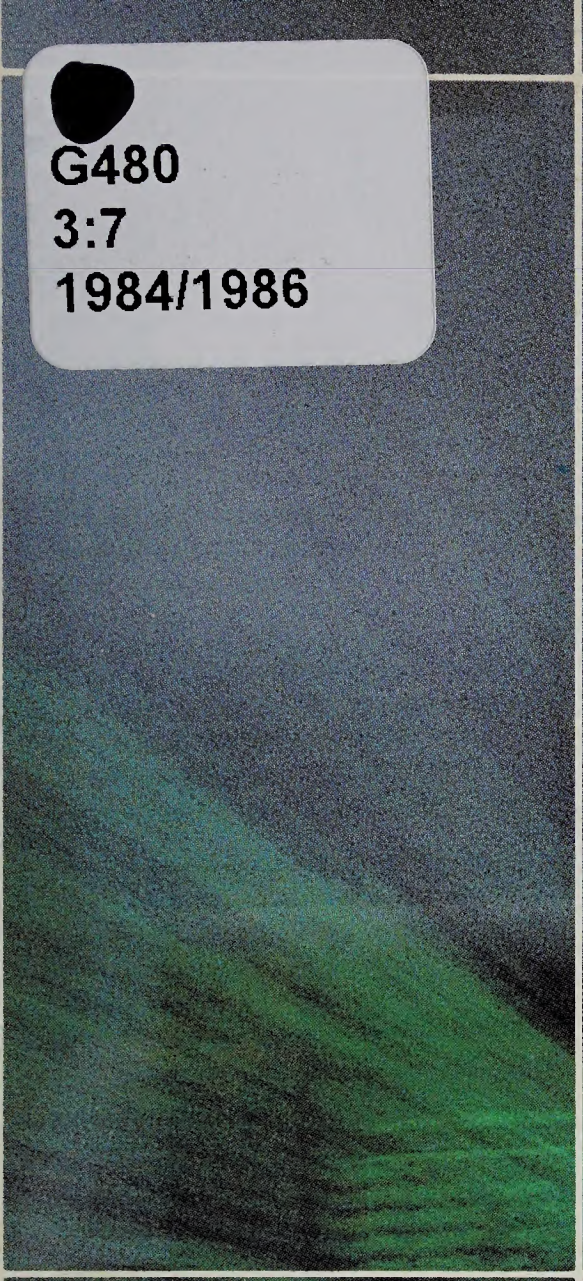

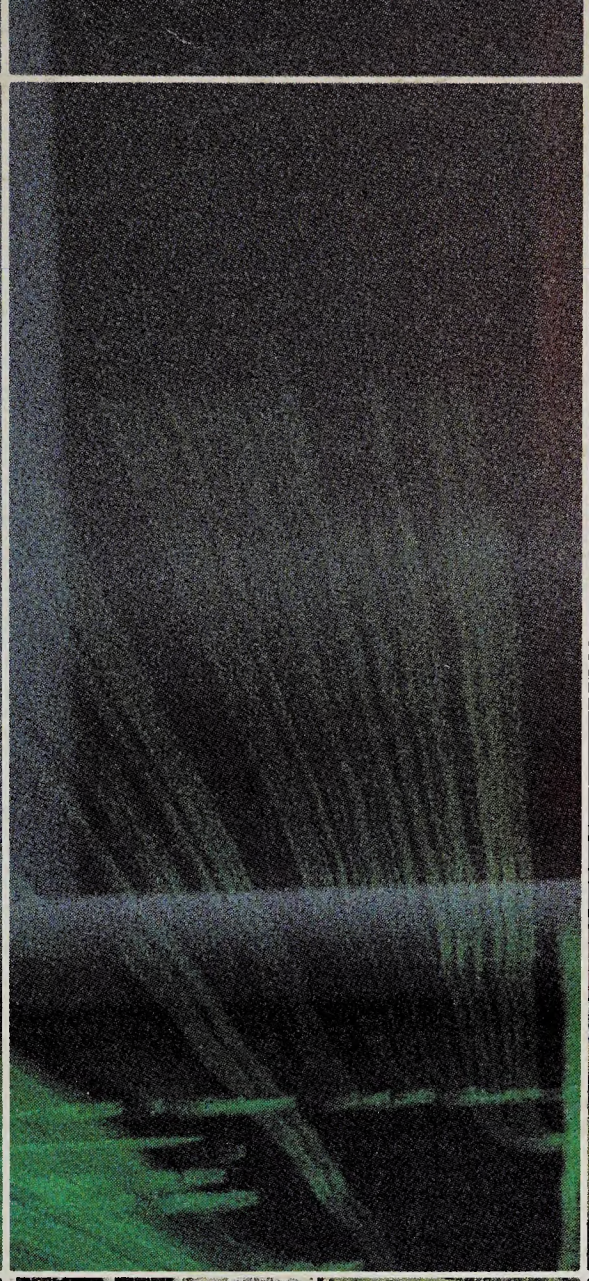

# STANLY TECHNICAL COLLEGE GENERAL CATALOG 1984-1986

## THE CATALOG

The purpose of the catalog is to furnish prospective students and other interested persons with information about Stanly Technical College and its programs. Announcements contained in this catalog are subject to change without notice and may not be regarded as binding obligations on the College or the State. Changes will be kept to a minimum, but changes in policy by the State Board of Community Colleges, the Department of Community Colleges, or by the local Board of Trustees may require alterations periodically.

Stanly Technical College is an equal opportunity educational institution and employer. The College does not practice or condone discrimination, in any form, against students, employees, or applicants on the grounds of race, color, national origin, religion, sex, age, or handicap, consistent with the Assurance of Compliance with Title VI and VII of the Civil Rights Act of 1964, Executive Order 11246, Title IX of the Education Amendments of 1973, and the Rehabilitation Act of 1973.

# Stanly Technical College

Route 4, Box 55
Albemarle, North Carolina 28001
704/982-0121

# GENERAL CATALOG
# 1984-86

Stanly Technical College is fully accredited by the Commission on Colleges of the Southern Association of Colleges and Schools.

**Volume 7** **1984**

# *Message From The President*

We believe that the comprehensive programs described in this catalog will stimulate you to begin or continue your life-long learning experiences. Our efforts are directed to help you achieve your goals and aspirations which will result in a qualitative life.

We believe that when you use your vision and vitality at this college to earn your degree, you will indeed become self-reliant, self-supporting and able to contribute to your family and community. As we reviewed and structured the programs in this catalog, our attention was focused on quality, adequacy, and relevance. Today, with both a diversity of regional curricula and continuing education programs designed to serve local needs, the college is productive and innovative. Through our trustees-staff leadership and a competent enthusiastic faculty, the college is equipped with intelligence and capacity to anticipate and meet the manpower needs of our area.

We hope that each of you who reads this catalog and enrolls in this college will experience remarkable progress and truly achieve your goals.

Dr. Charles H. Byrd

# ACADEMIC CALENDAR 1984-85

## FALL QUARTER 1984-85 (55 days)

| | | |
|---|---|---|
| September 27 | Thursday | Registration |
| October 1 | Monday | First Day of Classes |
| October 5 | Friday | Last Day to Register or Add a Course |
| October 26 | Friday | Last Day to Drop a Course with a Grade of W |
| November 22-23 | Thursday-Friday | Thanksgiving Holidays |
| December 3-7 | Monday-Friday | Pre-Registration with Advisors |
| December 12 | Wednesday | Pre-Payment Day for Winter Quarter |
| December 18 | Tuesday | Last Day of Classes |

## WINTER QUARTER 1984-85 (50 days)

| | | |
|---|---|---|
| January 2 | Wednesday | Registration |
| January 3 | Thursday | First Day of Classes |
| January 9 | Wednesday | Last Day to Register or Add a Course |
| January 30 | Wednesday | Last Day to Drop a Course with a Grade of W |
| February 25-March 1 | Monday-Friday | Pre-Registration with Advisors |
| March 6 | Wednesday | Pre-Payment Day for Spring Quarter |
| March 13 | Wednesday | Last Day of Classes |
| *March 14-15 | Thursday-Friday | Make-up Day for Inclement Weather |

## SPRING QUARTER 1984-85 (50 days)

| | | |
|---|---|---|
| March 19 | Tuesday | Registration |
| March 21 | Thursday | First Day of Classes |
| March 27 | Wednesday | Last Day to Register or Add a Course |
| April 5-8 | Friday-Monday | Easter Holidays |
| April 19 | Friday | Last Day to Drop a Course with a Grade of W |
| May 8 | Wednesday | Activity Day |
| May 20-24 | Monday-Friday | Pre-Registration with Advisors |
| May 29 | Wednesday | Pre-Payment Day for Summer Quarter |
| June 3 | Monday | Last Day of Classes |

**SUMMER QUARTER 1984-85** (50 days)

| | | |
|---|---|---|
| June 10 | Monday | Registration |
| June 12 | Wednesday | First Day of Classes |
| June 18 | Tuesday | Last Day to Register or Add a Course |
| July 1-12 | Monday-Friday | Summer Break (No classes) |
| July 15 | Monday | Classes Resume |
| July 23 | Tuesday | Last Day to Drop a Course with a Grade of W |
| August 19-23 | Monday-Friday | Pre-Registration with Advisors |
| August 28 | Wednesday | Pre-Payment Day for Fall Quarter |
| September 2 | Monday | Labor Day Holiday |
| September 4 | Wednesday | Last Day of Classes |
| September 5 | Thursday | Graduation |

* Any days lost due to inclement weather will be made up during this time.

# ACADEMIC CALENDAR 1985-86

**FALL QUARTER 1985-86** (50 days)

| | | |
|---|---|---|
| September 12 | Thursday | Registration |
| September 16 | Monday | First Day of Classes |
| September 20 | Friday | Last Day to Register or Add a Course |
| October 11 | Friday | No Classes |
| October 14 | Monday | Last Day to Drop a Course with a Grade of W |
| November 11-15 | Monday-Friday | Pre-Registration with Advisors |
| November 20 | Wednesday | Pre-Payment Day for Winter Quarter |
| November 25 | Monday | Last Day of Classes |

**WINTER QUARTER 1985-86** (55 days)

| | | |
|---|---|---|
| December 2 | Monday | Registration |
| December 4 | Wednesday | First Day of Classes |
| December 10 | Tuesday | Last Day to Register or Add a Course |
| December 23-January 1 | Monday-Wednesday | Winter Break (No Classes) |
| Janurary 2 | Thursday | Classes Resume |
| January 10 | Friday | Last Day to Drop a Course with a Grade of W |

| | | |
|---|---|---|
| February 10-14 | Monday-Friday | Pre-Registration with Advisors |
| February 19 | Wednesday | Pre-Payment Day for Spring Quarter |
| February 28 | Friday | Last Day of Classes |
| *March 3-5 | Monday-Wednesday | Make-up Days for Inclement Weather |

**SPRING QUARTER 1985-86** (55 days)

| | | |
|---|---|---|
| March 6 | Thursday | Registration |
| March 10 | Monday | First Day of Classes |
| March 14 | Friday | Last Day to Register or Add a Course |
| March 28-31 | Friday-Monday | Easter Holidays |
| April 8 | Tuesday | Last Day to Drop a Course with a Grade of W |
| May 7 | Wednesday | Activity Day |
| May 12-16 | Monday-Friday | Pre-Registration with Advisors |
| May 21 | Wednesday | Pre-Payment Day for Summer Quarter |
| May 28 | Wednesday | Last Day of Classes |

**SUMMER QUARTER 1985-86** (50 days)

| | | |
|---|---|---|
| June 2 | Monday | Registration |
| June 4 | Wednesday | First Day of Classes |
| June 10 | Tuesday | Last Day to Register or Add a Course |
| June 30-July 11 | Monday-Friday | Summer Break (No Classes) |
| July 14 | Monday | Classes Resume |
| July 15 | Tuesday | Last Day to Drop a Course with a Grade of W |
| August 11-15 | Monday-Friday | Pre-Registration with Advisors |
| August 20 | Wednesday | Pre-Payment Day for Fall Quarter |
| August 26 | Tuesday | Last Day of Classes |
| August 28 | Thursday | Graduation |

* Any days lost due to inclement weather will be made up during this time.

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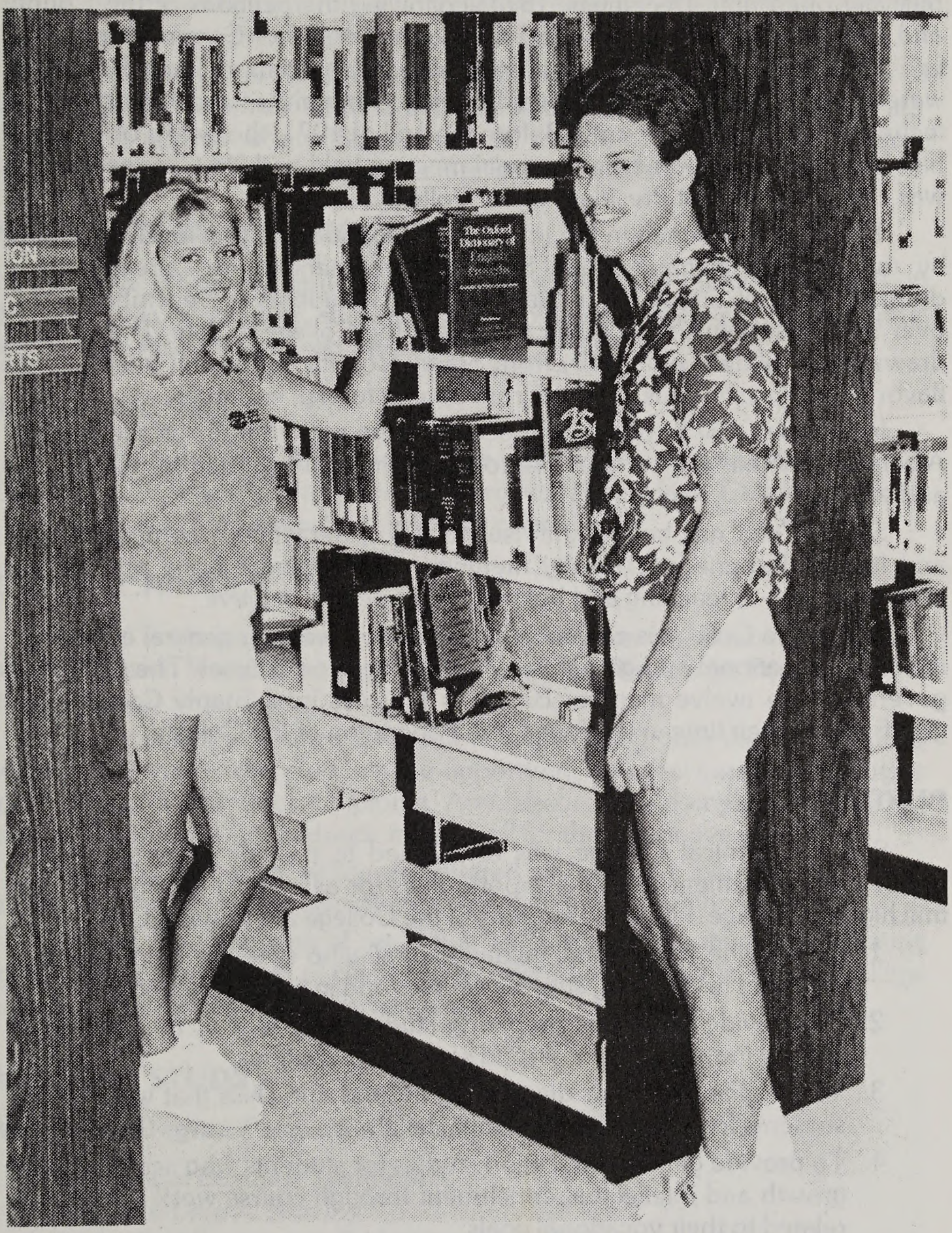
# *Introduction*



# *Admissions Policies*

# *INTRODUCTION*

## HISTORY

Stanly Technical College was established in July, 1971, under the authority of the 1963 Community College Act. However, the College did not officially open until December, 1971. Following the petitions of the County and City Boards of Education and the County Board of Commissioners, the late Senator Frank Patterson and the Honorable Richard Lane Brown, III were successful in gaining approval from the General Assembly to establish a technical college in the county. Before the end of 1971, the Board of Trustees had been appointed, an organizational meeting held and Dr. Charles H. Byrd was elected as the first President of the College.

The College opened in the temporary headquarters previously occupied by the South Albemarle High School. Enrollment figures already tell a dramatic story of Stanly Tech. Starting with 31 students in December, 1971, over 90,000 students have taken courses at the College to date. The College draws its enrollment principally from Stanly County but has an international flavor by having students enrolled from several foreign countries.

In October, 1975, the College occupied the new campus on the West of Albemarle. Within the campus are four buildings surrounded by rolling hills and valleys.

Stanly Tech has been highly successful in attracting a competent staff and faculty. Experienced faculty members with expertise bring preparation and dedication to teaching and helping the student to achieve.

Today the College is co-educational offering two-year general education, technical, vocational and general adult and extension courses. The College is governed by a twelve member Board of Trustees from Stanly County who give freely of their time and efforts for the operation of the College.

## PURPOSE

Stanly Technical College was established to provide appropriate economic and convenient learning opportunities for all citizens beyond the normal high school age. Flexible programs of the College are designed:

1. To provide educational guidance to all who seek our help, by assisting them in choosing suitable courses and in setting realistic goals.
2. To provide programs preparing students for jobs at the technician level in industry, business, and service occupations.
3. To provide programs developing abilities and skills that will prepare students for jobs at the vocational level.
4. To provide general education studies for students who seek personal growth and intellectual enrichment through course work not directly related to their vocational goals.
5. To provide continuing education based on community needs and interest with special emphasis on basic education courses for grades 1-8, high school diploma programs, high school equivalency certificates, developmental studies, and cultural and community service programs.

6. To accelerate the economic growth and development of Stanly Tech's service areas through responsive and relevant business and industry training programs.
7. To provide continuing articulation between the College and the public and private schools of the area.

Stanly Technical College has a continuing concern for the welfare of each student. The school seeks to cultivate in each student healthy mental attitudes, development of abilities and talents, establishment of human relationships, and motivation for progress in intellectual understanding.

## ADMINISTRATIVE OFFICE HOURS

College offices are open Monday through Friday from 8:00 a.m. to 5:00 p.m. An evening director, student services personnel and security personnel are on duty Monday through Thursday until 10:00 p.m.

## ACADEMIC YEAR

The school year is divided into four quarters or two semesters (General Education College Program) for all instructional activities. Calendars for instructional programs are published in this catalog.

## CLASS SCHEDULE

Stanly Technical College offers classes between the hours of 8:00 a.m. and 10:00 p.m. Monday through Thursday, until 5:00 p.m. on Friday, and until 12 noon on Saturday.

The availability of curricula credit courses during both day and evening sessions allows working students the opportunity to select curriculum courses applicable to a degree or a diploma. Any person, after completion of the appropriate admission procedures, may enroll for the day or evening classes.

Non-Credit courses which are offered primarily for personal and community improvement are also offered during day and evening sessions.

Prior to the beginning of each quarter (or semester) schedules indicating types, location and times of classes to be offered are published by the College and also announced in local news media.

## AREAS OF STUDY

**Associate Degree Programs** (Two Years)

Agricultural Business Technology
Associate Degree Nursing
Biomedical Equipment Technology
Business Administration
Business Data Processing
Criminal Justice-Protective Service Technology
Electromechanical Engineering Technology
Electronic Engineering Technology

Fashion Merchandising and Marketing Technology
General Office Technology
Industrial Maintenance Technology
Industrial Management
Manufacturing Engineering Technology
Mechanical Drafting and Design Technology
Occupational Therapy Assistant
Respiratory Therapy Therapist
Secretarial Science-Executive, Legal, Medical

Students completing the required hours in these curriculums are awarded the Associate in Applied Science degree. See the PROGRAMS OF STUDY section of this catalog for program descriptions and course offerings. Descriptions of courses offered in the above curriculums are listed alphabetically by course prefix in the COURSE DESCRIPTION section of this catalog.

**Diploma Programs** (One Year)

Automotive Body Repair
Automotive Mechanics
Computer Operator
Industrial Electronics
Machinist
Respiratory Therapy Technician

Students completing the requirements for these curriculums are awarded a diploma. See the PROGRAMS OF STUDY section of this catalog for program descriptions and course offerings. Descriptions of courses offered in the above curriculums are listed alphabetically by course prefix in the COURSE DESCRIPTION section of this catalog.

**Certificate Programs**

Nurse's Assistant
Welding

Students completing the requirements for these programs are awarded a certificate. See the PROGRAMS OF STUDY section of this catalog for program descriptions and course offerings. Descriptions of courses offered in the above curriculums are listed alphabetically by course prefix in the COURSE DESCRIPTION section of this catalog.

Additional programs are described in the CONTINUING EDUCATION section of this catalog.

## ADMISSIONS POLICY

Stanly Technical College, as do all other branches of the North Carolina Department of Community Colleges, operates under an "open door" admissions policy. This means that any person, whether a high school graduate or non-graduate, who is eighteen years of age or older, and who is able to profit from further formal education will be admitted to some phase of an educational program. Applicants between the ages of 16 and 18 years may be admitted to appropriate courses and programs as persons with special needs as attested by appropriate public school officials.

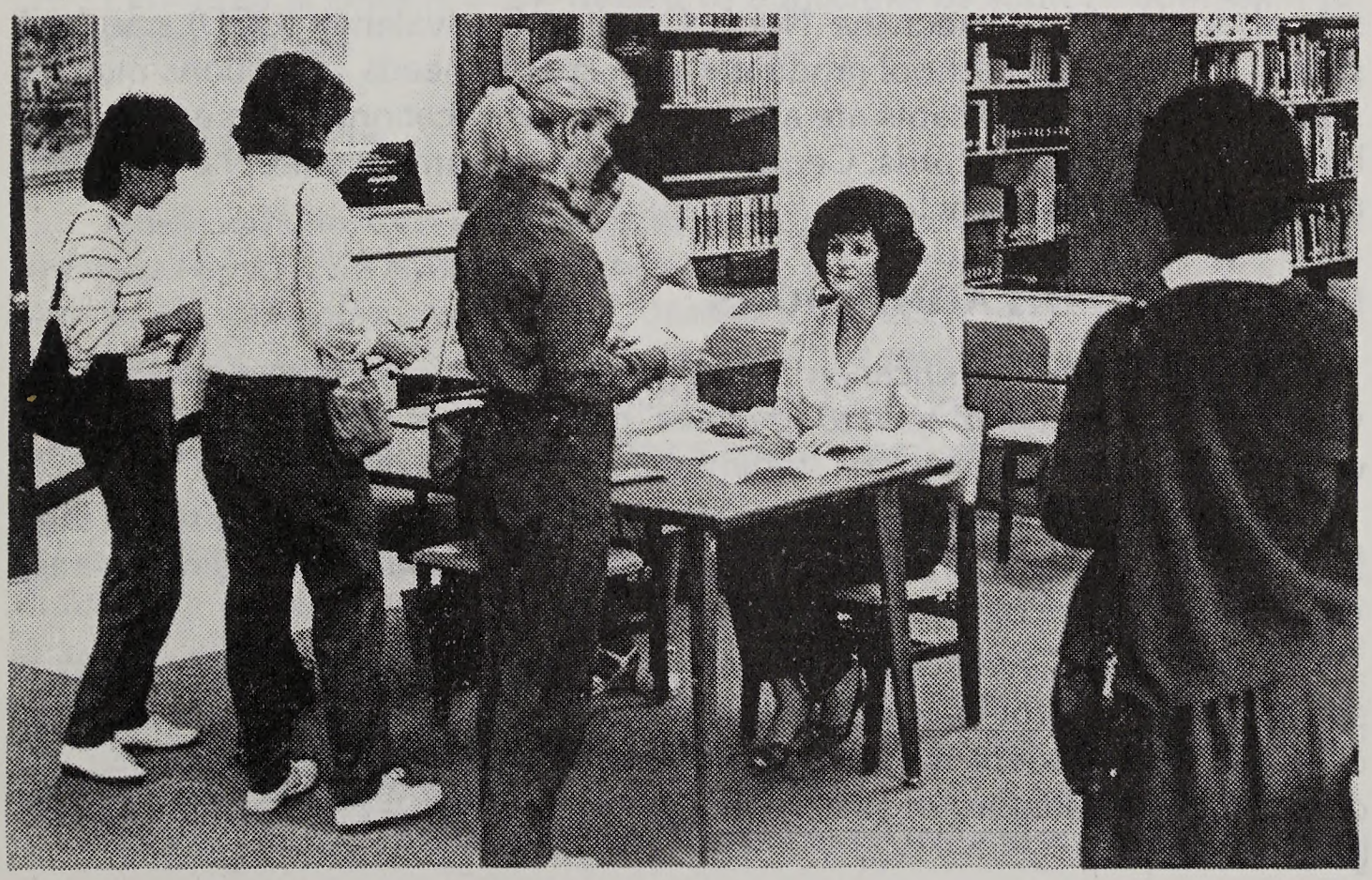
The open door policy does not mean there are no restrictions on specific programs. It does mean that these restrictions are flexible enough to allow each student the opportunity to eliminate deficiencies through developmental work.

## ADMISSION TO ASSOCIATE DEGREE PROGRAMS

High School graduation, or the equivalent, is required of all applicants for degree programs. The high school equivalency certificate (GED) or the state adult high school diploma is acceptable in lieu of a regular high school diploma. Applicants submitting General Education Development (GED) scores must meet North Carolina High School Equivalency Requirements with a total score of 225 with no single test score below 35.

In addition to general requirements, other requirements may be needed to meet admission standards and are specified under each curriculum in the PROGRAMS OF STUDY section of this catalog.

Applicants to associate degree programs will be required to take a placement test consisting of reading, mathematics, grammar, and writing. The results will be used in advising students in course and program selection.



# *ADMISSIONS POLICIES*

## ADMISSION TO ALLIED HEALTH CURRICULA

High school graduation, or the equivalent, is required of all applicants to allied health programs. The high school equivalency certificate (GED) or the state adult high school diploma is acceptable in lieu of a regular high school diploma. Applicants submitting General Education Development (GED) scores must meet the North Carolina High School Equivalency Requirements with a total score of 225 and no single test score below 35.

Applicants must submit three letters of reference. Those currently or previously employed in a health field must have a work-related reference from their immediate or past supervisor. Relatives should not be used as references.

Applicants for nursing and respiratory therapy must have successfully completed high school or college chemistry, biology, and algebra before entry into the program. All allied health applicants must take a placement test.

Applicants are subject to approval by the Admissions Committee. Members of the committee come from the instructional staff of the health curricula and the Student Services staff. An informal interview is held and the committee evaluates all available data concerning each applicant. When required by the Admissions Office, the applicant must also submit a medical form based upon physical examination.

Additional requirements may be needed to meet admission standards for specific allied health curricula and are listed under those programs in the PROGRAMS OF STUDY section of this catalog.

*(Note: The North Carolina Board of Nursing may deny license to individuals convicted of a felony or any other crime involving moral turpitude).*

## ADMISSION TO DIPLOMA PROGRAMS

Applicants for one-year vocational diploma programs should be high school graduates or meet the North Carolina Equivalency (GED) standard scores. For non-high school graduates with special needs exceptions may be made. Generally, applicants are admitted to most vocational programs on the basis of high school records. Certain diploma programs require the applicant to complete a placement test.

## SPECIAL CREDIT ADMISSIONS

Special credit classification is designated for those curriculum students who are not working toward degrees or diplomas. Application and acceptance are required before a student may be granted this status.

Special credit students may be required to take a placement test if they lack the background in mathematics, English grammar, or reading prerequisite to the course of their choosing.

The Special Credit classification may be retained indefinitely. However, a special credit student must maintain satisfactory academic progress in order to continue as a student. Level of courses taken (technical or vocational) will determine the category of satisfactory progress under which the student will be evaluated.

Special credit students wishing to apply credits earned under this classification toward a degree or diploma must complete all admission requirements for the program of their choice and contact the Registrar to change their enrollment status.

## ADMISSIONS PROCEDURE

All correspondence concerning admissions should be addressed to:

Admissions Office
Stanly Technical College
Route 4, Box 55
Albemarle, NC 28001
(704) 982-0121

Applicants for admission to any degree, diploma, or certificate program should complete the following general admission requirements:

1. Obtain an application form from the Admissions Office.
2. Submit the properly completed application to the Admissions Office.
3. Take a placement test upon notification by the Admissions Office.
4. Request that transcripts of all high school and post high school academic work be sent directly to the Admissions Office.
5. Have a personal interview, if requested by the Admissions Office.
6. Submit a properly completed health form when required. (Allied Health programs)

Additional requirements may be needed to meet admission standards for specific curricula and are listed under those programs in the PROGRAMS OF STUDY section of this catalog.

Letters of acceptance are mailed to applicants as soon as admission requirements are met.

## TESTING POLICY

Applicants for technical, allied health, and selected vocational programs are required to take a placement test before final acceptance. The placement test is an evaluation instrument designed to assist students in choosing courses appropriate for their indicated level of performance. (This requirement may be waived at the discretion of the Vice President for Student Services and Planning based on prior test scores or previous study.)

After taking the placement test which is administered through the Counselor's Office, the applicant is requested to make an appointment with the Counselor so that a valid interpretation of the applicant's test score can be discussed. Test interpretation is oriented toward helping individuals make realistic and objective plans for their educational pursuits. Developmental studies programs are available for students who do not make satisfactory scores on the placement test.

Special Credit students may be required to take the placement test if they

lack the background in mathematics, English grammar, or reading prerequisite to the course of their choosing.

Students desiring to take an aptitude or interest test may do so by contacting the Counselor. Special tests, such as interest inventories, reading tests and others are available to individuals who wish to take them. There is no charge for special tests given at Stanly Technical College.

## TRANSFER CREDIT

Upon acceptance, the Registrar will review post secondary transcripts of applicants for admission with advanced standing. When subject content and length of courses taken are comparable to those in the curriculum applied for, credit may be allowed if a grade of C or higher was earned. Transfer credits will not influence the student's grade point average while attending Stanly Technical College.

Allied health applicants with post secondary training must request in writing to the Registrar consideration for advanced standing.

## READMISSION

All former students who left Stanly Technical College in good standing are encouraged to enroll for additional study. However, re-admission after withdrawal is not automatic. Students who have been out one term or longer should contact the Admissions Office so their files can be reactivated. If a conference with a counselor or an advisor is required, the student will be notified. Reentering students who have attended other institutions since withdrawing from Stanly Technical College must have an official transcript sent to the Registrar's Office at Stanly Tech from each institution attended.

Former students desiring to re-enter who were withdrawn for academic or disciplinary reasons must request admission through the Vice President for Student Services and Planning.

## REGISTRATION

Applicants will be notified of the date for registration. Registration dates are published in the ACADEMIC CALENDAR section of this catalog. At registration, students will be assigned class schedules, pay fees, and purchase books. Students are considered registered upon completion of registration materials and payment of fees. Returning students registering after registration day must pay a late registration fee of $5.00.

# *Expenses, Financial Aid*

# *Academic Policies*

# *EXPENSES, FINANCIAL AID*

## DEFINITIONS OF CONTACT & CREDIT HOURS

Contact hours: Actual amount of time (clock hours) spent in class, shop, or lab for each course.

Credit hours: Academic credit awarded and used for tuition and graduation purposes.

## TUITION (CURRICULUM STUDENTS)

Tuition and other charges are set by the North Carolina State Board of Community Colleges, and are subject to change. While it is the Board's policy to keep all charges as low as possible, non-resident students are required under North Carolina law to pay a higher tuition rate than residents. The student is responsible for complying with regulations concerning declaration of residency.

For tuition purposes full time students are those students taking twelve or more credit hours per quarter or semester. There is no additional tuition charge for those hours beyond twelve. Part time students (less than twelve credit hours) are charged by the credit hour. The following tuition and fees are payable each term.

| | **Technical & Vocational (quarter)** | **General Education College Program (semester)** |
|---|---|---|
| Tuition — full-time | $ 51.00 | $ 76.50 |
| Tuition — full-time (non-resident of N.C.) | $255.00 | $382.50 |
| Tuition — part-time | $ 4.25 per credit hour | $ 6.38 per credit hour |
| Tuition — part-time (non-resident of N.C.) | $ 21.25 per credit hour | $ 31.88 per credit hour |

## RESIDENCE CLASSIFICATION FOR TUITION

Under North Carolina law, a person may qualify as a resident for tuition purposes in North Carolina, thereby being eligible for a tuition rate lower than that for non-residents. In essence, the controlling North Carolina statute (G.S. 116-143.1) requires that "To qualify as a resident for tuition purposes, a person must have established legal residence (domicile) in North Carolina and maintained that legal residence for at least twelve (12) months **immediately prior** to his or her classification as a resident for tuition purposes." Ownership of property in or payment of taxes to the state of North Carolina does not automatically qualify one for the in-state tuition rate. Failure to provide requested information for residency classification can result in the student being classified as a nonresident for tuition purposes and disciplinary action. A student who believes that he or she has been erroneously classified shall be permitted to appeal the case in accordance with the procedure outlined by the State Residence Committee.

Regulations concerning the classification of students by residence for purposes of applicable tuition differentials are set forth in detail in **A Manual to Assist the Public Higher Education Institutions of North Carolina in the Matter of Student Residence Classification for Tuition Purposes.** A copy of the manual is available for student inspection in the Student Services Office.

**STUDENT FEE** (Curriculum Student)

Students attending on the quarter system will be charged fifty cents (.50) per credit hour up to 12 credit hours for a maximum fee of $6.00 per quarter. Students attending on the semester system will be charged seventy-five (.75) per credit hour up to 12 credit hours for a maximum of $9.00 per semester.

Example:

| Credit Hours | Quarter Charges | Semester Charges |
|---|---|---|
| 1 | .50 | .75 |
| 2 | 1.00 | 1.50 |
| 3 | 1.50 | 2.25 |
| 4 | 2.00 | 3.00 |
| 5 | 2.50 | 3.75 |
| 6 | 3.00 | 4.50 |
| 7 | 3.50 | 5.25 |
| 8 | 4.00 | 6.00 |
| 9 | 4.50 | 6.75 |
| 10 | 5.00 | 7.50 |
| 11 | 5.50 | 8.25 |
| 12 or more | 6.00 | 9.00 |

The student fees are distributed equally between the Student Government Association (SGA) and Student Benefit (SBA) accounts. The Student Government account is disbursed by the Student Government Association for such things as: student activities, socials, conferences, and support of clubs and organizations. The Student Benefit account is administered by the Vice President for Student Services and Planning and is used for students' benefit such as: recreation equipment and supplies, student lounge decorations, transportation for student activities, student publications and awards, student I.D. cards, and back up support for Student Government activities.

Student fees are non-refundable except if a course or curriculum fails to materialize; then all the student's fees shall be refunded.

## ADDITIONAL EXPENSES

Book costs vary according to the courses taken and will range from $50-$150 per term depending upon the curriculum. Students will often be able to use the same book for more than one term.

Some programs require additional materials, uniforms, equipment, insur-

ance, and supplies. Information regarding additional expenses for specific curricula is available in the Admissions Office.

## LATE REGISTRATION FEE

A $5 late registration fee is charged to returning students who register after the official registration day as designated each term.

## RETURNED CHECKS

A fee of $10.00 will be charged to students for each check that is returned. This fee will be applicable to checks returned for "insufficient funds" or for "stop payment."

## REFUNDS

Tuition refunds for students shall not be made unless the student is, in the judgment of the college, compelled to withdraw for unavoidable reasons. In such cases two-thirds (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. Students who register but do not attend classes are responsible for tuition and fees and are not eligible for refunds except in cases stated above. Tuition refunds will not be considered for tuition of five dollars ($5) or less, except if a course or curriculum fails to materialize; then all the student's tuition shall be refunded.

Where a student, having paid the required tuition and fees for a term, withdraws from the College before the end of the term and the reasons for the withdrawal are found excusable by the College administration, the student may be allowed credit for unrefunded tuition and fees if applying for readmission during any of the next four quarters or two semesters. Written request for this arrangement must be made in the office of the Registrar.

## INSURANCE

All students in vocational or technical programs involving shop or lab work must buy accident insurance or sign a waiver indicating that they already have adequate accident coverage.

Liability insurance is required of all students in allied health programs for protection in the event of a liability claim of a personal or professional nature resulting from the performance of clinical duties. Premiums are payable at the time of registration for the term the student begins clinical practice. Coverage continues for any additional terms requiring the student to be in clinical practice to a maximum of twelve calendar months.

## FINANCIAL AID

The purpose in providing students with financial aid is to ensure that no student is denied the opportunity of attending or continuing at Stanly Technical College because of financial hardship. The tuition and fees at Stanly

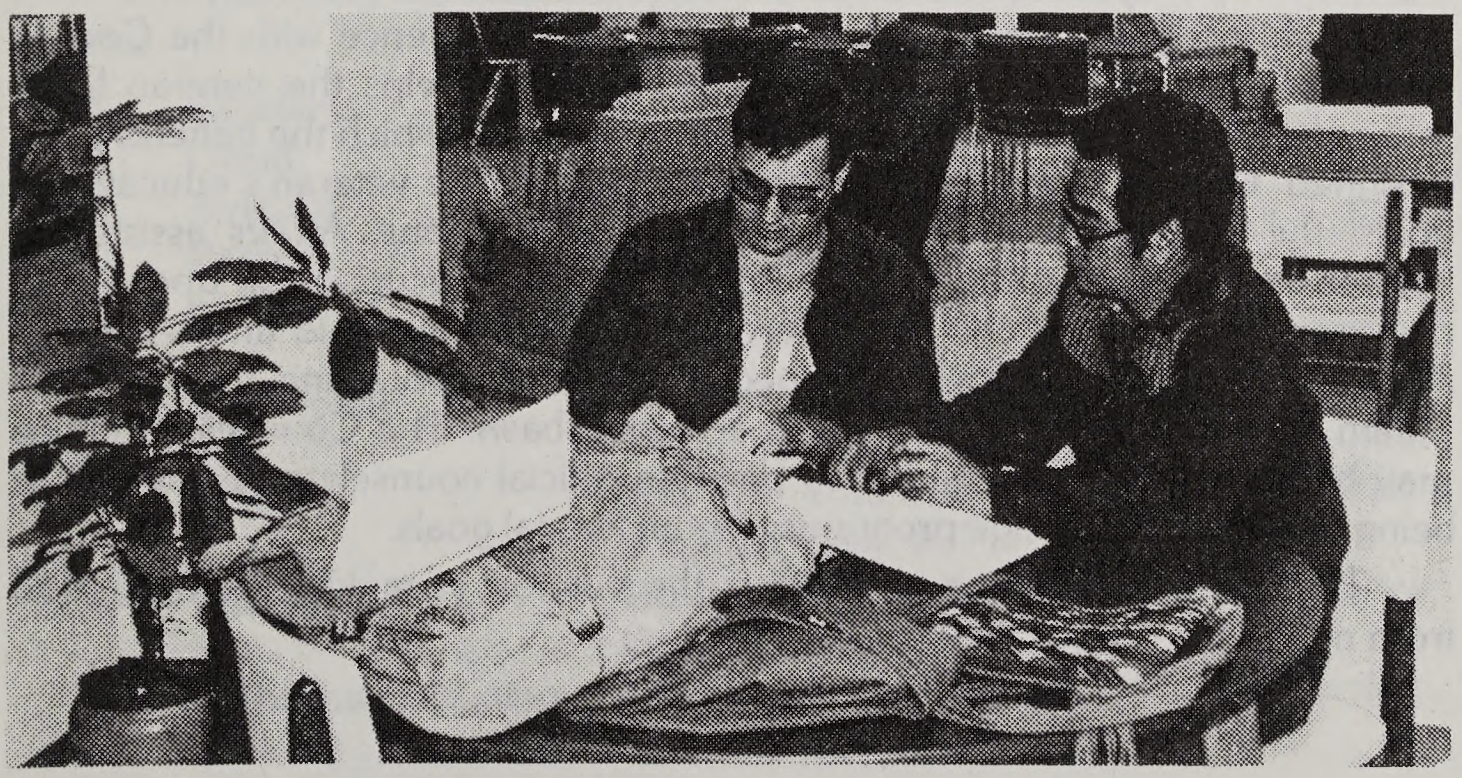
Technical College are low, but other related expenses and living expenses include transportation to and from school, books, uniforms, lunches, personal expenses, and normal living expenses. Every student is encouraged to consider applying for financial aid when making plans to attend Stanly Technical College.

There are three basic types of financial aid available at Stanly Technical College: Gift Aid (Grants and Scholarships), loans, and part-time employment (work-study). Grants and work-study are the most frequent types of aid awarded. Part-time employment opportunities are available in many areas, with the majority of jobs in clerical work. Students must submit proper applications for each type of financial aid desired. Applications may be obtained in the Financial Aid Office.

Most student aid is based on financial need rather than academic record. However, once students are receiving financial aid they will be required to maintain satisfactory academic progress in their course work.

Determination of the student's financial need is made by a standard method approved by the Federal Government. This standard method of determining how much a student needs assumes several things. First, parents are responsible for contributing a reasonable amount to their children's education, depending on income, number of dependents, allowable expenses and indebtedness, and assets. Second, the students should contribute to their education as their resources will allow. Third, student financial aid funds are used only for filling the gap between how much the student and parents are able to contribute and the actual expenses.

If a student meets the criteria for an independent student status, that student's financial need will be determined by calculating only how much the student and spouse should contribute toward education. However, parents are usually considered to have a responsibility in helping their children in school, even though the children may be employed and temporarily on their own. A claim of financial independence cannot be considered if it constitutes an evasion of parental responsibility.



# *EXPENSES, FINANCIAL AID*

Stanly Technical College does not have the resources in student aid funds to provide all the expenses married students may incur while enrolled. It is generally held that married students will have the normal expenses of family living regardless of whether they are in school or not. Normally, Stanly Tech attempts to provide married students with assistance for only those expenses which are related directly to the pursuit of education.

Stanly Technical College also believes in the principle of self-help. Students are expected through their summer employment to save a portion of their earnings for expenses. Most students' needs will usually be met by 50% or more self-help, and the rest gift aid or loans.

Grants and Scholarships available through the Financial Aid Office at Stanly Technical College include PELL Grant. Supplemental Educational Opportunity Grants (SEOG), and North Carolina Incentive Grants.

Loans available include the North Carolina Insured Student Loan Program, Veteran's Educational Loans, and the Stanly Technical College Emergency Loan Fund.

Part-time employment includes the College Work-Study Program (CWSP) and Veterans Work Study.

For further information concerning financial assistance and applications to the various programs or for information about financial assistance provided by other agencies such as Social Services, the Social Security Administration, N.C. Vocational Rehabilitation, contact the Financial Aid Office.

## SCHOLARSHIPS

Various scholarships from industry, civic, and social clubs are made available through the Financial Aid Office. Students interested in these funds should contact the Financial Aid Officer.

## VETERAN'S EDUCATIONAL BENEFITS

Each incoming veteran should schedule a conference with the Coordinator for Financial Aid and Veterans' Affairs who helps the veteran learn more about the veteran's benefits and the purpose for which the benefits were designed. Upon selection of a program which suits the veteran's educational goals, the Coordinator for Financial Aid and Veterans' Affairs assists the veteran in completing the proper applications and securing the documents necessary for certification. The Coordinator for Financial Aid and Veterans' Affairs also helps veterans with special problems, contacting the Winston-Salem Regional Veteran's Office on a regular basis. The Counselor's Office may be able to help veterans who need an official counseling review before being permitted to change programs or educational goals.

The Student Services staff assists the veteran in making the transition from military to college life.

## REQUIREMENTS FOR GRADUATION

The following requirements are established as a minimum for the Associate in Applied Science Degree and the Diploma.

1. Complete all course requirements of the curriculum, earning at least a 2.0 grade point average in courses required for graduation.
2. Pay a graduation fee at the time of registration for the last quarter.
3. Earn at least one-fourth of the credits required for a degree or diploma from Stanly Technical College.
4. Fulfill all financial obligations to the College.
5. **Be present for graduation exercises.** Graduation exercises are held at the end of the summer term on the date published in the academic calendar. In cases of unavoidable circumstances, exceptions to this requirement may be granted by the Vice President for Student Services and Planning. During graduation exercises candidates must be dressed in proper academic attire, as determined by the President of the College.

## GRADUATION IN ABSENTIA

A written request for permission to graduate in absentia must be filed with the Vice President for Student Services and Planning no later than 14 days prior to commencement exercises.

The degree or diploma will be mailed to those students with approved absences unless other arrangements are made with the Registrar's Office. Students with unapproved absences will be required to pick up their degree or diploma in the Registrar's Office after a written request has been approved by the Vice President for Student Services and Planning.

## GRADING SYSTEM

The following alphabetical system is used for reporting and recording all grades:

| | | |
|---|---|---|
| A | Excellent | 4 q.p.* per credit hour |
| B | Good | 3 q.p. per credit hour |
| C | Average | 2 q.p. per credit hour |
| D | Passed | 1 q.p. per credit hour |
| F | Failure | 0 q.p. per credit hour |

| | | |
|---|---|---|
| I | Incomplete | Will carry hours attempted and will be computed in GPA. Must be removed by the end of the next term or the grade will be changed to an "F." |
| W | Withdrawal | Hours are not included in determining Grade Point Average |
| WP | Withdrawal Passing | Hours are not included in determining Grade Point Average |

| | | |
|---|---|---|
| WF | Withdrawal Failing | Hours are not included in determining Grade Point Average |
| Y | Audited | |
| S | Satisfactory | Hours are not included in determining Grade Point Average |
| U | Unsatisfactory | |
| P | Credit received by passing a proficiency exam | |
| CS | Continuing | Must re-enroll until course objectives are met. Hours not included in GPA. |

Q.P.* = quality points

## SCHOLASTIC STANDARDS

The minimum grade point average for graduation is 2.0 or a grade average of C.

Quality Point Averages are determined by dividing the total number of quality points by the number of credit hours attempted. If a course is repeated, the last grade will be used in computing the student's hour-quality point ratio. A ratio of 2.0 indicates that the student has an average of C; above 2.0 indicates that an average above C; below 2.0 indicates that an average below C. Grades of I, P, S, U, Y, W, WP, WF, F and CS yield no quality points.

## GRADE REPORTS AND TRANSCRIPTS

Shortly after the end of each term student grade reports are mailed to students.

Transcripts of the student's record will be sent to other schools, prospective employers or to the student if an official written request is made by the student to the Registrar's office.

## COURSE AUDITING

Students who wish to audit courses must indicate such at the time of registration for the course and register through normal channels. Auditors receive no credit and are encouraged to attend class regularly and participate in class discussions. Auditors will be charged the same fees as students taking courses for credit. Students may not change from audit status or to audit status after the registration period.

## PROFICIENCY EXAMINATION

Applicants who have reason to believe they are proficient in a subject may request credit by examination. The examination may be written, oral, performance, or all of these, and may be scheduled at any time mutually convenient to the examining instructor and the student. The academic standards for credit by examination will be commensurate with the academic standards for the course; the minimum test to be similar to that which is administered at the conclusion of regularly scheduled courses. Students failing such an exami-

nation may not request a second examination until evidence of further study in the subject concerned is presented. No credit by examination will be allowed if the student has previously taken the course for credit and is now attempting to raise the course grade. Decision of the examining instructor will be final.

Credits earned by examination will be entered on the student's permanent record, but quality points will not be awarded for such credit. Hours earned through proficiency examination may not be considered when calculating hours to determine the student enrollment status (full time, part time). Example 1: Student registers for 12 credit hours (full time) and attempts and passes a 6 credit hour proficiency examination. For tuition purposes the student is charged a full time tuition fee. However, because the student passing a proficiency examination does not maintain attendance, the student may not use the 6 credit hours for calculating hour requirements for aid and benefits. Example 2: Student registers for 18 credit hours and proficiencies out of a 6 credit hour course. The student still remains in attendance for 12 credit hours and is considered full time for aid and benefits. Example 3: Student registers for a proficiency examination and fails the examination. The student must then be in class attendance for the course.

Procedures for Credit by Examination are as follows:

A. Students are responsible for initiating a request to their instructor to take a proficiency exam in a specified course.
B. The instructor evaluates the request to determine if:
   (1) A need for proficiency exam exists;
   (2) The student has demonstrated, or there is evidence, that the student possesses skill commensurate with the request.
C. Instructor initiates a request to the Dean for Occupational Education for approval or disapproval of proficiency exam.
D. Student is notified as to approval or disapproval.
E. Approved proficiency exams are processed as follows:
   (1) Students must pay for Proficiency Exams at the normal registration rate. The Registrar will initiate an appropriate registration bill and forward to the Business Office in cases where students are not enrolled in the courses for which the exam is requested.
   (2) Copies of payment of tuition will be forwarded to the Dean for Occupational Education and then the testing instructor.
   (3) The instructor, after verifying enrollment or payment, administers the exam and returns the completed request form to the Dean for Occupational Education to indicate pass or failure of the exam.

## DROP/WITHDRAWAL PROCEDURE

### Drop/Add

A student may drop or add a course during the drop/add period published in the Academic Calendar. Forms are available in the Registrar's Office

located in Student Services. Courses dropped during the drop/add period will not be recorded on the student's transcript.

### Withdrawal Procedure

A student withdrawing from a course/s is responsible for initiating a course withdrawal through the Registrar's Office located in Student Services. The instructor must initiate a withdrawal if a student does not attend a course/s or has two consecutive weeks of absences without contacting the instructor. By the conclusion of the second week of the term any students who have not attended classes shall be dropped by the instructor.

After the drop/add period (first five days of classes) students may withdraw without penalty through the fourth week of the term as published in the Academic Calendar. The grade of W will be assigned by the Registrar during this period and **will not** be computed in the student's grade point average.

After the end of the fourth week of the term students may withdraw from a course/s through the ninth week of the term (eighth week during the summer term). The grade of WP (Withdrawn Passing) or WF (Withdrawn Failing) will be assigned by the instructor at the time of withdrawal. The grades of WP and WF **will not** be computed in the student's grade point average.

**Students will not be allowed to withdraw from a course/s during the last two weeks of the term.**

Instructors who initiate drops during the last two weeks of the term must assign a grade to the student from the Grading System as published in this catalog.

## COURSE SUBSTITUTION

Students may request to substitute a course required in their program of study based on particular occupational goals. Action upon such substitutions must be initiated by the student's advisor/program head who in turn forwards the request to the Dean of Occupational Education. Consensus of these College officials must be reached to finalize a course substitution. A maximum of five (5) courses may be credited for any student through the course substitution method. Notification of approval of course substitutions must be submitted to the Registrar's Office.

## REPEATING A COURSE

Students will be permitted to substitute the second grade made on any course in which they have previously made a grade below C. In computing the cumulative GPA for a student who has repeated a course, the hours and quality points earned the first time will be omitted from the computation and only the second earned grade, whether F or higher, will count. The first grade, F or higher, will still be recorded on the student's transcript.

Students will not be allowed to repeat for credit a course in which they have made a grade of C or above. Students repeating a course in which a grade of C or above has been earned will be classified as audit.

## DEAN'S LIST

Soon after the end of each term the Registrar publishes a Dean's List in order to honor students who have earned outstanding scholastic records. To be named to the Dean's List a student must take a minimum of 12 credit hours of work and earn at least a 3.50 average with no grade lower than C, nor an incomplete.

## SATISFACTORY ACADEMIC PROGRESS POLICY

All curriculum students must meet these minimum standards to be considered progressing satisfactorily toward graduation.

| Credit Hours Attempted | GPA Diploma | GPA Degree |
|---|---|---|
| 1-30 | 1.60 | 1.50 |
| 31-46 | 1.75 | 1.65 |
| 47-62 | 1.90 | 1.75 |
| 63-78 | 2.00 | 1.85 |
| 79-94 | | 1.95 |
| 95 + | | 2.00 |

***Definitions:***

Credit Hours Attempted — Total hours taken including courses with grades I and F.

GPA — Grade Point Average — Determined by dividing total quality points earned by total hours attempted.

GPA Diploma — Average for curriculums awarding diplomas.

GPA Degree — Average for curriculums awarding Associate Degrees.

Any term the student's GPA falls below the recommended standing, the student will be placed on academic probation for the next term enrolled. The student is notified of academic probation on the grade report. The student then has the next term enrolled to achieve the GPA standing for credit hours attempted.

Failure to meet the minimum GPA during the probation term will result in the student being terminated for veteran's benefits and other areas requiring evidence of satisfactory progress. A veteran student who is dropped or withdraws from all courses when taking two or more courses will be placed on academic probation the next term enrolled.

Upon referral to Student Services for counseling, students making unsatisfactory progress may be provided other learning options or continue in a limited number of classes.

## ACADEMIC PROBATION PROCEDURES

This first term the student is on academic probation, the student must earn the Grade Point Average (GPA) standard for total credit hours attempted. Failure to do so will result in the student being limited to no more than two courses or a maximum of eight credit hours during the next period

of enrollment. Each term the student remains on academic probation, the student must earn better than a "C" average until the GPA standard is met. Failure to earn this average will result in academic suspension for a period of at least one term. Upon re-establishing the GPA standing for credit hours attempted, the student will be removed from academic probation. The Grade Point Average will be recomputed each term and the student will be notified of the exact grade points needed. If a student is on academic probation and withdraws after payment of fees for the term, that term will be counted as one of academic probation.

Example: At the end of the spring quarter, a student is placed on academic probation because the student has not earned the necessary Grade Point Average. Summer quarter, the student enrolls and withdraws after payment of fees, fall quarter this student is limited to no more than two courses or a maximum of eight hours since this is considered as the second term of academic probation.

## REINSTATEMENT FROM ACADEMIC SUSPENSION

The student must request in writing to the Vice President for Student Services and Planning consideration for reinstatement after having been on suspension for a minimum of one term. The term of reinstatement, the student must earn better than a 2.00 grade point average on that term's work. Failure to do this will result in suspension for a period of one year.

If after reinstatement to a program a determination is made through counseling with the student that a change of program would be to the best interest of the student, a recommendation will be made to the Vice President for Student Services and Planning that the student be permitted to complete a Request for a Change of Program.

## PROGRAM CHANGES

Students wishing to enroll in a curriculum program other than the one in which they are currently enrolled are encouraged to discuss their objectives with a counselor in Student Services. A change of program form, available in the registrar's office, must be completed by each student and returned to Student Services.

Credits and grades in the previous program(s) which are applied to the new program will be carried forward including the quality points earned on the courses. Courses applied to the new program in which no quality points were earned will be carried forward as hours attempted.

## CLASS ATTENDANCE

Each student is expected to attend all classes for which registered. Absences do not relieve the student's responsibility of meeting the requirements of the class. Any student missing two consecutive weeks after the first day of classes without contact or permission of the instructor will be withdrawn. Immediately following the first week of loss of contact with a student,

the instructor will determine the student's intent to continue or refer the student's name to Student Services for assistance in making this determination.

After loss of contact with the student, the instructor will withdraw the student from the class.

## BOOKS AND SUPPLIES

It is the student's responsibility to obtain the required textbooks and supplies prior to the first meeting of class. Students attending classes without the necessary textbooks and supplies may be withdrawn from the class/classes in question. The college maintains a bookstore from which the student may purchase the necessary books and supplies.

## ADVISORS

Students will be assigned advisors upon their first registration at Stanly Technical College. Usually the advisor will be the head of each student's respective program. Advisors will keep a record of their advisee's progress and will be the person a student will seek when questions arise regarding their program or requirements for program completion. Faculty members schedule office hours each term and students are encouraged to make appointments with advisors to lessen the problems and congestions during registration.

Students are urged to check the Faculty Locator Card posted on the faculty member's office door.

## INCLEMENT WEATHER

During periods of inclement weather, Stanly Technical College will close school when driving is hazardous. The Vice President for Student Services and Planning will determine when classes will be canceled due to inclement weather, and contact the news media and have them announce the plan. **NOTE:** THE CLOSING OF DAY CLASSES DOES NOT MEAN THAT EVENING CLASSES WILL NOT BE HELD. SEPARATE ANNOUNCEMENTS WILL BE MADE FOR DAY AND EVENING CLASSES. Students are urged **not** to call the news media or members of the school staff.

Instructional days missed for inclement weather shall be made up on the days indicated in the Academic Calendar. See the ACADEMIC CALENDAR section of this catalog.

## STUDENT RECORDS

All currently enrolled students have the right to examine their official records. The student's official records consist of school application, transcripts of previous educational training, test scores if applicable, grades and correspondence.

Stanly Technical College will release the following directory information: The student's name, enrollment status, program of study, dates of attendance, degrees awarded, awards given, and participation in official activities. Any student objecting to the release of any or all of above directory information without appropriate consent must notify the Registrar in writing within ten days after the initial registration. The objection must state what information the student does not want to be classified as directory information.

Other than directory information, student records may not be released without written consent of the student except in the following situations: (a) a request from a staff or faculty member of the College who has a legitimate educational interest in the information or administrative duties required in maintaining the records; (b) in compliance with a court order or subpoena, provided the student is notified in advance of the compliance; (c) requests from other departments, educational agencies, or accrediting agencies, which have a legitimate educational interest in the information; (d) requests from officials of other schools to which the student intends to transfer or enroll provided the student is furnished with a copy, if so desired; (e) requests from authorized representatives of the Comptroller General of the United States, the administrative head of a federal agency in connection with an order or evaluation of federally supported education programs; (f) requests in connection with a student's application for financial aid; (g) requests from appropriate persons in connection with an emergency if the knowledge of such information is necessary to protect the health and safety of the student or other persons.

Official records are those records maintained by any unit of the College except those created by an individual staff or faculty member for that member's use and are not accessible to the student.

Procedures for student inspection of records:

1. Students who wish to inspect and review their records shall submit a request in writing to the Registrar.
2. Access shall be provided as soon as possible but must be within 45 days of the request.
3. The Registrar must note in the permanent folder the following information:
    a. Name and date the access occurred.
    b. Copies made of materials.

# *Student Services, Student Life*

# *Programs of Study*

# *STUDENT SERVICES, STUDENT LIFE*

## COUNSELING

A major role of Stanly Technical College is to assist students in making the transition from high school and/or the world of work to the post high school institution. Individualized counseling sessions may be arranged to discuss a student's interests, aptitudes, vocational goals, or academic and personal problems. Such conferences are confidential.

Also, upon acceptance at the College, each student is assigned a faculty advisor who is available for help with situations related to the student's academic work. The advisor serves as a direct link between the student and the successful completion of the student's program of study.

## EXTRA-CURRICULAR ACTIVITIES

The administration, faculty and staff, in concert with the Trustees of the College, support the position that extra-curricular activities are important to the total development of the student. In this regard, students are encouraged to pursue their interests through participation in the numerous clubs, organizations, and activities which promote social development and supplement the educational process.

## STUDENT GOVERNMENT

The Student Government Association is composed of all curriculum students who are enrolled at Stanly Technical College. Members are encouraged to be active participants in student affairs and to voice opinions and thoughts through their representatives.

All extra-curricular activities are coordinated through the Student Government Association and the Office of Student Services. During the fall term the student body selects Student Government Association executive officers and technical and vocational senators in a campus-wide election. One representative is also elected from each campus club. An administrative advisor and several faculty advisors serve to assist the Student Government Association with their activities.

The executive officers and senators of the Student Government Association provide leadership for the student body. The Student Government Association sponsors activities that enhance student campus life. Students are involved in school affairs, with active participation on various advisory and standing committees.

The President of the Student Government Association serves as a member of the Administrative Council of Stanly Technical College and as an ex-officio member of the Board of Trustees. The Stanly Technical College Student Government Association actively participates in the State Student Government Association.

## CLUBS AND ORGANIZATIONS

In addition to the Student Government Association, eight clubs representing a large number of students with diverse interests are active on cam-

pus. These include Phi Beta Lambda, Fashion Merchandising Association, Respiratory Therapy Club, Nursing Club, BMET/EET, Data Processing Club, and the Occupational Therapy Club.

With the Student Government Association open to all students, and eight other clubs and organizations geared more to specific interest groups, extra classroom interests are for the majority of Stanly Technical College students.

## RECREATION

Stanly Technical College has recreational equipment and facilities available on the campus whereby students may participate in their leisure time in touch football, basketball, volleyball, softball, and horseshoes. The equipment may be checked out from Student Services.

Billiards, foosball, television, and electronic games are available in the student lounge for the students' recreational activities.

Socials, dances, and cookouts are planned for both day and evening students by the Student Government Association under the supervision of the Vice President for Student Services and Planning.

## STUDENT LOUNGE

Students are encouraged to use the student lounge as a place to meet, talk, eat, and relax. The lounge provides an opportunity for students, faculty, and staff to exchange ideas in an informal atmosphere. In order to assist the maintenance staff in cleaning the lounge, the lounge is closed at 1:00 p.m. on Friday.

Hot and cold foods and beverages are available from vending machines in the student lounge.

## CLASS RINGS

Stanly Technical College class rings are available to all students. Students wishing to order rings should check with the Student Services Office to find out when orders will be taken. A ring sales representative will be available each quarter and times will be announced in advance.

A deposit is presently required when the order is placed, and rings are mailed C.O.D. to the students' homes approximately 10 weeks from the date of order.

## ALUMNI ASSOCIATION

Each Stanly Tech student completing a course or graduating is invited to join the Alumni Association. The aim of the Alumni Association is to keep former students involved in Stanly Technical College's future activities and growth. Alumni may take advantage of placement services and other post-graduate benefits that are offered.

## SMOKING

Smoking is allowed on the campus but is prohibited in all instructional areas. Ash trays and smoking stands are provided in those areas where smoking is allowed. Smoking is permitted in faculty, staff, and administrative offices if there is no objection by the office occupant.

## HEALTH SERVICES AND FIRST AID

Limited first aid services are provided through the Office of Student Services. First aid kits are maintained in the Student Services Office as well as each of the shop areas. Injuries requiring more than minor first aid will be referred to local physicians. In case of an emergency, physicians and/or ambulance service may be called at student expense to provide necessary medical services.

## HOUSING

All new applications are checked to determine if the applicant needs housing assistance. Students so designated are then sent a Housing Information Form to complete and return to the Admissions Office. Depending upon what type of accommodations are required, the College tries to locate a suitable place through its housing list. The list is made up of names and addresses of people in Stanly County who have room(s), apartments, mobile homes, or houses to rent. This list is not given to students but discussed with them on an individual basis. After conferring with the student about his or her individual needs, a person on the housing list who meets these needs is contacted. A date and time is scheduled to visit the location. If the student is coming from out of town specifically to find a place to live, the College tries to arrange for several places to visit. After the student has decided which place he or she would like to rent, final arrangements are made. The rental fee and rules are decided upon between the student and the landlord. Stanly Technical College

is not responsible for housing arrangements between student and potential landlord other than assistance to the student in finding housing.

## JOB PLACEMENT

The Counselor/Placement Officer is responsible for assisting students and graduates of the College in finding employment in their chosen field. Student resumes' will be filed in the Job Placement Office. Placement service is also available to Stanly Technical College alumni seeking permanent employment. While there is no guarantee that students and alumni will be placed in a job of their choosing, many contacts with business and industry are maintained to help bring prospective employers and employees together.

The Job Placement Service is located in the Student Services Office.

## STUDENT RIGHTS AND RESPONSIBILITIES

Students at Stanly Technical College are considered to be mature adults who enter classes voluntarily. By entering classes, students take upon themselves certain responsibilities and obligations which include an honest attempt at academic performance, and social behavior consistent with the lawful purpose of the College. Students maintain all legal rights of citizenship while enrolled and are expected to remember that they are living in a democratic situation. The reputation of the College rests upon the shoulders of students as well as on the administration, staff and faculty, and it is hoped that each student will maintain high standards of citizenship. The campus and College will not be a place of refuge or sanctuary for illegal or irresponsible behavior. Students, as all citizens, are subject to civil authority on and off the campus. Common courtesy and cooperation make the above suffice for a long list of rules and regulations.

## STUDENT DISCIPLINE

Students causing minor infractions of rules and regulations in the classroom will be disciplined by the instructor in charge since the instructor has authority in defining proper classroom decorum.

Other violations of conduct or regulations will be referred to the Vice President for Student Services and Planning. Some types of misconduct which are subject to disciplinary action are cheating, plagiarism, theft or damage to the College's property.

Intoxicants, including alcoholic beverages and hallucinatory drugs, are not allowed on the campus of Stanly Technical College under any circumstances.

The President, Vice President for Student Services and Planning, and Evening Director are authorized to suspend immediately any student who impairs, impedes, or disrupts the legal mission, processes, or functions of the College. Students counseling, encouraging, instigating, or inciting others to impair, impede, or disrupt the educational and other lawful operations of the College shall also be subject to immediate suspension.

A student who has been suspended will receive a hearing with the Vice President for Student Services and Planning within five days of suspension. The hearing shall provide the student the opportunity for due process. The student may be represented by legal counsel at this hearing.

## STUDENT GRIEVANCE PROCEDURE

Differences in viewpoints are natural and essential for continuing growth and development as individuals. The approach taken by an individual represents many aspects of character and maturity.

Unresolved differences which affect students while enrolled may be classified as a grievance if the individuals involved have not, or cannot reach agreement.

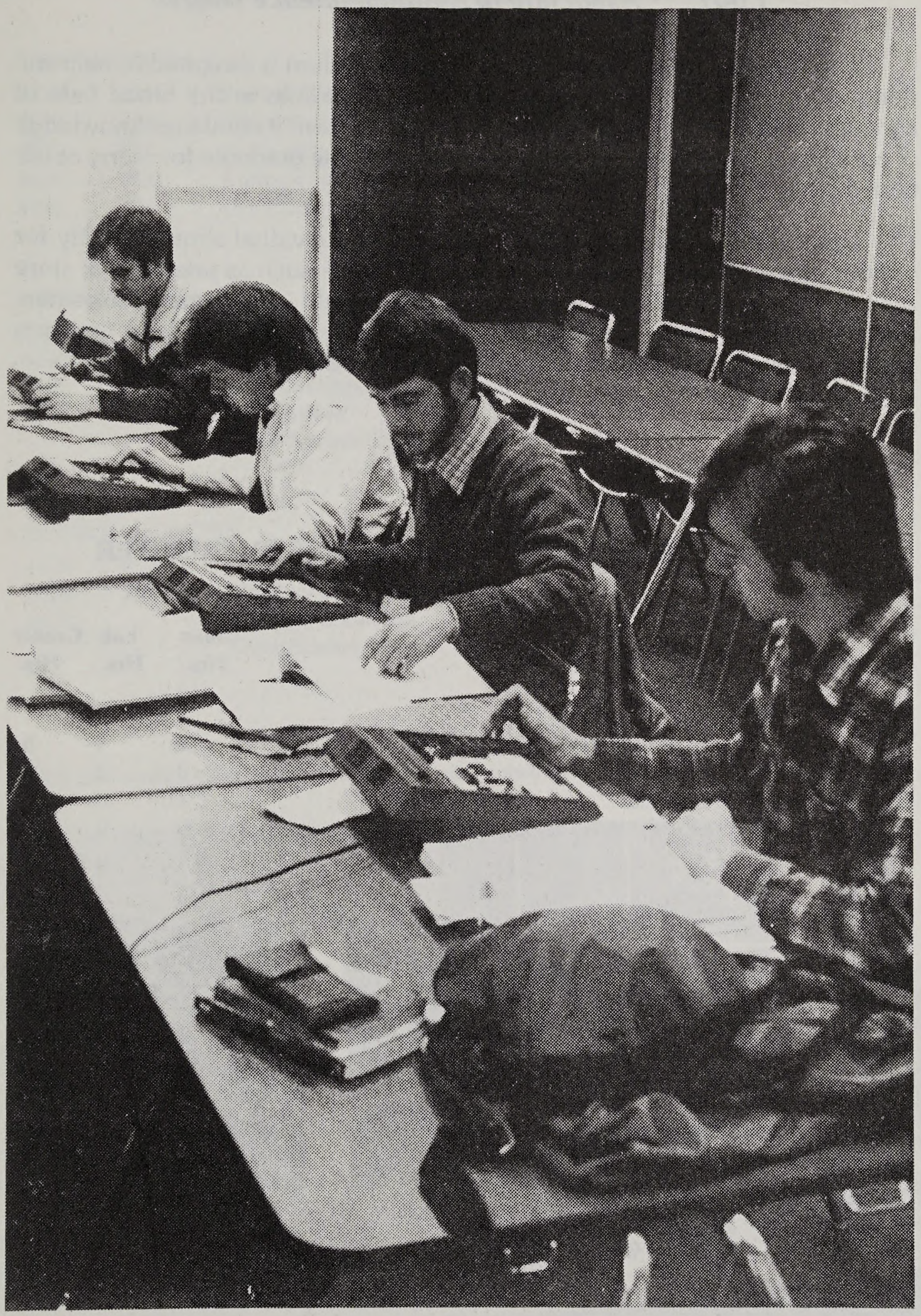
Grievances of students will be handled by the Vice President for Student Services and Planning who is assigned the responsibility for student welfare.

The Vice President for Student Services and Planning will verify consultation between the parties involved and render a decision. If, in the case of a student-instructor disagreement, such has not taken place, the Vice President for Student Services and Planning and the Vice President for Academic Services will assist in arranging a consultation. If there is not a resolution after consultation, the Vice President for Student Services and Planning and the Vice President for Academic Services will jointly render a decision. If the decision of the department heads is not unanimous or if the department heads are unanimous and the decision is unacceptable by the grievant, the matter will be referred to the President of the College.

The President will then call a hearing of the parties involved to include the department heads of the departments in question. After reviews, the President will submit a decision in writing to the grievant within five days of the hearing. Decisions of the President of the College may be appealed in writing through the President to the Personnel committee of the Board of Trustees.

The Board of Trustees shall hear appeals from officials and students in the College. No appeals will be heard unless the grievant has first exhausted the administrative procedures on appeals.

# PROGRAMS OF STUDY



# PROGRAMS OF STUDY

## Agricultural Business Technology

### T 001 Associate in Applied Science Degree

The Agricultural Business Technology curriculum is designed to help students acquire knowledge, understandings, and abilities in the broad field of agricultural business including agricultural production. It combines knowledge of agriculture with business education to prepare the graduate for many of the varied employment opportunities in agribusiness.

Upon graduation from this curriculum, an individual should qualify for various jobs in agricultural business and industry — such as salesman or store manager in farm supply stores; agricultural field serviceman; salesman; demonstrator, or plant manager of feed and food companies; farm products inspector; salesman or office manager of farm products marketing firms.

### SUGGESTED SEQUENCE OF COURSES BY QUARTER

| Course Title | | | Class Hrs. | Lab Hrs. | Credit Hrs. |
|---|---|---|---|---|---|
| FIRST QUARTER | | | | | |
| AGR | 125 | Animal Science | 3 | 4 | 5 |
| BUS | 102 | Typewriting I | 3 | 2 | 4 |
| ENG | 101 | Grammar | 3 | 0 | 3 |
| MAT | 110 | Business Mathematics | 6 | 0 | 6 |
| | | | 15 | 6 | 18 |
| SECOND QUARTER | | | | | |
| AGR | 185 | Soil Science & Fertilizer | 3 | 4 | 5 |
| BUS | 101 | Introduction to Business | 3 | 0 | 3 |
| CHM | 101 | Chemistry | 4 | 2 | 5 |
| ENG | 102 | Composition | 3 | 0 | 3 |
| | | | 13 | 6 | 16 |
| THIRD QUARTER | | | | | |
| AGR | 104 | Introduction to Agricultural Economics | 3 | 2 | 4 |
| AGR | 170 | Plant Science | 3 | 4 | 5 |
| BUS | 120 | Accounting I | 6 | 0 | 6 |
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| | | | 15 | 6 | 18 |
| FOURTH QUARTER | | | | | |
| AGR | 199 | Cooperative Work Experience | 0 | 40 | 4 |
| | | | 0 | 40 | 4 |

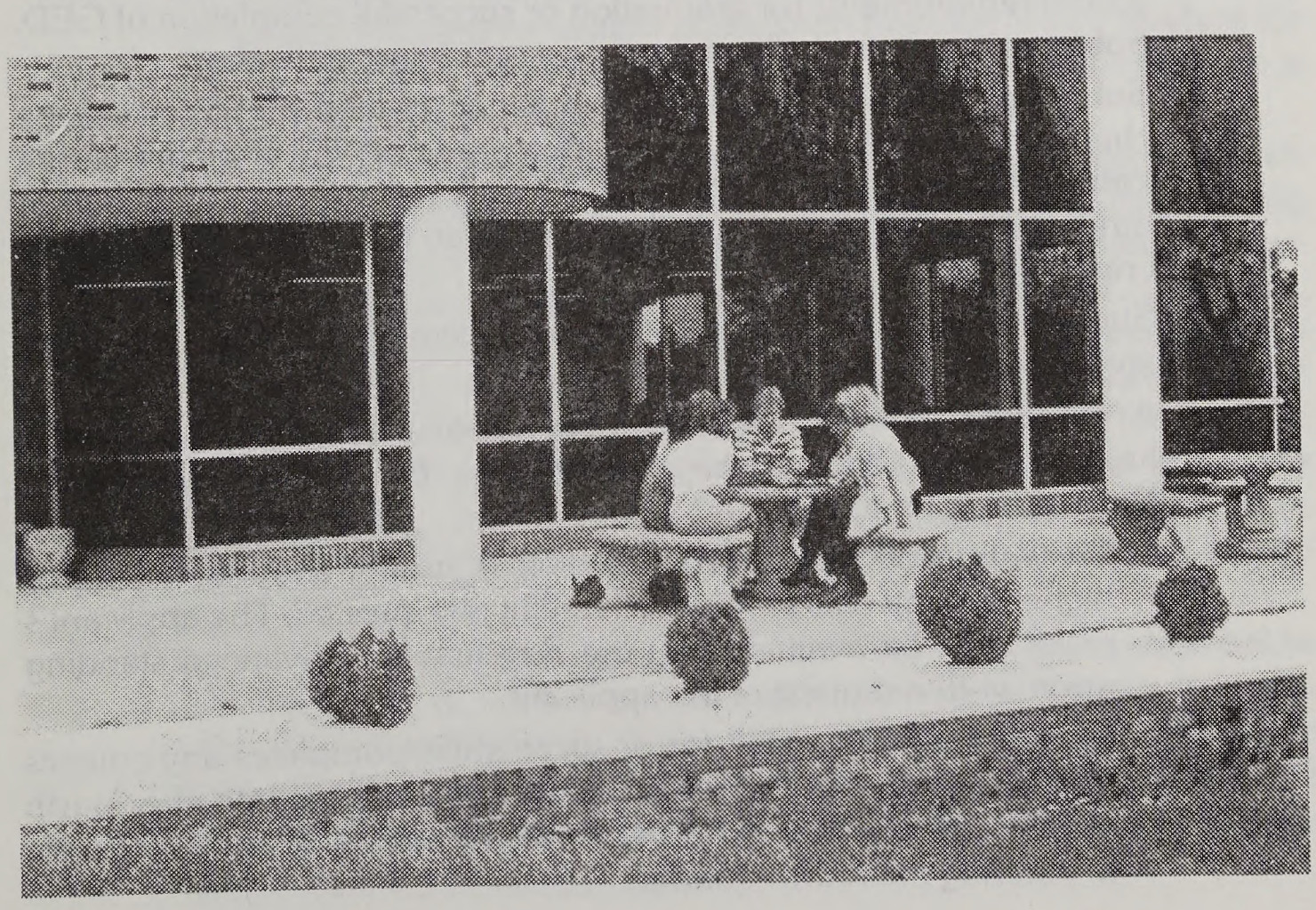
# *Agricultural Business Technology*

## *T 001 Associate in Applied Science Degree*

| | | | | | |
|---|---|---|---|---|---|
| FIFTH QUARTER | | | | | |
| AGR | 204 | Farm Business Management | 3 | 4 | 5 |
| BUS | 110 | Office Machines | 2 | 2 | 3 |
| BUS | 121 | Accounting II | 6 | 0 | 6 |
| BUS | 123 | Business Finance I | 3 | 0 | 3 |
| ENG | 204 | Oral Communication | 3 | 0 | 3 |
| | | | 17 | 6 | 20 |
| SIXTH QUARTER | | | | | |
| AGR | 201 | Agricultural Chemicals | 3 | 0 | 3 |
| AGR | 205 | Agricultural Marketing | 3 | 4 | 5 |
| BUS | 232 | Sales Development | 3 | 0 | 3 |
| | | Free Elective* | | | 2 |
| | | Social Science Elective | | | 3 |
| | | | 9 | 8 | 18 |
| SEVENTH QUARTER | | | | | |
| AGR | 218 | Agricultural Mechanization | 3 | 4 | 5 |
| AGR | 228 | Livestock Diseases & Parasites | 3 | 4 | 5 |
| AGR | | Agricultural Elective* | | | 5 |
| | | Social Science Elective | | | 3 |
| | | | 6 | 8 | 18 |

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 112

* Elective courses must be selected with advisor's approval from the associate degree curricula.



# Associate Degree Nursing

## T 059 Associate in Applied Science Degree

The Associate Degree Nursing, seven quarter curriculum, prepares the graduate to implement the nursing process for nursing care given to clients with physical and mental problems. The associate degree nurse is prepared to assess the client's problems; make the nursing diagnosis for common problems; plan, implement and evaluate nursing care which includes both medical and nursing orders; and supervise licensed practical nurses and other auxiliary health care personnel. The registered nurse may practice in a variety of health care settings such as hospitals, nursing homes, extended care facilities, doctors' offices, mental health centers, and industry.

Graduates from the Associate Degree Nursing Program will be eligible to take the National Council Licensure Examination which is given by the North Carolina Board of Nursing and is required for practice as a registered nurse.

Graduates of the Practical Nursing curriculum will be eligible to take the National Council Licensure Examination for Practical Nurses which is given by the North Carolina State Board of Nursing and is required for practice as a Licensed Practical nurse.

### ADMISSIONS REQUIREMENTS FOR THE ASSOCIATE DEGREE NURSING PROGRAM:

Requirements for entry to the Associate Degree Nursing (T-059) and Practical Nursing Education Curriculum Alternative (V-038)

1. Complete Application for Admission.
2. Submit high school transcript showing successful completion of high school requirements for graduation or successful completion of GED. Submit transcripts of all previous post-secondary education.
3. Submit evidence of successful completion of high school or college chemistry, biology, and algebra with a grade of "C" or higher before entry into the program. Successful scores for courses completed at other institutions will be evaluated and may be accepted for transfer credit.
4. Successful completion of institutional placement test with 12th grade level performance.
5. A graduate practical nurse may be given advanced placement if he/she meets admission requirements for the Associate Degree in Nursing progam and:
   a. Presents a practical nursing school transcript showing a "C" or higher on any course for which credit is requested. The applicant's record will be evaluated by the Registrar for advanced standing upon written request of the applicant.
   b. Receives transfer credit for or successfully completes any courses required in the first three quarters before entry into the fourth quarter. All graduate practical nurses must take Nursing 201 prior to entering the fourth quarter.

6. The college reserves the right to test any applicant asking for transfer credit on any course in theory or clinical.
7. All applicants must submit three letters of reference. Practical Nurses currently or previously employed must have a work-related reference from their immediate or past supervisor. Relatives should not be used as references.
8. After admission requirements have been completed, the applicant will be scheduled for an interview with the Admissions Committee. This committee will include the Nursing faculty.
9. Applicants who are selected by the Admissions Committee will be conditionally accepted until an Associate Degree Nursing Medical Form completed by a Physician is received in the Admissions Office and reviewed for satisfactory results. Immunizations must be current — TB test (x-ray if TB test is positive), CBC, and urinalysis.
10. Upon satisfactory completion of all the above requirements the applicant will receive written notification of final acceptance to the Associate Degree Nursing program.

**CRITERIA FOR PROGRESSION:**

1. For the student to progress in the nursing program a "C" or higher must be achieved for all nursing courses (courses with a prefix BIO, NUR, NUT). Students earning less than a "C" in nursing courses will automatically be withdrawn from the Nursing program. Students withdrawn will receive written notification from the Vice President for Student Services and Planning and may apply for readmission to a subsequent class through the normal admission process.
2. In the event that a student's physical or mental health interferes with the student's academic and/or clinical performance, the nursing faculty may require the student to submit written verification of current health from an appropriate health care provider; i.e., physician, nurse practitioner, psychiatrist, or psychologist. Upon consultation with the Director of Nursing and review of the professional statement of health submitted by the student, the Vice President for Student Services and Planning will render a decision as to whether or not the student will be allowed to continue in the program. The Vice President for Student Services and Planning will notify the student in writing of the decision.
3. In the event the student's behavior conflicts with safety essential to nursing practices, the instructors and/or Director of Nursing have the authority to immediately remove the student from the setting. Students so removed will be referred to the Vice President for Student Services and Planning for further investigation and/or possible dismissal from the Nursing program.

# Associate Degree Nursing

## T 059 Associate in Applied Science Degree

### READMISSION TO THE NURSING PROGRAM:

Students desiring readmission to the nursing curriculum must submit their request in writing to the Admissions Office.

### CRITERIA FOR GRADUATION:

To be eligible for graduation a student must:

1. Complete all course requirements in the Nursing curriculum, earning a grade of "C" or higher in the nursing courses and an overall 2.00 grade point average.
2. Pay a graduation fee at the time of registration for the last quarter.
3. Fulfill all financial obligations to the college.
4. Be present for graduation exercises. Graduation exercises are held at the end of the summer term on the date published in the academic calendar. In cases of unavoidable circumstances, exceptions to this requirement may be granted by the Vice President for Student Services and Planning. During graduation exercises, candidates must be dressed in proper attire, as determined by the President of the College.
5. The nursing faculty must recommend a student as a candidate for the National Council Licensure Examination for Practical Nurses or for Registered Nurses based on academic achievement and professional accountability.
6. The North Carolina Board of Nursing may deny licensure to individuals convicted of a felony or any other crime involving moral turpitude.

### SUGGESTED SEQUENCE OF COURSES BY QUARTER

| Course Title | | | Class Hrs. | Lab Hrs. | Clinical Hrs. | Credit Hrs. |
|---|---|---|---|---|---|---|
| FIRST QUARTER | | | | | | |
| BIO | 101 | Anatomy & Physiology I | 4 | 2 | 0 | 5 |
| NUR | 101 | Nursing Fundamentals | 6 | 4 | 3 | 9 |
| NUT | 101 | Nutrition and Diet Therapy | 3 | 0 | 0 | 3 |
| PSY | 151 | Principles of Psychology | 3 | 0 | 0 | 3 |
| | | | 16 | 6 | 3 | 20 |
| SECOND QUARTER | | | | | | |
| BIO | 102 | Anatomy & Physiology II | 4 | 2 | 0 | 5 |
| MAT | 111 | Drug Dosages and Measurements | 2 | 0 | 0 | 2 |
| NUR | 102 | Nursing Adults & Children I | 6 | 0 | 12 | 10 |
| PSY | 107 | Growth & Development-Life Span | 3 | 0 | 0 | 3 |
| | | | 15 | 2 | 12 | 20 |

# *Associate Degree Nursing*

## *T 059 Associate in Applied Science Degree*

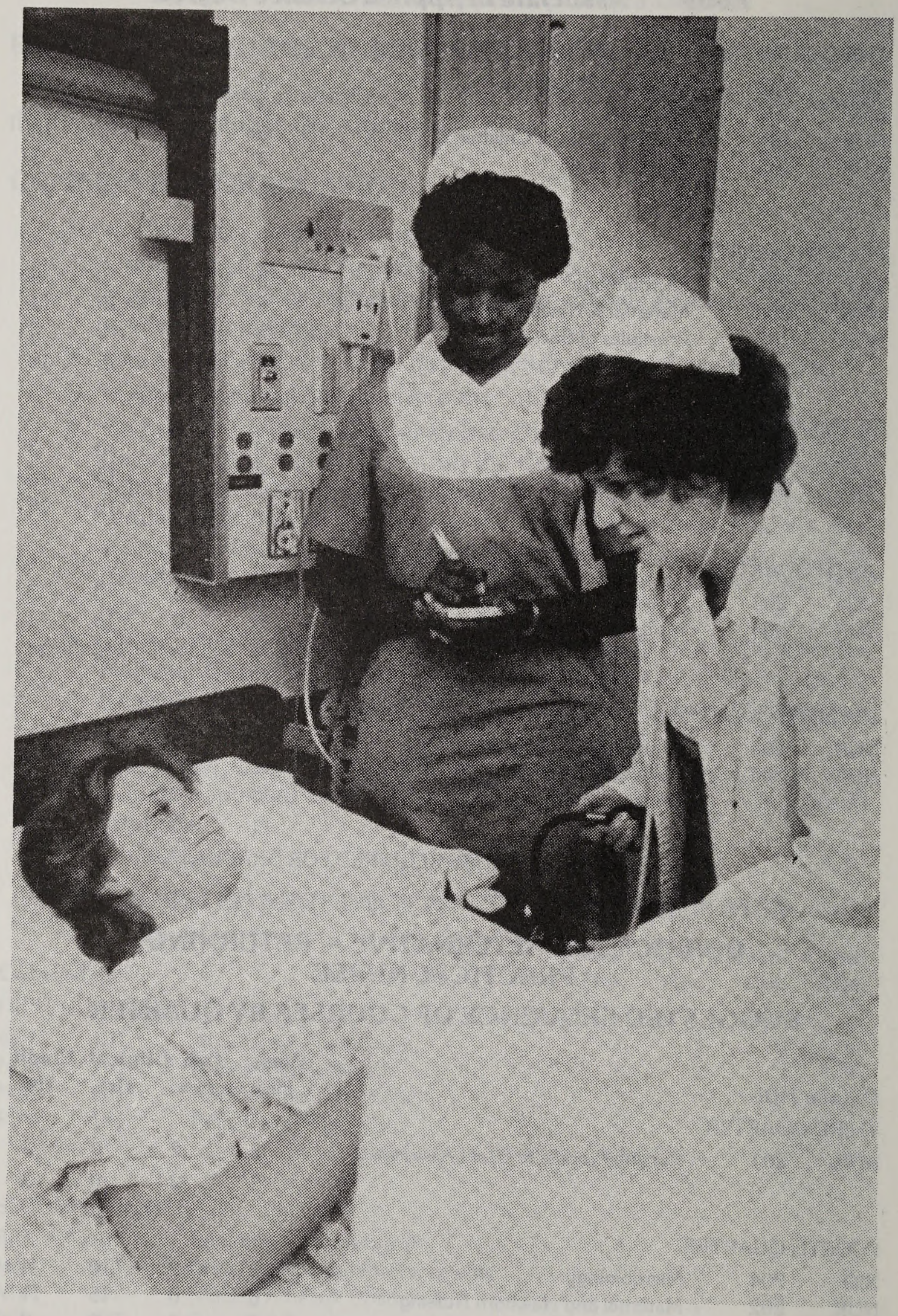
| | | | | | | |
|---|---|---|---|---|---|---|
| THIRD QUARTER | | | | | | |
| BIO | 203 | Advanced Physiology | 3 | 0 | 0 | 3 |
| ENG | 101 | Grammar | 3 | 0 | 0 | 3 |
| NUR | 103 | Nursing Adults & Children II | 6 | 0 | 12 | 10 |
| NUR | 105 | Pharmacology | 3 | 0 | 0 | 3 |
| | | | 15 | 0 | 12 | 19 |
| FOURTH QUARTER | | | | | | |
| BIO | 204 | Microbiology | 3 | 2 | 0 | 4 |
| NUR | 202 | Maternal & Newborn Nursing | 6 | 0 | 15 | 11 |
| SOC | 102 | Principles of Sociology | 3 | 0 | 0 | 3 |
| | | | 12 | 2 | 15 | 18 |
| FIFTH QUARTER | | | | | | |
| ENG | 102 | Composition | 3 | 0 | 0 | 3 |
| NUR | 203 | Mental Health Nursing | 8 | 0 | 15 | 13 |
| | | | 11 | 0 | 15 | 16 |
| SIXTH QUARTER | | | | | | |
| ENG | 204 | Oral Communications | 3 | 0 | 0 | 3 |
| NUR | 204 | Nursing Adults & Children III | 6 | 0 | 15 | 11 |
| | | | 9 | 0 | 15 | 14 |
| SEVENTH QUARTER | | | | | | |
| NUR | 205 | Nursing Adults & Children IV | 6 | 0 | 15 | 11 |
| NUR | 206 | Nursing Seminar | 2 | 0 | 0 | 2 |
| | | General Education Elective | 3 | 0 | 0 | 3 |
| | | | 11 | 0 | 15 | 16 |
| | | TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: | | | | 123 |

## CURRICULUM ALTERNATIVE – RETURNING PRACTICAL NURSE

## SUGGESTED SEQUENCE OF COURSES BY QUARTER

| Course Title | | | Class Hrs. | Lab Hrs. | Clinical Hrs. | Credit Hrs. |
|---|---|---|---|---|---|---|
| THIRD QUARTER | | | | | | |
| NUR | 201 | Nursing Process & Client Assessment | 2 | 2 | 0 | 3 |
| | | | 2 | 2 | 0 | 3 |
| FOURTH QUARTER | | | | | | |
| BIO | 204 | Microbiology | 3 | 2 | 0 | 4 |
| NUR | 202 | Maternal and Newborn Nursing | 6 | 0 | 15 | 11 |
| SOC | 102 | Principles of Sociology | 3 | 0 | 0 | 3 |
| | | | 12 | 2 | 15 | 18 |

# *PROGRAMS OF STUDY*



# *Associate Degree Nursing*

## *T 059 Associate in Applied Science Degree*

| | | | | | | |
|---|---|---|---|---|---|---|
| FIFTH QUARTER | | | | | | |
| ENG | 102 | Composition | 3 | 0 | 0 | 3 |
| NUR | 203 | Mental Health Nursing | 8 | 0 | 15 | 13 |
| | | | 11 | 0 | 15 | 16 |
| SIXTH QUARTER | | | | | | |
| ENG | 204 | Oral Communications | 3 | 0 | 0 | 3 |
| NUR | 204 | Nursing Adults & Children III | 6 | 0 | 15 | 11 |
| | | | 9 | 0 | 15 | 14 |
| SEVENTH QUARTER | | | | | | |
| NUR | 205 | Nursing Adults & Children IV | 6 | 0 | 15 | 11 |
| NUR | 206 | Nursing Seminar | 2 | 0 | 0 | 2 |
| | | General Education Elective | 3 | 0 | 0 | 3 |
| | | | 11 | 0 | 15 | 16 |

## PRACTICAL NURSING CURRICULUM ALTERNATIVE
## SUGGESTED SEQUENCE OF COURSES BY QUARTER

| Course Title | | | Class Hrs. | Lab Hrs. | Clinical Hrs. | Credit Hrs. |
|---|---|---|---|---|---|---|
| FIRST QUARTER | | | | | | |
| BIO | 101 | Anatomy & Physiology I | 4 | 2 | 0 | 5 |
| NUR | 101 | Nursing Fundamentals | 6 | 4 | 3 | 9 |
| NUT | 101 | Nutrition and Diet Therapy | 3 | 0 | 0 | 3 |
| PSY | 151 | Principles of Psychology | 3 | 0 | 0 | 3 |
| | | | 16 | 6 | 3 | 20 |
| SECOND QUARTER | | | | | | |
| BIO | 102 | Anatomy & Physiology II | 4 | 2 | 0 | 5 |
| MAT | 111 | Drug Dosages and Measurements | 2 | 0 | 0 | 2 |
| NUR | 102 | Nursing Adults & Children I | 6 | 0 | 12 | 10 |
| PSY | 107 | Growth and Development-Life Span | 3 | 0 | 0 | 3 |
| | | | 15 | 2 | 12 | 20 |
| THIRD QUARTER | | | | | | |
| ENG | 101 | Grammar | 3 | 0 | 0 | 3 |
| NUR | 103 | Nursing Adults & Children II | 6 | 0 | 12 | 10 |
| NUR | 105 | Pharmacology | 3 | 0 | 0 | 3 |
| | | | 12 | 0 | 12 | 16 |
| FOURTH QUARTER | | | | | | |
| NUR | 1106 | Practical Nursing Seminar | 3 | 0 | 0 | 3 |
| NUR | 1108 | Maternal and Newborn Nursing | 3 | 0 | 9 | 6 |
| NUR | 1109 | Nursing Adults & Children III | 6 | 0 | 9 | 9 |
| | | | 12 | 0 | 18 | 18 |
| | | TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: | | | | 74 |

# Automotive Body Repair

## V 001 DIPLOMA

The Automotive Body Repair curriculum provides training in the use of the equipment and materials of the auto body trade. The student studies the construction of the automobile body and techniques of auto body repairing, rebuilding, and refinishing.

Repairing, metal straightening, aligning, and painting are typical jobs performed. Graduates of this program may qualify with experience for such jobs as shop foreman, metal repairman, paint refinisher and frame straightener.

## SUGGESTED SEQUENCE OF COURSES BY QUARTER

| Course | | Title | Class Hrs. | Lab Hrs. | Credit Hrs. |
|---|---|---|---|---|---|
| FIRST QUARTER | | | | | |
| AUT | 1111 | Auto Body Repair | 6 | 12 | 10 |
| DFT | 1101 | Schematics & Diagrams | 1 | 3 | 2 |
| MAT | 1101 | Fundamentals of Mathematics | 3 | 0 | 3 |
| WLD | 1101 | Basic Gas Welding | 1 | 3 | 2 |
| | | | 11 | 18 | 17 |
| SECOND QUARTER | | | | | |
| AUT | 1112 | Auto Body Repair | 6 | 12 | 10 |
| PSY | 1101 | Human Relations | 3 | 0 | 3 |
| WLD | 1105 | Auto Body Welding | 2 | 6 | 4 |
| | | | 11 | 18 | 17 |
| THIRD QUARTER | | | | | |
| AUT | 1113 | Metal Finishing & Painting | 6 | 12 | 10 |
| AUT | 1115 | Trim & Glass Installation | 1 | 3 | 2 |
| EDP | 1103 | Computer Awareness | 1 | 3 | 2 |
| ENG | 1102 | Communication Skills | 3 | 0 | 3 |
| | | | 11 | 18 | 17 |
| FOURTH QUARTER | | | | | |
| AUT | 1114 | Body Shop Application | 8 | 18 | 14 |
| BUS | 1103 | Small Business Operation | 3 | 0 | 3 |
| | | | 1 | 18 | 17 |
| | | TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: | | | 68 |

# *Automotive Mechanics*

## *V 003 DIPLOMA*

This curriculum provides a training program for developing the basic knowledge and skills needed to inspect, diagnose, repair or adjust components of automotive vehicles. Manual skills are developed in practical shop work using components mounted on stands. Thorough understanding of the operating principles involved in the modern automobile comes in class assignments, discussion, and shop practice. Diagnosing and repair work is assigned on scheduled vehicles.

Complexity in automotive vehicles increases each year because of scientific discovery and new engineering. These changes are reflected not only in passenger vehicles, but also in trucks and buses powered by a variety of internal combustion engines. This curriculum provides a basis for the student to compare and adapt to new techniques for servicing and repair as vehicles are changed year by year.

## SUGGESTED SEQUENCE OF COURSES BY QUARTER

| Course Title | | | Class Hrs. | Lab Hrs. | Credit Hrs. |
|---|---|---|---|---|---|
| FIRST QUARTER | | | | | |
| MAT | 1101 | Fundamentals of Mathematics | 3 | 0 | 3 |
| PME | 1101 | Automotive Gas Engines | 3 | 9 | 6 |
| PME | 1104 | Diesel Engines | 2 | 6 | 4 |
| WLD | 1101 | Basic Gas Welding | 1 | 3 | 2 |
| | | | 9 | 18 | 15 |
| SECOND QUARTER | | | | | |
| DFT | 1102 | Schematics & Diagrams: Automotive Mechanics | 3 | 0 | 3 |
| PME | 1102 | Automotive Fuel Systems | 2 | 6 | 4 |
| PME | 1103 | Automotive Electrical Systems | 4 | 12 | 8 |
| PSY | 1101 | Human Relations | 3 | 0 | 3 |
| | | | 2 | 18 | 18 |
| THIRD QUARTER | | | | | |
| AUT | 1124 | Automotive Power Train Systems | 2 | 6 | 4 |
| AUT | 1128 | Automotive Transmissions | 3 | 9 | 6 |
| AUT | 1130 | Machine Shop Operation | 1 | 3 | 2 |
| EDP | 1103 | Computer Awareness | 1 | 3 | 2 |
| ENG | 1102 | Communication Skills | 3 | 0 | 3 |
| | | | 10 | 21 | 17 |
| FOURTH QUARTER | | | | | |
| AHR | 1101 | Automotive Air Conditioning | 3 | 3 | 4 |
| AUT | 1123 | Automotive Brakes, Chassis & Suspension Systems | 4 | 9 | 7 |
| BUS | 1103 | Small Business Operation | 3 | 0 | 3 |
| WLD | 1102 | Basic Arc Welding | 1 | 3 | 2 |
| | | | 11 | 15 | 16 |
| | | TOTAL CREDIT HOURS REQUIRED FOR GRADUTION: | | | 66 |

# Biomedical Equipment Technology

## T 158 Associate in Applied Science Degree

A biomedical technician must be able to install, operate, repair, and maintain electronic equipment such as x ray machines, incubators, electronic thermometers, pacemakers, radio frequency surgical devices, cardiac pressure monitors, sterilizers, operating room lamps and tables, automatic culture counters, and pulmonary equipment. The biomedical technician may also be called upon to maintain or make emergency repairs on surgical equipment in the hospital operating room, to instruct hospital personnel in the safe and correct use of equipment, and to be involved in evaluation and testing of new electromedical devices.

### ADDITIONAL ADMISSION REQUIREMENT:

Successful completion of Algebra I and II. This requirement may be met by completing MAT 100 Algebra at Stanly Technical College.

### SUGGESTED SEQUENCE OF COURSES BY QUARTER

| | | Course Title | Class Hrs. | Lab Hrs. | Credit Hrs. |
|---|---|---|---|---|---|
| FIRST QUARTER | | | | | |
| BMT | 101 | BMET at Work: Introduction to the Hospital and Industry | 2 | 0 | 2 |
| ELC | 111 | Electrical Fundamentals I | 4 | 6 | 6 |
| ENG | 101 | Grammar | 3 | 0 | 3 |
| MAT | 101 | Technical Mathematics I | 5 | 0 | 5 |
| MED | 101 | Medical Terminology | 0 | 4 | 2 |
| | | | 14 | 10 | 18 |
| SECOND QUARTER | | | | | |
| BIO | 101 | Anatomy & Physiology I | 4 | 2 | 5 |
| EDP | 200 | Basic Language | 3 | 2 | 4 |
| ELC | 120 | Electrical Fundamentals II | 4 | 6 | 6 |
| MAT | 102 | Technical Mathematics II | 5 | 0 | 5 |
| | | | 6 | 10 | 20 |
| THIRD QUARTER | | | | | |
| BMT | 163 | Laboratory Practices | 1 | 5 | 3 |
| CHM | 101 | Chemistry | 3 | 2 | 4 |
| ELN | 130 | Semiconductor Devices | 4 | 6 | 7 |
| SOC | 204 | Social Psychology for the Health Services | 3 | 0 | 3 |
| | | | 11 | 13 | 17 |
| FOURTH QUARTER | | | | | |
| BMT | 224 | Digital Electronics — BMT | 2 | 6 | 5 |
| BMT | 234 | Introduction to Medical Instrumentation | 2 | 3 | 3 |

# Biomedical Equipment Technology

## T 158 Associate in Applied Science Degree

| | | | | | |
|---|---|---|---|---|---|
| ELN | 141 | Control Devices | 5 | 4 | 7 |
| ENG | 102 | Composition | 3 | 0 | 3 |
| PHY | 101 | Physics: Properties of Matter | 3 | 2 | 4 |
| | | | 15 | 15 | 22 |

FIFTH QUARTER

| | | | | | |
|---|---|---|---|---|---|
| BMT | 225 | Microprocessors — BMT | 2 | 6 | 5 |
| BMT | 244 | Medical Instrumentation I | 3 | 4 | 5 |
| ENG | 204 | Oral Communications | 3 | 0 | 3 |
| PHY | 243 | Radiation Physics | 3 | 4 | 5 |
| | | | 11 | 14 | 18 |

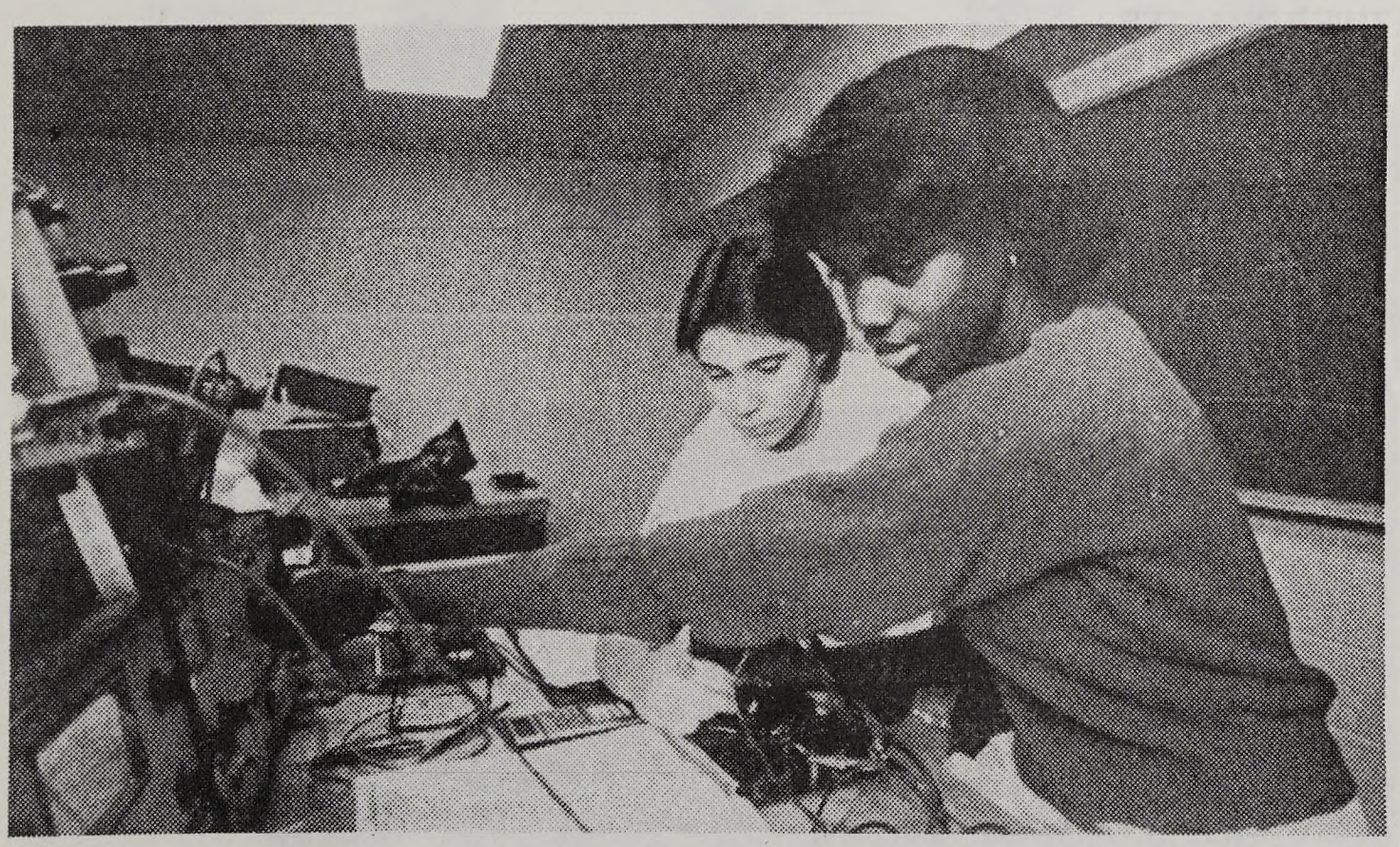
SIXTH QUARTER

| | | | | | |
|---|---|---|---|---|---|
| BMT | 254 | Medical Instrumentation II | 3 | 4 | 5 |
| BMT | 264 | Biomedical Troubleshooting Techniques | 3 | 4 | 5 |
| BMT | 271 | Biomedical Equipment: Selection & Design | 1 | 2 | 2 |
| BMT | 280 | X-Ray Equipment | 3 | 4 | 5 |
| | | | 10 | 14 | 17 |

SEVENTH QUARTER

| | | | | | |
|---|---|---|---|---|---|
| BMT | 201 | Internship | 0 | 24 | 2 |
| BMT | 202 | Seminar | 1 | 0 | 1 |
| ELN | 244 | Video Monitors | 2 | 2 | 3 |
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| | | Approved Elective | 3 | 0 | 3 |
| | | | 9 | 26 | 12 |

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 124



# PROGRAMS OF STUDY

## Business Administration

### T 018 Associate in Applied Science Degree

Persons with specialized education in business beyond the high school level are those who best meet the requirements of the employer in today's business and this curriculum is designed to prepare the student in many phases of administrative work. Training is provided in the areas of management, marketing, accounting, finance, and human resources management.

### SUGGESTED SEQUENCE OF COURSES BY QUARTER

| Course Title | | | Class Hrs. | Lab Hrs. | Credit Hrs. |
|---|---|---|---|---|---|
| FIRST QUARTER | | | | | |
| BUS | 101 | Introduction to Business | 3 | 0 | 3 |
| BUS | 102 | Typewriting I (or elective) | 1 | 4 | 3 |
| ECO | 102 | Economics I | 3 | 0 | 3 |
| ENG | 101 | Grammar | 3 | 0 | 3 |
| MAT | 110 | Business Mathematics | 6 | 0 | 6 |
| | | | 16 | 4 | 18 |
| SECOND QUARTER | | | | | |
| BUS | 115 | Business Law I | 3 | 0 | 3 |
| BUS | 120 | Accounting I | 6 | 0 | 6 |
| BUS | 123 | Business Finance I | 3 | 0 | 3 |
| ECO | 104 | Economics II | 3 | 0 | 3 |
| ENG | 102 | Composition | 3 | 0 | 3 |
| | | | 18 | 0 | 18 |
| THIRD QUARTER | | | | | |
| BUS | 110 | Office Machines | 2 | 2 | 3 |
| BUS | 116 | Business Law II | 3 | 0 | 3 |
| BUS | 121 | Accountinig II | 6 | 0 | 6 |
| BUS | 124 | Business Finance II | 3 | 0 | 3 |
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| | | | 17 | 2 | 18 |
| FOURTH QUARTER | | | | | |
| BUS | 122 | Accounting III | 6 | 0 | 6 |
| BUS | 245 | Retailing | 3 | 0 | 3 |
| EDP | 104 | Introduction to Data Processing | 5 | 0 | 5 |
| ENG | 204 | Oral Communications | 3 | 0 | 3 |
| PSY | 151 | Principles of Psychology | 3 | 0 | 3 |
| | | | 20 | 0 | 20 |
| FIFTH QUARTER | | | | | |
| BUS | 239 | Marketing | 6 | 0 | 6 |
| BUS | 250 | Payroll Accounting | 3 | 0 | 3 |

# Business Administration

## T 018 Associate in Applied Science Degree

| | | | | | |
|---|---|---|---|---|---|
| EDP | 200 | Basic Language | 3 | 2 | 4 |
| ENG | 206 | Business Communications | 3 | 0 | 3 |
| | | Social Science or Business Elective | 3 | 0 | 3 |
| | | | 18 | 2 | 19 |
| SIXTH QUARTER | | | | | |
| BUS | 229 | Income Taxes | 6 | 0 | 6 |
| BUS | 272 | Principles of Supervision | 3 | 0 | 3 |
| BUS | 280 | Small Business Management | 3 | 0 | 3 |
| BUS | 299 | Business Decisions | 3 | 0 | 3 |
| EDP | 206 | Systems Design | 5 | 0 | 5 |
| | | | 20 | 0 | 20 |

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 113

Elective courses must be selected with approval from the associate degree curricula.

# Business Data Processing

## T 022 Associate in Applied Science Degree

A graduate of the Business Data Processing curriculum will have completed a series of courses in computer concepts, data processing fundamentals, programming, software control systems, electronic data processing applications, fundamentals of systems analysis and design, accounting, English and mathematics. When these courses are linked with several years of experience as a business application programmer after graduation, career paths in business programming, systems analyst, and management could be available for a graduate of this program. It's possible that initial employment could involve systems analysis and design as a part of the programmer's responsibilities.

## SUGGESTED SEQUENCE OF COURSES BY QUARTER

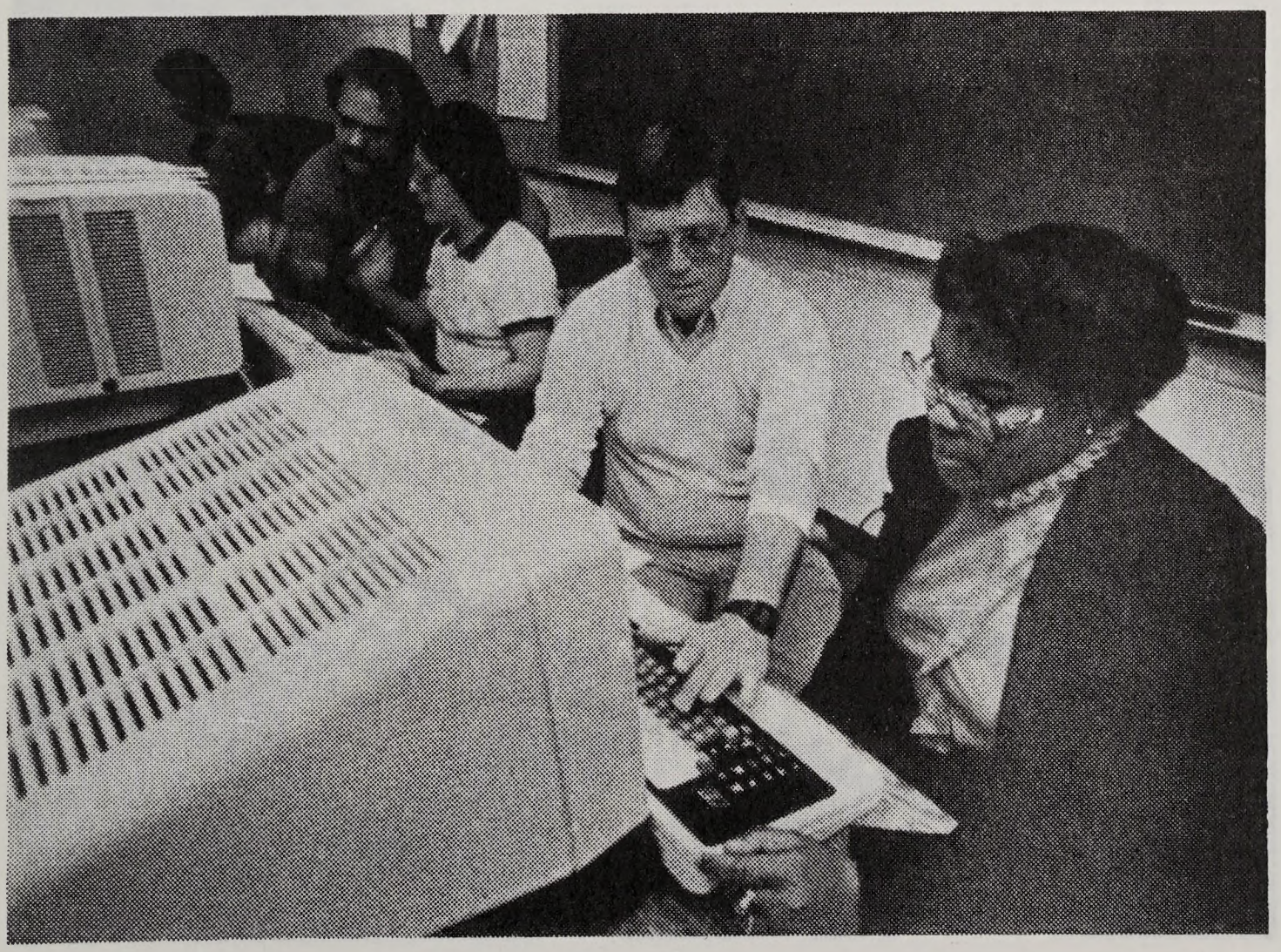
| Course Title | | | Class Hrs. | Lab Hrs. | Credit Hrs. |
|---|---|---|---|---|---|
| FIRST QUARTER | | | | | |
| BUS | 101 | Introduction to Business | 3 | 0 | 3 |
| EDP | 104 | Introduction to Data Processing | 5 | 0 | 5 |
| EDP | 106 | Programming Techniques | 4 | 0 | 4 |
| EDP | 200 | Basic Language | 3 | 2 | 4 |
| ENG | 101 | Grammar | 3 | 0 | 3 |
| | | | 18 | 2 | 19 |
| SECOND QUARTER | | | | | |
| BUS | 120 | Accounting I | 6 | 0 | 6 |
| EDP | 209 | RPG II Programming | 4 | 2 | 5 |
| ENG | 102 | Composition | 3 | 0 | 3 |
| MAT | 100 | Fundamentals of Algebra | 6 | 0 | 6 |
| | | | 19 | 2 | 20 |
| THIRD QUARTER | | | | | |
| BUS | 102 | Typewriting I | 1 | 4 | 3 |
| BUS | 121 | Accounting II | 6 | 0 | 6 |
| EDP | 110 | PASCAL | 3 | 2 | 4 |
| EDP | 210 | Advanced RPG II Programming | 4 | 2 | 5 |
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| | | | 17 | 8 | 21 |
| FOURTH QUARTER | | | | | |
| BUS | 245 | Retailing | 3 | 0 | 3 |
| ECO | 102 | Economics I | 3 | 0 | 3 |
| EDP | 108 | COBOL I | 4 | 2 | 5 |
| EDP | 211 | Control Languages (OCL/JCL) | 4 | 2 | 5 |
| ENG | 204 | Oral Communications | 3 | 0 | 3 |
| | | | 17 | 4 | 19 |

# *Business Data Processing*

## *T 022 Associate in Applied Science Degree*

| | | | | | |
|---|---|---|---|---|---|
| FIFTH QUARTER | | | | | |
| ECO | 104 | Economics II | 3 | 0 | 3 |
| EDP | 206 | Systems Design | 5 | 0 | 5 |
| EDP | 208 | COBOL II | 4 | 2 | 5 |
| EDP | | Elective | 3 | 2 | 4 |
| ENG | 206 | Business Communications | 3 | 0 | 3 |
| | | | 18 | 4 | 20 |
| SIXTH QUARTER | | | | | |
| BUS | 272 | Principles of Supervision | 3 | 0 | 3 |
| BUS | 299 | Business Decisions | 3 | 0 | 3 |
| EDP | 207 | Application Programming | 4 | 2 | 5 |
| EDP | 212 | Data Base Design | 3 | 0 | 3 |
| EDP | 214 | Assembly Language Programming | 4 | 2 | 5 |
| | | | 17 | 4 | 19 |

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 118



# Computer Operator

**V012 Diploma**

The increasing sophistication and expansion of data processing equipment throughout business and industry has created a need for skilled operators. The operator is responsible for the operation of computer and auxiliary machinery whose expense necessitates efficient utilization. The operator must be knowledgeable enough about the data processing equipment being used to efficiently monitor and control the equipment according to prescribed operation instructions and detect malfunctions as they occur.

## ADDITIONAL ADMISSION REQUIREMENT:

Completion of the placement test.

Must be high school graduate or meet the North Carolina Equivalency (GED) standard scores.

# *Computer Operator*

***V 012 Diploma***

## SUGGESTED SEQUENCE OF COURSES BY QUARTER

| Course Title | | | Class Hrs. | Lab Hrs. | Credit Hrs. |
|---|---|---|---|---|---|
| FIRST QUARTER | | | | | |
| BUS | 101 | Introduction to Business | 3 | 0 | 3 |
| BUS | 102 | Typewriting I | 1 | 4 | 3 |
| EDP | 100 | Computer Operations I | 2 | 2 | 3 |
| EDP | 104 | Introduction to Data Processing | 5 | 0 | 5 |
| ENG | 101 | Grammar | 3 | 0 | 3 |
| | | | 14 | 6 | 17 |
| SECOND QUARTER | | | | | |
| EDP | 101 | Computer Operations II | 3 | 2 | 4 |
| EDP | 106 | Programming Techniques | 4 | 0 | 4 |
| EDP | 200 | Basic Language | 3 | 2 | 4 |
| MAT | 100 | Fundamentals of Algebra | 6 | 0 | 6 |
| | | | 16 | 4 | 18 |
| THIRD QUARTER | | | | | |
| BUS | 120 | Accounting I | 6 | 0 | 6 |
| BUS | 272 | Principles of Supervision | 3 | 0 | 3 |
| EDP | 209 | RPG II Programming | 4 | 2 | 5 |
| EDP | 211 | Control Languages (OCL/JCL) | 4 | 2 | 5 |
| | | | 17 | 4 | 19 |
| FOURTH QUARTER | | | | | |
| BUS | 271 | Office Management | 3 | 0 | 3 |
| EDP | 105 | Computer Operation Techniques | 4 | 2 | 5 |
| EDP | 110 | PASCAL | 3 | 2 | 4 |
| EDP | 204 | System Study | 3 | 0 | 3 |
| ENG | 206 | Business Communications | 3 | 0 | 3 |
| | | | 16 | 4 | 18 |
| | | TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: | | | 72 |

# Criminal Justice-Protective Service Technology

### T 129 Associate in Applied Science Degree

Law enforcement today requires a variety of skills and special knowledge in criminal law, counseling, surveillance, psychology, sociology and tactics. The Criminal Justice Program provides indepth instruction for those who wish to enter the Law Enforcement field.

The curriculum is designed for flexibility providing the opportunity for students to gain skills in a wide range of law enforcement areas. Students can gain specialized knowledge in criminal law, investigation, traffic enforcement, and a broad range of other specialized areas such as Juvenile Delinquency, Deviant Behavior and Patrol Procedures.

## SUGGESTED SEQUENCE OF COURSES BY QUARTER

| Course Title | | | Class Hrs. | Lab Hrs. | Credit Hrs. |
|---|---|---|---|---|---|
| FIRST QUARTER | | | | | |
| BUS | 102 | Typewriting I | 1 | 4 | 3 |
| CJC | 101 | Introduction to Criminal Justice | 5 | 0 | 5 |
| CJC | 115 | Criminal Law I | 3 | 0 | 3 |
| ENG | 101 | Grammar | 3 | 0 | 3 |
| MAT | 110 | Business Mathematics | 6 | 0 | 6 |
| | | | 18 | 4 | 20 |
| SECOND QUARTER | | | | | |
| CJC | 203 | Introduction to Corrections | 5 | 0 | 5 |
| CJC | 216 | Criminal Law II | 3 | 0 | 3 |
| EDP | 103 | Computer Awareness | 2 | 1 | 2 |
| ENG | 102 | Composition | 3 | 0 | 3 |
| SOC | 102 | Principles of Sociology | 3 | 0 | 3 |
| | | | 16 | 1 | 16 |
| THIRD QUARTER | | | | | |
| CHM | 101 | Chemistry | 3 | 2 | 4 |
| CJC | 206 | Community Relations | 3 | 0 | 3 |
| CJC | 225 | Criminal Procedure | 5 | 0 | 5 |
| CJC | 238 | Principles of Correctional Administration | 3 | 0 | 3 |
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| | | | 17 | 2 | 18 |
| FOURTH QUARTER | | | | | |
| CJC | 110 | Juvenile Delinquency | 5 | 0 | 5 |
| CJC | 210 | Criminal Investigation | 5 | 0 | 5 |
| ENG | 204 | Oral Communications | 3 | 0 | 3 |
| PSY | 201 | Human Growth & Development | 3 | 0 | 3 |
| | | | 16 | 0 | 16 |

# *Criminal Justice-Protective Service Technology*

## *T 129 Associate in Applied Science Degree*

| | | | | | |
|---|---|---|---|---|---|
| FIFTH QUARTER | | | | | |
| CJC | 102 | Introduction to Criminology | 5 | 0 | 5 |
| CJC | 205 | Criminal Evidence | 5 | 0 | 5 |
| PSY | 151 | Principles of Psychology | 3 | 0 | 3 |
| | | Social Science Elective* | 3 | 0 | 3 |
| | | | 16 | 0 | 16 |
| SIXTH QUARTER | | | | | |
| CJC | 220 | Police Organization & Administration | 5 | 0 | 5 |
| CJC | 255 | Deviant Behavior | 5 | 0 | 5 |
| PSY | 206 | Applied Psychology | 3 | 0 | 3 |
| | | Technical Elective* | 3 | 0 | 3 |
| | | Social Science Elective* | 3 | 0 | 3 |
| | | | 19 | 0 | 19 |
| | | TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: | | | 105 |

*Elective Courses must be selected with advisor's approval from the Associate Degree curriculum.

# Electromechanical Engineering Technology

### T 039 Associate in Applied Science Degree

Advances in both manufacturing and maintenance techniques over the past decade have made it necessary to bridge the gap between electronics and mechanics with a technician versed in both disciplines. This type technician eliminates many communication and specialty problems and provides a highly efficient individual who can approach electromechanical problems, analyze the situation, find a solution, and actually perform the service; thus requiring only one technician instead of two or more. This curriculum provides courses to give the student a background in electricity/electronics, mechanical operations and functions, and in electromechanical systems covering such devices as computers, servomechanisms and numerical control systems.

The electromechanical technician may fabricate, test, analyze and adjust precision electromechanical instruments such as temperature probes and aerodynamic probes; use hand tools and metal working machines; install electrical assemblies and hardware; and test assembled instruments according to analysis. The electromechanical technician has employment possibilities with industry and business in maintenance, production, research, development or sales as an engineering assistant, engineering aide or field engineer.

## ADDITIONAL ADMISSION REQUIREMENT:

Successful completion of Algebra I and II. This requirement may be met by completing MAT 100 Algebra at Stanly Technical College.

## SUGGESTED SEQUENCE OF COURSES BY QUARTER

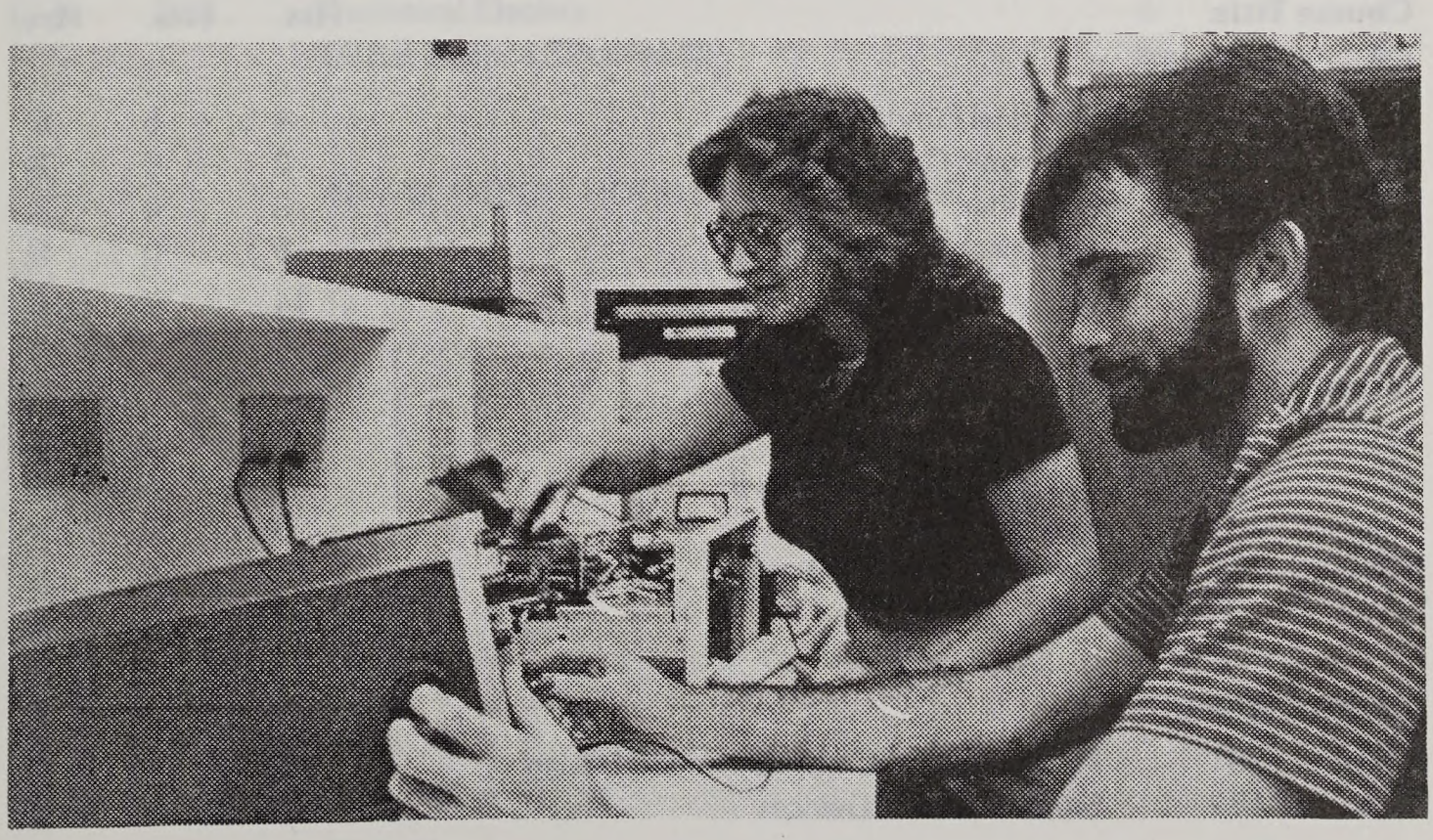
| Course Title | | | Class Hrs. | Lab Hrs. | Credit Hrs. |
|---|---|---|---|---|---|
| FIRST QUARTER | | | | | |
| ELC | 111 | Electrical Fundamentals I | 4 | 6 | 6 |
| ENG | 101 | Grammar | 3 | 0 | 3 |
| MAT | 101 | Technical Mathematics I | 5 | 0 | 5 |
| | | | 12 | 6 | 14 |
| SECOND QUARTER | | | | | |
| EDP | 200 | Basic Language | 3 | 2 | 4 |
| ELC | 120 | Electrical Fundamentals II | 4 | 6 | 6 |
| ENG | 102 | Composition | 3 | 0 | 3 |
| MAT | 102 | Technical Mathematics II | 5 | 0 | 5 |
| | | | 15 | 8 | 18 |
| THIRD QUARTER | | | | | |
| CAD | 201 | Introduction to Computer-Aided Drafting | 2 | 6 | 4 |
| ELN | 130 | Semiconductor Devices | 4 | 6 | 7 |
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| MAT | 103 | Technical Mathematics III | 5 | 0 | 5 |
| | | | 14 | 12 | 19 |

# *Electromechanical Engineering Technology*

## *T 039 Associate in Applied Science Degree*

| | | | | | |
|---|---|---|---|---|---|
| FOURTH QUARTER | | | | | |
| ELN | 141 | Control Devices | 5 | 4 | 7 |
| ENG | 204 | Oral Communications | 3 | 0 | 3 |
| MEC | 100 | Machine Practices | 2 | 3 | 3 |
| PHY | 101 | Physics: Properties of Matter | 3 | 2 | 4 |
| | | | 13 | 9 | 17 |
| FIFTH QUARTER | | | | | |
| ELM | 211 | Electromechanical Devices | 3 | 4 | 5 |
| MEC | 107 | Applied Mechanics | 5 | 0 | 5 |
| MEC | 110 | Fundamental Mechanisms | 2 | 4 | 4 |
| | | Social Science Elective | 3 | 0 | 3 |
| | | | 13 | 8 | 17 |
| SIXTH QUARTER | | | | | |
| ELM | 212 | Control System Technology I | 3 | 4 | 5 |
| ELN | 210 | Digital Fundamentals I | 3 | 4 | 5 |
| MEC | 235 | Hydraulics and Pneumatics | 3 | 2 | 4 |
| PHY | 104 | Physics: Light and Sound | 3 | 2 | 4 |
| | | Social Science Elective | 3 | 0 | 3 |
| | | | 15 | 12 | 21 |
| SEVENTH QUARTER | | | | | |
| ELM | 213 | Control System Technology II | 3 | 4 | 5 |
| ELM | 233 | Technical Elective | 6 | 0 | 6 |
| ELN | 211 | Microprocessors I | 3 | 6 | 6 |
| | | | 12 | 10 | 17 |

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 123



# Electronic Engineering Technology

### T 045 Associate in Applied Science Degree

The electronic curriculum provides an individual with a basic background in the practical application of electronics and in electronics theory. Therefore, not only would the graduate be qualified in the fields of testing, calibrating and repairing equipment, but also in the fields of design and development. The courses have been designed in a fashion to present content in an order that will provide the student with progressive levels of job related skills and knowledge.

Typically, graduates with an AAS in Electronics Engineering Technology are employed in such areas as:

1. microcomputer electronics
2. digital electronics
3. industrial instrumentation
4. biomedical electronics
5. product test
6. product design
7. technical sales
8. field engineering

**ADDITIONAL ADMISSION REQUIREMENT:**

Successful completion of Algebra I and II. This requirement may be met by completing MAT 100 Algebra at Stanly Technical College.

## SUGGESTED SEQUENCE OF COURSES BY QUARTER

| Course Title | | | Class Hrs. | Lab Hrs. | Credit Hrs. |
|---|---|---|---|---|---|
| FIRST QUARTER | | | | | |
| ELC | 111 | Electrical Fundamentals I | 4 | 6 | 6 |
| ELN | 110 | Electronic Computation | 2 | 0 | 2 |
| ENG | 101 | Grammar | 3 | 0 | 3 |
| MAT | 101 | Technical Mathematics I | 5 | 0 | 5 |
| | | | 14 | 6 | 16 |
| SECOND QUARTER | | | | | |
| EDP | 200 | Basic Language | 3 | 2 | 4 |
| ELC | 120 | Electrical Fundamentals II | 4 | 6 | 6 |
| ENG | 102 | Composition | 3 | 0 | 3 |
| MAT | 102 | Technical Mathematics II | 5 | 0 | 5 |
| | | | 15 | 8 | 18 |
| THIRD QUARTER | | | | | |
| CAD | 201 | Introduction to Computer-Aided Design | 2 | 6 | 4 |
| ELN | 130 | Semiconductor Devices | 4 | 6 | 7 |

# *Electronic Engineering Technology*

## *T 045 Associate in Applied Science Degree*

| | | | | | |
|---|---|---|---|---|---|
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| MAT | 103 | Technical Mathematics III | 5 | 0 | 5 |
| | | | 14 | 12 | 19 |

FOURTH QUARTER

| | | | | | |
|---|---|---|---|---|---|
| ELN | 140 | Electronic Instrumentation | 1 | 2 | 2 |
| ELN | 141 | Control Devices | 5 | 4 | 7 |
| ENG | 204 | Oral Communications | 3 | 0 | 3 |
| PHY | 101 | Physics: Properties of Matter | 3 | 2 | 4 |
| | | | 12 | 8 | 16 |

FIFTH QUARTER

| | | | | | |
|---|---|---|---|---|---|
| ELN | 210 | Digital Fundamentals I | 3 | 4 | 5 |
| ELN | 211 | Microprocessors I | 3 | 6 | 6 |
| ELN | 212 | Communication Systems | 2 | 2 | 3 |
| PHY | 102 | Physics: Work, Energy, Power | 3 | 2 | 4 |
| | | | 11 | 14 | 18 |

SIXTH QUARTER

| | | | | | |
|---|---|---|---|---|---|
| ELN | 220 | Digital Fundamentals II | 3 | 4 | 5 |
| ELN | 221 | Microprocessors II | 3 | 6 | 6 |
| ELN | 222 | Linear I. C. and Pulse Shaping | 4 | 2 | 5 |
| PHY | 104 | Physics: Light and Sound | 3 | 2 | 4 |
| | | | 13 | 14 | 20 |

SEVENTH QUARTER

| | | | | | |
|---|---|---|---|---|---|
| ELN | 231 | Microprocessors Troubleshooting | 4 | 4 | 6 |
| ELN | 232 | Electronic Design Project | 0 | 6 | 3 |
| ELN | 233 | Technical Elective | 4 | 0 | 4 |
| | | Social Science Electives (2) | 6 | 0 | 6 |
| | | | 14 | 10 | 19 |

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 126

# Fashion Merchandising and Marketing Technology

## T 143 Associate in Applied Science Degree

This curriculum is designed to prepare the individual to be a productive employee in an entry-level job and to provide the knowledge and skills necessary for career advancement in mid-management positions in various fashion merchandising and marketing businesses and industries.

The two year program provides study and application in areas such as fabric science, fundamentals of art and design, elements of fashion, salesmanship, fashion buying and merchandising, display design, merchandise planning and control, apparel fitting, credit procedures and problems.

## SUGGESTED SEQUENCE OF COURSES BY QUARTER

| Course Title | | | Class Hrs. | Lab Hrs. | Credit Hrs. |
|---|---|---|---|---|---|
| FIRST QUARTER | | | | | |
| BUS | 101 | Introduction to Business | 3 | 0 | 3 |
| ENG | 101 | Grammar | 3 | 0 | 3 |
| FAS | 101 | Introduction to Fashion Merchandising/Marketing | 3 | 0 | 3 |
| MAT | 110 | Business Mathematics | 6 | 0 | 6 |
| TEX | 100 | Fabric Science I | 3 | 0 | 3 |
| | | | 18 | 0 | 18 |
| SECOND QUARTER | | | | | |
| ART | 125 | Fundamentals of Art & Design | 2 | 2 | 3 |
| BUS | 115 | Business Law I | 3 | 0 | 3 |
| BUS | 220 | personal Development | 3 | 0 | 3 |
| ENG | 102 | Composition | 3 | 0 | 3 |
| FAS | 102 | Elements & Coordination of Fashion | 3 | 0 | 3 |
| FAS | 103 | Fashion Accessories | 3 | 0 | 3 |
| | | | 17 | 2 | 18 |
| THIRD QUARTER | | | | | |
| BUS | 110 | Office Machines | 2 | 2 | 3 |
| BUS | 280 | Small Business Management | 3 | 0 | 3 |
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| FAS | 108 | Fashion Salesmanship | 3 | 0 | 3 |
| FAS | 215 | Fashion Merchandising Field Study (* or approved elective) | 3 | 0 | 3 |
| HUM | 110 | History of Costume | 3 | 0 | 3 |
| | | | 17 | 2 | 18 |
| FOURTH QUARTER | | | | | |
| DMK | 260 | Commercial Display Design | 3 | 2 | 4 |
| EDP | 104 | Introduction to Data Processing | 5 | 0 | 5 |
| ENG | 204 | Oral Communications | 3 | 0 | 3 |

# *Fashion Merchandising and Marketing Technology*

## *T 143 Associate in Applied Science Degree*

| | | | | | |
|---|---|---|---|---|---|
| FAS | 209 | Fashion Modeling (* or approved elective) | 2 | 2 | 3 |
| FAS | 210 | Fashion Sales Promotion I | 3 | 2 | 4 |
| | | | 16 | 6 | 19 |
| FIFTH QUARTER | | | | | |
| BUS | 239 | Marketing | 6 | 0 | 6 |
| DMK | 240 | Merchandise Planning & Control | 4 | 0 | 4 |
| ENG | 206 | Business Communications | 3 | 0 | 3 |
| FAS | 211 | Fashion Sales Promotion II | 3 | 2 | 4 |
| | | | 16 | 2 | 17 |
| SIXTH QUARTER | | | | | |
| BUS | 219 | Credit Procedures & Problems | 3 | 0 | 3 |
| DMK | 249 | Fashion Buying & Merchandising | 3 | 0 | 3 |
| FAS | 104 | Fashion Sketching | 2 | 2 | 3 |
| FAS | 208 | Applied Fashion Merchandising | 1 | 4 | 3 |
| PSY | 206 | Applied Psychology | 3 | 0 | 3 |
| | | | 12 | 6 | 15 |
| | | TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: | | | 105 |

*Elective courses must be selected with advisor's approval from the associate degree curricula.

# General Education College Program

## G 020

A contractual agreement between Stanly Technical College and the University of North Carolina at Charlotte offers students an opportunity to complete college transfer credit courses in general education on the Stanly Technical College campus in Albemarle.

The program consists of one academic year (32 semester hours) of college credit courses in general education which meet the requirements of the university (UNCC). The second year of the program is in the planning stages now.

After satisfactory completion of courses offered, students may transfer to the University of North Carolina at Charlotte or other colleges and universities. A student wishing to become a degree-candidate at the University will be able to transfer as a sophomore and only be required to take remaining specialties and electives to qualify for the baccalaureate degree.

Students wishing to transfer to other colleges and universities should consult with appropriate officials at these colleges about their individual majors, class standing and credits allowed to transfer.

This program operates on the semester calendar. Courses are offered during both day and evening hours.

The general regulations at both the University of North Carolina at Charlotte and Stanly Technical College apply to students enrolled in this program.

### GENERAL ADMISSION REQUIREMENTS

Students accepted into the general education courses will have completed (or have in progress) a college preparatory, secondary school program which includes four units of English, three units of algebra and geometry, two units of social science, two units of a foreign languge, and one unit of a natural science. Student performance should reflect a grade of C or better. All credits and grades earned by students enrolled will be recorded on the University transcript.

The minimum admission requirements are either an acceptable high school diploma or the high school equivalency certificate (GED). Candidates are considered on an individual basis and on their own merits. Admission policies are sufficiently flexible to permit the admission of any student with any unusual or extenuating circumstances. Final decision will be based on judgment as to whether the applicant has a reasonable chance of successfully pursuing an academic program. The Admissions Committee for the University of North Carolina at Charlotte-Stanly Technical College General Education College Program shall include but not necessarily be limited to the Dean of Admissions & Records of the University of North Carolina at Charlotte and the Registrar at Stanly Technical College. Special credit students may attempt one semester of credit prior to meeting all the admission requirements, and will be registered through the normal procedures at Stanly Technical College.

# *General Education College Program*

## *G 020*

Prior to registering for subsequent semesters, special credit students must have met all admissions requirements and been approved by the Admissions Committee.

| Course Title | | | Semester Hours |
|---|---|---|---|
| BIO | 101 | Principles of Biology | 4 |
| ENG | 101 | English Composition | 3 |
| ENG | 102 | English Composition | 3 |
| ES | 101 | Earth Science | 4 |
| HIS | 125 | US History I | 3 |
| HIS | 126 | US History II | 3 |
| MAT | 103 | Precalculus Mathematics | 3 |
| MAT | 120 | Calculus | 3 |
| PSY | 101 | General Psychology | 3 |
| SOC | 151 | Introduction to Sociology | 3 |
| | | TOTAL CREDIT HOURS: | 32 |

# General Office Technology

## T 033 Associate in Applied Science Degree

More people are now employed in clerical occupations than in any other single job category. Automation and increased production will mean that these people will need more technical skills and a greater adaptability for diversified types of jobs.

The General Office Technology curriculum is designed to develop the necessary variety of skills for employment in the business world. Specialized training in skill areas is supplemented by related courses in mathematics, accounting, business law, and applied psychology.

## SUGGESTED SEQUENCE OF COURSES BY QUARTER

| Course | | Title | Class Hrs. | Lab Hrs. | Credit Hrs. |
|---|---|---|---|---|---|
| FIRST QUARTER | | | | | |
| BUS | 101 | Introduction to Business | 3 | 0 | 3 |
| BUS | 102 | Typewriting I | 1 | 4 | 3 |
| ECO | 102 | Economics I | 3 | 0 | 3 |
| ENG | 101 | Grammar | 3 | 0 | 3 |
| MAT | 110 | Business Mathematics | 6 | 0 | 6 |
| | | | 16 | 4 | 18 |
| SECOND QUARTER | | | | | |
| BUS | 103 | Typewriting II | 1 | 4 | 3 |
| BUS | 115 | Business Law I | 3 | 0 | 3 |
| BUS | 120 | Accounting I | 6 | 0 | 6 |
| ECO | 104 | Economics II | 3 | 0 | 3 |
| ENG | 102 | Composition | 3 | 0 | 3 |
| | | | 16 | 4 | 18 |
| THIRD QUARTER | | | | | |
| BUS | 104 | Typewriting III | 1 | 4 | 3 |
| BUS | 110 | Office Machines | 2 | 2 | 3 |
| BUS | 121 | Accounting II | 6 | 0 | 6 |
| BUS | 183 | Vocabulary | 3 | 0 | 3 |
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| ENG | 250 | Reference Manual | 3 | 0 | 3 |
| | | | 18 | 6 | 21 |
| FOURTH QUARTER | | | | | |
| BUS | 205 | Typewriting IV | 1 | 4 | 3 |
| BUS | 273 | Word Processing | 3 | 2 | 4 |
| EDP | 104 | Introduction to Data Processing | 5 | 0 | 5 |
| ENG | 204 | Oral Communications | 3 | 0 | 3 |
| | | Social Science Elective | 3 | 0 | 3 |
| | | | 15 | 6 | 18 |

# *General Office Technology*

## *T 033 Associate in Applied Science Degree*

| | | | | | |
|---|---|---|---|---|---|
| FIFTH QUARTER | | | | | |
| BUS | 112 | Filing | 3 | 0 | 3 |
| BUS | 211 | Secretarial Machines | 2 | 2 | 3 |
| BUS | 214 | Secretarial Procedures | 3 | 2 | 4 |
| EDP | 200 | Basic Language | 3 | 2 | 4 |
| ENG | 206 | Business Communications | 3 | 0 | 3 |
| | | | 14 | 6 | 17 |
| SIXTH QUARTER | | | | | |
| BUS | 215 | Office Application | 1 | 4 | 3 |
| BUS | 229 | Income Taxes | 6 | 0 | 6 |
| BUS | 272 | Principles of Supervision | 3 | 0 | 3 |
| | | Social Science Elective | 3 | 0 | 3 |
| | | | 13 | 4 | 15 |

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 107

# Industrial Electronics

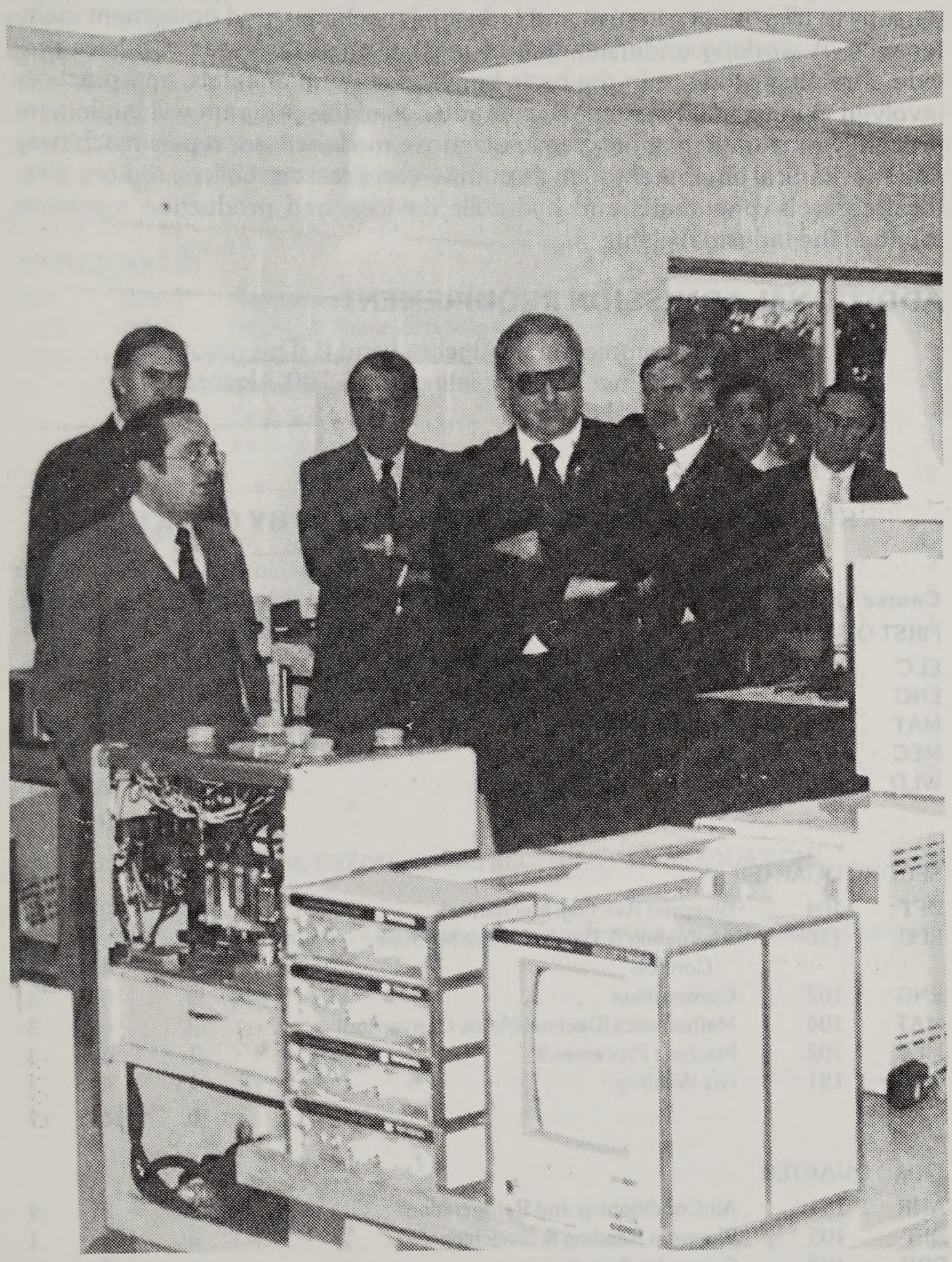
## V 045 Diploma

This program is designed to prepare individuals to repair and maintain electronic machines, controls and components which are used by various industrial operations. Individuals in the program learn to read blueprints, to determine repair procedures, to dismantle and assemble electronic components and to make necessary sensitive adjustments to meet specifications. A large portion of the laboratory time is spent verifying electronic principles and developing service techniques.

The graduate of this curriculum is prepared to maintain and service industrial electronic devices found in most manufacturing and service operations.

## SUGGESTED SEQUENCE OF COURSES BY QUARTER

| Course | | Title | Class Hrs. | Lab Hrs. | Credit Hrs. |
|---|---|---|---|---|---|
| FIRST QUARTER | | | | | |
| DFT | 1210 | Industrial Blueprint Reading | 4 | 0 | 4 |
| ELC | 1112 | Direct and Alternating Current | 5 | 15 | 10 |
| MAT | 1115 | Electrical Mathematics I | 3 | 0 | 3 |
| PSY | 1110 | Industrial Psychology | 3 | 0 | 3 |
| | | | 15 | 15 | 20 |
| SECOND QUARTER | | | | | |
| ELC | 1113 | Alternating and Direct Current Machine and Controls | 7 | 12 | 11 |
| ELN | 1102 | Electronic Fundamentals | 2 | 6 | 4 |
| MAT | 1116 | Electrical Mathematics II | 3 | 0 | 3 |
| | | | 12 | 18 | 18 |
| THIRD QUARTER | | | | | |
| EDP | 1103 | Computer Awareness | 1 | 3 | 2 |
| ELN | 1118 | Industrial Electronics I | 3 | 3 | 4 |
| ELN | 1121 | Digital Fundamentals | 5 | 8 | 8 |
| ENG | 1102 | Communication Skills | 3 | 0 | 3 |
| | | | 12 | 14 | 17 |
| FOURTH QUARTER | | | | | |
| ELN | 1104 | Digital Controls & Circuits | 5 | 12 | 9 |
| ELN | 1119 | Industrial Electronics II | 3 | 3 | 4 |
| ELN | 1124 | Introduction to Microprocessors | 3 | 3 | 4 |
| | | | 11 | 18 | 17 |
| | | TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: | | | 72 |



# PROGRAMS OF STUDY

## Industrial Maintenance Technology

### T 119 Associate in Applied Science Degree

The Industrial Maintenance Engineer Program is designed to prepare persons to fill positions in plan and industrial machinery and equipment maintenance. A working understanding of mechanisms is stressed. Courses provide a training program in the basic knowledge, fundamentals, and practices involved in industrial maintenance. Graduates of this program will implement preventive maintenance programs, diagnose malfunctions, repair machinery and mechanical equipment such as pumps, compressors, boilers, motors, electrical controls, pneumatic and hydraulic devices, and production machines found in the industrial plants.

**ADDITIONAL ADMISSION REQUIREMENT:**

Successful completion of Algebra I and II. This requirement may be met by completing MAT 100 Algebra at Stanly Technical College.

**SUGGESTED SEQUENCE OF COURSES BY QUARTER**

| Course Title | | | Class Hrs. | Lab Hrs. | Credit Hrs. |
|---|---|---|---|---|---|
| FIRST QUARTER | | | | | |
| ELC | 115 | Alternating & Direct Current | 2 | 4 | 4 |
| ENG | 101 | Grammar | 3 | 0 | 3 |
| MAT | 101 | Technical Mathematics I | 5 | 0 | 5 |
| MEC | 101 | Machine Processes I | 1 | 4 | 3 |
| WLD | 120 | Welding, Oxyacetylene | 1 | 2 | 2 |
| | | | 12 | 10 | 17 |
| SECOND QUARTER | | | | | |
| DFT | 104 | Blueprint Reading: Mechanical | 0 | 2 | 1 |
| ELC | 116 | Alternating & Direct Current Machine Controls | 2 | 4 | 4 |
| ENG | 102 | Composition | 3 | 0 | 3 |
| MAT | 104 | Mathematics (Decimal-Metric Conversion) | 3 | 0 | 3 |
| MEC | 102 | Machine Processes II | 1 | 4 | 3 |
| WLD | 121 | Arc Welding | 1 | 4 | 3 |
| | | | 10 | 14 | 17 |
| THIRD QUARTER | | | | | |
| AHR | 101 | Air Conditioning and Refrigeration | 3 | 2 | 4 |
| DFT | 105 | Blueprint Reading & Sketching | 0 | 2 | 1 |
| EDP | 103 | Computer Awareness | 1 | 2 | 2 |
| ELC | 119 | Industrial Electronic Control | 2 | 4 | 4 |
| ISC | 102 | Industrial Safety | 3 | 0 | 3 |
| MEC | 235 | Hydraulics & Pneumatics | 3 | 2 | 4 |
| | | | 12 | 12 | 18 |

# *Industrial Maintenance Technology*

## *T 119 Associate in Applied Science Degree*

| | | | | | |
|---|---|---|---|---|---|
| FOURTH QUARTER | | | | | |
| ELC | 121 | Electrical Troubleshooting | 2 | 2 | 3 |
| ENG | 204 | Oral Communications | 3 | 0 | 3 |
| MEC | 208 | Mechanical Problem Solving | 2 | 2 | 3 |
| MEC | 210 | Physical Metallurgy I | 3 | 2 | 4 |
| MEC | 214 | Shop Practice | 1 | 4 | 3 |
| WLD | 221 | Commercial & Industrial Practice | 2 | 2 | 3 |
| | | | 13 | 12 | 19 |
| FIFTH QUARTER | | | | | |
| ISC | 205 | Maintenance Management | 3 | 0 | 3 |
| MEC | 222 | Rigging & Material Handling | 2 | 2 | 3 |
| MEC | 299 | General Maintenance & Repair | 2 | 2 | 3 |
| | | Social Science Elective | 3 | 0 | 3 |
| | | Technical Elective* | 3 | 0 | 3 |
| | | Technical Elective* | 4 | 0 | 4 |
| | | | 17 | 4 | 19 |
| SIXTH QUARTER | | | | | |
| BUS | 235 | Business Management | 3 | 0 | 3 |
| BUS | 272 | Principles of Supervision | 3 | 0 | 3 |
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| ISC | 203 | Quality Control in Industrial Maintenance | 3 | 0 | 3 |
| PLA | 225 | Practicum | 1 | 6 | 3 |
| | | Social Science Elective | 3 | 0 | 3 |
| | | | 16 | 6 | 18 |

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 108

* Elective courses must be selected with advisor's approval from the Associate Degree Curricula.

# PROGRAMS OF STUDY

## Industrial Management

***(Offered During Evening Only)***

***T 049 Associate in Applied Science Degree***

The Industrial Management curriculum is designed to prepare students for careers in industry. It features a broad introduction to and practical studies in the various phases of plant operation and supervision. Industries in the area have helped establish this curriculum by specifying the types of knowledge they look for in a graduate seeking a position with them. Therefore, each course is presented on the basis of what the students should know in preparation for working in industry as potential supervisors and managers.

Studies are about equally divided among subjects on how an industry is organized, its operation, financing, the particulars on various departmental functions in which a student will likely start to work and how to work with people. This last area is particularly important and includes such subjects as human relations, techniques of supervision, and communications.

### SUGGESTED SEQUENCE OF COURSES BY QUARTER

| Course Title | | | Class Hrs. | Lab Hrs. | Credit Hrs. |
|---|---|---|---|---|---|
| FIRST QUARTER | | | | | |
| BUS | 101 | Introduction to Business | 3 | 0 | 3 |
| ECO | 102 | Economics I | 3 | 0 | 3 |
| ENG | 101 | Grammar | 3 | 0 | 3 |
| | | Social Science Elective | 3 | 0 | 3 |
| | | | 12 | 0 | 12 |
| SECOND QUARTER | | | | | |
| ECO | 104 | Economics II | 3 | 0 | 3 |
| ENG | 102 | Composition | 3 | 0 | 3 |
| PSY | 151 | Principles of Psychology | 3 | 0 | 3 |
| | | Business Elective* | 3 | 0 | 3 |
| | | | 12 | 0 | 12 |
| THIRD QUARTER | | | | | |
| BUS | 272 | Principles of Supervision | 3 | 0 | 3 |
| DFT | 151 | Drafting & Design | 2 | 4 | 4 |
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| | | | 8 | 4 | 10 |
| FOURTH QUARTER | | | | | |
| ENG | 204 | Oral Communications | 3 | 0 | 3 |
| MEC | 204 | Manufacturing Processes | 6 | 0 | 6 |
| | | Business Elective* | 3 | 0 | 3 |
| | | | 12 | 0 | 12 |

# *Industrial Management*

## *(Offered During Evening Only)*

## *T 049 Associate in Applied Science Degree*

| | | | | | |
|---|---|---|---|---|---|
| FIFTH QUARTER | | | | | |
| ENG | 206 | Business Communications | 3 | 0 | 3 |
| ISC | 211 | Work Measurement | 3 | 0 | 3 |
| MAT | 152 | Facts & Figures | 6 | 0 | 6 |
| | | | 12 | 0 | 12 |
| SIXTH QUARTER | | | | | |
| ECO | 201 | Labor Economics | 3 | 0 | 3 |
| ISC | 102 | Industrial Safety | 3 | 0 | 3 |
| ISC | 202 | Quality Control | 6 | 0 | 6 |
| | | | 12 | 0 | 12 |
| SEVENTH QUARTER | | | | | |
| EDP | 104 | Introduction to Data Processing | 5 | 0 | 5 |
| MEC | 213 | Production Planning | 3 | 0 | 3 |
| | | Social Science Elective | 3 | 0 | 3 |
| | | | 11 | 0 | 11 |
| EIGHTH QUARTER | | | | | |
| BUS | 120 | Accounting I | 6 | 0 | 6 |
| ISC | 204 | Value Analysis | 3 | 0 | 3 |
| ISC | 250 | Manufacturing Costs & Budgets | 3 | 0 | 3 |
| | | | 12 | 0 | 12 |
| NINTH QUARTER | | | | | |
| BUS | 299 | Business Decisions | 3 | 0 | 3 |
| ISC | 209 | Plant Layout | 5 | 0 | 5 |
| ISC | 210 | Job Evaluation | 4 | 0 | 4 |
| | | | 12 | 0 | 12 |

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 105

* Elective Courses must be selected with advisor's approval from the Associate Degree Curricula.

# Machinist

## V 032 Diploma

The Machinist curriculum is designed to train machinists by providing theory and practice in a variety of metal machining operations. Related courses including blueprint reading, metallurgy, math and science help provide additional basic skills necessary to the machinist trade. The machinist is a skilled metal worker who shapes metal parts by using machine tools and hand tools. The machinist must be able to set up and operate the machine tools found in a modern shop. The machinist is able to select the proper tools and material required for each job and to plan the cutting and finishing operations in their proper order so that the work can be completed according to blueprint or written specifications. The machinist makes standard shop computations relating to dimensions of work, tooling, feeds, and speeds of machining precision measuring instruments, such as micrometers and gauges are used to measure the accuracy of work.

### ADDITIONAL ADMISSION REQUIREMENT:

Completion of math portion of the placement test.

### SUGGESTED SEQUENCE OF COURSES BY QUARTER

| | | Course Title | Class Hrs. | Lab Hrs. | Credit Hrs. |
|---|---|---|---|---|---|
| FIRST QUARTER | | | | | |
| DFT | 1104 | Blueprint Reading | 0 | 3 | 1 |
| ISC | 1101 | Industrial Safety | 3 | 0 | 3 |
| MAT | 1101 | Fundamentals of Mathematics | 3 | 0 | 3 |
| MEC | 1101 | Machine Shop Theory & Practice I | 3 | 12 | 7 |
| MEC | 1122 | Practical Metallurgy | 3 | 2 | 4 |
| | | | 12 | 17 | 18 |
| SECOND QUARTER | | | | | |
| DFT | 1105 | Blueprint Reading: Mechanical | 1 | 2 | 2 |
| MAT | 1103 | Geometry | 3 | 0 | 3 |
| MEC | 1102 | Machine Shop Theory & Practice II | 3 | 12 | 7 |
| MEC | 1105 | Computer Numerical Control Machining I | 2 | 2 | 3 |
| PSY | 1101 | Human Relations | 3 | 0 | 3 |
| | | | 12 | 16 | 18 |
| THIRD QUARTER | | | | | |
| DFT | 1106 | Blueprint Reading: Mechanical | 1 | 2 | 2 |
| ENG | 1102 | Communication Skills | 3 | 0 | 3 |
| MAT | 1104 | Trigonometry | 3 | 0 | 3 |
| MEC | 1103 | Machine Shop Theory & Practice III | 3 | 12 | 7 |
| MEC | 1106 | Computer Numerical Control Machining II | 2 | 2 | 3 |
| | | | 12 | 16 | 18 |

# *Machinist*

## *V 032 Diploma*

FOURTH QUARTER

| | | | | | |
|---|---|---|---|---|---|
| BUS | 1103 | Small Business Operation | 3 | 0 | 3 |
| MAT | 1123 | Machinist Mathematics | 3 | 0 | 3 |
| MEC | 1104 | Machine Shop Theory & Practice IV | 3 | 12 | 7 |
| MEC | 1117 | Machine Repair | 2 | 3 | 3 |
| WLD | 1103 | Welding | 0 | 3 | 1 |
| | | | 11 | 18 | 17 |

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 71

# Manufacturing Engineering Technology

### T 050 Associate in Applied Science Degree

The primary objective of the Manufacturing Engineering Technology curriculum is the training of personnel to assist the engineer or small industry in planning, tooling, operating, servicing and supervising manufacturing operations. This curriculum provides a basic background of mechanical and related theory, with specific skills in the use of manufacturing and testing equipment. Students are given experiences in operating and servicing machines, accompanied by general education and management courses.

A graduate of this program may qualify for an entry position in one of several manufacturing functions: methods, analysis, production scheduling, quality control, materials testing, plant layout, time study, machine tooling, maintenance, and equipment and instrument work.

**ADDITIONAL ADMISSION REQUIREMENT:**

Successful completion of Algebra I and II. This requirement may be met by completing MAT 100 Algebra at Stanly Technical College.

**SUGGESTED SEQUENCE OF COURSES BY QUARTER**

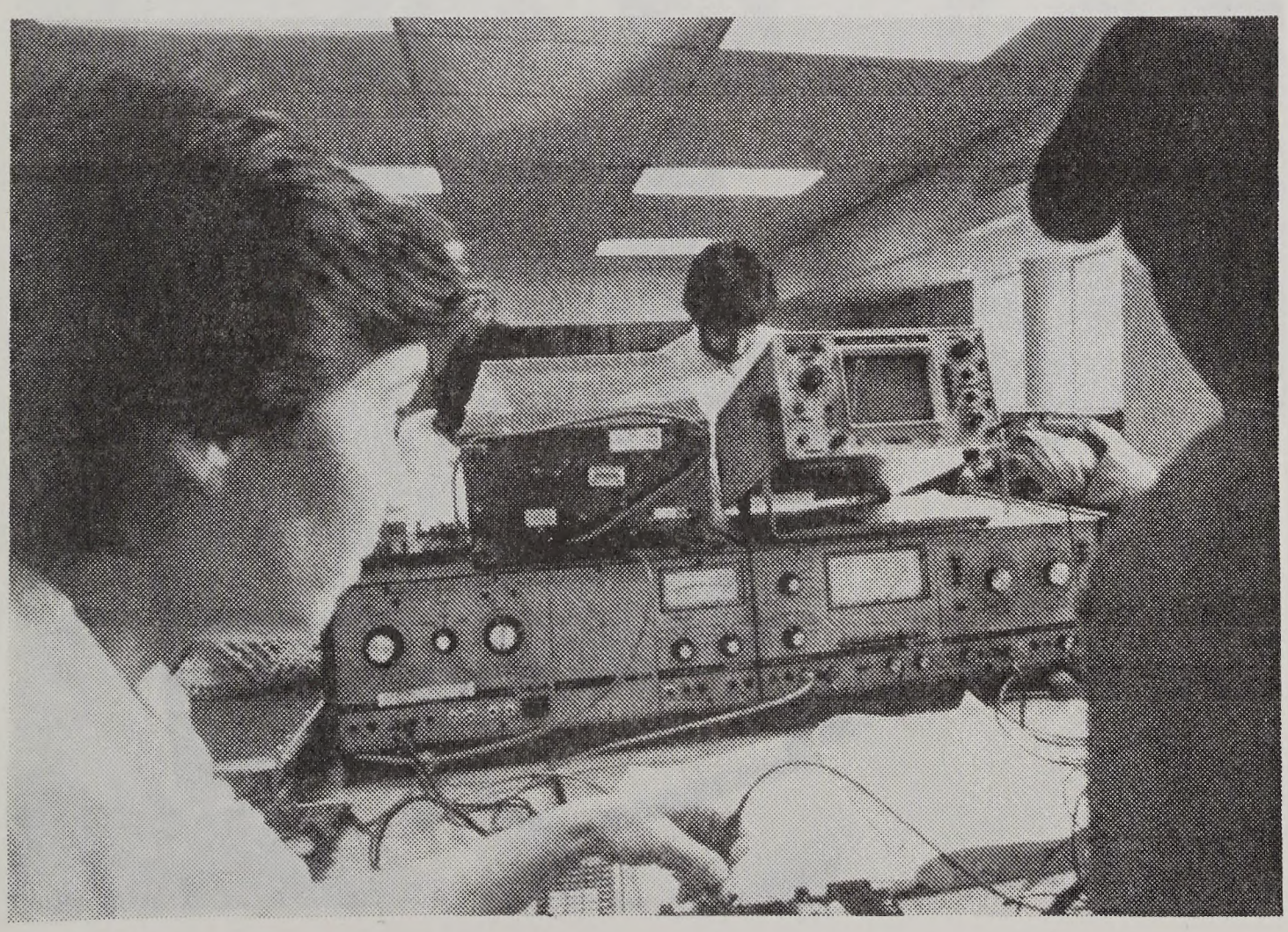
| Course Title | | | Class Hrs. | Lab Hrs. | Credit Hrs. |
|---|---|---|---|---|---|
| FIRST QUARTER | | | | | |
| DFT | 106 | Mechanical Drafting I | 2 | 6 | 4 |
| ENG | 101 | Grammar | 3 | 0 | 3 |
| MAT | 101 | Technical Mathematics I | 5 | 0 | 5 |
| MEC | 101 | Machine Processes I | 1 | 4 | 3 |
| | | General Education Elective | 3 | 0 | 3 |
| | | | 14 | 10 | 18 |
| SECOND QUARTER | | | | | |
| DFT | 107 | Mechanical Drafting II | 2 | 6 | 4 |
| ENG | 102 | Composition | 3 | 0 | 3 |
| MAT | 102 | Technical Mathematics II | 5 | 0 | 5 |
| MEC | 102 | Machine Processes II | 1 | 4 | 3 |
| PHY | 101 | Physics: Properties of Matter | 3 | 2 | 4 |
| | | | 14 | 12 | 19 |
| THIRD QUARTER | | | | | |
| EDP | 104 | Introduction to Data Processing | 5 | 0 | 5 |
| ENG | 204 | Oral Communications | 3 | 0 | 3 |
| MAT | 103 | Technical Mathematics III | 5 | 0 | 5 |
| MEC | 213 | Production Planning | 3 | 0 | 3 |
| PHY | 102 | Physics: Work, Energy, Power | 3 | 2 | 4 |
| | | | 19 | 2 | 20 |

# *Manufacturing Engineering Technology*

## *T 050 Associate in Applied Science Degree*

| | | | | | |
|---|---|---|---|---|---|
| FOURTH QUARTER | | | | | |
| EDP | 200 | Basic Language | 3 | 2 | 4 |
| ISC | 212 | Time & Motion Study | 2 | 6 | 4 |
| MEC | 210 | Physical Metallurgy I | 3 | 2 | 4 |
| PHY | 103 | Physics: Electricity | 3 | 2 | 4 |
| | | General Education Elective | 3 | 0 | 3 |
| | | | 14 | 12 | 19 |
| FIFTH QUARTER | | | | | |
| ISC | 209 | Plant Layout | 5 | 0 | 5 |
| MEC | 204 | Manufacturing Processes | 6 | 0 | 6 |
| MEC | 215 | Compound Angles | 2 | 3 | 3 |
| MEC | 216 | Physical Metallurgy II | 4 | 3 | 5 |
| MEC | 235 | Hydraulics & Pneumatics | 3 | 2 | 4 |
| | | | 20 | 8 | 23 |
| SIXTH QUARTER | | | | | |
| ISC | 202 | Quality Control | 6 | 0 | 6 |
| ISC | 206 | Process Planning | 2 | 6 | 4 |
| MEC | 298 | Tool & Die Design | 2 | 6 | 4 |
| | | General Education Elective | 3 | 0 | 3 |
| | | | 13 | 12 | 17 |

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 116



# Mechanical Drafting and Design Technology

### T 043 Associate in Applied Science Degree

Drafting/Design technicians must possess a broad range of skills and knowledge that will enable them to access, interpret, understand and act upon various kinds of technical information. These technicians are employed in many types of manufacturing, fabrication, research development and service industries. Substantial numbers also are employed in communications, transportation, public utilities, consulting engineering firms, and federal, state, and local governments.

Courses at Stanly Technical College prepare students with an extensive background in the fundamentals of drafting as well as their application to the complex design problems of products and processes.

Specifically, this curriculum includes an emphasis for developing operational skills for Computer-Assisted Drafting (CAD) systems which are projected to revolutionze the productivity and cost effectiveness in drafting/design related occupations.

Our drafting and design technicians are trained to perform many aspects of drafting, such as developing the drawing of a section, sub-assembly or major component. Investigating design factors and availability of material and equipment, production methods and facilities are frequent assignments. They assist in the design of units and controls from specifications by utilizing drawings of existing units and reports on functional performance. They may draw

# *Mechanical Drafting and Design Technology*

### *T 043 Associate in Applied Science Degree*

components in industrial fields based on engineers' original design concepts or specific ideas. Also, they may be assigned as coordinators for the execution of related work or other design, production, tooling material and planning groups.

Graduates of our Drafting/Design associate degree program who are trained in both fundamental and computer-assisted systems, will have the best prospects for employment.

## ADDITIONAL ADMISSION REQUIREMENT:

Successful completion of Algebra I and II. This requirement may be met by completing MAT 100 Algebra at Stanly Technical College.

## SUGGESTED SEQUENCE OF COURSES BY QUARTER

| | | Course Title | Class Hrs. | Lab Hrs. | Credit Hrs. |
|---|---|---|---|---|---|
| FIRST QUARTER | | | | | |
| DFT | 101 | Technical Drafting I | 2 | 6 | 4 |
| ENG | 101 | Grammar | 3 | 0 | 3 |
| MAT | 101 | Technical Mathematics I | 5 | 0 | 5 |
| PHY | 101 | Physics: Properties of Matter | 3 | 2 | 4 |
| PSY | 110 | Interpersonal Skills | 3 | 0 | 3 |
| | | | 16 | 8 | 19 |
| SECOND QUARTER | | | | | |
| DFT | 102 | Technical Drafting II | 2 | 6 | 4 |
| EDP | 103 | Computer Awareness | 1 | 2 | 2 |
| ENG | 102 | Composition | 3 | 0 | 3 |
| MAT | 102 | Technical Mathematics II | 5 | 0 | 5 |
| PHY | 102 | Physics: Work, Energy, Power | 3 | 2 | 4 |
| PSY | 210 | Industrial Psychology | 3 | 0 | 3 |
| | | | 17 | 10 | 21 |
| THIRD QUARTER | | | | | |
| CAD | 201 | Introduction to Computer-Aided Drafting | 2 | 6 | 4 |
| DFT | 103 | Technical Drafting III | 2 | 6 | 4 |
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| MAT | 103 | Technical Mathematics III | 5 | 0 | 5 |
| MEC | 205 | Strength of Materials | 3 | 2 | 4 |
| | | | 15 | 14 | 20 |
| FOURTH QUARTER | | | | | |
| DFT | 207 | Drafting Internship | 0 | 20 | 2 |

# Mechanical Drafting and Design Technology

## T 043 Associate in Applied Science Degree

| | | | | | |
|---|---|---|---|---|---|
| FIFTH QUARTER | | | | | |
| CAD | 202 | Mechanical Design Application | 2 | 6 | 4 |
| DFT | 201 | Technical Drafting IV | 2 | 6 | 4 |
| DFT | 204 | Descriptive Geometry | 2 | 6 | 4 |
| MEC | 101 | Machine Processes I | 1 | 4 | 3 |
| MEC | 105 | Statics | 3 | 3 | 4 |
| | | | 10 | 25 | 19 |
| SIXTH QUARTER | | | | | |
| DFT | 211 | Mechanisms (Electro-Mechanical) | 3 | 2 | 4 |
| DFT | 212 | Jigs and Fixture Design (CADD) | 2 | 6 | 4 |
| DFT | 230 | Structural Drafting | 2 | 6 | 4 |
| ENG | 204 | Oral Communications | 3 | 0 | 3 |
| MEC | 210 | Physical Metallurgy I | 3 | 2 | 4 |
| | | | 13 | 16 | 19 |
| SEVENTH QUARTER | | | | | |
| CAD | 203 | Computer-Aided Design/Structural Application | 2 | 6 | 4 |
| DFT | 205 | Design Drafting | 2 | 6 | 4 |
| MEC | 204 | Manufacturing Processes | 6 | 0 | 6 |
| MEC | 235 | Hydraulics and Pneumatics | 3 | 2 | 4 |
| | | | 13 | 14 | 18 |

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 118

# *Nurse's Assistant*

### *V 072 Certificate*

The continued shortage of nursing personnel has created a need for qualified men and women to give effective basic nursing care to selected patients in a general hospital or nursing home setting.

This course is designed to provide 330 hours of instruction consisting of classroom laboratory, and clinical experience. Clinical experience increases progressively throughout the latter part of the quarter. Clinical assignments are planned and supervised by the nursing instructor, so that students can apply classroom acquired knowledge to the clinical practice.

**Job Description**

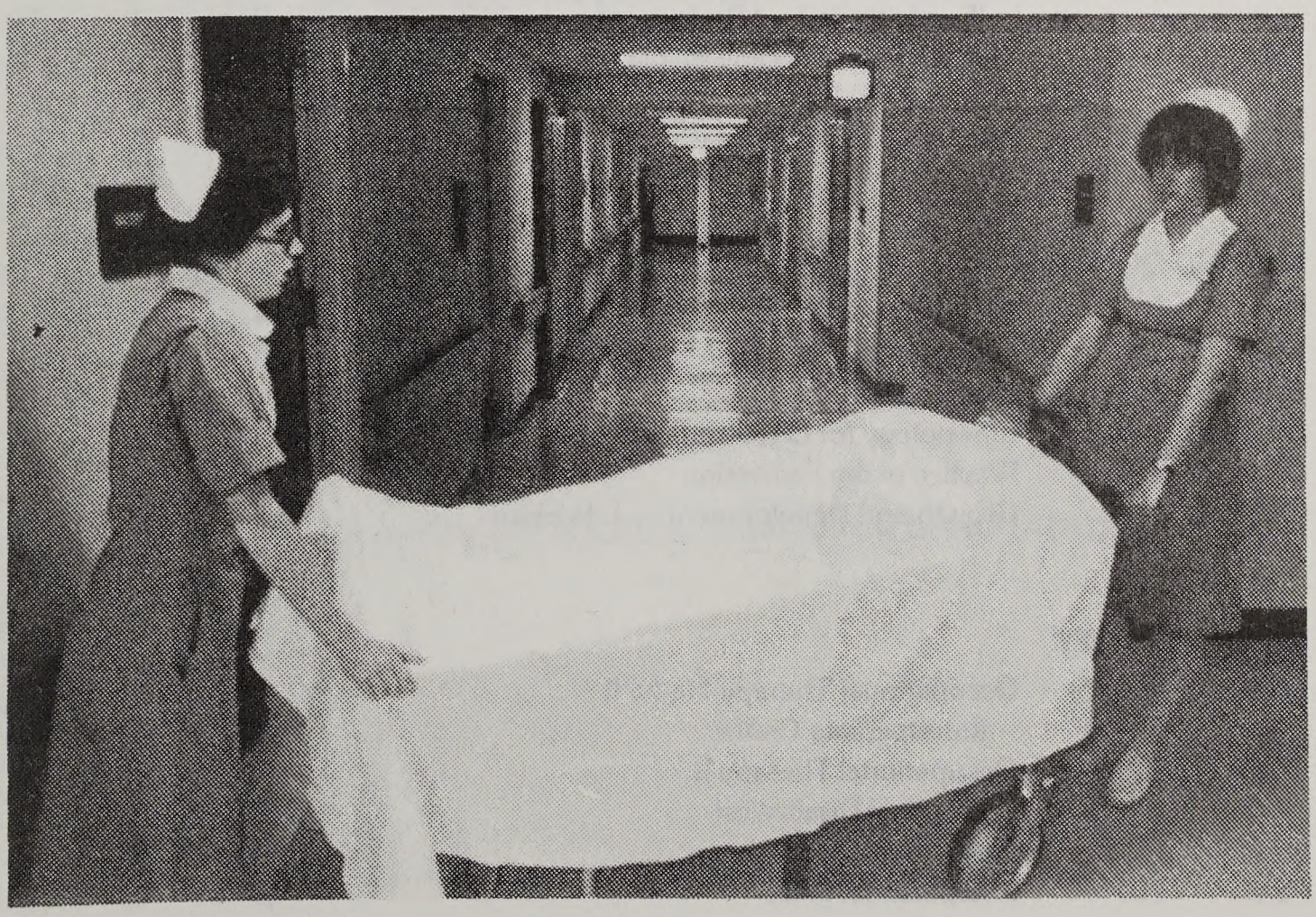
The Nurse's Assistant is employed to assist as a member of the nursing health team which contributes to the comfort, safety, and promotion of health of the patients. The Nurse's Assistant participates as a member of the health team in a plan of care to meet the physical, mental, emotional, and social needs of each patient under the direction and supervision of a licensed nurse.

**Cost**

Tuition and fees for the program is $57 plus the cost of the textbook. (Cost subject to change)

**Length of Program**

One quarter, 11 weeks.



# Occupational Therapy Assistant

## T 142 Associate in Applied Science Degree

Occupational Therapy is a health profession concerned with factors which prevent individuals from functioning at their fullest potential in work, play, and living. The Occupational Therapy Assistant Program prepares the graduate to work under the supervision of a Registered Occupational Therapist in developing, maintaining or restoring adaptive skills in individuals whose abilities to cope with the tasks of living are threatened or impaired by developmental deficits, aging, poverty or cultural disadvantage, or physical or psychosocial disability.

The program includes instruction in the basic concepts of occupational therapy, inter-personal skills, group dynamics and group leadership skills, and the use of activity techniques in teaching adaptive skills to the emotionally, physically, and developmentally disabled. Supervised field experience includes working with clients from these groups.

### SUGGESTED SEQUENCE OF COURSES BY QUARTER

| | | Course Title | Class Hrs. | Lab Hrs. | Credit Hrs. |
|---|---|---|---|---|---|
| FIRST QUARTER | | | | | |
| BIO | 101 | Anatomy and Physiology I | 4 | 2 | 5 |
| ENG | 101 | Grammar | 3 | 0 | 3 |
| MED | 101 | Medical Terminology | 0 | 4 | 2 |
| OTA | 101 | Occupational Therapy I (Fundamentals of Profession) | 2 | 3 | 3 |
| OTA | 103 | Occupational Therapy Media I (Minor Crafts) | 0 | 4 | 2 |
| PSY | 151 | Principles of Psychology | 3 | 0 | 3 |
| | | | 12 | 13 | 18 |
| SECOND QUARTER | | | | | |
| BIO | 102 | Anatomy and Physiology II | 4 | 2 | 5 |
| ENG | 102 | Composition | 3 | 0 | 3 |
| ENG | 204 | Oral Communications | 3 | 0 | 3 |
| OTA | 108 | Kinesiology for OTA Students | 3 | 2 | 4 |
| OTA | 110 | Practice of the Profession | 2 | 3 | 3 |
| PSY | 107 | Growth and Development — Life Span | 3 | 0 | 3 |
| | | | 18 | 7 | 21 |
| THIRD QUARTER | | | | | |
| OTA | 104 | Occupational Therapy Media II (Intermediate Crafts) | 1 | 4 | 3 |
| OTA | 106 | Occupational Therapy II (Physical Disabilities) | 3 | 2 | 4 |
| OTA | 112 | Disease Process | 3 | 0 | 3 |
| PSY | 110 | Interpersonal Skills | 3 | 0 | 3 |

# *Occupational Therapy Assistant*

## *T 142 Associate in Applied Science Degree*

| | | | | | |
|---|---|---|---|---|---|
| PSY | 205 | Abnormal Psychology | 3 | 0 | 3 |
| SOC | 102 | Principles of Sociology | 3 | 0 | 3 |
| | | | 16 | 6 | 19 |
| FOURTH QUARTER | | | | | |
| EDP | 103 | Computer Awareness | 1 | 2 | 2 |
| OTA | 201 | Aging Process | 3 | 0 | 3 |
| OTA | 204 | Occupational Therapy Media III (Woodworking) | 1 | 4 | 3 |
| OTA | 206 | Occupational Therapy — Splinting & Therapeutic Adaptation | 3 | 4 | 5 |
| OTA | 208 | Pediatrics for OTA Students | 3 | 0 | 3 |
| | | | 11 | 10 | 16 |
| FIFTH QUARTER | | | | | |
| OTA | 202 | Geriatric Programming | 3 | 2 | 4 |
| OTA | 205 | Occupational Therapy Media IV (Ceramics & Weaving) | 1 | 4 | 3 |
| OTA | 210 | Pediatric Programming | 3 | 2 | 4 |
| OTA | 212 | Occupational Therapy III (Psychiatric) | 3 | 0 | 3 |
| | | Elective | 3 | 0 | 3 |
| | | | 13 | 8 | 17 |
| SIXTH QUARTER | | | | | |
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| OTA | 214 | Occupational Therapy in the Community | 3 | 3 | 4 |
| OTA | 215 | Facility Management | 3 | 0 | 3 |
| OTA | 217 | Occupational Therapy-Activity Progamming | 3 | 0 | 3 |
| | | | 12 | 3 | 13 |
| SEVENTH QUARTER | | | | | |
| OTA | 220 | Occupational Therapy-Physical Disabilities Affiliation Field Placement I | 0 | 40 | 4 |
| OTA | 222 | Occupational Therapy-Psychiatric Affiliation Field Placement II | 0 | 40 | 4 |
| | | | 0 | 80 | 8 |

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 112

## Respiratory Therapy Technician

### T 091 Diploma

Often defined as the fastest growing allied health profession. Respiratory Therapy offers persons interested in caring for others an opportunity to serve as vital members of the health care team. The purpose of the Respiratory Therapy Curriculum is to prepare individuals to meet the challenges and responsibilities of this profession.

Respiratory Therapy Technicians are trained with great emphasis on the technical aspects of therapy and can expect to occupy positions as staff members, providing a majority of respiratory therapy patient care. They may be expected to supervise other respiratory therapy personnel, administer gas therapy, assist with long term continuous artificial ventilation, special therapeutic procedures and cardiopulmonary resuscitation. They are capable of performing many indispensable tasks related to patient care.

The Respiratory Therapy Technician Program at Stanly Technical College is fully accredited by the American Medical Association and graduates are eligible to take the national credentialing examination given by the National Board for Respiratory Care. Successful completion of this examination qualifies an individual as a Certified Respiratory Therapy Technician or CRTT. This title is recognized in all fifty states and Canada.

**ADMISSION REQUIREMENTS FOR RESPIRATORY THERAPY TEHNICIAN PROGRAM:**

1. Complete Application for Admission.
2. Submit high school transcript showing successful completion of high school requirements for graduation or successful completion of GED. Submit transcripts of all previous post-secondary education.
3. Submit evidence of successful completion of high school or college chemistry, biology, and algebra before entry into the program. At the discretion of the Director of Respiratory Therapy, Basic Science or successful completion of an exemption exam may be used to meet the chemistry requirement.
4. Successful completion of the institutional placement test with an average of 12th grade level performance.
5. The college reserves the right to test applicants asking for transfer credit on courses in theory or clinical.
6. All applicants must submit three letters of reference. Those currently or previously employed as a respiratory therapy technician must have a work-related reference from their immediate or past supervisor. Relatives should not be used as references.
7. After admission requirements have been completed, the applicant will be scheduled for an interview with the Admissions Committee. This committee will include the Respiratory Therapy faculty.
8. Applicants who are selected by the Admissions Committee will be conditionally accepted until a Respiratory Therapy Medical Form

completed by a Physician is received in the Admissions Office and reviewed for satisfactory results. Immunizations must be current for T.B. (x-ray if TB test is positive), rubella, tetanus, diphtheria, polio and rubeola. Evidence of recent serology, CBC, and urinalysis must also be presented.

9. Upon satisfactory completion of all of the above requirements the applicant will receive written notification of final acceptance to the Respiratory Therapy Technician program.

## SUGGESTED SEQUENCE OF COURSES BY QUARTER

| Course Title | | | Class Hrs. | Lab Hrs. | Clinical Hrs. | Credit Hrs. |
|---|---|---|---|---|---|---|
| FIRST QUARTER (FALL) | | | | | | |
| BIO | 101 | Anatomy and Physiology I | 4 | 2 | 0 | 5 |
| ENG | 101 | Grammar | 3 | 0 | 0 | 3 |
| MAT | 105 | Math for the Health Professional | 3 | 0 | 0 | 3 |
| MED | 101 | Medical Terminology | 0 | 4 | 0 | 2 |
| PHY | 105 | Basic Science | 3 | 2 | 0 | 4 |
| RTH | 201 | Respiratory Therapy Procedures I | 4 | 4 | 0 | 6 |
| | | | 18 | 10 | 0 | 23 |
| SECOND QUARTER (WINTER) | | | | | | |
| BIO | 103 | Cardiopulmonary Anatomy & Physiology | 2 | 4 | 0 | 4 |
| ENG | 102 | Composition | 3 | 0 | 0 | 3 |
| RTH | 202 | Respiratory Therapy Procedures II | 2 | 4 | 0 | 4 |
| RTH | 250 | Pharmacology | 2 | 0 | 0 | 2 |
| RTH | 302 | Clinical Practice I | 0 | 0 | 9 | 3 |
| | | | 9 | 8 | 9 | 16 |
| THIRD QUARTER (SPRING) | | | | | | |
| RTH | 205 | Respiratory Therapy Procedures III | 4 | 4 | 0 | 6 |
| RTH | 251 | Cardiopulmonary Pathophysiology | 3 | 0 | 0 | 3 |
| RTH | 252 | Pediatrics | 2 | 0 | 0 | 2 |
| RTH | 303 | Clinical Practice II | 0 | 0 | 24 | 8 |
| | | | 9 | 4 | 24 | 19 |
| FOURTH QUARTER (SUMMER) | | | | | | |
| EDP | 103 | Computer Awareness | 1 | 2 | 0 | 2 |
| RTH | 204 | Respiratory Therapy Seminar | 1 | 0 | 0 | 1 |
| RTH | 304 | Clinical Practice III | 0 | 0 | 12 | 4 |
| RTH | 305 | Clinical Practice IV | 0 | 0 | 24 | 8 |
| | | | 2 | 2 | 36 | 15 |
| | | TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: | | | | 73 |

# Respiratory Therapy Therapist

### T 091 Associate in Applied Science Degree

Allows graduates of the one-year Respiratory Therapy Technician program to advance their skills through the utilization of an additional year of training. Graduates receive supervisory training and more advanced physiology skills that qualifies them for additional career demands and responsibilities.

Stanly Technical College is currently seeking accreditation of the Respiratory Therapy Therapist program by the American Medical Association. Graduates would then be able to take the national credentialing examination given by the National Board for Respiratory Care. Successful completion of this examination qualifies an individual as a Registered Respiratory Therapist or RRT. This title is recognized in all fifty states and Canada.

## ADDITIONAL ADMISSION REQUIREMENTS:

In addition to all requirements for entry into the technician program, therapist applicants must:

1. Submit evidence of completion of a one-year technician program.
2. Incoming students who have already completed a one-year program must submit a notarized copy of their certification certificate issued by the National Board of Respiratory Care. Continuing students from the Respiratory Therapy Technician Program must attempt the first available NBRC exam following acceptance.
3. Students with grades of "D" in the technician program may be required to repeat the course(s) in question or satisfactorily complete an exemption exam prior to acceptance.
4. Current Respiratory Therapy Technician students must complete an application for the Respiratory Therapy Therapist Option no later than May 1 of the current year in order to be considered by the Admission Committee prior to acceptance of non-continuing students.
5. Evidence of satisfactory completion of two quarters of college level English must also be submitted.

## SUGGESTED SEQUENCE OF COURSES BY QUARTER

| Course Title | | | Class Hrs. | Lab Hrs. | Clinical Hrs. | Credit Hrs. |
|---|---|---|---|---|---|---|
| SUMMER QUARTER* | | | | | | |
| BIO | 204 | Microbiology | 3 | 2 | 0 | 4 |
| EDP | 103 | Computer Awareness | 1 | 2 | 0 | 2 |
| EDU | 220 | Methods of Teaching | 2 | 0 | 0 | 2 |
| ENG | 206 | Business Communications | 3 | 0 | 0 | 3 |
| PHY | 101 | Physics: Properties of Matter | 3 | 2 | 0 | 4 |
| | | | 12 | 6 | 0 | 15 |

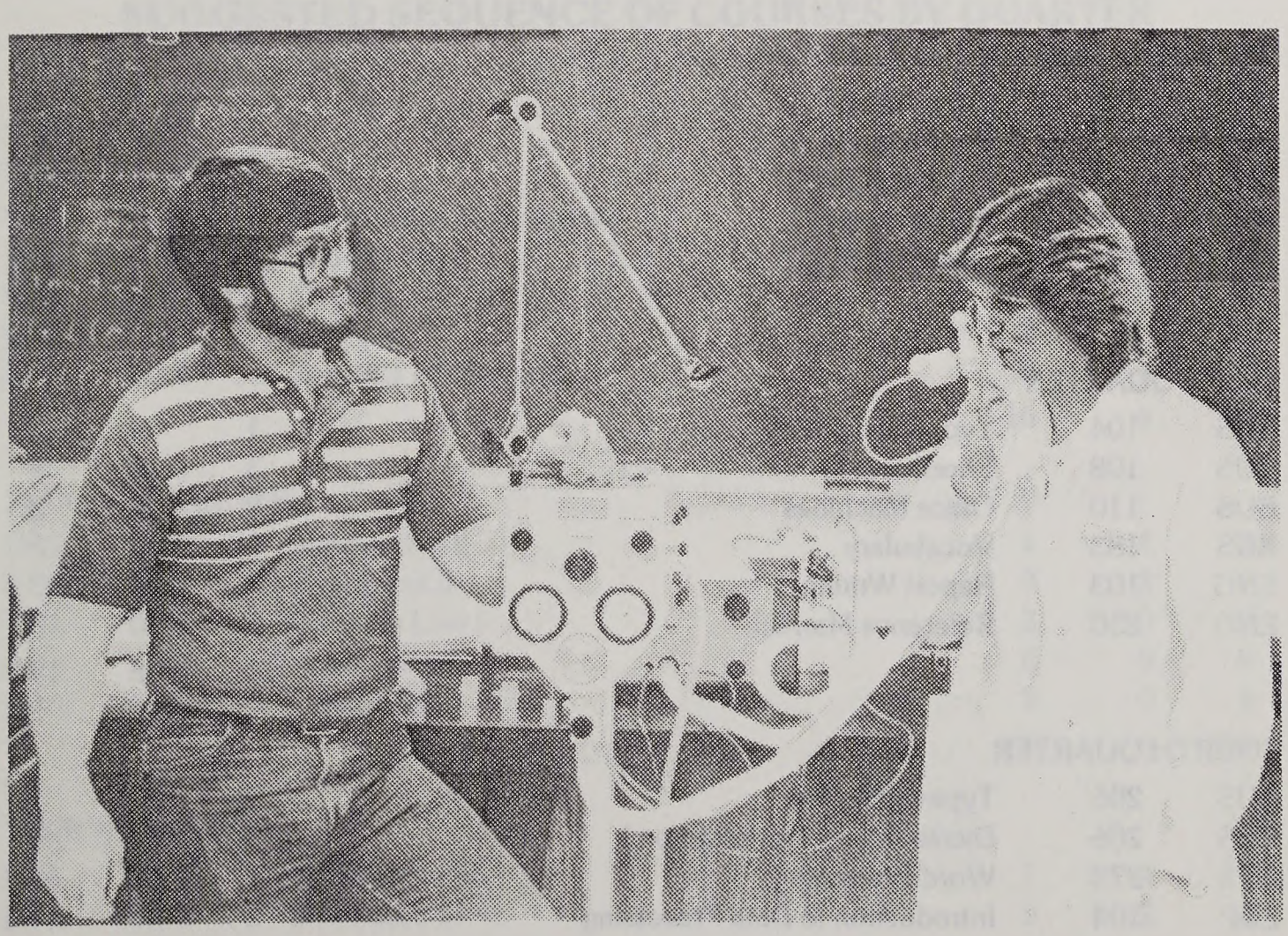
# *Respiratory Therapy Therapist*

## *T 091 Associate in Applied Science Degree*

| | | | | | | |
|---|---|---|---|---|---|---|
| FALL QUARTER | | | | | | |
| MAT | 101 | Technical Mathematics I | 5 | 0 | 0 | 5 |
| RTH | 260 | Respiratory Therapy Procedures IV | 2 | 2 | 0 | 3 |
| RTH | 261 | Cardiopulmonary Pathophysiology II | 4 | 2 | 0 | 5 |
| RTH | 271 | Pediatrics II | 2 | 2 | 0 | 3 |
| | | | 13 | 6 | 0 | 16 |
| WINTER QUARTER | | | | | | |
| ENG | 204 | Oral Communications | 3 | 0 | 0 | 3 |
| RTH | 272 | Advanced Pulmonary Functions | 1 | 2 | 0 | 2 |
| RTH | 280 | Cardiopulmonary Rehabilitation | 1 | 2 | 0 | 2 |
| RTH | 306 | Clinical Practice V | 0 | 0 | 16 | 5 |
| | | | 5 | 4 | 16 | 12 |
| SPRING QUARTER | | | | | | |
| CHM | 101 | Chemistry | 3 | 2 | 0 | 4 |
| PSY | 206 | Applied Psychology | 3 | 0 | 0 | 3 |
| RTH | 281 | Departmental Organization and Administration | 2 | 0 | 0 | 2 |
| RTH | 307 | Clinical Practice VI | 0 | 0 | 16 | 5 |
| | | | 8 | 2 | 16 | 14 |

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 128

Students have the option of beginning the program either Summer or Fall Quarter.



# Secretarial Science

***T 030, T 031, T 032 Associate in Applied Science Degree***

In today's society, there is a continued demand for stenographic and secretarial employees. Automation will never eliminate the need for a good secretary — particularly in the small, one-secretary office and in the executive type positions.

Secretarial skills taught in this course are typewriting, shorthand, transcription, and general office procedures. Supplementary courses deal with various other features and activities of business as well as with personality development so that a graduating student should be well prepared for a secretarial position.

## EXECUTIVE T 030

## SUGGESTED SEQUENCE OF COURSES BY QUARTER

| Course Title | | | Class Hrs. | Lab Hrs. | Credit Hrs. |
|---|---|---|---|---|---|
| FIRST QUARTER | | | | | |
| BUS | 101 | Introduction to Business | 3 | 0 | 3 |
| BUS | 102 | Typewriting I | 1 | 4 | 3 |
| BUS | 106 | Shorthand I | 3 | 2 | 4 |
| ENG | 101 | Grammar | 3 | 0 | 3 |
| MAT | 110 | Business Mathematics | 6 | 0 | 6 |
| | | | 16 | 6 | 19 |
| SECOND QUARTER | | | | | |
| BUS | 103 | Typewriting II | 1 | 4 | 3 |
| BUS | 107 | Shorthand II | 3 | 2 | 4 |
| BUS | 115 | Business Law I | 3 | 0 | 3 |
| BUS | 120 | Accounting I | 6 | 0 | 6 |
| ENG | 102 | Composition | 3 | 0 | 3 |
| | | | 16 | 6 | 19 |
| THIRD QUARTER | | | | | |
| BUS | 104 | Typewriting III | 1 | 4 | 3 |
| BUS | 108 | Shorthand III | 3 | 2 | 4 |
| BUS | 110 | Office Machines | 2 | 2 | 3 |
| BUS | 183 | Vocabulary | 3 | 0 | 3 |
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| ENG | 250 | Reference Manual | 3 | 0 | 3 |
| | | | 15 | 8 | 19 |
| FOURTH QUARTER | | | | | |
| BUS | 205 | Typewriting IV | 1 | 4 | 3 |
| BUS | 206 | Dictation and Transcription I | 3 | 2 | 4 |
| BUS | 273 | Word Processing | 3 | 2 | 4 |
| EDP | 104 | Introduction to Data Processing | 5 | 0 | 5 |

# *Secretarial Science*

## *T 030, T 031, T 032 Associate in Applied Science Degree*

| | | | | | |
|---|---|---|---|---|---|
| ENG | 204 | Oral Communications | 3 | 0 | 3 |
| | | Social Science Elective | 3 | 0 | 3 |
| | | | 18 | 8 | 22 |
| FIFTH QUARTER | | | | | |
| BUS | 112 | Filing | 3 | 0 | 3 |
| BUS | 207 | Dictation and Transcription II | 3 | 2 | 4 |
| BUS | 211 | Secretarial Machines | 2 | 2 | 3 |
| BUS | 214 | Secretarial Procedures | 3 | 2 | 4 |
| EDP | 200 | Basic Language | 3 | 2 | 4 |
| ENG | 206 | Business Communications | 3 | 0 | 3 |
| | | | 17 | 8 | 21 |
| SIXTH QUARTER | | | | | |
| BUS | 208 | Dictation and Transcription III | 3 | 2 | 4 |
| BUS | 215 | Office Application | 1 | 4 | 3 |
| | | Social Science Elective | 3 | 0 | 3 |
| | | | 7 | 6 | 10 |
| | | TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: | | | 110 |

## LEGAL T 031

## SUGGESTED SEQUENCE OF COURSES BY QUARTER

| Course Title | | | Class Hrs. | Lab Hrs. | Credit Hrs. |
|---|---|---|---|---|---|
| FIRST QUARTER | | | | | |
| BUS | 101 | Introduction to Business | 3 | 0 | 3 |
| BUS | 102 | Typewriting I | 1 | 4 | 3 |
| BUS | 106 | Shorthand I | 3 | 2 | 4 |
| ENG | 101 | Grammar | 3 | 0 | 3 |
| MAT | 110 | Business Mathematics | 6 | 0 | 6 |
| | | | 16 | 6 | 19 |
| SECOND QUARTER | | | | | |
| BUS | 103 | Typewriting II | 1 | 4 | 3 |
| BUS | 107 | Shorthand II | 3 | 2 | 4 |
| BUS | 115 | Business Law I | 3 | 0 | 3 |
| BUS | 120 | Accounting I | 6 | 0 | 6 |
| ENG | 102 | Composition | 3 | 0 | 3 |
| | | | 16 | 6 | 19 |
| THIRD QUARTER | | | | | |
| BUS | 104 | Typewriting III | 1 | 4 | 3 |
| BUS | 108 | Shorthand III | 3 | 2 | 4 |

# Secretarial Science

## T 030, T 031, T 032 Associate in Applied Science Degree

| | | | | | |
|---|---|---|---|---|---|
| BUS | 110 | Office Machines | 2 | 2 | 3 |
| BUS | 183 | Vocabulary | 3 | 0 | 3 |
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| ENG | 250 | Reference Manual | 3 | 0 | 3 |
| | | | 15 | 8 | 19 |

FOURTH QUARTER

| | | | | | |
|---|---|---|---|---|---|
| BUS | 205 | Typewriting IV | 1 | 4 | 3 |
| BUS | 206 | Dictation and Transcription I | 3 | 2 | 4 |
| BUS | 273 | Word Processing | 3 | 2 | 4 |
| EDP | 104 | Introduction to Data Processing | 5 | 0 | 5 |
| ENG | 204 | Oral Communications | 3 | 0 | 3 |
| | | Social Science Elective | 3 | 0 | 3 |
| | | | 18 | 8 | 22 |

FIFTH QUARTER

| | | | | | |
|---|---|---|---|---|---|
| BUS | 112 | Filing | 3 | 0 | 3 |
| BUS | 207 | Legal Dictation and Transcription II | 3 | 2 | 4 |
| BUS | 211 | Secretarial Machines | 2 | 2 | 3 |
| BUS | 214 | Secretarial Procedures | 3 | 2 | 4 |
| EDP | 200 | Basic Language | 3 | 2 | 4 |
| ENG | 206 | Business Communications | 3 | 0 | 3 |
| | | | 17 | 8 | 21 |

SIXTH QUARTER

| | | | | | |
|---|---|---|---|---|---|
| BUS | 116 | Business Law II | 3 | 0 | 3 |
| BUS | 208 | Legal Dictation and Transcription III | 3 | 2 | 4 |
| BUS | 215 | Legal Office Application | 1 | 4 | 3 |
| | | Social Science Elective | 3 | 0 | 3 |
| | | | 10 | 6 | 13 |

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 113

## MEDICAL T 032

## SUGGESTED SEQUENCE OF COURSES BY QUARTER

| Course Title | | | Class Hrs. | Lab Hrs. | Credit Hrs. |
|---|---|---|---|---|---|
| FIRST QUARTER | | | | | |
| BUS | 101 | Introduction to Business | 3 | 0 | 3 |
| BUS | 102 | Typewriting I | 1 | 4 | 3 |
| BUS | 106 | Shorthand I | 3 | 2 | 4 |
| ENG | 101 | Grammar | 3 | 0 | 3 |
| MAT | 110 | Business Mathematics | 6 | 0 | 6 |
| | | | 16 | 6 | 19 |

# Secretarial Science

## T 030, T 031, T 032 Associate in Applied Science Degree

SECOND QUARTER

| | | | | | |
|---|---|---|---|---|---|
| BUS | 103 | Typewriting II | 1 | 4 | 3 |
| BUS | 107 | Shorthand II | 3 | 2 | 4 |
| BUS | 115 | Business Law I | 3 | 0 | 3 |
| BUS | 120 | Accounting I | 6 | 0 | 6 |
| ENG | 102 | Composition | 3 | 0 | 3 |
| | | | 16 | 6 | 19 |

THIRD QUARTER

| | | | | | |
|---|---|---|---|---|---|
| BUS | 104 | Typewriting III | 1 | 4 | 3 |
| BUS | 108 | Shorthand III | 3 | 2 | 4 |
| BUS | 110 | Office Machines | 2 | 2 | 3 |
| BUS | 183 | Vocabulary | 3 | 0 | 3 |
| ENG | 103 | Report Writing | 3 | 0 | 3 |
| ENG | 250 | Reference Manual | 3 | 0 | 3 |
| | | | 15 | 8 | 19 |

FOURTH QUARTER

| | | | | | |
|---|---|---|---|---|---|
| BIO | 101 | Anatomy and Physiology I (Lecture Only) | 4 | 0 | 4 |
| BUS | 205 | Typewriting IV | 1 | 4 | 3 |
| BUS | 206 | Dictation and Transcription I | 3 | 2 | 4 |
| BUS | 273 | Word Processing | 3 | 2 | 4 |
| EDP | 104 | Introduction to Data Processing | 5 | 0 | 5 |
| ENG | 204 | Oral Communication | 3 | 0 | 3 |
| | | | 19 | 8 | 23 |

FIFTH QUARTER

| | | | | | |
|---|---|---|---|---|---|
| BUS | 112 | Filing | 3 | 0 | 3 |
| BUS | 211 | Secretarial Machines | 2 | 2 | 3 |
| BUS | 214 | Secretarial Procedures | 3 | 2 | 4 |
| EDP | 200 | Basic Language | 3 | 2 | 4 |
| ENG | 206 | Business Communications | 3 | 0 | 3 |
| MED | 101 | Medical Terminology | 0 | 4 | 2 |
| | | | 14 | 10 | 19 |

SIXTH QUARTER

| | | | | | |
|---|---|---|---|---|---|
| BUS | 208 | Medical Dictation and Transcription III | 3 | 2 | 4 |
| BUS | 215 | Medical Office Application | 1 | 4 | 3 |
| | | Social Science Elective | 3 | 0 | 3 |
| | | Social Science Elective | 3 | 0 | 3 |
| | | | 10 | 6 | 13 |

TOTAL CREDIT HOURS REQUIRED FOR GRADUATION: 112

# Welding

(Offered During Evening Only)

***V 050 Certificate***

The Welding Certificate Program provides the opportunity for students to develop the necessary skills for operation of a variety of types of welding equipment. The curriculum is designed to give students an understanding of the basic principles, methods, techniques, and skills required for welding.

## SUGGESTED SEQUENCE OF COURSES BY QUARTER

| | Class Hrs. | Lab Hrs. | Credit Hrs. |
|---|---|---|---|
| **FIRST QUARTER** | | | |
| **WLD 1141 Beginning Welding I** | **1** | **9** | **4** |

Introduction to the history of oxyacetylene and arc welding. The principles of welding and cutting, nomenclature of the equipment, assembly of unit. The operation of various AC transformers, AC and DC rectifiers, and DC motor generator arc welding units. Welding procedures such as practice of puddling and carrying the puddle, running flat beads, butt welding in the flat, vertical and overhead positions, and the cutting of straight lines with the torch. Safety procedures are stressed throughout the program of instruction. Testing appropriate to type welds will be performed.

**SECOND QUARTER**

**WLD 1142 Intermediate Welding II** **1** **9** **4**

A review of basic oxyacetylene cutting and welding, preparation of metals, types of joints, welding procedures and testing of the welds. The operation of AC transformers and DC motor generator arc welding machines. Studies are made of welding heats, polarities, and electrodes for use in joining various metal alloys by the arc welding process. After the student is capable of running beads, butt and fillet welds in all positions are made and tested in order that the student may detect his weakness in welding. Safety procedures are emphasized throughout the course.

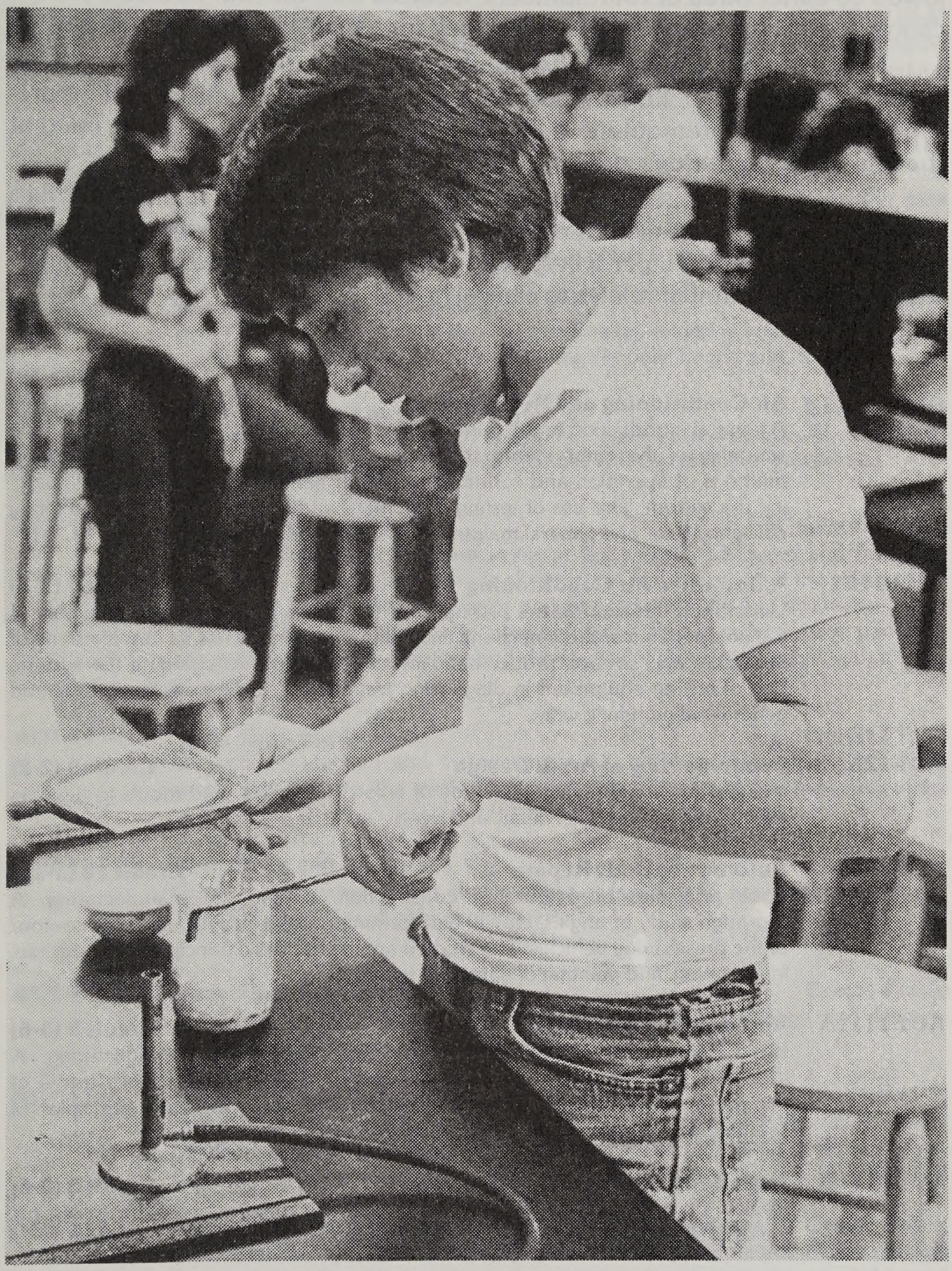
**THIRD QUARTER**

**WLD 1124 Advanced Welding III** **1** **9** **4**

Designed to provide practice in welding or pressure piping in the horizontal, vertical and horizontal fixed position using shielded metal arc welding processes according to Sections VIII and IX of the ASME code. Testing appropriate to type welds will be performed.

TOTAL CREDIT HOURS REQUIRED FOR CERTIFICATE: 12

# *Course Descriptions*



## COURSE DESCRIPTIONS

The following is a listing of course descriptions arranged **alphabetically by prefix.** Each course description lists the three-letter alphabetical prefix followed by either three or four numbers. Courses with the four numbers are vocational level courses and are not designed for associate degree programs.

Following the prefix and the number is the course title. Titles that have Roman numerals (I, II, III, etc.) indicate series courses and indicate that I is prerequisite to II, II is prerequisite to III. Other course prerequisites will be listed at the end of the course description.

There are three numbers to the right of the course title. The first number indicates the credit hours for the course. The numbers in parentheses indicate the class and lab hours per week. When three numbers are shown in parentheses the third number relates to clinical hours.

**Credit (Class-Lab)**

**AHR 101** **Air Conditioning and Refrigeration** **Credit 4 (3-2)**
A general introduction to the principles of refrigeration, including the study of the assembly of the components and connections necessary in the mechanisms, methods of operation and control, and proper handling of refrigerants in charging the system. The use of testing equipment in diagnosing trouble, conducting efficiency tests, and general maintenance work is also included.

**AHR 1101** **Automotive Air Conditioning** **Credit 4 (3-3)**
General introduction to the principles of refrigeration; study of the assembly of the components and connections necessary in the mechanisms, the methods of operation and control; proper handling of refrigerants in charging the system. Use of testing equipment in diagnosing trouble, conducting efficiency tests and general maintenance work.

**ART 125** **Fundamentals of Art & Design** **Credit 3 (2-2)**
Includes fashion drawing, the study of color, line, design and motifs to develop ability to recognize style, detail, and trends.

**AUT 1111** **Automotive Body Repair** **Credit 10 (6-12)**
Basic principles of automobile construction, design and manufacturing. A thorough study of angles, crown, and forming of steel into the complex contour of the present day vehicles. The student applies the basic principles of straightening, aligning, and painting of damaged areas.

**AUT 1111A** **Automotive Body Repair** **Credit 5 (3-6)**
Basic principles of automobile construction, design and manufacturing. A thorough study of angles, crown, and forming of steel into complex contour of the present day vehicles. The student begins to apply the basic principles of straightening, aligning, and painting of damaged areas.

**AUT 1111B** **Auto Body Repair** **Credit 5 (3-6)**
Review of AUT 1111A. The student finishes the application of the basic principles of straightening, aligning, and painting of damaged areas.

**AUT 1112** **Automotive Body Repair** **Credit 10 (6-12)**
A thorough study of the requirements for a metal worker, including the use of essential tools, forming fender flanges and beads, and straightening typical auto body damage. The student begins acquiring skills such as shaping angles, crowns, and contour of the metal of the body and fenders. Metal working and painting.

**AUT 1112A** **Auto Body Repair** **Credit 5 (3-6)**
A thorough study of the requirements for a metal worker, including the use of essential tools, forming fender flanges and bends, and straightening typical auto body damage.

**AUT 1112B** **Auto Body Repair** **Credit 5 (3-6)**
Review of AUT 1112A. The student begins to acquire skills such as shaping angles, crowns, and contour of the metal of the body and fenders, metal working and painting.

**AUT 1113** **Metal Finishing and Painting** **Credit 10 (6-12)**
Development of the skill to shrink stretched metal, soldering and leading, and preparation of the metal for painting. Straightening of doors, hoods, and deck lids; fitting and aligning. Painting fenders and panels, spot repairs, and complete vehicle painting; the use and application of power tools.

**AUT 1113A** **Metal Finishing and Painting** **Credit 5 (3-6)**
Developing the skill of shrinking stretched metal, soldering and leading, and preparing the metal for painting. Straightening of doors, hoods, and deck lids.

**AUT 1113B** **Metal Finishing and Painting** **Credit 5 (3-6)**
Fitting and aligning the parts to each other, painting fenders, panels and spot repair. Complete vehicle painting and the use and application of power tools.

**AUT 1114** **Body Shop Application** **Credit 14 (8-18)**
General introduction and instruction in the automotive frame and front end suspension systems, the methods of operation and control, and the safety of the vehicle. Unit job application covers straightening of frames and front wheel alignment. The student applies all phases of training. Repair order writing, parts purchasing, estimates of damage, and developing the final settlement with the adjuster.

**AUT 1114A** **Body Shop Application** **Credit 5 (3-6)**
General introduction and instruction in the automobile frame and front end suspension systems, the methods of operation and control, and the safety of the vehicle.

**AUT 1114B** **Body Shop Application** **Credit 5 (3-6)**
Unit job application covers straightening of frames and front wheel alignment. The student applies all phases of training.

**AUT 1114C** **Body Shop Application** **Credit 4 (2-6)**
The writing of repair orders, purchasing parts, estimating damage, and developing the final settlement with the adjuster.

**AUT 1115** **Trim and Glass Installation** **Credit 2 (1-3)**
Methods of removing and installing interior trim; cutting, sewing, and installing headlinings, seat covers, and door trim panels; painting of trim parts and accessories. Glass removal, cutting, fitting, and installation.

**AUT 1123** **Automotive Brakes, Chassis and Suspension Systems** **Credit 7 (4-9)**
A complete study of various braking systems employed on automobiles and light weight trucks. Emphasis on how they operate, power adjustment, and repair. Principles and functions of the components of the automotive chassis. Practical job instruction in adjusting and repairing of suspension and steering systems. Units to be studied: shock absorbers, springs, steering systems, steering linkage, and front end alignment.

# *COURSE DESCRIPTIONS*

**AUT 1124** **Automotive Power Train Systems** **Credit 4 (2-6)**
Principles and functions of automotive power train systems: clutches and transmission gears, drive shaft assemblies, rear axles and differentials. Identification of troubles, servicing, and repair.

**AUT 1125** **Automotive Servicing I** **Credit 8 (2-18)**
Emphasis is on the shop procedures necessary in "trouble-shooting" the various component systems of the automobile. "Trouble-shooting" of automotive systems provides a full range of experiences in testing, adjusting, repairing and replacing components. A close simulation to an actual automotive shop situation will be maintained.

**AUT 1128** **Automatic Transmission** **Credit 6 (3-9)**
The automobile has rapidly progressed during the past 20 years and the automatic transmission has taken the place of the dominant form of power transmission in the car. The automatic transmission is studied in detail and lab work is performed on the various types of transmissions, both domestic and imported. Diagnosing and repairing malfunctions in the transmission by factory approved methods and safe procedures are stressed.

**AUT 1130** **Machine Shop Operation** **Credit 2 (1-3)**
Many operations performed on the various parts of the automobile are performed in specialty shops. This course is designed to acquaint the student with the various machine shop operations. Some of the more numerous machinist operations include: boring, resurfacing, line-boring, crankshaft and camshaft grinding, reaming and sizing and value guide replacement. In this course the emphasis is placed on the simulation of these operations rather than actual hands-on operation.

**BIO 101** **Anatomy and Physiology I** **Credit 4 (2-5)**
A course dealing with normal structure and related functioning of the systems of the human body. The human body is studied in an effort to understand the coordination of all systems to maintain the need for homeostasis. Included are the skeletal, muscular, digestive, circulatory, respiratory, urinary, reproductive, endocrine, integumentary, nervous systems and the special sense organs. Students are required to dissect specially preserved cats during their laboratory class work and when possible the instructor will dissect a human cadaver at the end of the course as a review of the entire study.
Prerequisites: High school biology or acceptance into an Allied Health curriculum.

**BIO 102** **Anatomy & Physiology II** **Credit 4 (2-5)**
An in-depth course of anatomy and physiology, with emphasis on the skeletal, muscular, nervous, respiratory and circulatory systems. Those principles of chemistry and physics which are supportive to the understanding of these systems are included, along with the relevant pathophysiology. Laboratory experiments illustrative of these principles and pathology are included.

**BIO 103** **Cardiopulmonary Anatomy and Physiology** **Credit 4 (2-4-0)**
This course provides a concise study of the cardiac and pulmonary anatomy and physiology. Emphasis is placed on the areas of acid-base balance, ventilation-perfusion relationships, the mechanics and control of respiration. An introduction to ECG analysis is also included.
Pre-requisites: BIO 101, ENG 101, RTH 101, RTH 201, MAT 105

**BIO 203** **Advanced Physiology** **Credit 3 (0-0-3)**
Designed to provide the Associate degree student with an understanding of the various physiological processes characteristic of living organisms. The functioning

of the individual organ systems with the focus on interrelationships between organ systems in the maintenance of homeostasis and other selected topics in vertebrate physiology. Characteristics of muscles, electrical properties of nerve conduction, reflex function, blood and circulation, respiration and kidney function will be included. Not required for PN candidates.
Prerequisite: BIO 102

**BIO 204** **Microbiology** **Credit 4 (3-2-0)**
An introduction to microorganisms including viruses, richettsia, bacteria, fungi, and protozoa. Emphases are medical and nursing oriented providing basic principles of microbiology, immunology and various methods of control as related to pathogenic organisms. Selected laboratory assignments provide for demonstration of this principle.
Prerequisite: BIO 101 & BIO 102, or Instructor/Program Director approval.

**BMT 101** **BMET at Work: Introduction to the Hospital and Industry** **Credit 2 (2-0)**
An introduction to the field of Biomedical Equipment Technology. The student will be introduced to the organization and structure of the various medical facilities, the role of the BMET, the variety and functions of medical equipment. Consideration will be given to organizations affecting the BMET's work and literature related to the field. Visitations will be made to medical facilities to observe the BMET at work.

**BMT 163** **Laboratory Practices** **Credit 3 (1-5)**
The objective of this course is to develop skill in the use of the various hand tools used by the technician. The student is trained to observe safety precautions, use hand tools properly and safely, prepare and solder wire, components, and devices. The student is expected to construct a chassis for an electronic system, use fasteners, tubing and terminals where appropriate, using proper construction techniques, and produce a working system using printed circuit construction techniques.

**BMT 201** **Internship** **Credit 2 (0-24)**
The student is placed in a medical facility or industry for an eleven week period and works under the direct supervision of a qualified BMET or Clinical Engineer. During the internship the student is exposed to the variety of responsibilities required in the profession.

**BMT 202** **Seminar** **Credit 1 (1-0)**
Designed in conjunction with the internship to afford students the opportunity to share their work experiences and to discuss with the instructor problems encountered in this experience. Attention is also given to developing positive attitudes toward the work environment and human relationships.

**BMT 224** **Digital Electronics — BMT** **Credit 5 (2-6)**
An intensive exploration of the fundamentals of digital electronics. Students investigate the techniques, semiconductor devices, and integrated circuits used to implement the basic digital logic circuits. A discussion of Boolean Algebra and its relation to digital logic will also be presented.

**BMT 225** **Microprocessors — BMT** **Credit 5 (2-6)**
Modern medical equipment necessitates an understanding of the fundamentals of microprocessors. This course is designed to provide an introduction to a complete computing system. Number systems and codes, computer arithmetic and an introduction to programming are emphasized.
Prerequisite: BMT 224

# *COURSE DESCRIPTIONS*

**BMT 234** **Introduction to Medical Instrumentation** **Credit 3 (2-3)**

This course will introduce the student to the basic building blocks of medical instrumentation and will extend his knowledge into the operation of biomedical instruments through the introduction of common electrical circuitry of these instruments. Common electronic circuits will be pointed out and illustrated circuits such as differential amplifiers, operational amplifiers, voltage level detectors and other common building blocks for many instruments will be used. The Pasco training system will be the basis of this source of inquiry. Other important aspects of biomedical systems will be covered as time permits.

**BMT 244** **Medical Instrumentation I** **Credit 5 (3-4)**

This course will extend the student's knowledge of the operation of several biomedical instruments by continuing to build on the instruction from Introduction to Medical Instrumentation and looking at particular segments of medical instrumentation such as cardiac monitoring, electrocardiographs, electroencephlagraphs, defibrillators, procedures for maintaining, repairing, and calibrating this equipment will be learned. Each piece of equipment will be broken down into its major components, dismantled, reassembled and adjusted so that the equipment operates within the tolerances specified by the manufacturer. In addition, all aspects of electrical safety concerning the use of this equipment will be covered within this segment.

**BMT 254** **Medical Instrumentation II** **Credit 5 (3-4)**

This course is designed to provide the technician with the further understanding of instruments not covered in the Introduction to Medical Instrumentation or Instrumentation I. Procedures for maintaining, repairing and calibrating this equipment will also be learned and each piece of equipment will be broken down into its major components, dismantled, reassembled, and adjusted so that the equipment operates within the tolerances specified by the manufacturer. All aspects of electrical safety on this equipment will also be covered during the course of instruction.

Prerequisite: BMT 244

**BMT 264** **Biomedical Troubleshooting Techniques** **Credit 5 (3-4)**

Basic problems involving tracking down and identifying problems frequently encountered with the various types of medical instrumentation are to be covered in this course. Much of the time will be spent in developing the logical troubleshooting techniques such as backtracking and half split rule. Clinical monitoring devices and other equipment will be used for the laboratory exercise. Mechanical as well as electronic problems will be considered.

**BMT 271** **Biomedical Equipment: Selection and Design** **Credit 2 (1-2)**

Students will be required to research, propose and carry to completion a suitable biomedical equipment selection project. Other aspects of the course will include a study of the basic concepts of what is considered to be equipment design of high quality. Some aspects may be considered to be the equipment design which provides for ease of service. Other aspects to be considered will be component location, chassis strength, operations simplicity, repair accessibility as well as equipment aesthetics. The study of manuals provided by manufacturers and the various schematic drawings will also be included.

**BMT 280** **X-Ray Equipment** **Credit 5 (3-4)**

An introduction to radiation producing equipment, ultrasound and nuclear scanners. Emphasis is placed on maintaining, repairing and adjusting this equipment to assure that the equipment operates within the tolerance specified by the manufacturer.

Prerequisite: PHY 243

**BUS 101** **Introduction to Business** **Credit 3 (3-0)**
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 I** **Credit 3 (1-4)**
The objective of this course is a foundation for speed and accuracy. Basic training on the following: position, touch operation, mastery of keyboard, skill-building drills, and problem typing of simple business letters and tabulations.

**BUS 103** **Typewriting II** **Credit 3 (1-4)**
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.
Prerequisite: BUS 102 or the equivalent. Speed requirement, 30 words per minute for five minutes.

**BUS 104** **Typewriting III** **Credit 3 (1-4)**
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.
Prerequisite: BUS 103 or the equivalent. Speed requirement: 40 words per minute for five minutes.

**BUS 106** **Shorthand I** **Credit 4 (3-2)**
A beginning course in the theory and practice of reading and writing shorthand. Emphasis on phonetics, penmanship, word families, brief forms, and phrases.

**BUS 107** **Shorthand II** **Credit 4 (3-2)**
Continued study of theory with greater emphasis on dictation and elementary transcription.
Prerequisite: BUS 106 or the equivalent.

**BUS 108** **Shorthand III** **Credit 4 (3-2)**
Theory and speed building. Introduction to office style dictation. Emphasis on development of speed in dictation and accuracy in transcription.
Prerequisite: BUS 107.

**BUS 110** **Office Machines** **Credit 3 (2-2)**
A general survey of office machines. Students will receive training in the operation and application of the ten-key adding machine, printing calculator and electronic calculators.

**BUS 112** **Filing** **Credit 3 (3-0)**
An introduction to the record systems used in business with emphasis on the management and control of those systems. Filing methods will also be studied.

**BUS 115** **Business Law I** **Credit 3 (3-0)**
A general course designed to acquaint the student with certain fundamentals and principles of business law, including contracts, sales, and bailments.

**BUS 116** **Business Law II** **Credit 3 (3-0)**
Includes the study of laws pertaining to commercial paper, agency, partnerships, corporations, and property rights.

**BUS 120** **Accounting I** **Credit 6 (6-0)**
A study of the principles and techniques of accounting centered around collect-

ing, summarizing, and reporting information about service and mercantile enterprises.

**BUS 121** **Accounting II** **Credit 6 (6-0)**
Principles, techniques and tools of accounting are applied to the partnership form of business, with emphasis placed on the special journals and reports used by a partnership. This course also includes a more in-depth look at some of the concepts introduced in BUS 120.
Prerequisite: BUS 120

**BUS 122** **Accounting III** **Credit 6 (6-0)**
Principles, techniques, and tools of accounting are applied to the corporate form of business, with emphasis on the special journals and reports used by a corporation. This course also includes a more in-depth look at some of the concepts introduced in BUS 120.
Prerequisites: BUS 120 and 121.

**BUS 123** **Business Finance I** **Credit 3 (3-0)**
Includes a study of the financing of business units, as individuals, partnerships, corporations, and trusts. A detailed study is made of short-term, long-term, and consumer financing.

**BUS 124** **Business Finance II** **Credit 3 (3-0)**
Financing federal, state and local governments and the ensuing effects upon the economy. Factors affecting supply funds, monetary and credit policies.
Prerequisite: BUS 123

**BUS 150** **Introduction to Advertising** **Credit 3 (3-0)**
A survey of the field of advertising with emphasis on media, consumer behavior, market research, and the coordination of a total advertising campaign.

**BUS 183** **Vocabulary** **Credit 3 (3-0)**
Designed to build vocabulary in both speaking and reading. Such general listings as medical, legal, and realty terms are covered. Emphasis is also placed on being able to identify names of people and places in order to build comprehension while reading newspapers and news magazines. Vocabulary study is required for secretarial students, but is open to enrollees in all curriculums.

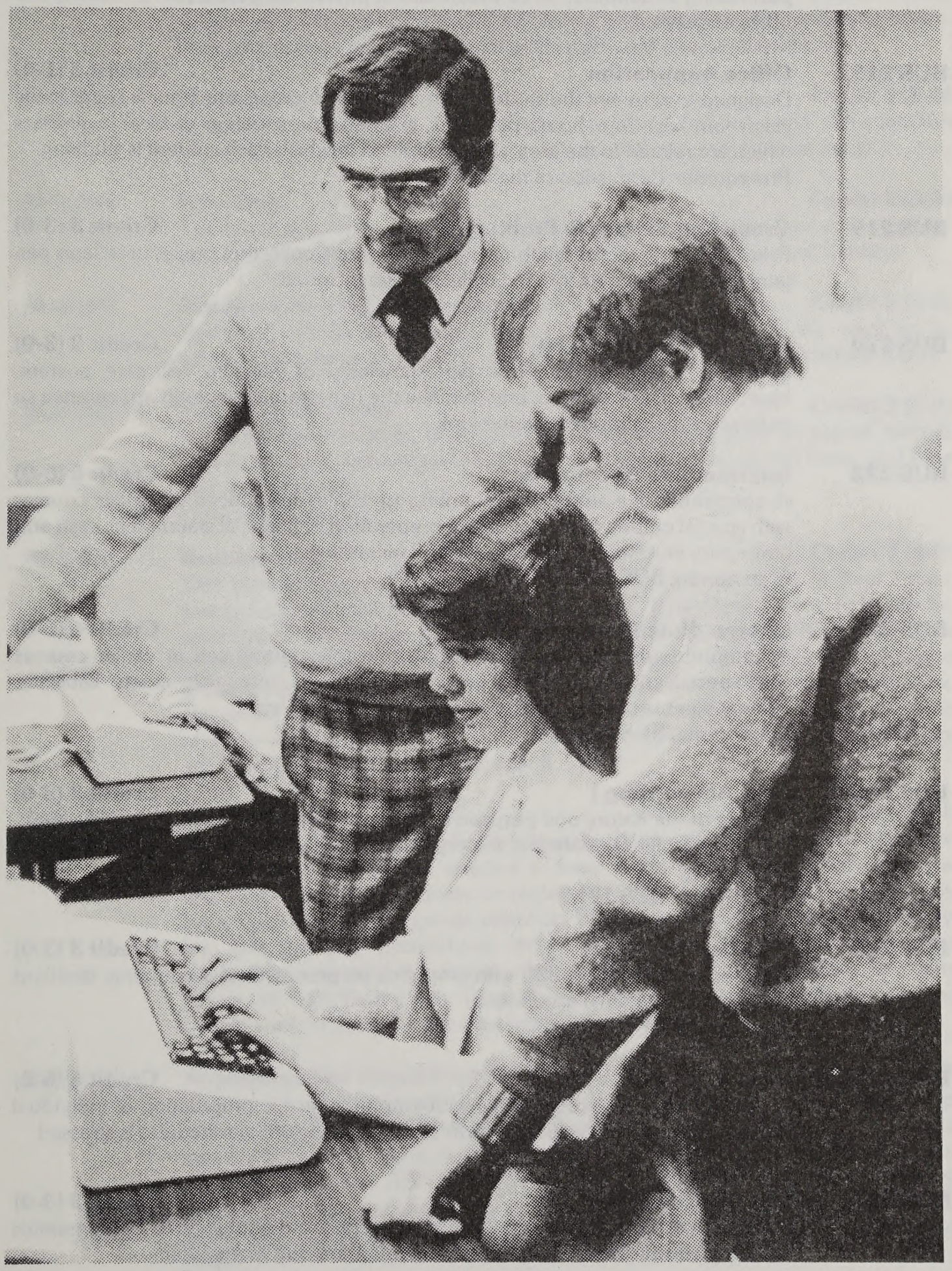
**BUS 205** **Typewriting IV** **Credit 3 (1-4)**
Emphasis is placed on the development of individual production rates. The student learns the techniques needed in planning and in typing projects that closely approximate the work appropriate to the field of study. These projects include review of letter forms, methods of duplication, statistical tabulation and the typing of reports, manuscripts and legal documents.
Prerequisite: BUS 104 Speed requirement: 50 words per minute for five minutes.

**BUS 206** **Dictation and Transcription I** **Credit 4 (3-2)**
Develops the skill of taking dictation and of transcribing at the typewriter materials appropriate to the course of study which includes a review of the theory and the dictation of familiar and unfamiliar material at varying rates of speed. Minimum dictation rate of 100 words per minute required for three minutes on new material.
Prerequisite: BUS 108

**BUS 207** **Dictation and Transcription II** **Credit 4 (3-2)**
Covering materials appropriate to the course of study, students develop the accuracy, speed, and vocabulary that will enable them to meet the stenographic re-

quirements of business and professional offices. Minimum dictation rate of 110 words per minute required for three minutes on new material.
Prerequisite: BUS 206

**BUS 208** **Dictation and Transcription III** **Credit 4 (3-2)**
Principally a speed building course, covering materials appropriate to the course of study with emphasis on speed as well as accuracy. Minimum dictation rate of 120 words per minute required for three minutes on new material.
Prerequisite: BUS 207



# *COURSE DESCRIPTIONS*

**BUS 211** **Secretarial Machines** **Credit 3 (2-2)**
An introduction of machines used in business. Emphasis will be placed on attainment of skill in using duplicating equipment, dictating and transcribing machines, and other office machines.

**BUS 214** **Secretarial Procedures** **Credit 4 (3-2)**
Designed to acquaint the student with the responsibilities encountered by a secretary 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, interviewing for a job, grooming and office etiquette.

**BUS 215** **Office Application** **Credit 3 (1-4)**
Designed to acquaint the student with on-the-job training, one hour is spent in the classroom with four hours per week in a lab-type situation at local businesses which are related to the area of specialization in which each student is studying.
Prerequisite: Permission of the instructor.

**BUS 219** **Credit Procedures & Problems** **Credit 3 (3-0)**
Principles and practices in the extension of credit; collection procedures; laws pertaining to credit extension and collection are included.

**BUS 220** **Personal Development** **Credit 3 (3-0)**
Designed to give the student expert knowledge of make-up, hair care, posture, figure control, and fashion, and to make the necessary changes in appearance so as to achieve the modern career look.

**BUS 222** **Intermediate Accounting I** **Credit 6 (6-0)**
A comprehensive study of accounting principles introduced in earlier courses with special emphasis placed on the preparation of financial statements, cash and temporary investments, receivables and inventories.
Prerequisite: BUS 122.

**BUS 223** **Intermediate Accounting II** **Credit 6 (6-0)**
A comprehensive study of accounting principles introduced in earlier courses with special emphasis placed on long-lived assets, intangible assets, liabilities, owners equity accounts, and special accounting problems.
Prerequisite: BUS 222.

**BUS 225** **Cost Accounting I** **Credit 3 (3-0)**
A study of the nature and purpose of cost accounting with emphasis on accounting for direct labor, materials, factory overhead, and the job order system of cost accounting.
Prerequisite: BUS 121

**BUS 226** **Cost Accounting II** **Credit 3 (3-0)**
A continuation of BUS 225 with emphasis on process cost accounting, standard costs, and managerial accounting.
Prerequisite: BUS 225

**BUS 229** **Income Taxes** **Credit 6 (6-0)**
A study of federal income taxes with emphasis on the preparation of individual tax returns. A detailed study of form 1040 and supporting schedules is stressed.

**BUS 232** **Sales Development** **Credit 3 (3-0)**
A study of the sales process including mastering and applying the fundamentals of selling, product knowledge, consumer attitudes and motivation.

**BUS 233** **Personnel Management** **Credit 3 (3-0)**
Principles of organization and management of personnel, procurement, placement, training, performance checking, supervision, remuneration, labor relations, fringe benefits and security.

**BUS 235** **Business Management** **Credit 3 (3-0)**
A detailed analysis of planning, organizing, directing, and controlling from a middle management point of view.

**BUS 239** **Marketing** **Credit 6 (6-0)**
A general survey of the field of marketing with emphasis on marketing institutions, promotion, pricing, marketing channels, and market research.

**BUS 244** **Purchasing** **Credit 3 (3-0)**
A study in ordering form and procedure to obtain specified items and quantities of items on schedule at lowest cost consistent with quantity requirements.

**BUS 245** **Retailing** **Credit 3 (3-0)**
The focus is on the operational problems of retailing centered around organization, location, buying, selling, promotion, service, and merchandise handling.

**BUS 247** **Fundaments of Risk and Insurance** **Credit 3 (3-0)**
Designed to help the student understand the nature of risk, the need for insurance, and the basic features of some of the more common insurance policies.

**BUS 250** **Payroll Accounting** **Credit 3 (3-0)**
A comprehensive study of accounting principles as applied to payroll records with particular emphasis placed on payroll computations, payroll taxes, and state and federal reports.
Prerequisite: BUS 120

**BUS 251** **Real Estate I** **Credit 4 (4-0)**
This course comprises the first half of a two-quarter program in Real Estate, directed toward qualifying a student for the N.C. Real Estate Licensing Board Examinations. It introduces the student to the broad subject of Real Estate, the various provisions affecting brokers and salesmen, the several laws applying to property, contract sales and other facets of the business. The course further explores the subjects of financing, mortgages, liens, zoning, ordinances, appraisals and leases among others. Upon satisfactory completion of this course, a student will be eligible to enroll in Real Estate II.

**BUS 252** **Real Estate II** **Credit 5 (5-0)**
This course emphasizes the importance of mathematics in the Real Estate profession. Besides review and practice in basic math, it covers prorated expenses, calculation of land areas, plats, financing and other essentials. The subject of closing statements is given special attention. It teaches use of the worksheet, classifying and entering transactions, practical problems and specific knowledge necessary for passing the state examination for licensing. Upon satisfactory completion of both Real Estate I and II, the student is given a certificate showing qualification to apply for the state board examination.

**BUS 254** **Appraising The Single Family Residence** **Credit 3 (3-0)**
This course encompasses the fundamentals of single family Real Estate Appraisal. The three basic methods: cost approach, market approach and income approach, are thoroughly reviewed and applied through practical exercises. The course also involves field trips to the Stanly County Tax Department, Mapping Department, Register of Deeds and the Clerk of Court in order to acquaint students with the research and analysis required for the single family residence appraisal.

# *COURSE DESCRIPTIONS*

**BUS 269** **Auditing** **Credit 5 (5-0)**
An analysis of accounting control systems and the independent auditor's examination of the system and other evidence as a basis for expressing an opinion on financial statements.
Prerequisite: BUS 122

**BUS 271** **Office Management** **Credit 3 (3-0)**
A study of the fundamental principles of office management with emphasis on office automation, planning, controlling, organizing and solving office problems.

**BUS 272** **Principles of Supervision** **Credit 3 (3-0)**
Introduces the basic responsibilities and duties of the supervisor's 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** **Word Processing** **Credit 4 (3-2)**
Since competent secretaries must have adequate language skills, word processing was designed as a final course to attack any grammar, composition or style problems of students. Emphasis of the class on punctuation and composing letters. Students spend part of their class time working with secretaries of the college to get first hand experience in answering phones, taking messages, and duplicating materials. Emphasis is given to modern word processing equipment and procedures. Also covered is how to take minutes of a meeting and the basic rules of parliamentary procedure.

**BUS 280** **Small Business Management** **Credit 3 (3-0)**
A study of how to start, staff, and finance a new business, as well as how to develop profit planning and adequate accounting records. Case studies are used to bring out some of the potential problems of operating a small business.

**BUS 281** **Managing Conflict in Business and Industry** **Credit 3 (3-0)**
Emphasis is placed upon understanding the nature of conflict in business and industry and identify ways to deal with stress and conflict in the work setting. Methods and techniques will be employed to creatively manage employee conflicts as well as to channel destructive feelings and emotions into positive outlets. Simulation, role playing, lecture, and active class discussion will be the instructional method.

**BUS 299** **Business Decisions** **Credit 3 (3-0)**
A comprehensive analysis of decision making from a total organization point of view. An investigation of decision tools, along with the use of case analysis and simulation games to develop decision making skills.
Prerequisites: BUS 101, ECO 104, BUS 122, BUS 124, and BUS 239.

**BUS 1103** **Small Business Operation** **Credit 3 (3-0)**
A study of starting and financing a small service type of business and also an introduction to financial record keeping, payroll forms, taxes, business law, and types of business organizations.

**BUS 1105** **Industrial Organizations** **Credit 3 (3-0)**
Methods, techniques, and practices of modern management in planning, organizing and controlling operations of a manufacturing concern. Introduction to the competitive system and the factors constituting product cost.
Prerequisite: None

**CAD 201** **Introduction to Computer-Aided Design** **Credit 4 (2-6)**
The introductory CAD course includes a description of computer aided design systems, advantages, applications, and operational skills with emphasis on con-

struction geometry and developing a data base. Competencies include 1) inputting geometric data via keyboard, digitizer, and menu with stylus; 2) editing, filing, retrieving, and screen controls such as zooming, mirroring, rotating, and layering; 3) outputting data for plotting and printing.
Prerequisite: EDP 102, DFT 102

**CAD 202** **Mechanical Design Applications** **Credit 4 (2-6)**
Instruction emphasizes skill development in two and three dimensional mechanical design applications using interactive computer graphics. Topics covered include 2-D and 3-D construction techniques, auxiliary views, view ports, conic sections, surface construction intersection, sectioning, multi-view and assembly drawings, bills of materials, and mass properties computations.
Prerequisites: CAD 201

**CAD 203** **Computer Aided Design/Structural Application** **Credit 4 (2-6)**
Utilizing the application of computer assisted graphics the student will be expected to complete a detailed study of mechanical equipment and preparation of plans and detailed drawings as prepared by the mechanical engineering consultant or contractor for the architectural structure. Heating and air conditioning, lighting and electrical, plumbing, and other mechanical equipment as necessary for construction will be included in this study. Emphasis will be placed on computer assisted drafting techniques used in preparing appropriate drawings and details.

**CAT 116** **Photography I** **Credit 4 (2-4)**
An introduction to the field of photography, photographic equipment and materials. A study of the fundamental techniques of the camera and its expressive possibilities in relation to the field of design and visual communications. Assigned camera projects, darkroom procedures and equipment.

**CHM 101** **Chemistry** **Credit 4 (3-2)**
Study of the physical and chemical properties of substances, chemical changes; elements, compounds, gases, chemical combinations; weights and measurements; theory of metals; acids, bases, salts, solvents, solutions, and emulsions. In addition, study of carbohydrates; electrochemistry, electrolytes, and electrolysis in their application of chemistry to industry. Documented case studies of accidents in healthcare facilities will be examined as well as reports assigned to the students for investigation and documentation.

**CIV 101** **Surveying I** **Credit 4 (2-6)**
Theory and practice of plane surveying including taping, differential and profile leveling, cross sections, earthwork computations, transit, stadia and transit-tape surveys.

**CIV 102** **Surveying II** **Credit 4 (2-6)**
Triangulation of ordinary precision; use of plane table; calculation of areas of land; land surveying; topographic surveys and mapping.
Prerequisite: CIV 101

**CIV 103** **Surveying III** **Credit 4 (2-6)**
Route surveys by ground and aerial methods; simple, compound, reverse, parabolic and spiral curves; geometric design of highways; highway surveys and plants, including mass diagrams.
Prerequisite: CIV 102.

**CJC 101** **Introduction to Criminal Justice** **Credit 5 (5-0)**
This course is designed to familiarize the student with a philosophy and history of law enforcement, its legal limitations in our society, the primary duties and

responsibilities of the various agencies in the criminal justice field, the basic processes of justice, an evaluation of law enforcement's current position, and an orientation relative to the profession as a career.

**CJC 102** **Introduction to Criminology** **Credit 5 (5-0)**
A general course designed to introduce the student to the causation of crime and delinquency. The historical and contemporary aspects of crime, law enforcement, punishment, and correctional administration will be discussed.

**CJC 110** **Juvenile Delinquency** **Credit 5 (5-0)**
General survey of juvenile delinquency as an individual and social problem, theories of delinquency, causation, and methods of correction and prevention. The course will present a general overview of the juvenile court.

**CJC 115** **Criminal Law I** **Credit 3 (3-0)**
A course designed to present a basic concept of criminal laws and to provide a legal groundwork for those who seek to enter the criminal justice field.

**CJC 203** **Introduction to Corrections** **Credit 5 (5-0)**
An examination of the total correctional process from law enforcement through the administration of justice, probation, prisons and correctional institutions, and parole. This course will provide a history and philosophy in the field of correction.

**CJC 205** **Criminal Evidence** **Credit 5 (5-0)**
Instruction covers the kinds and degrees of evidence and the rules governing the admissibility of evidence in court.

**CJC 206** **Community Relations** **Credit 3 (3-0)**
This course will provide the student with an understanding of community structures as they relate to minority groups, peer groups, socioeconomic groups, leader groups, and group relations. Emphasis will be placed on the organization and the function of these groups as they relate to the possession of criminal justice-protective service.

**CJC 210** **Criminal Investigation** **Credit 5 (5-0)**
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.

**CJC 216** **Criminal Law II** **Credit 3 (3-0)**
A continuation of Criminal Law I which presents a basic concept of criminal law and creates an appreciation of the rules under which one lives in our system of government. Primary emphasis will be placed on North Carolina law.
Prerequisite: CJC 115.

**CJC 220** **Police Organization & Administration** **Credit 5 (5-0)**
Introduction to principles of organization and administration, discussion of the service functions, e.g., personnel management, police management, training, communications, records, property maintenance, and miscellaneous services.

**CJC 225** **Criminal Procedure** **Credit 5 (5-0)**
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.
Prerequisite: CJC 101

**CJC 238** **Principles of Correctional Administration** **Credit 3 (3-0)**
Emphasis is placed on the principles of administration in the correctional setting.

including budgeting and financial control, recruitment and development of staff, administrative decision-making, public relations and other correctional administrative functions.

**CJC 255** **Deviant Behavior** **Credit 5 (5-0)**
This course is designed to familiarize the student with human behavior and how it relates to the duties and responsibilities of the law enforcement officer.

**DFT 101** **Technical Drafting I** **Credit 4 (2-6)**
The field of drafting is introduced as the student begins study of drawing principles and practices for print reading and describing objects in the graphic language. Basic skills and techniques of drafting included are: use of drafting equipment, lettering, free-hand or thographic and pictorial sketching, geometric construction, orthographic instrument drawing and principal views, and standards and practices of dimensioning. The principles of isometric, oblique, and perspective are introduced.
Prerequisite: None

**DFT 102** **Technical Drafting II** **Credit 4 (2-6)**
The application of orthographic projections will be continued, applying them to working drawings. Standards and practices of dimensioning and tolerancing as approved by the American National Standards Institute will be studied. Threads, fasteners, charts and graphs, piping and welding drawings will be included, as well as a special emphasis on the student's major area of study.
Prerequisite: DFT 101

**DFT 103** **Technical Drafting III** **Credit 4 (2-6)**
Continued study of sectional views and auxiliary views both primary and secondary, intersections and developments and their practical solutions. The various techniques employed to produce and render pictorial drawings including isometric, oblique, and perspectives.
Prerequisite: DFT 102.

**DFT 104** **Blueprint Reading: Mechanical** **Credit 1 (0-2)**
A study of the interpretation and reading of blueprints with information on the basic principles of the blueprint, including lines, dimensioning procedures, and notes.

**DFT 105** **Blueprint Reading & Sketching** **Credit 1 (0-2)**
A continued practice in interpretation of blueprints as they are used in industry. Includes a study of prints supplied by industry, making plans of operations, introduction to drafting room procedures, and sketching as a means of passing on ideas, information, and processes.
Prerequisite: DFT 104.

**DFT 106** **Mechanical Drafting I** **Credit 4 (2-6)**
Upon completion of this course the student should be able to: (1) use drafting equipment and instruments; (2) letter words and numbers in Gothic; (3) draw orthographic and pictorial freehand sketches; (4) lay out geometric constructions; (5) execute orthographic drawings by use of instruments; (6) dimension drawings and apply notes to drawings; (7) reproduce, file, and store drawings; and (8) execute simple "working" drawings.

**DFT 107** **Mechanical Drafting II** **Credit 4 (2-6)**
Upon completion of this course the student should be able to: (1) apply orthographic projection principles to more complex drafting problems, including those with various kinds of holes; (2) read and draw the conventions of line.

# *COURSE DESCRIPTIONS*

**DFT 113** **Electronic Drafting** **Credit 5 (2-6)**
The fundamentals of drafting are presented with an emphasis on applications in the electronics field. Basic skills and techniques are included such as the use of drafting instruments, types of drawings, construction of drawings both with instruments and freehand, lettering and dimensioning, and how to read prints. In addition to basic skills, specialized experience will be included which directly relates to the electronics industry, such as types of drawings common to electronics, special symbols used, schematic diagrams, and layout diagrams with an emphasis on printed circuit work.

**DFT 151** **Drafting and Design** **Credit 4 (2-4)**
Familiarization with and use of drafting equipment. Also the study of mechanical design fundamentals, dimensioning, principles of tolerancing, materials specifications and how to present views by accepted drawing procedures.

**DFT 201** **Technical Drafting** **Credit 2 (6-4)**
Applications and constructions of charts, graphs, and nomographs in engineering and technical data. Screw threads, springs, keys, rivets, piping, and welding symbols, methods of representing and specifying will be covered. Basic mechanisms of motion transfer, gears and cams, will be studied and drawn with emphasis on methods of specifying, calculating, dimensioning, and delineating.
Prerequisite: DFT 103

**DFT 204** **Descriptive Geometry** **Credit 4 (2-6)**
Graphic analysis of space problems involving points, lines, planes, connectors, and a combination of these. Practical design problems will be stressed with analytical verification where applicable. Visualization shall be stressed on every problem.
Prerequisites: DFT 103, MAT 102

**DFT 205** **Design Drafting** **Credit 4 (2-6)**
Basic design is introduced in the study of motion transfer mechanisms as they relate to power trains. Principles of design sketching, design drawing, layout drafting, detailing from layouts, production drawings and simplified drafting practice constitute areas of study. Types and methods of specifying materials and workmanship are integral part of the course.
Prerequisites: DFT 204, PHY 102, DFT 201

**DFT 207** **Drafting Internship** **Credit 2 (0-20)**
The drafting student is provided the opportunity to participate in a work/study experience in an industrial setting. For an eleven week period the student will concentrate on developing skills relating to the work environment, and interpersonal relationships. Also projects and activities relating to a variety of drafting responsibilities and job tasks will be experienced. *(2 hr. technical elective may be substituted with the approval of the Dean)

**DFT 211** **Mechanisms (Electromechanical)** **Credit 4 (3-2)**
Mathematical and drafting room solutions of problems involving the principles of machine elements. Study of motions of linkages, velocities and accelerations of points within a link mechanism, layout methods for designing cams, belts, pulleys, gears, and gear trains.
Prerequisite: MAT 103, DFT 102, PHY 102

**DFT 212** **Jig and Fixture Design (CADD)** **Credit 4 (2-6)**
Commercial standards, principles, practices and tools of jig and fixture design, individual project and design work to acquaint students with the types of jigs and fixtures and their design. Computer Assisted Drafting systems will be utilized in the instructional strategies and student lab work.
Prerequisite: DFT 102, MEC 101

**DFT 230** **Structural Drafting** **Credit 4 (2-6)**
A concentrated study and drawing of structural plans, details and shop drawings of the structural components of buildings to include steel, reinforced concrete, and timber structures. Appropriate symbols, conventions, dimensioning practices, and notes as used by the draftsman will be included. Emphasis will be placed on drafting of appropriate drawings for fabrication and erection of the structural components.

**DFT 1101** **Schematics and Diagrams: Automotive Body Repair** **Credit 2 (1-3)**
Interpretation and reading of schematics and diagrams. Development of ability to read and interpret blueprints, charts, instruction and service manuals, and writing diagrams. Information on the basic principles of lines, views, dimensioning procedures, and notes.

**DFT 1102** **Schematics and Diagrams: Automotive Mechanics** **Credit 3 (3-0)**
Interpretation and reading of schematic prints and diagrams. Making sketches of electrical wiring and fuel system components for automotive engines and other internal combustion engines. Learning to identify the various components of the systems by sketching and labeling parts. Practice in tracing wiring systems and diagnosing trouble by using schematics and diagrams found in the automotive service manuals.

**DFT 1104** **Blueprint Reading** **Credit 1 (0-3)**
Interpretation and reading of blueprints. Information on the basic principles of the blueprint; lines, views, dimensioning procedures and notes.

**DFT 1105** **Blueprint Reading: Mechanical** **Credit 2 (1-2)**
Further practice in interpretation of blueprints as they are used in industry; study of prints supplied by industry; making plans of operations; introduction to drafting room procedures; sketching as a means of passing on ideas, information and processes.
Prerequisite: DFT 1104.

**DFT 1106** **Blueprint Reading: Mechanical** **Credit 2 (1-2)**
Advanced blueprint reading and sketching as related to detail and assembly drawings used in machine shops. The interpretation of drawings of complex parts and mechanisms for features of fabrication, construction and assembly.
Prerequisite: DFT 1105.

**DFT 1110** **Blueprint Reading: Building Trades** **Credit 1 (0-3)**
Principles of interpreting blueprints and trade specifications common to the building trades. Development of proficiency in making three-view and pictorial sketches.

**DFT 1113** **Blueprint Reading: Electrical** **Credit 1 (0-3)**
Interpretation of schematics, diagrams and blueprints applicable to electrical installations with emphasis on electrical plans for domestic and commercial buildings. Sketching schematics, diagrams, and electrical plans for electrical installations using appropriate symbols and notes according to the applicable codes will be a part of this course.

**DFT 1210** **Industrial Blueprint Reading** **Credit 4 (0-4)**
This course is to enable the Industrial Electronic Technician to locate various pieces of equipment within a plant by interpretation of blueprints and aids, those involved in the installation and maintenance of equipment. Scale measurements and symbols used in blueprints are taught to give the student a basic working knowledge of the wiring locations and control locations of various machines. The student will be able to make basic drawings and layouts showing the location symbols of industrial devices.

# *COURSE DESCRIPTIONS*

**DMK 240** **Merchandise Planning & Control** **Credit 4 (4-0)**
Concerns itself with the scientific use of numbers in merchandising, and the figures and mathematical techniques that are employed to translate fashions into the profit-making activities of planning, pricing, and controlling quantities.

**DMK 249** **Fashion Buying & Merchandising** **Credit 3 (3-0)**
Analyzes the buying function and the career opportunities in different types of fashion retailing enterprises, and studies the merchandising techniques that are used to forecast fashions, plan assortments, determine sources of supply, select merchandise, negotiate buying arrangements, and follow through on the sale of merchandise.

**DMK 260** **Commercial Display Design** **Credit 4 (3-2)**
Examines display as a visual merchandising medium, and covers the principles of display design and their applications to fashion merchandising environs.

**ECO 102** **Economics I** **Credit 3 (3-0)**
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 II** **Credit 3 (3-0)**
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.

**ECO 108** **Consumer Economics** **Credit 3 (3-0)**
Designed to help students use their resources of time, energy and money to get the most out of life. It gives students an opportunity to build useful skills in buying, managing finances, increasing resources, and understanding the economy in which they live.

**ECO 201** **Labor Economics** **Credit 3 (3-0)**
The history of the labor movement in the United States, the development of methods and strategies by labor and management, applicable laws, the factors of income and economic security, and the overall economic effects of the labor movement.
Prerequisite: ECO 104.

**EDP 100** **Computer Operations I** **Credit 3 (2-2)**
Upon completion of this course the student should be able to: (1) define and use selected coding system for input data; (2) design input record layouts; (3) read and interpret computer output reports; (4) state and define principles of operations involving data entry, interpreting, sorting, collating, and forms handling; (5) list the characteristics and describe the hardware components of a computing system; (6) list the operator's duties in the operation of card read/punch, magnetic tape, disk, and console typewriter; (7) describe the hardware characteristics of a computer system with and without teleprocessing; (8) describe principles of operating a document reader; (9) describe computer output microfilming and audio response equipment.

**EDP 101** **Computer Operations II** **Credit 4 (3-2)**
Upon completion of this course the student should be able to: (1) convert decimal, binary and hexadecimal numbers from one system to another; (2) define terms, explain concepts and state procedures for a system generation and IPL for two levels of control programs; (3) explain and demonstrate the concept of a serial and multitasking computer system and describe the operational environ-

ment of each; (4) trace the job flow in a multitasking computer system environment; (5) define basic terms associated with the operation of a serial and multitasking operational environment; (6) list purpose and types of JCL cards for OS; (7) use utility manuals to code JCL and execute selected utilities on computer system used by STC; (8) define and use job commands on computer system used by STC; (9) distinguish between operational environment for batch processing and on line applications.
Prerequisite: EDP 100

**EDP 103** **Computer Awareness** **Credit 2 (1-2)**
A study of the fundamental concepts of information processing systems. The course will build an understanding of computers and their uses presented through a combination of classroom and hands-on experience.
Prerequisite: none

**EDP 104** **Introduction to Data Processing** **Credit 5 (5-0)**
A study of the fundamental concepts and operation principles of data processing systems to develop a basic understanding of computers.

**EDP 105** **Computer Operation Techniques** **Credit 5 (4-2)**
Upon completion of this course the student should be able to: (1) write and define console commands with the abbreviations and subparameters; (2) define the different statuses of the CPU; (3) explain selected error and recovery procedure; (4) explain standard procedures for data security and backup; (5) define the principles and reasons for job scheduling; (6) read and understand basic operator manuals; (7) after an overview of the OS system — give the written principles of a control program; (8) describe the two types of channels and purpose of each; (9) correctly operate the terminal and/or computer currently in lab; (10) describe typical features of DOS or equivalent operating system; (11) code selected OCL statements and describe their purpose; (12) describe the operational environment for a mini-computer system; (13) discuss measures that can be taken for computer room security.
Prerequisites: EDP 100, EDP 101

**EDP 106** **Programming Techniques** **Credit 4 (4-0)**
On completion of the course, the student should be able to: (1) identify computer capabilities in data manipulation and reduction, (2) understand the functioning of supervisor programs within the computer, (3) differentiate between various techniques in data processing, (4) use selected techniques, matrices, tables, loops, subroutines, digit selections, etc., in the creation of efficient computer programs, (5) construct logic flow charts depicting computer programs.
Prerequisite: EDP 104.

**EDP 108** **Cobol I** **Credit 5 (4-2)**
The Common Business Oriented Language (COBOL) is presented in detail. A variety of business and commercial applications are programmed and tested by the student.
Prerequisites: EDP 106, BUS 102.

**EDP 110** **PASCAL** **Credit 4 (3-2)**
This is a study of the PASCAL Programming Language for Business Applications. The student will write and test programs using micro computers.

**EDP 200** **BASIC Language** **Credit 4 (3-2)**
BASIC Language deals with an overview of the computer and its many uses. General areas covered will include: What is a computer? A computer glossary, How does it work? Languages, what can it do?, Peripherals, Software, Programming Basics. Through a class project students will gain hands-on experience in utilizing BASIC Language.

# *COURSE DESCRIPTIONS*

**EDP 201** **Advanced Basic Programming** **Credit 4 (3-2)**
This course is a continuation of EDP 200, Basic Programming. This course will contain information on (1) File Handling; (2) Menus; (3) Interactive Programming and (4) Sorting.
Prerequisite: EDP 200

**EDP 204** **System Study** **Credit 3 (3-0)**
The course is designed specifically with the Business uses of computers in mind. Students will examine the need and uses of business data processing equipment and software systems. Emphasis is placed on the requirements for designing an application software system.
Prerequisite: EDP 104

**EDP 206** **Systems Design** **Credit 5 (5-0)**
The course is designed to give the student training in systems design and analysis. Emphasis in both classroom and laboratory assignments. Problem definition, file organization, effective retrieval of information are some of the topics considered.
Prerequisite: EDP 104

**EDP 207** **Application Programming** **Credit 5 (4-2)**
The student will work as member of a Programming Team To Compute; A Data Processing System. This will include the Analysis Designing, Programming, Testing, and Documenting of the system.
Prerequisite: EDP 209 or other course approved by advisor

**EDP 208** **Cobol II** **Credit 5 (4-2)**
A continuation of EDP 108. The student will learn more complex techniques and features of COBOL language by writing, flowcharting, debugging, and running programs.
Prerequisite: EDP 108.

**EDP 209** **RPG II Programming** **Credit 5 (4-2)**
Report Program Generator (RPG) coding includes preparation of the spacing chart, file description, file extension, input calculation, and output specification sheets. Business programs are written and run on an IBM computer.

**EDP 210** **Advanced RPG II Programming** **Credit 5 (4-2)**
A continuation of the study of RPG programming covering more complex features and advanced programming techniques.
Prerequisite: EDP 209.

**EDP 211** **Control Languages (OCL/JCL)** **Credit 5 (4-2)**
Upon completion of this course the student should be able to: (1) use utility manuals to create control statements for certain utilities, (2) code DD statement for sequential files, (3) code statements to compile and execute COBOL programs, (4) create, store and execute load-modules, (5) list physical and storage characteristics of disk and tape, (6) calculate storage requirements for a file on disk or tape, (7) trace the job flow form input to output identifying software programs involved for a multiprogramming computer system for compilation and execution of programs, (8) diagram the program and data flow in a multiprogramming computer including channels and interrupts, (9) define an operation system, (10) code parameters of a Job and Execute card.
Prerequisite: EDP 208.

**EDP 212** **Data Base Design** **Credit 3 (3-0)**
The student will learn structures of Data Base Management Systems, Design of the Data Base itself, File Security, and the roles of the Data Base Administrator.
Prerequisite: EDP 104

**EDP 214** **Assembly Language Programming** **Credit 5 (4-2)**

The student will learn to write Assembly Language Programs using techniques such as Address Modification, Looping, Editing, Sorting, Subroutines and Macro Instructions.

Prerequisite: EDP 208 or EDP 210

**EDP 216** **FORTRAN Programming** **Credit 4 (3-2)**

This course is designed to give the student hands-on training in FORTRAN Programming Language. Students will enter, compile, debut their own programs utilizing a variety of Business and Scientific Applications.

Prerequisite: EDP 104 or EDP 103

**EDP 400** **Introduction to Personal Computers** **Credit 2 (2-2)**

Introduction to Personal Computers covers how to operate microcomputers. There will be discussions on how to use hardware and software, what type of computers are available to the public, how to flowchart, how to write simple programs in BASIC, how to use graphics and basic concepts of computers.

**EDP 1103** **Computer Awareness** **Credit 2 (1-3)**

A study of the fundamental concepts of information processing systems. The course will build an understanding of computers and their uses presented through a combination of classroom and hands-on experience.

Prerequisite: none

**EDU 150** **Seminar Practicum** **Credit 3 (1-6)**

A vital part of the Teacher Associate Program is that each student will be assigned to an education setting for the number of hours prescribed each quarter. The laboratory experience can come from a myriad of possibilities including public schools and state and federally funded day care and centers for exceptional children. This experience provides an opportunity for students to develop further skill in working with young children in assisting with programming activities and in adapting to the needs of individual children. Seminar emphasis will be placed on preparing creative instructional materials. Seminar topics will also be drawn from the student's laboratory work during the week.

**EDU 151** **Seminar Practicum** **Credit 3 (1-6)**

A vital part of the Teacher Associate program is that each student will be assigned to an education setting for the number of hours prescribed each quarter. The laboratory experience can come from a myriad of possibilities including public schools and state and federally funded day care and centers for exceptional children. This experience provides an opportunity for students to develop further skills in working with young children in assisting with programming activities and in adapting to the needs of individual children. Seminar emphasis will be placed on preparing creative instructional materials. Seminar topics will also be drawn from the student's laboratory work during the week.

**EDU 152** **Seminar Practicum** **Credit 3 (1-6)**

A vital part of the Teacher Associate program is that each student will be assigned to an education setting for the number of hours prescribed each quarter. The laboratory experience can come from a myriad of possibilities including public schools and state and federally funded day care and centers for exceptional children. This experience provides an opportunity for students to develop further skills in working with young children in assisting with programming activities and in adapting to the needs of individual children. Seminar emphasis will be placed on nurturing children's physical, social, emotional, and intellectual growth. Seminar topics will also be drawn from the student's laboratory work during the week.

# *COURSE DESCRIPTIONS*

**EDU 202** **Seminar Practicum** **Credit 4 (1-9)**

A vital part of the Teacher Associate program is that each student will be assigned to an education setting for the number of hours prescribed each quarter. The laboratory experience can come from a myriad of possibilities including public schools, state and federally funded day care and centers for exceptional children. This experience provides an opportunity for students to develop further skills in working with young children in assisting with programming activities and in adapting to the needs of individual children. Seminar emphasis will be placed on learning how to develop a positive self-concept in children. Seminar topics will also be drawn from the student's laboratory work during the week.

**EDU 203** **The Exceptional Child** **Credit 3 (3-0)**

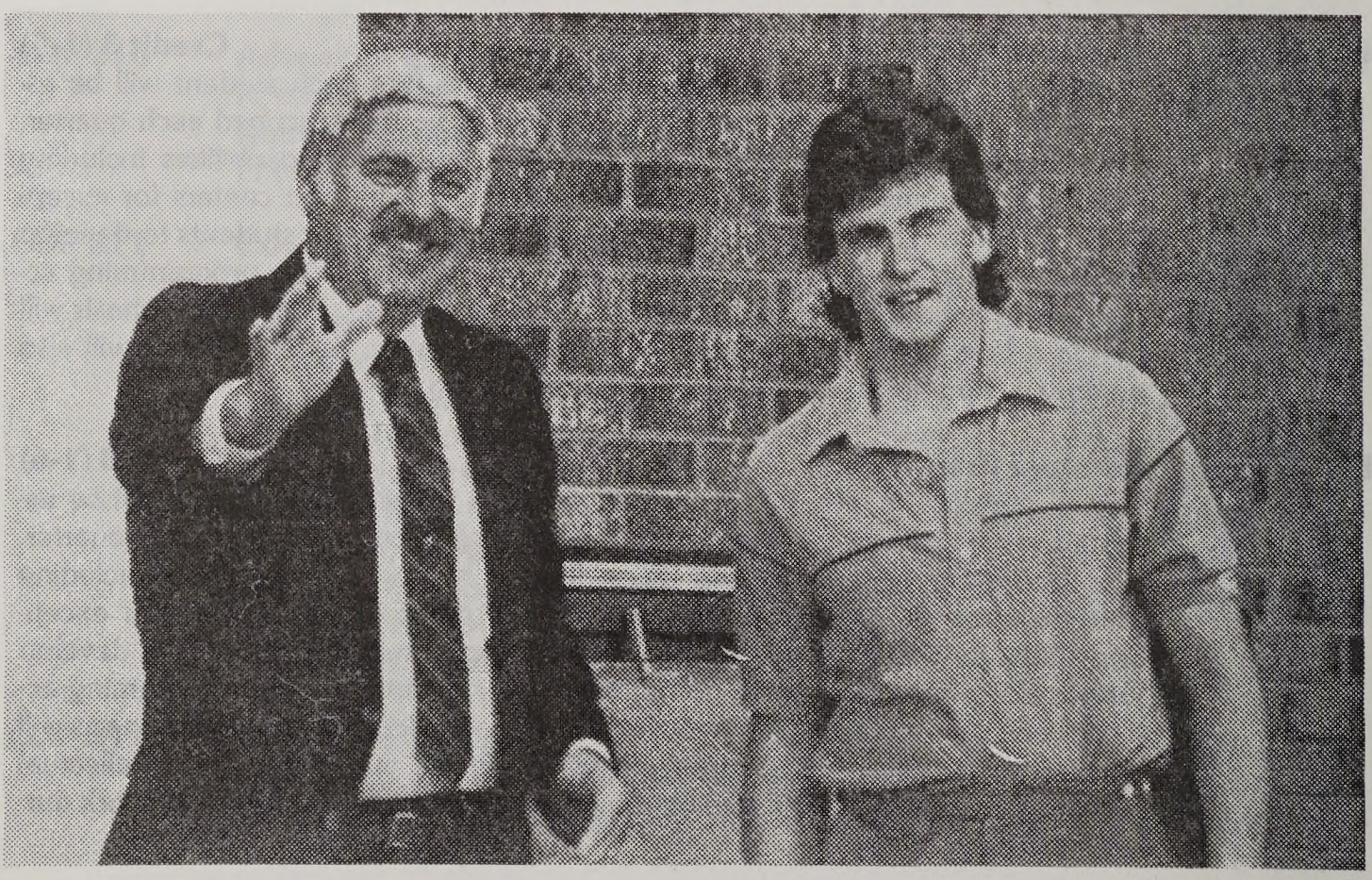
Study of children with developmental variations requiring modifications in activities. Consideration is given to recognition of problems, community resources, and appropriate activities for the child with exceptional deviations in personality or physical development.

**EDU 204** **Parent Education** **Credit 3 (3-0)**

Designed to provide the student with experiences that will enable them to communicate effectively with parents, plan for parent involvement, and develop a series of programs for presentation to the parents of children in their classroom.

**EDU 205** **Seminar Practicum** **Credit 4 (1-9)**

A vital part of the Early Childhood Specialist program as each student will be assigned to an education setting for the number of hours prescribed each quarter. The laboratory experience can come from a myriad of possibilities including private day care, private nursery school, kindergarten, public schools, public school kindergartens and state and federally funded day care. This experience provides an opportunity for students to develop further skill in working with young children in assisting with programming activities and in adapting to the needs of individual children. Seminar emphasis will be placed on observing and recording the behavior of children. Seminar topics will also be drawn from the student's laboratory work during the week.



**EDU 206** **Children in Crisis** **Credit 2 (2-0)**
Study of crisis situations in the lives of children to include death, divorce, child abuse and illness. Problem solving situations will be given and methods analyzed.

**EDU 210** **Curriculum Design and Application** **Credit 3 (3-0)**
To acquaint potential educators of children with the various aspects of the profession. Opportunities include establishing philosophy and policies, planning an appropriate program selecting materials and equipment, and implementing a workable budget.

**EDU 220** **Methods of Teaching** **Credit 2 (2-0-0)**
A course to improve instruction through the study of techniques, methods and materials. Specifically designed to encourage continuing education and inservice education. Emphasis is placed on the flexibility of developing a program to meet continuing needs in a work oriented background.
Prerequisites: none

**EDU 228** **Methods and Techniques for the Aide of the Exceptional Child** **Credit 3 (3-0)**
Current practices and materials used in programs dealing with exceptional children are investigated and evaluated. Emphasis will be placed on a flexibility of programs to meet individual learning needs.

**EDU 229** **Methods, Materials and Techniques for Instructional Aides** **Credit 3 (3-0)**
A course designed for the study of methods, materials, and techniques of improving instruction. The course is organized to give opportunities for the student to study in-depth areas of interest and need.

**EDU 230** **Introduction to Education** **Credit 3 (0-3)**
Study of principles and practices of childhood education. The types of facilities and media which promote optimal development of each child. Demonstration of curriculum areas through planned activities and play suitable for promoting a more stimulating environment for children.

**EDU 231** **Methods, Materials and Techniques of Audio-Visual Production** **Credit 3 (2-2)**
A course designed to provide training in audio-visual production including the making of transparencies, elementary photography, lettering, dry-mounting and laminating.

**EDU 232** **Physical Activities for Children** **Credit 3 (3-0)**
Study of the physical development of children with emphasis on movement, rhythms, games, and other activities which promote optimal development. Each student will develop a series of activities appropriate for a specific level of development.

**EDU 234** **Audiovisual Instruction Through Creative Expression** **Credit 3 (3-0)**
Individual and group exploration of activities and media for promoting optimal overall development of children with emphasis on audio-visual instruction.

**EDU 250** **Seminar Practicum** **Credit 4 (1-9)**
A vital part of the Teacher Associate Program is that each student will be assigned to an education setting for the number of hours prescribed each quarter. The laboratory experience can come from a myriad of possibilities including public schools, state and federal funded day care and centers for exceptional children. This experience provides an opportunity for students to develop further

skills in working with young children in assisting with programming activities and in adapting to the needs of individual children.

**EDU 251** **Seminar Practicum** **Credit 5 (1-12)**
A vital part of the Teacher Associate program is that each student will be assigned to an education setting for the number of hours prescribed each quarter. The laboratory experience can come from a myriad of possibilities including public schools, state and federal funded day care and centers for exceptional children. This experience provides an opportunity for students to develop further skills in working with young children in assisting with programming activities and in adapting to the needs of individual children. Seminar emphasis will be placed on promoting good relations with parents. Seminar topics will also be drawn from the student's laboratory work during the week.

**EDU 252** **Seminar Practicum** **Credit 3 (1-6)**
A vital part of the Teacher Associate program is that each student will be assigned to an education setting for the number of hours prescribed each quarter. The laboratory experience can come from a myriad of possibilities including public schools, state and federal funded day care and centers for exceptional children. This experience provides an opportunity for students to develop further skills in working with young children in assisting with programming activities and in adapting to the needs of individual children. Seminar emphasis will be placed on methods of finding a job. Seminar topics will also be drawn from the student's laboratory work during the week.

**ELC 111** **Electrical Fundamentals I** **Credit 6 (4-6)**
A qualitative study of units of measurement, electrical quantities, simple circuits, electromotive forces, current, power, laws, basic electrical instruments and measurements, resistance, impedance and basic circuit components. Concepts taught are generally limited to fundamentals with very little emphasis placed on quantitative aspects. Laboratory work will teach the proper use and care of basic hand tools and the basic manual skills used in working with electricity. Measurement techniques and safety practices will be stressed throughout.

**ELC 115** **Alternating & Direct Current** **Credit 4 (2-4)**
A study of the electrical structure of matter and electron theory, the relationship between voltage, current, and resistance in series, parallel, and series-parallel circuits. OHM's Law and Kirchhoff's Law will be studied with an understanding of its relationship and applications of electricity to modern industrial machinery.

**ELC 116** **Alternating & Direct Current Machine Controls** **Credit 4 (2-4)**
A course providing the basic concepts of AC and DC machines and simple control circuits. Includes basic meter and test equipment reading and care.
Prerequisite: ELC 115

**ELC 119** **Industrial Electronic Control** **Credit 4 (2-4)**
A study of basic industrial electronic systems such as motor controls, alarm systems, heating systems and controls, basic solid state devices, and controls as related to industries.
Prerequisite: ELC 115, ELC 116

**ELC 120** **Electrical Fundamentals II** **Credit 6 (4-6)**
Additional electrical concepts and circuit analysis procedures as applied to more complex two terminal and simple two part networks are introduced. Laboratory work will include additional measurement techniques with emphasis on verification of theoretical concepts.
Prerequisite: ELC 111
Corequisite: MAT 101

**ELC 121** **Electrical Troubleshooting** **Credit 3 (2-2)**
A training course in making electrical adjustments and related maintenance operation. Includes use of test equipment and circuit logic for fast and efficient location and repair of electrical circuits.
Prerequisites: ELC 115, ELC 116, ELC 119.

**ELC 1112** **Direct & Alternating Current** **Credit 10 (5-15)**
A study of the electrical structure of matter and electron theory, the relationship between voltage, current, and resistance in series, parallel, and series-parallel circuits. An analysis of direct current circuits by Ohm's Law and Kirchhoff's Law. A study of the source of direct current voltage potentials. Fundamental concepts of alternating current flow, reactance, impedance, phase angle, power, and resonance. Analysis of alternating current circuits.

**ELC 1112A** **Direct & Alternating Current** **Credit 4 (2-6)**
A study of the electrical structure of matter and electron theory, the relationship between voltage, current, and resistance in series, parallel, and series-parallel circuits. An analysis of direct currents by Ohm's Law and Kirchhoff's Law. A study of the source of direct current voltage potentials. Fundamental concepts of alternating current flow, reactance, impedance, phase angle, power, and resonance. Analysis of alternating current circuits.

**ELC 1112B** **Direct & Alternating Current** **Credit 4 (2-6)**
An advanced study of A/C circuits with their relationships to the analysis of inductive resistance and capacitive circuits used in the understanding of alternating current.
Prerequisite: ELC 1112A

**ELC 1113** **Direct and Alternating Currents Machines & Controls** **Credit 11 (7-12)**
Provides fundamental concepts in single and polyphase alternating current circuits, voltages, currents, power measurements, transformers and motors. Instruction in the use of electrical test instruments in circuit analysis. The basic concepts of AC and DC machines and simple system controls. An introduction to the type control used in small appliances such as thermostats, times, and sequencing switches.
Prerequisites: ELC 1112, MAT 1115

**ELC 1113A** **Alternating Current & Direct Current: Machines & Controls** **Credit 5 (3-6)**
Provides fundamental concepts in single and polyphase alternating current circuits, voltages, currents, power measurements, transformers, and motors. Instruction in the use of electrical test instruments in circuit analysis. The basic concepts of AC and DC machines and simple system controls. An introduction to the type control used in small appliances such as thermostats, times, and sequencing switches.
Prerequisites: ELC 1112, MAT 1115

**ELC 1113B** **Alternating Current & Direct Current: Machines & Controls** **Credit 3 (1-6)**
A study of AC-DC motors and controllers and AC transformer. Their use and application will be studied with respect to their power losses and measurements.
Prerequisite: ELC 1113A

**ELC 1115** **Practical Math for Electricians** **Credit 3 (3-0)**
A study of addition, subtraction, multiplication and division of fractions and decimals, the use of percentages in practical problems, electrical applications of ratio and proportion, uses of electrical formulas, and the metric system.

# *COURSE DESCRIPTIONS*

**ELC 1116** **National Electrical Code I** **Credit 6 (6-0)**
Designed to assist electricians, and others in the field, in all phases of wiring, understanding the correct methods of wiring, and use of materials in accordance with National Electric Code Standards. The Code contains provisions required for safety, which will be fully covered within the course.

**ELC 1117** **National Electrical Code II** **Credit 6 (6-0)**
A more in-depth study of the principles and procedures outlined in NEC 1. For further preparation of persons entering or working in the electrical field.
Prerequisite: ELC 1116 or permission of instructor

**ELC 1124** **Residential Wiring** **Credit 8 (4-12)**
Provides instruction and application in the fundamentals of blueprint reading, planning, layout, and installation of wiring in residential applications such as: services, switchboards, lighting, fusing, wire sizes, branch circuits, conduits. National Electrical Code regulations in actual building mock-ups.
Prerequisites: ELC 1113, DFT 1110

**ELC 1124A** **Residential Wiring** **Credit 4 (2-6)**
Provides instruction and application in the fundamentals of blueprint reading, planning, layout, and installation of wiring in residential applications such as: services, switchboards, lighting, fusing, wire sizes, branch circuits, conduits. National Electrical Code regulations in actual building mock-ups.
Prerequisites: ELC 1113, DFT 1110

**ELC 1124B** **Residential Wiring** **Credit 4 (2-6)**
Actual wiring of residential occupancies in classroom and in the field. A working knowledge will begin in the planning layout and power distribution to each part of the dwelling.
Prerequisite: ELC 1124A

**ELC 1125** **Commercial and Industrial Wiring** **Credit 8 (4-12)**
Layout, planning, and installation of wiring systems in commercial and industrial complexes, with emphasis upon blueprint reading and symbols, the related National Electrical Code, and the application of the fundamentals of practical experience in wiring, conduit preparation, and installation of simple systems.
Prerequisites: ELN 1118, ELC 1124

**ELC 1125A** **Commercial and Industrial Wiring** **Credit 4 (2-6)**
Layout, planning, and installation of wiring systems in commercial and industrial complexes, with emphasis upon blueprint reading and symbols, the related National Electrical Code, and the application of the fundamentals of practical experience in wiring, conduit preparation, and installation of simple systems.
Prerequisites: ELN 1118, ELC 1124

**ELC 1125B** **Commercial and Industrial Wiring** **Credit 4 (2-6)**
Actual wiring of commercial industrial structures in classroom and in the field. A working knowledge of planning layout and power distribution to each phase of the job using approved method of wiring.
Prerequisite: ELC 1125A

**ELM 211** **Electromechanical Devices** **Credit 5 (3-4)**
A study of the fundamental devices used in electromechanical technology. Devices such as electrical motors, generators, transformers, relays, and transducers will be investigated. Concepts of work, energy, power, time constants, and efficiency as related to electromechanical devices will be stressed. Study of the instrumentation required to perform the investigation of electromechanical devices will form an integral part of the course.
Prerequisite: ELC 114, PHY 101

**ELM 212** **Control System Technology I** **Credit 5 (3-4)**

A study of control system technology. Basic concepts and terminology are investigated. Methods used to evaluate open-loop, closed-loop, regulator, follow-up, process, servomechanism, sequential, numerical, analog and digital control systems are introduced. Methods of describing control system components are investigated for electrical, liquid, gas, thermal and mechanical systems. Characteristics of processes, measuring means, and controllers are covered.
Prerequisite: ELN 211.

**ELM 213** **Control System Technology II** **Credit 5 (3-4)**

Control system transducers, final control elements, and performance are covered. Transducer topics include position, displacement, velocity, acceleration, force, temperature, flow rate, pressure, and liquid level measurement. Control element topics include control valves, armature controlled DC motors, two phase AC motors, and amplifiers. Topics include frequency response analysis and testing, Bode diagrams, closed loop response, stability, and controller adjustment.
Prerequisite: ELM 212

**ELM 233** **Technical Elective** **Credit 6 (6-0)**

A specialized course related to the EET program in which topics are selected according to the interests of the student and instructor, depending on the technology of the market and industry.

**ELN 110** **Electronic Computation** **Credit 2 (2-0)**

The student is introduced to many of the electronic mathematical computations and how they relate to one another. Special emphasis is placed on procedures requiring solutions by using calculators with trigonometric functions, scientific notation, etc.

**ELN 121** **Electronics I** **Credit 5 (3-4)**

Presents qualitative electronics concepts beginning with systems and networks and proceeding to devices. Typical networks such as power supplies, amplifiers, oscillators, and feedback circuits are introduced. Solid state devices and vacuum tubes are introduced as idealized devices. Experience is provided in basic troubleshooting techniques. Instruments are introduced as needed for simple testing and measurements.
Prerequisite: ELC 112

**ELN 122** **Electronics II** **Credit 8 (5-6)**

A quantitative study beginning with active control devices and proceeding to networks. A variety of equivalent circuit models are used to evaluate device and system parameters and predict circuit performance. Instruments are used in the laboratory to collect data, verify math predictions, and troubleshoot.
Prerequisite: ELN 121
Corequisite: ELC 113, MAT 101

**ELN 130** **Semiconductor Devices** **Credit 7 (4-6)**

Presents qualitative electronics concepts beginning with atomic structure of semiconductors and doping agents and proceeding to the solid state diode and bipolar junction transistor. Common emitter, base, and collector circuits are studied before proceeding to JFET and MOSFET circuitry. Experience is provided in basic troubleshooting techniques in laboratory exercises. Instruments are introduced as needed for simple testing and measurements.

**ELN 140** **Electronic Instrumentation** **Credit 2 (1-2)**

A study of block diagram construction of instruments normally found in the laboratory. Instruments covered shall include the volt meter, current meter, ohm meter, audio and RF generators, and the oscilloscope.

# *COURSE DESCRIPTIONS*

**ELN 141** **Control Devices** **Credit 7 (5-4)**
A quantitative study beginning with active control devices such as the SCR, triac, diac, etc. The student will design and construct various types of control devices and verify their operation in the laboratory. Linear integrated circuitry will be introduced, along with MOS technology. The student is also introduced to oscillator theory.

**ELN 210** **Digital Fundamentals I** **Credit 5 (3-4)**
A beginning course in digital integrated circuit intended to provide a basic understanding of digital signal sources, gating, counting and display. Coverage also includes truth tables, coding/decoding, multiplexing and sequential circuits.

**ELN 211** **Microprocessors I** **Credit 6 (3-6)**
An introductory course in microprocessors. A microprocessor trainer based on 8 bit 6502 provides experience in numbering systems, programming the microprocessors, hardware familiarization, assembly language, I/O techniques, logical and arithmetic operations.

**ELN 212** **Communication Systems** **Credit 3 (2-2)**
A course investigating numerous communication related electronic systems. Related topics such as AM, FM, tuned circuit, RF amplifiers and oscillators.

**ELN 218** **Digital Electronics I** **Credit 5 (3-4)**
Investigates the techniques, semiconductor devices, and integrated circuits used to implement the basic digital logic circuits. A discussion of Boolean Algebra and its relation to digital logic will also be presented.
Prerequisites: ELN 123, MAT 103

**ELN 219** **Digital Electronics II** **Credit 5 (3-4)**
Continues the study of digital circuits. An in-depth investigation of flip-flops, registers, sequential and combinational logic circuits, and digital design techniques will be presented.
Prerequisite: ELN 218

**ELN 220** **Digital Fundamentals II** **Credit 5 (3-4)**
An intermediate course in digital integrated circuits concerned with registers and counters, arithmetic elements, and semiconductor memories (RAMSs and ROMs). Related circuits such as monostable multivibrators and LED displays provide additional coverage. The last of the course introduces the concept of busing through tri-state and open collector circuitry.
Prerequisite: ELN 210.

**ELN 221** **Microprocessors II** **Credit 6 (3-6)**
An intermediate course in microprocessors concerned with branching and program loops, stacks, interrupts, use of monitor, keyboard and display interfacing and finally an introduction to microprocessors troubleshooting.
Prerequisites: ELN 210, ELN 211

**ELN 222** **Linear I.C. and Pulse Shaping** **Credit 5 (4-2)**
A study of linear integrated circuit devices with special emphasis on applications. Topics include operational amplifiers, comparators, voltage regulators, 555 timers, bistable, astable, and monstable multivibrators.
Prerequisites: ELN 210, ELN 141.

**ELN 231** **Microprocessors Troubleshooting** **Credit 6 (4-4)**
Provides an introduction to the use of different instruments and techniques in troubleshooting of microprocessors. The course also provides experience in

Digital logic probe, static control testing, oscilloscope multiplexing, and signature analyzer.
Prerequisites: ELN 220. ELN 221.

**ELN 232** **Electronics Design Project** **Credit 3 (0-6)**
A laboratory class emphasizing independent research and design work by the student. The student will select a project in consultation with the instructor; perform the required research; compile data, formulate a theoretical model and construct tests and evaluate a working model of the selected project.
Prerequisites: ELN 212. ELN 220. ELN 221. ELN 222.

**ELN 233** **Technical Elective** **Credit 4 (4-0)**
A specialized course related to the EET program in which topics are selected according to the interests of the student and instructor, depending on the technology of the market and industry.

**ELN 241** **Electronic Systems I** **Credit 6 (3-6)**
A general survey of electronic systems with emphasis on their description in block diagram format. Systems to be studied are those in communications, computing, measurement, automatic control, and others of a specialized nature as appropriate.
Prerequisites: ELN 123, ELC 114, MAT 103

**ELN 244** **Video Monitors** **Credit 3 (2-2)**
Especially designed for the BMET, this course introduces the study of brightness control and DC reinsertion circuits, video amplifiers, video detector stages, automatic gain control, video IF amplifier stages, and RF tuner units. Sweep circuits and high voltage circuits will also be analyzed. Lab exercises will include signed tracing and troubleshooting of these circuits.

**ELN 246** **Electronics Design Project** **Credit 3 (0-6)**
A laboratory class emphasizing independent research and design work by the student. The student will select a project in consultation with the instructor; perform the required research; compile data; formulate a theoretical model; and construct, test, and evaluate a working model of the selected project.
Prerequisites: ELN 219, ELN 241, ELN 247
Corequisite: ELN 248

**ELN 247** **Microprocessors I** **Credit 7 (5-4)**
Provides an introduction to a complete computing system. Number systems and codes, computer arithmetic, and an introduction to programming are emphasized.
Prerequisite: ELN 248

**ELN 248** **Microprocessors II** **Credit 7 (5-4)**
A continuation of ELN 247. Emphasis is placed on advanced programming techniques, interfacing, and applications of the basic computing system.
Prerequisites: ELN 247, ELN 219

**ELN 1110** **Basic Electronics** **Credit 11 (5-18)**
A study of the electrical structure of matter and electron theory, the relationship between voltage, current, and resistance in series, parallel and series parallel circuits. An analysis of direct current circuits by Ohm's Law and Kirchhoff's Law. An introduction into AC circuits involving resistance, capacitance, and inductance, leading to a working knowledge of how these components respond in different types of electronic circuits.

# COURSE DESCRIPTIONS

**ELN 1112** **Vacuum Tubes and Solid State Devices** **Credit 12 (7-15)**
An introduction to vacuum tubes and their development; the theory, characteristics and operation of vacuum diodes, semi-conductor diodes, rectifier circuits, filter circuits, triodes and simple voltage amplifier circuits. Transistor theory, operation, characteristics, and their application to audio and radio frequency amplifier and oscillator circuits. Troubleshooting and repair of solid state devices.
Prerequisites: ELC 1112, MAT 1115

**ELN 1113** **Television Theory and Circuits** **Credit 7 (5-6)**
This is a beginning theory course which introduced the study of the following: Brightness control and DC re-insertation circuits, video detector stages, automatic gain control circuits, deflection oscillator and amplifier stages, automatic frequency control circuits, picture IF amplifier stages and RF tuner units. Shop work will include construction, analysis, testing, and simple troubleshooting of the stages studied in class. Visual alignment and adjustments of control circuits are performed.
Prerequisites: ELC 1112, ELN 1112, MAT 1115

**ELN 1118** **Industrial Electronics I** **Credit 4 (3-3)**
Basic theory, operating characteristics, and application of vacuum tubes such as: diodes, triodes, tetrodes, pentodes, and gaseous control tubes. An introduction to amplifiers using triodes, power supplies using diodes, and other basic applications.
Prerequisite: ELC 1113

**ELN 1119** **Industrial Electronics II** **Credit 4 (3-3)**
Basic industrial electronic systems such as: motor controls, alarm systems, heating systems and controls, magnetic amplifier controls, welding control systems using thyratron tubes, and other basic types of systems commonly found in most industries.
Prerequisite: ELN 1118

**ELN 1120** **Electronic Fundamentals** **Credit 2 (6-4)**
A study of the basic theory and operation characteristics of the saturable reactor; vacuum tubes; PN devices used in basic rectification and regulating circuits; the transistor used in basic amplifier switching modulation and oscillation circuits; and integrated circuits used in basic differential and operational amplifiers. Elemental circuits are constructed and analyzed, using basic test equipment in laboratory experiments.
Prerequisite: ELC 1113

**ELN 1121** **Digital Fundamentals** **Credit 5 (8-8)**
A continuation of ELN 1120. The study of number systems, codes, logic gates, flip flop counters, basic arithmetic, logic, data storage devices, memories, D.A. converters, and A.D. converters. Elemental circuits are constructed and analyzed, using basic test equipment, and LE readouts.
Prerequisite: ELN 1113.

**ELN 1123** **Digital Control Systems** **Credit 5 (12-4)**
This course is designed to develop a skill in using circuit application and data sheets, the use of test equipment in analyzing electrical-electronic circuits, troubleshooting relay-analog and digital controls. The testing and replacement of devices, working with interface problems and an understanding of voltage transients, thermal impedance and the coordination of protective elements. Field trips to local industries using these systems will compliment lab and class work.

**ELN 1124** **Introduction to Microprocessors** **Credit 3 (3-4)**
A study of microprocessors-architecture/organization. Working with data

sheets in developing simplified instruction sets in assembly and machine language. The interfacing of the microcompressor with I/O parts. Develop a knowledge of static and dynamic testing using volt meters, logic probes, and the oscilloscope. Program microcompressors based equipment and analysis. The address, data, and central bus's using an oscilloscope, logic and signature analysism.

**ELN 1125** **Radio Receiver and Amplifier Servicing** **Credit 8 (4-12)**
An introduction of commonly used servicing techniques as applied to monophonic and stereophonic high fidelity amplifier systems and auxiliary equipment. The operation and servicing of inter-communication amplifiers and switching circuits will also be taught. Principles of radio reception and practices of servicing; included are block diagrams of radio receivers, servicing techniques of AM and FM receivers by resistance measurements, signal injection, voltage analysis, oscilloscope methods of locating faculty stages and components and the alignment of AM and FM receivers.
Prerequisites: MAT 1115, ELN 1112, ELC 1112

**ELN 1127** **Television Receiver Circuits and Servicing** **Credit 15 (9-18)**
A study of principles of television receivers, alignment of radio and intermediate frequency amplifiers, adjustment of horizontal and vertical sweep circuits will be taught. Techniques of troubleshooting and repair of TV receivers with the proper use of associated test equipment will be stressed. Additional study of more specialized servicing techniques and oscilloscope wave-form analysis will be used in the adjustment, troubleshooting and repair of the color television circuits.
Prerequisites: ELN 1113, ELN 1125

**ENG 101** **Grammar** **Credit 3 (3-0)**
Designed to aid the student in the improvement of self-expression. The approach is functional with emphasis on grammar, diction, sentence structure, and spelling. Intended to simulate students in applying the basic principles of English grammar in their day-to-day situations in industry and social life.

**ENG 101D** **Grammar** **Credit 3 (3-0)**
A developmental grammar course designed for renewal of the basics. It includes such components as capitalization, spelling, subject-verb agreement, and pronoun-antecedent agreement. All instruction is self paced and non-competitive.

**ENG 102** **Composition** **Credit 3 (3-0)**
Designed to aid the student in the improvement of self-expression in business and technical composition. Emphasis is on the sentence, paragraph and whole composition. Correct work usage and punctuation is also covered.
Prerequisite: ENG 101

**ENG 103** **Report Writing** **Credit 3 (3-0)**
The fundamentals of English are utilized as a background for the organization and techniques of modern report writing. Exercises in developing typical reports, using writing techniques and graphic devices, are completed by the students. Practical application in the preparation of a full-length report is required of each student at the end of the term. This report must have to do with something in the student's curriculum.
Prerequisites: ENG 101, ENG 102

**ENG 156** **Pre-College English** **Credit 3 (3-0)**
Includes sentence structure, punctuation, easily confused words, introductory research skills, and difficult subject-verb agreements, verb tenses, pronoun cases, and adjective/adverb comparison. A vocabulary and spelling list especially for college enrollees will be included.

# *COURSE DESCRIPTIONS*

**ENG 204** **Oral Communications** **Credit 3 (3-0)**
A study of basic concepts and principles of oral communications to enable the student to communicate with others. Emphasis is placed on the speaker's attitude, improving diction, voice, and the application of particular techniques of theory to correct speaking habits and to produce effective and oral presentation. Particular attention is given to conducting meetings, conferences, and interviews.
Prerequisite: ENG 101

**ENG 206** **Business Communication** **Credit 3 (3-0)**
Develops skills in business letter writing by detailing approaches to various types of letters. Included are units on proofreading, conducting business meetings, business vocabulary, memo drafting, and review of oral presentations procedures.
Prerequisites: ENG 101, ENG 102

**ENG 210** **Children's Literature** **Credit 3 (3-0)**
Designed to familiarize students with the well-known authors and illustrators of children's literature and to introduce them to the best quality books for young people. Street is also placed on the use of these materials with the children in order to obtain maximum pleasure and learning.

**ENG 250** **Reference Manual** **Credit 3 (3-0)**
A thorough coverage of McGraw-Hill Publishers *The Gregg Reference Manual* the style authority adopted by the college. The manual contains spelling, vocabulary, grammar review, letter make-up, use of numbers, homonyms, abbreviations, etc.

**ENG 1101** **Reading Improvement** **Credit 2 (2-0)**
Designed to improve the student's ability to read rapidly and accurately. Special machines are used for class drill to broaden the span of recognition, to increase eye coordination and word group recognition, and to train for comprehension in larger units.

**ENG 1102** **Communication Skills** **Credit 3 (3-0)**
Designed to promote effective communication through correct language usage in speaking and writing.

**ENG 1102D** **Communication Skills** **Credit 3 (3-0)**
Emphasis on practical grammar including elements as capitalization, possessives, agreement of subject and verb, pronoun usage, word choice, sentence structure, and spelling.

**ENG 1104** **Communication Skills for Nurses** **Credit 2 (2-0-0)**
Designed to include general medical vocabulary and an introduction to medical news through awareness of medical information in newspapers and magazines. A complete study of library usage is included, as well as introduction to study skills and *Reference Manual for Office Personnel*, the LPN program standard text for written and spoken English skills.

**ENG 1105** **Report Writing & Research** **Credit 3 (3-0-0)**
Designed to develop research skills and use of informational sources as well as reviewing standard writing skills (punctuation, word usage and sentence structure).

**ENG 1106** **Communication Skills For Nurses** **Credit 3 (3-0-0)**
Designed to promote effective communication through correct language usage in speaking and writing, with emphasis on writing business letters and giving oral explanation.
Prerequisites: ENG 1104, ENG 1105

**FAS 101** **Introduction to Fashion Merchandising/Marketing** **Credit 3 (3-0)**
Covers the nature of the business enterprises, and the industrial practices involved in the design, production, retailing and consumption of fashion products, with major emphasis on marketing activities and interrelationships.

**FAS 102** **Elements & Coordination of Fashion** **Credit 3 (3-0)**
Examines the dynamics, language and coordination of fashion and analyzes the basic styles, sizes, construction, and workmanship of apparel products.

**FAS 103** **Fashion Accessories** **Credit 3 (3-0)**
Concerns itself with the properties, characteristics, and construction of leather, fur, hosiery, intimate apparel, belts, umbrellas, millinery, wigs, jewelry, and cosmetics as they affect the knowledgeable buying and selling of these products.

**FAS 104** **Fashion Sketching** **Credit 3 (2-2)**
To help students develop fashion sketching techniques for promotion designs which are already complete, and also for illustrations in magazines, newspapers, poster design and display. Also, enables students to acquire knowledge of figure proportions.

**FAS 108** **Fashion Salesmanship** **Credit 3 (3-0)**
Covers the principles of salesmanship and their application to creative and effective techniques for selling fashion products, by means of role-playing various selling situations.

**FAS 208** **Applied Fashion Merchandising** **Credit 3 (1-4)**
Provides students with opportunities to test and apply retail merchandising principles, practices and techniques, through the actual operation and management of a retail store.

**FAS 209** **Modeling** **Credit 3 (2-2)**
This course is designed to cover the basics involved in pursuing a modeling career. Subjects included are exercise, nutrition, hair and skin care, and poise. The student who does not plan a professional modeling career also benefits by gaining poise and self-confidence.

**FAS 210** **Fashion Sales Promotion I** **Credit 4 (3-2)**
An introduction to sales promotion activities for all marketing levels with concentration on the specialized techniques and procedures employed to implement the activities of advertising and copywriting.

# COURSE DESCRIPTIONS

**FAS 211** **Fashion Sales Promotion II** **Credit 4 (3-2)**
Covers the types and objectives of the different sales promotion activities that are used to sell fashion products, and the specialized techniques and procedures that are employed to implement fashion shows, special events and publicity, culminating with the presentation of a fashion show.

**FAS 215** **Fashion Merchandising Field Study** **Credit 3 (3-0)**
FAS 215 is a field study trip to New York City involving seminars with experts in the fashion merchandising field. Includes tours of major retail operations and showroom; seminars with designers and fashion specialists; and attendance at a Broadway show followed by a tour of the costume department.

**HEA 101** **Personal Health & Physical Fitness** **Credit 2 (2-0)**
Study of influences on physical and mental health, individual practices which aid in maintaining good physical fitness throughout the life span, and developing effective methods of educating children toward better health.

**HEA 102** **Physical Fitness Programs** **Credit 2 (1-3)**
Business and industry recognize that physical fitness can lead to increased productivity, employee longevity and improved morale. Course emphasis will be upon Personal Fitness programs and activities. Students will receive instruction and actively participate in personal physical fitness activities including nutrition, and stress and attitude management. This course will be directed at specific target groups so as to meet their particular needs. Fitness programs in exercise, tennis, golf are included. Participants will actively engage in fitness programs as directed by the instructor.
HEA 102 will be offered with the following options:
HEA 102 Physical Fitness Programs (Exercise)
HEA 102 Physical Fitness Programs (Tennis)
HEA 102 Physical Fitness Programs (Golf)
HEA 102 Physical Fitness Programs (Running)

**HED 120** **First Aid** **Credit 3 (3-0)**
A study of health and safety practices necessary for work with young children, and study of first aid practices leading to Red Cross First Aid card.

**HUM 110** **History of Costume** **Credit 3 (3-0)**
A study of the costumes of the ancient world, Europe and America and the effects of the social environment upon appearance and the evaluation of garments with special emphasis on the influence of history on modern concepts of dress.

**ISC 102** **Industrial Safety** **Credit 3 (3-0)**
Management and supervisory responsibility for fire and accident prevention, accident reports, good housekeeping, machine guarding, personnel protective equipment, industrial accident code and fire regulations, the first aid department, job instruction and safety instruction, company rules and enforcements are covered. This is all related to OSHA with exercises in the use and interpretation of the Federally published standards.

**ISC 151** **Textile Technology** **Credit 3 (3-0)**
Textile Technology is designed to introduce a student to the materials and processes used in the textile industry. The course starts with consideration of the popular fibers used and progresses through the several stages in the manufacture of various types of yarn, the making of fabrics by weaving, knitting and other means, finishing, dyeing and printing of fabrics, and concludes with comparisons of characteristics among natural, regenerated and synthetic materials.
Participants will gain a knowledge of and appreciation for the ingenuity and pro-

cedures practiced in our important textile industry as well as knowledge of its diversity of products.

**ISC 202** **Quality Control** **Credit 6 (6-0)**
Organization, techniques, and procedures for efficient quality control; functions, responsibilities, structure, costs reports, records, personnel and vendor-customer relationships in quality control.
Prerequisite: MEC 204

**ISC 203** **Quality Control in Industrial Maintenance** **Credit 3 (3-0)**
The organization, techniques, and procedures of quality control as needed by today's industrial maintenance technicians. Including a study into the functions, responsibilities, and structure of quality control.

**ISC 204** **Value Analysis** **Credit 3 (3-0)**
An opportunity to study procedures, conditions and products with the purpose of identifying and removing unnecessary cost by the use of sound decisions through a common sense approach.
Prerequisite: MEC 204

**ISC 205** **Maintenance Management** **Credit 3 (3-0)**
Administration, decision making, setup and inspection of various programs such as preventive maintenance, repair parts, inventory control, and organization and functions of maintenance will be introduced in this course. Various aspects of management, engineering resources analysis and maintenance facilities will be covered.

**ISC 206** **Process Planning** **Credit 4 (2-6)**
Upon completion of this course the student should be able to: (1) perform a dimensional and tolerance analysis of a product print, using tolerance charts; (2) select and plan the process of manufacture and its sequence; and (3) select the machine tool, standard and special equipment and tooling for the most economical manufacturing process.

**ISC 209** **Plant Layout** **Credit 5 (5-0)**
A practical study of factory planning with emphasis on efficient arrangements of work areas, layouts for small and medium-sized plants, selection of production and materials handling equipment. This includes a layout problem in small scale.
Prerequisite: MEC 204

**ISC 210** **Job Evaluation** **Credit 4 (4-0)**
How to determine and write job descriptions, evaluate and grade jobs and arrive at pay rates for production, clerical and supervisory positions.

**ISC 211** **Work Measurement** **Credit 3 (3-0)**
Principles of work simplification, job methods improvement, motion study fundamentals and time study techniques. Use of flow and process charts, multiple activity charts, operation charts, flow diagrams and methods evaluation.
Prerequisite: ISC 210

**ISC 212** **Time & Motion Study** **Credit 4 (2-6)**
Upon completion of this course the student should be able to: (1) apply the general problem solving process to work methods design; (2) construct activity charts and human and machine charts; (3) apply the principles of motion economy as related to the use of human body, the work place and to the design of tools and equipment; (4) conduct a time study, determine the rating factor and allowances and develop a time standard; (5) use the MIM method to determine time standards; and (6) conduct work sampling.

# *COURSE DESCRIPTIONS*

**ISC 250** **Manufacturing Costs and Budgets** **Credit 3 (3-0)**
Since all decisions in industry involve costs and plans involve budgets, this course is an introduction to the principles involved in this important area of plant management.
Prerequisites: MEC 204, MAT 152

**ISC 1101** **Industrial Safety** **Credit 3 (3-0)**
A study of the development of Industrial Safety; accident occurrence and prevention; analysis of accident causes and costs; basic factors of accident control; safety education and training; accident reporting and records; employer and employee responsibility; safety organizations; first aid; mechanical safeguards; personal protective equipment use; materials handling; fire prevention and protection; safety codes; and accident statistics.

**MAT 100** **Fundamentals of Algebra** **Credit 6 (6-0)**
This course is designed as a concentrated presentation of the essentials of elementary Algebra. Topics covered include solving first-degree equations in one variable, factoring, graphing linear equations, solving linear systems, and solving quadratic equations as well as other basic algebraic operations.

**MAT 101** **Technical Mathematics I** **Credit 5 (5-0)**
This course is the first in a three-quarter sequence for students in technical areas. Included is a comprehensive coverage of basic algebraic principles and processes as well as an introduction to functions. Applications to practical problems is emphasized.
Prerequisite: Algebra I or Math 100.

**MAT 102** **Technical Mathematics II** **Credit 5 (5-0)**
A continuation of MAT 101. Advanced algebraic topics as well as trigonometric functions, radians, oblique triangles, and vectors are studied in depth.
Prerequisite: MAT 101

**MAT 103** **Technical Mathematics III** **Credit 5 (5-0)**
The fundamental concepts of analytical geometry, differential and integral calculus are introduced. Topics included are graphing techniques, geometric and algebraic interpretation of the derivative, differentials, rate of change, the integral and basic integration techniques. Applications of these concepts to practical situations are stressed.
Prerequisite: MAT 102

**MAT 104** **Mathematics (Decimal-Metric Conversion)** **Credit 3 (3-0)**
A course involving practice problems in conversion of fractions to decimal and decimal to fractions, metric conversions to English systems, and proper use of conversion tables. Basic forms of algebraic solutions for the unknown are practiced.

**MAT 105** **Math for the Health Professionals** **Credit 3 (3-0)**
Accuracy in mathematical calculations is crucial to work in the health professions. Therefore, practical problems dealing with fractions, decimals, Roman numerals, ratio and proportion, equations, and formulas will be covered as well as a study of the three systems of measurement used in the health related fields (metric, apothecaries, and household).

**MAT 110** **Business Mathematics** **Credit 6 (6-0)**
This course stresses the fundamental operations and their application to business problems. Topics covered include payrolls, price marking, interest and discount, commission, taxes, metric system, and pertinent uses of mathematics in the field of business.

**MAT 111** **Drug Dosages and Measurements** **Credit 2 (2-0)**
This course includes a review of basic mathematical skills and an introduction to the systems used in measuring drugs and solutions. Methods of conversion between the systems and drug dosage calculations are included.

**MAT 150** **Pre Algebra** **Credit 5 (5-0)**
This course is designed for the student who has had no previous experience with Algebra but who plans to take Algebra or other Algebra-based courses in the future. A review of basic mathematical operations will be followed by a detailed study of elementary algebraic concepts.

**MAT 152** **Facts and Figures** **Credit 6 (6-0)**
A review of math fundamentals and the application of mathematics to the solutions of typical problems in business and industry. It includes learning and the use of common conversion tables, measuring devices, the slide rule and other essential abilities.

**MAT 153** **Basic Mathematics** **Credit 3 (3-0)**
This course is designed to refresh the student on basic mathematical skills and introduce the student to aspects of modern mathematics, and the metric system including: sets, fractions, decimals, percent, basic Euclidean geometry, measurement, positive and negative numbers, ratio and proportion, consumer mathematics, discounts, and interest.

**MAT 153D** **Basic Mathematics** **Credit 3 (3-0)**
A developmental math course designed to refresh basic skills including whole number operations, fractions, decimals and percents. The instruction is self-paced and non-competitive.

**MAT 1101** **Fundamentals of Mathematics** **Credit 3 (3-0)**
This course is the study of basic math involving operations with whole numbers, fractions, decimals, percents, measurement, and formulas used in shop work.

**MAT 1101D** **Fundamentals of Mathematics** **Credit 3 (3-0)**
A developmental course in the practical use of numbers. Skills to be mastered: addition, subtraction, multiplication, division, fractions, decimals, percents, ratio and proportion, and introduction to metrics.

**MAT 1103** **Geometry** **Credit 3 (3-0)**
Designed for the vocational student, this course covers basic geometric principles such as angle measurement, the study of circles and polygons, and the Pythagorean Theorem.
Prerequisite: MAT 1101

**MAT 1104** **Trigonometry** **Credit 3 (3-0)**
Trigonometric ratios; solving problems with right triangles, using tables, and interpolating; solution of oblique triangles using law of sines and law of cosines; graphs of the trigonometric functions; inverse functions, trigonometric equations. All topics are applied to practical problems.
Prerequisite: MAT 1103.

**MAT 1105** **Mathematics for Nurses** **Credit 3 (3-0-0)**
Safe and accurate administration of medications is a fundamental responsibility of the practical nurse. To this end knowledge of dosage calculation and the basic mathematical computations necessary to dosage calculation must be presented. This will include a review of fractions, decimals, Roman numerals, ratio and proportion, equations and formulae of dosage calculations. Also the three (3) systems of measurement (household, Apothecaris and metric) in which medication orders are written will be presented.

# *COURSE DESCRIPTIONS*

**MAT 1115** **ELectrical Mathematics I** **Credit 3 (3-0)**
A study of fundamental concepts of algebra; basic operations of addition, subtraction, multiplication, and division; solution of first order equations, use of letters and signs, grouping, factoring, exponents, ratios, and proportions; solution of equations, algebraically and graphically; a study of logarithms and use of tables; an introduction to trigonometric functions and their application to right angles; and a study of vectors for use in alternating current.

**MAT 1116** **Electrical Mathematics II** **Credit 3 (3-0)**
In-depth treatment to give a working knowledge of the powers of 10, Ohm's law for series and parallel circuits, quadratic equations, Kirchhoff's laws, trigonometric functions, plane vectors, alternating currents, vector algebra and logarithms.
Prerequisite: MAT 1115.

**MAT 1123** **Machinist Mathematics** **Credit 3 (3-0)**
Introduces gear ratio, lead screw and indexing problems with emphasis on application to the machine shop. Practical applications and problems furnish the trainee with experience in geometric propositions and trigonometric relations to shop problems; concludes with an introduction to compound angle problems.
Prerequisite: MAT 1104.

**MEC 100** **Machine Practices** **Credit 3 (2-3)**
A course designed to familiarize the student with the machine shop and machine processes. Although not an in-depth study of machine shop practice, it covers a wide variety of techniques, machines, and procedures while giving enough shop practice to enable the student to "get the feel" of most of the machines.
Prerequisite: None

**MEC 101** **Machine Processes I** **Credit 3 (1-4)**
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 family of machine tools by performing selected operations such as turning, facing, threading, drilling, boring, and reaming.

**MEC 102** **Machine Processes II** **Credit 3 (1-4)**
A study of advanced operations on lathe, drilling, boring, and reaming machines. Includes milling machine theory and practice. Provides a thorough study of the types of milling machines, cutters, jig and fixture devices, and the accessories used in a modern industrial plant. Safety in the operational shop is stressed.
Prerequisite: MEC 101.

**MEC 105** **Statics** **Credit 4 (3-3)**
A study of systems of forces acting on bodies, machines, and structures at rest and the effects of forces on objects. Topics covered included analysis of force systems; equilibrium; analysis of structures, frames, and machines; distributed forces; friction; and moment of inertia.
Prerequisite: MAT 102, PHY 102

**MEC 107** **Applied Mechanics** **Credit 5 (5-0)**
Concepts and applications of statics and dynamics. Force systems, moments and couples, equilibrium, trusses, friction, centroids, center of gravity, moments of inertia, motion, work, energy momentum, and impulse are covered. Applications relating to the particular technology are introduced.
Prerequisite: ELC 114, PHY 101

**MEC 110** **Fundamental Mechanisms** **Credit 4 (2-4)**
A study of the purpose and actions of cams, cables, gear trains, differentials, screws, belts, pulleys, shafts, levers, and other mechanical devices used to transmit or control signals.
Prerequisite: PHY 102

**MEC 204** **Manufacturing Processes** **Credit 6 (6-0)**
A study of various manufacturing processes, the equipment, tools and materials used, the principles involved and the products produced. Films and field trips further introduce the broad subjects of Manufacturing.

**MEC 205** **Strength of Materials** **Credit 4 (3-2)**
Study of principles and analysis of stresses which occur within machine and structure elements subjected to various types of loads such as static, impact, varying and dynamic. Analyses of these stresses are made as applied to thin-walled cylinders and spheres, riveted and welder joints, beams, columns, and machine components.
Prerequisites: PHY 102, MAT 102.

**MEC 208** **Mechanical Problem Solving** **Credit 3 (2-2)**
A basic study related to special problems encountered in the mechanical area. Mechanical advantages, motors, controls, and types of movements are investigated. General mechanical operations and maintenance as well as production line problems are surveyed.
Prerequisite: MEC 102

**MEC 210** **Physical Metallurgy I** **Credit 4 (3-2)**
An introductory course in metallurgy covering a basic study of the properties of metals and alloys. Includes analysis of the structure of metals and alloys, atomic structure, nuclear structure, and nuclear reactions. Also covers solid (crystalline) structures, methods of designating crystal planes, liquid and vapor phases, phase diagrams, and alloy systems.

**MEC 213** **Production Planning** **Credit 3 (3-0)**
Day-to-day direction, forecasting, product planning and control, scheduling, dispatching, routing, and inventory control. Actual layouts are utilized for planning and control.
Prerequisite: Consent of Advisor, MAT 152

**MEC 214** **Shop Practice** **Credit 3 (1-4)**
A shop practice course designed to acquaint the student with basic fundamentals of installation, maintenance, and repair of machine tools. Machine maintenance and accuracy are emphasized. Slip and press fits are produced to include bearing assembly.

**MEC 215** **Compound Angles** **Credit 3 (2-3)**
Upon completion of this course, a study of special geometric solids encountered in the planning and production of jigs and fixtures, the student should be able to: (1) recognize and solve problems pertaining to the five basic types of solids; (2) convert orthographic drawings to pictorials; and (3) recognize and solve problems related to compound angular drilling and boring.

**MEC 216** **Physical Metallurgy II** **Credit 5 (4-3)**
Upon completion of this course, the student should be able to: (1) use and explain the iron carbide phase diagram; (2) perform various heat treatments on plain carbon steel; (3) discuss surface hardening treatments; (4) explain the nature and use of alloy steels, cast irons, and nonferrous metals; (5) discuss the effect of wear and corrosion; (6) identify unmarked samples; and (7) conduct basic failure analysis.

# *COURSE DESCRIPTIONS*

**MEC 222** **Rigging & Material Handling** **Credit 3 (2-2)**
Transporting, conveying, transferring, self-loading and bulk-handling equipment will be introduced. Use of wire rope, slings, chains, scaffolds, and ladders will be investigated. Proper storage of materials will also be covered.

**MEC 235** **Hydraulics & Pneumatics** **Credit 4 (3-2)**
An examination of the basic theories of hydraulic and pneumatic systems with a look at combinations of systems in various circuits. Includes basic designs and functions of circuits and motors, controls, electrohydraulic servomechanisms, plumbing, filtration, accumulators, and reservoirs.

**MEC 298** **Tool & Die Design** **Credit 4 (2-6)**
Upon completion of this course, a study of the knowledge and skills needed for the design of tools, fixtures and dies, the student should be able to: (1) design simple point and multiple point cutting tools; (2) design and draw jigs and fixtures; (3) design piercing and planning dies; (4) design pending and forming dies; and (5) complete a design project.

**MEC 299** **General Maintenance & Repair** **Credit 3 (2-2)**
The purpose of this course is to broaden the experiences of the student in the areas of mechanics. Problems involving various types of equipment will be given to demonstrate the check list method of maintenance and preventative maintenance. The use of precision measuring tools and checking for accuracy, squareness and correct center line distances is stressed for pre-start inspection. This course is a wide-based study in everyday manufacturing problems and solutions.

**MEC 1101** **Machine Shop Theory and Practice I** **Credit 7 (3-12)**
An introduction to the metalworking trade as it relates to machining operations. The student will be oriented to the machine shop, safety, basic hand tools, and shop measuring instruments. Operations on engine lathes, drilling machines, metal cutting saws, milling machines, and bench grinders will also be covered.

**MEC 1101A** **Machine Shop Theory and Practice IA** **Credit 3 (1-6)**
An introduction to the metalworking trade as it relates to machining operations. The student will be oriented to the machine shop, safety, basic hand tools, and shop measuring instruments.

**MEC 1101B** **Machine Shop Theory and Practice IB** **Credit 4 (2-6)**
Operations on engine lathes, drilling machines, metal cutting saws, milling machine, and bench grinders will be covered.
Prerequisite: MEC 1101A

**MEC 1102** **Machine Shop Theory and Practice II** **Credit 7 (3-12)**
An introduction to the assembly of parts, fits, hand broaches, screw and tap extractors, set-up equipment, inspection tools, gauges, buffing and polishing, and surface grinders. Continued instruction in the use of precision measuring tools, selection of speeds and feeds, reciprocating and continuous band cut-off saws, contour band saws, lathes, power drills, and milling machines.
Prerequisite: MEC 1101.

**MEC 1102A** **Machine Shop Theory and Practice IIA** **Credit 3 (1-6)**
An introduction to the assembly of parts, fits, hand broaches, screw and tap extractors, set-up equipment, inspection tools, gauges, buffing and polishing, and surface grinders.
Prerequisite: MEC 1101

**MEC 1102B** **Machine Shop Theory and Practice IIB** **Credit 4 (2-6)**
Continued instruction in the use of precision measuring tools, selection of speeds

and feeds, reciprocating and continuous band cut-off saws, contour band saws, lathes, power drills, and milling machines.
Prerequisites: MEC 1101, MEC 1102A

**MEC 1103** **Machine Shop Theory and Practice III** **Credit 7 (3-12)**
Additional instruction and practice in the use of precision measuring tools, milling machines, and surface grinders. Practice in setting up and operating machine tools including the selection and use of work holding devices, feeds and speeds, special heads and tables, cutting tools, and coolants. Instruction and practice in the use of power feed drills and abrasive saws.
Prerequisites: MEC 1101, MEC 1102

**MEC 1103A** **Machine Shop Theory and Practice IIIA** **Credit 3 (1-6)**
Additional instruction and practice in the use of precision measuring tools, milling machines, and surface grinders. Instruction and practice in the use of power feed drills and abrasive saws.
Prerequisites: MEC 1101, MEC 1102

**MEC 1103B** **Machine Shop Theory and Practice IIIB** **Credit 4 (2-6)**
Practice in setting up and operating machine tools including the selection and use of work holding devices, feeds and speeds, special heads and tables, cutting tools, and coolants.
Prerequisites: MEC 1101, MEC 1102, MEC 1103A

**MEC 1104** **Machine Shop Theory and Practice IV** **Credit 7 (3-12)**
The student will work to required tolerances setting up and operating machine tools. An introduction to turret lathes, advanced milling machine operations, special machining operations, and special machines. Also covered will be grinding specific surfaces using hand, surface and cylinderical grinders, and lapping and honing parts to specified tolerances.
Prerequisites: MEC 1101, MEC 1102, MEC 1103

**MEC 1104A** **Machine Shop Theory and Practice IVA** **Credit 3 (1-6)**
The student will work to required tolerances setting up and operating machine tools. An introduction to turret lathes, advanced milling machine operations, special machining operations, and special machines.
Prerequisites: MEC 1101, MEC 1102, MEC 1103

**MEC 1104B** **Machine Shop Theory and Practice IVB** **Credit 4 (2-6)**
Covered will be grinding specific surfaces using hand, surface and cylindrical grinders, and lapping and honing parts to specified tolerances.
Prerequisites: MEC 1101, MEC 1102, MEC 1103, MEC 1104A

**MEC 1105** **Computer Numerical Control Machining I** **Credit 3 (2-2)**
This course is an introduction to CNC programming using the "machinist" language. Program writing, editing, and execution are stressed. Machine operations such as drilling and some milling cycles are used as a basis for application. Mirror Image and circular milling are examples of applications covered for both drilling and milling operations.
Prerequisite: MEC 1101

**MEC 1106** **Computer Numerical Control Machining II** **Credit 3 (2-2)**
A continuation of MEC 1105 with advance work in milling and drilling operations. Helical interpolation, polar coordinate programming, canned cycles, rectangular and circular pocket milling are some of the specific items covered. Demonstrated student skills in these and other areas will serve as a basis for satisfactory completion of the course.
Prerequisite: 1105

**MEC 1117** **Machine Repair** **Credit 3 (2-3)**
This course is designed to acquaint the student with the movable parts of machine tools, the basic methods of joining these parts together, adjustments necessary to obtain satisfactory service, removal and reinstallation of worn parts, uses of lubricants as applied to machine tools, safety precautions as directed by OSHA.
Prerequisite: None.

**MEC 1118** **Introduction to Metals** **Credit 4 (3-2)**
This course is designed to familiarize the student with the different properties of ferrous and non-ferrous metals. It provides a background for understanding the physical changes and chemical metallurgy of producing metals. Explains the material designation system, classifications of steels, trade names and cross reference information for comparable materials. Common shop terms used in treatment of metals will be explained.

**MEC 1119** **Applied Metallurgy** **Credit 3 (2-3)**
Covers practical metallurgy theory and practice in the treatment of ferrous and non-ferrous metals. Actual practice of heat treatment will be performed on sample materials with emphasis on low and high carbon steels. Relationships between part design and heat treatment will be applied. Testing equipment for verification of correct treatment will be used.
Prerequisite: MEC 1118

**MEC 1122** **Practical Metallurgy** **Credit 4 (3-2)**
This course is designed to familiarize the student with ferrous and nonferrous metals. Production and application practices are covered along with the SAE-AISI designation systems. Heat treatment of metals, with emphasis on low and high carbon steels, part design for heat treating purposes, and the use of testing equipment are included. Power metallurgy is also introduced.

**MED 101** **Medical Terminology** **Credit 2 (0-4)**
This course has been designed from an etymological point of view; that is, word roots are combined synthetically with prefixes and suffixes. This approach enables students to understand words as they appear in medicine, surgery, urology, laboratory diagnosis, etc. The course will enable the student to better communicate verbally or in written form with professional workers in the health fields, with medical secretaries, nurses, hospital administrators, and medical or radiologic technologists.

**MUS 210** **Music for Young Children** **Credit 3 (3-0)**
To provide the student with some understanding of music as a learning tool for the young child. Students participate in song, dance and rhythmic activities which are appropriate to the interest and musical developmental level of young children.

**NUR 101** **Nursing Fundamentals** **Credit 9 (6-4-3)**
An introduction to nursing, the health care system, the concept of wellness-illness continuum and the nursing process. The nursing process is used to assess the 14 basic human needs of man. Emphasis is placed on the therapeutic communication. Theory, scientific principles, and procedures for basic nursing skills are taught, demonstrated, and practiced in class and the nursing laboratory, and clinical area.
Co-requisite: BIO 101, PSY 151, NUT 101

**NUR 102** **Nursing Adults and Children I** **Credit 10 (6-0-12)**
An introduction to medical-surgical nursing theory and clinical practice utilizing

the nursing process and nursing diagnosis concepts. Client assessment, identification of common problems, making the nursing diagnosis, and planning and evaluating client care will be discussed for children and adult clients with alterations in health and illness surgical needs, cancer, terminal illness, and diseases of musculo-skeletal and gastro intestinal systems. Diet therapy and pharmacotherapeutics are included in the client care plan. Oren's Self-Care Model and Roy's Adaptation Model will be used as a basis for planning nursing care.
Prerequisites: BIO 101, PSY 151, NUT 101, NUR 101
Corequisites: BIO 102, PSY 107, MAT 111

**NUR 103** **Nursing Adults and Children II** **Credit 10 (6-0-12)**

Continuation of medical-surgical nursing theory and clinical practice utilizing the nursing process and nursing diagnosis concepts. Client assessment, identification of common problems, making the nursing diagnosis and planning client care will be discussed for adults and children with diseases of cardiovascular, urinary, reproductive, integumentary, auditory and speech systems. Diet therapy and pharmacotherapeutics are included in the care plan. Orem's Self-Care Model and Roy's Adaptation Model will be used as a basis for planning nursing care.
Prerequisites: NUR 102

**NUR 105** **Pharmacology** **Credit 3 (3-0)**

An introductory course in pharmacotherapeutics. Medication sources, preparations, actions, standards, and names are presented. Emphasis is placed on correct preparation, safe administration, and client's response to medications. Actions and other pharmacologic properties of medications in each classification are presented. Assessment of the client before and after medication administration is stressed. Practice in preparation and steps in administration of oral and parenteral medical are planned for in the laboratory and the clinical areas.
Prerequisite: MAT 111

**NUR 201** **Nursing Process and Client Assessment** **Credit 3 (2-2-0)**

Nursing Process and Client Assessment includes theory and practice in using the nursing process and client assessment skills. Laboratory experiences include demonstration and practice of techniques useful in assessing the head, neck, chest, cardiovascular system, breasts, genitourinary system, abdomen, musculoskeletal system, neurosensory system, and nutritional status.
Required for graduate and licensed practical nurses before entry into the fourth quarter of the Associate Degree Nursing program (T-059)

**NUR 202** **Maternal and Newborn Nursing** **Credit 11 (6-0-15)**

Obstetrics provides for study of the basic and more complex concepts in obstetrical nursing. Nursing process and nursing diagnosis are used to assess the family, identify common problems, and plan family care during the antepartal, intrapartal, postpartal, and newborn periods. Common and more complex problems of pregnancy and the newborn are also studied. Clinical experiences include using the nursing process to assess, plan, implement, and evaluate nursing care for the intrapartal, postpartal, and newborn clients in normal and more complex situations.
Prerequisites: BIO 101, NUR 103, NUR 105, BIO 102
Corequisite: None

**NUR 203** **Mental Health Nursing** **Credit 13 (8-0-15)**

Mental Health Nursing provides for assessing the dynamics of behavior and identifying interpersonal needs. Emphasis is placed on communications and interpersonal interviews as a means of attaining these goals. Mental health nursing and psychiatric concepts, basic psychiatric care and problematic behavior and nursing actions are included. Selected class and clinical learning experiences involve the therapeutic use of self with the patient in identifying human needs and problems

using goal-directed approaches and evaluating results as a continuous process in coping behaviors. Selection of learning experiences in class and clinical is influenced by an assessment of students' needs in relation to the course objectives. Students are encouraged to view themselves and the patients as individuals with individual needs and mechanisms of adjustment.
Prerequisites: PSY 151, PSY 107, NUR 103

**NUR 204** **Nursing Adults and Children III** **Credit 11 (6-0-15)**
A continuation of medical-surgical nursing theory and clinical practice utilizing the nursing process, nursing diagnosis, client care management, and client teaching concepts. Client assessment, identification of common problems, making the nursing diagnosis, and planning client care for adults and children with alterations and diseases of the respiratory, neurosensory, visual, and endocrine systems are emphasized. Diet therapy and pharmacotherapeutics are included in the client care plan. Orem's Self-Care Model and Roy's Adaptation Model are used as a basis for planning nursing care.
Prerequisites: BIO 103, NUR 103, NUR 105, BIO 104

**NUR 205** **Nursing of Adults and Children IV** **Credit 11 (6-0-15)**
Introduction to medical-surgical nursing intensive care theory and clinical practice utilizing the nursing process and nursing diagnosis concepts. Client assessment, identification of common problems, making nursing diagnosis and planning care for clients with complex health problems related to the cardiovascular, respiratory, urinary and gastrointestinal systems. Leadership concepts in the management of client care delivered by other nursing team members are emphasized.
Prerequisites: NUR 201, BIO 104, NUR 105

**NUR 206** **Nursing Seminar** **Credit 2 (2-0)**
This seminar is designed to provide opportunities for discussion of issues and trends in nursing education, nursing practice, and the legal aspects. Responsibilities of the nurse to self, to the health team and community are stressed as well as the role of the registered nurse in selected practice services.

**NUR 1100** **Nurse's Assistant Skills I** **Credit 7 (3-12-0)**
Upon completion of this course the student should be able to: (1) provide for the hygienic needs of patients; (2) provide a safe environment for patients; (3) utilize principles of body mechanics in giving patient care; (4) demonstrate the ability to perform basic nursing skills and procedures; (5) demonstrate appropriate behavior in patient care setting; (6) follow policies and procedures of the clinical agency.

**NUR 1100** **Nurse's Assistant Skills II** **Credit 7 (3-12-0)**
Upon completion of this course the student should be able to: (1) demonstrate effective working relationships in the clinical setting; (2) appreciate the role of the nurse aide as a member of the health team; (3) use appropriate terminology in reporting and recording; (4) accept responsibility for own actions; (5) recognize the special needs of geriatric patients; (6) communicate appropriately in the clinical setting.

**NUR 1106** **Practical Nursing Seminar** **Credit 3 (3-0)**
Practical nursing Seminar provides an introduction to the legal aspects of nursing practice. The more common legal problems and ways to avoid legal entanglements are discussed. Ethical and legal responsibility in controversial nursing situations are presented and discussed. Professional organizations are presented with emphasis placed on those applicable for the licensed practical nurse. Roles of the Licensed Practical Nurse and job opportunities are explored in depth.
Corequisites: NUR 1108, NUR 1109.

**NUR 1108** **Maternal and Newborn Nursing** **Credit 6 (3-0-9)**
Using the nursing process and nursing diagnosis, the basic concepts in maternal and child nursing are introduced. Client assessment, identification of common problems, making the nursing diagnosis, and planning client care will be discussed for clients in the antepartum, intrapartum, postpartum, newborn, and childhood periods. Common problems of pregnancy and the newborn will be introduced. Using the systems approach, common illnesses in the stages of childhood and their impact on the child and family will be discussed.
Prerequisite: NUR 103, NUR 105

**NUR 1109** **Nursing Adults and Children III** **Credit 9 (6-0-9)**
A continuation of medical-surgical nursing theory and clinical practice utilizing the nursing process and nursing diagnosis concepts. The role of the licensed practical nurse in client assessment, identification of common problems, making the nursing diagnosis, and planning client care will be discussed for patients with infectious, respiratory, neurosensory, and endocrine systems diseases and drug overdosages and toxic substance reactions.
Prerequisite: NUR 103, NUR 105

**NUT 101** **Nutrition and Diet Therapy** **Credit 3 (3-0)**
Introduces the learning concepts of change and balance as the fundamental framework for the study of nutrition. Deals with compositions of food, the digestion, absorption, and metabolism of the seven basic nutrients, and the basic four food groups. The results of deficiencies, the factors that influence food habits, and nutritional requirements in all age groups are discussed. Therapeutic diets are introduced.

**OTA 101** **Occupational Therapy I (Fundamentals of the Profession) Credit 3 (2-3)**
Students are introduced to occupational therapy, the concept of the treatment team and the roles of other professionals on the team. Emphasis is placed on the COTA, The American Occupational Associates, and local professional groups. Students begin the study of professional literature and the areas of practice of Occupational Therapy.

**OTA 103** **Occupational Therapy Media I (Minor Crafts)** **Credit 2 (0-4)**
The goal of this course is to teach students basic skills in various craft media, the criteria for activity choices and the basics of activity analysis.
Prerequisites: None.

**OTA 104** **Occupational Therapy Media II (Intermediate Crafts)** **Credit 3 (1-4)**
The purpose of this course is to teach crafts that require tools for their completion. Emphasis will be placed on the proper use, maintenance, and safety factors of tools and materials. Students will do activity analysis and group teaching throughout the course.
Prerequisite: OTA 103

**OTA 106** **Occupational Therapy II (Physical Disabilities)** **Credit 4 (3-2)**
Course materials will present students with diagnosis of general medical neurological and orthopedic conditions commonly found in occupational therapy settings. Etiology, pathology, course of treatment, prognosis and prevention will be discussed as they apply to the assistant level therapist. Lab sessions will afford students an opportunity to develop skills and simulate various disabling conditions. Problem solving to enable normal activity will be a part of didactic and lab sessions.
Prerequisites: BIO 101, BIO 102, OTA 101, OTA 108, OTA 112

**OTA 108** **Kinesiology for OTA Students** **Credit 4 (3-2)**
A study of movement of the human body as it relates to activity, disability and occupational therapy treatment. In laboratory sessions, students will become

familiar with various methods of testing joint range of motion, muscle strength and coordination.
Prerequisites: BIO 101, OTA 101

**OTA 110** **Practice of the Profession** **Credit 3 (2-3)**
Students observe and participate in various practice areas of the profession. Emphasis is placed on the role of occupational therapy personnel in these areas in conjunction with other professionals. Students begin study of activity analysis, observation of behavior, interviewing techniques and documentation.
Prerequisites: OTA 101

**OTA 112** **Disease Process** **Credit 3 (3-0)**
Selected disease processes will be presented from childhood through geriatrics. Emphasis will be placed on etiology, prognosis and management. Students will utilize observation and activity analysis techniques when discussing management.
Prerequisites: MED 101, BIO 101, BIO 102, OTA 101, OTA 110

**OTA 201** **The Aging Process** **Credit 3 (3-0)**
Course will focus upon the second half of the life span with emphasis on Gerontology. Concepts of the aging process, retirement, physical, emotional and social adjustments will be presented.
Prerequisites: OTA 112, OTA 106, PSY 107

**OTA 202** **Geriatric Programming** **Credit 4 (3-2)**
Students study techniques of geriatric therapy programs. Emphasis is on maintaining independence, activities of daily living, work simplification, perceptual deficits, life review, diversion, etc. Community programs are examined.
Prerequisites: BIO 101, OTA 108, OTA 106, OTA 112, OTA 201, OTA 206

**OTA 204** **Occupational Therapy Media III (Woodworking)** **Credit 3 (1-4)**
Course material and laboratory sessions will orient, familiarize and develop personal and therapeutic skills in one of occupational therapy's major crafts. Woodworking will be discussed, analyzed and practiced in terms of its inherent therapeutic characteristics and value in promoting independent development of problem solving skills and media safety.
Prerequisites: OTA 103, OTA 104

**OTA 205** **Occupational Therapy Media IV (Ceramics and Weaving)** **Credit 3 (1-4)**
Course work will include basic techniques of ceramics including: hand-building, mold pouring and process, wheel-thrown pottery and glazing techniques. Basic weaving techniques will include material selection, loom construction, warping process, pattern making and following. Both segments of the course will emphasize safety procedures and rules regarding a variety of patient populations and clinical settings as well as adaptive therapy techniques.
Prerequisites: OTA 103, OTA 104, OTA 204

**OTA 206** **Occupational Therapy — Splinting and Therapeutic Adaptation** **Credit 5 (3-4)**
Students will lean basic static splinting techniques for a variety of physical disabilities and therapeutic adaptations for problems ranging from sensory-motor developmental delays to activities of daily living functional deficits. Laboratory sessions will direct and enable students to create adaptive devices using knowledge gained in previous media courses. Therapeutic testing equipment will also be presented.
Prerequisites: OTA 103, OTA 106, OTA 108

**OTA 208** **Pediatrics for OTA Students** **Credit 3 (3-0)**
Course will review normal and abnormal development with emphasis on occupa-

tional therapy intervention. Evaluation techniques will be presented. Occupational therapy treatment planning and techniques will be emphasized.
Prerequisites: PSY 107, OTA 106, OTA 112

**OTA 210** **Pediatric Programming** **Credit 4 (3-2)**
Students learn fundamentals of pediatric programming. Areas of study include environmental limitations, attitudes toward children with problems, programs for well children, children with spina bifida, deaf-blind, congenital problems are studied. Therapeutic techniques, perceptual-motor facilitation and inhibition techniques are some of the approaches focused upon.
Prerequisites: OTA 106, OTA 108, OTA 112, OTA 208, PSY 107

**OTA 212** **Occupational Therapy III (Psychiatric)** **Credit 3 (3-0)**
Students learn the role of occupational therapy in psychiatry. Class materials include the most common diagnostic categories with emphasis on therapeutic approach including behavioral observation, activity analysis, group function, frames of reference and treatment techniques.
Prerequisites: PSY 205

**OTA 214** **Occupational Therapy in the Community** **Credit 4 (3-3)**
The study and application of occupational therapy programs in various community settings (school systems, nursing homes, sheltered workshops, day care programs). Course will include class lectures and in-community experience (Level IB) and will be interfaced with OTA 215 Facility Management.
Prerequisites: OTA 101, OTA 106, OTA 108, OTA 110, OTA 112, OTA 201, OTA 202, OTA 206, OTA 208, OTA 210, OTA 212

**OTA 215** **Facility Management** **Credit 3 (3-0)**
Course is designed to teach the principles and application of maintenance and management of equipment and supplies as well as the skills essential to administrative functioning. Areas to be focused upon include cost analysis, budget, ordering materials and supplies, medicare-medicaid, scheduling patients, charging, uniform cost reporting, justification of equipment vs. supplies.
Prerequisites: OTA 101, OTA 110

**OTA 217** **Occupational Therapy — Activity Programming** **Credit 3 (3-0)**
Students will actively design programs for various populations. Materials and experience from previous OTA courses will be utilized. Course will focus on the practical application of therapeutic techniques and emphasize observation, documentation, activity analysis and effective communications.
Prerequisites: OTA 101, OTA 106, OTA 108, OTA 110, OTA 112, OTA 201, OTA 202, OTA 206, OTA 208, OTA 210, OTA 212

**OTA 220** **Occupational Therapy — Physical Disabilities Affiliation Field Placement I** **Credit 4 (0-40)**
Under the supervision of a registered occupational therapist, the OTA student will be required to provide occupational therapy services to a clinical setting for a six-week period. Emphasis will be upon the application of academically acquired knowledge as well as acquisition of additional experience and skills. The student will have the opportunity to develop methods and techniques that will lead to the performance level expected of an entry level OTA.
Prerequisites: Successful completion of all required course work.

**OTA 222** **Occupational Therapy — Psychiatric Affiliation Field Placement II** **Credit 4 (0-40)**
A clinical experience similar to that of OTA 220 consisting of a six-week session in a psychiatric clinical setting under the supervision of a registered OTA.
Prerequisites: Successful completion of all required course work.

# *COURSE DESCRIPTIONS*

**PHY 101** **Physics: Properties of Matter** **Credit 4 (3-2)**
A fundamental course covering several basic principles of physics. The divisions included are solids and their characteristics, liquids at rest and in motion, gas laws and applications. Laboratory experiments and specialized problems dealing with these topics are part of this course.

**PHY 102** **Physics: Work, Energy, Power** **Credit 4 (3-2)**
Major areas covered in this course are work, energy, and power. Instruction includes such topics as statics, forces, center of gravity and dynamics. Units of measurement and their applications are vital parts of this course. A practical approach is used in teaching students the use of essential mathematical formulas.
Prerequisite: PHY 101, MAT 101

**PHY 103** **Physics: Electricity** **Credit 4 (3-2)**
Basic theories of electricity, types of electricity, methods of production, and transmission and transforming electricity. Electron theory, electricity by chemical action, electricity by friction, electricity by magnetism, induction voltage, amperage, resistance, horsepower, wattage, and transformers are major parts of this course.
Prerequisites: PHY 101, MAT 101

**PHY 104** **Physics: Light & Sound** **Credit 4 (3-2)**
A survey of the concepts involving wave motion leads to a study of sound, its generation, transmission and detection. The principles of wave motion also serve as an introduction to a study of light, illumination and the principles involved in optical instruments. Application is stressed throughout.
Prerequisites: MAT 101, PHY 101

**PHY 105** **Basic Science** **Credit 4 (3-2-0)**
This course is designed primarily for Respiratory Therapy students as an introduction to physics, chemistry and microbiology. Those basic principles applicable to Allied Health personnel are explored and demonstrated by laboratory experiments so that the students are more comfortable in the clinical setting.

**PHY 243** **Radiation Physics** **Credit 5 (3-4)**
Introduces the student to the physical principles underlying radiologic technology. Special attention is given to the equipment required to generate X-Rays and the nature and behavior of X radiation. Radium and the radionuclides also receive coverage, as do radiation hazards and protection.

**PHY 1101** **Applied Science I** **Credit 4 (3-2)**
An introduction to physical principles and their application in industry. Topics in this course will support the particular curriculum in which the course is offered and will be selected from the following: measurement, force, motion, work, energy, power, solids, liquids, gases, heat, thermometry, electrical principles, properties of matter, sound, and light

**PHY 1102** **Applied Science II** **Credit 4 (3-2)**
The second in a series of two courses of applied physical principles. Topics introduced in this course are heat and thermometry, and principles of force, motion, work, energy, and power.
Prerequisite: PHY 1101

**PLA 225** **Practicum** **Credit 3 (1-6)**
This course consists of supervised work experience alternating with the educational program on a schedule satisfactory to employers, the institution, and the student.This period of time will enable the student to perform a planned variety of activities required of his specialty. The work periods will be carefully planned and closely supervised by the employer and the institution to provide experiences and responsibilities commensurate with the capabilities of the student.

**PME 1101** **Automotive Gas Engines** **Credit 6 (3-9)**
Development of a thorough knowledge and ability in using, maintaining, and storing the various hand tools and measuring devices needed in engine repair work. Study of the construction and operation of components of internal combustion engines. Testing of engine performance; servicing and maintenance of pistons, valves, cams and camshafts, fuel and exhaust systems, cooling systems; proper lubrication; and methods of testing, diagnosing and repairing.

**PME 1102** **Automotive Fuel Systems** **Credit 4 (2-6)**
A thorough study of the fuel system and emission control systems of the automobile including the fuel pump, fuel tank carburetor, air breather and the various components for the emission control systems. This includes a study of fuels, types of fuel systems, special tools and testing equipment for the fuel system.

**PME 1103** **Automotive Electrical Systems** **Credit 8 (4-12)**
A study of the electrical systems of the automobile. Basic systems include battery cranking system, alternator, regulator system, ignition systems, accessories, and basic wiring systems. Emphasis is placed on diagnosis and testing of the various parts using special tools and test equipment.

**PME 1103A** **Automotive Electrical Systems** **Credit 4 (2-6)**
This course is a study of the electrical systems of the automobile including the basic systems of the battery and cranking sytems, charging system, ignition system, accessories and basic wiring. The student will study the basic electrical test equipment as well as the more sophisticated diagnostic equipment. Safety is stressed in the practical shop applications and factory approved methods of repair.

**PME 1103B** **Automotive Electrical Systems** **Credit 4 (2-6)**
This course will continue into the electrical systems on the material that was studied in the Electrical Systems. Emphasis is shifted from theory of operation of the various systems to diagnostic lab work and electric trouble shooting. Using factory manuals, the student traces and troubleshoots problems dealing with chassis and body wiring also.
Prerequisite: PME 1103A

**PME 1104** **Diesel Engines** **Credit 4 (2-6)**
This course is designed for the automotive student who will be confronted with the smaller versions of the diesel engine used in today's automobile. This course deals with the diesel theory of operation, rebuilding and servicing the diesel engine and its components, and studying the fuel and injection systems. Safety and factory approved methods of servicing the automotive diesel will be stressed throughout the course.

**POL 102** **The National Government** **Credit 3 (3-0)**
English and colonial background, the articles of confederation and the framing of the federal constitution. The nature of the federal union; state rights, federal powers, political parties. The general organization and functioning of the national government.

**POL 250** **American Government** **Credit 3 (3-0)**
The purpose of this course is to acquaint the student with the formal institutions of the American political system and their relationships with political parties, interest groups and individual citizens.

**PSY 105** **Human Growth & Development: Prenatal & Infant** **Credit 3 (3-0)**
A detailed study of the developmental sequence of the prenatal and infant

periods with emphasis on influences on and conditions necessary for optimal development.

**PSY 106** **Human Growth & Development: Early Childhood** **Credit 3 (3-0)**
A detailed study of the developmental sequence during the pre-school period ages 2 to 6. Emphasis is given to factors influencing development, the importance of experiences in establishing patterns of behavior, attitudes, interpersonal skills, language usage, and the relationship of early childhood to later realization of potential.

**PSY 107** **Growth and Development — Life Span** **Credit 3 (3-0)**
This developmental course provides the student an opportunity to study human growth and development from conception through death. The course emphasizes the genetic, biological, environmental, and socio-cultural influences on development. Students will learn the different characteristic changes, when they occur, and what causes them to occur during the various stages of growth and development.
Prerequisite: PSY 151

**PSY 110** **Interpersonal Skills** **Credit 3 (3-0)**
A study of the basic principles of human behavior and interpersonal relations and their application to the formation of self management skills, group participation, and appropriate relationships within the working environment.
Prerequisite: PSY 151

**PSY 151** **Principles of Psychology** **Credit 3 (3-0)**
An introductory course in behavior which surveys the principles of learning, perception, thinking, biological and psychological motives, feelings and emotions, personality and adjustment. The objectives are to lay the foundation for advanced study in psychology, education, and sociology.

**PSY 201** **Human Growth & Development: Middle Childhood & Adolescence** **Credit 3 (3-0)**
A detailed study of the developmental sequence during middle childhood and adolescence; emphasis is given to environmental and social factors which influence developmental rates, formulation of behavior patterns, and establishing of value systems and interests.

**PSY 205** **Abnormal Psychology** **Credit 3 (3-0)**
An introduction to the dynamics of abnormal psychological behavior including neurosis, psychosis, character disorders, and psychosomatic reactions. The concept of Behavior Modification as a treatment modality will be stressed.
Prerequisite: PSY 151

**PSY 206** **Applied Psychology** **Credit 3 (3-0)**
A study of the principles of psychology in the understanding of inter-personal relations on the job. Motivation, feelings, and emotions are considered with particular reference to on-the-job problems.

**PSY 207** **Personal Stress Management** **Credit 3 (3-0)**
Stress will be defined and analyzed in relation to effects upon behavior, how stress can lead to distress and the destructive physiological effects of stress adaptation diseases. Attention will be directed toward individual differences of how and why stressors affect people in different ways. Special forms or techniques to relieve stress such as meditation desensitization, and running will be discussed and analyzed to assist an individual in developing a personal coping strategy.

**PSY 210** **Industrial Psychology** **Credit 3 (3-0)**
A study of the psychological principles that control employee actions and at-

titudes are explored in relationship to the current technological transitions occurring due to development in automated manufacturing.

**PSY 1101** **Human Relations** **Credit 3 (3-0)**
A study of basic principles of human behavior. The problems of the individual are studied in relation to society, group membership, and relationships within the work situation.

**PSY 1110** **Industrial Psychology** **Credit 3 (3-0)**
Psychological principles and techniques are applied to the activities and problems of employees in business and industry due to the rapid and emerging transitions that are occurring in technological processes and equipment.

**RED 100D** **Improving Reading Skills** **Credit 3 (3-0)**
A developmental reading course designed to improve reading vocabulary and comprehension. It includes specific skills in comprehension, structured vocabulary improvement, pronunciation skills and the study of roots and affixes. The course is informal and includes discussions of current reading.

**RED 101** **Introduction to Reading** **Credit 4 (3-2)**
This course is designed to inform the students of the background of reading — the definition and history. Included will be the relationship between self concept and learning to read, the physiological aspects of reading, readiness for reading and phonics. Lab work for this course will consist of observation and assistance to the classroom teacher in public schools.

**RED 102** **Methods, Materials & Techniques of Teaching Reading** **Credit 4 (3-2)**
This course is designed to expose students to the mechanics of reading in word recognition and comprehension. In addition, major methods and techniques of teaching reading in the local system will be emphasized. Lab work for this course will consist of activities, working with individuals and small groups under the direction of the classroom teacher in public schools.
Prerequisite: RED 101

**RED 103** **Methods, Materials & Techniques of Teaching Reading** **Credit 4 (3-2)**
Students will study and use diagnostic measures used in the local school system and informal methods of identifying reading needs. Emphasis will be placed on teacher-made materials and activities to be used independently for recreation and instruction. Lab work for this course will consist of making materials and working with individuals and small groups.
Prerequisites: RED 101, RED 102

**RED 104** **Teaching Remedial Reading** **Credit 3 (3-0)**
A course designed for aides who assist in teaching pupils who cannot successfully participate in reading activities in a traditional pattern. Based on diagnosis, selection of appropriate materials and stimulating and maintaining interest. Includes appropriate word attack and comprehension skills.

**RED 1101D** **Improving Reading Skills** **Credit 3 (3-0)**
A developmental reading course designed for independent work in word identification, comprehension, and vocabulary skills.

**RTH 201** **Respiratory Therapy Procedures I** **Credit 6 (4-4-0)**
This course is designed as an introduction to respiratory therapy. Topics include professional associations, the hospital structure, basic patient assessment, aseptic principles and the administration of medical gases, aerosol and humidity therapy. An introduction to charting is presented and the students tour the clinical affiliates during this course.
Prerequisite: Admission into the RT Program

# *COURSE DESCRIPTIONS*

**RTH 202** **Respiratory Therapy Procedures II** **Credit 4 (2-4-0)**
This course deals with the techniques for maintaining proper bronchial hygiene including the administration of intermittent positive pressure breathing, chest physical therapy, postural drainage, incentive spirometry and breathing exercises. The techniques and procedues used in pulmonary function studies is also included.
Prerequisites: BIO 101, ENG 101, RTH 201, MAT 105

**RTH 204** **Respiratory Therapy Seminar** **Credit 1 (1-0-0)**
This course allows the student to integrate the various types of therapy which were studied previously in the classroom and clinic. The student will have an opportunity to do independent research in Respiratory Therapy.
Prerequisites: RTH 251, RTH 252, RTH 303

**RTH 205** **Respiratory Therapy Procedures III** **Credit 6 (4-4-0)**
An introduction to the theories and techniques of continuous ventilation. Topics include the maintenance of artificial airways including suctioning, indications, physiological considerations and the care of ventilator patients. Appropriate equipment selection, techniques and physiologic effects of mode selection, PEEP, expiratory resistance, inspiratory hold and high frequency ventilation will be emphasized. Basic cardiac life support is taught according to the standards of the American Heart Association.
Prerequisites: RTH 202, BIO 103, RTH 250, RTH 302

**RTH 250** **Pharmacology** **Credit 2 (2-0-0)**
This course provides a comprehensive introduction to the medications administered by respiratory therapy practitioners. Emphasis is placed on the techniques to be observed that will assure safe administration of these agents. A concise overview of drugs relating to respiratory therapy is also provided.
Prerequisites: BIO 101, ENG 101, RTH 101, RTH 201, MAT 105

**RTH 251** **Cardiopulmonary Pathophysiology** **Credit 3 (3-0)**
Pathological processes which affect the body are discussed with special emphasis on those which affect the respiratory and cardiovascular systems.
Prerequisites: RTH 202, RTH 250, BIO 103, RTH 302

**RTH 252** **Pediatrics** **Credit 2 (2-0)**
An introduction to pediatric and neonatal anatomy, physiology and disease processes. Ventilator care and management will be stressed along with different modes of therapy used in pediatrics.
Prerequisites: RTH 202, RTH 250, BIO 103, RTH 302

**RTH 260** **Respiratory Therapy Procedures IV** **Credit 3 (2-2-0)**
This course is an indepth study of the mechanisms and hazards of mechanical ventilation. Modifications of therapy according to physiological parameters and disease states are stressed.
Prerequisites: RTH 205, RTH 304

**RTH 261** **Cardiopulmonary Pathophysiology II** **Credit 5 (4-2-0)**
This course will provide an indepth study of the physiology of the cardiorespiratory system with emphasis on hemodynamic principles. Nutrition, fluid balance, renal physiology and concepts of advanced cardiac life support are presented. Special diagnostic testing and procedures are also discussed.
Prerequisites: RTH 251, RTH 250, BIO 103

**RTH 271** **Pediatrics II** **Credit 3 (2-2-0)**
An indepth study of neonatal and pediatric physiology, mechanical ventilation,

disease processes, evaluation and care of the pediatric patient is presented.
Prerequisites: RTH 252, RTH 304

**RTH 272** **Advanced Pulmonary Functions** **Credit 2 (1-2-0)**
Mechanics and interpretation of pulmonary function will include body plethysmography, planimetry and bedside screening. Diffusion study techniques, isoflows and Vmax 50 are discussed. Topics also included are blood gas quality control and equipment for testing.
Prerequisite: RTH 202

**RTH 280** **Cardiopulmonary Rehabilitation** **Credit 2 (1-2-0)**
An indepth study of the assessment of the chronically ill patient and home environment including nutrition, physical therapy and pharmacology. Patient teaching will be stressed in areas of psychological support, exercise protocol and disinfection of equipment in the home environment. This course is designed to enable the practitioner to structure a discharge plan geared to the individual client.
Prerequisites: Program Director approval

**RTH 281** **Departmental Organization and Administration** **Credit 2 (2-0-0)**
A study in planning, organizing, directing, and controlling a respiratory therapy department. Record keeping, charting, and personnel management will be covered.
Prerequisites: RTH 306, ENG 206

**RTH 302** **Clinical Practice I** **Credit 3 (0-0-9)**
This course will provide the student with an opportunity to apply the techniques of aerosol, humidity and medical gas therapy in a clinical situation with proper supervision.
Prerequisites: RTH 201

**RTH 303** **Clinical Practice II** **Credit 8 (0-0-24)**
This course will provide the students an opportunity to apply the techniques of IPPB, chest physiotherapy, pulmonary function studies, and chest x-ray and arterial blood gas analysis in a clinical situation with proper supervision.
Prerequisites: RTH 202, RTH 250, BIO 103, RTH 302

**RTH 304** **Clinical Practice III** **Credit 4 (0-0-12)**
This course provides the student an opportunity for an intensive application of respiratory therapy to specific areas of the hospital such as neonatal intensive care, medical surgical intensive care, respiratory intensive care, cardiac and cardiovascular intensive cares.
Prerequisites: RTH 251, RTH 252, RTH 303

**RTH 305** **Clinical Practice IV** **Credit 8 (0-0-24)**
During this course the student will function as a member of the respiratory therapy staff in the performance of the routine department duties. The student will be confronted with responsibilities and decisions which they will be required to make as technicians. Daily physician rounds will also be scheduled.
Prerequisites: RTH 251, RTH 252, RTH 303

**RTH 306** **Clinical Practice V** **Credit 5 (0-0-16)**
Under supervision, the student will apply and practice the techniques of mechanical ventilation and emergency respiratory support measures as required in various hospital settings and demonstrate clinical competence. Emphasis will be in intensive care, physician rounds, special procedures and differential diagnostic procedures. Skills of respiratory physical assessment and diagnostic interpretation will be emphasized.
Prerequisite: RTH 260, RTH 261

**RTH 307** **Clinical Practice VI** **Credit 5 (0-0-16)**
This clinical experience is designed to cover the total aspects of respiratory care for the acute and chronically ill adult or neonate. Skills in respiratory physical assessment and diagnostics are redefined. Management skills are surveyed.
Prerequisite: RTH 306.

**SCI 101** **General Science** **Credit 4 (3-2)**
Study of basic concepts from biological, physical, and natural sciences. Laboratory experiences provide opportunities to develop projects for demonstrating simple science concepts to young children, utilizing materials from nature and simple equipment. Each student will develop a series of projects appropriate for a specific level of development.

**SCI 151** **Basic Science I** **Credit 4 (3-2)**
This includes the mathematical concepts of the metric and English systems of measurement, percentage, fractions, logarithms, exponents, ratio and proportion, simple algebraic equations, and interpretation of statistical terms such as mean, normal distribution and standard deviation. Study of basic physics including mechanics, properties of matter, thermodynamics, gas laws, fluidics and their application to respiratory therapy. Terminology of heat, sound magnetism and electricity.
Prerequisite: Admission to Respiratory Therapy Program

**SCI 152** **Basic Science II** **Credit 4 (3-2)**
This includes chemical and physical concepts of atomic structure and its relation to the periodic table, chemical bonding, states of matter, gas laws, acids and bases, acid base balance in the body. Formula writing for physiology of the human body. A basic approach with classification, morphology, identification and physiology of microorganisms, and immunization with emphasis on the problems of cleaning and sterilization techniques as applied to respiratory therapy.
Prerequisites: BUS 184, MAT 105, MED 131, RTH 101, RTH 201, SCI 151

**SOC 102** **Principles of Sociology** **Credit 3 (3-0)**
Includes the principles of sociology and culture, collective behavior, community life, social institutions and social change; 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** **Principles of Dynamic Leadership** **Credit 3 (0-3)**
Leadership philosophies, principles, and techniques will be analyzed in relation to the requirement of the contemporary leader of the '80's. Students will review personality traits as well as the complex relationship of intersecting variables and come to realize that leadership is a process rather than a single act or event. Major variables for study are: (1) Characteristics of the leader (2) Characteristics of the followers (3) Characteristics of the organization (4) The social economic and political milieu. Leadership theories of McGreggor and Drucker will be analyzed as well as the 15th century principles of Machiavelli, the dedication and charisma of India's Ghandi, the mania of Hitler and the indoctrination and persistence of China's Mao.
From this study the student will come to recognize his or her leadership style, be exposed to successful leadership techniques and principles to be employed in their work situation, and understand the complex interaction of leadership variables.

**SOC 128** **Community Resources** **Credit 3 (3-0)**
An overall view of community, state and national resource and service agencies, designed to assist families, children or individuals within the community.

**SOC 204** **Social Psychology for the Health Services** **Credit 3 (3-0)**
This course is designed to assist biomedical students in building meaningful human relationships and to help them make the adjustments necessary to develop a satisfactory work situation. The fields of adjustment to be considered are: work environment, group interpersonal relationships, and personal involvement. Psychologically, students will be concerned with attitudes, frustrations, causation of behavior, motivation, individual differences, and job satisfaction. Sociologically, students will consider status, culture, role, communication, social systems, and the human relationship approach to others. They will be encouraged to see their own personalities in relation to our culture and society.

**SOC 211** **Marriage and Family** **Credit 3 (3-0)**
A practical consideration and discussion of the factors leading to successful marital adjustment; attention is given to the period from early dating to marriage, the coming of children, and the problems of child rearing. The course also deals with sex adjustment, in-law relationships, religion, and money management.
Prerequisite: None.

**SSC 150** **Current Affairs** **Credit 3 (3-0)**
Building of understanding and knowledge of the events in the news, the people who influence world affairs, and the historical background for the trouble centers. Includes a map-reading and geography unit, as well as discussion of internationally-known landmarks. Review of sources of information beneficial to studying current affairs and obtaining additional information.

**SSC 303** **Organizations and the Parliamentary Process** **Credit 3 (3-0)**
This course is a review of organizations to which people may join and a study of the rules of parliamentary procedures which allow such groups to make decisions in an orderly manner. This part of the course emphasizes the duties of the presiding person and the rights of the individual members. Civic, religious, political, professional, sports, military, and academic organizations are discussed. *World Almanac* and *Robert's Rules of Order* are the required texts.

**TEX 100** **Fabric Science I** **Credit 3 (3-0)**
Analyzes textile fibers and the construction of fabrics, with emphasis on the properties that affect their hand, appearance, performance and end use.

**WLD 120** **Welding, Oxyacetylene** **Credit 2 (1-2)**
An introduction to the history of oxyacetylene welding, the principles of welding and cutting, nomenclature of the equipment, and assembly of units. Covers welding procedures such as practice in puddling and carrying the puddle, running flat beads, butt welding in the flat, vertical and overhead positions, brazing, and hard and soft soldering. Safety procedures in the use of tools and equipment are stressed through the program of instruction. The student performs mechanical testing and inspection to determine quality of the welds.

**WLD 121** **Arc Welding** **Credit 3 (1-4)**
A study of the operation of AC transformers and DC motor generator arc welding sets. Studies are made of welding heats, polarities, and electrodes for use in joining various metal alloys by the arc welding process. After the student is capable of running beads, butt and fillet welds in all positions are made and tested in order that the student may detect weaknesses in welding. Safety procedures in the use of tools and equipment are emphasized throughout the course.

**WLD 221** **Commercial & Industrial Practice** **Credit 3 (2-2)**
A course designed to build skills through practices in simulated and actual industrial processes and techniques. Includes sketching and layout on paper the size and shape description, listing the procedure steps necessary to build the product, estimating time and material, and then actually following these direc-

tions to build the product. Emphasis is placed on maintenance, repairing worn or broken parts by special welding applications, field welding, and nondestructive tests and inspection.
Prerequisites: WLD 120, WLD 121.

**WLD 1101** **Basic Gas Welding** **Credit 2 (1-3)**
Welding demonstrations by the instructor and practice by students in the welding shop. Safe and correct methods of assembling and operating the welding equipment. Practice will be given for surface welding; bronze welding, silver-soldering, and flame cutting methods applicable to mechanical repair work.

**WLD 1102** **Basic Arc Welding** **Credit 2 (1-3)**
Students are made aware of welding heats, polarities and electrodes for uses in joining various metal alloys by the arc welding process. Procedures such as welding different types of joints are practiced. Safety procedures are emphasized throughout the course.
Prerequisite: WLD 1101

**WLD 1103** **Welding** **Credit 1 (0-3)**
The various processes used for joining materials by welding are discussed. Lecture demonstrations and practice cover the oxyacetylene and arc welding processes, filler metals used, gases, currents, weldability of metals. Instruction is given in the set-up and safe operation of oxyacetylene welding apparatus. Students prepare joints by both hand and machine cutting with the oxyacetylene torch.

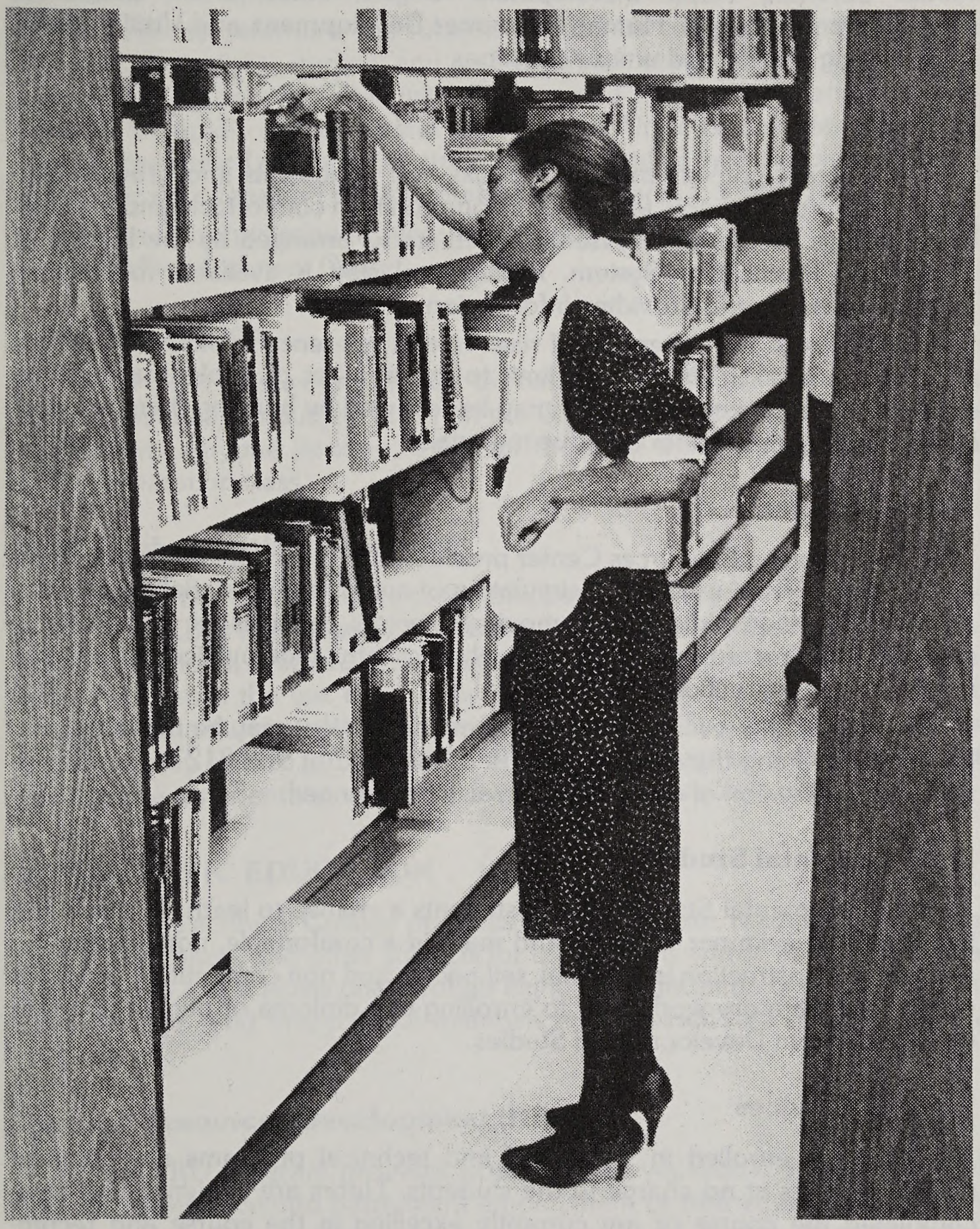
**WLD 1105** **Automotive Body Welding** **Credit 4 (2-6)**
Welding practices on material applicable to the installation of body panels and repairs to doors, fenders, hoods, and deck lids. Student runs beads, does butt and fillet welding. Performs tests to detect strength and weaknesses of welded joints. There are two types of welding used — gas-shield arc welding and oxyacetylene welding. Safety procedures are extremely emphasized throughout the course.
Prerequisite: WLD 1101

**WLD 1141** **Beginning Welding I** **Credit 4 (1-9)**
Introduction to the history of oxyacetylene and arc welding. The principles of welding and cutting, nomenclature of the equipment, assembly of unit. The operation of various AC transformers, AC and DC rectifiers, and DC motor generator arc welding units. Welding procedures such as practice of puddling and carrying the puddle, running flat beads, butt welding in the flat, vertical and overhead positions, and the cutting of straight lines with the torch. Safety procedures are stressed throughout the program of instruction. Testing appropriate to type welds will be performed.

**WLD 1142** **Intermediate Welding II** **Credit 4 (1-9)**
A review of basic oxyacetylene cutting and welding, preparation of metals, types of joints, welding procedures and testing of the welds. The operation of AC transformers and DC motor generator arc welding machines. Studies are made of welding heats, polarities, and electrodes for use in joining various metal alloys by the arc welding process. After the student is capable of running beads, butt and fillet welds in all positions are made and tested in order that the student may detect his weakness in welding. Safety procedures are emphasized throughout the course.

**WLD 1124** **Advanced Welding III** **Credit 4 (1-9)**
Designed to provide practice in welding or pressure piping in the horizontal, vertical and horizontal fixed position using shielded metal arc welding processes according to Sections VIII and IX of the ASME code. Testing appropriate to type welds will be performed.

# *Continuing Education, Learning Resources Department*



## *People*

# *LEARNING RESOURCES CENTER*

## LEARNING RESOURCES DEPARTMENT

As a center for student learning and innovative teaching, the Learning Resources Department at Stanly Technical College includes the Library, Media Services, Adult Development Center, Adult Basic Education, Developmental Studies, Human Resources Development, and Visiting Artist, each serving specific and unique functions.

### Library

The library consists mainly of books and periodicals and provides services to the student body, faculty, and community in comfortable and pleasant surroundings. Books are housed in open stacks arranged by the Library of Congress Classification System. Professional staff is available to assist in locating materials and providing information.

Books, with the exception of reserve and reference books, are checked out for two weeks. There is no limit to the number of books that may be checked out by a student. Books may be renewed by bringing them to the library. A fine is charged for overdue materials.

### Media Services

The Learning Resources Center provides media services for faculty, staff, and students. This includes the circulation of audiovisual materials and equipment such as slide, filmstrip, and movie projectors. Facilities are also available for video tape recording and viewing, photography, tape publication, and the production of instructional materials.

Requests and reservations for any media services may be made by visiting or telephoning the media specialist in the LRC at 982-0121. An orientation to the utilization of equipment can also be arranged.

### Developmental Studies

Developmental Studies affords students a chance to learn or review the basic skills of grammar, reading, and math in a comfortable, non-threatening atmosphere. Instruction is personal, self-paced, and non-competitive. Students needing preparatory work prior to enrolling in a diploma or degree program can benefit from Developmental Studies.

### Tutorial Services

Students enrolled in vocational and technical programs may request tutorial services at no charge to the students. Tutors are students who have completed the course or are currently excelling in the course and recommended by the instructor.

## ADULT HIGH SCHOOL DIPLOMA PROGRAM

This program is designed for adults of all ages to enable them to complete their high school credits.

Students between the ages of 16 and 18, who have been released by the Superintendent of their public school may enroll in the Adult High School Program. This program was designed by the Albemarle City/Stanly County Boards of Education with Stanly Technical College to provide the opportunity for citizens to complete their high school education.

In order to determine the subjects needed for completing high school, a student's transcript is studied, and an individually prescribed curriculum is assigned. Study is accomplished with programmed materials; thus students may advance as rapidly as they master the materials. Upon completion of the individually prescribed subjects, the students are awarded their diplomas by Stanly Technical College and the Albemarle City or Stanly County Schools.

There is no registration fee. Adults may enroll at anytime by contacting the Adult Development Center.

### GED Preparation

GED prep classes are offered on campus and in the community. The classes cover all five subject areas on the GED and are provided at no cost to the student. Anyone desiring to test for the GED is requested to enroll in a GED preparation class.

### GED (high school equivalency)

The GED is an alternative to the traditional credit system of public education. The GED is a five-part exam testing the students' competencies, as compared to national norms. No one under 18 may take the exam without a release form from the last high school attended. There is a testing fee of $5. Study materials are available for use within the Adult Development Center, or a student may elect to purchase a book from the College bookstore. A pre-test to diagnose a student's strengths and weaknesses is available without charge.

## ADULT BASIC EDUCATION

Stanly Technical College provides training in math, reading, writing, consumer education, and other subjects for those adults whose basic educational skills are on grade levels one through eight. No registration fee is required for these courses and instructional materials are provided free of charge to the student.

### Human Resources Development (HRD)

The HRD program provides structured pre-vocational training, counseling, and assistance into permanent employment or further educational training for chronically unemployed or underemployed adults. Program design calls for a re-orientation to the world of work through recognition of personal assets and limitations, understanding the effect of one's behavior on others, familiarization with problem solving processes, and development of basic academic and communications skills which are prerequisite to securing and keeping employment.

Adults may enroll at regularly scheduled class times throughout the school year. There is a $10 registration fee.

**Visiting Artist**

The purpose of the Visiting Artist program is to deepen the appreciation and cultivation of the arts within the communities served by the colleges. Visiting artists are responsible for performances, lecture-demonstrations, and programs for civic clubs, public schools, art councils, and church groups. There is no charge for this service.

## CONTINUING EDUCATION

Rapid changes in our modern society have necessitated that individuals, businesses, and other organizations take advantage of ongoing learning opportunities in order to successfully cope with the new challenges and conditions of our times. Thus, education more and more must become a process of lifelong learning. At Stanly Technical College a wide variety of non-credit, continuing education courses are a response to this need. They are organized by the Continuing Education Department and provide opportunities for an adult to:

(1) obtain pre-employment training in order to find a job;
(2) upgrade and update skills, increase abilities and advancement opportunities;
(3) improve personal and family life;
(4) learn new arts and skills for greater enjoyment of leisure time.

The continuing education program of Stanly Technical College is designed to make all of these objectives easier to reach by offering a large selection of subjects taught at convenient hours in convenient locations as frequently as needed.

### ENROLLMENT

Persons wishing to take an adult education class are urged to **Pre-Register** for the class. This can be done very simply by telephone, letter, or personal visit to the Continuing Education Department. Since many classes must be limited in size, students will be admitted on a "first come" basis so that persons who have pre-registered will be given first priority. If a class is not filled, a student may register for the course by attending the first or second class meeting.

### COST

A small registration fee is required for each continuing education course. Students should plan to pay the registration fee at the first meeting of the class, as well as have their Social Security numbers. The registration fee will not be refunded except in the case of a class which is discontinued by adminis-

trative personnel of the college. A few courses such as driver education (road-work only), multimedia first aid, and guitar will have additional charges. Students also will be expected to purchase their own textbooks, as well as personal supplies and materials. Students sixty-five years of age or older are exempt from the registration fee.

## CLASS HOURS AND LOCATIONS

The meeting times and places of different classes will vary greatly, but they usually meet once or twice weekly on weekday evenings for two or three hours. However, courses can be provided at any time which is agreeable to the persons involved.

Although numerous courses will be taught at Stanly Tech's new campus, many others will be taught wherever adequate facilities and equipment can be provided.

# *CONTINUING EDUCATION*

## AWARDS AND PERMANENT RECORDS

Although continuing education courses are normally non-credit, student achievement in class may be recognized by the awarding of an attractive certificate showing the student's name, the course title, and total hours. General requirements for the earning of a certificate are 75 per cent attendance and the achievement of minimum class objectives set forth by the instructor.

A permanent record is kept of all students who complete adult education programs. Continuing Education Units (CEU's) will be awarded those who successfully complete instructional programs which are approved for this purpose. CEU's are becoming a widely recognized method for measuring and recording the amount of training which an adult completes by means of non-credit courses.

## CONTINUING EDUCATION OPPORTUNITIES

(Courses shown here for illustration purposes only.
Others are offered as the need arises.)

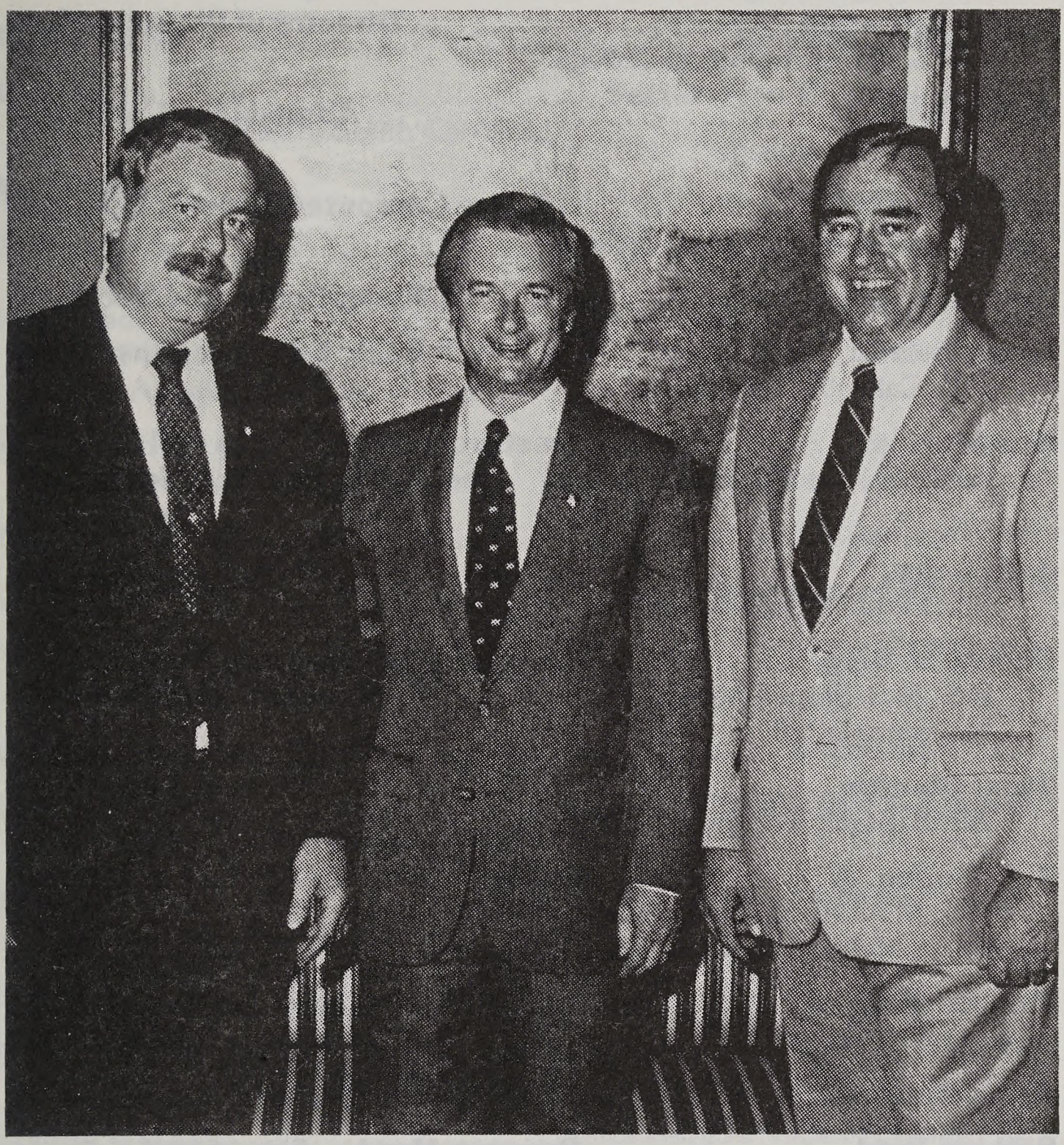
Electrical, Mechanical and Building Trade Courses
Business Education and Related
Industrial Services
Law Enforcement
Fire Service Training
Hospitality and Food Service Education
Health and Safety Education
Liberal and Language Arts Education
Family Life and Consumer Education
Creative Arts and Homemaking

## COMMUNITY SERVICE PROGRAMS

Stanly Technical College seeks to sponsor and promote a variety of community services which contribute to the cultural, economic, and civic improvement of the community. The following are some examples: workshops, community forums, art exhibits, resident musicians and artists, speaker and film presentations, occupational training for the disadvantaged and handicapped.

## STATE ADMINISTRATION

John A. Forlines, Jr. . . . . Chairman, State Board of Community Colleges
Robert W. Scott . . . . . President, Department of Community Colleges



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A.A.S. University of South Carolina

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**James Eudy** ..... **Maintenance Staff**

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M.A. Appalachian State University

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M.A. Appalachian State University

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Medical College of S.C. and East Carolina School of Medicine

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M.A. Appalachian State University

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**Mitch Huneycutt**..... **Maintenance Staff**

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Diploma, A.A.S. Central Piedmont Community College

**Ronnie Huneycutt**..... **Instructor — Auto Mechanics**

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**Mitzie Johnson** ..... **Instructor — Nursing Department**
RN — State of North Carolina
BSN — UNC-Chapel Hill

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B.S. Winston-Salem University

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A.A. North Greenville College
B.A. Gardner-Webb College

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**Donnie Lowder** ..... **Vice President for Fiscal Services**
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B.A. Shaw University
M.A. Appalachian State University
College Business Management — University of Kentucky

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**Billy McLendon** ..... **Maintenance Staff**

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M.Ed., UNC-Charlotte

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M.Ed., N.C. State University
Ed.S., Appalachian State University

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**Tom Pope** ..... **Instructor — Respiratory Therapy**
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**Sayed Raissi** ..... **Program Head/Electronics Engineering**
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B.A. Campbell University

**Sudie Ridenhour** ..... **Bookkeeper**

**John Roberts** ..... **Instructor, Data Processing**
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M.A. UNC-Greensboro

**Barbara Slater** ..... **Cashier/Assistant Prime Computer System Operator**
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**Kay Smith**..... **Chairperson/Director — Nursing Education**
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RN — State of North Carolina
B.A.N. — Pfeiffer College
Advanced Nursing Courses — UNC-Chapel Hill
M.Ed., UNC-Charlotte
Ed.D., N.C. State University

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University of Kentucky

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B.S., University of S.C.

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Graduate, Evans Business College
A.A.S., Stanly Technical College

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**Joylen Thomas**..... **HRD Recruiter**
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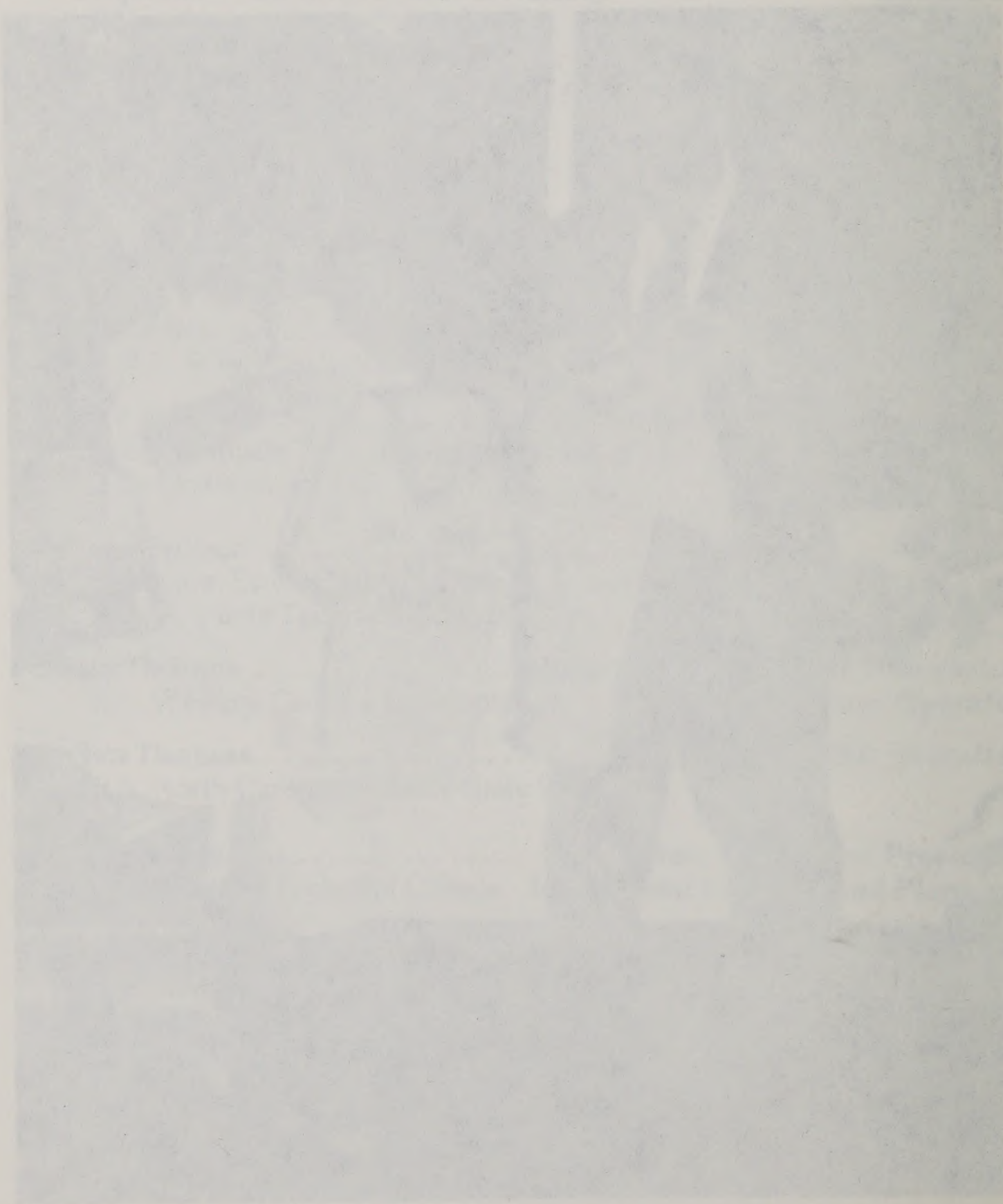
Advanced Study — UNC-Charlotte

**Virginia Yandle** ..... **Library Assistant**



# Stanly Technical College

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