B.S., M.A., Western Carolina University.
- ROBERT N. REAVES, Instructor in Electronics Engineering Technology
A.S., Spartanburg Jr. College; A.A.S., Gaston College; B.S., Southwest Missouri State College.
- WILLIAM L. ROGERS, Dental Laboratory Technology Coordinator
U.S. Navy Instructors Training School; A.A.S., Durham Technical Institute.
- SHARON J. SAWYER, R.N., Instructor in Nursing Education
Diploma, St. Luke's Hospital.
- WILLIAM J. SEWELL, Instructor in English
A.A., Reinhardt College; A.B., LaGrange College; M.A., University of Alabama; Ph.D., Duke University.
- YVONNE M. SIMMONS, Instructor in Business Education
B.S., North Carolina Central University.
- CORA S. STACKELBERG, Program Coordinator of Math and Science
B.S.E.E., Massachusetts Institute of Technology; M.A.T., Duke University.
- HELEN D. THOMPSON, Individualized Instruction Lab Coordinator
A.B., University of North Carolina at Chapel Hill.
- JOSEPH D. WADE, Police Science Coordinator
B.A., B.S., High Point College; Federal Bureau of Investigation National Police Academy; Federal Bureau of Narcotics School; Northwestern University Traffic Institute.
- JEROME R. WORSLEY, Instructor in Business Education
B.S., M.A., East Carolina University; Ed.D., North Carolina State University.
- JOHN A. ZUNES, Instructor in Physics
B.S., Virginia Polytechnic Institute; M.S., Duke University.

Index

A	
Academic Calendar	
Acceptance	16
Achievement Recognition	12
Accounting	41
Accreditations	6
Activity Fee	33
Address Change	27
Adult Basic Education	138
Adult High School Education	138
Advanced Standing	19
Appeals Procedure	13
Application	15
Apprenticeship Training	151
Architectural Drafting	46
Attendance	12
Automotive Mechanics	48
B	
Basic Admissions Requirements	17
Books and Supplies	35
Business Administration	54
Business Data Processing	60
C	
Certificates	23
Conditional Status	19
Continuing Education	136
Continuing Education Units	137
Counseling	11
Counseling Conference	16
Course Audit	19
Course Load	25
Course Repeat	25
Credit by Examination	20
Curriculum Admission Requirements	17
Curriculum	6
D	
Degree Programs	23
Dental Laboratory Technology	66
Diploma Programs	23
Disciplinary Procedure	13
Dismissal Procedure	13
E	
Electronics Engineering Technology	71
Enrollment	6
Evening Curriculum Admission	18
Expenses	30
F	
Faculty Advisors	12
Failure Regulation	25
Fees	33
Fire Service Training	150
Food Service Courses	145
Foreign Students	19
G	
General Education	119
General Office Technology	76
Grading System	23
Graduation Fee	35
Graduation Requirements	26
Grants	38
Guidance	11
H	
Hospitality Training	145
Hotel-Motel Management	146
I	
Individual Occupational Classes	139
Insurance	36
J	
Judiciary Committee	13

L		Resident Tuition	33
Late Registration Fee	35	Resident Status for Tuition Payment	31
Law Enforcement Training	148	Respiratory Therapy	109
Learning Resources Center	132	S	
Library Technology	82	Schedule Changes	24
Location	6	Scholarships	36
Loans	37	Secretarial Science	114
M		Senior Citizens Service	152
Machinist	85	Special Occupational Programs	141
Management Development Training	141	Special Students	19
Mathematics Skills	17	Special Students Admissions Requirements	18
Mental Health Associate	87	Specific Admissions Procedures	15
N		Sports	11
Name Change	27	Student Center	11
New and Expanding Industry Training	152	Student Government	10
Non-Resident Tuition	33	Student Organizations	10
O		Student Publications	10
Occupational Educational Extension	139	Student Regulations	13
Opticianry	91	T	
Orientation	12, 16	Transcripts	15, 27
Outline of Admission Procedure	16	Transfer Credit	18
P		Transfer of Credit	27
Personal Interest	138	Travel Service	147
Pharmacy Technician	98	Tuition	33
Philosophy	7	Tuition Fee Basis	33
Placement Testing	16	Tutorial Services	134
Police Science	101	U	
Practical Nurse Education	104	Uniform Deposit	36
Programs	7	V	
Purpose	7	Veterans Education Benefits	39
R		W	
Readmission	26	Withdrawal Regulations	26
Refund Policy	35		
Rehabilitation Approval	9		
Residence Halls	7		
Residence Requirements	23		

