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1980

General College Catalog 1979-1980

Utah Technical College at Salt Lake

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UTAH TECHNICAL COLLEGE

GENERAL CATALOG • 1979-80



Associated Students of
Utah Technical College
**STUDENT GOVERNMENT
HANDBOOK**



UTAH TECHNICAL COLLEGE AT SALT LAKE

GENERAL CATALOG
1979-1980



Redwood Road Campus: 4600 South Redwood Road
Salt Lake City, Utah 84107
(801) 969-3411

Downtown Campus: 431 South 6th East
Salt Lake City, Utah 84102
(801) 328-8521

A state-assisted trade and technical college operated under the direction of the Utah State Board of Regents. The college is accredited by The Northwest Association of Schools and Colleges.



PRESIDENT'S MESSAGE

We are pleased that you have enough interest in Utah Tech to be reading this catalog. We hope that as your reading continues, your interest grows, and you will come on campus to share our excitement and allow us to answer any questions you have about our College.



Our job here is to help people prepare for effective and satisfying employment. In our classes we emphasize specific, realistic job skills, and we supplement those classes with activities which develop balanced personal competence.

We do our job very well. The faculty are experienced teachers and in nearly every case were experienced professionals before they became teachers. The staff is very professional and concerned about you individual students. The combination of effective teachers and supportive staff allows us to provide the proper help to most students who come here. Almost 95 percent of the students who complete our prescribed programs find work in their field of training, and most of those students who do not complete programs stop school because they are working. We do help people, we'd like you to be one of those people.

If, as you continue learning about the Utah Technical College at Salt Lake, you find courses or programs which interest you or would help you be more effective or satisfied in your work, come join us in the learning by doing.

DALE S. COWGILL
President

REDWOOD ROAD CAMPUS UTAH TECHNICAL COLLEGE

4600 South Redwood Road, Salt Lake City, Utah 84107
(801) 969-3411

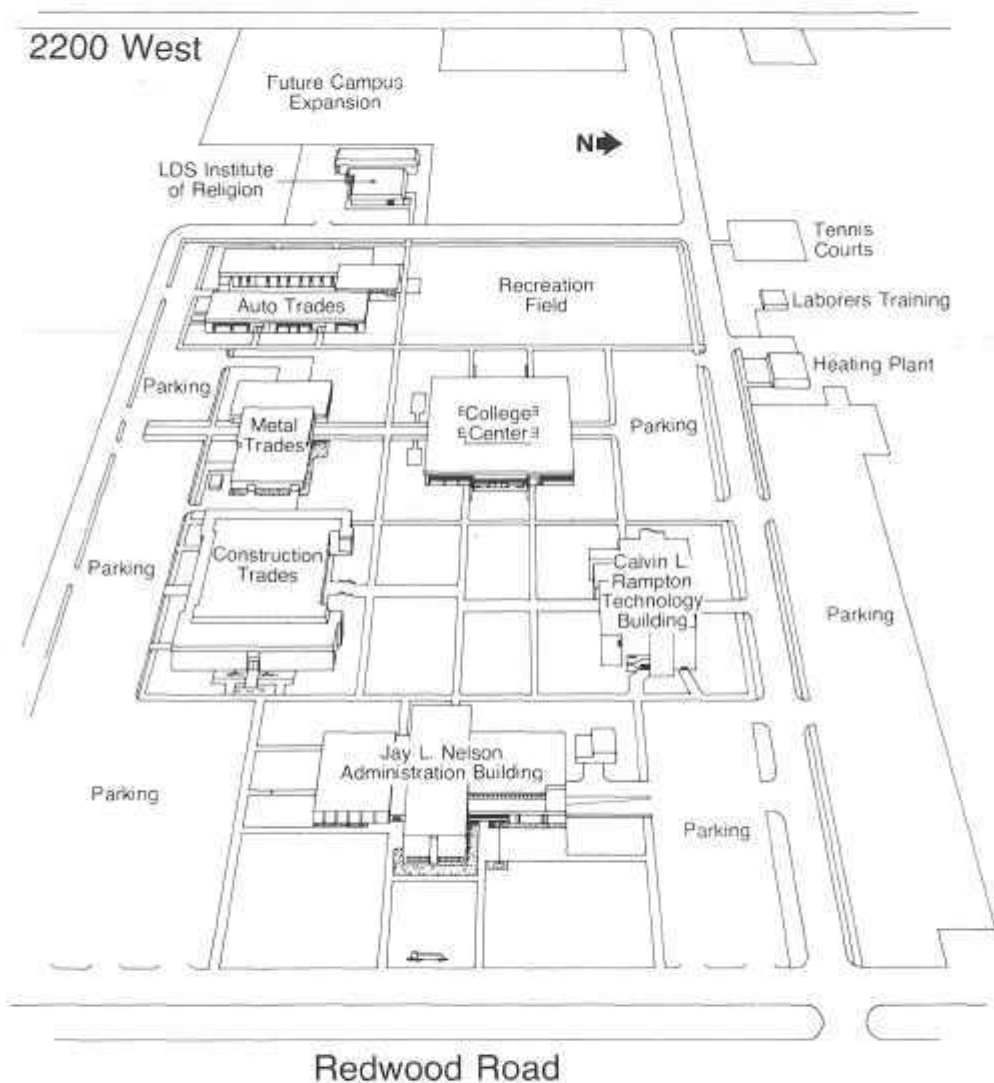


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COLLEGE CALENDAR FOR 1979-1980

1979

JUNE

| | | | | | | | |
|----|----|----|----|----|----|----|---|
| | 3 | 4 | 5 | 6 | 7 | 1 | 2 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 | 9 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 | |
| 24 | 25 | 26 | 27 | 28 | 29 | 30 | |

JULY

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

AUGUST

| | | | | | | | | |
|----|----|----|----|----|----|----|----|---|
| | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 4 |
| 12 | 13 | 14 | 15 | 16 | 17 | 18 | | |
| 19 | 20 | 21 | 22 | 23 | 24 | 25 | | |
| 26 | 27 | 28 | 29 | 30 | 31 | | | |

SEPTEMBER

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|----|----|----|----|----|----|----|---|
| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 1 |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 | |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 | |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 | |
| 30 | | | | | | | |

OCTOBER

| | | | | | | | |
|----|----|----|----|----|----|----|---|
| 7 | 8 | 9 | 10 | 11 | 12 | 13 | 6 |
| 14 | 15 | 16 | 17 | 18 | 19 | 20 | |
| 21 | 22 | 23 | 24 | 25 | 26 | 27 | |
| 28 | 29 | 30 | 31 | | | | |

NOVEMBER

| | | | | | | | |
|----|----|----|----|----|----|----|---|
| 4 | 5 | 6 | 7 | 8 | 9 | 10 | 3 |
| 11 | 12 | 13 | 14 | 15 | 16 | 17 | |
| 18 | 19 | 20 | 21 | 22 | 23 | 24 | |
| 25 | 26 | 27 | 28 | 29 | 30 | | |

DECEMBER

| | | | | | | |
|----|----|----|----|----|----|----|
| 2 | 3 | 4 | 5 | 6 | 7 | 1 |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 |
| 30 | 31 | | | | | |

1980

JANUARY

| S | M | T | W | T | F | S | |
|----|----|----|----|----|----|----|---|
| | 6 | 7 | 8 | 9 | 10 | 11 | 5 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 | |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 | |
| 27 | 28 | 29 | 30 | 31 | | | |

FEBRUARY

| | | | | | | |
|----|----|----|----|----|----|----|
| 3 | 4 | 5 | 6 | 7 | 1 | 2 |
| 10 | 11 | 12 | 13 | 14 | 15 | 16 |
| 17 | 18 | 19 | 20 | 21 | 22 | 23 |
| 24 | 25 | 26 | 27 | 28 | 29 | |

SUMMER QUARTER

| | |
|-----------|--------------------------------------|
| May 21-23 | Registration for Continuing Students |
| May 24 | New Student Registration |
| June 11 | Instruction Begins |
| June 22 | Last Day for Class Changes |
| July 4 | Independence Day Holiday |
| July 24 | Pioneer Day Holiday |
| August 24 | Summer Quarter Ends |

FALL QUARTER

| | |
|----------------|--|
| August 20-23 | Registration for Continuing Students |
| August 27-31 | New Student Registration |
| September 4-21 | Open Registration |
| September 25 | Instruction Begins |
| October 8 | Last Day for Class Changes |
| October 12 | UEA-UVA Conference - Classes Dismissed |
| October 19-22 | Harvest Holidays |
| November 22-25 | Thanksgiving Holiday |
| December 13 | Fall Quarter Ends |
| December 14- | |
| January 2 | Christmas Holidays |

WINTER QUARTER

| | |
|--------------|--------------------------------------|
| December 3-7 | Registration for Continuing Students |
| December 10 | New Student Registration |
| January 3 | Instruction Begins |
| January 16 | Last Day for Class Changes |
| February 18 | President's Holiday |
| March 18 | Winter Quarter Ends |
| March 19-23 | Spring Vacation |

SPRING QUARTER

| | |
|-----------|--------------------------------------|
| March 3-6 | Registration for Continuing Students |
| March 7 | New Student Registration |
| March 24 | Instruction Begins |
| April 4 | Last Day for Class Changes |
| May 26 | Memorial Day Holiday |
| June 5 | Spring Quarter Ends |
| June 7 | Graduation |

Apprenticeship programs do not follow the above calendar. Please check with the Dean of Students Office or Division.

MARCH

| | | | | | | | |
|----|----|----|----|----|----|----|---|
| 2 | 3 | 4 | 5 | 6 | 7 | 8 | 1 |
| 9 | 10 | 11 | 12 | 13 | 14 | 15 | |
| 16 | 17 | 18 | 19 | 20 | 21 | 22 | |
| 23 | 24 | 25 | 26 | 27 | 28 | 29 | |
| 30 | 31 | | | | | | |

APRIL

| | | | | | | | |
|----|----|----|----|----|----|----|---|
| 6 | 7 | 8 | 9 | 10 | 11 | 12 | 5 |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 | |
| 20 | 21 | 22 | 23 | 24 | 25 | 26 | |
| 27 | 28 | 29 | 30 | | | | |

MAY

| | | | | | | |
|----|----|----|----|----|----|----|
| 4 | 5 | 6 | 7 | 1 | 2 | 3 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | 31 | | | | |

JUNE

| | | | | | | | |
|----|----|----|----|----|----|----|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 2 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 | |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 | |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 | |
| 29 | 30 | | | | | | |



GENERAL INFORMATION

Non-Discrimination

Utah Technical College at Salt Lake is a tax-assisted institution operated under the direction of the Utah State Board of Regents. Qualified students are admitted to the school and may enjoy all rights and privileges appropriate to students without regard to sex, color, creed, age, national origin or handicap.

Questions pertaining to the application of Title IX and the regulations issued thereunder may be directed to the Personnel Office. The latter is responsible for the college's compliance with the provisions of Title IX.

Areas of Instruction

Objectives: The prime objective of Utah Technical College is to provide a satisfying educational experience for those individuals desiring training to prepare for, enter into, and progress in the world of work.

A secondary objective is to provide a supply of competent workers for business and industry.

Occupational Preparatory: Programs designed to train students for occupational entry.

Apprentice Related Instruction: A related training program for the worker who is learning a trade through apprenticeship or on-the-job training. Primarily operated during the evening.

Occupational Extension: Evening programs designed to aid the fully trained worker or journeyman to keep abreast of new developments in the trade and to help prepare the individual for job advancement.

Supervisory Training: Special evening courses to assist foremen, supervisors and executives and those preparing for such positions to become familiar with new techniques, developments, improved methods in business, and industrial supervision and management.

Pre-Technical Programs: Designed to assist students in upgrading or reviewing fundamentals in mathematics, reading, communications, and human relations. Students may enter the Pre-Tech Program any day of the quarter. All students progress at their own rate on an individualized basis. A student enrolled in a trade-technical program may also take concurrent Pre-Tech classes.

Instructional Facilities

The facilities and equipment used in training at Utah Tech are the finest obtainable. There are currently five major buildings on campus that are used for instructional purposes. The inspection of these facilities is open to prospective students on request.

Visitors

The College is open to visitors who wish to see the trade and technical training that is offered. All visitors are requested to go to the information desk in the main building for a guide before visiting departments.

Tours may be arranged for small groups by advance request. Evening tours may be conducted in special circumstances.

Institute of Religion

An L.D.S. Institute of Religion has been established adjacent to the College Campus. A maximum of six quarter hours of non-denominational Institute credit may be transferred to the College and shown

on the student's official transcript. Credit obtained from such classes will not apply toward graduation from Utah Technical College at Salt Lake but is generally transferable to other colleges as elective credit.

A full-time staff teaches a variety of courses, including Courtship and Marriage; American Religions, World Religions; and at least 25 other classes. Because of the unique nature of the College there is no homework or examinations for Institute classes. The Student LDSSA is organized to run L.D.S. student affairs at the Institute. There is also an active fraternity and sorority connected with this program.

College Center

The College Center is the social-cultural and recreational center of the campus for students, faculty, staff, alumni, and guests. The main floor contains attractive lounge areas, the college store, a snack bar, and a cafeteria. Offices for the College Center Director, Recreation Director, student government, College Store Manager, and Food Service Manager are also located on the main floor. The basement provides additional lounges, a games room, a student organizations room, a universal gym, shower facilities, a crafts center, and conference rooms. Students, college personnel, alumni, and guests are encouraged to use the facilities and services. A list of services are available at the College Center. Reservations for meeting spaces and other facilities should be made well in advance with the College Center Director or staff. All groups using the facilities are required to observe College Center Policy. All students are invited to apply to the student body officers, to the committee heads, or to the College Center staff for assign-

ments to various activities, committees, and organizations.

HOURS:

7:00 a.m.-9:30 p.m., Mon.-Thurs.

7:00 a.m.-5:00 p.m., Friday

8:00 a.m.-1:00 p.m., Saturday

College Store

The College Store carries required books, tools, and supplies. Many other items such as sweat shirts, jackets, rings, tie-tacks, mugs, stationery, and candy are provided for sale throughout the day and evening.

HOURS:

Monday-Thursday, 8:00 a.m.-8:15 p.m.

Friday, 8:00 a.m.-3:45 p.m.;

Saturday, 8:00 a.m.-9:00 a.m.

Cafeterias

The school's cafeterias provide limited snack bar service throughout the day and evening. Full cafeteria service is provided during the breakfast and lunch hours. Eating areas and facilities are provided for those who do not wish to purchase lunches in the cafeteria. Vending machines located throughout the campus dispense beverages, fresh fruits, pastries, candy, and ice cream.

Instructional Media Center

The Instructional Media Center is open from 7:00 a.m. to 10:00 p.m. during Fall, Winter, and Spring Quarters. Books in the library are principally technical volumes related to the areas of instruction offered. Trade manuals, periodicals, and reference materials are available. Other facilities are in the audio-visual aids section, which provides classes and individuals with films, film strips, recording devices, and other materials.

Advisory Committees

Advisory Committees, composed of leaders in industry and business, regularly review each course. This assures that courses offer up-to-date technological information and training that supplies all the needs and skills for the various trades and technical programs.

Joint Apprenticeship Committees, composed of representatives from both labor and management, meet regularly with college officials to evaluate and review training programs offered to apprentices to keep them abreast of modern developments and techniques.

Counseling and Guidance Services

The College provides guidance services which are intended to supplement instruction and out-of class activities at the college. Faculty and administration, together with professional guidance personnel, assist applicants and students with admission procedures, selection of vocation, course selection and planning, solution of social and emotional problems, job placement, scholarship, and financial problems.

It is the desire of college personnel that all students enter college with an optimum opportunity for success and be assisted through the college programs to achieve objectives which will enrich both individual and community.

Employment

A variety of part-time employment opportunities are available to students; however, it is recommended that employment be limited so as not to interfere with the students' concentration on their studies.

The employment counselor assists students in locating part-time jobs while they are attending college. The counselor also aids graduates who are seeking employment. The college maintains friendly and cooperative relations with labor, management and employment offices. In cooperation with these agencies, the school gives its graduates all possible assistance in securing jobs.

Housing

It is recommended that students moving to Salt Lake City to attend school make advance arrangements for housing.

The school will do all possible to assist in locating housing, but cannot assume responsibility for securing such facilities.

Financial Aid

Utah Tech has financial aid plans to help nearly everyone, such as student loans, grants, scholarships, tuition waivers and part-time employment. Here's a brief explanation of these financial aids:

Tuition Scholarships

State law allows us to waive the tuition of up to 10 percent of our total enrollment each year. Limited to tuition for Utah residents only, the waivers are for full-time students and based on academic excellence.

The college gets private scholarship donations each year. The scholarships vary in value. They are based on academic achievement. Some of the scholarship money is earmarked for special uses. They are:

Sterling Scholar

Given to winners and runners-up of the State Sterling Scholar Program.

Health Occupations

Several scholarships are awarded each year by hospitals and nursing homes to practical nursing students.

Utah Education Fund

The State Legislature sets aside some money for disadvantaged students. These funds are used to match the SSIG funds as awards to students with financial need.

State Student Incentive Grant

A Federal Grant to the State to be used by students with financial need. Federal funds are matched by State funds for direct aid to students.

National Direct Student Loan (NDSL)

This is a Federal government program for those attending at least half-time (7-11 credit hours) who have financial need. Repayment costs just three percent interest starting 10 months after you leave school. Payback is \$30 a month, including interest. Interest starts accruing nine months after you leave school, and the first payment is due 10 months after you leave.

College Work Study (CWS)

You can help work your way through college with a part-time job on campus. The pay is the minimum wage. Federal government pays 80 percent of wages for students who work part-time, and the college pays 20 percent. You must have financial need to qualify.

Supplemental Education Opportunity Grant (SEOG)

These grants are worth up to \$1,500 a year to students who have no other way to finance an education. This money is not paid back.

Basic Educational Opportunity Grant (BEOG)

This is a Federal aid program designed to provide financial assistance to those who need it to attend post-high school educational institutions. Basic Grants are intended to be the "floor" of a financial aid package and may be combined with other forms of aid in order to meet the full costs of education. The amount of your Basic Grant is determined on the basis on your own and your family's financial resources.

Guaranteed Student Loans (GSL)

Guaranteed student loans through many banks or credit unions can also be used at Utah Tech. These include the Federally insured student loan and the Utah Guaranteed Student Loan. Application forms are available either at the lending institution or at the financial aid office.

General Financial Aid Information

Because financial aid is based on family need and because such need is a confidential matter between the student and the college, there is no public notice of financial aid awards.

Financial assistance is awarded for one year, and requests for renewal must be submitted annually.

Financial aid deadline — March 1.

The primary criteria to determine financial aid recipients is financial need. In the case of scholarships, the criteria is academic achievement. An Applicant must be accepted as a student by the college in a program that leads to a certificate or a degree in order to be considered for financial aid. For scholarships, SEOG grants, SSIG grants and work study, an

applicant must be a full-time student. A Basic Grant or an NDSL loan can be awarded on a part-time basis, but they are prorated.

The criteria used to determine the amount of a student's award is the uniform methodology required by the Federal government for the programs which are federally funded. The total aid a student receives must not exceed the amount he needs. This includes all other assistance a student may have, no matter what the source of funds.

In order for a student to continue to receive financial aid, he must be satisfactorily progressing academically, and any changes in his financial situation must be reported to the financial aid office. New applications must be submitted each year.

Conditions under which financial aid may be withdrawn:

1. Failure to maintain good academic standing
2. Placement on disciplinary probation.
3. Failure to meet minimum academic workload (normally 12 credit hours)

4. Misrepresentation on applications or financial statements
5. Withdrawal from school
6. Violation of institutional regulations

The terms and expected repayment for any loan received by a student to assist with his attendance at U.T.C. are as follows:

Payment begins on the first of the tenth month after a student leaves school and are \$30 per month (including principal and interest) until the total amount of loan and interest is paid. Interest is at the rate of 3 percent per year on the unpaid balance. It is a student's responsibility to be sure that the institution is informed as to his current address so statements may be mailed correctly.

The financial aid office at the college has been designated by the institution to provide financial aid information and the necessary forms to students and assist them with any questions or problems regarding financial aid.

Student Expenses

The following figures represent estimated minimal needs for three quarters (one school year) at Utah Tech for a single dependent student. Other budgets available in the Financial Aids Office for independent students both single and married.

| Expenses | Commuter | Living Away From Home |
|---------------------------|----------------|-----------------------|
| Tuition and Fees | \$ 414 | \$ 414 |
| Books, Tools and Supplies | 200 | 200 |
| Room and Board | 500 | 1,733 |
| Transportation | 240 | 240 |
| Personal | 450 | 450 |
| TOTAL | \$1,804 | \$3,037 |

Personal expenses will vary from student to student due to the variety in individual tastes and budgets. Entertainment, food, clothing, and transportation costs are just a few areas which allow for great flexibility.

Tuition and Fees*

Credit Classes

Per Quarter Costs:

| | |
|--------------------|----------|
| One Credit Hour | \$ 39.00 |
| Two Credit Hours | \$ 39.00 |
| Three Credit Hours | \$ 52.00 |
| Four Credit Hours | \$ 66.00 |
| Five Credit Hours | \$ 79.00 |
| Six Credit Hours | \$ 92.00 |
| Seven Credit Hours | \$106.00 |
| Eight Credit Hours | \$119.00 |
| Nine Credit Hours | \$132.00 |
| Ten Credit Hours | \$145.00 |

* This fee schedule is subject to change without notice.

Nonresidents pay \$234 per quarter in addition to the above amount for ten or more credit hours. If nonresidents take fewer than ten credit hours the non-resident fee is prorated. Nonresident tuition applies only to Fall, Winter, and Spring quarter.

Late Fee: \$10.00

Bad Check Charge: \$5.00

A non-refundable \$10.00 fee is charged for testing and/or admission.

Refunds: Tuition and fees are refundable. Full refund before commencement of the quarter. Refunds for 10 hours or less pro-rated 90% for the first 7 calendar days of the quarter, 70% through the 14th day, and 50% through the 21st day. No refund after the 21st calendar day.

Refunds for classes of less than one quarter in length are pro-rated 90% first two days of class, 70% through the fourth day of class and 50% through the sixth day. No refund after the class has met six days.

Maximum registration without special permission is 20 credit hours. Extra hours above maximum registration must be approved by a Dean or Division Head.

Minimum Class Size: Classes will normally not be taught for fewer than ten students. When classes are cancelled for insufficient enrollment, all tuition and fees will be returned.

Non-Credit Classes: Charges for non-credit classes will depend upon the nature of the course and the number of contact hours of instruction. Total charges will be printed in the quarterly class schedule.

Cap and Gown Fee: Cap and gown are required for all graduating students. The rental fee charge is the responsibility of the student.

Auditing Classes: The charge for auditing courses is the same as taking the course for credit or for a grade. Students must declare their intention to audit a course at the time of registration. The student's transcript of credit will show "AU" instead of a grade for the course.

Special Fees and Exceptions

Non-Resident Fees: Residence in Utah merely for the purpose of attending Utah Technical College does not entitle the student to resident classification. Requirements for resident classification include establishing a permanent domicile within the State of Utah prior to registration with the intention to maintain a permanent residence within the state and abandonment of domicile elsewhere.

Scholarship Fees: Students attending on a tuition-paid scholarship are required to pay \$28.00 per quarter for student fees.

Late Registration Fee: Students who do not make fee payments by the due dates will be charged a late registration fee of \$10. Anyone whose check is dishonored by a bank will be charged the late fee plus \$5 for handling.

Veteran Educational Benefits

Utah Technical College at Salt Lake is approved as an educational training center.



Veterans and dependents of veterans are entitled to educational benefits. The campus Veterans Office (Administration Building, Room 150G) provides answers to many questions dealing with government opportunities, gives educational counseling, and is the certifying office. Audits, challenged courses, or repeated courses are not considered for subsistence. Allowances are paid upon the completion of a month's schooling at the beginning of the following month on the schedule listed overleaf.

Veterans must enroll for 12 credit or 22 or 27 clock hours, whichever is appropriate for their major, to receive the maximum monthly educational allowance.

A student who is a veteran may repeat a class once for which he has earned an "E" grade and receives federal benefits if the class is needed for normal progression or required for graduation.

| Type of Training | No. Deps. | 1 Dep. | 2 Deps. | Each Add. Dep. |
|--------------------------------|-----------|--------|---------|----------------|
| Institutional Full-Time | \$311 | \$370 | \$422 | \$26 |
| Three-Quarters | 233 | 277 | 317 | 19 |
| Half-Time | 156 | 185 | 211 | 13 |

Student Insurance

The student's insurance fee provides limited coverage for accidental bodily injury to students while attending class or participating in school-sponsored activities. Travel by insured persons is covered while traveling directly between their home premises and the place of such activity.

Senior Citizens

The 1977 Legislature enacted HB 60 which provides for citizens of Utah 62 years of age and older to enroll in classes on a space available basis at a low or no cost to them. The bill further specifies that the enrollment of senior citizens is not to add to the cost of instruction and that the credit hours produced may not be counted toward FTE's.

In accordance with this provision, the College policy will be as follows:

1. Senior citizens will be authorized to enroll for classes or laboratories on an audit basis (non-credit).
2. A non-refundable \$10.00 registration fee will be charged each senior citizen once each fiscal year. This will be collected at the time of initial enrollment.
3. A laboratory fee will be charged for each laboratory in which

senior citizens are permitted to enroll.

4. A minimum of 10 students must be enrolled in order to offer a class or laboratory. Senior citizens may not be counted toward this minimum number.
5. Space will be considered as "available" for enrollment of senior citizens after the end of the third week of each quarter.
6. Waiting lists of those individuals desiring to enroll in specific classes or labs are to be maintained but no fees will be accepted until they are enrolled.

Credit

The following numbering system for classes is employed by the College and is accepted by the Utah System of Higher Education.

001-049 Remedial or preparatory courses — will not satisfy degree requirements.

050-099 Terminal courses — would not ordinarily satisfy baccalaureate requirements (non-transferable).

100-299 Lower division courses acceptable for transfer credit by all schools in the Utah System of Higher Education. However, not all courses may be acceptable toward graduation requirements. Students planning to transfer credit

toward a four-year program at another college or university should check with their Division Head for information on transferability of specific classes.

Unit of Credit: A quarter hour of credit represents a minimum of one class hour a week of lecture, demonstration or discussion, combined with two hours of preparation outside of class for each credit earned, or three hours a week of laboratory, field, or shop work. Normally there are eleven weeks in each quarter and the class hour is 50 minutes. Quarter hours may be reduced to semester hours by multiplying by two-thirds.

Residency Credit: A student must take at least 25% of required credits in residency at the College to qualify for graduation. Waiver, transfer, or challenge credits do not fulfill residency credit requirements.

Minimum Registration for a Full-Time Student: The minimum registration for a full-time student load is considered to be twelve credits. To be eligible for student body office, students are required to be registered for twelve credits or more.

Waiver and Transfer of Credit

1. When students present a college transcript with their application for admission, the general education credits will be evaluated by the admissions office and credits accepted for transfer will be recorded. Grades of "D" or "E" will not be accepted for transfer.

2. Trade and/or technical school transfers may receive hour-for-hour credit providing the objective is the same. If training is toward a different

objective, only time for like units may be allowed.

3. Students who desire advanced placement, waiver of credit for previous experience, or credit by examination must apply and make necessary arrangements through their major division head at the time of registration or earlier. Documentary proof will be required before any such credit may be considered.

Challenging of Courses for Credit

Most classes at UTC may be challenged for credit by officially registered students who have gained the equivalent of formal classroom instruction from previous training, experience and independent study.

The student will make application and arrangements with the instructor of the subject for challenge examinations. Upon successful completion of the examinations, and any other requirements specified by the instructor, the student will be given a passing grade (P) for the class. The fee for each class challenged is \$10.00 payable after the class has been successfully challenged. Challenge credit will not be given for any course that a student has been previously registered in. Credits earned by challenging are not considered part of the residence requirement.

Books — Tools — Supplies

Cost of books, tools, and supplies varies according to the course. Fluctuation in cost of these items may necessitate increases in price without notice. Students must acquire the books, tools, and supplies that are required for the classes in which they are enrolled. The

lists are available in the department offices.

Admission Procedure

Applicants for enrollment in the day school or extended day classes should follow one of the following procedures:

1. High School graduates or transfer students may enroll as follows:
 - a. Complete the application for enrollment form.
 - b. Attach a transcript of High School or College credits.
 - c. Pay a \$10.00 application fee.
2. Applicants who are **not** high school graduates:
 - a. Complete the application for enrollment form.
 - b. Pay the \$10.00 application fee.
 - c. Take the placement test given at the college. (Contact college for appointment).

Note: When an applicant cannot visit the college, the general aptitude test battery may be taken at a local employment office and then those scores, together with the application for enrollment and \$10.00 application fee, must be sent to the college admissions office.

3. Evening students:
 - a. Applications for admission to apprentice classes must be approved by the Apprenticeship Coordinator before registration.
 - b. Applicants for other evening classes will present their application for approval prior to payment of fees.

Readmission

When students interrupt their continuous enrollment by not enrolling for one or more quarters (with the exception of Summer Quarter) they may be readmitted by simply requesting the Admissions Office to prepare a registration packet for the quarter they intend to enroll.

Grades and Reports

Report cards are distributed to occupational preparatory students at the end of each quarter. Evaluation of performance and performance characteristics are graded as follows:

| | |
|-----|-----------------------------|
| A | = 4.0 Superior Grade |
| A- | = 3.7 |
| B+ | = 3.4 |
| B | = 3.0 Above Average Grade |
| B- | = 2.7 |
| C+ | = 2.4 |
| C | = 2.0 Average Grade |
| C- | = 1.7 |
| D+ | = 1.4 |
| D | = 1.0 Lowest Passing Grade |
| D- | = 0.7 |
| E | = 0.0 Failing Grade |
| UW* | = 0.0 Unofficial Withdrawal |
| P | = Passing Grade |
| I | = Incomplete Grade* |
| W | = Withdrawal |
| AU | = Audit |
| EX | = Extended Grade* |

*All work must be satisfactorily completed within 3 months of the grade or it will be changed to "E"

Repeat Courses: A Student may repeat a course in which a low grade has been received. The original grade will remain on the record. When a course has been repeated, the grade earned

the last time the course is taken is the grade used in calculation of the student's grade point average. A student repeating a course must notify the Registration Office.

Records

Permanent records of students' attendance and achievement are maintained in the school office. Transcripts will be furnished on request with 24 hours notice. The first transcript will be issued free. Each transcript thereafter will cost the applicant \$1.00. Transcripts will not be released for any student who has any financial obligation to the college.

Program Changes

Course changes, adds, and drops are permitted during the first two weeks of the quarter. Students desiring to change course schedules will obtain a Change in Registration Card from the Registrar's Office. The card must be filled out completely and properly signed by the student. A \$1.00 fee will be charged for processing each change in registration.

Program changes after the deadline for adding or dropping courses will be honored only in extreme circumstances. Such changes must have the written approval of the Instructor, Advisor, the appropriate Division Head or Dean and the Registrar.

Withdrawal from the College

If it becomes necessary for students to completely withdraw from the college, they are required to make an appointment with their advisor for an exit interview. Students desiring to withdraw

from the College will obtain an Application of Withdrawal from the Registrar's Office. Applications must be filled out completely and properly signed by the Advisor and Division Head or Dean.

The Application to Withdraw must be returned to the Registrar's Office. No entry will be made on the student's record for withdrawals during the first three weeks of the quarter. Withdrawals after the third week of school will be shown on the official Transcript of the students as a "W". Students withdrawing during the last two weeks of the quarter should be given a grade of "E".

Note: Students who merely stop attending class and do not follow the official withdrawal procedure will be given the grade of "UW" at the end of the quarter. "UW" is equivalent to an "E". Students may also withdraw from individual classes after the third week of the quarter by following the above procedure.

Graduation

Candidates for graduation must obtain and complete an Application for Graduation from the Registrar or Division Head and file it with the Registrar during the fourth week of the next to last quarter of training.

Applicants will receive a written report on their standing for graduation upon which to plan their program for the remainder of their training.

Potential graduates must complete the graduation requirements applicable to the class with which they are graduating.

Attendance at Commencement Exercises is expected at the time of graduation.

To be eligible for graduation from Utah Technical College, a student must have at least a 1.9 G.P.A., must have taken at least 25% of required credits in residency at the College, and must qualify for one of the following certificates:

Certificate of Graduation: This certificate is awarded after satisfactory completion of a minimum of 48 quarter credit hours in a prescribed course of study. The chosen course of study includes the required general education, theory and laboratory classes.

Diploma: The Diploma is awarded to those students who have satisfactorily completed a minimum of 96 quarter credit hours in a prescribed course of study (most courses require more than 96 credit hours). The chosen course of study includes the required general education, theory, and laboratory classes.

Associate in Applied Science

Degree: This degree is awarded to those students who have satisfactorily completed a minimum of 96 quarter credit hours in a prescribed course of study (most courses require more than 96 credit hours) including General Education, related, and trade/technical classes. A minimum of 24 quarter credit hours of applicable General Education type courses, numbered 100 or above, must be taken in lieu of courses marked with an asterisk (*) under each program listing.

General Education requirements for the Associate in Applied Science Degree must include English 101, and 21 addi-

tional credit hours in at least three of the following areas and must parallel the prescribed course of study:

- (HU) Humanities
- (LS) Life Sciences
- (PS) Physical Sciences
- (SS) Social Sciences

The Associate in Applied Science Degree is offered in the following areas: Apprenticeship, Architectural Drafting Technology, Auto Body Repair and Painting, Auto Mechanics, Building Construction, Business Management, Commercial Art, Data Processing, Drafting and Design Technology, Electronic Technology, Executive Secretary, Food Service, Heavy Duty Mechanics, Hotel-Motel Management, Transportation Management and Welding.

Non-high school graduates are expected to pass G.E.D. Equivalency Tests prior to receiving the Associate Degree. The tests are administered by the College. A \$5.00 fee is charged to applicants taking the test.

Certificate of Completion: This certificate is awarded to those students who satisfactorily complete requirements for programs of less than 48 quarter credit hours in length, and certain non-credit programs.

A student cannot graduate until all financial obligations to the college have been cleared.

Student Government

A democratic school government operates under an established constitution and by-laws through elected officers and the Student Senate. Student activities include dances, assemblies, sports events, outings, and safety programs

throughout the year. Several student clubs are in operation on the campus.

Clubs

The quality of a student's educational experience may be greatly enhanced through participation with other students in club activities. Students may share their interest in sports, travel, vocations, social activities, study and many other things through club activities. There are many active clubs on campus and any time a group of students desires to organize and promote a new program they are encouraged to do so.

Sports

The College fosters a variety of intramural sports including flag football, basketball, volleyball, badminton, horseshoes, ping pong. Students interested in sporting and recreation events are invited to contact the Recreation Director in the College Center.

College Hours

Classes operate from 7:30 a.m. to 11 p.m. Monday-Friday and Saturday from 8:30 a.m. to 3:30 p.m.



ACCOUNTING

Division: Accounting, Computing, and Management

Division Head: Jerry H. Fullmer

**Faculty: C. Brown, R. Child, R. Cox, M. Moss, W. Moss, H. Moulton,
J. Van Os**

Rampton Technology Building, Room 216

DESCRIPTION

The Accounting graduate may enter the career field as a clerk, bookkeeper, or junior accountant. In opportunities thereafter, one may develop as accountant, treasurer, Certified Public Accountant (with further training), controller, or in other advanced management situations.

Skills acquired in the course of training include basic typing, office machines, data processing, and all phases of basic accounting.

Accounting is a growing field, and there are currently good openings, since most levels of business activity require well-trained personnel in this area. Graduates should expect to enter employment locally from \$500.00 a month and up. Many accountants earn salaries in excess of \$1,000.00 a month.

Certificate. On completion of requirements in the Accounting Program, students may enter any of the Business Management programs for a Diploma or A.A.S. Degree.

| First Quarter (F,W,S) | Hrs./Wk. | | |
|----------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ACCT 101 Elem. Acctg. I. | 5 | 3 | 5 |
| ENG 101 English Comp. | 3 | — | 3 |
| MTH 138 Advanced Bus. Math. | 5 | — | 5 |
| OA 070 Keyboarding. | — | 5 | 2 |
| | 13 | 8 | 15 |

21 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$70.00

| Second Quarter (W,S,Su) | Hrs./Wk. | | |
|--------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ACCT 102 Elem. Acctg. II. | 5 | 3 | 5 |
| OA 131 Office Mach. | — | 5 | 2 |
| MGT 105 Bus. Law I. | 5 | — | 5 |
| ENG 115 Bus. Commun. | 3 | — | 3 |
| DP 101 Basic Comp. Conc. | 2 | 3 | 3 |
| | 15 | 11 | 18 |

26 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$60.00



| Third Quarter (S,Su) | Hrs./Wk. | | |
|------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MGT 103 Mgrl. Analysis. | 5 | 3 | 5 |
| MGT 221 Cred. & Coll. | 3 | — | 3 |
| MKTG 102 Prin. of Mktg. | 4 | 1 | 4 |
| DP 201 Auto. Commun. | 2 | 3 | 3 |
| ECN 101 Gen. Economics. | 3 | — | 3 |
| | 17 | 7 | 18 |

24 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$60.00



APPLIANCE TECHNICIAN

Division: Appliance Trades
Division Head: Verlaine Zito
Faculty: R. Bolinder
Metal Trades Building, Room 228A

DESCRIPTION

The Appliance Technician has the basic and necessary electrical and mechanical fundamentals for repairing all types of major appliances.

Job opportunities include servicing, installing or selling major appliances as well as parts sales. The major appliance field includes domestic refrigerators, freezers, automatic washers and dryers (both gas and electric), dishwashers, electric ranges, self-cleaning electric ranges and micro-wave ovens.

Upon completion of the course, the student is ready to work in the industry for large metropolitan service companies specializing in one brand or to work for an appliance dealer on a variety of brands. After two years of work experience, wages range from \$5.00 to \$10.00 per hour. The appliance technician frequently works independently. Decision making and problem solving are an important part of his work.

As appliances become more sophisticated, the demand for appliance technicians grows steadily.

Certificate

| First Quarter (F) | Hrs./Wk. | | |
|-------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MAR 110 Refrig. Sys. | — | 15 | 5 |
| MAR 111 Fund. of Refrig. Sys. | 5 | — | 5 |
| MTH 060 Applied Math. | 5 | — | 5 |
| ELC 104 AC-DC Fund. | 5 | — | 5 |
| | 15 | 15 | 20 |

30 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$500.00

| Second Quarter (W) | Hrs./Wk. | | |
|--------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MAR 120 Basic App. Sys. | — | 15 | 5 |
| MAR 121 Fund. Maj. Appl. | 5 | — | 5 |
| ELC 105 AC-DC Circuits. | 5 | — | 5 |
| ELC 106 Solid State Fund. | 5 | — | 5 |
| | 15 | 15 | 20 |

30 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$34.00



| Third Quarter (S) | Hrs./Wk. | | |
|-------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MAR 130 Adv. Appl. Lab. | — | 15 | 5 |
| MAR 131 Adv. Mech. Thry. | 5 | — | 5 |
| ELC 108 Adv. Elect. | 5 | — | 5 |
| MAR 132 Cust. Relations. | 5 | — | 5 |
| | 15 | 15 | 20 |

30 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$52.00



APPRENTICESHIP

Division: Apprenticeship

Division Head: Geoffrey R. Brugger

Construction Trades Building, Room 254A

DESCRIPTION

A related training program for workers learning a trade through apprenticeship or on-the-job training. Courses are offered primarily in the evening during the Fall and Winter quarters. Training consists of 81 clock-hours per quarter with emphasis on special theory and shop practices which supplement on-the-job experience.

Students who graduate from an apprenticeship program and receive a certificate of completion from the Utah Apprenticeship Council will be eligible to apply for the Associate in Applied Science Degree in Apprenticeship.

Associate in Applied Science Degree

To qualify for the Associate in Applied Science Degree, apprentices must fulfill the following conditions:

1. The apprentice must be a high school graduate or successfully complete an equivalency examination.
2. The apprentice must have fulfilled the indenture contract and received a certificate of completion.
3. The apprentice must complete the 24 hours of General Education requirements required of all candidates for the degree.
4. The apprentice must complete at least 25 percent of his or her program in residence at Utah Technical College at Salt Lake.
5. The apprentice must meet all graduation requirements as indicated under Graduation in the current Utah Technical College Catalog.



Apprentices enrolled in the following programs are currently eligible for an A.A.S. Degree:

| | |
|-----------------------|----------------------------|
| Auto/Diesel Mechanics | Machinist |
| Boilermaking | Sheet Metal |
| Brick Masonry | Surveying |
| Carpentry | Painting and Decorating |
| Cabinet Making | Pipefitting |
| Electricity | Plumbing |
| Glazing | Welding |
| Ironworking | |

Students who choose to earn an A.A.S. Degree are required to earn a minimum of 24 qtr-credit hours of applicable General Education type classes, numbered 100 or above.



ARCHITECTURAL TECHNOLOGY

Division: Graphic Arts

Division Head: Walter L. White

Faculty: K. Hall, L. Jansen, G. Johnson, R. Ninow

Rampton Technology Building, Rooms 503, 504, 508, 509



DESCRIPTION

An architectural drafting technician prepares working drawings from rough sketches and verbal instructions. The technician will be able to do structural, plumbing, mechanical, electrical, presentation drawings, and architectural detailing in a neat, accurate, and legible manner. The technician will also be able to do fundamental field surveying, specification writing, building and zoning investigation, and structural calculations which require knowledge of plane geometry, algebra, trigonometry, mechanics and strength of materials, methods of construction, and technical writing skills.

Since the technician works closely with professionals such as architects, engineers, and contractors and also performs job inspections and makes occasional client contact, neat appearance and good verbal skills are required.

This program is accredited by the American Institute of Architects.

Graduates can expect to receive from \$3.50-\$5.00 starting hourly salary in architects' or engineers' offices, and in contractors, material suppliers and other construction related fields.

Diploma, A.A.S. Degree



General Education classes marked with an asterisk (*) are required for a Diploma. Students who choose to earn an A.A.S. Degree are required to earn a minimum of 24 quarter credit hours of applicable General Education type classes, numbered 100 or above, in lieu of classes marked with an asterisk (*). These classes must include ENG 101, MTH 101, PHY 101, and 11 additional credit hours.

Refer to the General Education section of the catalog on page 79.

| | Hrs./Wk. | | |
|-------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| First Quarter (F,W) | | | |
| AT 110 Arch. Drafting I..... | 1 | 14 | 5 |
| AT 111 Arch. Constr. I..... | 3 | — | 3 |
| COM 055 Communications*..... | 5 | — | 5 |
| MTH 051 Elem. Algebra..... | 5 | — | 5 |
| AT 236 Persp. & Dilin. I..... | 2 | — | 2 |
| | 16 | 14 | 20 |

30 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$170.00

| | Hrs./Wk. | | |
|-------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| Second Quarter (W,S) | | | |
| AT 120 Arch. Drafting II..... | 1 | 14 | 5 |
| AT 112 Arch. Constr. II..... | 5 | — | 5 |
| MTH 052 Elem. Trig..... | 2 | — | 2 |
| MTH 056 Scientific Calc..... | 1 | — | 1 |
| DDT 101 Smoley's Tables..... | 1 | — | 1 |
| Soc. Science Elective**..... | 3 | — | 3 |
| | 13 | 14 | 17 |

27 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$65.00

| | Hrs./Wk. | | |
|--------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| Third Quarter (S,Su) | | | |
| AT 130 Arch. Drafting III..... | 1 | 14 | 5 |
| AT 113 Arch. Constr. III..... | 3 | 1 | 3 |
| AT 134 Arch. History..... | 3 | — | 3 |
| AT 237 Persp. & Dilin. II..... | 2 | — | 2 |
| PHY 055 Applied Physics*..... | 5 | — | 5 |
| | 14 | 15 | 18 |

29 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$55.00

| | Hrs./Wk. | | |
|------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| Fourth Quarter (F**) | | | |
| AT 210 Arch. Detailing..... | 1 | 14 | 5 |
| AT 211 Arch. Constr. IV..... | 4 | 1 | 4 |
| AT 215 Structure I..... | 5 | — | 5 |
| AT 202 Mech. Systems..... | 2 | 3 | 3 |
| | 12 | 18 | 17 |

30 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$90.00

| | Hrs./Wk. | | |
|----------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| Fifth Quarter (W**) | | | |
| AT 220 Arch. Work. Drws. I... .. | 1 | 14 | 5 |
| AT 212 Arch. Constr. V..... | 4 | 1 | 4 |
| AT 226 Structure II..... | 5 | — | 5 |
| AT 229 Codes & Zoning..... | 3 | — | 3 |
| AT 241 Arch. Inspection..... | 2 | — | 2 |
| | 15 | 15 | 19 |

30 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$45.00

| | Hrs./Wk. | | |
|-----------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| Sixth Quarter (S**) | | | |
| AT 230 Arch. Work. Drws. II... .. | 1 | 14 | 5 |
| AT 213 Arch. Constr. VI..... | 4 | 1 | 4 |
| AT 216 Specifications..... | 3 | 2 | 4 |
| AT 239 Arch. Estimating..... | 4 | 1 | 4 |
| | 12 | 18 | 17 |

30 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$45.00

**Nine credit hours of prior approved EDDT course work may be substituted for nine credit hours of AT courses in the fourth, fifth or sixth quarters — not to exceed nine credit hours of EDDT courses in the total program.



ASSOCIATE DEGREE NURSING PROGRAM

Division: WSC/UTC Cooperative A.D. Nursing Program

Director: Chris Henningson

Faculty: L. Duke, D. Hall, A. Mumford, M. Williams

Nelson Administration Building, Room 238A



DESCRIPTION

Weber State College, in cooperation with Utah Technical College at Salt Lake, has extended the Associate Degree Nursing Program to the Salt Lake Area. Students will graduate from Weber State College with an Associate of Science Degree in Nursing.

Students who are Utah residents may apply for admission by contacting the Director, W.S.C./U.T.C. Coop Nursing Program, 4600 South Redwood Road, Salt Lake City, Utah 84107.

Applicants must meet requirements for graduation from Weber State College. Courses providing all educational requirements and clinical experience will be offered in the Salt Lake area. No out-of-state students will be admitted to the Cooperative Associate Degree Nursing Program.

Registration takes place at Utah Technical College at Salt Lake unless there are unusual circumstances. Deadline for completed application procedure is approximately February 28 and the selection of students is made by April 15. First Quarter classes are prerequisites to Nursing Classes.

Associate Degree



| First Quarter (Su) | Hrs./Wk. | | |
|------------------------------------|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| LS 201 Human Anat. & Phys. | 5 | 1 | 5 |
| LS 111 Microbiology | 5 | 1 | 5 |
| FL 101 Nutrition | 3 | — | 3 |
| HQ 120 Intro. to Nursing | 3 | — | 3 |
| | 16 | 2 | 16 |

18 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$30.00

| Second Quarter (F) | Hrs./Wk. | | |
|---------------------------------|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| NSG 101 Nursing | 5 | — | 5 |
| NSG 102 Nursing Lab | — | 15 | 5 |
| CEM 101 Intro. to Chem. | 5 | 2 | 5 |
| | 10 | 17 | 15 |

27 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$200.00

| Third Quarter (W) | Hrs./Wk. | | |
|--------------------------------------|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| NSG 111 Nursing | 6 | — | 6 |
| NSG 112 Nursing Lab | — | 18 | 6 |
| FL 150 Child Growth & Devel. | 5 | — | 5 |
| | 11 | 18 | 17 |

29 Clock Hour Program
Approx. Cost of Books, tools,
Supplies = \$30.00

| Fourth Quarter (S) | Hrs./Wk. | | |
|-------------------------------|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| NSG 121 Nursing | 6 | — | 6 |
| NSG 122 Nursing Lab | — | 18 | 6 |
| PSY 101 Psychology | 3 | — | 3 |
| | 9 | 18 | 15 |

27 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$40.00

| Fifth Quarter (F) | Hrs./Wk. | | |
|----------------------------------|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| NSG 221 Nursing | 4 | — | 4 |
| NSG 222 Nursing Lab | — | 15 | 5 |
| ENG 101 English Comp. | 3 | — | 3 |
| HO 130 Pathophysiology | 3 | — | 3 |
| | 10 | 15 | 15 |

25 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$40.00

| Sixth Quarter (W,S) | Hrs./Wk. | | |
|-------------------------------|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| NSG 201 Nursing | 4 | — | 4 |
| NSG 202 Nursing | — | 15 | 5 |
| ENG 102 English Comp. | 3 | — | 3 |
| ENG 251 American Lit. | 3 | — | 3 |
| | 10 | 15 | 15 |

25 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$25.00

| Seventh Quarter (W,S) | Hrs./Wk. | | |
|--------------------------------------|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| NSG 211 Nursing | 4 | — | 4 |
| NSG 212 Nursing Lab | — | 15 | 5 |
| ENG 103 English Comp. | 3 | — | 3 |
| ENG 160 Effective Speaking | 3 | — | 3 |
| NSG 299 Nursing Seminar | 2 | — | 2 |
| | 12 | 15 | 17 |

27 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$100.00



AUTO BODY PAINT

Division: Automotive

Division Head: Neal D. Grover

Faculty: C. Spainhower

Automotive Trades Building, Room 208

DESCRIPTION

Automobile painters restore old and damaged motor vehicles to "look like new." These skilled workers repaint vehicles that have lost the luster of their original paint and the repaired portions of vehicles damaged in accidents.

To prepare an automobile for painting, the painter prepares the vehicle to receive the new finish. A spray gun is then used to apply primer coats to the automobile's surface. After the primer coat dries, the surface is sanded until it is smooth enough to be painted. Before painting repaired portions of an automobile, the painter may mix paints or colors to match the existing color of the car. The spray gun must be handled skillfully so the paint is applied evenly. A knowledge of the various materials and supplies used in the refinishing process is vital.

This program requires manual dexterity, average scholastic ability, and an appreciation and understanding of color.

Students may enter this program winter quarter if openings are available.

Certificate



| First Quarter (F) | Hrs./Wk. | | |
|------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ABP 110 Auto Paint Lab. | — | 20 | 7 |
| ABP 111 Auto Painting. | 5 | — | 5 |
| MTH 050 Voc. Math. | 5 | — | 5 |
| | 10 | 20 | 17 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$210.00

| Second Quarter (W) | Hrs./Wk. | | |
|---------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ABP 120 Color Applic. Lab. | — | 20 | 7 |
| ABP 121 Color Application. | 5 | — | 5 |
| COM 055 Communications. | 5 | — | 5 |
| | 10 | 20 | 17 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$18.00

| Third Quarter (S) | Hrs./Wk. | | |
|----------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ABP 130 Color Matching Lab. | — | 20 | 7 |
| ABP 131 Color Matching. | 5 | — | 5 |
| PSY 055 Human Relations. | 3 | — | 3 |
| MGT 150 Bus. for Trade Ocp. | 3 | — | 3 |
| | 11 | 20 | 18 |

31 Clock Hour Program
Approx. Cost of Books, tools,
Supplies = \$29.00



AUTO BODY REPAIR

Division: Automotive

Division Head: Neal D. Grover

Faculty: V. Hansen, N. Grover

Automotive Trades Building, Room 208

DESCRIPTION

Auto Body Repair workers are skilled individuals who repair damaged motor vehicles by straightening bent frames, removing dents from fenders and body panels, welding torn metal, and replacing badly damaged parts. Body repair people usually are qualified to repair all types of vehicles, although most work is on automobiles and small trucks. The body repair person's work is characterized by variety, because each damaged vehicle presents a different problem.

The body repair person's work requires fast job analysis and ability to visualize what is needed to restore the damaged automobile. Welding light gauge metal is one of the skills to be acquired along with skill in parts repair and replacement.

Young people interested in entering auto body repair should be in good physical condition and have good eye-hand coordination.

Students may enter this program winter quarter if openings are available.

Certificate

| First Quarter (F) | Hrs./Wk. | | |
|-------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| AB 110 Auto Body Repair | — | 20 | 7 |
| AB 111 Metal and Proc. | 5 | — | 5 |
| PSY 055 Human Relations | 3 | — | 3 |
| WLD 108 Related Welding | 2 | 3 | 3 |
| | 10 | 23 | 18 |

33 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$305.00

| Second Quarter (W) | Hrs./Wk. | | |
|-------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| AB 120 Auto Body Recon. | — | 20 | 7 |
| AB 121 Stress Analysis | 5 | — | 5 |
| MTH 050 Voc. Math. | 5 | — | 5 |
| | 10 | 20 | 17 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$18.00



| Third Quarter (S) | Hrs./Wk. | | |
|----------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| AB 130 Adv. Auto Body Rec. | — | 20 | 7 |
| AB 131 Estimating — Align. | 5 | — | 5 |
| PHY 055 Applied Physics | 5 | — | 5 |
| | 10 | 20 | 17 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$18.00



AUTO BODY REPAIR AND PAINT

Division: Automotive

Division Head: Neal D. Grover

Faculty: V. Hansen, C. Spainhower

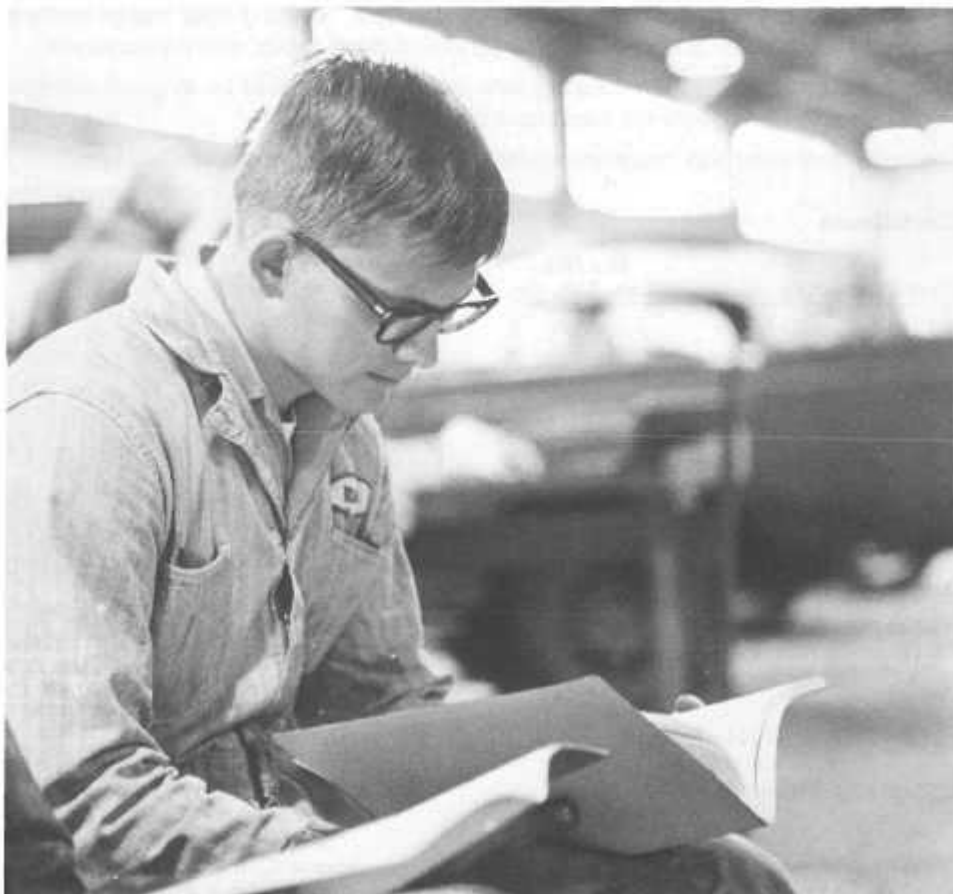
Automotive Trades Building, Room 208

DESCRIPTION

This is a two-year composite program of both Auto Body Paint and Auto Body Repair. Students enrolled in the program register for the same theory and laboratory classes; related and General Education subjects differ from those listed in the Auto Body Paint and Auto Body Repair Certificate programs.

Students may enter this program winter quarter if openings are available.

Diploma or A.A.S. Degree





General Education classes marked with an asterisk (*) are required for a Diploma. Students who choose to earn an A.A.S. Degree are required to earn a minimum of 24 qtr. credit hours of applicable General Education type classes, numbered 100 or above, in lieu of classes marked with an asterisk (*). In the Auto Body Paint and Repair program these classes must include ENG 101, PHY 101, and 16 additional credit hours.

| First Quarter (F) | Hrs./Wk. | | |
|---------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ABP 110 Auto Paint Lab. | — | 20 | 7 |
| ABP 111 Auto Painting | 5 | — | 5 |
| MTH 050 Voc. Math* | 5 | — | 5 |
| | 10 | 20 | 17 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$207.00

| Second Quarter (W) | Hrs./Wk. | | |
|-------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ABP 120 Color Applic. Lab. | — | 20 | 7 |
| ABP 121 Color Application | 5 | — | 5 |
| COM 055 Communications* | 5 | — | 5 |
| | 10 | 20 | 17 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$18.00

| Third Quarter (S) | Hrs./Wk. | | |
|-------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ABP 130 Color Matching Lab. | — | 20 | 7 |
| ABP 131 Color Matching | 5 | — | 5 |
| PSY 055 Human Relations* | 3 | — | 3 |
| MGT 150 Bus. for Occup. | 3 | — | 3 |
| | 11 | 20 | 18 |

31 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$29.00

| Fourth Quarter (F) | Hrs./Wk. | | |
|-----------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| AB 110 Auto Body Repair. | — | 20 | 7 |
| AB 111 Metal and Proc. | 5 | — | 5 |
| WLD 108 Related Welding | 2 | 3 | 3 |
| | 7 | 23 | 15 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$305.00

| Fifth Quarter (W) | Hrs./Wk. | | |
|---------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| AB 120 Auto Body Recon. | — | 20 | 7 |
| AB 121 Stress Analysis | 5 | — | 5 |
| ECN 055 Ecn. Pers. Finance* | 3 | — | 3 |
| | 8 | 20 | 15 |

28 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$18.00

| Sixth Quarter (S) | Hrs./Wk. | | |
|------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| AB 130 Adv. Auto Body Rec. | — | 20 | 7 |
| AB 131 Estimating & Align. | 5 | — | 5 |
| PHY 055 Applied Physics* | 5 | — | 5 |
| | 10 | 20 | 17 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$18.00



AUTO MECHANICS

Division: Automotive

Division Head: Neal D. Grover

**Faculty: J. Cameron, I. Dickson, H. Julander, B. Nielson, R. Southwick,
J. Witt**

Automotive Trades Building, Room 208



DESCRIPTION

The Automobile Mechanics program is a six-quarter program. The program is designed to give a student training in both domestic and imported vehicle mechanics. A student graduating from this program should enjoy a wide selection of job opportunities in a very employable industry.

Most automobile mechanics perform a variety of repairs. Some mechanics, such as automatic transmissions specialists, tune-up experts, automobile air-conditioning specialists, front end mechanics, and brake mechanics, specialize in one or two types of repair. However, specialists with all-around skills may perform general automobile repair work. Those wishing to specialize in one area of training (tune-up, chassis, drive trains, etc.) may do so and receive a department certificate of completion.

Most mechanics are required to purchase their own hand tools. Employers furnish engine analyzers, test equipment, and special tools for servicing such units as automatic transmissions. Young people interested in becoming auto mechanics should be in good physical condition, have above average ability, good mechanical aptitude, and eye-hand coordination.

Diploma, A.A.S. Degree



General Education classes marked with an asterisk (*) are required for a Diploma. Students who choose to earn an A.A.S. Degree are required to earn a minimum of 24 qtr. credit hours of applicable General Education type classes, numbered 100 or above, in lieu of classes marked with an asterisk (*). In the Auto Mechanics program these classes must include ENG 101, PHY 101 and 16 additional credit hours.

| First Quarter (F,W,S,Su) | Hrs./Wk. | | |
|----------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| AM 110 Auto Chassis Rep. | — | 20 | 7 |
| AM 111 Auto Chassis | 5 | — | 5 |
| WLD 105 Welding | 2 | 3 | 3 |
| | 7 | 23 | 15 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$500.00

| Second Quarter (F,W,S,Su) | Hrs./Wk. | | |
|------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| AM 130 Auto Engines Lab. | — | 20 | 7 |
| AM 131 Auto Engines | 5 | — | 5 |
| PSY 055 Human Relations* | 3 | — | 3 |
| | 8 | 20 | 15 |

28 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$45.00

| Third Quarter (F,W,S,Su) | Hrs./Wk. | | |
|---------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| AM 120 Fuel & Elec. Sys. Ser. | — | 20 | 7 |
| AM 121 Fuel & Elec. Sys. | 5 | — | 5 |
| MTH 050 Voc. Math* | 5 | — | 5 |
| | 10 | 20 | 17 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$45.00

| Fourth Quarter (F,W,S,Su) | Hrs./Wk. | | |
|------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| AM 210 Auto Elec. Comp. | — | 20 | 7 |
| AM 211 Auto Elec. Comp. | 5 | — | 5 |
| PHY 055 Applied Physics* | 5 | — | 5 |
| | 10 | 20 | 17 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$45.00

| Fifth Quarter (F,W,S,Su) | Hrs./Wk. | | |
|-----------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| AM 220 Drive Mech. Lab. | — | 20 | 7 |
| AM 221 Drive Mechanisms | 5 | — | 5 |
| COM 055 Communications* | 5 | — | 5 |
| | 10 | 20 | 17 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$45.00

| Sixth Quarter (F,W,S,Su) | Hrs./Wk. | | |
|---------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| AM 240 Spec. Equip. Lab. | — | 20 | 7 |
| AM 241 Spec. Equip. & Access. | 5 | — | 5 |
| CIV 055 Voc. Civics | 3 | — | 3 |
| | 8 | 20 | 15 |

28 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$25.00



BARBERING

Division: Service Occupations

Division Head: Ruth Foulks

Faculty: T. Hite, J. Italasano

Nelson Administration Building, Room 179

DESCRIPTION

Today there are unlimited opportunities for skilled hair stylists but only minimal demand for barbers with modest hair cutting ability. It takes a high degree of diversified skills — skills which Utah Tech teaches its students to be successful in this field.

Style cutting, clipper tapers, neck and face shaping, chemical restructuring of hair, scientific scalp treatments, and color, curl, air, and heat expansion of the form of the hair are some of the skills acquired through the program. Also during the sequence of the course, students become adept in the use of razors and shears, a variety of combs including hot combs, hot styling irons, various style brushes, and style dryers.

Earnings depend largely on the hair stylists personal abilities, creativity, and human relations aptitudes, plus a willingness to work hard.

Theory and lab classes must be taken concurrently. No clock hour credit toward licensing in any one quarter will be awarded without passing grades on both theory and lab classes for that quarter.

New students will be admitted twice in a quarter whenever there is space available.

Certificate





Requires 1500 clock hours of instruction and prepares the student to meet requirements for taking the State Licensing Examination. Additional classes may be taken to meet the three month extended time period for licensure as stated in the Barber Licensing Amendments, 1977.

| First Quarter (F,W,S,Su) | Hrs./Wk. | | |
|-------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| BE 110 Barbering Lab. | — | 25 | 9 |
| BR 111 Barbering Theory. | 5 | — | 5 |
| | 5 | 25 | 14 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$220.00

| Second Quarter (F,W,S,Su) | Hrs./Wk. | | |
|-------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| BR 120 Barbering Lab. | — | 25 | 9 |
| BR 121 Barbering Theory. | 5 | — | 5 |
| | 5 | 25 | 14 |

30 Clock Hour Program

| Third Quarter (F,W,S,Su) | Hrs./Wk. | | |
|-------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| BR 130 Barbering Lab. | — | 25 | 9 |
| BR 131 Barbering Theory. | 5 | — | 5 |
| | 5 | 25 | 14 |

30 Clock Hour Program

| Fourth Quarter (F,W,S,Su) | Hrs./Wk. | | |
|-------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| BR 140 Barbering Lab. | — | 25 | 9 |
| BR 141 Barbering Theory. | 5 | — | 5 |
| | 5 | 25 | 14 |

30 Clock Hour Program

| Fifth Quarter (F,W,S,Su) | Hrs./Wk. | | |
|-------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| BR 150 Barbering Lab. | — | 25 | 9 |
| BR 151 Barbering Theory. | 5 | — | 5 |
| | 5 | 25 | 14 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$35.00

PERMANENT WAVING†

An evening school program open to licensed barbers. Others may be allowed to register in the program after evaluation of qualifications. Meets the eligibility requirements as outlined in the Barber Licensing Amendments, 1977, in preparation for taking the State Licensing Examination for Permanent Waving.

| | Hrs./Wk. | | |
|--|----------|------|-----|
| | Lec. | Lab. | Cr. |
| BR 63 Permanent Waving Theory & Lab (F) | 2 | 8 | 4 |
| BR 64 Permanent Waving Theory & Lab (W) | 2 | 8 | 4 |
| BR 65 Permanent Waving Theory & Lab (S) | 2 | 8 | 4 |
| | 6 | 24 | 12 |



BRICK MASONRY TRAINING

Division: Building Construction

Division Head: L. Eugene Overson

Faculty: J. Nielson

Construction Trades Building, Room 274A

DESCRIPTION

This is a pre-apprenticeship program designed to provide the necessary skills and safety habits needed to enter the field as an apprentice. It is possible to be granted 6 months apprenticeship experience as a result of taking this course.

The student will learn the skills of laying brick and block to a line, building leads efficiently, and of generally being an asset to the employer. By graduation, the student will be trained to use the tools of the trade including a brick trowel, hammer, levels, jointers, a line, line block, trigs, pins, and mason scale rule.

Equipment students use includes mortar mixer, mason saw, and scaffolding.

This three-quarter program begins in the Fall of the year. Successful completion leads to a Certificate of Graduation.

Certificate

| First Quarter (F) | Hrs./Wk. | | |
|--|----------|------|-----|
| | Lec. | Lab. | Cr. |
| BMT 110 Lab Appl. Masonry | — | 20 | 7 |
| BMT 111 Fund. of Bricklaying | 5 | — | 5 |
| MTH 050 Voc. Math | 5 | — | 5 |
| | 10 | 20 | 17 |

30 Clock Hour Program
Approx. Cost of Books, tools,
Supplies = \$200.00

| Second Quarter (W) | Hrs./Wk. | | |
|--|----------|------|-----|
| | Lec. | Lab. | Cr. |
| BMT 122 Field & Lab. Appl. | — | 20 | 7 |
| BMT 121 Fund. of Bricklaying | 5 | — | 5 |
| COM 055 Communications | 5 | — | 5 |
| | 10 | 20 | 17 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$12.00

| Third Quarter (S) | Hrs./Wk. | | |
|--|----------|------|-----|
| | Lec. | Lab. | Cr. |
| BMT 130 Field Appl. in Mas. | — | 20 | 7 |
| BMT 131 Fund. of Bricklaying | 5 | — | 5 |
| WLD 105 Welding | 2 | 3 | 3 |
| | 7 | 23 | 15 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$12.00





BUILDING CONSTRUCTION

Division: Building Construction

Division Head: L. Eugene Overson

**Faculty: D. Ballard, R. Davis, R. Dean, G. Haycock, V. Nelson, D. Paulsen,
D. Sorenson, D. Stevens, E. Zaugg**

Construction Trades Building, Room 274A



DESCRIPTION

A carpenter in the field of Building Construction has a wide variety of options open depending on ability, interest, degree of proficiency or training, and a willingness to work. Most who enter the trade through this program do so as apprentices and carpenters; others enter as rough and finish carpenters, cabinetmakers, concrete workers, insulation or sheetrock applicators, roofing applicators, etc.

Building Construction, like all skilled trades, requires study and practice to attain proficiency. Students in the building trades should gain a firm understanding of physics and mathematics. These subjects are essential to the technical aspects and modern methods used in construction work.

The Building Construction student will receive training in plan reading, use of layout instruments, footing and foundations, concrete flatwork, framing layout, window installation, roof framing, roofing, insulation, sheetrocking and taping, hanging doors, interior and exterior trim, cabinetmaking, stair construction, paint preparation and finish.

Tools for this course must be purchased at the beginning of the First Quarter program.

Diploma, A.A.S. Degree



General Education classes marked with an asterisk (*) are required for a Diploma. Students who choose to earn an A.A.S. Degree are required to earn a minimum of 24 qtr. credit hours of applicable General Education type classes, numbered 100 or above, in lieu of classes marked with an asterisk (*). In the Building Construction program these must include ENG 101, MTH 101, PHY 101 and 11 additional hours.

Refer to the General Education section of the catalog on page 79.

| First Quarter (F,W) | Hrs./Wk. | | |
|-------------------------------|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| BC 112 Tools of Constr. | — | 15 | 5 |
| BC 113 Tools of Constr. | 5 | — | 5 |
| BC 103 Blueprint Reading | 2 | 3 | 3 |
| BC 053 Carpentry Math* | 5 | — | 5 |
| | 12 | 18 | 18 |

30 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$460.00

| Second Quarter (W,S) | Hrs./Wk. | | |
|-------------------------------|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| BC 124 Milwk. & Cabinet | — | 15 | 5 |
| BC 123 Milwk. & Cabinet | 5 | — | 5 |
| BC 054 Carpentry Math* | 5 | — | 5 |
| BC 104 Blueprint Reading | 2 | 3 | 3 |
| | 12 | 18 | 18 |

30 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$28.00

| Third Quarter (S,Su) | Hrs./Wk. | | |
|------------------------------|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| BC 134 Forming & Framing ... | — | 20 | 7 |
| BC 133 Forming & Framing ... | 5 | — | 5 |
| COM 055 Communications* | 5 | — | 5 |
| | 10 | 20 | 17 |

30 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$22.00

| Fourth Quarter (Su,F) | Hrs./Wk. | | |
|-------------------------------|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| BC 210 House Constr. | — | 20 | 7 |
| BC 211 House Constr. | 5 | — | 5 |
| PHY 055 Applied Physics* | 5 | — | 5 |
| | 10 | 20 | 17 |

30 Clock Hour Program
 Approx. Cost of Books, tools,
 Supplies = \$12.00

| Fifth Quarter (F,W) | Hrs./Wk. | | |
|--------------------------------|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| BC 220 Int. Constr. Tech. | — | 15 | 5 |
| BC 221 Int. Const. Tech. | 5 | — | 5 |
| PSY 055 Human Relations* | 3 | — | 3 |
| CIV 055 Voc. Civics* | 3 | — | 3 |
| | 11 | 15 | 16 |

26 Clock Hour Program

| Sixth Quarter (W,S) | Hrs./Wk. | | |
|-------------------------------|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| BC 232 Ext. Const. Tech. | — | 20 | 7 |
| BC 233 Ext. Const. Tech. | 5 | — | 5 |
| WLD 105 Welding. | 2 | 3 | 3 |
| | 7 | 23 | 15 |

30 Clock Hour Program



BUSINESS MANAGEMENT (Accounting Oriented)

Division: Accounting, Computing and Management

Division Head: Jerry H. Fullmer

Faculty: C. Brown, R. Holt, M. Moss, W. Moss

Rampton Technology Building, Room 216

DESCRIPTION

The Business Management graduate often begins as a management trainee or junior accountant.

In addition to basic accounting skills acquired through the certificate program, the student also becomes knowledgeable in the field of human relations. Taxes, banking and finance, and cost systems are other areas of interest for those graduating with accounting skills.

Employment opportunities are very good. Business management is one of the fastest growing fields in industry today. Beginning salaries are approximately \$700 per month. Many management positions pay in excess of \$1,000 per month.

Certificate, Diploma, A.A.S. Degree

Available to students who have completed the requirements in Accounting. All General Education requirements are included.

| Fourth Quarter (F,Su) | Hrs./Wk. | | |
|-----------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ACCT 204 Inter. Acctg. I. | 4 | 4 | 4 |
| MGT 215 Cost Analysis. | 5 | — | 5 |
| MGT 106 Business Law II. | 3 | — | 3 |
| MGT 204 Banking & Fin. | 5 | — | 5 |
| | 17 | 4 | 17 |

21 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$60.00

| Fifth Quarter (W) | Hrs./Wk. | | |
|--------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ACCT 205 Inter. Acctg. II. | 4 | 4 | 4 |
| MTH 101 Intro. Col. Alg. | 5 | — | 5 |
| MGT 209 Fed. Income Tax. | 5 | — | 5 |
| PSY 055 Human Relations (a). | 3 | — | 3 |
| | 17 | 4 | 16 |

21 Clock Hour Program
Approx. Cost of Books, tools,
Supplies = \$50.00

| Sixth Quarter (S) | Hrs./Wk. | | |
|-------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| DP 200 Computer Audit | 3 | 2 | 4 |
| ACCT 206 Inter. Acctg. III. | 4 | 4 | 4 |
| Business Electives | 6 | — | 6 |
| SOC 055 Applied Soc. (b). | 3 | — | 3 |
| | 16 | 6 | 17 |

22 Clock Hour Program
Approx. Cost of Books, tools,
Supplies = \$50.00

- (a) PSY 101 — General Psychology —
(Required for the A.A.S. Degree)
- (b) MGT 218 Internal Auditing
- (c) SOC 101 — Introduction to Sociology —
(Required for the A.A.S. Degree)

BUSINESS ELECTIVES:

- ACCT 221 Governmental Accounting
- MGT 202 Small Business Management
- MGT 203 Managerial Finance
- MGT 205 Principles of Management
- MGT 207 Personnel & Labor Relations
- MGT 218 Internal Auditing
- MGT 220 Operations Analysis
- CE Cooperative Education (see Cooperative Education section)



BUSINESS MANAGEMENT (Ownership Oriented)

Division: Accounting, Computing and Management

Division Head: Jerry H. Fullmer

Faculty: R. Cox, R. Holt, M. Homer, W. Moss

Rampton Technology Building, Room 216

DESCRIPTION

Business Management — Business Management is a diversified field involved in every facet of business and public service. The graduate is trained for entry level positions with a firm foundation in decision making for growth potential. Management is a challenging and rewarding occupation.

Ownership — Ownership Management involves the basic skill and information needed to operate a successful business. Studies involve finance, taxes, personnel, and management. The program is designed to prepare men and women who have the establishing of their own business as a future goal, as well as improving skills for those who currently own and operate their own firms. The program also appeals to employed managers and potential managers of smaller business and local chain stores. Opportunities are excellent.

Diploma, A.A.S. Degree

Available to students who have completed the major requirements in Accounting or Marketing. (Fourth and Fifth Quarter classes differ according to major requirements completed). All General Education requirements are included.



For students with an Accounting major:

| Fourth Quarter (F) | Hrs./Wk. | | |
|---------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MGT 205 Prin. of Mgt. | 3 | — | 3 |
| ENG 160 Effec. Speaking | 3 | — | 3 |
| PSY 055 Human Relations (a) ... | 3 | — | 3 |
| SOC 055 Ap. Sociology (b) ... | 3 | — | 3 |
| Business Elective | 5 | — | 5 |
| | 17 | — | 17 |

17 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$60.00

For students with an Accounting major:

| Fifth Quarter (W) | Hrs./Wk. | | |
|--|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MGT 204 Bank & Finance | 5 | — | 4 |
| MGT 222 Credit Mgt. | 3 | — | 3 |
| MGT 206 Techniques of Supervision | 4 | — | 4 |
| CIV 055 Voc. Civics (c) | 3 | — | 3 |
| Business Elective | 4 | — | 4 |
| | 19 | — | 18 |

18 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$65.00

**For students with Marketing major:**

| Fourth Quarter (F) | Hrs./Wk. | | |
|-----------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MGT 205 Prin. of Mgt. | 3 | — | 3 |
| ENG 101 English Comp. | 3 | — | 3 |
| ACCT 102 Elem. Acct. II. | 5 | 3 | 5 |
| PSY 055 Human Relations (a) . . . | 3 | — | 3 |
| SOC 055 Ap. Sociology (b) . . . | 3 | — | 3 |
| | 17 | 3 | 17 |

20 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$65.00

For students with a Marketing major:

| Fifth Quarter (W) | Hrs./Wk. | | |
|-----------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MGT 103 Managerial Analysis . . . | 5 | 3 | 5 |
| MGT 222 Credit Mgmt. | 3 | — | 3 |
| MGT 207 Persnl. & Lab Rel. | 4 | — | 4 |
| CIV 055 Voc. Civics (c) | 3 | — | 3 |
| MGT 204 Bank & Finance | 5 | — | 4 |
| | 20 | 3 | 19 |

23 Clock Hour Program
 approx. Cost of Books, Tools,
 Supplies = \$70.00

For students with Marketing and Accounting major:

| Sixth Quarter | Hrs./Wk. | | |
|---------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MGT 212 Applied Mgt. | 3 | — | 3 |
| MGT 202 Small Bus. Mgt. | 4 | — | 4 |
| MGT 203 Managerial Finance. . . | 5 | — | 5 |
| Business Elective | 3 | — | 3 |
| | 15 | — | 15 |

15 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$55.00

- (a) PSY 101 — General Psychology —
 (Required for A.A.S. Degree)
- (b) SOC 101 — Introduction to Sociology —
 (Required for A.A.S. Degree)
- (c) PS 110 Political Science — (Required for
 A.A.S. Degree).

BUSINESS ELECTIVES:

- CE Cooperative Education (see Coop. Ed. Section)
- DP 101 Basic Computer Concepts
- DP 201 Automated Communications
 (Prerequisite: DP 101)
- MGT 106 Business Law II
- MGT 207 Personnel and Labor
- MGT 209 Federal Income Tax
- MGT 210 Investments
- MGT 220 Operations Analysis
- MGT 221 Credit and Collections
- MGT 223 Credit Analysis
 (Prerequisite: MGT 222)
- MGT 240 Women in Management: Developing Potential
- MGT 241 Women in Management: Communications
- MGT 242 Women in Management: Management Techniques
- MKTG 131 Insurance Principles
- MKTG 185 EDP Marketing Applications
- RE 101 Introduction to Real Estate
- RE 258 Real Estate Property Management
 (Prerequisite: RE 101)



BUSINESS MANAGEMENT (Supervision Oriented)

Division: Accounting, Computing and Management

Division Head: Jerry H. Fullmer

Faculty: R. Cox, R. Holt, M. Homer, W. Moss

Rampton Technology Building, Room 216

DESCRIPTION

Business Management — Business Management is a diversified field involved in every facet of business and public service. The graduate is trained for entry level positions with a firm foundation in decision making for growth potential. Management is a challenging and rewarding occupation.

Supervision — Supervisory management focuses primarily upon the management of people and numerous resources. Supervision implies first line management. Graduates generally are employed as management trainees or are working towards promotion within their own employment situation.

Employment opportunities are very good since well qualified supervisors are in high demand.

Diploma, A.A.S. Degree

Available to students who have completed the requirements in Accounting or Marketing. (Fourth Quarter classes differ according to major requirements completed). All General Education requirements are included.

For students with an Accounting major:

| Fourth Quarter (F) | Hrs./Wk. | | |
|---------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MGT 205 Prin. of Mgt. | 3 | — | 3 |
| ENG 160 Effic. Speaking | 3 | — | 3 |
| PSY 055 Human Relations (a) ... | 3 | — | 3 |
| SOC 055 Ap. Sociology (b) ... | 3 | — | 3 |
| Business Elective | 5 | — | 5 |
| | 17 | — | 17 |

17 Clock Hour Program
Approx. Cost of Book - Tools,
Supplies = \$60.00

For students with an Accounting major:

| Fifth Quarter (W) | Hrs./Wk. | | |
|---------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MGT 106 Business Law II | 3 | — | 3 |
| MGT 206 Techniques of Supv. ... | 4 | — | 4 |
| MGT 204 Bank & Finance. | 5 | — | 4 |
| CIV 055 Voc. Civics (c) | 3 | — | 3 |
| Business Elective | 3 | — | 3 |
| | 18 | — | 17 |

18 Clock Hour Program
Approx. Cost of Books, tools,
Supplies = \$65.00

For students with an Accounting major:

| Sixth Quarter (S) | Hrs./Wk. | | |
|-------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MGT 207 Pers. & Lab Rel. | 4 | — | 4 |
| MGT 212 Applied Mgt. | 3 | — | 3 |
| MGT 220 Oper. Analysis. | 3 | — | 3 |
| Business elective | 5 | — | 5 |
| | 15 | — | 15 |

15 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$65.00

For students with a Hotel/Motel management major:

| Fourth Quarter (F) | Hrs./Wk. | | |
|--------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MGT 205 Prin. of Mgt. | 3 | — | 3 |
| ENG 160 Effect. Speaking | 3 | — | 3 |
| PSY 055 Hum. Relations (a) ... | 3 | — | 3 |
| SOC 055 Ap. Sociology (b) ... | 3 | — | 3 |
| ENG 115 Bus. Rpt. Writing ... | 3 | — | 3 |
| HM 139 Htl./Rest. Acct II | 3 | 2 | 3 |
| | 18 | 2 | 18 |

20 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$66.00



For students with a Hotel/Motel management major:

| Fifth Quarter (W) | Hrs./Wk. | | |
|------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MGT 106 Bus. Law II | 3 | — | 3 |
| MGT 206 Techniques of Suprv. | 4 | 1 | 4 |
| MGT 203 Managerial Finance | 5 | — | 5 |
| MGT 203 Bank & Finance | 5 | — | 4 |
| CIV 055 Voc. Civics (c) | 3 | — | 3 |
| ECN 101 Gen. Economics | 3 | — | 3 |
| | 18 | 1 | 17 |

19 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$70.00

For students with a Hotel/Motel management major:

| Sixth Quarter (S) | Hrs./Wk. | | |
|----------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MGT 207 Pers. & Lab. Rel. | 4 | 1 | 4 |
| MGT 212 Applied Mgt. | 3 | — | 3 |
| MGT 220 Oper. Analysis | 3 | — | 3 |
| HM 133 Campgd. & Rec. Mgt. | 5 | — | 5 |
| | 15 | 1 | 15 |

16 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$70.00

For students with a Marketing major:

| Fourth Quarter (F) | Hrs./Wk. | | |
|-----------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ACCT 102 Elem. Acctg. II | 5 | 3 | 5 |
| MGT 205 Prin. of Mgt. | 3 | — | 3 |
| ENG 101 English Comp. | 3 | — | 3 |
| PSY 055 Human Relations (a) | 3 | — | 3 |
| SOC 055 Ap. Sociology (b) | 3 | — | 3 |
| | 17 | 3 | 17 |

20 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$60.00

For students with a Marketing major:

| Fifth Quarter (W) | Hrs./Wk. | | |
|------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MGT 103 Managerial Analysis | 5 | 3 | 5 |
| MGT 106 Business Law II | 3 | — | 3 |
| MGT 206 Techniques of Suprv. | 4 | — | 4 |
| CIV 055 Voc. Civics (c) | 3 | — | 3 |
| Business Elective | 3 | — | 3 |
| | 18 | 3 | 18 |

21 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$75.00

For students with a Marketing and Accounting major:

| Sixth Quarter (S) | Hrs./Wk. | | |
|--------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MGT 204 Bank & Finance | 5 | — | 4 |
| MGT 207 Pers. & Lab. Re. | 4 | — | 4 |
| MGT 212 Applied Mgt. | 3 | — | 3 |
| MGT 220 Oper. Analysis | 3 | — | 3 |
| | 15 | — | 14 |

15 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$55.00

- (a) PSY 101 — General Psychology —
(Required for A.A.S. Degree)
- (b) SOC 101 — Introduction to Sociology —
(Required for A.A.S. Degree)
- (c) PS 110 — Political Science —
(Required for A.A.S. Degree)

BUSINESS ELECTIVES:

CE Cooperative Education (see Coop. Ed. section)

- DP 101 Basic Computer Concepts
- DP 201 Automated Communications
- MKTG 122 Direct Salesmanship
- MKTG 107 Sales Promotion
- MKTG 131 Insurance Principles
- PS 101, 102, 103 Studentbody Leadership
(Available only to studentbody officers)
- MKTG 185 EDP Marketing Appl.
- MGT 203 Managerial Finance
- MGT 215 Cost Analysis
(Prerequisite: MGT 103)

NOTE: Courses applied to the Certificate cannot apply as Business Management Electives.

For students with a Food Service major:

| Fourth Quarter (F) | Hrs./Wk. | | |
|-------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MGT 205 Prin. of Mgt. | 3 | — | 3 |
| ENG 160 Effective Speaking | 3 | — | 3 |
| SOC 055 Applied Sociology (b) | 3 | — | 3 |
| HM 139 Hotel & Rest Acctg. II | 3 | 2 | 3 |
| MGT 106 Business Law I | 3 | — | 3 |
| FS Elective | 3 | — | 3 |
| | 18 | 2 | 18 |

20 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$50.00



| Fifth Quarter (W) | Hrs./Wk. | | |
|-----------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| CIV 055 Voc. Civics (e) | 3 | — | 3 |
| MGT 106 Business Law II | 3 | — | 3 |
| MGT 203 Managerial Fin. | 5 | — | 5 |
| MGT 207 Personnel & Lab. | 4 | 1 | 4 |
| FS Elective | 3 | — | 3 |
| | 18 | 1 | 18 |

19 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$50.00

| Sixth Quarter | Hrs./Wk. | | |
|---------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MGT 212 Applied Mgt. | 3 | — | 3 |
| ENG 113 Bus. Report Writing | 3 | — | 3 |
| ECON 101 Gen. Economics | 3 | — | 3 |
| FS 241 Food & Bev. Mgt. | 5 | — | 5 |
| FS Elective | 3 | — | 3 |
| | 17 | — | 17 |

17 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$50.00

- (d) SOC 101 Intro. to Sociology
(Required for A.A.S. Degree)
- (e) PS 110 Political Science
(Required for A.A.S. Degree)

Food Service Electives

FS 215 Food Service Problems
(Open-Arrange)

Fall

HM 123 Travel and Tourism

Winter

FS 239 Gourmet Cooking
MKTG 108 Sales Promotion
MKTG 185 EDP Marketing Applications
HM 132 Housekeeping, Maintenance &
Engineering

Spring

MKTG 108 Sales Promotion
MKTG 185 EDP Marketing Applications
FS 241 Food & Beverage Management



CLERK TYPIST

Division: Office Education

Division Head: Kathryn Beebe

**Faculty: M. Aylett, E. Bartholomew, M. Densley, A. Johnson, L. Metos,
J. Rodi, S. Wall**

Nelson Administration Building, Room 210C

DESCRIPTION

The Clerk Typist performs general clerical work including compiling and typing reports, bills, application forms, shipping tickets, and other material from clerical records. Filing, posting information to records, coordinating mail distribution, answering telephones, and computing and recording numerical data are also activities performed by Clerk Typists. Accurate and fast production typewriting is essential. Beginning salaries range from \$500 to \$650 a month.

Certificate





On completion of this program the student will be qualified to enter the Executive Secretary program and obtain an A.A.S. Degree.

| First Quarter (F,W,S,Su) | Hrs./Wk. | | |
|------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| OA 087 Vocab. Bldg. | 3 | — | 3 |
| OA 155 Records Mgt. | 2 | 3 | 3 |
| MTH 080 Bus. Math* | 2 | 3 | 3 |
| COM 110 Cal. Com. | 3 | — | 3 |
| Typewriting Elective** | 1 | 9 | 4 |
| | 11 | 15 | 16 |

26 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$80.00

| Second Quarter (F,W,S,Su) | Hrs./Wk. | | |
|------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| OA 171 Recordkeeping | 3 | — | 3 |
| ENG 080 Bus. English* | 2 | 3 | 3 |
| MKTG 101 Intro. to Bus. | 4 | — | 4 |
| Typewriting Elective** | 1 | 9 | 4 |
| Business Elective | 3 | — | 3 |
| | 13 | 12 | 17 |

25 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$45.00

| Third Quarter (F,W,S,Su) | Hrs./Wk. | | |
|--------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| OA 101 Office Technology | 5 | — | 5 |
| OA 131 Office Machines | 1 | 2 | 2 |
| ENG 115 Bus. Report Writing .. | 3 | — | 3 |
| Typewriting Elective** | 1 | 9 | 4 |
| Business Elective | 3 | — | 3 |
| | 13 | 11 | 17 |

24 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$45.00

**A minimum of 12 credits of typewriting electives is required for certificate.

| Typewriting Electives | Hrs./Wk. | | |
|----------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| OA 111 Beg. Typing | 5 | 5 | 4 |
| OA 112 Inter. Typing | 5 | 5 | 4 |
| OA 113 Adv. Typing | 5 | 5 | 4 |
| OA 115 Type Spd. Build.*** | — | 5 | 2 |
| OA 213 Prod. Typing | 5 | 5 | 4 |
| OA 214 Legal Typing | 2 | 1 | 2 |
| OA 215 Medical Typing | — | 2 | 1 |
| | 22 | 28 | 21 |

***May be taken any quarter.

BUSINESS ELECTIVES:

- OA 271 Secretarial Accounting
- MGT 205 Principles of Management
- MGT 206 Techniques of Supervision
- MGT 240 Women in Management: Developing Potential
- MGT 241 Women in Management: Communications
- MGT 242 Women in Management: Management Techniques



COMMERCIAL ART

Division: Graphic Arts

Division Head: Walter L. White

**Faculty: R. Huddleston, G. Hulet, D. Jordan, J. Lema, Jr., A. Reinhold,
L. Snyder, F. VanDyke**

Nelson Administration Building, Rooms 302, 309, 313, 314, 318, 338



DESCRIPTION

A Commercial Artist is a specialist in graphic communications which includes translating ideas into well designed visual forms such as drawings, art for printing, layouts, posters, cartoons, fashion illustrations, brochures, letterheads, and package design.

Since the artist is involved in the communication-selling functions, the artist must possess human relations skills to coordinate between client and printer to produce a finished product that will be high quality and economical.

The Commercial Art program contains a uniform group of foundation classes inclusive in the first, second, and third quarters which are required of all Commercial Art students for a preparation of the major specialties offered in the fourth, fifth, and sixth quarters. A student may select anyone of the four major areas of study: Art Production, Design, Illustration, Lettering, or a combination of interdisciplinary classes provided graduation requirements are met.

The Commercial Artist may be a free-lance artist serving a group of clients or may be associated with an art studio, advertising agency, printing firm, or other related commercial enterprises. Graduates may earn approximately \$3.50-\$6.00 an hour starting salary.

Diploma, A.A.S. Degree



First Year Courses

All beginning students will take a comprehensive orientation test for the purpose of helping the student understand more fully what the Commercial Art Program is. This examination will also indicate the individual's potential for success in this field. The examinations will be evaluated and the student will be counseled individually by the commercial art faculty.

General Education classes marked with an asterisk (*) are required for a Diploma. Students who choose to earn an A.A.S. Degree are required to earn a minimum of 24 qtr. credit hours of applicable General Education type classes, numbered 100 or above, in lieu of classes marked with an asterisk (*). These classes must include ENG 101, and 21 additional credit hours.

Refer to the General Education section of the catalog on page 79.

| First Quarter (F,W) | Hrs./Wk. | | |
|------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| CA 115 Drawing I | 1 | 3 | 2 |
| CA 116 Princ. & Elem. of Art | 3 | 1 | 3 |
| CA 117 Media & Tech. I | 2 | 3 | 3 |
| CA 118 Lettering I | 2 | 4 | 3 |
| COM 055 Communications* | 5 | — | 5 |
| | 13 | 11 | 16 |

24 Clock Hour Program
Approx. Cost of Books, Tools;
Supplies = \$250.00

| Second Quarter (W,S) | Hrs./Wk. | | |
|-------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| CA 123 Perspective | 1 | 3 | 2 |
| CA 125 Lettering II | 1 | 3 | 2 |
| CA 126 Anatomy | 2 | 3 | 3 |
| CA 127 Color | 3 | 1 | 3 |
| CA 128 Media & Tech. II | 2 | 4 | 3 |
| MTH 050 Voc. Math* | 5 | — | 5 |
| | 14 | 14 | 18 |

28 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$170.00

| Third Quarter (S,Su) | Hrs./Wk. | | |
|-----------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| CA 135 Typography I | 2 | 3 | 3 |
| CA 136 Figure Drawing | 1 | 3 | 2 |
| CA 137 Design I | 2 | 2 | 3 |
| CA 139 Drawing II | 1 | 4 | 2 |
| CA 140 Layout I | 2 | 3 | 3 |
| CA 141 History of Art | 3 | — | 3 |
| | 11 | 15 | 16 |

26 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$110.00

ART PRODUCTION MAJOR:

This two-year program will provide the student with job entry level training sufficient to become an advertising production artist. He will gain an understanding of printing methods that will enable him to properly prepare camera-ready production art. He will become familiar with the preparation of art for hand-separated and four-color process printing, how to interpret a layout, specify and order type, prepare art for package design, point-of-purchase display, and how to communicate with the printer.

| Fourth Quarter (F) | Hrs./Wk. | | |
|--------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| CA 215 Art Preparation I | 2 | 3 | 3 |
| †CA 230 Layout II | 2 | 2 | 3 |
| †CA 227 Typography II | 1 | 2 | 2 |
| Soc. Science Elective* | 3 | — | 3 |
| CA Electives (3) | | | |
| | 8 | 7 | 11 |

| ELECTIVES (3 suggested) | | | |
|-----------------------------|---|---|---|
| †CA 257 Adv. Figure Drawing | 2 | 4 | 3 |
| †CA 263 Adv. Media & Tech. | 2 | 2 | 3 |
| CA 249 Cartooning | 2 | 1 | 2 |
| CA 250 Retail Illustration | 1 | 2 | 2 |
| CA 258 Air Brush | | 2 | 2 |
| PRT 104 Photography | 1 | 3 | 2 |

Approx. Cost of Books, Tools,
Supplies = \$75.00-\$95.00



| Fifth Quarter (W) | Hrs./Wk. | | |
|-----------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| †CA 220 Art Preparation II | 2 | 2 | 3 |
| CA 228 Screen Printing | 1 | 3 | 2 |
| †CA 252 Advanced Layout | 1 | 2 | 2 |
| †CA 261 Art Preparation III | 2 | 4 | 3 |
| PRT 107 Printing Com-Art | 2 | 1 | 2 |
| CA Electives (2) | | | |
| | 8 | 12 | 12 |

ELECTIVES: (2 suggested)

| | | | |
|---------------------------|---|---|---|
| †CA 239 Design II | 2 | 2 | 3 |
| †CA 216 Illustration | 2 | 4 | 3 |
| CA 264 Illus. Workshop I | 2 | 2 | 3 |
| †CA 240 Sign Techniques | 1 | 3 | 2 |
| CA 259 Calligraphy | 2 | 4 | 3 |
| †PRT 108 Adv. Photography | 1 | 3 | 2 |

Approx. Cost of Books, Tools,
Supplies = \$75.00-\$95.00

| Sixth Quarter (S) | Hrs./Wk. | | |
|--|----------|------|-----|
| | Lec. | Lab. | Cr. |
| CA 247 Studio Production | 3 | 3 | 4 |
| CA 236 Occup. Orient. | 2 | 4 | 4 |
| Physical Science or Life Science Elective | — | — | 5 |
| CA Electives (2) | | | |
| | | | 13 |

ELECTIVES (2 suggested)

| | | | |
|-----------------------------|---|---|---|
| †CA 244 Adv. Screen Print | 1 | 3 | 2 |
| †CA 266 Adv. Illustration | 2 | 4 | 3 |
| CA 265 Illus. Workshop II | 2 | 2 | 3 |
| †CA 253 Fashion Illus. | 1 | 2 | 2 |
| †CA Promotional Design | 1 | 2 | 2 |
| †CA Pack. & Display Design | 1 | 3 | 2 |
| †CA 260 Adv. Sign Lettering | 2 | 4 | 3 |
| †CA 262 Design III | 2 | 2 | 3 |

Approx. Cost of Books, Tools,
Supplies = \$75.00-\$95.00

†Prerequisite required.

DESIGN MAJOR:

This two-year program will provide the student with job entry level training to specialize in advertising design and be prepared to accept a job as a design-layout artist. Logo, brochure, packaging, point-of-purchase design, and advertising layout are included. Graphic creativity is an important and integral part of this program.

| Fourth Quarter (F) | Hrs./Wk. | | |
|--------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| CA 215 Art Preparation I | 2 | 3 | 3 |
| CA 230 Layout II | 2 | 2 | 3 |
| CA 227 Typography II | 2 | 3 | 3 |
| Soc. Science Elective* | 3 | — | 3 |
| CA Electives (2) | | | |
| | 9 | 8 | 12 |

ELECTIVES (2 suggested)

| | | | |
|-----------------------------|---|---|---|
| †CA 257 Adv. Figure Drawing | 2 | 4 | 3 |
| CA 258 Air Brush | 2 | 2 | 2 |
| †CA 263 Adv. Media & Tech. | 2 | 2 | 3 |
| CA 249 Cartooning | 2 | 1 | 2 |
| †CA 250 Retail Illustration | 1 | 2 | 2 |
| PRT 104 Photography | 1 | 3 | 2 |

Approx. Cost of Books, Tools,
Supplies = \$75.00-\$95.00

| Fifth Quarter (W) | Hrs./Wk. | | |
|---------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| CA 239 Design II | 2 | 2 | 3 |
| CA 252 Adv. Layout | 1 | 2 | 2 |
| CA 220 Art Preparation II | 2 | 2 | 3 |
| PRT 107 Printing Com-Art | 2 | 1 | 2 |
| CA Electives (2) | | | |
| | 7 | 7 | 10 |

ELECTIVES (2 suggested)

| | | | |
|---------------------------|---|---|---|
| †CA 261 Art Prep. III | 2 | 4 | 3 |
| †CA 216 Illustration | 2 | 4 | 3 |
| CA 264 Illus. Workshop I | 2 | 2 | 3 |
| †CA 240 Sign Techniques | 1 | 3 | 2 |
| CA 228 Screen Printing | 1 | 3 | 2 |
| †PRT 108 Adv. Photography | 1 | 3 | 2 |

Approx. Cost of Books, Tools,
Supplies = \$75.00-\$95.00

| Sixth Quarter (S) | Hrs./Wk. | | |
|--|----------|------|-----|
| | Lec. | Lab. | Cr. |
| CA 236 Occupational Orient. | 2 | 4 | 4 |
| CA 254 Promotional Design | 1 | 2 | 2 |
| CA 255 Pack. & Display Des. | 1 | 3 | 2 |
| CA 262 Design III | 2 | 2 | 3 |
| Physical Science or Life Science Elective | | | 5 |
| CA Elective (1) | | | |
| | 6 | 11 | 16 |



ELECTIVES (1 suggested)

| | | | |
|------------------------------|---|---|---|
| †CA 244 Adv. Screen Printing | 1 | 3 | 2 |
| †CA 260 Adv. Sign Techniques | 2 | 4 | 3 |
| †CA 266 Adv. Illustration | 2 | 4 | 3 |
| CA 265 Illus. Workshop II | 2 | 2 | 3 |
| †CA 253 Fashion Illustration | 1 | 2 | 2 |
| CA 247 Studio Production | 3 | 3 | 4 |

Approx. Cost of Books, Tools,
Supplies = \$75.00-\$95.00

†Prerequisite required.

ILLUSTRATION MAJOR:

This two-year program will provide the student with job level training of producing camera-ready art for reproduction in the area of picture making. Points of interest covered in this major are: book covers, magazine with story, product and spot illustrations in both black and white and full color.

Students that are preparing for this major must have a high level of drawing skill in both figure and product.

| Fourth Quarter (F) | Hrs./Wk. | | |
|-----------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| †CA 257 Adv. Figure Drawing | 2 | 4 | 3 |
| CA 215 Art Preparation I | 2 | 3 | 3 |
| †CA 263 Adv. Media & Tech. | 2 | 2 | 3 |
| Soc. Science Elective* | 3 | — | 3 |
| CA Electives (2) | | | |
| | 9 | 9 | 12 |

ELECTIVES (2 suggested)

| | | | |
|-----------------------------|---|---|---|
| †CA 227 Typography II | 1 | 2 | 2 |
| †CA 230 Layout II | 2 | 2 | 3 |
| CA 249 Cartooning | 2 | 1 | 2 |
| †CA 250 Retail Illustration | 2 | 2 | 2 |
| PRT 104 Photography | 1 | 3 | 2 |

Approx. Cost of Books, Tools,
Supplies = \$75.00-\$95.00

| Fifth Quarter (W) | Hrs./Wk. | | |
|----------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| CA 216 Illustration | 2 | 4 | 3 |
| CA 264 Illus. Wrkshp. I | 2 | 2 | 3 |
| †CA 220 Art Preparation II | 2 | 2 | 3 |
| PRT 107 Printing Com-Art | 2 | 1 | 2 |
| Ca Elective (2) | | | |
| | 8 | 9 | 11 |

ELECTIVES (2 suggested)

| | | | |
|---------------------------|---|---|---|
| †CA 252 Adv. Layout | 1 | 2 | 2 |
| †CA 239 Design II | 2 | 2 | 3 |
| CA 228 Screen Printing | 1 | 3 | 2 |
| †CA 240 Sign Painting | 1 | 3 | 2 |
| †CA 261 Art Prep. III | 2 | 4 | 3 |
| CA 259 Calligraphy | 2 | 4 | 3 |
| †PRT 108 Adv. Photography | 1 | 3 | 2 |

Approx. Cost of Books, tools,
Supplies = \$75.00-\$95.00

| Sixth Quarter (S) | Hrs./Wk. | | |
|--|----------|------|-----|
| | Lec. | Lab. | Cr. |
| †CA 266 Adv. Illustration | 2 | 4 | 3 |
| †CA 265 Illus. Workshop II | 2 | 2 | 3 |
| CA 236 Occ. Orient. & Port. | 2 | 4 | 4 |
| †CA 253 Fashion Illus. | 1 | 3 | 2 |
| Physical Science* or Life Science Elective* | | | 5 |
| CA Elective (1) | | | |
| | 7 | 13 | 17 |

ELECTIVES (1 suggested)

| | | | |
|------------------------------|---|---|---|
| †CA 247 Studio Prod. | 3 | 3 | 4 |
| †CA 244 Adv. Screen Printing | 1 | 3 | 2 |
| †CA 254 Promotional Design | 1 | 2 | 2 |
| †CA 255 Pac. & Display Des. | 1 | 3 | 2 |
| †CA 260 Adv. Sign Lettering | 2 | 4 | 3 |
| †CA 262 Design III | 2 | 2 | 3 |

Approx. Cost of Books, tools,
Supplies = \$75.00-\$95.00



LETTERING MAJOR:

Because of the increased demand for qualified lettering artists in outdoor advertising and the previous scarcity of training institutions to provide them, a major is offered to train artists in this area. This two-year program will provide the student with job entry level training in sign painting in all the general areas: lettering, indoor and outdoor; design, pattern making and use of scale; and screen printing. Many opportunities are available in this creative and challenging field.

| Fourth Quarter (F) | Hrs./Wk. | | |
|------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| †CA 227 Typography II | 1 | 2 | 2 |
| CA 215 Art Preparation I | 2 | 3 | 3 |
| †CA 230 Layout II | 2 | 2 | 3 |
| CA 249 Cartooning | 2 | 1 | 2 |
| Soc. Science Elective* | 3 | — | 3 |
| CA Electives (2) | | | |
| | 10 | 8 | 13 |

ELECTIVES (2 suggested)

| | | | |
|---------------------------------------|---|---|---|
| †CA 257 Adv. Figure Drawing | 2 | 4 | 3 |
| †CA 250 Retail Illustration | 1 | 2 | 2 |
| CA 258 Air Brush | 2 | 2 | 2 |
| †CA 263 Adv. Media & Tech. | 2 | 2 | 3 |
| PRT 104 Photography | 1 | 3 | 2 |

Approx. Cost of Books, Tools,
Supplies = \$75.00-\$95.00

| Fifth Quarter (W) | Hrs./Wk. | | |
|------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| †CA 239 Design II | 2 | 2 | 3 |
| †CA 259 Calligraphy | 2 | 4 | 3 |
| CA 228 Screen Printing | 1 | 3 | 2 |
| †CA 240 Sign Techniques | 1 | 3 | 2 |
| PRT 107 Printing Com-Art | 2 | 1 | 2 |
| CA Electives (2) | | | |
| | 8 | 13 | 12 |

ELECTIVES (2 suggested)

| | | | |
|--------------------------------------|---|---|---|
| †CA 220 Art Preparation II | 2 | 2 | 3 |
| †CA 216 Illustration | 2 | 4 | 3 |
| CA 264 Illus. Workshop I | 2 | 2 | 3 |
| †CA 252 Advanced Layout | 1 | 2 | 2 |
| †CA 261 Art Prep. III | 2 | 4 | 3 |
| †PRT 108 Adv. Photography | 1 | 3 | 2 |

Approx. Cost of Books, Tools,
Supplies = \$75.00-\$95.00

| Sixth Quarter (S) | Hrs./Wk. | | |
|--|----------|------|-----|
| | Lec. | Lab. | Cr. |
| CA 236 Occupational Orient. | 2 | 4 | 4 |
| †CA 244 Adv. Screen Print. | 1 | 3 | 2 |
| CA 254 Promotional Design | 1 | 2 | 2 |
| †CA 260 Adv. Sign Techniques | 2 | 4 | 3 |
| Physical Science* or Life Science Elective* | | | 5 |
| CA Elective (1) | | | |
| | 6 | 13 | 16 |

ELECTIVES (1 suggested)

| | | | |
|--|---|---|---|
| †CA 266 Adv. Illustration | 2 | 4 | 3 |
| CA 265 Illus. Workshop II | 2 | 2 | 3 |
| †CA 253 Fashion Illustration | 1 | 3 | 2 |
| †CA 255 Pack. & Displ. Dsgn. | 1 | 3 | 2 |
| †CA 247 Studio Production | 3 | 3 | 4 |
| †CA 262 Design III | 2 | 2 | 3 |

Approx. Cost of Books, Tools,
Supplies = \$75.00-\$95.00

†Prerequisite required.

COOPERATIVE EDUCATION

Division: All Divisions

Contact Individual Division Heads for Information.

DESCRIPTION

When students combine in-class instruction with actual on-the-job experience for school credit and pay, they have become a part of the Cooperative Education (CE) concept. It is a highly successful learning situation that provides students relevant training in the working world within their field of study.

In order for Utah Technical College at Salt Lake to give credit to a student working on-the-job, the following conditions must be met:

1. The student must demonstrate professional job seeking skills or enroll and successfully pass CE 100 Career Orientation (3 hrs./wk. 3 cr.)
2. The student must be employed or secure employment in a job directly related to his/her field of study.
3. The student must be working a minimum of 15 hours per week.
4. The student must set and accomplish objectives that will help improve on-the-job performance.
5. The school must have the cooperation of the employers whereby they agree to supervise and evaluate the student's efforts and performance.

Cooperative Education is designed to bridge the gap between the classroom and the world of work. If not already employed, students will be given assistance in finding a job of interest to them and one that relates to their course of study. Other than the CE 100 Career Orientation class, there is no formal classroom meeting and students will only be required to meet with their CE Coordinator/Instructor weekly on an individual basis. Cooperative Education credit is available during both day and evening school. For further information regarding specific course CE requirements and credit hours, contact Division Heads.

What are the Benefits to the Student?

- Gives the student the opportunity to apply educational concepts from school.
- Enables the student to gain a better understanding of the relationship between education and the working world.
- Enables the student to earn additional units of school credit while working for pay.
- Your employee will have the opportunity to recognize weaknesses and take steps to correct them.
- Your employee will participate in new learning experiences thus making that person a more valuable employee.

What are the Benefits to UTC/SL?

What are the Benefits for the Employer?

- Your employee will be motivated to improve personal productivity both at school and on-the-job.
- Improves education by placing students in operating business concerns.
- Meets the needs of the community with better trained, more motivated employees.



COSMETOLOGY

Division: Service Occupations

Division Head: Ruth Foulks

Faculty: L. Tate, J. Sheehy

Nelson Administration Building, Room 182

DESCRIPTION

Cosmetology students learn to design hair to enhance the individual client's own beauty. The study of chemicals is made so the student may know how to maintain the proper condition, color, and curl of the hair. Instruction is also given in make-up, manicuring, and total care of the skin. Additionally, current and past fashion trends are reviewed so that every student will be thoroughly familiar with the cycle of hair styles and designs.

The cosmetology profession is a particularly creative field and can be highly individualistic. The successful man or woman in this field needs to be a real self-starter, willing to work hard and make every effort to cultivate a radiant attitude.

Most graduates will work in beauty salons as beauticians. It is possible to specialize in cutting, coloring, permanent waving, or trichology. Other possibilities for employment exist as salon managers and receptionists.

The local employment picture is exceptionally good. There are many more openings available than there are graduates at the present time.

Graduates from this program normally work on a percentage basis.

New students will be admitted each quarter whenever there is space available.

Certificate





Requires 1500 clock hours of instruction for graduation and prepares the student to meet requirements for taking the State Licensing Examination for a license without haircutting. Additional classes may be taken for the added 500 clock hours needed (total 2000 hours) to include haircutting on the license.

| First Quarter (F,W,S,Su) | Hrs./Wk. | | |
|----------------------------------|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| COS 110 Cosmetology Lab . . . | — | 25 | 9 |
| COS 111 Cosmetology Theory . . . | 5 | — | 5 |
| | 5 | 25 | 14 |

30 Clock Hour Program
Approx. Cost of Books; Tools,
Supplies = \$220.00

| Second Quarter (F,W,S,Su) | Hrs./Wk. | | |
|----------------------------------|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| COS 120 Cosmetology Lab . . . | — | 25 | 9 |
| COS 121 Cosmetology theory . . . | 5 | — | 5 |
| | 5 | 25 | 14 |

30 Clock Hour Program

| Third Quarter (F,W,S,Su) | Hrs./Wk. | | |
|----------------------------------|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| COS 130 Cosmetology Lab . . . | — | 25 | 9 |
| COS 131 Cosmetology Theory . . . | 5 | — | 5 |
| | 5 | 25 | 14 |

30 Clock Hour Program

| Fourth Quarter (F,W,S,Su) | Hrs./Wk. | | |
|----------------------------------|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| COS 140 Cosmetology Lab . . . | — | 25 | 9 |
| COS 141 Cosmetology Theory . . . | 5 | — | 5 |
| | 5 | 25 | 14 |

30 Clock Hour Program

| Fifth Quarter (F,W,S,Su) | Hrs./Wk. | | |
|----------------------------------|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| COS 150 Cosmetology Lab . . . | — | 25 | 9 |
| COS 151 Cosmetology Theory . . . | 5 | — | 5 |
| | 5 | 25 | 14 |

30 Clock Hour Program



DATA PROCESSING

Division: Accounting, Computing and Management

Division Head: Jerry H. Fullmer

Faculty: L. Hoffman, R. Rodi, D. Stearns

Rampton Technology Building, Room 206



DESCRIPTION

Data Processing, whether business or scientific, consists of recording and reporting meaningful information manually or electronically through the use of punch card equipment, data terminals interfaced with high speed printers, or totally self-contained computers along with their peripheral equipment such as disk or tape drives — some with seemingly unlimited capabilities.

The computer has been called an extension of the human brain; however, it does nothing that a human being does not instruct it to do. Therefore, an ideal training program provides the technical courses used to program or "instruct" the computer to perform the innumerable and repetitive tasks desired instantaneously and with flawless accuracy.

Graduates of the first-year certificate program can expect to obtain entry positions in the field of data processing as keypunch operators, card-to-tape operators, tape operators, console operators, data originators and controllers, coders, and programmers using the very basic computer languages. Graduates of the two-year program can expect excellent placement as programmers using the computer languages they learned in the second year, such as advanced Assembly, COBOL, Fortran, RPG, and Basic. As ability is proved the programmer may be offered positions of increased responsibility such as computer operations supervisor, programming supervisor, systems and procedures supervisor, manager, or assistant manager for data processing.

Certificate, Diploma, A.A.S. Degree



General Education classes marked with an asterisk (*) are required for a Diploma. Students who choose to earn an A.A.S. Degree are required to earn a minimum of 24 qtr. credit hours of applicable General Education type classes, numbered 100 or above, in lieu of classes marked with an asterisk(*)

| First Quarter (F,W) | Hrs./Wk. | | |
|--------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ACCT 101 Elem. Acctg. I | 5 | 4 | 5 |
| DP 110 Intro. to Prog. | 5 | — | 5 |
| DP 111 BASIC Programming | 5 | 3 | 5 |
| MTH 051 Intro. to Algebra* | 5 | — | 5 |
| | 20 | 7 | 20 |

27 Clock Hour Program
Approx. Cost of Books, tools,
Supplies = \$100.00

| Second Quarter (W,S) | Hrs./Wk. | | |
|------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ACCT 102 Elem. Acctg. II | 5 | 4 | 5 |
| DP 120 Basic COBOL Prog. | 5 | 5 | 7 |
| MTH 101 Intro. Col. Alg. | 5 | — | 5 |
| | 15 | 9 | 17 |

24 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$75.00

| Third Quarter (S,Su) | Hrs./Wk. | | |
|-------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| DP 112 RPG II Programming | 5 | 5 | 7 |
| MGT 103 Manag. Acctg. | 5 | 4 | 5 |
| MTH 105 College Algebra. | 5 | — | 5 |
| | 15 | 9 | 17 |

24 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$55.00

| Fourth Quarter (F) | Hrs./Wk. | | |
|---------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| DP 115 BAL Programming | 5 | 5 | 7 |
| DP 291 Adv. Prog. Techniques. | 5 | 4 | 5 |
| MTH 106 Plane Trig. | 5 | — | 5 |
| | 15 | 9 | 17 |

24 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$55.00

| Fifth Quarter (W) | Hrs./Wk. | | |
|--------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ENG 101 English Comp. | 3 | — | 3 |
| DP 220 Applied COBOL | 3 | 7 | 5 |
| DP 272 FORTRAN Prog. | 5 | 5 | 7 |
| | 11 | 12 | 15 |

23 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$55.00

| Sixth Quarter (S) | Hrs./Wk. | | |
|-----------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ECN 101 Gen. Economics. | 3 | — | 3 |
| ENG 130 Tech. Writing | 3 | — | 3 |
| DP 280 Bus. Sys. Design | 5 | 5 | 5 |
| DP 295 Ind. Case. | 3 | 7 | 5 |
| | 14 | 12 | 16 |

26 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$55.00



ELECTRICITY

Division: Electronics

Division Head: Ulrich E. Zeisler

Faculty: R. Davis, F. Harper, W. Ingram, M. Shaw, A. Thorpe, H. Weir

Construction Trades Building, Room 242

DESCRIPTION

The Electricity program is designed to provide students with a broad foundation in the principles and an entry level working knowledge of the techniques, equipment, and tools of the electrical craft. The course will prepare for an apprenticeship program in the residential and industrial construction industry, electrical helper in utility companies, etc. Entry level as maintenance electrician in plants, mines, buildings; motor winder/electrical worker in apparatus service shops; industrial worker with electrical, pneumatic, and hydraulic controls, etc.; depends on the individual's initiative, ability to pass tests, and employment working agreements. The possibilities for advancement should be enhanced by having this broad foundation in the basic principles of the diverse electrical field.

Certificate

DAY PROGRAM

| First Quarter (F,W) | Hrs./Wk. | | |
|--------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELC 070 Math for Electr. I | 5 | — | 5 |
| ELC 103 Electrical Codes | 5 | — | 5 |
| ELC 110 Electrical Wiring | — | 15 | 5 |
| ELC 111 Basic Electricity | 5 | — | 5 |
| | 15 | 15 | 20 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$230.00

| Second Quarter (W,S) | Hrs./Wk. | | |
|---------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELC 071 Math for Electr. II | 5 | — | 5 |
| ELC 120 Electric Motors | — | 15 | 5 |
| ELC 121 AC & Elec. Appts. | 5 | — | 5 |
| COM 055 Communications | 5 | — | 5 |
| | 15 | 15 | 20 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$90.00

| Third Quarter (S,Su) | Hrs./Wk. | | |
|---------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELC 072 Physics for Electr. | 5 | — | 5 |
| ELC 131 Instrumentation | 5 | — | 5 |
| ELC 151 Adv. Motor Control | 5 | — | 5 |
| ELC 160 Industrial Controls | — | 15 | 5 |
| | 15 | 15 | 20 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$75.00

EXTENDED DAY PROGRAM

| First Quarter (F,W,S) | Hrs./Wk. | | |
|--------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELC 070 Math for Electr. I | 5 | — | 5 |
| ELC 103 Electrical Codes | 5 | — | 5 |
| ELC 111 Basic Electricity | 5 | — | 5 |
| | 15 | — | 15 |

15 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$70.00

| Second Quarter (F,W,S) | Hrs./Wk. | | |
|-------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELC 110 Electrical Wiring | — | 15 | 5 |
| | — | 15 | 5 |

15 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$160.00



| Third Quarter (F,W,S) | Hrs./Wk. | | |
|---------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELC 071 Math for Electr. II | 5 | — | 5 |
| ELC 121 AC & Ele. Apprts. | 5 | — | 5 |
| COM 055 Communications | 5 | — | 5 |
| | 15 | — | 15 |

15 Clock Hour Program
Approx. Cost of Books, tools,
Supplies = \$50.00

| Fourth Quarter (F,W) | Hrs./Wk. | | |
|-----------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELC 120 Electric Motors | — | 15 | 5 |
| | — | 15 | 5 |

15 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$40.00

| Fifth Quarter (W) | Hrs./Wk. | | |
|--------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELC 072 Physics for Electr. | 5 | — | 5 |
| ELC 131 Instrumentation | 5 | — | 5 |
| ELC 151 Adv. Motor Control | 5 | — | 5 |
| | 15 | — | 15 |

15 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$50.00

| Sixth Quarter (S) | Hrs./Wk. | | |
|---------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELC 160 Industrial Controls | — | 15 | 5 |
| | — | 15 | 5 |

15 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$25.00





ELECTRONIC TECHNOLOGY

Division: Electronics

Division Head: Ulrich E. Zeisler

Faculty: J. Baker, K. Bingham, D. Christensen, W. Crossen, J. Culligan, R. Darnell, H. Edmonds, S. Lawrence, H. Pastore, R. Reisner, J. Smith

Rampton Technology Building, Room 516

DESCRIPTION

Electronic Technology consists of the practical application of mathematics, physics, electronic theoretical principles, and communication skills in the manufacture, repair, maintenance, and sales of complex electronic equipment. It is possible for a student to advance in the industry from entrance level skills to professional or management level standing on the strength of the basic program. Presently, advancement is limited only by the individual's initiative and drive after employment.

Certificate — The Certificate program prepares students for entrance level in the field of electronics. Upon completion the student is prepared for employment in routine maintenance, repair, assembly, and testing of electronic equipment. Because of the technical demand by the electronic industry, the students are encouraged to earn a diploma or an Associate of Applied Science Degree to prepare for advancement to professional or management level.

Diploma — The diploma program prepares students for employment in manufacturing, maintaining, repairing, and selling electronic devices and systems. Other areas for employment are as technicians in microwave, communication, radio and television, mobile communication, medical electronics, instrumentation and industrial controls, and electronic data processing.

A.A.S. Degree

The A.A.S. Degree program is designed to provide students with a broad background in mathematics and physics, along with theoretical and practical training in electronics. This prepares the electronic technician to assist the engineer in production, operation, and servicing of electronic systems and equipment. With an A.A.S. Degree, technicians may be employed as testers or inspectors, or they may be expected to apply their background in science assisting engineers or scientists in resolving problems in research and development.

DAY PROGRAM — CERTIFICATE

| First Quarter (F,W,S,Su) | Hrs./Wk. | | |
|----------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 140 DC & AC Appl. | — | 10 | 3 |
| ELT 141 DC & AC Fund. | 6 | 4 | 7 |
| ELT 095 Algebra for Electr. | 5 | — | 5 |
| ELT 096 Trig. for Electr. | 5 | — | 5 |
| | 16 | 14 | 20 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$220.00

| Second Quarter (F,W,S,Su) | Hrs./Wk. | | |
|------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 150 App. Amp. Dev. | — | 10 | 3 |
| ELT 151 Amp. Dev. Fund. | 6 | 4 | 7 |
| COM 055 Communications. | 5 | — | 5 |
| | 11 | 14 | 15 |

25 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$50.00



| Third Quarter (F,W,S,Su) | Hrs./Wk. | | |
|-----------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 160 App. Adv. Amp. Dev. | — | 10 | 3 |
| ELT 161 Adv. Amp. Dev. Fund. | 6 | 4 | 7 |
| ELT 152 Logic Fund. | 5 | — | 5 |
| PSY 055 Human Relations, | 3 | — | 3 |
| | 14 | 14 | 18 |

28 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$40.00

EXTENDED DAY – CERTIFICATE
 (Gen. Ed. requirements included)

| First Quarter (F,W,S) | Hrs./Wk. | | |
|----------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 146 DC App. | — | 4 | 1 |
| ELT 147 DC Fund. | 2 | 2 | 3 |
| ELT 095 Algebra for Electr. | 5 | — | 5 |
| | 7 | 6 | 9 |

13 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$180.00

| Second Quarter (F,W,S) | Hrs./Wk. | | |
|--------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 148 AC App. | — | 6 | 2 |
| ELT 149 AC Fund. | 4 | 2 | 4 |
| ELT 096 Trig. for Electr. | 5 | — | 5 |
| | 9 | 8 | 11 |

17 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$10.00

| Third Quarter (F,W,S) | Hrs./Wk. | | |
|--------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 156 App. Amp. Dev. I | — | 4 | 1 |
| ELT 157 Amp. Dev. Fund. I | 2 | 2 | 3 |
| COM 055 Communications. | 5 | — | 5 |
| | 7 | 6 | 9 |

13 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$50.00

| Fourth Quarter (F,W,S) | Hrs./Wk. | | |
|---------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 158 App. Amp. Dev. II | — | 6 | 2 |
| ELT 159 Amp. Dev. Fund. II | 4 | 2 | 4 |
| PSY 055 Human Relations: | 3 | — | 3 |
| | 7 | 8 | 9 |

15 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$20.00



| Fifth Quarter (F,W,S) | Hrs./Wk. | | |
|------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 166 App. Adv. Amp. Dev. I | — | 4 | 1 |
| ELT 167 Adv. Amp. Dev. I. | 2 | 2 | 3 |
| ELT 152 Logic Fund. | 5 | — | 5 |
| | 7 | 6 | 9 |

13 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$40.00

| Sixth Quarter (F,W,S) | Hrs./Wk. | | |
|-------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 168 App. Adv. Amp. Dev. II | — | 6 | 2 |
| ELT 169 Adv. Amp. Dev. II. | 4 | 2 | 4 |
| | 4 | 8 | 6 |

12 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$10.00



DAY PROGRAM – DIPLOMA
(Gen. Ed. requirements included)

| First Quarter (F,W,S,Su) | Hrs./Wk. | | |
|----------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 140 DC & AC Appl. | — | 10 | 3 |
| ELT 141 DC & AC Fund. | 6 | 4 | 7 |
| ELT 095 Algebra for Electr. | 5 | — | 5 |
| ELT 096 Trig. for Electr. | 5 | — | 5 |
| | 16 | 14 | 20 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$220.00

| Second Quarter (F,W,S,Su) | Hrs./Wk. | | |
|------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 150 App. Amp. Dev. | — | 10 | 3 |
| ELT 151 Amp. Dev. Fund. | 6 | 4 | 7 |
| PHY 055 Applied Physics | 5 | — | 5 |
| | 11 | 14 | 15 |

25 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$50.00

| Third Quarter (F,W,S,Su) | Hrs./Wk. | | |
|-----------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| Elt 160 App. Adv. Amp. Dev. | — | 10 | 3 |
| ELT 161 Adv. Amp. Dev. Fund. | 6 | 4 | 7 |
| COM 055 Communications. | 5 | — | 5 |
| | 11 | 14 | 15 |

25 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$40.00

| Fourth Quarter (F,W,S,Su) | Hrs./Wk. | | |
|------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 170 App. Com. Dev. | — | 10 | 3 |
| ELT 171 Com. Dev. Fund. | 6 | 4 | 7 |
| ELT 152 Logic Fund. | 5 | — | 5 |
| | 11 | 14 | 15 |

25 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$50.00

| Fifth Quarter (F,W,S,Su) | Hrs./Wk. | | |
|---------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 226 Pract. Syst. Anal. | — | 10 | 3 |
| ELT 227 Systems Analysis. | 6 | 4 | 7 |
| PSY 055 Human Relations. | 3 | — | 3 |
| DDT 108 Electronic Drafting ... | 2 | 2 | 3 |
| | 11 | 16 | 16 |

27 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$50.00

| Sixth Quarter (F,W,S,Su) | Hrs./Wk. | | |
|--------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT Elective | 6 | 14 | 10 |
| ELT 191 Cir. Anal. | 5 | — | 5 |
| | 11 | 14 | 15 |

25 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$30.00

EXTENDED DAY – DIPLOMA
(Gen. Ed. requirements included)

| First Quarter (F,W,S) | Hrs./Wk. | | |
|----------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 095 Algebra for Electr. | 5 | — | 5 |
| ELT 146 DC App. | — | 4 | 1 |
| ELT 147 DC Fund. | 2 | 2 | 3 |
| DDT 108 Electronic Draft. | 2 | 2 | 3 |
| | 9 | 8 | 12 |

17 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$190.00

| Second Quarter (F,W,S) | Hrs./Wk. | | |
|--------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 096 Trig. for Electr. | 5 | — | 5 |
| ELT 148 AC app. | — | 6 | 2 |
| ELT 149 AC Fund. | 4 | 2 | 4 |
| PSY 055 Human Relations. | 3 | — | 3 |
| | 12 | 8 | 14 |

20 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$40.00



| Third Quarter (F,W,S) | Hrs./Wk. | | |
|--------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 156 App. Amp. Dev I | — | 4 | 1 |
| ELT 157 Amp. Dev. Fund I | 2 | 2 | 3 |
| COM 055 Communications | 5 | — | 5 |
| | 7 | 6 | 9 |

13 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$50.00

| Fourth Quarter (F,W,S) | Hrs./Wk. | | |
|----------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 158 App. Amp. Dev. II | — | 6 | 2 |
| ELT 159 Amp. Dev. Fund. II | 4 | 2 | 4 |
| ELT 152 Logic Fund. | 5 | — | 5 |
| | 9 | 8 | 11 |

17 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$30.00

| Fifth Quarter (F,W,S) | Hrs./Wk. | | |
|-------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 166 App. Adv. Amp. Dev. I | — | 4 | 1 |
| ELT 167 Adv. Amp. Dev. I | 2 | 2 | 3 |
| ELT 191 Cir. Analysis | 5 | — | 5 |
| | 7 | 6 | 9 |

13 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$40.00

| Sixth Quarter (F,W,S) | Hrs./Wk. | | |
|--------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 168 App. Adv. Amp. Dev. II | — | 6 | 2 |
| ELT 169 Adv. Amp. Dev. II | 4 | 2 | 4 |
| | 4 | 8 | 6 |

12 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$10.00

| Seventh Quarter (F,W,S) | Hrs./Wk. | | |
|-------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 170 App. Com. Dev. | — | 10 | 3 |
| ELT 171 Com. Dev. Fund. | 6 | 4 | 7 |
| | 6 | 14 | 10 |

20 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$40.00

| Eighth Quarter (F,W,S) | Hrs./Wk. | | |
|----------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 226 Pract. Syst. Anal. | — | 10 | 3 |
| ELT 227 Systems Analysis | 6 | 4 | 7 |
| | 6 | 14 | 10 |

20 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$20.00

| Ninth Quarter (F,W,S) | Hrs./Wk. | | |
|-----------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT Elective | 6 | 14 | 10 |
| | 6 | 14 | 10 |

20 Clock Hour Program
 Approx. Cost of Books, tools,
 Supplies = \$20.00

DAY PROGRAM — A.A.S. DEGREE
 (Gen. Ed. requirements included)

| First Quarter (F,W,S,Su) | Hrs./Wk. | | |
|--------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 150 App. Amp. Dev. | — | 10 | 3 |
| ELT 151 Amp. Dev. Fund. | 6 | 4 | 7 |
| MTH 105 College Algebra | 5 | — | 5 |
| ENG 101 English Comp. | 3 | — | 3 |
| | 14 | 14 | 18 |

28 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$70.00

| Second Quarter (F,W,S,Su) | Hrs./Wk. | | |
|------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 160 App. Adv. Amp. Dev. | — | 10 | 3 |
| ELT 161 Adv. Amp. Dev. Fund. | 6 | 4 | 7 |
| MTH 106 Plane Trig. | 5 | — | 5 |
| ENG 130 Technical Writing | 3 | — | 3 |
| | 14 | 14 | 18 |

28 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$40.00



| Third Quarter (F,W,S,Su) | Hrs./Wk. | | |
|------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 170 App. Com. Dev. | — | 10 | 3 |
| ELT 171 Com. Dev. Fund. | 6 | 4 | 7 |
| ELT 152 Logic Fund. | 5 | — | 5 |
| ELT 098 App. Calculus. | 5 | — | 5 |
| | 16 | 14 | 20 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$60.00

| Fourth Quarter (F,W,S,Su) | Hrs./Wk. | | |
|---------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 226 Pract. Syst. Anal. | — | 10 | 3 |
| ELT 227 Systems Analysis. | 6 | 4 | 7 |
| PHY 117 Mechanics. | 5 | 1 | 5 |
| | 11 | 15 | 15 |

26 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$60.00

| Fifth Quarter (F,W,S,Su) | Hrs./Wk. | | |
|--------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT Elective** | 6 | 14 | 10 |
| PHY 118 Heat, Light & Sound. . | 5 | 1 | 5 |
| Soc. Science Elective*** | 3 | — | 3 |
| | 14 | 15 | 18 |

29 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$50.00

| Sixth Quarter (F,W,S,Su) | Hrs./Wk. | | |
|---|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT Elective** | 6 | 14 | 10 |
| PHY 119 Elec. Magn. & Modern Physics. | 5 | 1 | 5 |
| DDT 108 Electronic Drafting. . | 2 | 2 | 3 |
| | 13 | 17 | 18 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$60.00

**See electives, page 000.

***See electives, page 000.

EXTENDED DAY – A.A.S. DEGREE (Gen. Ed. requirements included)

| First Quarter (F,W,S) | Hrs./Wk. | | |
|---------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 156 App. Amp. Dev. I. | — | 4 | 1 |
| ELT 157 Amp. Dev. Fund. I. | 2 | 2 | 3 |
| PHY 117 Mechanics. | 5 | 1 | 5 |
| ENG 101 English Comp. | 3 | — | 3 |
| | 10 | 7 | 12 |

17 Clock Hour Program
Approx. Cost of Books, tools,
Supplies = \$50.00

| Second Quarter (F,W,S) | Hrs./Wk. | | |
|----------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 158 App. Amp. Dev. II. | — | 6 | 2 |
| ELT 159 Amp. Dev. Fund. II. | 4 | 2 | 4 |
| PHY 118 Heat, Light & Sound. . | 5 | 1 | 5 |
| ENG 130 Technical Writing. | 3 | — | 3 |
| | 12 | 9 | 14 |

21 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$20.00

| Third Quarter (F,W,S) | Hrs./Wk. | | |
|---|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 166 App. Adv. Amp. Dev. I. — | 4 | 1 | 1 |
| ELT 167 Adv. Amp. Dev. I. | 2 | 2 | 3 |
| PHY 119 Elec. Magn. & Modern Physics. | 5 | 1 | 5 |
| Soc. Science Elective*** | 3 | — | 3 |
| | 10 | 7 | 12 |

17 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$30.00

| Fourth Quarter (F,W,S) | Hrs./Wk. | | |
|-----------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 168 App. Adv. Amp. Dev. II. — | 6 | 2 | 2 |
| ELT 169 Adv. Amp. Dev. II. | 4 | 2 | 4 |
| MTH 105 College Algebra. | 5 | — | 5 |
| | 9 | 8 | 11 |

17 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$20.00



| Fifth Quarter (F,W,S) | Hrs./Wk. | | |
|-----------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 170 App. Com. Dev..... | — | 10 | 3 |
| ELT 171 Com. Dev. Fund..... | 6 | 4 | 7 |
| ELT 152 Logic Fund..... | 5 | — | 5 |
| | 11 | 14 | 15 |

25 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$40.00

| Sixth Quarter (H,W,S) | Hrs./Wk. | | |
|--------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 226 Pract. Syst. Anal..... | — | 10 | 3 |
| ELT 227 Systems Analysis..... | 6 | 4 | 7 |
| | 6 | 14 | 10 |

20 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$40.00

| Seventh Quarter (F,W,S) | Hrs./Wk. | | |
|-------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT Elective**..... | 6 | 14 | 10 |
| | 6 | 14 | 10 |

20 Clock Hour Program
 Approx. cost of Books, Tools,
 Supplies = \$50.00

| Eighth Quarter (F,W,S) | Hrs./Wk. | | |
|------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT Elective**..... | 6 | 14 | 10 |
| | 6 | 14 | 10 |

20 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$50.00

| Ninth Quarter (F,W,S) | Hrs./Wk. | | |
|-------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ELT 098 App. Calculus..... | 5 | — | 5 |
| MTH 106 Plane Trig..... | 5 | — | 5 |
| DDT 108 Electr. Drafting..... | 2 | 2 | 3 |
| | 12 | 2 | 13 |

14 Clock Hour Program
 Approx. cost of Books, Tools,
 Supplies = \$40.00

****ELECTIVES:**

- ELT 228, 229, Microwave Advanced Communications with Lab (F,S)
- ELT 238, 239, Computer Technology with Lab (F,W,S,Su)
- ELT 247, 248, 249, Medical Electronics with Lab (W)
- ELT 258, 259, Instrumentation with Lab (S)
- ELT 278, 279, Advanced T.V. systems with Lab (S)

***Soc. Science: One of the following ECN 101, SOC 101, PSY 101, PS 110.



ENGINEERING DRAFTING AND DESIGN

Division: Graphic Arts

Division Head: Walter L. White

Faculty: S. Davis, T. Ellison, G. Pidcock, D. Walker, D. Webb, J. Yenchik
Rampton Technology Building, Rooms 403, 404, 408, 409

DESCRIPTION

The Engineering Drafting & Design Technology program is fully certified by the American Institute of Design and Drafting (A.I.D.D.)

The technician today must be able to demonstrate capabilities in geometry, algebra, trigonometry, mechanics, strength of materials, and basic physics. Since the technician works closely with professionals such as engineers, neat appearance and good verbal skills are also required.

Engineering Drafting & Design Technology graduates are qualified with entrance level skills in a number of drafting fields: mechanical, structural, electrical and electronics, civil, and piping. Graduates, after gaining experience, may reasonably expect advancements into positions such as design checking, engineering design, and supervision. Industrial competition for present day world markets has inspired accelerated technological progress in product refinement, and has stimulated scores of entirely new concepts in product development. It is this competition and the consequent need for progressive design that has increased the demand for qualified drafting personnel.

Graduates may expect to receive approximately \$4.25 to \$5.75 an hour starting salary.





DAY PROGRAM – CERTIFICATE

(Diploma = 97 credits)

| First Quarter (F,W) | Hrs./Wk. | | |
|----------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| EDDT 113 Draft Fund..... | 5 | 15 | 10 |
| MTH 051 Elem. Algebra..... | 5 | — | 5 |
| | 10 | 15 | 15 |

25 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$165.00

| Second Quarter (F,W,S) | Hrs./Wk. | | |
|------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| EDDT 124 Adv. Des. Geom..... | 3 | 7 | 5 |
| EDDT 133 Eng. Draw. I..... | 3 | 7 | 5 |
| MTH 052 Elem. Trig..... | 2 | — | 2 |
| MTH 056 Scientific Calc..... | 1 | — | 1 |
| COM 055 Communications..... | 5 | — | 5 |
| | 14 | 14 | 18 |

28 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$140.00

| Third Quarter (W,S,Su) | Hrs./Wk. | | |
|--------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| EDDT 134 Eng. Drawing II.... | 3 | 7 | 5 |
| EDDT 136 Tech. Draft. Spec.... | 3 | 7 | 5 |
| PHY 055 Applied Physics..... | 5 | — | 5 |
| MS 227 Machine Shop..... | 2 | 2 | 3 |
| | 13 | 16 | 18 |

29 Clock Hour Program
Approx. cost of Books, tools,
Supplies = \$55.00

A detainer certificate given for completion of first three (3) quarters.

| Fourth Quarter (F,S)** | Hrs./Wk. | | |
|---------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| EDDT 218 Elec. & Ekt. Draw.... | 3 | 7 | 5 |
| EDDT 219 Civil Drafting..... | 3 | 7 | 5 |
| EDDT 236 Pipe Drafting..... | 2 | 3 | 3 |
| EDDT 216 Str. of Materials..... | 5 | — | 5 |
| | 13 | 17 | 18 |

30 Clock Hour Program
Approx. cost of Books, tools,
Supplies = \$68.00

| Fifth Quarter (W)** | Hrs./Wk. | | |
|-----------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| EDDT 224 Steel Design..... | 5 | — | 5 |
| EDDT 227 Structural Detailing.... | 3 | 7 | 5 |
| EDDT 234 Manuf. Process..... | 3 | — | 3 |
| | 11 | 7 | 13 |

18 Clock Hour Program
Approx. Cost of Books, tools,
Supplies = \$95.00

| Sixth Quarter (S**) | Hrs./Wk. | | |
|---------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| EDDT 226 Machine Design.... | 5 | — | 5 |
| EDDT 239 Adv. Machine Draft.... | 3 | 7 | 5 |
| PSY 055 Human Relations..... | 3 | — | 3 |
| MS 225 Foundry Proc..... | 1 | 3 | 2 |
| | 12 | 10 | 15 |

22 Clock Hour Program
Approx. Cost of Books, tools,
Supplies = \$40.00

**9 credit hours of prior approved AT course work may be substituted for 9 credit hours of EDDT courses in the 4th, 5th, or 6th quarters not to exceed 9 credit hours of AT courses for total program.

DAY PROGRAM – CERTIFICATE,

A.A.S. DEGREE (Degree = 103 credits)

*Students who choose to earn an A.A.S. Degree are required to earn a minimum of 24 qtr. credit hours of applicable General Education type classes, numbered 100 or above. These classes must include ENG 101, MTH 101, PHY 101, and 11 additional credit hours.

| First Quarter (F,W) | Hrs./Wk. | | |
|------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| EDDT 113 Draft Fund..... | 5 | 15 | 10 |
| MTH 101 Intro. Col. Algebra* | 5 | — | 5 |
| | 10 | 15 | 15 |

25 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$165.00



| Second Quarter (F,W,S) | Hrs./Wk. | | |
|----------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| EDDT 124 Adv. Des. Geom. | 3 | 7 | 5 |
| EDDT 133 Eng. Draw. I. | 3 | 7 | 5 |
| MTH 052 Elem. Trig. | 2 | — | 2 |
| MTH 056 Scientific Calc. | 1 | — | 1 |
| ENG 101 Eng. Comp.* | 3 | — | 3 |
| | 12 | 14 | 16 |

26 Clock Hour Program
Approx. Cost of Books, tools,
Supplies = \$140.00

| Third Quarter (W,S,Su) | Hrs./Wk. | | |
|--------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| EDDT 134 Eng. Drawing II | 3 | 7 | 5 |
| EDDT 136 Tech. Draft. Spec. | 3 | 7 | 5 |
| PHY 101 Intro. to Physics* | 5 | — | 5 |
| MS 227 Machine Shop | 2 | 2 | 3 |
| | 13 | 16 | 18 |

29 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$55.00

| Fourth Quarter (F,S)** | Hrs./Wk. | | |
|--------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| EDDT 218 Elec. & Elect. Dwg. | 3 | 7 | 5 |
| EDDT 219 Civil Drafting | 3 | 7 | 5 |
| EDDT 236 Pipe Drafting. | 2 | 3 | 5 |
| EDDT 216 Str. of Materials | 5 | — | 5 |
| | 13 | 17 | 18 |

30 Clock Hour Program
Approx. Cost of Books, tools,
Supplies = \$65.00

| Fifth Quarter (W**) | Hrs./Wk. | | |
|-------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| EDDT 224 Steel Design | 5 | — | 5 |
| EDDT 227 Structural Detail. | 3 | 7 | 5 |
| EDDT 234 Manuf. Process | 3 | — | 3 |
| General Ed. Elective* | 5 | — | 5 |
| | 16 | 7 | 18 |

23 Clock Hour Program
Approx. cost of Books, Tools,
Supplies = \$95.00

| Sixth Quarter (S**) | Hrs./Wk. | | |
|------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| EDDT 226 Machine Design | 5 | — | 5 |
| EDDT 239 Adv. Mach. Draft. | 3 | 7 | 5 |
| ENG 130 Tech. Writing* | 3 | — | 3 |
| PSY 101 Gen. Psychology* | 3 | — | 3 |
| MS 225 Foundry Processes | 1 | 3 | 2 |
| | 15 | 10 | 18 |

25 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$40.00

**9 credit hours of prior approved AT course work may be substituted for 9 credit hours of EDDT courses in the 4th, 5th, or 6th quarters not to exceed 9 credit hours of AT courses for total program.

EXTENDED DAY – CERTIFICATE (Taught in Evening) 59 credits

Engineering Drafting & Design extended day credit classes may be applied to the Diploma or A.A.S. Degree requirements for graduation.

| First Quarter (F) | Hrs./Wk. | | |
|---------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| EDDT 115 Mach. Draft I. | 4 | 12 | 8 |
| | 4 | 12 | 8 |

16 Clock Hour Program
Approx. cost of Books, Tools,
Supplies = \$75.00

| Second Quarter (W) | Hrs./Wk. | | |
|-----------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| EDDT 123 Descriptive Geo. | 2 | 10 | 6 |
| MTH 051 Elem. Algebra | 3 | — | 5 |
| | 7 | 10 | 10 |

17 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$50.00



| Third Quarter (S) | Hrs./Wk. | | |
|-----------------------------------|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| EDDT 133 Eng. Drawing I | 3 | 7 | 5 |
| MTH 052 Elem. Trig. | 2 | — | 2 |
| MTH 056 Scientific Calc. | 1 | — | 1 |
| | <u>6</u> | <u>7</u> | <u>8</u> |

13 Clock Hour Program
Approx. Cost of Books, tools,
Supplies = \$95.00

| Fourth Quarter (F) | Hrs./Wk. | | |
|---------------------------------------|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| EDDT 134 Eng. Drawing II | 3 | 7 | 5 |
| EDDT 216 Mech. & Str. of Mat. | 5 | — | 5 |
| ENG 130 Tech. Writing | 3 | — | 3 |
| | <u>11</u> | <u>7</u> | <u>13</u> |

18 Clock Hour Program
Approx. Cost of Books, tools,
Supplies = \$35.00

| Fifth Quarter (W) | Hrs./Wk. | | |
|-------------------------------------|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| EDDT 225 Mach. Tool Draft | — | 8 | 3 |
| EDDT 226 Machine Design | 5 | — | 5 |
| MS 227 Machine Shop | 2 | 2 | 3 |
| | <u>7</u> | <u>10</u> | <u>11</u> |

17 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$25.00

| Sixth Quarter (S) | Hrs./Wk. | | |
|--------------------------------------|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| EDDT 237 Structural Draft | 2 | 3 | 3 |
| EDDT 236 Pipe Drafting | 2 | 3 | 3 |
| EDDT 238 Elec. Mech. Draft | 2 | 3 | 3 |
| | <u>6</u> | <u>9</u> | <u>9</u> |

15 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$35.00

EVENING SCHOOL

All divisions participate in the Evening School.

GENERAL:

A wide variety of programs and courses is offered to meet the educational needs of students unable to attend regular day programs. Classes are offered for apprentice workers; occupational improvement classes are designed to keep workers current in the field; occupational preparatory (Extended Day) programs provide skill training to prepare for entry level employment; supervisory training classes assist in preparing for management and supervisory skills. General Education and pre-technical classes are also available.

MINIMUM ENROLLMENT:

Any class with fewer than 10 students enrolled may be cancelled by the College for that quarter. Students registered will receive 100% refund of tuition and fees for any class so cancelled.

ELIGIBILITY:

Courses are open to anyone over 16 years of age and are offered without reference to college credit, except where indicated otherwise.

NEW COURSES:

New courses may be added on request from the community, business, or industry (10 people minimum).

APPRENTICE COURSES:

A related training program for workers learning a trade through apprenticeship or on-the-job training. Courses are offered primarily in the evening during the Fall and Winter quarters. Training consists of 81 clock hours per quarter with emphasis in special theory and shop practices which supplement on-the-job experience. Courses are open only to qualified apprentices and trainees in the following areas:

| | |
|-----------------|------------------------|
| Brickmasonry | Structural Ironworkers |
| Cabinet Making | Millwrights |
| Carpentry | Painting & Decoration |
| Drywall Const. | Pipefitting & Ref. |
| Electricity | Plumbing |
| Foundry Working | Sheetmetal |
| Glaziers | Welding |

Ironworkers Layout

Apprenticeship programs are offered to fit particular needs. Programs are presently operated for:

Kennecott Copper Corporation
EIMCO Corporation

OCCUPATIONAL IMPROVEMENT COURSES:

Special classes have been planned to help trained workers keep current with new developments and technological changes. These classes also assist the partially trained workers in gaining new skills for job advancement. For course descriptions see program sections.

Apparel Manufacturing

Beginning Flat Pattern Making.

Automotive

Autobody
Autobody Paint
Automotive Fuel and Electrical
Auto Owner's Course
Motorcycle Mechanics
Small Engine Repair
Diesel and Industrial Hydraulics

Building Construction

Cabinet and Furniture Making
Construction Estimating
Blueprint Reading
Basic Building Inspection
Advanced Code Enforcement
General Contractors License
Bricklaying Skills and Practice



Business

Accounting
Checkstand Training
CPS Review
Machine Shorthand (Court Reporting)
Middle Management
Motivation and Communication
Office Machines
Real Estate
Shorthand
Supervision and Management
Typewriting
Women in Management

Data Processing

Computer Programming

Electronics & Electricity

Amateur Radio
Basic Electronics
Closed Circuit Television
Computer Electronics
F.C.C. License Study
Instrumentation
Logic Fundamentals
Medical Electronics
Microprocessors
Microwave Communication
Receivers & Transmitters
Solid State Systems
Television
Basic Electricity
Electric Motors and Controls
Electrical Codes
House Wiring
Industrial Controls
Instrumentation

Graphics

Architectural Drafting, Plant Layout
ART — Art Layout and Design, Beginning Drawing, Water Color and Oils, Figure Drawing, and Photo Retouching
DRAFTING & DESIGN — Mechanical Drafting, Structural Drafting, Technical Illustration, Electronic Drafting, Metal Fabricators Layout
PRINTING — Offset Printing and Duplicating, Offset Camera - Black & White and Color, Pasteup, Cold Type Typesetting, Printing Management
PHOTOGRAPHY — Beginning, Intermediate, and Color Photography

Metal Trades

MACHINE SHOP — Beginning Machine Shop, Machine Shop for Hobbyists, Machinist's Numerical Control, Advanced Machine Shop, Machine Shop Math, and Blueprint Reading
APPLIANCES — Major Appliance Repair and Refrigeration
WELDING — Beginning, Intermediate, Advanced and Inert Gas Welding

Men's Hair Styling

Basic and high fashion (open to licensed barbers)

Permanent Waving

Permanent Waving for licensed barbers to meet current licensing requirements

Pre-Technical

Upgrading or reviewing of basic fundamentals

Upholstery

Beginning Furniture Upholstery

SUPERVISORY TRAINING:

Special courses to assist supervisory personnel for such positions to become familiar with new techniques, developments and improved methods in business and industrial supervision and management.

GENERAL EDUCATION DIVISION:

General Education classes are offered in the evening as support for the Occupational Preparatory programs. Such areas include:

- English
- Mathematics
- Chemistry
- Physics
- Civics
- Human Relations
- Communications
- Political Science
- Psychology

Classes are also offered in Mathematics, Communications, Personal Development and Reading Skills for those desiring up-grading to enter technical programs but lack necessary entry skills.

OCCUPATIONAL PREPARATION: (EXTENDED DAY) Same as Day-School only taught in the evening.

Full programs are offered during evenings and Saturdays to prepare students to enter various fields with entry level skills. The courses have the same subject matter as the day school occupational preparatory programs and lead to a certificate, diploma, or Associate in Applied Science Degree.

The following programs are found in alphabetical sequence in the catalog.

Accounting

Business Management (Accounting Oriented)

Business Management (Ownership Oriented)

Business Management (Supervision Oriented)

Drafting & Design Technology

Electricity

Electronics

Marketing — Direct Sales

Marketing — Retail Merchandising

Real Estate

Transportation Management



EXECUTIVE SECRETARY

Division: Office Education

Division Head: Kathryn Beebe

**Faculty: M. Aylett, E. Bartholomew, M. Densley, A. Johnson, L. Metos,
J. Rodi, S. Wall**

Nelson Administration Building, Room 210C



DESCRIPTION

This program requires a prerequisite typing speed of 50 NWPM. Students earn a certificate in three quarters, or a diploma or A.A.S. Degree. The Clerk Typist program or Stenographer program, or equivalent, is a prerequisite for the diploma or A.A.S. Degree.

The program is designed to prepare students to enter and progress in careers as secretaries. Maturity, intelligence, clearly defined personal ethics, and the ability to get along and work effectively with others are necessary personal qualities for being a successful secretary. A mastery of office skills and the ability to assume responsibility without direct supervision is essential.

On completion of training the student will be qualified to select from jobs with beginning salaries ranging from \$650 to \$850 a month.

Certificate, Diploma, A.A.S. Degree



| First Quarter (F) | Hrs./Wk. | | |
|------------------------------------|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| OA 201 Sec. Procedures | 5 | — | 5 |
| OA 213 Production Typing | 2 | 8 | 4 |
| OA 221 Shorthand IV | 5 | — | 5 |
| — or — | | | |
| MGT 205 Princs. of Mgt. | 3 | — | 3 |
| MTH 080 Business Math* | 2 | 3 | 3 |
| | 14 | 11 | 17 |

25 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$90.00

| Second Quarter (W) | Hrs./Wk. | | |
|---|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| OA 202 Exec. Sec. Procs. | 5 | — | 5 |
| OA 222 Shorthand V†† | 5 | — | 5 |
| — or — | | | |
| MGT 206 Techs. of Supervision | 4 | — | 4 |
| OA 224 Transcription | 3 | — | 3 |
| — or — | | | |
| ECN 101 Gen. Economics | 3 | — | 3 |
| OA 271 Sec. Accounting | 5 | — | 5 |
| | 18 | — | 18 |

18 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$50.00

| Third Quarter (S) | Hrs./Wk. | | |
|-----------------------------------|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| OA 210 Admin. Office Mgt. | 5 | — | 5 |
| OA 214 Legal Typing | 1 | 2 | 2 |
| OA 215 Medical Typing | — | 2 | 1 |
| OA 223 Shorthand VI | 5 | — | 5 |
| — or — | | | |
| MGT 105 Business Law | 5 | — | 5 |
| ENG 101 English Comp. | 3 | — | 3 |
| PSY 101 Gen. Psychology | 3 | — | 3 |
| | 17 | 4 | 19 |

21 Clock Hour Program
Approx. Cost of Books, tools,
Supplies = \$50.00

††An alternate sequence of shorthand and transcription may be followed. CR 221, CR 222, CR 223, CR 224.

General Education classes marked with an asterisk (*) are required for a Certificate or Diploma. Students who choose to earn an A.A.S. Degree are required to earn a minimum of 24 qtr. credit hours of applicable General Education type classes numbered 100 or above. These classes must include ENG 101, and 21 additional credit hours. Often more than one General Education class will need to be scheduled each quarter in place of the asterisked classes, or in addition where only one such class is listed in a quarter.

Refer to the General Education section of the catalog on page 79.

FIXED AND FLEXIBLE PROGRAMS

Division: Skills Center

Division Head: Brent H. Goodfellow

Downtown Campus, Room 103

DESCRIPTION

The Skills Center offers students who qualify the opportunity to receive short-term (usually 6 to 9 months) vocational training. A variety of courses is offered: Auto Mechanics, Foreign Auto Repair, Welding, Auto Body, Food Service, and Clerical. GED Preparation, refresher Math, and Reading classes are also available for students who need to improve their basic skills.

All classes are individualized, and students progress at their own speed. Upon completion of any of the Skills Center courses, students can receive high school credit through the Salt Lake School District and a certificate of achievement. The emphasis is on training for immediate employment.

Skills Center credit is not transferable to the regular college program.

Scheduling of all courses is on a weekly open-entry, open-exit basis and does not follow the college's quarter system.

Special flexible programs that are offered periodically include: Auto Parts, Merchandising, Transportation, Insurance Upgrade Classes, Social Service Aide, Electronics Assembly, etc. . . .

For further information about the Skills Center, call 328-8521, or visit the Center at 431 South 6th East, Salt Lake City, Utah 84102.





FOOD SERVICE

Division: Marketing

Division Head: Gary Cole

Faculty: J. Anjewierden, T. Nuttall

Rampton Technology Building, Room 220



DESCRIPTION

Food Service is among the fastest growing industries with a wide variety of management opportunities. Advancement within the field is primarily based upon an individual's own motivation and capabilities. The tremendous growth of the industry has created many advancement opportunities for those who are qualified. The scope of employment includes commercial-institutional school cafeterias, fast food operations, lodging, hospitals, nursing homes, airline catering, professional catering, and a variety of family and specialty type restaurants; as well as owning one's own food service establishments.

Although initial entry level salaries may be less than competitive with other career fields, through hard work and dedication a salary can be quickly advanced. Beginning salaries usually range from between \$6,500 to \$10,000 per year. Successful managers are earning from \$10,000 to \$18,000 per year, and those managers who have demonstrated the ability to direct larger operations are earning from \$25,000 to \$35,000 per year.

Uniforms — Hair Standards — All students are required to purchase appropriate uniforms in order to participate in instructional food preparation courses. Health Department and industry standards require that hair be controlled through the use of hair nets and/or hats.



CERTIFICATE OR DEGREE

Food Service Certificate for completion of first year requirements: Business Management (Supervision Oriented with Food Service emphasis) Diploma, A.A.S. Degree available to students who have completed the major requirements in Business Management. All General Education requirements are included.

| First Quarter (F,W) | Hrs./Wk. | | |
|-----------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| FS 101 Intro. to Hospitality..... | 4 | — | 4 |
| FS 125 Service of Food..... | 2 | 2 | 2 |
| FS 126 Safety & Sanitation..... | 2 | — | 2 |
| FS 147 Food Prep. I..... | 4 | 6 | 6 |
| FS 199 Hospitality Seminar..... | 2 | — | 1 |
| MTH 080 Business Math (a).... | 3 | 2 | 3 |
| | 11 | 10 | 18 |

27 Clock Hour Program
Approx. Cost of Books, tools,
Supplies = \$80.00

| Second Quarter (W,S) | Hrs./Wk. | | |
|----------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| FS 131 Nutrition..... | 3 | — | 3 |
| FS 137 Food & Bev. Cost Ctl..... | 2 | — | 2 |
| FS 145 Purchasing..... | 2 | 1 | 2 |
| FS 146 Menu Planning..... | 2 | — | 2 |
| FS 148 Food Prep. II..... | 4 | 6 | 6 |
| MGT 206 Tech. of Suprvsn..... | 5 | — | 4 |
| | 18 | 7 | 19 |

25 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$50.00

| Third Quarter (S,Su) | Hrs./Wk. | | |
|---------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| HM 143 Hotel/Rest. Acct. I..... | 3 | 2 | 3 |
| FS 149 Food Prep. III..... | 3 | 4 | 4 |
| ENG 080 Bus. English (b)..... | 5 | — | 3 |
| PSY 055 Human Rltns. (c)..... | 3 | — | 3 |
| CE Coop. Education..... | 3 | — | 3 |
| | 17 | 6 | 16 |

23 Clock Hour Program
Approx. Cost of Books, tools,
Supplies = \$50.00

- (a) MTH 138 Advanced Bus. Math. (Required for A.A.S. Degree).
- (b) ENG 101 English Composition — (Required for A.A.S. Degree).
- (c) PSY General Psychology — (Required for A.A.S. Degree).

FOOD SERVICE ELECTIVES:

FS 215 Food Service Problems (Open-Arrange)

(Fall)

HM 123 Travel and Tourism

(Winter)

FS 239 Gourmet Cooking

MKTG 108 Sales Promotion

MKTG 185 EDP Marketing Applications

HM 132 Housekeeping, Maintenance & Engineering

(Spring)

MKTG 108 Sales Promotion

MKTG 185 EDP Marketing Applications



GENERAL EDUCATION

Division: General Education

Division Head: Donald E. Matthews

Faculty: English: D. Black, P. Gardner, A. Gregg, R. Kirk, J. Lunt, L. Walker, R. Wisan

Math: R. Bown, D. Blackham, J. Brinkerhoff, A. Erickson, R. Erickson, C. Jensen, D. Merrill, R. Parr, L. Salmond, D. Smith, C. Thomson, H. Van Os, J. Wood

Life Science: D. Ballard, B. Blomquist

Social Science: J. Fulmer, W. Laney, K. Magnusson, L. Tilt

Science: T. Osborne, C. Stewart, C. Watt

Rampton Technology Building, Room 316

DESCRIPTION

General Education classes are offered to meet the related instruction needs of students in trade and technical programs. These classes are offered at remedial, non-transfer credit, and transfer credit levels. Students who have not declared a trade or technical major at the College may enroll in General Education classes on a space available basis only.

Students who choose to earn an A.A.S. Degree must earn a total of 24 quarter hours (numbered above 100) of credit offered by the General Education division. English 101 must be included, and the requirements of the major division may specify others. Classes must include at least one from three of the following areas:

(HU) Humanities

(LS) Life Science

(PS) Physical Science

(SS) Social Science

Some General Education classes in individual programs may have a number below 100. When such a class is listed in the catalogue with an asterisk (*), a class with a number above 100 may be substituted for it for those who are seeking an A.A.S. Degree. Often more than one General Education class must be taken each quarter so that 24 hours may be earned while other requirements are being met.

The following classes are available for the A.A.S. Degree:

English:

English 102, 103, 115, 130

Humanities:

ADT 134; CA 141; COM 110; ENG 101, 160, 251, HIS 120

Physical Science:

CEM 101; MTH 101, 105, 106, 138; PHY 101, 105, 117, 118, 119

Social Science:

ECN 101, 135; PS 110; PSY 101; SOC 101

Life Science:

LS 111, 201; FL 101, 150



HEAVY DUTY MECHANICS

Division: Automotive

Division Head: Neal D. Grover

Faculty: K. Burch, D. Kranendonk, J. Larson, H. Smith

Automotive Trades Building, Room 208



DESCRIPTION

Heavy-duty mechanics repair and maintain diesel engines that power (a) transportation equipment, such as heavy duty trucks and buses; (b) construction equipment, like bulldozers, earthmovers and cranes; (c) farm equipment, such as tractors and irrigation pumps; and (d) a variety of other diesel-powered equipment like generators, compressors, and pumps used in public utilities or oil well drilling rigs.

Diesel or heavy-duty mechanics use common hand tools, such as pliers, wrenches, and screwdrivers as well as special tools including valve refacers and piston pin fitting machines. Additionally, they may use complex testing equipment like dynamometers, which measure engine power, and special fuel injection equipment.

Most diesel mechanics are required to buy their own hand tools. A beginner accumulates tools as he/she gains experience.

A young person planning to go into this phase of mechanics should be in good physical condition, have above average mechanical ability, and have good eye-hand coordination.

Diploma, A.A.S. Degree



General Education classes marked with an asterisk (*) are required for a Diploma. Students who choose to earn an A.A.S. Degree are required to earn a minimum of 24 qtr. credit hours of applicable General Education type classes, numbered 100 or above, in lieu of courses marked with an asterisk (*). In the Heavy Duty Mechanics program these classes must include ENG 101, PHY 101, and 16 additional credit hours.

| First Quarter (F,W,S) | Hrs./Wk. | | |
|--------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| HDM 114 H.D. Chassis Lab | — | 20 | 7 |
| HDM 115 H.D. Chassis Thy | 5 | — | 5 |
| MS 229 Machine Practice | 1 | 3 | 2 |
| | 6 | 23 | 14 |

29 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$500.00

| Second Quarter (F,W,S) | Hrs./Wk. | | |
|-----------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| HDM 122 Basic Diesel Eng. | — | 20 | 7 |
| HDM 123 Basic Dsl. Eng. Thy | 5 | — | 5 |
| MTH 050 Voc. Math* | 5 | — | 5 |
| | 10 | 20 | 17 |

30 Clock Hour Program
Approx. Cost of Books, tools,
Supplies = \$35.00

| Third Quarter (F,W,S) | Hrs./Wk. | | |
|-------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| HDM 134 Prev. Maint. & Serv. | — | 20 | 7 |
| HDM 135 Pr. Maint. & Ser. Thy | 5 | — | 5 |
| WLD 107 Welding | 4 | 6 | 6 |
| | 9 | 26 | 18 |

35 Clock Hour Program
Approx. Cost of Books, tools,
Supplies = \$35.00

| Fourth Quarter (F,W) | Hrs./Wk. | | |
|---------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| HDM 202 H.D. Elec. Lab | — | 20 | 7 |
| HDM 203 H.D. Elec. Theory | 5 | — | 5 |
| PSY 055 Human Rltns.* | 3 | — | 3 |
| | 8 | 20 | 15 |

28 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$290.00

| Fifth Quarter (F,W) | Hrs./Wk. | | |
|----------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| HDM 222 Adv. Dsl. Eng. Lab | — | 20 | 7 |
| HDM 223 Adv. Dsl. Eng. Thy | 5 | — | 5 |
| PHY 055 Applied Physics* | 5 | — | 5 |
| | 10 | 20 | 17 |

30 Clock Hour Program
Approx. Cost of Books, tools,
Supplies = \$35.00

| Sixth Quarter (S) | Hrs./Wk. | | |
|----------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| HDM 232 Truck Mech. Lab | — | 20 | 7 |
| HDM 233 Truck Mech. Theory | 5 | — | 5 |
| COM 055 Communications* | 5 | — | 5 |
| | 10 | 20 | 17 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$18.00

| Sixth Quarter (S) | Hrs./Wk. | | |
|-----------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| HDM 238 Const. Eq. Mec. Lb. | — | 20 | 7 |
| HDM 239 Const. Eq. Mec. Thy | 5 | — | 5 |
| COM 055 Communications* | 5 | — | 5 |
| | 10 | 20 | 17 |

30 Clock Hour Program
Approx. cost of Books, tools,
Supplies = \$18.00



HOTEL/MOTEL MANAGEMENT

Division: Marketing

Division Head: Gary Cole

Faculty: D. Black, J. Anjewierden, T. Nuttall

Rampton Technology Building, Room 220

DESCRIPTION

The hotel, travel, recreation industry is among the fastest growing in the world, providing a wide range of management opportunities. Advancement within the field is primarily based upon an individual's own motivation and capabilities. The tremendous growth of the industry has created many advancement opportunities for those who are qualified. The lodging industry has jobs which range from front desk to sales, convention management, food and beverage director, accounting, law, to top management. Although entry level salaries may be less than those in other fields, through dedication and hard work a person with an educational background can rapidly advance to a good paying job. Successful managers are earning from \$16,000 to \$20,000 per year, and managers who have demonstrated the ability to direct larger operations are earning from \$25,000 to \$50,000 per year and more.

Employment opportunities are excellent, and because the total job market is vast, a person also has an almost unlimited choice of location. Travel and recreation management opportunities abound with travel agencies, airlines, resorts and parks. Advancement is rapid for qualified personnel.

Certificate





On completion of requirements in the Hotel/Motel program, students may enter Business Management (Supervision Oriented) for a Diploma or A.A.S. Degree.

| First Quarter (F) | Hrs./Wk. | | |
|--|----------|------|-----|
| | Lec. | Lab. | Cr. |
| HM 120 Front Office Proced. | 3 | 2 | 3 |
| HM 123 Travel & Tourism | 2 | — | 2 |
| HM 125 Dom. Rates & Tariff | 3 | — | 3 |
| FS 101 Intro. to Hospitality | 4 | — | 4 |
| MTH 080 Bus. Math | 3 | 2 | 3 |
| CE 100 Coop. Education | 3 | — | 3 |
| | 18 | 4 | 18 |

22 Clock Hour Program
 Approx. Cost of Books, tools,
 Supplies = \$66.00

| Second Quarter (W) | Hrs./Wk. | | |
|---------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| HM 121 Reservations | 2 | — | 2 |
| HM 122 Hospitality Mktg. | 4 | 1 | 4 |
| HM 124 Adv. Travel & Tour. | 3 | — | 3 |
| HM 126 Intl. Airl. Rts & Rts. | 5 | — | 5 |
| HM 132 Hskpg. Maint. & Eng. | 4 | 1 | 4 |
| | 18 | 2 | 18 |

20 Clock Hour Program
 Approx. Cost of Books, tools,
 Supplies = \$66.00

| Third Quarter (S) | Hrs./Wk. | | |
|--------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| HM 127 Dom. & Intl. Ticket | 2 | 1 | 2 |
| HM 138 Htl. Restr. Acct. | 3 | 2 | 3 |
| FS 199 Hospitality Seminar | 2 | — | 1 |
| FS 240 Food & Bev. Mgt. | 5 | — | 5 |
| ENG 101 English Comp. | 3 | — | 3 |
| CE 123 Coop. Education. | — | — | 3 |
| | 15 | 3 | 17 |

18 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$66.00



MACHINE SHOP

Division: Metal Trades

Division Head: Verlaine Zito

Faculty: R. Ashdown, F. Boulton, R. Brunson, L. Cottam, G. Miller

Metal Trades Building, Room 228A

DESCRIPTION

Many opportunities exist in the manufacturing industries for the machinist. Students entering the machinist field learn the use of various types of machines such as the drill press, engine lathe, milling machine and different types of precision grinders. The student learns the operations of machine tools and the importance of accuracy and quality finishing and speed of performance.

Training involves quality control, heat treating, the study of metals, numerical control operations as well as electrical discharge machining. Entry level skills for the machinist include blueprint reading, shop mathematics and welding.

Job opportunities are excellent and are expected to increase in the future. The unique and important skills of the machinist are a vital and respected part of today's industrial technology and future prospects are unlimited.

Certificate

| First Quarter (F,W) | Hrs./Wk. | | |
|-------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MS 110 M.S. Lab..... | — | 15 | 5 |
| MS 111 Basic M.S. Thy..... | 5 | — | 5 |
| BPR 100 Blueprint Rdg..... | 3 | 2 | 3 |
| MTH 053 Math for M. Shop..... | 5 | — | 5 |
| | 13 | 17 | 18 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$100.00

| Second Quarter (W,S) | Hrs./Wk. | | |
|----------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MS 120 M.S. Lab..... | — | 15 | 5 |
| MS 121 M. Shop Theory..... | 5 | — | 5 |
| MS 101 Adv Blprt Rdg..... | 3 | 2 | 3 |
| MS 060 M.S. Math..... | 5 | — | 5 |
| | 13 | 17 | 18 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$300.00



| Third Quarter (S,Su) | Hrs./Wk. | | |
|------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MS 130 Adv M.S. Lab..... | — | 15 | 5 |
| MS 131 Adv Mach. Theory..... | 5 | — | 5 |
| MS 061 Ap. M.S. Math..... | 5 | — | 5 |
| WLD 105 Related Welding..... | 2 | 3 | 3 |
| | 12 | 18 | 18 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$26.00



MARKETING (Direct Sales Oriented)

Division: Marketing
Division Head: Gary Cole
Faculty: G. Egan, C. Youngman
Rampton Technology Building, Room 220

DESCRIPTION

The Marketing program is organized to allow incoming students to select retail merchandising or direct sales. Several courses are common to both areas due to the nature of the marketing field.

The total marketing field dealing with distribution of goods and services is one of the fastest growing and most dynamic areas in the business and commercial world.

Direct Sales — Professional sales is one of the highest paid occupations in the world today making it a challenging and rewarding field for both men and women. Success in direct sales requires a foundation of dedication, well-learned principles, orientation to people, and a strong and dynamic personality. The skills developed are applicable to many disciplines in the world of work. The electives available allow the student to begin career specialization.

The Marketing program provides a practical foundation to enhance the probability of success. Many managers are chosen from successful "salespeople." A challenging and rewarding career can be found in sales.

Certificate or Degree





On completion of requirements in a Marketing program, students may enter Business Management (Supervision or Ownership) for a Diploma or A.A.S. Degree.

| First Quarter (F,W) | Hrs./Wk. | | |
|---------------------------------|----------|------|-----|
| | Lect. | Lab. | Cr. |
| MKTG 122 Salesmanship..... | 5 | — | 5 |
| MKTG 101 Intro. to Bus..... | 4 | — | 4 |
| ECN 101 Economics..... | 3 | — | 3 |
| CE 100 Coop. Ed..... | 3 | — | 3 |
| ENG 115 Bus. Communication..... | 3 | — | 3 |
| | 18 | — | 18 |

18 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$72.00

| Second Quarter (W,S) | Hrs./Wk. | | |
|---------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MKTG 220 Adv. Salesmanship..... | 5 | — | 5 |
| MKTG 107 Sales Promotion..... | 4 | — | 4 |
| MTH 138 Adv. Bus. Math..... | 5 | — | 5 |
| MKTG Elective..... | 3 | — | 3 |
| | 17 | — | 17 |

17 Clock Hour Program
 Approx. Cost of Books, tools,
 Supplies = \$72.00

| Third Quarter (S,Su) | Hrs./Wk. | | |
|------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MKTG 103 Prin. of Mktg..... | 5 | — | 5 |
| MGT 105 Bus. Law..... | 5 | — | 5 |
| ACCT 101 Elem. Acctg. I..... | 5 | 3 | 5 |
| ENG 160 Effective Speak..... | 3 | — | 3 |
| | 18 | 3 | 18 |

21 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$66.00

ELECTIVES:

(Fall)

CE 123, 126, 129 Cooperative
 Education
 MKTG 175 Applied Mktg.
 MKTG 148 Sales Management
 RE 101 Intro. to Real Estate

(Winter)

CE 123, 126, 129 Cooperative
 Education
 MKTG 131 Insurance Principles
 MKTG 185 EDP Mktg. Appl.
 MKTG 148 Sales Management
 RE 101 Intro to Real Estate
 MKTG 176 Applied Marketing

(Spring)

CE 123, 126, 129 Cooperative
 Education
 MGT 210 Investments
 MKTG 177 Applied Mktg.
 MKTG 185 EDP Mktg. Appl.
 MGT 206 Techniques of Supervision



MARKETING (Retail Merchandising Oriented)

Division: Marketing

Division Head: Gary Cole

Faculty: F. Ford, L. Stephens, C. Youngman

Rampton Technology Building, Room 220



DESCRIPTION

The Marketing program is organized to allow incoming students to select retail merchandising or direct sales. Several courses are common to both areas due to the nature of the marketing field.

The total marketing field dealing with distribution of goods and services, is one of the fastest growing and most dynamic areas in the business and commercial world.

Retail Merchandising — Retail is a major employment industry with a widely diverse field of job opportunities such as sales, display, inventory control, and many others. These can lead to a career as a buyer, merchandising manager, department manager, etc.

Retailing positions generally deal with exposure to a variety of people, making it an interesting and challenging training choice.

The electives available allow the student to begin career specialization.

Certificate



On completion of requirements in a Marketing program, students may enter Business Management (Supervision or Ownership) for a Diploma or A.A.S. Degree.

| First Quarter (F,W) | Hrs./Wk. | | |
|--------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MKTG 101 Intro. to Business... | 4 | — | 4 |
| MKTG 106 Retailing | 5 | — | 5 |
| ENG 115 Bus. Communications | 3 | — | 3 |
| CE 100 Coop. Education..... | 3 | — | 3 |
| MKTG Elective | 3 | — | 3 |
| | 18 | — | 18 |

18 Clock Hour Program
Approx. Cost of Books, tools,
Supplies = \$66.00

| Second Quarter (W,S) | Hrs./Wk. | | |
|------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MKTG 103 Princ. of Mktg..... | 5 | — | 5 |
| MTH 138 Adv. Bus. Math..... | 5 | — | 5 |
| ECN 101 Gen. Economics..... | 3 | — | 3 |
| ENG 160 Effec. Speaking..... | 3 | — | 3 |
| MKTG Elective..... | 3 | — | 3 |
| | 19 | — | 19 |

19 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$72.00

| Third Quarter (S,Su) | Hrs./Wk. | | |
|------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MKTG 105 Bus. Law..... | 5 | — | 5 |
| MKTG 107 Sales Promotion... | 4 | — | 4 |
| ACCT 101 Elem. Accounting... | 5 | 3 | 5 |
| MKTG Elective..... | 3 | — | 3 |
| | 17 | 3 | 17 |

20 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$72.00

MARKETING ELECTIVES

(Fall)

- MKTG 122 Salesmanship
- MKTG 144 Fashion Merchandising I
- MKTG 161 Front End Operations
- MKTG 185 EDP Marketing Appl.
- MGT 221 Credit & Collections
- CE 123 Cooperative Education

(Winter)

- MKTG 122 Salesmanship
- MKTG 144 Fashion Merchandising I
- MKTG 147 Principles of Retail Buying
- MKTG 149 Fashion Merchandising II
- MKTG 150 Visual Merchandising
- MKTG 185 EDP Marketing Appl.
- MGT 202 Small Business Management
- MGT 221 Credit & Collections
- CE 126 Cooperative Education

(Spring)

- MKTG 146 Contemporary Images for Women
- MKTG 147 Principles of Retail Buying
- MKTG 149 Fashion Merchandising II
- MKTG 150 Visual Merchandising
- MKTG 161 Front End Operations
- MGT 202 Small Business Management
- CE 129 Cooperative Education

MEDICAL ELECTRONIC TECHNICIAN

Division: Electronics

Division Head: Ulrich E. Zeisler

Rampton Technology Building, Room 516

See Electronic Technology Program,
page 61.



NURSE AIDE

Division: Health Occupations

Division Head: Ruth Foulks

**Faculty: C. Barnes, A. Butler, T. Chapa, B. Crookston, G. Daly, G. Evans,
D. Hansen, J. Jenkins, A. McBride, M. Nelson, V. Poulson,
M. Richards, P. Staley, B. Taylor.**

Nelson Administration Building, Room 342

DESCRIPTION

Under the direction of a registered or licensed practical nurse, nurse aides work cooperatively with other members of the health team in giving nursing care for patients in health care institutions.

In general, the Nurse Aide duties will fall under one of five categories (1) nursing care, (2) care of the patient's unit, (3) food service, (4) handling equipment and supplies, (5) record keeping and messenger duties.

The Nurse Aide should be in good physical and mental health. Some desirable personal qualities are: trustworthiness, dependability, and working harmoniously with people.

Men and women entering this field can expect to receive approximately \$2.70 an hour starting salary.

Approximately the first 100 hours of the course are spent in the classroom and laboratory. After this is satisfactorily completed, the remaining hours are spent in a patient care facility working under supervision.

Certificate of Completion

Offered Fall and Spring quarters.

200 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$75.00





OPERATING ROOM TECHNICIAN

Division: Health Occupations

Division Head: Ruth Foulks

Faculty: C. Barnes, A. Butler, T. Chapa, B. Crookston, G. Daly, G. Evans, D. Hansen, J. Jenkins, A. McBride, M. Nelson, V. Poulson, M. Richards, P. Staley, B. Taylor.

Nelson Administration Building, Room 342

DESCRIPTION

The Operating Room Technician, under the direct supervision of the Operating Room Supervisor and/or Registered Nurse functions as a member of the Operating Room Team by assisting with surgical procedures, providing the surgeon with instruments, sutures, sponges, medication, and other equipment necessary to accomplish the procedures.

Men and women entering this field should be in good mental and physical health. The job requires visual and aural acuity, eye-hand coordination and finger dexterity. Operating room technicians are required to stand for long periods at a time. They must be able to relate and work well with others, be trustworthy and dependable.

Classes must be taken in numbered sequence with lecture and related lab taken concurrently. Classes must be passed with a "C" grade or better. A "C-" (minus) grade is not considered an acceptable performance level for passing.

Special application procedure is required and must be initiated through the College Admissions Office. Applicant must demonstrate accuracy in basic mathematical skills before acceptance into the operating room program. New students meeting the requirements will be admitted every third week whenever there is space available. New students requiring an Anatomy & Physiology course will be admitted only at the beginning of each quarter that class is offered.

Certificate

Prepare the graduate for National Certificate examination.

| First Quarter (F,W,S) | Hrs./Wk. | | |
|-------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| LS 201 Human Anat. & Phys. | 5 | 2 | 5 |
| HO 110 Health Occupations | 4 | — | 4 |
| ORT 102 Op. Rm. Theory I | 9 | 6 | 11 |
| | 18 | 8 | 20 |

26 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$110.00

| Second Quarter (W,S,Su) | Hrs./Wk. | | |
|-------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ORT 112 Op. Rm. Theory II | 12 | 1 | 12 |
| ORT 113 Clinical Exp. I | — | 11 | 4 |
| | 12 | 12 | 16 |

24 Clock Hour Program
Approx. Cost of Books, tools,
Supplies = \$15.00

| Third Quarter (F,S,Su) | Hrs./Wk. | | |
|--------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ORT 122 Op. Rm. Theory III | 8 | — | 8 |
| ORT 123 Clinical Exp. II | — | 24 | 8 |
| | 8 | 24 | 16 |

32 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$15.00



PRACTICAL NURSING

Division: Health Occupations

Division Head: Ruth Foulks

**Faculty: C. Barnes, A. Butler, T. Chapa, B. Crookston, G. Daly, G. Evans,
D. Hansen, J. Jenkins, A. McBride, M. Nelson, V. Poulson, M.
M. Richards, P. Staley, B. Taylor**

Nelson Administration Building, Room 172

DESCRIPTION

The Licensed Practical Nurse gives nursing care under the supervision of a registered professional nurse or physician. The LPN provides for the emotional and physical comfort and safety of the patient. The LPN demonstrates ability in using skills and judgments based on the fundamental principles of nursing care.

Men and women entering this field should be in good mental and physical health. Some desirable personal qualities include: trustworthiness, dependability, and working harmoniously with people.

Graduates can expect to receive from \$500-\$550 a month starting salary.

The applicant must demonstrate accuracy in basic mathematical skills before acceptance into the nursing program. Pre-Tech math may be required before entrance into HO 110. First quarter prerequisite classes must be completed before registration into subsequent nursing classes. To continue in the program all general education classes must be passed with a grade no lower than "C". A "C-" (minus) grade is not satisfactory.

A special application procedure through the office of the Division Head of Health Occupations is required. The student who is registered in HO 110 must initiate the application into the nursing program. Applications for the second quarter taught winter quarter, will be considered the beginning of fall quarter. Applications for the second quarter, taught summer quarter, will be considered the beginning of spring quarter.

Nursing classes must be taken in numbered sequence with lecture and related lab taken concurrently. To continue in the program all nursing classes must be passed with a grade no lower than "C". "C-" (minus) grade is not satisfactory.

Certificate

Prepare the graduate to take the State Board Test Pool Examination to become a Licensed Practical Nurse in Utah.

| First Quarter (F,S0) | Hrs./Wk. | | |
|------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| LS 201 Human Anat. & Phys. | 5 | 2 | 5 |
| FL 101 Nutrition. | 3 | — | 3 |
| PSY 101 Psychology. | 3 | — | 3 |
| HO 110 Health Occupations. | 4 | — | 4 |
| LS 111 Microbiology. | 5 | 2 | 5 |
| | 20 | 4 | 20 |

24 Clock Hour Program
Approx. Cost of Books, tools,
Supplies = \$120.00



| Second Quarter (W,Su) | Hrs./Wk. | | |
|----------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| PN 117 Nursing Theory..... | 5 | — | 5 |
| PN 114 Nursing Lab..... | — | 24 | 8 |
| PN 123 Mental Health..... | 3 | — | 3 |
| PN 119 Pharmacology..... | 4 | — | 4 |
| | 12 | 24 | 20 |

36 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$120.00

| Fourth Quarter (W,Su) | Hrs./Wk. | | |
|----------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| PN 148 Nursing Theory..... | 12 | — | 12 |
| PN 149 Nursing Lab..... | — | 24 | 8 |
| | 12 | 24 | 20 |

36 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$100.00

| Third Quarter (S,F) | Hrs./Wk. | | |
|----------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| PN 138 Nursing Theory..... | 12 | — | 12 |
| PN 139 Nursing Lab..... | — | 24 | 8 |
| | 12 | 24 | 20 |

36 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$90.00



PRE-TECHNICAL DEPARTMENT

Division Head: Max Lowe

Faculty: V. Belnap, J. Davis, G. Giles, W. Jones, W. Loomis, T. Matthews, J. Powell

Rampton Technology Building, Room 417

DESCRIPTION

The program is designed to assist students in upgrading or reviewing basic fundamentals in mathematics, reading, communications, and human relations. It is of particular importance for improving the skills of students desiring entry into trade-technical programs and to provide a more positive attitude for higher student achievement.

Students may enter Pre-Tech any day of any quarter. (No transcript of high school records or entrance exam is necessary). All students progress at their own rate on an individualized basis. They may enter a trade-technical program when attaining entry level requirements for that program. (Generally only one quarter of Pre-Tech is necessary which usually consists of 25 clock hours per week).

Students currently enrolled in a trade-technical program may enroll in a Pre-Tech class to upgrade their skills in a particular area such as mathematics or reading. Assistance is available for preparing for the GED test.

Upon completion of any Pre-Tech or any UTC course, students can receive High School credit through the Salt Lake School District or Granite School District. (Pre-Tech coordinates this Function).

Special tutoring classes are available. COM 5 (Reading) COM 20 (English) Math (MTH 15), COM 25. A study skills class with emphasis on speed reading is also available.



DAY PROGRAM

| First Quarter (F,W,S,Su) | Hrs./Wk. | | |
|-----------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MTH 020 Math Pre-Vocational | — | 10 | 7 |
| COM 010 Reading Pre-Tech | — | 5 | 4 |
| PSY 010 ZOOM | 2 | 3 | 3 |
| COM 015 Basic Commun | — | 5 | 4 |
| | 2 | 23 | 18 |

25 Clock Hour Program

Approx. Cost of Books, Tools,
Supplies = \$20.00

EXTENDED DAY

| First Quarter (F,W,S) | Hrs./Wk. | | |
|-----------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MTH 020 Math Pre-Vocational | — | 10 | 7 |
| COM 010 Reading Pre-Tech | — | 5 | 4 |
| COM 015 Basic Commun | — | 5 | 4 |
| | — | 20 | 15 |

20 Clock Hour Program

Approx. Cost of Books, tools,
Supplies = \$25.00



PRINTING

Division: Graphic Arts

Division Head: Walter L. White

Faculty: R. Curtis, J. Olsen, C. Tinnin

Nelson Administration Building, Rooms 187, 189, 195, 196



DESCRIPTION

A printing student learns the basic entry level of skills in four printing areas: camera, press, copy preparation, and printing economics. The student will be able to shoot line copy and halftones in camera, run line copy, halftones, duotones, four-color process in press, IBM, MT/ST magnetic tape, and Compugraphics; phototype cold copy typesetting, layout and design, paste-up, estimating of jobs in the printing field, shop layout, and printing economics.

The printing student works closely with professionals, carrying on liaison work between shops and prospective customers. Consequently, the student must be neat in appearance and possess good work habits.

Graduates may expect to receive approximately \$3.25-\$5.50 starting salary in certain areas. Printing graduates may be placed in captive plants (i.e. businesses which use an internal printing department to print their own forms, leaflets, etc.), or commercial printing firms.

Certificate — 53 credits



| First Quarter (F,W,S,Su) | Hrs./Wk. | | |
|---------------------------------|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| PRT 110 Copy Prep..... | 1 | 4 | 2 |
| PRT 114 Cam. Platemaking.... | 1 | 4 | 2 |
| PRT 117 Presswork..... | 3 | 12 | 7 |
| OA 070 Keyboarding..... | — | 5 | 2 |
| MTH 050 Voc. Math..... | 5 | — | 5 |
| | 10 | 25 | 18 |

35 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$200.00

| Second Quarter (F,W,S,Su) | Hrs./Wk. | | |
|----------------------------------|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| *PRT 120 Copy Prep..... | 1 | 4 | 2 |
| *PRT 124 Cam. Platemaking.... | 1 | 4 | 2 |
| *PRT 127 Presswork..... | 3 | 12 | 7 |
| PRT 217 Printing Econ..... | 5 | — | 5 |
| | 10 | 20 | 16 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$50.00

| Third Quarter (F,W,S,Su) | Hrs./Wk. | | |
|---------------------------------|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| *PRT 130 Copy Prep..... | 1 | 4 | 2 |
| *PRT 134 Cam. Platemaking.... | 1 | 4 | 2 |
| *PRT 137 Presswork..... | 3 | 12 | 7 |
| COM 055 Communications.... | 5 | — | 5 |
| PSY 055 Human Relations.... | 3 | — | 3 |
| | 13 | 20 | 19 |

33 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$45.00

PROJECT COOPERATION

Division: Skills Center
Division Head: Lorraine Olsen
Downtown Campus, Room 213

DESCRIPTION

Certificate of Achievement

PROJECT COOPERATION — A unique vocational training program developed to provide vocational trade and skills training to the disadvantaged high school dropout or potential dropout.

The objectives of this program are: (1) to provide vocational training and guidance to the disadvantaged; (2) to assist the high school completion process; (3) to obtain marketable job skills for the student in areas where jobs are available and can lead to career fields; (4) to provide work experience wherever possible and on-the-job training to enhance job skills; (5) to coordinate outreach, counseling, job placement, and follow-up services for the students.

PROJECT COOPERATION offers the following the following types of vocational training programs, each one geared to meet the needs of the individual.

1. Vocational Classroom Training
2. On-The-Job Training (OJT)
3. In-School Work Experience
4. Transitional Services including:
 - a. Career assessment
 - b. Career exploration
 - c. Tutoring in math, English, and reading

Students enrolled in Project Cooperation can expect to earn the minimum wage while in their respective training program and receive counseling on a daily basis.

Upon completion of training, each student participates in a job seeking — job survival course, specifically designed to illustrate not only how to get a job, but how to keep a job.



REAL ESTATE

Division: Marketing

Division Head: Gary Cole

Faculty: R. Little, J. Keddington

Rampton Technology Building, Room 220

DESCRIPTION

The Real Estate Program assists in the educational development of professional real estate practitioners. The first year certificate program provides training for sales persons in conjunction with cooperating real estate brokers. The skills learned in the certificate program will significantly improve the probability of success in real estate. Commissions and opportunities are excellent for the trained and motivated professional.

The second year program in Real Estate is oriented toward management and advanced real estate. Many career opportunities exist as a broker, appraiser, supervisor, loan officer, etc. Most Government entities and financial institutions have need for trained professionals in real estate. There is also an opportunity to own and manage your own business.

Certificate, Diploma or A.A.S. Degree

All General Education requirements are included.





| First Quarter (F,W) | Hrs./Wk. | | |
|--|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MKTG 122 Direct Slsmsnshp. | 5 | — | 5 |
| MKTG 101 Intro. to Bus. | 4 | — | 4 |
| ENG 101 English Comp. | 3 | — | 3 |
| RE 101 Intro. to Real Estate | 5 | 1 | 5 |
| | 17 | 1 | 17 |

18 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$55.00

| Second Quarter (W,S) | Hrs./Wk. | | |
|--|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MKTG 103 Prin. of Mktg. | 5 | — | 5 |
| ENG 115 Bus. Rpt. Writing | 3 | 1 | 3 |
| MTH 138 Adv. Bus. Math. | 5 | — | 5 |
| RE 157 Real Estate Meth. & Prin. for Salesman | 5 | — | 5 |
| Cooperative Education 100 | 3 | — | 3 |
| | 20 | 1 | 20 |

22 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$55.00

| Third Quarter (S) | Hrs./Wk. | | |
|--------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ENG 160 Effective Speaking | 3 | — | 3 |
| RE 159 Creative RE Sales | 3 | — | 3 |
| RE 160 Real Est. Economics | 3 | — | 3 |
| RE 154 Real Est. Finance | 3 | — | 3 |
| RE 155 Real Est. Appr. I. | 3 | — | 3 |
| Cooperative Education 123 | 2 | — | 2 |
| | 17 | — | 17 |

17 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$55.00

| Fourth Quarter (F) | Hrs./Wk. | | |
|------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| RE 201 Adv. Real Estate | 5 | 1 | 5 |
| MGT 206 Tech. of Sprvsn | 4 | 1 | 4 |
| ACCT 101 Elem. Acctg. I. | 5 | 3 | 5 |
| PSY 055 Human Rltns. (a) | 3 | — | 3 |
| | 17 | 5 | 17 |

22 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$66.00

| Fifth Quarter (W) | Hrs./Wk. | | |
|-------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MKTG 107 Sales Promotion | 4 | — | 4 |
| RE 153 Real Estate Law | 3 | 1 | 3 |
| RE 258 Real Est. Prop. Mgt. | 3 | — | 3 |
| SOC 055 Applied Soc. (b) | 3 | — | 3 |
| RE 256 Real Est. App. II. | 3 | — | 3 |
| | 16 | 1 | 16 |

17 Clock Hour Program
 Approx. Cost of Books, Tools,
 Supplies = \$72.00

| Sixth Quarter (S) | Hrs./Wk. | | |
|---|----------|------|-----|
| | Lec. | Lab. | Cr. |
| RE 251 Real Est. Invest. | 3 | 1 | 3 |
| MGT 202 Small Bus. Mgt. | 4 | 1 | 4 |
| RE 252 Real Est. Problems & Case Studies | 3 | — | 3 |
| CIV 055 Voc. Civics (c) | 3 | — | 3 |
| ECN 101 Gen. Economics | 3 | — | 3 |
| | 16 | 2 | 16 |

18 Clock Hour Program
 Approx. cost of Books, Tools,
 Supplies = \$72.00

- (a) PSY 101 General Psychology — (Required for A.A.S. Degree).
- (b) SOC 101 Introduction to Sociology — (Required for A.A.S. Degree)
- (c) PS 110 Political Science — (Required for A.A.S. Degree).



RECREATIONAL VEHICLE MECHANICS

Division: Automotive

Division Head: Neal D. Grover

Faculty: D. Weston

Automotive Trades Building, Room 208



DESCRIPTION

Mechanics in this field do a variety of jobs. They may be small gasoline engine repair experts, outboard motor specialists, motorcycle mechanics, or mechanics for snowmobiles and other similar recreational vehicles. The mechanics must understand all the electrical and mechanical components of the above equipment.

Most employment will come from recreational equipment dealers, lawn mower shops, etc., where this type of equipment is sold.

The requirements of this trade indicate that a candidate should be strong in mechanical aptitude and have a desire to work to precision specifications.

The student will acquire a basic set of mechanics hand tools on entering training and will add to them while progressing in the field. Normally the employer expects the mechanic to have a kit of tools.

With the tremendous increase in leisure time and the emphasis on sporting equipment and also the present energy crisis, this field is extremely promising.

Certificate



| First Quarter (F) | Hrs./Wk. | | |
|-----------------------------------|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| RVM 110 2C & 4C Eng. Rep. | — | 20 | 7 |
| RVM 111 2C & 4C Eng. Thy. | 5 | — | 5 |
| MTH 050 Voc. Math. | 5 | — | 5 |
| | 10 | 20 | 17 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$300.00

| Second Quarter (W) | Hrs./Wk. | | |
|-------------------------------------|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| RVM 130 Snwm & Mcycl. Lab | — | 20 | 7 |
| RVM 131 Snwm. & Mcycl. Thy. | 5 | — | 5 |
| PHY 055 Applied Physics | 5 | — | 5 |
| | 10 | 20 | 17 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$18.00

| Third Quarter (S) | Hrs./Wk. | | |
|--------------------------------------|-----------------|-------------|------------|
| | Lec. | Lab. | Cr. |
| RVM 120 Otbrd. Mtr. Dr. Sys. | — | 20 | 7 |
| RVM 121 Otbrd. Mtr. Dr. Thy. | 5 | — | 5 |
| COM 055 Communications | 5 | — | 5 |
| | 10 | 20 | 17 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$18.00



REFRIGERATION AND AIR CONDITIONING

Division: Refrigeration and Appliance Trades

Division Head: Verlaine Zito

Faculty: R. Beebe

Metal Trades Building, Room 228A

DESCRIPTION

A refrigeration air-conditioning mechanic is a skilled technician who must be able to install, maintain, and service all types of refrigeration and air-conditioning equipment.

This person must have or develop manipulative skills in copper pipe fitting, bending and installation, soft soldering, silfosing, silverbrazing, threading and installing iron pipe, use of air torch and oxy-acetylene torch, and the use of a wide variety of hand tools and power tools.

Such a mechanic must be able to read blueprints and circuit diagrams, work with electricity and perform electrical services, work in awkward and cramped positions and on ladders. Usually such a person also must be able to drive small trucks, maintain stock of parts and equipment, and handle necessary paperwork. It is necessary to be in good physical condition and be able to lift, reach, stoop, pull, and push. Many mechanics work extended hours, and many work without supervision.

Those in the service areas should be able to work with people, so they will be given the opportunity to develop their human relations skills.

Job opportunities have been excellent. Trends suggest that they will remain so in the future. Graduates can expect to receive from \$3.00 to \$4.00 per hour starting salary.

Certificate





| First Quarter (F) | Hrs./Wk. | | |
|---------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| REF 110 Basic Refrig. Sys. | — | 15 | 5 |
| REF 111 Fund. of Refrig. | 5 | — | 5 |
| MTH 060 Applied Math. | 5 | — | 5 |
| ELC 104 AC-DC Fund. | 5 | — | 5 |
| | 15 | 15 | 20 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$499.00

| Second Quarter (W) | Hrs./Wk. | | |
|--------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| REF 122 Refrig. Sys. | — | 9 | 3 |
| REF 121 Refrig. Sys. | 5 | — | 5 |
| ELC 105 AC-DC Circuits. | 5 | — | 5 |
| ELC 106 Solid State Fund. | 5 | — | 5 |
| ELC 109 Solid State Lab. | — | 6 | 2 |
| | 15 | 15 | 20 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$17.00

| Third Quarter (S) | Hrs./Wk. | | |
|---------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| REF 130 Comm. Service* | — | 15 | 5 |
| REF 131 Auto-Controls Sys. | 5 | — | 5 |
| REF 105 Piping Practices. | 5 | — | 5 |
| REF 107 Refrig. Controls. | 5 | — | 5 |
| | 15 | 15 | 20 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$23.00

*Five credit hours of cooperative work experience may be substituted for REF 130.



STENOGRAPHER

Division: Office Education

Division Head: Kathryn Beebe

**Faculty: M. Aylett, E. Bartholomew, M. Densley, A. Johnson, L. Metos,
J. Rodi, S. Wall**

Nelson Administration Building, Room 210C

DESCRIPTION

In this program students without previous training develop shorthand, typewriting, and other clerical skills. Stenographers' duties include taking dictation in shorthand correspondence, reports and other matters, and transcribing on the typewriter. Stenographers also perform a variety of other clerical duties in an office. The ability to follow instructions, attention to detail in performance, and responsibility for accuracy of spelling, punctuation, and grammar are essential elements of jobs performed by stenographers. Graduates with certificates receive beginning salaries ranging from \$550 to \$700 a month.

Certificate

On completion of this program the student will be qualified to enter the Executive Secretary program and obtain an A.A.S. Degree.

General Education classes marked with an asterisk (*) are required for a Certificate. Students who choose to earn an A.A.S. Degree are required to earn a minimum of 24 qtr. credit hours of applicable General Education type classes numbered 100 or above. These classes must include ENG 101, and 21 additional credit hours. Often more than one General Education class will need to be scheduled each quarter in place of the asterisked classes, or in addition where only one such class is listed in a quarter.

| First Quarter (F,W,S) | Hrs./Wk. | | |
|------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| OA 121 Shorthand I†† | 5 | 5 | 7 |
| ENG 080 Bus. English* | 2 | 3 | 3 |
| MTH 080 Bus. Math* | 2 | 3 | 3 |
| Typewriting Elective** | 1 | 9 | 4 |
| | 10 | 20 | 17 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$100.00





| Second Quarter (W,S,Su) | Hrs./Wk. | | |
|-------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| OA 101 Office Technology..... | 5 | — | 5 |
| OA 122 Shorthand II††..... | 5 | — | 5 |
| COM 110 Col. Commun..... | 3 | — | 3 |
| Typewriting Elective**..... | 1 | 9 | 4 |
| | 14 | 9 | 17 |

23 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$40.00

| Third Quarter (S,Su,F) | Hrs./Wk. | | |
|-----------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| OA 123 Shorthand III††..... | 5 | — | 5 |
| OA 124 Transcription..... | 1 | 4 | 3 |
| OA 155 Records Mgt..... | 2 | 3 | 3 |
| OA 271 Sec. Accounting..... | 5 | — | 5 |
| Typewriting Elective**..... | 2 | 3 | 3 |
| | 15 | 10 | 19 |

25 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$40.00

††An alternate sequence of shorthand and transcription in Machine Shorthand may be followed: CR 121, CR 122, CR 123, CR 124.

**A minimum of 9 credits of typewriting electives are required for certificate.

| Typewriting Electives | Hrs./Wk. | | |
|-------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| OA 111 Beg. Typing..... | 5 | 5 | 4 |
| OA 112 Inter. Typing..... | 5 | 5 | 4 |
| OA 113 Adv. Typing..... | 5 | 5 | 4 |
| OA 115 Type. Spd. Bld.**..... | — | 5 | 2 |
| OA 213 Prod. Typing..... | 5 | 5 | 4 |
| OA 214 Legal Typing..... | 2 | 1 | 2 |
| OA 215 Medical Typing..... | — | 2 | 1 |

***May be taken any quarter.



TRANSPORTATION MANAGEMENT

Division: Marketing

Division Head: Gary Cole

Faculty: B. Warnick

Rampton Technology Building, Room 220



DESCRIPTION

The Transportation Certificate program is designed to prepare the student for employment by a transportation company or by a shipper of freight. The graduate may become a dispatcher, billing clerk, dock worker or foreman, safety employee or supervisor, log clerk, claims worker or supervisor, freight agent, etc.

In addition to typing, office machines, and basic accounting skills acquired through this program, the student also becomes knowledgeable in the fields of economic and safety regulation of transportation and will usually be able to determine whether a company is complying with the numerous governing rules and regulations.

Employment opportunities are excellent. Wage rates are usually at or above rates of other industries.

The Diploma and the A.A.S. Degree graduate will be prepared to work into management with either a carrier or shipper of freight. In addition to the skills enumerated in the Certificate program, the student will be able to interpret freight tariffs, work with personnel programs, and to work knowledgeably with other modes of transportation — air, rail, and water.

Utah is an important transportation center for three modes — motor, air, and rail. Intermodal connections with ships are becoming more important.

Certificate, Diploma, A.A.S. Degree.



| First Quarter (F) | Hrs./Wk. | | |
|---|----------|------|-----|
| | Lec. | Lab. | Cr. |
| OA 070 Keyboarding | — | 5 | 2 |
| MKTG 101 Intro. to Bus. | 4 | — | 4 |
| TRM 100 Intro. to Trans. & Dist. Systems | 3 | — | 3 |
| MTH 138 Adv. Bus. Math. | 5 | — | 5 |
| PSY 055 Human Fltns. (a) | 3 | — | 3 |
| | 15 | 5 | 17 |

20 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$50.00

| Second Quarter (W) | Hrs./Wk. | | |
|----------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MGT 105 Bus. Law I | 5 | — | 5 |
| TRM 103 Trans. Org. & Mgt. | 3 | — | 3 |
| DP 101 Basic Comp. Con. | 2 | 3 | 3 |
| ECN 101 Gen. Economics | 3 | — | 3 |
| ENG 101 Eng. Comp. | 3 | — | 3 |
| | 16 | 3 | 17 |

19 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$70.00

| Third Quarter (S) | Hrs./Wk. | | |
|----------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| OA 131 Office Machines | — | 5 | 2 |
| ACCT 101 Elem. Acctg. | 5 | 3 | 5 |
| TRM 102 Econ. Regulation | 3 | — | 3 |
| ENG 115 Bus. Report. Wrtg. | 3 | — | 3 |
| CE 100 Coop. Edu. | 3 | — | 3 |
| | 14 | 8 | 16 |

22 Clock Hour Program
Approx. Cost of Books, tools,
Supplies = \$45.00

| Fourth Quarter (F) | Hrs./Wk. | | |
|--------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| ACCT 102 Elem. Acctg. II | 5 | 3 | 5 |
| DP 201 Automated Comm. | 2 | 3 | 3 |
| MGT 205 Pnnc. of Mgt. | 3 | — | 3 |
| TRM 201 Rates & Tariffs | 3 | — | 3 |
| TRM 203 Econ. Regul. II | 3 | — | 3 |
| | 16 | 6 | 17 |

22 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$50.00

| Fifth Quarter (W) | Hrs./Wk. | | |
|-----------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MGT 103 Managerial Analysis | 5 | 3 | 5 |
| CIV 055 Voc. Civics (b) | 3 | — | 3 |
| MGT 206 Tech. of Superv. | 4 | 1 | 4 |
| TRM 214 Phys. Dist. Mgt. | 3 | — | 3 |
| ENG 160 Effective Speech | 3 | — | 3 |
| | 18 | 4 | 18 |

22 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$50.00

| Sixth Quarter (S) | Hrs./Wk. | | |
|--------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| MGT 207 Person. & Labor | 4 | 1 | 4 |
| TRM 215 Trans. Economics | 3 | — | 3 |
| TRM Elective | 6 | — | 6 |
| SOC 055 Applied Soc. (c) | 3 | — | 3 |
| | 16 | 1 | 16 |

17 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$50.00

- (a) PSY 101 General Psychology —
(Required for A.A.S. Degree)
- (b) PS 110 Political Science —
(Required for A.A.S. Degree)
- (c) SOC 101 Introduction to Sociology —
(Required for A.A.S. Degree)

TRANSPORTATION MANAGEMENT ELECTIVES:

(Fall)

- TRM 211 Motor Carrier Safety
TRM 212 Claims Management I
CE 123 Cooperative Education
Prerequisite: CE 100

(Winter)

- MGT 202 Small Business Management
MGT 204 Banking and Finance
TRM 213 Claims Management II
TRM 101 Commercial Motor Transportation
CE 123 Cooperative Education
Prerequisite: CE 100

(Spring)

- MGT 204 Banking and Finance
TRM 104 Traffic Management
CE 123 Cooperative Education
Prerequisite: CE 100



WARD CLERK

Division: Health Occupations

Division Head: Ruth Foulks

Faculty: C. Barnes, A. Butler, T. Chapa, B. Crookston, G. Daly, G. Evans,
D. Hansen, J. Jenkins, A. McBride, M. Nelson, V. Poulson,
M. Richards, P. Staley, B. Taylor.

Nelson Administration Building, Room 342



DESCRIPTION

The Hospital Ward Clerk is a receptionist and clerk working on a unit with other members of the hospital staff for one main purpose: To help care for the patient.

Communication is the fundamental function. The Ward Clerk's desk is a vital link between patients and the staff of the unit as well as other areas of the hospital.

Men or women interested in becoming ward clerks should be mature, dependable individuals who are able to work harmoniously with people.

The starting salary is approximately \$3.80 an hour.

The student must pass the theory portion (84 hours) before going into the clinical area (96 hours).

Certificate of Completion

Offered Fall and Spring Quarters.

180 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$50.00



WELDING

Division: Metal Trades

Division Head: Verlaine Zito

Faculty: R. Ashdown, F. Boulton, G. Bringhurst, W. Butler, J. Udy, D. Westley, N. Wood, G. Miller

Metal Trades Building, Room 228A

DESCRIPTION

Students are trained to enter the rapidly growing field of welding. Arc, acetylene, and inert gas welding techniques are taught. A graduate welder is capable of welding ferrous and nonferrous metals in all positions. Such a person operates shears, rolls, drills, and brakes. A welder is involved in layout, cutting, and forming metals.

A welder determines electrodes and filler metal to be used. A graduate understands and works from blueprints and written procedures and knows the weld symbols.

Welders receive from \$3.50 to \$5.50 per hour as a starting wage, with top scale of \$10.00 per hour in the Salt Lake Valley.

Good physical condition and good eyesight are essential.

Certificate, Diploma, A.A.S. Degree

General Education classes marked with an asterisk (*) are required for a Diploma. Students who choose to earn an A.A.S. Degree are required to earn a minimum of 24 qtr. credit hours of applicable General Education type classes, numbered 100 or above, in lieu of classes marked with an asterisk (*). These classes must include ENG 101 and 21 additional hours.

Refer to the General Education section of the catalog on page 79.

| First Quarter (F,W) | Hrs./Wk. | | |
|-------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| WLD 112 Wld. Pr. I, Arc & Acetylene | — | 20 | 7 |
| WLD 111 Fund. of Welding | 5 | — | 5 |
| MTH 090 Voc. Math* | 5 | — | 5 |
| | 10 | 20 | 17 |

30 Clock Hour Program
Approx. cost of Books, Tools,
Supplies = \$241.00

| Second Quarter (W,S) | Hrs./Wk. | | |
|--------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| WLD 122 Wld. Pr. II, Arc & Acetylene | — | 20 | 7 |
| WLD 121 Thy. Wldg. & Ctng. | 5 | — | 5 |
| MTH 061 Math for Welders* | 5 | — | 5 |
| | 10 | 20 | 17 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$16.00

| Third Quarter (S,Su) | Hrs./Wk. | | |
|---------------------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| WLD 130 Wld. Pr. III, Arc & Acetylene | — | 20 | 7 |
| WLD 131 Thy. App. of Wld. | 5 | — | 5 |
| BPR 138 BPR for Welders | 3 | 2 | 3 |
| | 8 | 22 | 15 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$11.00



| Fourth Quarter (F,W) | Hrs./Wk. | | |
|---|----------|------|-----|
| | Lec. | Lab. | Cr. |
| WLD 210 Adv. Weld. Prac. | — | 15 | 5 |
| WLD 212 Metallurgy of Ferrous Metals | 5 | — | 5 |
| WLD 213 Pipe Weld. Proc. | 3 | 2 | 4 |
| COMM 055 Communications* | 5 | — | 5 |
| | 13 | 17 | 19 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$32.00

| Fifth Quarter (F,W) | Hrs./Wk. | | |
|-----------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| WLD 230 Inert Gas Processes | — | 15 | 5 |
| WLD 232 Weld. Insp. Meth. | 2 | 3 | 3 |
| WLD 233 Inert Gas Weld. | 5 | — | 5 |
| PHY 055 Applied Physics* | 5 | — | 5 |
| | 12 | 18 | 18 |

30 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$16.00

| Sixth Quarter (S) | Hrs./Wk. | | |
|---------------------------|----------|------|-----|
| | Lec. | Lab. | Cr. |
| WLD 220 Spec. Wldg. Proc. | — | 15 | 5 |
| WLD 222 Spec. Wlds | 3 | — | 3 |
| WLD 238 Shop Layout * fab | 2 | 3 | 3 |
| MS 100 Machine Shop Fund | 1 | 1 | 1 |
| PSY 055 Human Rltis * | 3 | — | 3 |
| | 9 | 19 | 15 |

28 Clock Hour Program
Approx. Cost of Books, Tools,
Supplies = \$25.00



COURSE DESCRIPTIONS

Courses marked with a dagger (†) are taught in the Evening School.

- AB 050 Auto Body Repair†**
6 hrs./wk. 0 cr.
A basic course designed for the auto owner. Covers repair of minor dents and scratches, metal finishing and parts replacement.
- AB 110 Auto Body Welding and Repair**
20 hrs./wk. 7 cr.
Comprehensive welding course covering welds used in rebuilding automobiles. Includes repair procedures.
- AB 111 Metallurgy and Processing**
5 hrs./wk. 5 cr.
Composition and characteristics of ferrous and non-ferrous metals. Includes process and use in sheet metal design and welding.
- AB 120 Auto Body Reconstruction**
20 hrs./wk. 7 cr.
Repair of auto body and frame damage, panel replacement, trim and hardware service, glass service, electrical service, dents and body mechanics.
- AB 121 Stress Analysis, Specifications and Repair Principles**
5 hrs./wk. 5 cr.
Stress conditions, ductility and dimensional relations present within panels and subassemblies. Final construction of a new automobile. Accurate damage analysis and repair sequence planning, specifications, body measurements, and tolerance.
- AB 130 Advanced Auto Body Reconstruction**
20 hrs./wk. 7 cr.
Continued laboratory practice on all types of auto-body damage. Emphasis on timing repair projects to determine individual production potential. Completion of totally wrecked project car.
- AB 131 Estimating-Alignment**
5 hrs./wk. 5 cr.
Damage repair estimating, using flat rate manuals and estimating forms. Includes estimating non-measurable damage, Suspension systems and steering geometry.
- ABP 050 Auto Painting†**
Basic course designed for auto owners. Covers metal preparation, sanding, spot painting and painting of passenger cars and light trucks. Students will be required to furnish own primer sealer, and paint.
- ABP 110 Automotive Painting Lab**
20 hrs./wk. 7 cr.
Procedures and practices in handling equipment, use of materials, and basic surface preparations for painting.
- ABP 111 Automotive Painting**
5 hrs./5 cr.
Use and maintenance of equipment, painting materials and preparation of surfaces.
- ABP 120 Color Application Lab**
20 hrs./wk. 7 cr.
Application of principles covered in ABP 121. Preparation and painting of actual automobiles.
- ABP 121 Color Application**
5 hrs./wk. 5 cr.
Techniques of color application and preparation of color paint.
- ABP 130 Color Matching Lab**
20 hrs./wk. 7 cr.
Laboratory practice in mixing and matching colors by formula with a color mixing machine, and skill development in preparing surfaces and applying paint.
- ABP 131 Color Matching**
5 hrs./wk. 5 cr.
Theory of mixing and matching colors by formula.
- ACCT 101 Elementary Acctg. I†**
8 hrs./wk. 5 cr.
Basic structure of accounting. Understanding asset, liability, capital, and expense accounts. The accounting cycle, special journals, receivables, payables and payroll. Includes worksheet, adjusting, and closing entries.

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| ACCT 102 | Elementary Acctg. II† 8 hrs./wk. 5 cr. Study of deferrals, accruals, tangible and intangible assets, cash control, inventory, partnerships, and corporations. Prerequisite: ACCT 101. | AM 053 | Auto Owners Course† 30 clock hours 0 cr. Designed for the average automobile owner who wants to be familiar with the operation, maintenance, and servicing of an automobile. Basic principles of operation to be covered. |
| ACCT 204 | Intermediate Accounting† 8 hrs./wk. 4 cr. Balance sheet analysis, current assets, liabilities, transaction flow and the accounting process. Prerequisite: Completion of requirements in Accounting Program. (Formerly ACCT 201) | AM 054 | Basic Fuel & Elec. System† 30 clock hours 0 cr. Covers basic electrical and fuel systems of the automobile to give background to the person who likes to do minor servicing and tuneups. Some automotive background is helpful. |
| ACCT 205 | Intermediate Accounting II† 8 hrs./wk. 4 cr. Balance Sheet Analysis. Special inventory valuation problems, operational and non-operational assets, contributed capital, retained earnings, contraction and expansion of corporate capital (Formerly ACCT 202). | AM 063 | Auto Owners Course† 6 hrs./wk. 1 cr. Designed for the automobile owner who wants to be familiar with the basics of the operation, maintenance, and servicing of the family automobile. A special report or paper is required for completion of credit for this class. |
| ACCT 206 | Intermediate Accounting III† 8 hrs./wk. 4 cr. Balance Sheet Analysis. Long term investments in equity securities, bonds as long term liabilities and investments, pensions, leases, fair level accounting (Formerly ACCT 203) | AM 110 | Automotive Chassis Repair 20 hrs./wk. 7 cr. Service procedures and shop practices in repair and maintenance of automotive chassis components. |
| ACCT 221 | Governmental Accounting† 5 hrs./wk. 5 cr. Special accounting processes related to governmental units and non-profit organizations. General and Special funds. Bond funds, sinking funds, and problems associated with special type of organizations. | AM 111 | Automotive Chassis 5 hrs./wk. 5 cr. Theory and function of components of the automotive chassis. Covers nomenclature, brakes, steering correction, suspension systems, drive-lines, and universal joints. |
| AM 051 | Automotive Tune-Up† 24 clock hours 0 cr. Diagnosis, service, and repair of carburetion and ignition system components and use of electronic tune-up equipment. Previous training or experience necessary. | AM 120 | Fuel & Basic Electrical systems Service 20 hrs./wk. 7 cr. Service and repair of fuel systems and components. Service of basic electrical system and components. |
| AM 052 | Automotive Air Conditioning† 24 clock hours 0 cr. Theory and operation of units in auto air conditioning systems. Service, trouble shooting, and installation. | AM 121 | Fuel & Basic Electrical Systems 5 hrs./wk. 5 cr. Theory of fuel system servicing and introduction of fundamentals of automotive electrical systems. |

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| AM 130 | Automotive Engine Lab 20 hrs./wk. 7 cr. Skill development in use of tools, safety practices, diagnosis, measuring, servicing, repairing, and testing of both gas and diesel automotive engines. | AM 241 | Specialty Equipment & Accessories 5 hrs./wk. 5 cr. This class has emphasis on theory of operation of the specialty equipment and accessories of today's modern vehicle, both domestic and imported. |
| AM 131 | Automotive Engines 5 hrs./wk. 5 cr. Theory of operation, parts nomenclature, production processes, and major overhaul procedures of both the gas and diesel automotive engine. | AT 050 | Architectural Drafting I† 6 hrs./wk. 0 cr. A basic course in drafting techniques including lettering, lines, tools, sections, elevations, and plans. The student will develop a simple set of working drawings on a small frame structure. |
| AM 210 | Auto Electrical Components Lab 20 hrs./wk. 7 cr. Diagnosis, service, and repair on auto electrical components and systems. Auto emissions control systems service. Engine tune-up procedures. Use of testing equipment and devices. | AT 055 | Surveying† 6 hrs./wk. 0 cr. The history, development and present-day status of land survey systems. Studies the U.S. Public Land System, writing of metes and bounds descriptions, present-day proposed land record systems. |
| AM 211 | Auto Electrical Components 5 hrs./wk. 5 cr. Theory and function of auto electrical systems and components and of emissions control devices. Theory in the use of testing equipment and devices. Application of advanced servicing techniques. | AT 057 | Alternative Energy† 5 hrs./wk. 0 cr. Survey of past, present, and possible future methods of utilizing alternate energy. Emphasis placed on home applications, techniques, and materials. |
| AM 220 | Driving Mechanism Lab 20 hrs./wk. 7 cr. Service and repair of automotive drive mechanisms, automatic transmissions, standard transmissions, drive lines, differentials, and rear axles. | AT 060 | Architectural Drafting II† 6 hrs./wk. 0 cr. A continuation of AT 050 with emphasis on detailing stairs, windows, doors, and other structural and architectural elements. Plans are developed on a small residence. (Prerequisite: AT 050). |
| AM 221 | Drive Mechanisms 5 hrs./wk. 5 cr. Theory and operation of drive mechanisms. Includes automatic transmissions, standard transmissions, differentials, and rear axles. | AT 080 | Architectural Drafting III† 6 hrs./wk. 0 cr. Continuation of AT 060 with emphasis on light commercial detailing. Plans are developed on a small commercial building. (Prerequisite: AT 060). |
| AM 240 | Specialty Equipment & Accessories Lab 20 hrs./wk. 7 cr. Diagnosis and repair of specialty equipment and accessories which include specialty emission systems, air conditioning and controls, vacuum systems, speed controls, etc. | AT 110 | Architectural Drafting I 15 hrs./wk. 5 cr. The basic techniques of drafting including tools, sketching, lettering, plans, elevations, and sections. |

- AT 111 Architectural Construction I**
3 hrs./wk. 3 cr.
Study of wood framing systems including stick framing, trussed rafters, truss joists, glulams, various types of floor and roof systems, nailing standards and fasteners, connectors and hangers, and miscellaneous steel and concrete construction, used in connection with wood framing. The study will include the investigation of building details and the application of such in free-hand sketches.
- AT 112 Architectural Construction II**
5 hrs./wk. 5 cr.
Study of building construction as it relates to building materials and their use.
- AT 113 Architectural Construction III**
3 hrs./wk. 3 cr.
Study of steel framing and details including joists, beams, columns, decking, study of concrete systems and details including foundations, footings, beams, columns, slabs, precast units; study of masonry and details including steel reinforced masonry. The study of these topics will involve the use of free-hand drawing techniques.
- AT 120 Architectural Drafting II**
15 hrs./wk. 5 cr.
Experience in working drawings for structures such as fireplaces, stairs, masonry and frame walls, cabinet details. (Prerequisite: AT 110).
- AT 130 Architectural Drafting III**
15 hrs./wk. 5 cr.
The study of data for planning. The completion of working drawings for a small building. (Prerequisite: AT 120).
- (HU) AT 134 Architectural History**
3 hrs./wk. 3 cr.
General survey of the history of Architecture from ancient through modern and the effects of history on modern design.
- AT 202 Mechanical Systems**
5 hrs./wk. 3 cr.
Basic design of electrical, heating, air conditioning, and plumbing requirements for buildings.
- AT 210 Architectural Detailing**
15 hrs./wk. 5 cr.
Research in construction units and development of detail drawings for those units.
- AT 211 Architectural Construction IV**
5 hrs./wk. 4 cr.
Planning and design data, landscape materials, site planning, site layout, services, construction layout.
- AT 212 Architectural Construction V**
5 hrs./wk. 4 cr.
Study of curtain walls, window walls, Metal entrances and windows, wood windows, sliding glass doors (wood and metal).
- AT 213 Architectural Construction VI**
5 hrs./wk. 4 cr.
Study of cabinet and finish wood work, sheet metal and roofing, terazzo, quarry and ceramic tile, furnishings, specialties, sound control, fireplaces, earthquake and wind resistance.
- AT 215 Structures I**
5 hrs./wk. 5 cr.
Basic theory of forces relative to strength of materials. Introduction to the sizing of wood, steel and reinforced concrete members within structural systems.
- AT 216 Specifications**
5 hrs./wk. 4 cr.
Introduction to basic CSI format and specification writing.
- AT 220 Architectural Working Drawing†**
15 hrs./wk. 5 cr.
Planning, calculating, researching and developing a commercial structure and preparing preliminary working drawings.
- AT 226 Structures II**
5 hrs./wk. 5 cr.
Continuation of Structures I. (Prerequisite: AT 215).
- AT 229 Codes and Zoning**
3 hrs./wk. 3 cr.
Study of the Uniform Building Code, Life Safety Code, Utah State Handicap Code, City-County Codes and Zoning Ordinances.

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| AT 230 | Advanced Architectural Working Drawings II 15 hrs./wk. 5 cr. Completion of working drawings on a small commercial structure including specifications, structural calculations, code search, and necessary data for the completion of architectural services. | BC 054 | Carpentry Math 5 hrs./wk. 5 cr. Continuation of carpentry math requirements covering rules and formulas, surface measurement, volume, estimating and metrics. (Prerequisite: BC 053 with a passing grade). |
| AT 236 | Perspective and Delineation I 2 hrs./wk. 2 cr. Techniques of representing a architectural project in one point or two point perspective with shades and showdowns. | BC 055 | Construction Estimating† 6 hrs./wk. 0 cr. Instruction in methods of interpreting blueprints and specifications, quantity surveys, feedback, and estimating procedures. (Prerequisite: BC 060) or equivalent training. |
| AT 237 | Perspective and Delineation II 2 hrs./wk. 2 cr. Architectural techniques in rendering with pencil, pen and ink. (Prerequisite: AT 236). | BC 060 | Blueprint Reading — Residential† 6 hrs./wk. 0 cr. Symbols, views, measurements, terms, specifications and abbreviations used in reading blueprints. |
| AT 239 | Architectural Estimating 5 hrs./wk. 4 cr. Study of the development of cost and material estimates of a building project working from blueprints, drawings and reference materials. | BC 073 | Basic Building Inspection† 2 hrs./wk. 0 cr. Designed to broaden the knowledge and skill of building inspectors to help meet their added responsibilities and to train new and prospective inspectors. Includes instruction and use of the "Uniform Building Codes." The course is also open to architects, draftsmen, engineers, builders, and others of similar interest. |
| AT 241 | Architectural Inspections 2 hrs./wk. 2 cr. A comprehensive analysis of architectural inspection of building projects, including inspection reports, material testing, shop drawings, change orders, arbitration, completion certificates, layouts, and payment requests. | BC 074 | Advanced Code Enforcement† 2 hrs./wk. 0 cr. Designed to help building inspectors become more knowledgeable in the area of current building code requirements, in-depth study of where to find criteria for making code decisions, and techniques of diplomacy used in enforcing building codes. (Prerequisite: BC 073) or equivalent training. |
| BC 050 | Cabinet and Furniture Making† 5 hrs./wk. 0 cr. Practical experience in cabinet and furniture making. Use of shop facilities to build projects of your own choice. General safety practices are stressed. | BC 080 | Construction Crafts I 6 hrs./wk. 0 cr. A course designed to teach basic construction knowledge to those working in the trade, those anticipating working in the trade or needing basic information about the trade. This quarter will include core material, related information and tools of construction. Students may proceed through this course at their own rate of speed. |
| BC 053 | Carpentry Math 5 hrs./wk. 5 cr. Designed to develop a fundamental background in mathematical concepts, processes and practical applications. Covers fractions, decimals, percentage, ratio and proportion, and powers and roots as they relate to the carpentry trade. | | |

- BC 081 Construction Crafts II**
6 hrs./wk. 0 cr.
A continuation of BC 080 Construction Crafts I. This covers blueprint reading, carpentry and ironwork.
- BC 082 Construction Crafts III**
6 hrs./wk. 0 cr.
A continuation of BC 081 Construction Crafts II covering concrete and welding.
- BC 085 Basic Requirements for Contracting†**
3 hrs./wk. 0 cr.
For those anticipating taking the contractor's license examination. This class covers the basic requirements for obtaining a license and will include such subjects as license classification, contractor's license laws, financial capabilities, mechanic's lien laws, contractor bonding, etc.
- BC 090 Construction Management† Applied Principles**
4 hrs./wk. 0 cr.
Course of instruction designed to present the basic principles of management applied to the residential construction industry. During this course an extensive examination of management techniques including critical path methods, management by objective, and financial management will be provided as they relate to the home builder.
- BC 103 Blueprint Reading I – Building Construction**
5 hrs./wk. 3 cr.
Theory of projection, architectural symbols, relationship of views and measurements, plan and elevation views, sections and details and familiarization of terms, specifications, and abbreviations associated with a blueprint.
- BC 104 Blueprint Reading II – Building Construction**
5 hrs./wk. 3 cr.
A study of commercial plans and specifications in the construction industry with emphasis on the relationship of the architect, engineer, contractor, and owner. (Prerequisite: BC 103, or equivalent training.
- BC 112 Tools of Construction**
15 hrs./wk. 5 cr.
Practical experience in care and use of hand and power tools used by the carpenter and cabinet maker in the building construction industry. General safety practices are stressed.
- BC 113 Tools of Construction**
5 hrs./wk. 5 cr.
Study of the kinds, care, and use of hand and power tools used in the Building Construction Industry.
- BC 123 Millwork & Cabinet**
5 hrs./wk. 5 cr.
Theory, principles, and methods used in design and layout of cabinet and millwork. (Prerequisite: BC 113).
- BC 124 Millwork & Cabinet**
15 hrs./wk. 5 cr.
Practical experience in layout and construction of cabinet and millwork. Includes work with plastic laminates, moldings, trim, and wood finishing. General safety practices are stressed. (Prerequisite: BC 112).
- BC 133 Forming & Framing**
5 hrs./wk. 5 cr.
Basic principles and methods of forming, placing, finishing, and curing of concrete in walls, slabs, footings, etc. Introduction to framing principles as they apply to residential and commercial buildings.
- BC 134 Forming & Framing**
20 hrs./wk. 7 cr.
Actual experience utilizing the principles and methods of forming and framing as taught in BC 133.
- BC 210 House Construction**
20 hrs./wk. 7 cr.
Advanced application of techniques involving instrument layout, rough framing, roof framing, and shingling. Provided by the construction of a full size home.
- BC 211 House Construction**
5 hrs./wk. 5 cr.
Theory involving with layout, rough framing, roof framing, shingling, and use of the steel square.

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| BC 220 | Interior Construction 15 hrs./wk. 5 cr. Practical experience in the application of insulation, wallboard, interior finish, stairways and cabinets, giving the student the necessary trade knowledge to perform the operations skillfully. (Prerequisite: BC 210 and 211). | BMT 111 | Fundamentals of Bricklaying I 5 hrs./wk. 5 cr. Instructions in safety and use of masonry hand tools and equipment. In-depth study of industrial safety standards. Introduction to names, sizes and types of brick, block, and tile products, including their strengths and application. |
| BC 221 | Interior Construction 5 hrs./wk. 5 cr. Study of the varied materials and methods used in interior construction, to include insulation, wallboard, interior finish, stairways and cabinets. (Prerequisite: BC 210 and 211). | BMT 121 | Fundamentals of Bricklaying II 5 hrs./wk. 5 cr. Theory of laying corners, fireplaces, sills, arches, pavings; types of joints, masonry reinforcement and masonry bonds. (Prerequisite: BMT 110 and 111.) |
| BC 232 | Exterior Construction 20 hrs./wk. 7 cr. Practical application of the materials covered in BC 233. Practice in the methods and techniques of the building industry. (Prerequisite: BC 220 and 221). | BMT 122 | Field & Laboratory – Applications in Masonry 20 hrs./wk. 7 cr. Field and laboratory applications of laying masonry products on and off campus, school and civic projects as related to the theory class BMT 121. (Prerequisite: BMT 110 and 111) |
| BC 233 | Exterior Construction 5 hrs./wk. 5 cr. Study of the exterior trims and finishes to include cornice, sidings, painting and decorating. Covers the many methods and techniques of the building industry where the carpentry student may be employed. (Prerequisite: BC 220 and 221). | BMT 130 | Field Application in Masonry 20 hrs./wk. 7 cr. Field applications in laying of all types of masonry materials, school and civic projects on and off campus. (Prerequisite: BMT 121 and 122). |
| BMT 050 | Bricklaying Skill & Practice† 5 hrs./wk. 0 cr. A special class designed to help the beginning bricklayer to develop confidence and to learn current techniques, practices, and materials of bricklaying. Emphasis on mixing and spreading mortar, laying of bricks and blocks to a line, types of joints, and laying of corners is stressed. Safety in the use of masonry hand tools and equipment is also stressed. | BMT 131 | Fundamentals of Bricklaying III 5 hrs./wk. 5 cr. Discussion of problems and their solutions as related to the brick mason field. Emphasis on speed techniques as they relate to the projects outlined in BMT 130. (Prerequisite: BMT 121 and 122). |
| BMT 110 | Laboratory Applications in Masonry 20 hrs./wk. 7 cr. Laboratory applications in mixing and spreading mortar, erecting and building scaffolds, and laying of brick and block to the line. | BPR 045 | Basic Blueprint Reading† 6 hrs./wk. 0 cr. Basic blueprint reading and field sketching, geometrical principles, multiview and pictorial drawings and dimensioning. |
| | | BPR 046 | Intermediate Blueprint Reading† 6 hrs./wk. 0 cr. Principles of projection, position of views and sections. |
| | | BPR 050 | Blueprint Reading for Welders† 3 hrs./wk. 0 cr. Basic reading of the alphabet of lines and views on blueprints. Orthographic projection drawings and blueprints. Basic pattern development. Reading piping and welding symbols. Classification of materials, metals, electrodes and processes. |

- BPR 100** **Blueprint Reading**
5 hrs./wk. 3 cr.
Study of orthographic third angle projection including sketching, section conventions, auxiliary views, and interpretation of fractional and decimal measurements. Includes symbol measurements, drafting standards of blueprints, sections, auxiliary views, details, and specifications as they relate to the machine trades.
- BPR 138** **Blueprint Reading for Welders**
5 hrs./wk. 3 cr.
Basic study of blueprint reading combined with special work on welding symbols and welding terms.
- BPR 150** **Blueprint Reading for Welders†**
3 hrs./wk. 3 cr.
Basic reading of the alphabet of lines and views on blueprints. Orthographic projection drawings and blueprints. Basic pattern development. Reading piping and welding symbols. Classification of materials. Students will complete a workbook and a working drawing.
- BR 063, 064, 065** **Permanent Waving†**
10 hrs./wk. 4 cr./class
Theory and lab practice in permanent waving skills.
- BR 110, 120, 130, 140, 150** **Barbering Lab**
25 hrs./wk. 9 cr./class
The barbering lab is organized similar to a regular shop where the student will work after graduation. Instruction and practice in the laboratory on haircuts, tapering, shaving, shampooing, scalp and face massaging, tonics, hair coloring, hair analysis, razor cutting, hair straightening, hair piece fitting, hair and skin cosmetics, trichology, permanent waving, and men's hair styling. Student will use barbering tools as they apply in today's modern barber industry.
- BR 111** **Barbering Theory**
5 hrs./wk. 5 cr.
Barber history, tools and accessories. Shaving, haircutting, shampooing, hair tonics, scalp, and face massaging.
- BR 121** **Barbering Theory**
5 hrs./wk. 5 cr.
Hygiene, bacteriology, sterilization and sanitation, anatomy and physiology, digestion, circulatory and skeletal systems.
- BR 131** **Barbering Theory**
5 hrs./wk. 5 cr.
Muscular system, nervous system, skin, face and scalp blood supply, electricity, cosmetic chemistry, and skin and scalp conditions.
- BR 141** **Barbering Theory**
5 hrs./wk. 5 cr.
Hair analysis, trichology, comprehensive review.
- BR 151** **Barbering Theory**
5 hrs./wk. 5 cr.
Permanent waving, comprehensive review in final preparation for the State Licensing Examination.
- CA 050** **General Art†**
6 hrs./wk. 0 cr.
Introductory course in basic elements of commercial art including lettering, composition, perspective, design, and handling value to define form.
- CA 051** **Water Color and Still Life Oil Painting†**
6 hrs./wk. 0 cr.
Painting experience in water colors, acrylics, or oils. Students will have the option of following either a prescribed course outlined for beginners or will be given advanced training in the media of their choice.
- CA 053** **Layout & Design†**
6 hrs./wk. 0 cr.
Introductory course including psychology of graphic selling, researching a design problem, symbolism, conventionalization of forms, creative processes, and preparing a morgue as applied to the advertising media.
- CA 060** **Beginning Drawing†**
6 hrs./wk. 0 cr.
Learning to see things as they are and to transfer this information to paper. Drawings will be made from three-dimensional objects.

- CA 063** **Layout & Design II†**
6 hrs./wk. 0 cr.
Advanced course in problem solving through advertising orders, going from research, thumbnails, roughs, and comprehensives. (Prerequisite: CA 053).
- CA 115** **Drawing I**
4 hrs./wk. 2 cr.
An analysis approach toward accurate drawing. Relationship of picture plane to subject matter, proper measuring, basic perspective theory, awareness of positive and negative shapes are emphasized.
- CA 116** **Principles and Elements of Art**
4 hrs./wk. 3 cr.
Study of principles and elements that will be applied in most of the more advanced commercial art classes that follow.
- CA 117** **Media and Techniques I**
5 hrs./wk. 3 cr.
An introduction to basic commercial art media and various techniques with an emphasis on modeling form, that is, the use of light and shadows to achieve a three-dimensional quality to the rendering.
- CA 118** **Lettering I**
6 hrs./wk. 3 cr.
Introduction to pen and brush lettering and the gothic alphabet with emphasis on proper letter form and spacing. The course includes choice, use, and proper care of instruments.
- CA 123** **Perspective**
4 hrs./wk. 2 cr.
Fundamentals of the basic theories and applications of perspective. Study concentrates on the relationship of the two-dimensional picture plane surface to the organization of pictorial elements to create the illusion of three-dimensional space. Creative problems in both linear and aerial perspective will be examined.
- CA 125** **Lettering II**
4 hrs./wk. 2 cr.
Introduction and application of single stroke alphabets such as the swash styles; includes brush script and introduces broad pen lettering. (Prerequisite: CA 118).
- CA 126** **Anatomy**
5 hrs./wk. 3 cr.
Intensive study of bone and muscle structure as basis for drawing the head and figure (Prerequisite: CA 115).
- CA 127** **Color**
4 hrs./wk. 3 cr.
Theory and practice in pigment color plus a comparison with light theory is made. A systematic orderly approach to a basic understanding of the principles of color is pursued.
- CA 128** **Media and Techniques II**
6 hrs./wk. 3 cr.
An introduction to basic media and techniques used in commercial art includes instruction in the aqueous media: transparent washes in lamp black, various techniques in water color, the use of acrylics as a transparent as well as opaque medium.
- CA 135** **Typography I**
5 hrs./wk. 3 cr.
Lettering indication, study of typography in general, study of specific type faces. (Prerequisite: CA 118).
- CA 136** **Figure Drawing**
4 hrs./wk. 2 cr.
Drawing the head and figure using male and female models. (Prerequisite: CA 115, CA 126).
- CA 137** **Design I**
4 hrs./wk. 3 cr.
This class introduces the student to the principles of advertising design. A series of exercises and projects help the student to apply the various principles. Both concept and execution are emphasized. (Prerequisite: CA 116, CA 127).
- CA 139** **Drawing II**
5 hrs./wk. 2 cr.
Drawing out-of-doors from nature, includes further development of the skills cultivated in Drawing I and Media and Techniques I. The course emphasizes drawing and composition.

- CA 140** **Layout I**
5 hrs./wk. 3 cr.
Introduction to the methods of indicating type, body copy, and photographs and their application in rendering layouts. The course introduces the point and pica systems of measuring type.
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CA 141 **History of Art**
3 hrs./wk. 3 cr.
Examination of art forms of the post-impressionistic through contemporary movements with emphasis on current trends, techniques, and concepts. Study centers around the aesthetic, cultural, and psychological factors that shape artistic expression.
- CA 215** **Art Preparation I**
5 hrs./wk. 3 cr.
A professional approach to producing an accurate camera-ready mechanical to faithfully reproduce a given layout. Up-to-date printing methods investigated also.
- CA 216** **Illustration**
6 hrs./wk. 3 cr.
An introduction to picture making. Includes: the laws of drawing, composition, design, techniques, mood and feeling. Subjects covered are: magazine, book, product, and spot illustrations. Media used: Black and White, full color. (Prerequisite: CA 257).
- CA 220** **Art Preparation II**
4 hrs./wk. 3 cr.
Advanced techniques in camera-ready art preparation are taught. Mechanical color separation is emphasized. (Prerequisite: CA 135, CA 215).
- CA 227** **Typography II**
3 hrs./wk. 2 cr.
Intensive study of various type faces and their application in commercial art. Creativity and typography problem solving are included. (Prerequisite: CA 135).
- CA 228** **Silk Screen Preparation**
4 hrs./wk. 2 cr.
An introduction to silk screen techniques, including hand-cut and photo stencil, with emphasis on the preparation of art for the various stencil types and also including the exploration of various uses of the silk screen process in the field. (Prerequisite: CA 227).
- CA 230** **Layout II**
4 hrs./wk. 3 cr.
Advanced layout with emphasis on comprehensives. Students will design layouts for brochures, billboards, newspaper ads, and magazine ads. (Prerequisite: CA 140).
- CA 236** **Occupational Orientation**
6 hrs./wk. 4 cr.
Preparation of portfolio and resume; field trips to art studios, advertising agencies, sign shops, engraving and printing plants; including techniques and department in job interviews.
- CA 239** **Design II**
5 hrs./wk. 3 cr.
An advanced advertising design class. A series of realistic design problems are solved by the student. Concept, execution, typography, and color will be emphasized. (Prerequisite: CA 137, CA 140).
- CA 240** **Sign Techniques**
4 hrs./wk. 2 cr.
The class is designed to teach the student many of the "tricks of the trade" for the sign industry. This includes enlarging techniques, use of the scale rule, application of decals, cut out letters, mask and spray techniques and lettering with enamels for permanent signage. (Prerequisite: CA 118, CA 125).
- CA 244** **Advanced Silk Screen**
4 hrs./wk. 2 cr.
An advanced class for students having had prior experience with silk screen printing which now emphasizes exact printing quality, use of fine details, tight and consistent registration, the use of enamel, lacquer and vinyl inks on appropriate surfaces and familiarization with the different characteristics of the popular photo stencil films. (Prerequisite: CA 228).

- CA 247 Studio Production**
6 hrs./wk. 4 cr.
This is an on-the-job simulated class. The student works from advertising orders as an employee would do in an advertising agency or commercial art studio. Attaining a professional level in speed, accuracy, and concept in commercial art is the objective of the class. (Prerequisite: CA 220)
- CA 249 Cartooning**
3 hrs./wk. 2 cr.
The student is introduced to cartooning as a part of commercial illustration. Advertising cartooning is emphasized. Professionalism in cartooning is the objective. (Prerequisite: CA 115)
- CA 250 Retail Illustration**
3 hrs./wk. 2 cr.
Techniques explored for department store product illustration for advertising. Soft and hard goods rendered in both line and wash will be studied. (Prerequisite: CA 115, CA 117)
- CA 252 Advanced Layout**
3 hrs./wk. 2 cr.
Advanced course in layout including psychology of graphic selling. Creativity and layout problem solving will be emphasized. (Prerequisite: CA 230)
- CA 253 Fashion Illustration**
3 hrs./wk. 2 cr.
Advanced instruction in materials and techniques involved in fashion illustration for department store advertising. (Prerequisite: CA 245)
- CA 254 Promotional Design**
3 hrs./wk. 2 cr.
Fundamentals of point-of-purchase and exhibition design with emphasis on three-dimensional concepts and techniques. Includes volume design, construction and production. (Prerequisite: CA 137, CA 239)
- CA 255 Packaging Design**
4 hrs./wk. 2 cr.
Basic packaging fundamentals including design principles, package production and layout, and selling psychology. Application covers graphic design for boxes, labels, albums, and specialty packaging. (Prerequisite: CA 227)
- CA 257 Advanced Figure Drawing**
6 hrs./wk. 3 cr.
A continuation of Figure Drawing I. Interpretation of photographic research with emphasis on drawing and illustrating the human body from the model. Taught in conjunction with CA 263 — Advanced Media & Tech. (Prerequisite: CA 136)
- CA 258 Air Brush**
4 hrs./wk. 2 cr.
Designed to give another added dimension to media and techniques through mechanical equipment. The student will learn the basic uses and skills of the air-brush.
- CA 259 Calligraphy**
6 hrs./wk. 3 cr.
An exploration into the history and methods of broad pen and quill pen lettering with emphasis on its use in today's field of communication. Students will be taught to recognize and appreciate the letter forms of the various historic periods. (Prerequisite: CA 118)
- CA 260 Advanced Sign Techniques**
4 hrs./wk. 3 cr.
To the continued study of sign methods previously learned are added more lettering styles, in more sizes, including build-up methods; lettering on varied surfaces with appropriate brushes, as well as continued screen process preparation as it relates to the sign business. (Prerequisite: CA 240, 228, 125, 118)
- CA 261 Art Preparation III**
6 hrs./wk. 3 cr.
Advanced theory and practice of art production which includes proper use and understanding of paper; a review of type specifying; preparing art for point-of-purchase, packaging, 30 sheet and silk screen posters and other 'non-routine' production art. (Prerequisite: CA 125, CA 220)
- CA 262 Design III**
4 hrs./wk. 3 cr.
Design of logo, letterhead, envelope, invoice, store-front and signs, color scheme, interior motif, and ad formats for commercial firm. (Prerequisite: CA 137, CA 239)

- CA 263** **Advanced Media & Techniques**
4 hrs./wk. 3 cr.
Emphasis on technique as applied to illustration. Taught in conjunction with Advanced Figure Drawing and must be taken at the same time. (Prerequisite: CA 136).
- CA 264** **Illustration Workshop I**
4 hrs./wk. 3 cr.
Taught in conjunction with Illustration class. Under close supervision the student is given more time to solve problems in drawing, composition, design, techniques, mood and feeling.
- CA 265** **Illustration Workshop II**
4 hrs./wk. 3 cr.
Taught in conjunction with Advanced Illustration class. Student is given more time to solve problems in drawing, composition, design, techniques, mood and feeling.
- CA 266** **Advanced Illustration**
6 hrs./wk. 3 cr.
Designed around a student's personal interest as it applies to illustration. Under the direction of instructor, the student will produce finished illustration worthy of reproduction. (Prerequisite: CA 216).
- CE 100** **Career Orientation**
3 hrs./wk. 3 cr.
Development of attitude and practical skills towards securing employment including career guidance, self-inventory, attitude, goal setting, motivation, job applications, resumes, interview techniques and employer/employee relationships.
- **NOTE:** Only (three) credit hours of CE 100 will be allowed toward the maximum (21) credit hours in the Cooperative Education Program.
- CE 123** **Career Oriented Cooperative Work Experience†**
15 hrs./wk. 3 cr.
Gainful employment in a job directly related to selected career. Cooperative planning and effort among student, instructor-coordinator and employment supervisor toward achieving specified career objectives. (Prerequisite: Instructor-Coordinator approval).
- CE 126** **Career Oriented Cooperative Work Experience†**
15 hrs./wk. 3 cr.
Gainful employment in selected career. Cooperative planning and effort among student, instructor-coordinator, and employment supervisor toward achieving specified career objectives. (Prerequisite: Instructor-Coordinator approval, CE 123).
- CE 129** **Career Oriented Cooperative Work Experience†**
15 hrs./wk. 3 cr.
Gainful employment in selected career. Cooperative planning and effort among student, instructor-coordinator, and employment supervisor toward achieving specified career objectives. (Prerequisite: Instructor-Coordinator approval, CE 126).
- CE 133** **Career Oriented Cooperative Work Experience†**
15 hrs./wk. 3 cr.
Gainful employment in selected career. Cooperative planning and effort among student, instructor-coordinator, and employment supervisor toward achieving specified career objectives. (Prerequisite: Instructor-Coordinator approval, CE 129).
- CE 136** **Career Oriented Cooperative Work Experience†**
15 hrs./wk. 3 cr.
Gainful employment in selected career. Cooperative planning and effort among student, instructor-coordinator, and employment supervisor toward achieving specified career objectives. (Prerequisite: Instructor-Coordinator approval, CE 133).
- CE 139** **Career Oriented Cooperative Work Experience†**
15 hrs./wk. 3 cr.
Gainful employment in selected career. Cooperative planning and effort among student, instructor-coordinator, and specified employment supervisor toward achieving career objectives. (Prerequisite: Instructor-Coordinator approval, CE 136).

- (PS)**
CEM 101 **Introduction to Chemistry†**
 7 hrs./wk. 5 cr.
 Survey of general chemistry covering structure, composition, and properties of substances and of their transformations.
- CIV 055** **Vocational Civics†**
 3 hrs./wk. 3 cr.
 Includes citizenship, functions of government, history, economics and philosophy of the democratic ideal.
- COM 005** **Reading Tutoring**
 1 cr.
 Personalized tutoring in reading. Instructional materials will consist of students vocational textbooks.
- COM 010** **Reading Pre-Technical†**
 5 hrs./wk. 4 cr.
 Basic development reading program for students reading on a 10th grade level or less. Individual instruction is emphasized.
- COM 015** **Basic Communication†**
 5 hrs./wk. 4 cr.
 Basic course in spelling, word usage, and writing. Individualized and utilizes a multi-media approach.
- COM 020** **Basic Communications Tutoring**
 5 hrs./wk. 1 cr.
 Communications/English tutoring program for students who need extra help with vocabulary studies and spelling. Individualized to fit the student's needs.
- COM 025** **Study Skills**
 4 cr.
 A special class designed to help students develop proper study skills by using the SQ4R system. Develop proper recall skills by mapping and improving reading with emphasis on reading faster.
- COM 055** **Communications†**
 5 hrs./wk. 5 cr.
 Practice in listening, writing, and speaking skills as they relate to giving and receiving messages. Emphasis on inter-personal communication to help the individual relate to self and others more effectively. Includes self-awareness of others, styles of communication, problem solving. Practical instruction in job interview procedures, preparation of related letters, and the resume.
- COM 060** **Campus Publications**
 2 hrs./wk. 2 cr.
 Supervised experience in writing and editing for the college newspaper and other publications. Open to Newspaper staff members or by consent of the instructor. May be repeated for credit and substituted for COM 055 or ENG 080.
- COM 110** **Interpersonal and Group Communication**
 3 hrs./wk. 3 cr.
 One-to-one, dyadic, and group communication, understanding communication situations; techniques of influencing thought and behavior; message characteristics. Emphasis is placed on communication in the world in which the student and employee function.
- COS 100** **Manicuring**
 25 hrs./wk. 8 cr.
 Supervised practice in the art of manicuring and hand care. Includes principles of sterilization and sanitation, hygiene, anatomy and physiology, and diseases of skin and nails.
- COS 101** **Manicuring**
 24 hrs./wk. 8 cr.
 Lab instruction and practice in manicuring including principles of personality development, meeting the public, ethics, salesmanship and working in a salon.
- COS 110, 120, 130, 140** **Cosmetology Lab**
 25 hrs./wk. 9 cr./class
 Learning by doing is emphasized. Lab instruction and practice are an integral part and extend over length of program. Shampooing, scalp treatments, manicuring, haircutting, hair styling, permanent waving, facials, massaging, trichology, care and styling of wigs and wiglets, finger waving, hair coloring, and bleaching.
- COS 111** **Cosmetology Theory**
 5 hrs./wk. 5 cr.
 Sterilization and sanitation, hygiene, anatomy and physiology, personality, and other related topics directly connected with practical units of laboratory instruction.

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| COS 121 | Cosmetology Theory 5 hrs./wk. 5 cr. Diseases of hair, skin and nails, electricity, and other related topics directly connected with practical units of laboratory instruction. | CR 052 | Court Reporting II 4 hrs./wk. 0 cr. Dictation 60 to 100 wpm. Open entry. |
| COS 131 | Cosmetology Theory 5 hrs./wk. 5 cr. Courtesy, telephone conversation, ethics, salesmanship, salon management, and other related topics directly connected with practical units of laboratory instruction. | CR 053 | Court Reporting III 4 hrs./wk. 0 cr. Dictation 100 to 120 wpm. Open entry. |
| COS 141 | Cosmetology Theory 5 hrs./wk. 5 cr. Comprehensive review of cosmetology theory and practical application. | CR 054 | Court Reporting IV 4 hrs./wk. 0 cr. Dictation 120 to 150 wpm. Open entry. |
| COS 150 | Cosmetology Lab 25 hrs./wk. 9 cr. Final preparation on all phases of cosmetology laboratory work for graduation and for taking the State Board Licensing Examination. | CR 055 | Court Reporting V 4 hrs./wk. 0 cr. Dictation 150 to 175 wpm. Open entry. |
| COS 151 | Cosmetology Theory 5 hrs./wk. 5 cr. Student is coached in final preparation on all phases of Cosmetology theory for graduation and for taking the State Board Licensing Examination. | CR 056 | Court Reporting VI 4 hrs./wk. 0 cr. Dictation 175 to 200 wpm. Open entry. |
| COS 160, 170 | Cosmetology Lab 25 hrs./wk. 9 cr./class These classes are optional for graduation but are necessary for practice in hair cutting required for the additional 500 clock hours needed to include hair cutting on the State License. | CR 120 | Court Reporting† 5 hrs./wk. 5 cr. Stenotype Theory. Keyboard; fundamentals of writing by sound. Beginning speed practice. Dictation. 40 to 60 wpm. |
| COS 161, 171 | Cosmetology Theory 5 hrs./wk. 5 cr./class These classes are optional for graduation, but are necessary for the additional 500 clock hours needed to include hair cutting on the State License. Includes hair shaping and state board preparation review. | CR 122 | Court Reporting II† 5 hrs./wk. 5 cr. Skill Development; Theory review; high frequency words and phrases; building writing vocabulary; speed building practice. Dictation 60 to 100 wpm. Open entry. (Prerequisite: CR 120 or equivalent) |
| | | CR 123 | Court Reporting III† 5 hrs./wk. 5 cr. Skill Development; Theory reinforcement; additional short forms and phrases; common business and industrial terms; accounting, sales, insurance, banking and investments, publishing, printing, advertising, transportation, education, engineering, and communications. Speed building practice. Dictation 100 to 120 wpm. Open entry. (Prerequisite: CR 122 or equivalent) |
| | | CR 124 | Transcription† 5 hrs./wk. 3 cr. New material transcription to level of vocationally acceptable standards. To be taken concurrently with CR 123. |

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| CR 221 | Court Reporting IV† 5 hrs./wk. 5 cr. Court Reporting Theory; High frequency words and phrases in legal terminology, legal dictation, introduction to two-voice testimony, speed-building practice. Legal documents and instruments; reports and testimony. Dictation 120 to 150 wpm. Open entry. (Prerequisite: CR 123 or equivalent). | DP 060 | Applied Computer Concepts 5 hrs./wk. 3 cr. Introduction to data processing and automation in the business office and industry. Understanding data processing terminology and the use of peripheral, data entry, and terminal devices, and computer number systems. This class is required for non-data processing majors. |
| CR 222 | Court Reporting V† 5 hrs./wk. 5 cr. Advanced Court Reporting theory; Two-voice testimony; jury charges, medical dictation. Speed building practice. Dictation 150 to 175 wpm. Open entry. (Prerequisite: CR 221 or equivalent). | DP 070 | Keypunch† 5 hrs./wk. 0 cr. Keypunch machines and punch card systems. (Prerequisite: OA 070 or typing speed of 35 wpm). |
| CR 223 | Court Reporting VI† 5 hrs./wk. 5 cr. Advanced Court Reporting Theory; Legal-medical dictation, high-speed dictation of two-voice testimony, literary practice for CSR test. Intensive speed building practice. Dictation 175 to 200 wpm. Open entry. (Prerequisite: CR 222 or equivalent). | DP 101 | Basic Computer Concepts† 3 hrs./wk. 3 cr. Understanding terminology, syntax, and basic concepts in computers. OA 070 must be taken concurrently, or equivalent typing skill required for satisfactory keypunch performance in DP 201. This class is required of non-data processing majors. |
| CR 224 | Transcription† 5 hrs./wk. 2 cr. Development of vocational competency in court reporting transcription. Taken concurrently with CR 223. (Prerequisite: Typing speed of 65 n/wpm). | DP 110 | Introduction to Programming† 5 hrs./wk. 5 cr. Introduction to programming languages for Data Processing majors. This class is a prerequisite for all DP classes. May take concurrently with DP 111. |
| CR 250 | Legal Terminology† 2 hrs./wk. 2 cr. Spelling, definition, and usage of legal terminology for students enrolled in Court Reporting classes. | DP 111 | BASIC Programming† 5 hrs./wk. 5 cr. BASIC Programming taught through use of terminals and keypunch machines. First of quarter spent on keypunch machines, while programming in BASIC. (Prerequisite: OA 070 or typing speed of 35 wpm). |
| CR 276 | English for Court Reporters† 2 hrs./wk. 2 cr. Functional English principles involving spelling, grammar, and punctuation for students enrolled in Court Reporting classes. | DP 112 | RPG Programming† 10 hrs./wk. 7 cr. Terminology, syntax, and basic concepts pertaining to computers, RPG programming and concepts. Familiarization with actual operation of in-house computer. |
| | | DP 115 | Assembler Programming† 10 hrs./wk. 7 cr. Basic Assembly Language programming problems. Familiarization with instructions and their uses. (Prerequisite: Grade of C or better in DP 110. Passing grade in MTH 101). |

- DP 120 COBOL Programming†**
10 hrs./wk. 7 cr.
Training and instruction in COBOL language and emphasis on solution of problems. (Prerequisite: DP 110).
- DP 200 Computer Audit†**
5 hrs./wk. 4 cr.
Typical audit procedures evaluating internal control, evaluating the audit trail, performing audit tests with and without the computer, audit objectives, auditing standards and generally accepted accounting principles are discussed. Emphasis is placed upon auditing computerized records.
- DP 201 Automated Communications†**
5 hrs./wk. 3 cr.
Theory application in Data Bases. Data input to computer terminals. BASIC terminal language taught. (Prerequisite: DP 101 or equivalent; MTH 101 or MTH 138).
- DP 202 FORTRAN Programming†**
5 hrs./wk. 5 cr.
Basic principles and fundamentals of FORTRAN programming.
- DP 220 Applied COBOL Programming†**
10 hrs./wk. 5 cr.
Advanced programming techniques in COBOL with emphasis on modular and structured design, documentation, segmentation and linkage, decision tables, table handling, and sorting. (Prerequisite: Grade of C or better in DP 120).
- DP 272 FORTRAN/BASIC Programming†**
10 hrs./wk. 7 cr.
Basic principles and fundamentals of FORTRAN and BASIC languages in solving mathematical problems. Use of statistics in business programs. Practical use of terminals and communications inter- and intra-computer. (Prerequisite: Passing grade in MTH 105 or equivalent).
- DP 280 Business Systems Design†**
5 hrs./wk. 5 cr.
Techniques and analyzing, designing, and implementing business systems using the computer. (Prerequisite: Grade of C or better in DP 220 and passing grade in ACCT 103).
- DP 291 Advanced Programming Techniques†**
10 hrs./wk. 5 cr.
Selected practical business problems for actual production situations in Assembly language, FORTRAN or COBOL. Includes use of tape and disk storage, and use of job control. (Prerequisite: Grade of C or better in DP 220).
- DP 295 Individual Case Studies**
10 hrs./wk. 5 cr.
Advanced techniques in programming using Assembly language, FORTRAN, COBAL, Pascal, or PL-1. Software writing stressed. (Prerequisite: Grade of C or better in DP 115, DP 220, and DP 272).
- ECN 055 Applied Economics†**
3 hrs./wk. 3 cr.
Personal finance and consumer economics. Includes budgeting, good spending habits, wise shopping for food, clothing, housing, loans, insurance, and investments.
- (SS) ECN 101 General Economics†**
3 hrs./wk. 3 cr.
The study of production, distribution, and consumption of goods and services. This survey course includes the study of demand and supply, national income, employment and inflation, the Federal Reserve System, money and banking, business cycles, taxation, and political economics.
- ECN 135 Labor Economics**
The American free-enterprise system, labor market economics, wage theory, labor mobility, human resource development, history and role of labor unions, collective bargaining, employment and public policy.
- EDDT 050 Mechanical Drafting I†**
6 hrs./wk. 0 cr.
Fundamentals of drafting including sketching, lettering, orthographic projection, auxiliary views, and sectioning.
- EDDT 051 Pipeline Drafting†**
6 hrs./wk. 0 cr.
Basic fundamentals of drawing tank designs, cryogenics, and piping systems in industrial application including spools, P&I, and plans.

EDDT Layout for Fabricators I†

052 6 hrs./wk. 0 cr.
Fundamentals of graphic layout of complex objects in flat pattern.

EDDT Mechanical Drafting II†

060 6 hrs./wk. 0 cr.
Advanced techniques including assembly production, dimensions, tolerances, surface quality, specifications, and basic descriptive geometry. (Prerequisite: EDDT 050)

EDDT Structural Drafting†

061 6 hrs./wk. 0 cr.
Basic fundamentals of drawing structural steel and steel connections for fabrication. Smoley's tables and estimating.

EDDT Layout for Fabricators II†

062 6 hrs./wk. 0 cr.
Continuation of EDDT 052. (Prerequisite: EDDT 052)

EDDT Structural Drafting II†

063 6 hrs./wk. 0 cr.
Design of simple beams and columns. Reactions and stresses in connections, bolted, welded, and riveted. (Prerequisite: EDDT 061)

EDDT Structural Drafting III†

064 6 hrs./wk. 0 cr.
Design and detail of trusses, design drawings for framed and seated connections, skewed, sloped and canted beam connections. (Prerequisite: EDDT 063)

EDDT Layout for Fabricators III†

065 6 hrs./wk. 0 cr.
Continuation of EDDT 062. (Prerequisite: EDDT 062)

EDDT Mechanical Drafting III†

070 6 hrs./wk. 0 cr.
Continued descriptive geometry, shop processes, materials, and basic working drawings. (Prerequisite: EDDT 060)

EDDT Legal & Patent Drawing

076 6 hrs./wk. 0 cr.
Use of illustrations and how to illustrate. Creating a patent drawing in isometric, dimetric, trimetric or orthographic projections. Review needs for documentation.

EDDT Smoley's Tables

101 1 hr./wk. 1 cr.
Solution of triangles and circular segments by using tables of slopes and rises, parallel tables of logs and squares, and table of segmental functions.

EDDT Electronic Drafting

108 4 hrs./wk. 3 cr.
Broad coverage of basic drafting techniques, electronic diagrams, symbols, charts, graphs, and printed circuit drawings.

EDDT Drafting Fundamentals

113 20 hrs./wk. 10 cr.
Laboratory practice with drafting tools. Includes fundamentals of drafting, lettering, dimensioning, and orthographic projections.

EDDT Mechanical Drafting I†

115 16 hrs./wk. 8 cr.
Fundamentals of basic drawing including tools, lettering, orthographic projections, auxiliary views, and descriptive geometry.

EDDT Descriptive Geometry†

123 12 hrs./wk. 5 cr.
Study of points, lines, planes, and polyhedrons and their manipulation in space. Auxiliary views, intersections, and developments.

EDDT Advanced Descriptive Geometry

124 10 hrs./wk. 5 cr.
Secondary auxiliaries, pictorials, isometric sketching, perspective (Days — taught first half of quarter only).

- EDDT Engineering Drawing I†**
133 10 hrs./wk. 5 cr.
 Drawings of threads and fasteners, dimensioning and tolerancing, and working drawings; detail and assembly drawings catalog use and parts callouts (Days — taught second half of quarter only).
- EDDT Engineering Drawing II†**
134 10 hrs./wk. 5 cr.
 Detail and assembly drawings, catalog use and parts callouts (Days — taught first half of quarter only).
- EDDT Technical Drafting Specialities**
136 10 hrs./wk. 5 cr.
 Introduction to technical detailing. Includes structural detailing, electrical detailing, and mapping (Days — taught second half of quarter only).
- EDDT Mechanics & Strength of Materials†**
216 5 hrs./wk. 5 cr.
 Basic theory of forces, force systems, section modulus, shear, tension and compression, and properties of materials and how they apply to design. (Prerequisite: MTH 052 or MTH 106).
- EDDT Electrical and Electronic Drawing**
218 10 hrs./wk. 5 cr.
 A broad coverage of drawings used in electrical and electronics industries. Diagrams, schematics, printed circuits, chassis layout, and industrial controls (Days — taught first half of quarter only) (Prerequisite: EDDT 136).
- EDDT Civil Drafting**
219 10 hrs./wk. 5 cr.
 Surface features of the earth are drawn and depicted by conventional symbols. Also includes sub-divisions, curves and intersections, contours, natural and man-made features (Days — taught second half of quarter only) (Prerequisite: EDDT 124).
- EDDT Steel Design**
224 5 hrs./wk. 5 cr.
 Design of bolted and welded connections, simple beams and columns, trusses and buildup sections, rectangular and skewed framing. (Prerequisite: EDDT 216).
- EDDT Machine Tool Drafting†**
225 8 hrs./wk. 3 cr.
 Design and elementary research of small units in machine tools applied to working drawings.
- EDDT Machine Design†**
226 5 hrs./wk. 5 cr.
 Principles of the design of shafts, bearings, fasteners, couplings, gears, cams, and frames as they apply to mechanical design. (Prerequisite: EDDT 216).
- EDDT Structural Detailing**
227 10 hrs./wk. 5 cr.
 General course covering AISC standard detailing, welding symbols, connection details, shapes and plates, and Smoley's Tables. (Prerequisite: EDDT 134).
- EDDT Manufacturing Processes**
234 5 hrs./wk. 5 cr.
 A broad coverage of materials and processes used in manufacturing as related to machine design. Includes ferrous and non-ferrous metals, castings, power metallurgy, plastics, welding, and corrosion.
- EDDT Pipe Drafting†**
236 5 hrs./wk. 3 cr.
 Specialized training in controls, symbols, fittings, part specifications, diagrams, and detail drawings as they apply to piping.
- EDDT Structural Drafting**
237 5 hrs./wk. 3 cr.
 Specialized course in detailing, sizing, and estimating of structural steel with an introduction on the use of Smoley's Tables.
- EDDT Electro Mechanical Drafting†**
238 5 hrs./wk. 3 cr.
 Specialized course in electronics diagrams, component design, P.C., and terminal boards and assemblies.
- EDDT Advanced Machine Drafting**
239 10 hrs./wk. 5 cr.
 Design drawing class, includes layout drawing to mechanical details.

- ELC 055 Electrical Wiring†**
15 hrs./wk. 0 cr.
Applications of electrical code and theory in lab or live projects. Sheathed cable, conduit, and low voltage remote control wiring. (Prerequisite: ELC 057 and ELC 060)
- ELC 057 Basic Electricity†**
5 hrs./wk. 0 cr.
Atomic structure, magnetism, sources of electricity, D.C. circuits, Ohm's Law, power, conductors, electrical measurements, etc. as they apply to solutions of practical electrical problems.
- ELC 058 Electric Motors†**
15 hrs./wk. 0 cr.
Application of A.C. and electrical apparatus such as motor types, operation, maintenance, selection, and applications. Includes rewinding, troubleshooting, and repair of single/polyphase motors.
- ELC 059 A.C. and Electrical Apparatus†**
5 hrs./wk. 0 cr.
Principles of A.C. in electrical apparatus such as generators, motors, magnetic circuits, transformers, etc. (Prerequisite: ELC 057)
- ELC 060 Electrical Codes†**
5 hrs./wk. 0 cr.
Basic National Electrical Code including residential, commercial, and hazardous wiring requirements, blueprint reading.
- ELC 061 Industrial Controls†**
15 hrs./wk. 0 cr.
Practical applications of instrumentation and motor controls in the lab including installation, troubleshooting, and maintenance. (Prerequisite: ELC 062, 063)
- ELC 062 Instrumentation†**
5 hrs./wk. 0 cr.
Principles of industrial automation and instrumentation including equipment and industrial techniques.
- ELC 063 Advanced Motor Control†**
5 hrs./wk. 0 cr.
Principles of motor controls, techniques, diagramming, analysis, and development of industrial motor control systems.
- ELC 070 Mathematics for Electricians I**
5 hrs./wk. 5 cr.
Review of fractions and decimals, percentages, powers of ten, use of calculator, square roots, areas and volumes, ratio and proportions, algebraic equations.
- ELC 071 Mathematics for Electricians II**
5 hrs./wk. 5 cr.
Intermediate algebra, AC equations, basic trigonometry. (Prerequisite: ELC 070 with C grade or better)
- ELC 072 Physics for Electricians**
5 hrs./wk. 5 cr.
Lecture-demonstration including concepts of mechanics, fluid mechanics, heat, light, sound, electricity, and magnetism as they apply to the electrical industry.
- ELC 103 Electrical Codes**
5 hrs./wk. 5 cr.
National Electrical Code covering residential, commercial, industrial, and hazardous wiring requirements. Also includes electrical blueprint reading and use.
- ELC 104 AC-DC Fundamentals**
5 hrs./wk. 5 cr.
Electron theory, Ohm's Law and its application, equivalent circuits, magnetism, motors, generators, transformers, and instruments.
- ELC 105 AC-DC Circuits**
5 hrs./wk. 5 cr.
Electrical circuits as related to power mechanisms. Includes the theory of operation, maintenance and overhaul of motors, transformers, and basic controls.
- ELC 106 Solid State Fundamentals**
5 hrs./wk. 5 cr.
Theory and operation of semiconductors and electronic control devices used in refrigeration and major appliances.

- ELC 107 Practical Wiring & Controls**
5 hrs./wk. 5 cr.
Requirements for power service wiring and function and adjustment of all basic refrigeration and air-conditioning controls. Applicable National Electric Code.
- ELC 108 Advanced Electrical**
5 hrs./wk. 5 cr.
Range electrical circuits, Electronic circuits in ranges, and radar microwave ovens.
- ELC 109 Sold State Application**
6 hrs./wk. 2 cr.
Laboratory experience in the installation and use of semi-conductors and electronic control devices.
- ELC 110 Electrical Wiring**
15 hrs./wk. 5 cr.
Laboratory application of principles covered in ELC 103 and ELC 111. Wiring techniques applied to practical laboratory projects using NM sheathed cable, conduit, and low voltage remote control wiring. Wiring houses constructed by the College. (Prerequisite: ELC 103, ELC 111).
- ELC 111 Basic Electricity**
5 hrs./wk. 5 cr.
Atomic structure, magnetism, sources of electricity, D.C. circuits, Ohm's Law, power, conductors, ampacity/resistance/voltage drop, electrical measurements, circuit simplification, and Kirchhoff's Law applied to the solution of practical electrical problems.
- ELC 120 Electric Motors**
15 hrs./wk. 5 cr.
Laboratory application of principles covered in ELC 111. Troubleshooting, repairing, rewinding, and connecting single/polyphase motors. Introduction to maintenance welding. (Prerequisite: ELC 121).
- ELC 121 A.C. and Electrical Apparatus**
5 hrs./wk. 5 cr.
Theory of alternating current and principles of electrical apparatus. Emphasis on generators, motors, magnetic circuits, inductance, transformers, capacitance, reactance, impedance, resonance, power factor, and single/polyphase power systems. (Prerequisite: ELC 111).
- ELC 131 Instrumentation**
5 hrs./wk. 5 cr.
Theory of principles, equipment and techniques of industrial automation and instrumentation.
- ELC 151 Advanced Motor Controls**
5 hrs./wk. 5 cr.
Theory of principles, equipment, and techniques of motor control. Includes diagramming, analysis, and theoretical development of practical, industrial motor control systems.
- ELC 160 Industrial Controls**
15 hrs./wk. 5 cr.
Laboratory application of principles covered in ELC 131 and ELC 151. Installation, troubleshooting, and maintenance of motor control systems. Practical application of pneumatic and hydraulics-instrumentation systems. (Prerequisite: ELC 131 and ELC 151).
- ELT 052 FCC Study (2nd class)† (F, W)**
6 hrs./wk. 0 cr.
Study of typical F.C.C. questions and theory behind each question. Designed to help pass second class F.C.C. test (Prerequisite: Student should have some background in electronics, either through school or work experience).
- ELT 053 FCC Study (1st class)† (S)**
6 hrs./wk. 0 cr.
Study of typical F.C.C. questions and theory behind each question. Designed to help pass F.C.C. first class test (Prerequisite: ELT 052 or equivalent)
- ELT 054 Basic Amateur Communications**
4 hrs./wk. 0 cr.
Study of typical F.C.C. Amateur questions applicable to amateur general and technician licenses and code practice. Designed to help amateur pass F.C.C. license. Some background in electronics would be helpful but not a prerequisite.

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| ELT 056 | Electronic Assembly 30 hrs./wk. 0 cr. Covers basic electronics theory, math and color codes, safety procedures, use of tools and necessary equipment, soldering and assembly to meet industrial standards. | ELT 146 | DC Application and Practice† 4 hrs./wk. 1 cr. Application of Direct Current and familiarization with basic test equipment. Soldering and wiring techniques. (Prerequisite: Basic knowledge of Algebra) |
| ELT 093 | Microprocessor† (F, S) 5 hrs./wk. 0 cr. Covers terminology, architecture, interfacing techniques, timing, programming concepts with application to control circuits and data processing. | ELT 147 | DC Fundamentals† 4 hrs./wk. 3 cr. Basic electronics; including electron theory, direct current principles, series, and parallel concepts, and DC power sources. (Prerequisite: knowledge of Algebra) |
| ELT 095 | Algebra for Electronics 5 hrs./wk. 5 cr. Fractions, ratios and proportions, square roots, basic algebra, algebraic equations, scientific notation, graphical analysis, basic geometry | ELT 148 | AC Application and Practice† 6 hrs./wk. 2 cr. Application of alternating current to series and parallel circuits. (Prerequisite: ELT 146, basic knowledge of Algebra and Trigonometry) |
| ELT 096 | Trigonometry for Electronics 5 hrs./wk. 5 cr. Basic trigonometry, phasor algebra, logarithms, exponential equations. (Prerequisite: ELT 095 with C grade or better). | ELT 149 | AC Fundamentals† 6 hrs./wk. 4 cr. Generation and use of alternating current. Inductance, capacitance, resonance, AC circuit analysis, using phasors and complex numbers. (Prerequisite: Basic knowledge of Algebra and Trigonometry, ELT 147). |
| ELT 098 | Calculus for Electronics 5 hrs./wk. 5 cr. Differential and integral calculus: Rates, limits, derivatives, definite and indefinite integrals, trigonometric functions. (Prerequisite: ELT 096 with C grade or better) | ELT 150 | Application of Amplifying Devices 10 hrs./wk. 3 cr. Application of characteristic curves in design of amplifying circuits in both solid state and vacuum tubes, testing and troubleshooting of amplifier circuits. (Prerequisite: ELT 140) |
| ELT 140 | DC & AC Application and Practice 10 hrs./wk. 3 cr. Application of DC and AC principles. Familiarization with basic test equipment. Practice with soldering and wiring techniques. Study of meters and associated circuitry. (Prerequisite: Basic knowledge of Algebra and Trigonometry) | ELT 151 | Amplifying Device Fundamentals† 10 hrs./wk. 7 cr. Vacuum tube, bi-polar, and field effect transistor theory, and characteristic curves and parameters. Introduction to the design of amplifier circuitry. (Prerequisite: ELT 141) |
| ELT 141 | DC & AC Fundamentals 10 hrs./wk. 7 cr. Basic electronics including electron theory, direct current, alternating current, meters, series and parallel circuits, and batteries. (Prerequisite: Basic knowledge of Algebra and Trigonometry). | ELT 152 | Logic Fundamentals 5 hrs./wk. 5 cr. Boolean Algebra, logic gates, logic simplification, truth tables, switching network theory, lab included. |

- ELT 156** **Application of Amplifying Devices I†**
4 hrs./wk. 1 cr.
Application and use of electron tubes, semi-conductor diodes, basic power supplies; testing and troubleshooting techniques.
- ELT 157** **Amplifying Device Fundamentals I†**
4 hrs./wk. 3 cr.
Physics of solid state devices, theory of electron tubes, basic power supplies, characteristic curves.
- ELT 158** **Application of Amplifying Devices II†**
6 hrs./wk. 2 cr.
Application and use of bi-polar transistors and regulated power supplies; characteristic curves to design basic amplifiers including differential amplifiers; testing and troubleshooting techniques.
- ELT 159** **Amplifying Device Fundamentals II†**
6 hrs./wk. 4 cr.
Bi-polar transistors, differential amplifiers, and active resistor theory and characteristic curves; introduction to design of amplifier circuitry, regulated power supplies.
- ELT 160** **Application of Advanced Amplifying Devices**
10 hrs./wk. 3 cr.
Application, testing, and troubleshooting of thyristors, misc. solid state devices, integrated circuits, digital electronics, optoelectronic devices, operational amplifiers, electronic power supplies. (Prerequisite: ELT 150).
- ELT 161** **Advanced Amplifying Device Fundamentals**
10 hrs./wk. 7 cr.
Fundamentals of thyristors, misc. solid state devices, integrated circuits, digital electronic, optoelectronic devices, introduction to operational amplifiers, electronic power supplies. (Prerequisite: ELT 151).
- ELT 166** **Application of Advanced Amplifying Devices I†**
4 hrs./wk. 1 cr.
Application, testing, and troubleshooting of field effect transistors and integrated circuits.
- ELT 167** **Advanced Amplifying Device Fundamentals I†**
4 hrs./wk. 3 cr.
Fundamentals of field effect transistors and integrated circuits.
- ELT 168** **Application of Advanced Amplifying Devices II†**
6 hrs./wk. 2 cr.
Application, testing, and troubleshooting of thyristors, operational amplifiers, optoelectronics devices, and multivibrators.
- ELT 169** **Advanced Amplifying Device Fundamentals II†**
6 hrs./wk. 4 cr.
Fundamentals of thyristor devices, operational amplifiers, optoelectronic devices, multi-vibrators, and miscellaneous semi-conductors.
- ELT 170** **Application and Testing of Electronic Communication Devices**
10 hrs./wk. 3 cr.
Design, build and test communication circuits. Application of communication circuits in transmitters and receivers. Troubleshooting and alignment of receivers. (Prerequisite: ELT 160).
- ELT 171** **Principles of Electronic Communication Devices**
10 hrs./wk. 7 cr.
Theory and circuit analysis of amplitude, frequency, and phase modulated transmitters and receivers including single side band and stereo. Fundamentals of antennas and transmission lines. (Prerequisite: ELT 161).
- ELT 191** **Circuit Analysis**
5 hrs./wk. 5 cr.
Application of basic principles of electronics and analysis of complex circuits and systems.
- ELT 226** **Practical Systems Analysis**
10 hrs./wk. 3 cr.
A step-by-step approach to systematic lab analysis and troubleshooting with the latest state of the art equipment and methods. (Prerequisite: ELT 170).

- ELT 227 Systems Analysis**
10 hrs./wk. 7 cr.
Principles of how active and passive circuits, devices, and networks are integrated into systems such as monochrome and color television.
- ELT 228 Applied Advanced Communication**
10 hrs./wk. 3 cr.
Application and analysis of basic microwave systems. Operation of microwave test equipment, calibration and adjustment procedures. (Prerequisite: ELT 170)
- ELT 229 Microwave Advanced Communications**
10 hrs./wk. 7 cr.
Principles of microwave oscillators, waveguides, antennas with application to audio, visual and data transmission. Solid state microwave devices, modulation and demodulation, and lasers for communications. (Prerequisite: ELT 171)
- ELT 238 Laboratory Analysis of Digital and Analog Concepts**
10 hrs./wk. 3 cr.
Construction and analysis of logic circuits used in computers. Practice in programming and familiarization of computer systems. (Prerequisite: ELT 150)
- ELT 239 Computer Technology**
10 hrs./wk. 7 cr.
Concepts of pulse and digital circuitry, logical design and digital computers, data transmission, and systems analysis. Emphasis on technical aspects of computers. Programming of digital and analog computers. (Prerequisite: ELT 151, ELT 152)
- ELT 247 Applied Physiology**
3 hrs./wk. 3 cr.
Familiarization with functional systems of the human body with emphasis on those most adaptable to monitoring by electronic instrumentation.
- ELT 248 Medical Electronics Lab**
10 hrs./wk. 3 cr.
Application and operation of medical electronic equipment as studied in ELT 249. Alignment, adjustment and troubleshooting and supervised repair work is emphasized. Field trips to various medical centers. (Prerequisite: ELT 170)
- ELT 249 Medical Electronics**
10 hrs./wk. 7 cr.
Design and operation of medical electronic equipment including X-Ray and related instrumentation. Coronary care instrumentation including: EKG, rate meters, defibrillators synchronizers, pacemakers, strain gauges and amplifiers. Nuclear medicine instrumentation including: Radiation detection devices, counting devices, scalars and scanning devices. Biological potentials and computer applications as used in medicine are considered. (Prerequisite: ELT 171)
- ELT 258 Instrumentation Lab**
10 hrs./wk. 3 cr.
Processes of calibration and standardization of test equipment. (Prerequisite: ELT 170)
- ELT 259 Instrumentation**
10 hrs./wk. 7 cr.
Repair, calibration, and standardization of electronic test equipment. Operation and circuits common to each type of basic test equipment. (Prerequisite: ELT 171)
- ELT 278 Application of T.V. Production and Reproduction Systems**
10 hrs./wk. 3 cr.
Application of principles of closed circuit television and broadcast studio techniques. Actual video taping, editing, use of film, and camera chains will be stressed. (Prerequisite: ELT 224)
- ELT 279 Theory of T.V. Production and Reproduction Systems**
10 hrs./wk. 7 cr.
Concepts and operation of closed circuit television and broadcast television. Cameras, VTR's, special effect generation, sync generators, and other video processing components. Broadcast standards will be stressed. (Prerequisite: ELT 225)

- ENG 080 Business English†**
3 hrs./wk. 3 cr.
Review of grammar, punctuation, sentence structure, spelling, and word usage. Stress on the application of the above principles in the business setting and in proofreading exercises.
- ENG 087 Vocabulary Building†**
3 hrs./wk. 3 cr.
Course in vocabulary building and spelling improvement.
- (HU) ENG 101 English Composition†**
3 hrs./wk. 3 cr.
Basic principles of effective composition and necessary practice in expressing ideas.
- ENG 102 English Composition†**
3 hrs./wk. 3 cr.
Continuation of ENG 101 with special emphasis on the principles of logic, the writing of research papers, business letters. (Prerequisite: ENG 101 with C grade or better).
- ENG 103 English Composition**
3 hrs./wk. 3 cr.
More advanced concepts of ENG 101 and ENG 102 with an emphasis on argumentation and persuasion. (Prerequisite: ENG 102).
- ENG 115 Business Writing†**
3 hrs./wk. 3 cr.
A variety of business-oriented writing assignments with a strong emphasis on letter writing. (Prerequisite: ENG 080 with a C grade or equivalent).
- (HU) ENG 130 Technical Writing†**
3 hrs./wk. 3 cr.
Introduction to technical writing includes study of practical work in style, language, and mechanics of technical reports.
- (HU) ENG 160 Effective Speaking†**
3 hrs./wk. 3 cr.
Emphasis on the dual role of speech as both a speaking and listening skill. Practice is provided through individual speeches and group discussions with emphasis on organization and delivery.
- (HU) ENG 251 American Literature**
3 hrs./wk. 3 cr.
Survey of modern American novelists and playwrights with readings selected from each author. Outside reading of two novels and one play required.
- (LS) FL 101 Principles of Nutrition**
3 hrs./wk. 3 cr.
Basic principles of human nutrition and their application through the life cycle.
- (LS) FL 150 Child Growth & Development**
5 hrs./wk. 5 cr.
Fundamentals of growth and development relating to effective human relationships within the family; a study of behavior and cultural influence from infancy through adolescence. A nursery school serves as a child development laboratory to give students practical experience.
- FS 015 Food Service Problems†**
TBA/wk. 0 cr.
Analysis of problems in the food service industry, with emphasis on areas of individual student concern and interest. (Prerequisite: See Instructor).
- FS 039 Gourmet Cooking†**
6 hrs./wk. 0 cr. hrs.
Introduction to world cuisine. Specialized techniques and recipes from around the world, including French, Italian, Mediterranean, Chinese, etc. Buffet displays and advanced food decoration also covered.
- FS 047 Food Preparation I†**
10 hrs./wk. 0 cr.
Production and use of food and materials, introduction to tools and equipment, development of standards in food preparations, the effect of these factors upon the economic, nutritive value, and aesthetic appeal of food.
- FS 048 Food Preparation II†**
10 hrs./wk. 0 cr.
Continuation of Food Preparation I, with introduction to proper baking and complete menu preparation as emphasis.

- FS 101 Introduction to the Hospitality Industry†**
4 hrs./wk. 4 cr.
Traces the growth and development of the industry from early inns to the modern high-rise and commercial hotels, lodging and food operations, opportunities and future trends.
- FS 125 Service of Food†**
2 hrs./wk. 2 cr.
Fundamentals of food service. Restaurant or coffee shop, formal dining room, sanitation, grooming and personal cleanliness, table setting, completing and placing orders, suggesting menu items, efficient and correct serving of meals, proper cleanup, handling of money and cash controls.
- FS 126 Safety and Sanitation**
2 hrs./wk. 2 cr.
Principles of personal health and hygiene, safety and sanitary requirements relating to food service. The student may also receive a certificate of completion from the National Institute from the Food Service Industry, certifying completion of applied food service sanitation.
- FS 131 Basic Nutrition†**
3 hrs./wk. 3 cr.
Basics of nutrition, how people eat, why they eat as they do, nutritional interviewing techniques, nutritional care throughout the life cycle, nutritional value of various foods, combinations for meal planning, proper preparation methods, etc.
- FS 137 Food and Beverage Cost Control†**
3 hrs./wk. 3 cr.
Cost control as a necessity to profit and continuation in business. Sound purchasing, proper storeroom operation, controlled food production, standardized recipes, records and proper supervision.
- FS 145 Purchasing†**
3 hrs./wk. 3 cr.
Knowledge and understanding of food and beverage products and the various standards applied to each product. Quality and cost control of non-food supplies, specifications, ordering, receiving, and storage. Sound purchasing practices are defined.
- FS 146 Menu Planning†**
2 hrs./wk. 2 cr.
Basics of menu planning, including types of menus, cycle menus, factors in planning, and menu making techniques.
- FS 147 Food Preparation I†**
10 hrs./wk. 6 cr.
Production and use of food and materials, introduction to tools and equipment, development of standards in food preparations, the effect of these factors upon economic nutritive value, and aesthetic appeal of food.
- FS 148 Food Preparation II†**
10 hrs./wk. 6 cr.
Continuation of Food Preparation I, with introduction to proper baking and complete menu preparation an emphasis. (Prerequisite: HRI 147 or equivalent)
- FS 149 Food Preparation III†**
7 hrs./wk. 4 cr.
Continuation of Food Preparation II. Restaurant and banquet service. Emphasis on appetizers, entrees, and sauce preparation. Instruction in garnishes, pastries, and food decorations. (Prerequisite: FS 148 or equivalent)
- FS 199 Hospitality Seminar†**
2 hrs./wk. 1 cr.
This course deals with current development in the hospitality industry. Industry leaders discuss trends, problems, solutions and opportunities.
- FS 215 Food Service Problems†**
2-7 hrs./wk. 2-6 cr. (Negotiable with Instructor)
Analysis of problems in the food service industry, with emphasis on areas on individual student concern and interest. (Prerequisite: See Instructor)
- FS 239 Gourmet Cooking†**
7 hrs./wk. 4 cr.
Introduction to world cuisine. Specialized techniques and recipes from around the world including French, Italian, Mediterranean, Chinese, etc. Buffet displays and advanced food decoration also covered.

- FS 240 Food & Beverage Management**
5 hrs./wk. 5 cr.
Surveys food and beverage operations, covering such areas as menu planning, receiving, storing and issuing, food production, food and beverage service, bar operation, budgeting, sanitation, operational analysis, equipment layout selection, and maintenance. (Formerly HM 125).
- FS 241 Food Production Principles**
5 hrs./wk. 3 cr.
Introduction to cooking methods, basic baking and other food preparation. Survey of kitchen tools and equipment. Concurrent instruction and kitchen hands-on experience. (Formerly HM 245).
- GED 010 GED Preparation†**
5 hrs./wk. 1 cr.
Individualized program designed to prepare students to take the GED High School Equivalency Examination.
- HDM 114 Heavy Duty Chassis Lab**
20 hrs./wk. 7 cr.
Practical experience in front end and steering, clutch, transmission, differential, suspension and undercarriage.
- HDM 115 Heavy Duty Chassis**
5 hrs./wk. 5 cr.
Classroom instruction front end and steering, clutch, transmission, differential, suspension and undercarriage.
- HDM 122 Basic Diesel Engines Lab**
20 hrs./wk. 7 cr.
Practical experience in the theory, operation, troubleshooting and repair, maintenance, and parts nomenclature of both 2-cycle and 4-cycle diesel engines.
- HDM 123 Basic Diesel Engines**
5 hrs./wk. 5 cr.
Classroom instruction in the theory, operation, trouble shooting and repair, maintenance and parts nomenclature of both 2-cycle and 4-cycle engines.
- HDM 134 Preventative Maintenance & Service Lab**
20 hrs./wk. 7 cr.
Practical experience in preventative maintenance and servicing of heavy duty equipment.
- HDM 135 Preventative Maintenance & Servicing**
5 hrs./wk. 5 cr.
Classroom instruction in preventative maintenance and servicing of heavy duty equipment.
- HDM 202 Heavy Duty Electrical Lab**
20 hrs./wk. 7 cr.
Practical experience in operation, maintenance, testing, trouble shooting, and repair of all electrical units of the heavy duty field; basic operation, maintenance and repair of air conditioning units.
- HDM 203 Heavy Duty Electrical**
5 hrs./wk. 5 cr.
Classroom instruction in operation, maintenance, testing, trouble shooting, and repair of all electrical units of the heavy duty field; basic operation, maintenance and repair of air conditioning units.
- HDM 222 Advanced Diesel Engines Lab**
20 hrs./wk. 7 cr.
Practical experience in tune-up, trouble shooting, and maintenance of 2-cycle and 4-cycle diesel engines, with emphasis on all systems.
- HDM 223 Advanced Diesel Engines**
Classroom instruction in tune-up, trouble shooting, and maintenance of 2-cycle and 4-cycle diesel engines, with emphasis on all systems.
- HDM 232 Truck Mechanics Lab**
20 hrs./wk. 7 cr.
Practical experience in truck-type transmissions, air systems, cab and chassis reconditioning, with emphasis on highway trucks, trailers, and systems.

- HDM 233 Truck Mechanics**
5 hrs./wk. 5 cr.
Classroom instruction in truck-type transmissions, air systems, cab and chassis reconditioning, with emphasis on highway trucks, trailers, and systems.
- HDM 238 Construction Equipment Mechanics Lab**
20 hrs./wk. 7 cr.
Practical experience in mobile hydraulics, torque converters, and power shift transmissions.
- HDM 239 Construction Equipment Mechanics**
5 hrs./wk. 5 cr.
Classroom instruction in mobile hydraulics, torque converters, and power shift transmissions.
- HIS 120 Early U.S. History**
3 hrs./wk. 3 cr.
General survey of American History from discovery and colonization through the American Revolution. The establishment of the Constitution and westward expansion.
- HM 120 Front Office Procedures**
5 hrs./wk. 3 cr.
Procedures used in all areas in the front office, including reservations, registration, check-out and guest service. Duties of all front office personnel. Public relations responsibilities emphasized.
- HM 121 Reservations**
2 hrs./wk. 2 cr.
The reservations functions are related to the travel industry, focusing on the various components of the reservations and the problems which can be encountered, and ways they can be solved in obtaining reservations in all phases of the travel industry.
- HM 122 Hospitality Marketing**
5 hrs./wk. 4 cr.
Modern marketing techniques in food and lodging industries, including human factors, consumer demand, planning, advertising, and sales methods.
- HM 123 Travel & Tourism**
2 hrs./wk. 2 cr.
Concentrates on geography (both domestic and international) as relating to travel planning and itinerary preparation. Specifically designed for the person who is planning to travel. Route structures of basic travel companies and patterns throughout the world. Should be taken concurrently with HM 125.
- HM 124 Advanced Travel & Tourism**
2 hrs./wk. 3 cr.
A focus on the advantages and disadvantages of tourism, and the theory behind tourism as a tool to world understanding. Problems which can be encountered by the tourist and by the international traveler. Tourism in third world and developing countries is explored.
- HM 125 Domestic Rates and Tariffs**
5 hrs./wk. 3 cr.
A focus on the construction of domestic airline rates and the theory behind the tariff computation of airline fares and rates. A section of the class will be spent on the theory behind excursion fares and promotional fares. However, due to the nature of monetary exchange on excursion fares, no specific excursion fares are explored.
- HM 126 International Airline Rates & Routes**
5 hrs./wk. 5 cr.
Emphasis on itinerary planning and on the routes that are covered by specific airlines and the theory behind an airline's rate and route structure. Specific attention will be paid to international connecting points, routing problems, and international political situations which call for specific itinerary routings. Visa problems are discussed.
- HM 127 Domestic & International Ticketing**
3 hrs./wk. 2 cr.
Domestic and international ticketing procedures. The fare ladder construction fare construction over hidden cities, more distant points, around the world itineraries, the actual ticketing of an international passenger. Also the area bank settlement plan is studied.

- HM 132 Housekeeping, Maintenance, & Engineering**
5 hrs./wk. 4 cr.
Basic housekeeping procedures; scheduling and controls. Basics of hotel and restaurant engineering and maintenance of grounds and buildings.
- HM 133 Campground & Recreation Management**
5 hrs./wk. 4 cr.
Examines the recreation industry, its growth and potential, and some practical approaches to its management and the problems and challenges of campground management.
- HM 138 Hotel & Restaurant Accounting**
5 hrs./wk. 3 cr.
Includes financial statements, basic structure of accounts, uniform system of accounts, and some basic managerial accounting.
- HM 139 Hospitality Seminar**
2 hrs./wk. 1 cr.
Review of practical management principles, case problems, and discussions with managers and other experts in the industry.
- HO 110 Health Occupations**
4 hrs./wk. 4 cr.
Introduction of the health worker to medical ethics and legal implications. Basic medical terminology. Personal hygiene and body mechanics. Review of basic mathematics including metric and apothecary systems of measurements. Conversion of one system to the other.
- HO 120 Introduction to Nursing**
3 hrs./wk. 3 cr.
Medical terminology; roles and interrelationships in the health care team, medical ethics, and psychology of the patient.
- HO 130 Pathophysiology**
3 hrs./wk. 3 cr.
Introduction to the understanding of the nature of disease and its effect on total body systems.
- (LS) LS 111 Microbiology**
7 hrs./wk. 5 cr.
A survey of microbial principles; metabolism, immunology, control, pathology, and a survey of microbial taxonomic groups with relation to diseases. Lab includes practical experience with aseptic technique, identification, and cultivation.
- (LS) LS 201 Human Anatomy & Physiology**
7 hrs./wk. 5 cr.
Study of the human body, its systems and organs, and their interaction. Medical terminology and applications stressed. Practical knowledge of structures acquired by laboratory dissection.
- MAR 055, 056, 057 Major Appliance Repair†**
6 hrs./wk. 0 cr.
Fundamentals of electrical and mechanical repair of common major household appliances.
- MAR 110 Refrigeration Systems**
15 hrs./wk. 5 cr.
Theory and repair of home and freezer refrigeration systems using caplines only.
- MAR 111 Fundamentals of Refrigeration Systems**
5 hrs./wk. 5 cr.
Basic principles of capline systems. Theory of compressor systems and controls.
- MAR 120 Basic Appliance Systems**
15 hrs./wk. 5 cr.
Actual hands-on training, diagnosing, operating, and repairing major appliances (all makes).
- MAR 121 Fundamentals of Major Appliances**
5 hrs./wk. 5 cr.
Basic appliance mechanical theory as applied to washing machines, dryers, disposals, dishwashers, and compactors.
- MAR 130 Advanced Appliance Lab**
15 hrs./wk. 5 cr.
The disassembly of ranges and other major appliances, including diagnosis, repair, and installation.

- MAR 131** **Advanced Mechanical Theory**
5 hrs./wk. 5 cr.
Advanced appliance mechanical theory as applied to major appliances.
- MAR 132** **Customer Relations**
5 hrs./wk. 5 cr.
Techniques and procedures used to successfully deal with customers and related problems. Also covering importance of necessary paper work related to the service industry.
- MGT 051** **Middle Management Development†**
3 hrs./wk. 0 cr.
Leadership and decision making, training and motivating.
- MGT 052** **Supervision and Management Skills†**
3 hrs./wk. 0 cr.
Principles of effective supervision, training of employees, communicating with management.
- MGT 053** **Motivation and Communication**
3 hrs./wk. 0 cr.
Communication and motivation techniques, value systems, leadership, teamwork, and group dynamics.
- MGT 062** **Middle Management Development†**
3 hrs./wk. 3 cr.
Value of records, leadership, goal setting, decision making, delegating authority, human relations, motivating, training and appraisals.
- MGT 063** **Supervision and Management Skills†**
3 hrs./wk. 3 cr.
Role of effective supervision, employment needs and organizational objectives, training employees, measuring performance, communicating with management.
- MGT 064** **Motivation & Communication Skills†**
3 hrs./wk. 3 cr.
Communication and motivation techniques, overcoming communication barriers, value systems, motivation theory, leadership teamwork, and group dynamics.
- MGT 080** **Women in Management: Exploring Your Potential†**
3 hrs./wk. 0 cr.
Learning to deal objectively with oneself in exploring attitudes, aptitudes, abilities, talents, strengths, and weaknesses as they relate to the working woman interested in improving her position.
- MGT 081** **Women in Management; Communication Skills†**
3 hrs./wk. 0 cr.
Examining ways in which to communicate with peers, employees, and supervisors; with an emphasis on helpful verbal and non verbal communication between men and women in supervisory positions.
- MGT 082** **Women in Management; Management Skills†**
3 hrs./wk. 0 cr.
Meeting the needs of women who wish to serve in administrative or leadership positions by learning the basic managerial skills, such as budgeting, delegating, evaluating, and decision-making.
- MGT 103** **Managerial Analysis†**
8 hrs./wk. 5 cr.
Continuation of corporation accounting, branch accounting, manufacturing, and cost accounting. Includes study of funds and management statements analysis. (Prerequisite: ACCT 102, formerly ACCT 103).
- MGT 105** **Business Law I**
5 hrs./wk. 5 cr.
Introduction to business law, contracts, personal property and bailments, sales and commercial paper.
- MGT 106** **Business Law II†**
3 hrs./wk. 3 cr.
Creditors rights, secured transactions, agency and employment, partnerships, corporations and real property. (Prerequisite: MGT 105).
- MGT 150** **Business for Trade Occupations**
3 hrs./wk. 3 cr.
Survey of business functions, including Finance, Taxes, and Regulation, Personnel, Marketing, Organization and Business Law, Orientation towards small business operation and management. (Prerequisite: MTH 050).

- MGT 202 Small Business Management†**
4 hrs./wk. 4 cr.
Introduction to problems of the small business — capitalization, borrowing, taxes, purchasing, personnel, organization, location, promotion, and financial control techniques are examined.
- MGT 203 Managerial Finance†**
5 hrs./wk. 5 cr.
Financial administration, includes planning and budgeting, control of costs, financial analysis for operations, and capital investments. Pricing and marginal analysis. (Prerequisite: ACCT 103 or equivalent)
- MGT 204 Banking and Finance†**
5 hrs./wk. 4 cr.
Introduction to elements of financial management from viewpoint of lending institutions and business managers. Banking system and national financial markets discussed in relation to monetary impact on business operations.
- MGT 205 Principles of Management†**
3 hrs./wk. 3 cr.
Basic principles of business management. Overview of theory and practical applications. Introduction to concepts of managerial skills. (Formerly MGT 201)
- MGT 206 Techniques of Supervision†**
4 hrs./wk. 4 cr.
Principles and skills necessary in motivating, guiding, and educating employees individually and in groups. Effective communication with the management team.
- MGT 207 Personnel & Labor Relations†**
4 hrs./wk. 4 cr.
Introduction to problems associated with employees individually, and complex problems associated with organized labor.
- MGT 209 Federal Income Tax†**
5 hrs./wk. 5 cr.
Basic Federal Tax Legislation and regulation for the individual or for the company. (Formerly ACCT 209)
- MGT 210 Investments†**
3 hrs./wk. 3 cr.
Uses of investments. Stocks and bonds. Mutual Funds. Limited Partnerships, Real Estate Investment Trusts, and other areas.
- MGT 212 Applied Management†**
3 hrs./wk. 3 cr.
The development of management. In-depth study of principles of business. Emphasis placed on the decision making process. For students with basic management skills and wishing to expand their abilities. (Prerequisite: MGT 201 and MGT 206)
- MGT 215 Cost Analysis†**
5 hrs./wk. 5 cr.
Materials, labor, overhead, job cost and standard cost. (Prerequisite: MGT 103) Formerly ACCT 215.
- MGT 218 Internal Auditing†**
5 hrs./wk. 5 cr.
Internal audit procedures covering audit planning, implementation, and audit control. Discussion of field work, audit working papers, report review, and summary report preparation to management. (Prerequisite: MGT 203 or ACCT 202. Formerly ACCT 218)
- MGT 220 Operations Analysis†**
3 hrs./wk. 3 cr.
Introduction to basic business statistics, use of population parameters, probability sampling, and forecasting, particularly for decision making in business management.
- MGT 221 Credit and Collections†**
3 hrs./wk. 3 cr.
Introduction to credit in business relationship to money, use of credit by manufacturer, wholesalers, retailers, and consumers, credit documents.
- MGT 222 Credit Management†**
3 hrs./wk. 3 cr.
Evaluation of credit granting tools; financial report and its analysis; ratios; operating costs; comparative analysis; collection tools; insolvency.

- MGT 223 Credit Analysis†**
3 hrs./wk. 3 cr.
Case studies in bankruptcies, credit adjustments, and legal aids. Involvement of cases representing consumers, retailers, and wholesalers. (Prerequisite: MGT 222).
- MGT 240 Women in Management; Developing Potential**
3 hrs./wk. 3 cr.
Attitude, aptitude, abilities, and talents are discovered and developed. Goal setting applied to individual career and methods of achievement.
- MGT 241 Women in Management; Communication**
3 hrs./wk. 3 cr.
Verbal and non-verbal communication. Formal and informal communication systems. Dealing effectively with employees and managers, male, female, and groups.
- MGT 242 Women in Management; Management Techniques**
3 hrs./wk. 3 cr.
Principles and practices of management for women. Organization, controlling, staffing, and other management functions discussed for effective decision-making.
- MKTG 101 Introduction to Business†**
4 hrs./wk. 4 cr.
An overview of the American business system with special emphasis on terminology, government regulation, organization, management, accounting, finance, marketing and production.
- MKTG 103 Principles of Marketing†**
5 hrs./wk. 5 cr.
Introductory course in problems and policies of manufacturers, wholesalers, and retailers as related to marketing of goods and services.
- MKTG 106 Retailing†**
5 hrs./wk. 5 cr.
Fundamentals of merchandising, store location, organization, and layout, problems in the various branches of retailing, store service, and personnel, buying, selling and stock control.
- MKTG 107 Sales Promotion**
4 hrs./wk. 4 cr.
Principles and problems of advertising and promotion including campaign planning, creating messages keyed to today's changing needs, wants and attitudes. Layout, copy writing, headlines, and various media used to coordinate with other elements in marketing. (Formerly MKTG 128).
- MKTG 122 Salesmanship†**
5 hrs./wk. 5 cr.
Direct sales training. Experience in basic techniques through participation in a series of live simulated sales calls. Emphasis placed on product knowledge, pre-approach, needs, benefits, and closing techniques.
- MKTG 131 Insurance Principles†**
3 hrs./wk. 3 cr.
Insurance fundamentals — Life, Health, Liability, Special emphasis on uses of insurance as it relates to transfer of risk in business and personal needs including estate and tax planning.
- MKTG 142 Interior Design†**
3 hrs./wk. 3 cr.
Home and office interiors, harmony in furnishings; floor and wall coverings, window treatments.
- MKTG 143 Home Furnishings†**
3 hrs./wk. 3 cr.
Specialization in interior decorating for the home, designed to provide the student with the tools of a consultant in interior home furnishing.
- MKTG 145 Introduction to Fashion**
3 hrs./wk. 3 cr.
An introductory course designed to acquaint retail merchandising students with the basic terminology of fashion, careers, publications, new styles and trends in womens, mens and childrens fashions, creating new lines and major market centers.
- MKTG 146 Contemporary Images for Women**
3 hrs./wk. 3 cr.
Personal and professional development as it relates to self-improvement for success in business. Course emphasis placed on hair and skin care, physical fitness, wardrobe planning, visual poise, social/business etiquette and contemporary issues for women.

MKTG Principles of Retail Buying†

147 3 hrs./wk. 3 cr.
The buying process, inventory management, sales records, and placing merchandise orders. Responsibilities of sales manufacturers, distributors, and representatives. Examination of merchandise distribution.

MKTG Sales Management

148 3 hrs./wk. 3 cr.
Techniques of sales management. Conducting sales meetings. Time and territory management. Quota management. Sales performance, interviews. Motivation techniques. Sales training techniques. (Prerequisite: MKTG 122 or equivalent).

MKTG Fashion Merchandising II

149 (Advanced)†
3 hrs./wk. 3 cr.
Specialized training as it relates to the field of fashion, including the history of fashion, textiles, fashion design and leading designers, fashion coordination, fashion show production. (Prerequisite: MKTG 145)

MKTG Visual Merchandising

150 3 hrs./wk. 3 cr.
Planning for in-store displays, budgeting, working with props, fixtures, lighting, and merchandise.

MKTG Front End Operations

161 4 hrs./wk. 4 cr.
The course is designed to train students in the basic responsibilities of the front end in a retail outlet. Cash register operations, computation approaches, credits, shoplifting and pilferage, check-out procedures and courtesy desk.

MKTG Applied Marketing†

175 2 hrs./wk. 1 cr.
Organization and planning for various marketing and management activities.

MKTG Applied Marketing II

176 2 hrs./wk. 1 cr.
Preparation for statewide competition in various marketing and management specialties such as Display, Salesmanship, Sales Management, etc. Develops specialized marketing skills. (Prerequisite: MKTG 175 or instructor approval).

MKTG Applied Marketing III

177 2 hrs./wk. 1 cr.
Competitive events in marketing and management specialties. Development of leadership and social skills needed in business associations. (Prerequisite: MKTG 176)

MKTG EDP Marketing Applications

185 3 hrs./wk. 3 cr.
Electronic Data Processing (EDP) systems and information generated for retailers, wholesalers, and manufacturers. Applications to market analysis and information related to direct sales, organization, buying trends, inventory analysis, and material control.

MKTG Advanced Salesmanship

220 5 hrs./wk. 5 cr.
Techniques of advanced salesmanship. Emphasis on polishing sales objections skills, closing skills and communication skills. Also includes sales plans, expense reports, call plans, prospecting, team selling. Seminar format. (Prerequisite: MKTG 122 or equivalent).

MS Machine Shop Math†

045 6 hrs./wk. 0 cr.
Review of arithmetic including square roots and an introduction to algebra.

MS Machine Shop Math†

046 6 hrs./wk. 0 cr.
Review of algebra and introduction to geometry and right angle trigonometry.

MS Basic Machine Shop†

050 6 hrs./wk. 0 cr.
Practical experience in bench work, drill press, and lathe operations. Includes shop safety, care and maintenance of machines, shop math, and blueprint reading.

MS Advanced Machine Shop†

052 6 hrs./wk. 0 cr.
Practical experience on mills, shapers, and precision grinders. Includes shop safety, care and maintenance of machines, and shop math. (Prerequisite: MS 050 or equivalent experience).

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| MS 055 | Numerical Control Programming & Electrical Discharge Machining† 6 hrs./wk. 0 cr. Basic experience in programming and operation of a two axis N.C. machine and operation of E.D.M. machine. (Prerequisite: MS 052 or Industrial Experience) | MS 111 | Basic Machine Theory 5 hrs./wk. 5 cr. Basic machine shop theory including operation and performance of drill presses, lathes, basic hand tools, and measurement and accuracy. |
| MS 058 | Hobby Machine Shop† 6 hrs./wk. 0 cr. Special course for those who machine special projects such as amateur gunsmithing, product development, etc. (Prerequisite: MS 050 or Industrial Experience) | MS 120 | Machine Shop Lab 15 hrs./wk. 5 cr. Application of principles covered in MS 121. Includes operation of shapers and mills. |
| MS 060 | Machine Shop Math 5 hrs./wk. 5 cr. Solving algebraic equations, manipulating formulas, ratio and proportion of gearing, fundamentals of plane geometry and layout, right triangle trigonometry, and geometric construction. | MS 121 | Machine Shop Theory 5 hrs./wk. 5 cr. Basic machine shop theory including operation and performance of machine tools, including shapers, mills and planers. Emphasis is placed on operation, maintenance and performance. |
| MS 061 | Applied Machine Shop Math 5 hrs./wk. 5 cr. Fundamentals of plane trigonometry, basic analytical geometry as applied to two and three axis numerical control processes. | MS 130 | Advanced Machine Shop Lab 15 hrs./wk. 5 cr. Includes manufacture of gears, heat treating, use of grinders, quality assurance, and numerical control. Practical application of numerical control programming, use of Flexowriter, metallurgy, electrical discharge machining, testing and inspection. |
| MS 100 | Machine Shop Fundamentals 2 hrs./wk. 1 cr. Basic theory and practice of machine tools and equipment with emphasis on measurement and measuring devices. | MS 131 | Advanced Machine Theory 5 hrs./wk. 5 cr. Advanced application of machining principles including instruction in gears, grinders, heat treating, numerical control, precision grinding, and metallurgy; electrical discharge machining, testing and inspection. |
| MS 101 | Advanced Blueprint Reading 5 hrs./wk. 3 cr. Advanced technical blueprint reading including isometric sketching of basic machines and their parts, the study of military standards, dimensioning and tolerancing, metric system dimensioning, welding symbols, and how they affect machine shop drawings. | MS 225 | Foundry Processes 4 hrs./wk. 2 cr. Basic casting processes (such as pattern and mold preparation, gating, risering, and selection of casting alloys) are all taught by preparing and pouring nonferrous castings. |
| MS 110 | Basic Machine Shop Lab 15 hrs./wk. 5 cr. Laboratory application of principles covered in MS 111. Includes operation of drill presses, lathes and extensive bench work with hand tools and introduction to mills. | MS 227 | Machine Shop† 4 hrs./wk. 3 cr. Introduction to machine processes and demonstrations in the Machine Shop including shop safety, measurement, accuracy and shop organization. |

- MS 229 Related Machine Shop**
4 hrs./wk. 3 cr.
Introduction to engine lathe, tool grinding, basic drill press operations, bench work and layout.
- MTH 015 Math Tutoring Lab†**
5 hrs./wk. 1 cr.
Mathematical tutoring program for students enrolled in regular vocational-technical classes.
- MTH 020 Math Pre-Vocational†**
10 hrs./wk. 7 cr.
Basic operations with whole numbers, fractions, decimals, percentages, proportions, and the metric system. The Sound/Page System is used.
- MTH 050 Vocational Math†**
5 hrs./wk. 5 cr.
Review of fractions and decimals, percentage, ratio and proportion, powers and roots, areas and volumes, rules and formulas with trade applications. (Some sections are individualized.)
- MTH 051 Elementary Algebra†**
5 hrs./wk. 5 cr.
Fundamentals of Algebra.
- MTH 052 Elementary Trigonometry†**
5 hrs./wk. 4 weeks 2 cr.
Solution of right triangles, graphing trig functions, and the law of sines and cosines. (Prerequisite: MTH 051, 060, or equivalent with C grade or better).
- MTH 053 Math for Machine Shop**
5 hrs./wk. 5 cr.
Review of whole numbers, fractions, decimals, fractional conversions, square roots, pythagorean theorem, measurement and denominate numbers, metrics and an introduction to algebra and formulas and their application to Machine Shop training.
- MTH 056 Scientific Calculators†**
5 hrs./wk. 2 weeks 1 cr.
Use of scientific calculators in performing arithmetic operations, calculating roots and exponent values, e to the x power, trigonometric, and logarithmic functions. (Prerequisite: MTH 052 with C grade or better).
- MTH 058 Phasor Algebra†**
5 hrs./wk. 4 weeks 2 cr.
Complex numbers, "j" operator. Phasor operation in rectangular and polar form. (Prerequisite: MTH 052 with C grade or better).
- MTH 060 Applied Math†**
5 hrs./wk. 5 cr.
Short review of arithmetic with emphasis on fractions, decimals and basic applied algebra with electricity application.
- MTH 061 Math for Welders**
5 hrs./wk. 5 cr.
Application of vocational math skills to business and trade problems, including layout of shapes made with straight lines and circles and regular and tapered solids. Basic trigonometry. (Prerequisite: MTH 050 with C grade or better).
- MTH 080 Business Math†**
5 hrs./wk. 3 cr.
Review of fundamentals of math including decimals, fractions, percentages, and interest with basic business application.
- MTH 098 Applied Calculus†**
5 hrs./wk. 5 cr.
Electronic applications to differential and integral calculus. Rates, limits, derivatives, definite and indefinite integrals and various functions are discussed. (Prerequisite: MTH 106 or equivalent with C grade or better).
- (PS) MTH 101 Intermediate College Algebra†**
5 hrs./wk. 5 cr.
Linear equations, special products, factoring, fractions, fractional equations, simultaneous equations, exponents, radicals, complex numbers, quadratic equations, and logarithms. (Prerequisite: MTH 051 with C grade or better).
- (PS) MTH 105 College Algebra†**
5 hrs./wk. 5 cr.
Functions, graphs, complex numbers, quadratic functions, equations, logarithms, matrices, inequalities, theory of equations, sequences, series, and combinations. (Prerequisite: MTH 101 with C grade or better).

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| (PS) MTH 106 | Plane Trigonometry† 5 hrs./wk. 5 cr. Circular functions; solution of right triangles, oblique triangles, solutions of trigonometric equations, identities, and graphing of trigonometric functions (Prerequisite: MTH 105 with C grade or better). | NSG 221 222 | Family Centered Needs of Maternal Child & Adolescents & Emotional Needs of People (Each section taught one-half quarter) 19 hrs./wk. 9 cr. These courses are three interrelated rotations designed to develop a knowledge of principles which can be applied when planning and giving care to various age groups with more complex health problems. Opportunities are provided for the student to assess, plan, implement and evaluate nursing care of patients with an alteration of their basic needs. Concurrently theory and guided clinical experiences are planned in medical, surgical, pediatric, and psychiatric nursing in various settings. |
| (PS) MTH 138 | Advanced Bus. Math† 5 hrs./wk. 5 cr. Includes simple and compound interest, mortgages, loans, annuities, and discounts. (Prerequisite: MTH 080 with C grade or equivalent skills) Financial calculator required. | NSG 299 | Nursing Seminar Current concepts in nursing. Required for sophomore students. |
| NSG 101, 102 | Fundamentals of Nursing Care 20 hrs./wk. 10 cr. Initial course for associate degree nursing students. Planned to assist students to develop fundamental skills and identify simple nursing problems related to basic needs of people. | OA 020 | Forkner Shorthand I† 5 hrs./wk. 0 cr. Forkner theory. An alphabetic speed writing system. |
| NSG 111, 112 | Need of Adults 24 hrs./wk. 12 cr. Emphasis on meeting basic human needs of patients through an increased development of nursing skills. Understanding of principles and facts relative to common pathological processes, diagnostic procedures, and specialized equipment. Nursing assessment is incorporated into theory and practicum. | OA 021 | Beginning Shorthand† 5 hrs./wk. 0 cr. Century 21 Theory. A symbol system of shorthand for secretarial preparation. Requires good English skills and good attendance record. |
| NSG 121, 122 | Needs of the Family 24 hrs./wk. 12 cr. Emphasis on meeting basic human needs of the family throughout the childbearing cycle. Care of children. Increased development of nursing skills based on understanding of principles and facts relative to these aspects of the life cycle. | OA 022 | Shorthand Review† 5 hrs./wk. 0 cr. Gregg and Century 21 theory and Forkner theory review. Building dictation speed and vocabulary. Dictation to 80 wpm. |
| NSG 201, 202 | Needs of Adults (Emphasis on Medical Intervention) 19 hrs./wk. 9 cr. | OA 023 | Shorthand Speed Building† 5 hrs./wk. 0 cr. Building speed and accuracy in writing shorthand. (Prerequisite: Dictation speed of 80 wpm). |
| NSG 211, 212 | Needs of Adults (Emphasis on Surgical Intervention) 19 hrs./wk. 9 cr. | OA 031 | Office Machines† 3 hrs./wk. 0 cr. Introduction to ten-key adding machine, electronic printing calculator, electronic and display calculator. Open entry. |

- OA 040 Forkner Shorthand II†**
5 hrs./wk. 0 cr.
Forkner shorthand theory concluded (Prerequisite: OA 020).
- OA 050 Typewriting Speed Building†**
5 hrs./wk. 0 cr.
Drills in speed building and accuracy.
- OA 051 Beginning Typewriting†**
5 hrs./wk. 0 cr.
Introduction to keyboard and correct typing techniques, letters and memos.
- OA 052 Typewriting Review†**
5 hrs./wk. 0 cr.
Keyboard and number review. Corrective drills for speed and accuracy. Letters, tabulations, and manuscript placement.
- OA 070 Keyboarding†**
5 hrs./wk. 2 cr.
Keyboard theory and review. Professional and personal typewriting for non-clerical majors. Open entry.
- OA 081 CPS Review I†**
5 hrs./wk. 0 cr.
Certified Professional Secretary examination preparation concerning units in Economics and Management Business and Public Policy, and Office Procedures.
- OA 082 CPS Review II†**
5 hrs./wk. 0 cr.
Certified Professional Secretary examination preparation concerning units in Environmental Relationships, Communications and Decision Making, Financial Analysis, and Mathematics of Business.
- OA 101 Office Technology**
5 hrs./wk. 5 cr.
Training in telecommunications, postal regulations, word processing, and machine transcription. Introduction to ten-key adding machine and electronic printing calculator. (Prerequisite: Typing speed of 45 n/wpm).
- OA 111 Beginning Typewriting†**
10 hrs./wk. 4 cr.
Keyboard, correct typing techniques, and speed and accuracy building. Introduction to production typing. The student should be typing 30 net words per minute at the completion of the class.
- OA 112 Intermediate Typewriting†**
10 hrs./wk. 4 cr.
Keyboard drills, speed and accuracy drills, technique drills, and production typing. The student should be typing 40 net words per minute at the completion of the class.
- OA 113 Advanced Typewriting†**
10 hrs./wk. 4 cr.
Speed and accuracy drills, specialized production typing. Student should be typing 50 net words per minute at completion of the class.
- OA 115 Typewriting Speed Building†**
5 hrs./wk. 2 cr.
Intensive speed building practice. Drills in accuracy, techniques, and machine parts are included.
- OA 120 Forkner Shorthand I†**
10 hrs./wk. 5 cr.
Forkner theory. An alphabetic speed writing system.
- OA 121 Shorthand I†**
10 hrs./wk. 7 cr.
Introduction to theory. Dictation from practiced material. Preview of new material for dictation. Minimum dictation speed at completion should be 50 wpm.
- OA 122 Shorthand II†**
5 hrs./wk. 5 cr.
Review of theory. Dictation and speed building. Continuation of OA 121. Specialized dictation and new material. Minimum dictation speed at completion should be 60 wpm.

- OA 123 Shorthand III†**
5 hrs./wk. 5 cr.
Speed building to achieve an acceptable speed for employment. Continuation of OA 122. New material, specialized dictation, and theory reinforcement. Minimum dictation speed at completion should be 80 wpm.
- OA 124 Transcription†**
5 hrs./wk. 3 cr.
New material dictation and transcription with advanced materials and specialized vocabulary.
- OA 125 Shorthand Theory†**
5 hrs./wk. 5 cr.
Century 21 theory for beginning shorthand students.
- OA 131 Office Machines†**
5 hrs./wk. 2 cr.
Introduction to ten-key adding machine and electronic calculators. Burroughs accounting machine includes accounts receivable, accounts payable, and payroll. Emphasis is on proficiency and business applications. Students should be adding at 90 strokes per minute at completion of the class. Open entry.
- OA 141 Forkner Shorthand†**
5 hrs./wk. 5 cr.
Forkner theory of shorthand concluded. (Prerequisite: OA 020 or OA 120)
- OA 155 Records Management**
5 hrs./wk. 3 cr.
Introduction to filing equipment and supplies. Individualized practice in card and correspondence filing — in alphabetical, numerical, geographic, and subject systems. Open entry.
- OA 171 Recordkeeping**
5 hrs./wk. 3 cr.
Individualized program of practice on business forms, cashier's records, banking procedures, petty cash records, purchase records and payroll. Open entry.
- OA 201 Secretarial Procedures**
5 hrs./wk. 5 cr.
Practice in communications, transmittal services, mechanized office operations, records management, and decision making. Requires completion of simulated office projects.
- OA 202 Executive Secretarial Procedures**
5 hrs./wk. 5 cr.
Continuation of OA 201. Practice in travel and conference arrangements, processing business data, financial and legal work and decision making. Requires completion of simulated office projects. (Prerequisite: OA 201 or equivalent).
- OA 210 Administrative Office Management**
5 hrs./wk. 5 cr.
Development of managerial techniques in working with people. Practice in setting objectives, organizing time, decision making techniques, and assigning responsibility.
- OA 213 Production Typewriting**
10 hrs./wk. 4 cr.
Individualized completion of simulated projects for different departments in a large business, including multi-page problems, unarranged data to promote creativity, editing and decision making involving all types of business papers. Emphasis on speed and accuracy. (Prerequisite: Typing speed of 50 n/wpm). Open entry.
- OA 214 Legal Typewriting†**
3 hrs./wk. 2 cr.
Production typewriting of legal correspondence, client instruments, and court documents. Instruction on the format of legal letters and pleadings; and includes legal vocabulary study. (Prerequisite: Typing speed of 55 n/wpm)
- OA 215 Medical Typewriting†**
2 hrs./wk. 1 cr.
Introduction to medical terminology. Practice in maintaining appointment calendars, patient records, insurance forms, medical correspondence composition and typewriting.
- OA 221 Shorthand IV**
5 hrs./wk. 5 cr.
Theory review, special shorthand shortcuts, speed and vocabulary development. Includes Century 21, Gregg, and other speed-writing systems. Minimum dictation speed at completion should be 80 wpm.

- OA 222 Shorthand V**
5 hrs./wk. 5 cr.
Intensive practice in new matter dictation and speed-building. A minimum dictation speed at completion should be 90 wpm. (Prerequisites: A minimum grade of C in OA 221 or equivalent).
- OA 223 Shorthand VI**
5 hrs./wk. 5 cr.
A continuation of OA 222. Includes specialized terminology in medical, legal, technical, and international trade areas. A minimum dictation speed at completion should be 100 wpm. (Prerequisite: A minimum grade of C in OA 222 or equivalent).
- OA 224 Transcription**
5 hrs./wk. 3 cr.
Development of reliable production competency in transcription.
- OA 271 Secretarial Accounting**
5 hrs./wk. 5 cr.
Practice in complete accounting cycle, banking procedures, and payroll. Requires completion of a practice set for a professional service.
- OA 281 CPS Review†**
5 hrs./wk. 5 cr.
Certified Professional Secretary examination preparation concerning units in Economics and Management, Business and Public Policy, and Office Procedures. Simulated tests.
- OA 282 CPS Review II†**
5 hrs./wk. 5 cr.
Certified Professional Secretary examination preparation concerning units in Environmental Relationships, Communications and Decision Making, Financial Analysis and Mathematics of Business. Simulated tests.
- ORT 102 Operating Room Theory I**
15 hrs./wk. 11 cr.
Knowledge of microorganisms and their relationship to disease in order to practice the basic principles used in the operating room by the technician. Supervised laboratory practice in the correct handling of supplies and equipment used during surgical operations.
- ORT 112 Operating Room Theory II**
13 hrs./wk. 12 cr.
O.R. techniques relating to the care of the patient preoperatively, during surgery, and postoperatively. Emphasis on general surgery.
- ORT 113 Clinical Experience I**
11 hrs./wk. 4 cr.
Supervised hospital application of the principles of surgical asepsis in the operating room.
- ORT 122 Operating Room Theory III**
8 hrs./wk. 8 cr.
O.R. techniques relating to the care of the patient preoperatively, during surgery and postoperatively. Emphasis on specialty surgery and related surgical areas.
- ORT 123 Clinical Experience II**
24 hrs./wk. 8 cr.
Supervised hospital application of the duties of the operating room technician and the circulator.
- PHY 055 Applied Physics†**
5 hrs./wk. 5 cr.
Lecture-demonstration including concepts of mechanics, fluid mechanics, heat, light, sound, electricity, and magnetism as they apply to industry.
- (PS) PHY 101 Introduction to Physics†**
5 hrs./wk. 5 cr.
Survey of general physics covering mechanics, heat, light, sound, electricity, and magnetism, and modern physics. (Prerequisite: MTH 101).
- (PS) PHY 105 Modern Physics†**
5 hrs./wk. 5 cr.
Survey of atomic physics covering relativity, atomic structure, spectra, radiation, radioactivity, sources and their detection, and nuclear reaction. (Prerequisite: MTH 101 or PHY 101 or PHY 117).
- (PS) PHY 117 Mechanics†**
6 hrs./wk. 5 cr.
Fundamental concepts of mechanics and fluid mechanics. Lab included. (Prerequisite: MTH 101 and MTH 052).

- (PS) PHY 118** **Heat, Light and Sound†**
6 hrs./wk. 5 cr.
Continuation of PHY 117 covering fundamentals of heat, light and sound. Lab included. (Prerequisite: PHY 117).
- (PS) PHY 119** **Electricity, Magnetism, & Modern Physics†**
6 hrs./wk. 5 cr.
Continuation of PHY 118 covering fundamentals of electricity, magnetism, atomic and nuclear physics. Lab included. (Prerequisite: PHY 117)
- PN 114** **Nursing Lab**
24 hrs./wk. 8 cr.
Supervised laboratory and hospital practice in effective application of fundamental nursing principles and procedures. The student must pass lab procedures at school before being allowed in the clinical area.
- PN 117** **Nursing Theory**
5 hrs./wk. 5 cr.
Fundamental principles and procedures in nursing care. Rehabilitation and care of the elderly.
- PN 119** **Pharmacology**
4 hrs./wk. 4 cr.
Fundamental principles in administration of medicines, including supervised application in the laboratory. Must be completed before the student will be allowed to go to the clinical area.
- PN 123** **Mental Health**
3 hrs./wk. 3 cr.
Abnormal human behavior problems with emphasis on principles of nursing care in mental illness.
- PN 138 & 148** **Nursing Theory**
12 hrs./wk. 12 cr./class
These are two interrelated rotations employing the team-teaching approach. They deal with principles of medical-surgical nursing and maternal-child health.
- PN 139 & 149** **Nursing Lab**
24 hrs./wk. 8 cr./class
These are two interrelated clinical rotations dealing with the application of principles of medical-surgical nursing and maternal-child health.
- PRT 050** **Offset Printing & Duplicating I†**
6 hrs./wk. 0 cr.
Introduction to offset presswork, feeders and delivery systems, pressure adjustments, ink and water balance, printing of line and halftones, paper and inks.
- PRT 051** **Offset Camera – Black & White†**
6 hrs./wk. 0 cr.
Basic course in operation of cameras, processing film, calibrating screens, shooting line and halftone negatives. Includes masking and platemaking.
- PRT 060** **Offset Printing & Duplicating II†**
6 hrs./wk. 0 cr.
Continuation in depth of subjects taught in PRT 050 including register printing of line and halftones. (Prerequisite: PRT 050).
- PRT 070** **Photography†**
6 hrs./wk. 0 cr.
Basic course in understanding of cameras, lighting, and darkroom procedures. Camera aperture settings, shutter speeds, and films. Outdoor lighting, flash, strobe, flash fill-in, and multiple lighting. Darkroom work included.
- PRT 071** **Offset Printing & Duplicating III†**
6 hrs./wk. 0 cr.
Continuation of PRT 060 with emphasis on fundamentals of 4 color printing. (Prerequisite: PRT 060).
- PRT 073** **Color Slide Photography†**
3 hrs./wk. 0 cr.
Basic instruction in photo equipment techniques and skills needed to produce outstanding color slides and color transparencies. Includes practice sessions.
- PRT 074** **Intermediate Photography†**
6 hrs./wk. 0 cr.
Assignments in portraiture, action, landscape, night, table top, animal, nature, and photo essay photography. Darkroom display prints. (Prerequisite: PRT 070 or equivalent).

- PRT 102 Applied Printing Concepts**
5 hrs./wk. 3 cr.
Operation of MAG Tape strike-on system for automatic type setting, offset duplicators, spirit duplicator, mimeograph, power stapler, paper cutter, folder and automatic collator. Preparation of masters for reprographic equipment. (Prerequisite: Type 45 wpm)
- PRT 104 Photography**
4 hrs./wk. 2 cr.
Basic course in understanding of cameras, lighting, and darkroom procedures with emphasis on 35mm black and white applications. Camera and enlarger operations, filters, films, and printing papers are explained. Darkroom work included.
- PRT 107 Printing—Commercial Art**
3 hrs./wk. 2 cr.
Utilization of commercial art layouts, drawings and photographs in making plates, film, negatives, and color proofs.
- PRT 108 Advanced Photography**
4 hrs./wk. 2 cr.
Assignments in portraiture, action, landscape, night, table top, animal, nature, and photo essay photography. Darkroom display prints. (Prerequisite: PRT 104)
- PRT 110 Copy Preparation**
5 hrs./wk. 2 cr.
Elementary methods of copy preparation for press ready or camera ready composition.
- PRT 114 Camera & Platemaking**
5 hrs./wk. 2 cr.
Elementary camera platemaking in preparation of plates for the offset press.
- PRT 117 Presswork**
15 hrs./wk. 7 cr.
Introduction to offset and letterpress pressmanship. Emphasis on introduction of basic presswork techniques.
- PRT 120 Copy Preparation**
5 hrs./wk. 2 cr.
Methods of copy preparation by use of IBM and Compugraphics cold copy typesetting equipment and camera ready pasteup.
- PRT 124 Camera and Platemaking**
5 hrs./wk. 2 cr.
Emphasis on camera work and platemaking.
- PRT 127 Presswork**
15 hrs./wk. 7 cr.
Increased training on letterpress and offset presses. Greater depth in craftsmanship.
- PRT 130 Copy Preparation**
5 hrs./wk. 2 cr.
Advanced IBM and Compugraphics cold copy typesetting and pasteup.
- PRT 134 Camera and Platemaking**
5 hrs./wk. 2 cr.
Advanced screen photography and screen platemaking.
- PRT 137 Presswork**
15 hrs./wk. 7 cr.
Advanced offset and letterpress pressmanship with emphasis on screen presswork.
- PRT 217 Printing Economics**
5 hrs./wk. 5 cr.
Study of printing plant operation, utilizing of equipment, work flow, plant layout and design. Emphasis on pricing and estimating printing jobs.
- PS 101, 102, 103 Studentbody Leadership**
2 hrs./wk. 2 cr./qtr.
Survey procedures and communication skills with practical experience and application through administration and organization of studentbody activities (Limited to Studentbody officers).
- (SS) PS 110 Political Science†**
3 hrs./wk. 3 cr.
A study of the Constitution and branches of the Federal and State Governments. A history of the development of government in the U.S.
- PSY 010 Zoom†**
5 hrs./wk. 3 cr.
A program to build success attitudes, motivation, and goal setting in six facets of living: physical, mental, social, financial, family life, and ethical. Group discussions, movies, records, and handouts are used.

- PSY 085 Human Relations†**
3 hrs./wk. 3 cr.
Application of psychological principles to life problems. Includes theories of personality, personal and social adjustment, principles of success, and human relations development.
- PSY 071 I'm OK, You're OK†**
3 hrs./wk. 0 cr.
You have read the book. Now put it to practice in a fun class with a common language of parent, adult, and child — not ego, alter ego, and id.
- (SS) PSY 101 General Psychology†**
3 hrs./wk. 3 cr.
Basic survey course emphasizing common problems of life. Units include studies of childhood growth and development, personality formation, motivation, and adjustment.
- RE 078 Basic Real Estate Investments†**
3 hrs./wk. 0 cr.
Basic principles of buying and selling real estate. Methods of financing, government programs, property values, real estate investments. DOES NOT QUALIFY FOR STATE LICENSE REQUIREMENTS.
- RE 101 Introduction to Real Estate†**
6 hrs./wk. 5 cr.
Utah real estate law, instruments of conveyance, security instruments, legal descriptions, plat maps and plans. (Formerly MKTG 151) MEETS STATE LICENSE REQUIREMENTS.
- RE 153 Real Estate Law†**
3 hrs./wk. 3 cr.
Utah real estate law, legal descriptions. Principles of title, ownership and transfer, joint tenants and tenants in common. Documents of conveyance, security instruments, notes and contracts, liens, foreclosures and redemptions. Escrows and closings, public records, taxes, assessments, appeals. (Prerequisite: RE 101) (Formerly MKTG 153) MEETS BROKER REQUIREMENTS.
- RE 154 Real Estate Finance†**
3 hrs./wk. 3 cr.
Real Property contracts, deeds of trust, mortgages used as security instruments. Title transfer and instruments. FHA and VA loans, conventional loans, financial institutions, secondary mortgage markets, mortgage insurance. Amortization, debt, interest and discount point structure. Income and income properties. (Prerequisite: RE 101) (Formerly MKTG 154) MEETS BROKER REQUIREMENTS.
- RE 155 Real Estate Appraisal I†**
3 hrs./wk. 3 cr.
Basic concepts of value, cost approach, market approach, income approach. Correlation and final estimation. MEETS BROKER REQUIREMENTS.
- RE 157 Real Estate Principles and Methods For Salesmen†**
5 hrs./wk. 5 cr.
Real Estate sales techniques, Utah law and procedures. Nature and classification of property rights. Contracts: listing agreements, earnest money receipts, broker-salesperson relationships. Legal instruments, legal descriptions. Single-family dwelling appraisal. (Prerequisite: RE 101) (Formerly MKTG 157).
- RE 159 Creative Real Estate Sales†**
3 hrs./wk. 3 cr.
Sales techniques. Obtaining listings and buyers. Buyer qualification, buyer behavior patterns and relations, handling objections. Closing techniques. (Prerequisite: RE 157) (Formerly MKTG 159).
- RE 160 Real Estate Economics†**
3 hrs./wk. 3 cr.
Land value, supply and demand. Commercial, residential, mineral and oil rights, price structure, land development. Geographic considerations. Function of real estate within the free market system.
- RE 201 Advanced Real Estate†**
6 hrs./wk. 5 cr.
Concepts of ownership; title and title conveyance, review of Utah real estate law. Principles of value, appraising, legal descriptions, surveys. Security instruments, public records, closing statements. (Prerequisite: RE 101) (Formerly MKTG 152) MEETS BROKER REQUIREMENTS.

- RE 251 Real Estate Investments†**
3 hrs./wk. 3 cr.
Forms of real estate investment income; equity growth, tax considerations, appreciation. Analyzing properties. Investment organizations, types and selection. (Prerequisite: RE 154).
- RE 252 Real Estate Problems and Case Studies†**
3 hrs./wk. 3 cr.
Common and unique problems in real estate; residential, farms and ranches, commercial, minerals and oil, income, leases and options, land development, real estate industries. Ethics and organization. (Prerequisite: RE 201).
- RE 253 Real Estate Property Management†**
3 hrs./wk. 3 cr.
Property management, insurance, taxes. Real estate advertising, marketing. Housing legislation. Income vs. value. Investing in the real estate market. (Prerequisite: RE 101) (Formerly MKTG 153).
- RE 256 Real Estate Appraisal II†**
3 hrs./wk. 3 cr.
Continuation of real estate appraisal I. Investigation of appraising, residential, commercial, industrial, income, farms and ranches. Writing the appraisal report. (Prerequisite: RE 155) (Formerly MKTG 156).
- REF 055, 056, 057 Refrigeration & Air Conditioning†**
6 hrs./wk. 0 cr.
Refrigeration principles and electricity. Emphasis on basic concepts of single phase hermetic units, relays, overloads, and electrical diagnosis.
- REF 105 Piping Practices**
5 hrs./wk. 5 cr.
Refrigeration piping and specifications in commercial construction. Includes heat load calculations.
- REF 107 Refrigeration Controls**
5 hrs./wk. 5 cr.
Requirements for power service wiring of refrigeration and air-conditioning controls and application to the National Electric Code.
- REF 110 Basic Refrigeration Systems**
15 hrs./wk. 5 cr.
Refrigerants, domestic refrigerators and freezer systems, including building of a complete individual system.
- REF 111 Fundamentals of Refrigeration**
5 hrs./wk. 5 cr.
Development and operation of basic types of refrigeration systems, compression systems and controls, tools and uses.
- REF 121 Refrigeration Systems**
5 hrs./wk. 5 cr.
Characteristics and uses of different types of refrigeration systems.
- REF 122 Refrigeration Systems**
9 hrs./wk. 3 cr.
Continuation of REF 110, including commercial applications, cooling systems, and cooling system applications.
- REF 130 Commercial Service**
15 hrs./wk. 5 cr.
Air conditioning, heating and humidifying, cooling and dehumidifying, cooling systems, controls and instructions. Installation of equipment.
- REF 131 Automatic Control Systems**
5 hrs./wk. 5 cr.
Theory and application of control systems used in all types of refrigeration systems.
- RVM 051 Small Engine Repair – 2-Cycle†**
6 hrs./wk. 0 cr.
Theory and repair of small 2-cycle gasoline engines, uses of tools, tune-up, and overhaul operations to properly repair them: Snowmobiles, chain saws, motorcycles, and outboard motors all fit in this category.
- RVM 053 Motorcycle Repair & Service†**
6 hrs./wk. 0 cr.
Principles of operation and repair of 2-cycle and 4-cycle motorcycle engines, lubrication and fuel systems, and basic tune-up procedures.
- RVM 055 4-Cylinder Motorcycle Technology†**
6 hrs./wk. 0 cr.
This course includes equipment and parts nomenclature and use of test equipment and tools for overhaul and troubleshooting procedures.

- RVM 110 2 & 4-Cycle Engine Repair**
20 hrs./wk. 7 cr.
Procedures and practices used in repairing small 2- and 4-cycle and small multi-cylinder industrial engines.
- RVM 111 2- & 4-Cycle Engine Theory**
5 hrs./wk. 5 cr.
Principles of operation of carburetion, ignition, oiling, cooling, and governor systems of small 2- and 4-cycle engines; also small, multi-cylinder industrial engines.
- RVM 120 Outboard Motor & Drive Systems**
20 hrs./wk. 7 cr.
Practices used to tune, maintain, overhaul, store, and rig outboard motors, transmissions, and lower units.
- RVM 121 Outboard Motor & Drive Systems Theory**
5 hrs./wk. 5 cr.
Principles of operation of multi-cylinder 2-cycle engines, drive systems, transmissions, magnetos, and carburetion used in outboard motors.
- RVM 130 Snowmobiles & Motorcycles Lab**
20 hrs./wk. 7 cr.
Service, overhaul, and maintenance operations used in snowmobiles and motorcycle engines, transmissions, and chassis. Also chain saws.
- RVM 131 Snowmobile & Motorcycle Theory**
5 hrs./wk. 5 cr.
Principles of operation of 4-cycle engines and high performance 2-cycle engines, multi-speed constant mesh gear transmissions, belt transmissions, carburetion systems, lubrication systems, and dynamometer operation. Also chain saw operation.
- SOC 055 Applied Sociology†**
3 hrs./wk. 3 cr.
Analysis of social organization in the industrial setting. Human behavior and group interaction. Forces in society that influence behavior.
- (SS) SOC 101 Introduction to Sociology†**
3 hrs./wk. 3 cr.
Study of culture, mores, institutions, beliefs, and values. Includes analysis of social organization, group interaction and human behavior, group standards and values, and forces in society that influence behavior.
- TRM 100 Introduction to Transportation & Distribution Systems†**
3 hrs./wk. 3 cr.
Principles and practices of transportation and its role in the distribution process. Orientation to the physical distribution system with an overview of economic and safety regulation, public policy, rate theory and distribution problems.
- TRM 101 Commercial Motor Transportation†**
3 hrs./wk. 3 cr.
Study of motor industry equipment and practices, registration, taxation, financing of highways, qualifying the driver, qualifying equipment, economic and safety regulations, and transportation of hazardous materials.
- TRM 102 Economic Regulation I†**
3 hrs./wk. 3 cr.
(1) Bases of economic regulation. The regulatory acts. Administrative agencies.
(2) Legal obligations, rights and liabilities of carriers, shippers and receivers. Regulation of rates, routes, entry and pooling.
- TRM 103 Transportation Organization & Management†**
3 hrs./wk. 3 cr.
Carrier organization and management problems. Personnel, financial, pricing, and marketing with consideration given to influences from competition and government policies. Each student will make a detailed analysis of a carrier problem related to his specific career.
- TRM 104 Traffic Management†**
5 hrs./wk. 5 cr.
(1) Management of logistics and transportation services from the shipper point of view. Purchasing transport services, managing company-operated transport, use of freight classifications and tariffs, routing, packaging, and marking. Consideration given to documentation and legal requirements.
(2)
- TRM 201 Rates and Tariffs†**
3 hrs./wk. 3 cr.
(1) Rate theory, use of freight classifications, tariff rules and regulations. Computation of freight rates and charges.

- TRM 203 Economic Regulation II†**
3 hrs./wk. 3 cr.
(1) A continuation of TRM 102 with added emphasis on air, rail and water transport.
(2) Rate bureaus and conferences. Regulatory practice and procedure. Judicial review and court actions. (Prerequisite: TRM 102).
- TRM 211 Motor Carrier Safety†**
3 hrs./wk. 3 cr.
Detailed analysis of Department of Transportation safety regulations.
- TRM 212 Claims Management I†**
3 hrs./wk. 3 cr.
(1) Procedures for filing loss and damage claims. Transportation contracts for the various transport modes including carrier and shipper liability.
- TRM 213 Claims Management II†**
3 hrs./wk. 3 cr.
(1) Continuation of TRM 212. Specific phases of carrier liability, measure of damages, freight forwarder claims and carrier claim regulations. (Prerequisite: TRM 212).
- TRM 214 Transportation Economics†**
3 hrs./wk. 3 cr.
(1) Economic theory as applied to location of economic enterprise, transportation service, transportation pricing, logistics, management and public policy. (Prerequisite: ECN 101).
(2)
- TRM 215 Physical Distribution Management†**
3 hrs./wk. 3 cr.
(1) Analysis of transportation and logistics problems of industrial and warehouse management, location problems and the physical distribution function as related to other functions of the firm.
- (1) Assists the student to prepare for the American Association of Traffic and Transportation examinations.

(2) Assists the student to prepare for the I.C.U. Practitioners examination.
- WLD 050 Fundamentals of Welding I†**
6 hrs./wk. 0 cr.
Study of oxy-acetylene and arc welding machines and equipment. Safety. Shielded metal arc welding of beads and fillet welds. Flat, horizontal and over-head positions. Oxy-acetylene welding beads and butt welds.
- WLD 051 Fundamentals of Welding II†**
6 hrs./wk. 0 cr.
Study of mild steel and low alloy steel electrodes. Theory of oxy-acetylene cutting and welding. Safety. Arc and acetylene practice in all positions. Basic braze welding. (Prerequisite: WLD 050 or equivalent experience).
- WLD 052 Intermediate Welding†**
6 hrs./wk. 0 cr.
Study of basic blueprint reading and welding symbols. Arc air cutting. Safety. Welding procedures and techniques. Arc welding of corner and butt welds in all positions.
- WLD 053 Advanced Welding†**
6 hrs./wk. 0 cr.
Shielded metal arc welding. A.S.M.E. test procedures and practice. Study of metal properties. Testing and inspection of welds. V-butt welds in all positions. Theory and practice of gas metal arc welding (GMAW) and flux cored welding practice.
- WLD 054 Inert Gas Welding†**
6 hrs./wk. 0 cr.
Metallurgy of welding ferrous and non-ferrous metals. Study and practice of gas metal arc welding (GMAW) and gas tungsten arc welding (GTAW). Practice welding of ferrous and non-ferrous metals.
- WLD 105 Related Welding**
5 hrs./wk. 3 cr.
Basic principles of arc and acetylene welding including flat and horizontal welds, also brazing and cutting techniques.
- WLD 107 Basic Arc and Acetylene Welding**
10 hrs./wk. 6 cr.
Fundamentals of Shielded Metal Arc Welding (SMAW) and oxy-acetylene welding including cutting and brazing.

- WLD 108 Basic Arc Welding of Light Gauge Steel**
5 hrs./wk. 3 cr.
Basic principles of Shielded Metal Arc Welding (SMAW) and Gas Metal Arc Welding (GMAW) on light gauge steel.
- WLD 111 Fundamentals of Welding**
5 hrs./wk. 5 cr.
Basic theory of the oxy-acetylene process, basic theory of arc welding electricity and arc welding machines and equipment. Theory of general welding procedures for mild steel.
- WLD 112 Welding Practices I-Arc & Acetylene**
20 hrs./wk. 7 cr.
Laboratory application of principles in WLD 111. Includes arc welding in all positions of fillet welding on mild steel and acetylene weld in all positions on butt and corner joints.
- WLD 121 Theory of Welding & Cutting**
5 hrs./wk. 5 cr.
Theory of oxy-acetylene cutting and welding equipment, general welding procedures of mild steel in all positions. Complete study of electrodes and filler metals.
- WLD 122 Welding Practices II-Arc & Acetylene**
20 hrs./wk. 7 cr.
Laboratory application of principles of WLD 121. Practice in oxy-acetylene and arc air cutting. Arc welding practice of fillet and groove joints in all welding positions.
- WLD 130 Welding Practices III-Arc & Acetylene**
20 hrs./wk. 7 cr.
Shielded metal arc welding of butt joints in all positions and large fillet weld practice. Physical testing and inspection of welds. Metal fabrication projects. Braze welding. Acetylene machine cutting-oxy-acetylene welding of small diameter pipe.
- WLD 131 Theory Applications of Welding**
5 hrs./wk. 5 cr.
Theory of properties of metals. Familiarization with application of major weld joints. Emphasis on welding safety. Procedures of welding and testing of mild steel weldments. Also basics of braze-welding and acty. pipe welding.
- WLD 153 Advanced Welding†**
6 hrs./wk. 3 cr.
A.S.M.E. test procedures and practice. Study of metal properties. Testing and inspection of welds. V-butt welds in all positions. Theory and practice of Gas Metal Arc Welding (GMAW) and Flux Cored Arc Welding (FCAW) on mild steel. (Prerequisite: WLD 052 or equivalent experience).
- WLD 154 Inert Gas Welding†**
6 hrs./wk. 3 cr.
Metallurgy of welding ferrous and non-ferrous metals. Study and practice of Gas Metal Arc Welding (GMAW) and Gas Tungsten Arc Welding (GTAW). Practice welding of steel, stainless steel and aluminum. (Prerequisite: WLD 153 or near journeyman level).
- WLD 210 Advanced Welding Practices**
15 hrs./wk. 5 cr.
Laboratory application of principles covered in WLD 213. Gas Metal Arc Welding (GMWA) and Shielded Metal Arc Welding (SMAW) practice. Includes approved fabrication and repair projects.
- WLD 212 Metallurgy of Ferrous Metals**
5 hrs./wk. 5 cr.
Fundamentals of metallurgy for welding carbon steels.
- WLD 213 Pipe Welding Procedures**
5 hrs./wk. 4 cr.
Procedures and instructions for pipe welding and A.S.M.E. tests. Covers arc, acetylene, wire feed methods, and advanced braze welding.

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- WLD 220 Special Welding Process & Fabrication**
15 hrs./wk. 5 cr.
Advanced welding practice in use of wire feed, solid wire, and cored wire. S.M.A.W. of stainless steel, cast iron, etc. Fabrication projects are stressed.
- WLD 223 Specialty Welds & Fabrication Procedures**
5 hrs./wk. 4 cr.
Theory of flux cored arc-welding. S.M.A.W. cast iron, stainless steel and heavy and light gauge metals. A study of welding codes. A.S.M.E. and A.W.S. Fabrication planning of assigned or approved projects.
- WLD 230 Inert Gas Processes**
15 hrs./wk. 5 cr.
Laboratory application of principles covered in WLD 233. Practical application of inert gas welding of ferrous and non-ferrous metals. Includes approved and assigned fabrication projects.
- WLD 232 Welding & Inspection Methods & Practices**
5 hrs./wk. 3 cr.
Destructive and non-destructive testing and practical application of inspection methods.
- WLD 233 Inert Gas Welding**
5 hrs./wk. 5 cr.
Theory of gas tungsten arc welding of ferrous and non-ferrous metals. Procedures and instructions for WLD 230. Metallurgy of welding ferrous and non-ferrous metals.
- WLD 238 Shop Layout & Fabrication**
5 hrs./wk. 3 cr.
Study of blueprint, welding symbols, layout, completing bills of materials, cost estimating and fabricating procedures.

COLLEGE REGULATIONS

College Rules & Regulations

Institutional Liability: Utah Technical College at Salt Lake disclaims liability of any kind for injury or illness of any student as a result of participation in any activities connected with the school. Every reasonable effort is made to provide safe conditions for the conducting of all activities.

Rules and Disciplinary Procedures:

Students attending Utah Technical College at Salt Lake are expected to maintain a high standard of moral conduct and to uphold the laws of the College, and of the State and Federal Governments. They enter College through choice and are not required to attend by law. Forfeiture of the privilege to attend may result from unsatisfactory conduct. In the government of the College, the administration and faculty rely chiefly upon the individual and collective self-control of students. Students are expected to register promptly, to pursue their studies with diligence and to attend classes regularly. They should show respect for order, morality, personal honor, and the rights, both of person and of property, as is to be expected of good citizens.

Any administrator, faculty member, instructor, parent or guardian, or guest may file charges against any student for unacceptable conduct. Charges must be submitted to the Dean of Students for evaluation and referral to the President. Copies of the Rules and Disciplinary Procedures are available in the Dean of Student's Office.

Student Dress and Appearance:

Utah Technical College at Salt Lake recognizes the right of individuals to

select their own fashion. At the same time, the College recognizes the relationship between employability and appearance.

The student body officers have recommended guidelines regarding dress and grooming on the basis that it is useless to train a student for employment if he or she then dresses in such a manner as to alienate prospective employers. Accordingly, the following dress and grooming guidelines have been adopted and approved for all students attending Utah Technical College at Salt Lake:

- Students shall appear neat and clean. Appropriate dress is characterized by cleanliness and neatness. The majority of students recognize the satisfaction of being properly dressed for each occasion.
- Dress for the classroom and school activities should be consistent at all times with good taste.
- In the shop or laboratory, dress should conform with licensing requirements, and/or industry standards for safety and appearance. In some programs a specific laboratory uniform may be required. Clothing or hair styles that can be hazardous to students in training should not be worn.

Student Grievance Procedure: In pursuing educational studies and other College sponsored activities, the student should be free of unfair and improper action by any member of the College community. A grievance is a claim or charge of injustice or oppression or discrimination based upon an event or condition which affects the welfare or conditions of an individual

student or group of students. A solution through the established grievance procedure of the College is the recommended course of action for any student. When a student feels that he/she has been denied his/her rights by a member of the College community, he/she can seek redress. Grievance action may be initiated by a student against any member of the college community. It should be known that grievance action is to be treated on a less formal basis than a court of law and that the objective of a grievance hearing is to seek a viable solution to a problem without putting anyone on trial. Copies of the Student Grievance Procedure are available in the Dean of Student's Office.

FERPA: Annually, Utah Technical College at Salt Lake informs students of the Family Educational Rights and Privacy Act of 1974. This Act, with which the institution intends to comply fully, was designed to protect the privacy of education records, to establish the right of students to inspect and review their education records, and to provide guidelines for correction of inaccurate or misleading data through informal and formal hearings. Students also have the right to file complaints with the Family Educational Rights and Privacy Act Office (FERPA) concerning alleged failures by the institution to comply with the Act. Local policy explains in detail the procedures to be used by the institution for compliance with the provisions of the Act. Copies of the policy can be found in the following offices: Registrar and Dean of Students. The offices mentioned also maintain a Directory of Records which lists all education records maintained on students

by this institution. Questions concerning the Family Education Rights and Privacy Act may be referred to the Registrar's Office.

Smoking

Smoking areas are designated and containers are provided to help keep the campus clean.

Probation and Suspension Policy

Any student who has a grade point average of below 1.9 for a quarter or who has a cumulative grade point average below 1.9 will be on probation. Earning a 2.0 grade point average during a probationary period will remove the student from probation if the cumulative grade point increases to 1.9 or higher. A probationary student earning at least a 2.0 grade point average will be allowed to remain in school, even though the cumulative grade point average is still below 1.9. As long as a student's cumulative grade point average is below 1.9 he/she remains on probation. Earning a 2.0 grade point average during any probation quarter simply allows the student to continue without being suspended.

Suspension: Any student who earns a quarterly grade point average below 1.9 for two consecutive quarters may be suspended for two quarters. If a student earns a grade point average below 1.9 for two consecutive quarters, that student may be suspended even though the cumulative average is above 1.9. Satisfactory progress at the college requires a student to achieve a 1.9 grade point average in classes in his/her major in order to graduate.

Student Conduct

College students are considered adults, and, as such, are charged with the responsibility of regulating their own conduct and of respecting the rights and privileges of others. Rules, policies, and regulations of the college, faculty and administration are to be respected. Failure to show respect for order, honesty, and classroom conduct as expected of college students is cause for suspension or dismissal.

Grounds for Refusing Service

The failure by a student to pay any past-due obligations due and owing to the College or to make satisfactory arrangements for payment of the same will be grounds for refusing further service at the institution to that particular student.

GOVERNING BOARDS

UTAH STATE BOARD OF REGENTS

- Donald B. Holbrook, *Salt Lake City,*
Chairman
- Charles E. Peterson, *Salt Lake City,*
Vice Chairman
- Peter W. Billings, *Salt Lake City*
- D. Omer Buttars, *Ogden*
- J. Lynn Dougan, *Salt Lake City*
- Kendrick H. Harward, *Richfield*
- George C. Hatch, *Salt Lake City*
- Mary D. Lunt, *Cedar City*
- Neal A. Maxwell, *Salt Lake City*
- Robert L. Newey, *Ogden*
- Jean Overfelt, *Salt Lake City*
- Luke G. Pappas, *Price*
- Rex G. Plowman, *Lewiston*
- Roy W. Simmons, *Kaysville*
- H. Bruce Stucki, *St. George*
- Timothy R. Zoph, *Salt Lake City*
- Dr. T. H. Bell, *Executive Officer and*
Commissioner of Higher
Education, Salt Lake City
-

UTAH TECHNICAL COLLEGE INSTITUTIONAL COUNCIL

- Richard S. Prows, *Salt Lake City*
Chairman
- Eugene C. Hafen, *Salt Lake City,*
Vice Chairman
- Frances N. Boyden, *Salt Lake City*
- F. J. (Joe) Cosgrove, *Ogden*
- Lenore Edmunds, *Salt Lake City*
- Dennis Huston, *Salt Lake City,*
Student Body President
- John H. Klas, *Salt Lake City*
- John A. Rokich, *Magna*
- Douglas T. Simpson, *Kamas*
- Bernard Tanner, *Springville,*
Alumni Representative
- Amy F. Tomita, *Secretary to the*
Council, Salt Lake City
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PERSONNEL



STAFF ASSISTANTS

| | |
|----------------------|---------------------------------------|
| EDWARD ANDERSON | Skills Center Counselor |
| SUSAN BESSER | Skills Center Counselor |
| GENE CHRISTENSEN | Admissions Counselor |
| JOHN O. CHRISTENSEN | Librarian, Instructional Media Center |
| LOUIE CONONELOS | Skills Center Counselor |
| LOREN P. EVANS | Assistant Registrar – Evening |
| KENT B. FERREL | Controller |
| JAMES D. GARDNER | Food Services Manager |
| JERRY L. GRAHAM | Skills Center Counselor |
| CHARLES W. HANSEN | Placement Counselor |
| R. H. HANSEN | College Research Director |
| FAYE L. JENSEN | Skills Center Counselor |
| WILLIAM JEFF JOHNSEN | Admissions Counselor |
| LOREN E. LANDWARD | Admissions Counselor |
| WILLIAM MEANS | College Store Manager |
| BENJAMIN J. MENDOZA | Skills Center Counselor |
| HAROLD MOLITOR, II | Skills Center Counselor |
| KATHERINE NIELSEN | Skills Center Counselor |
| RONALD R. OLLIS | Public Relations Director |
| MARIAN RILEY | Skills Center Counselor |
| RUTH ROSS | Skills Center Counselor |
| FREDERICK SALAZAR | Skills Center Counselor |
| DEAN P. SARGENT | Purchasing Agent |
| RICHARD SHAUGHNESSY | Student Financial Aids Director |
| ALCIE B. SMITH | Admissions Counselor |
| BETTY J. SPANGLER | Skills Center Counselor |
| DARRELL WALKER | Skills Center Counselor |
| WAYNE WERBEL | Resource Specialist |
| JOHN F. WIEMER | Recreation Director |
| CHARLES T. WILLIAMS | Veterans Affairs Coordinator |

DIVISION HEADS

| | |
|---------------------|---|
| KATHRYN C. BEEBE | Office Education |
| GEOFFREY R. BRUGGER | Apprenticeship |
| GARY M. COLE | Marketing |
| RUTH E. FOULKS | Health and Service Occupations |
| JERRY H. FULLMER | Accounting, Computing & Management |
| BRENT H. GOODFELLOW | Skills Center Fixed & Flexible Programs |
| NEAL D. GROVER | Automotive Trades |
| DONALD E. MATTHEWS | General Education |
| LORRAINE OLSEN | Skills Center, Project Cooperation |
| L. EUGENE OVERSON | Building Construction |
| WALTER L. WHITE | Graphic Arts |
| ULRICH E. ZEISLER | Electronics |
| VERLAINE S. ZITO | Metal Trades |

FACULTY

- ANJEWIERDEN, John**
Skills Center — Food Service (1972)
Salesman & Associate, Anjewierden Realty, Food Production Manager, St. Mark's Hospital; Instructor, Salt Lake Skills Center B.A., M.S.
- ASHDOWN, Robert C.**
Machine Shop/Welding (1972)
Tool & Dye Maker, C. M. Roestenburg & Sons, Dynapac Corp.; Machinist, Elmco, Euteck Inc.; Teacher, Davis School District A.S., B.S., M.I.E., T&I.
- AYLETT, Maureen**
Secretarial & Computer Education (1977)
Instructor, Salt Lake City School District; Part-time instructor, Utah Technical College at Salt Lake; Secretary, Utah Highway Patrol, Secretary, Spears & Co., Inc., Los Angeles, California B.S.
- BAKER, Joseph J.**
Electronics (1964)
Electronics Technician, Sperry Utah; Instructor, B.Y.U., A.A.S., Radio Institute Certificate, T&I.
- BALLARD, Davis V.**
General Education (1968)
Structural Draftsman, Utah State Department of Highways, Homebuilding, Biology and Science Teacher, Public School System B.S., M.S., T&I.
- BALLARD, R. Darrell**
Building Construction (1977)
Design Engineer, General Contractor, Plastic Design; U. of U.; Washington State College; USC (Engineering and Architecture) U.S.A.F. Instructor
- BARNES, Carol**
Health Occupations (1973)
Supervisor and Staff Nurse, Cottonwood, Salt Lake County, St. Elizabeth, Mercer, LDS, and Holy Cross Hospitals, R.N. (Utah); B.S., T&I.
- BARTHOLOMEW, Earl R.**
Secretarial (1961)
Utah Power & Light, Management Consultant, President Dictation Transcription Corp.; Supervisor, Administration, U.T.C., S.L., B.S., T&I.
- BEEBE, Robert**
Refrigeration and Air Conditioning (1968)
Refrig. Tech., John H. Wernli Co.; Service Mgr., Schoppe Co.; Rebuilding Specialists. Refrig. and A/C Journeyman B.S., M.I.E., T&I.
- BELNAP, Viola C.**
Pre-Tech (1969)
Instructor, Salt Lake City and Murray Schools, B.S., M. Ed. Reading Specialist
- BINGHAM, Keith E.**
Electronics (1974)
Com-Tel, Inc., Process Systems, Inc., Beehive Medical Electronics, Litton Data Systems and Litton Guidance and Controls Systems, Self-Employed in Automotive-Electrical Service, A.A.S., T&I, B.S.
- BLACK, Dall L.**
General Education (1964)
Supervisor-Instructor, U.S. Army B.S., M.S.; T&I.
- BLACK, Durant C.**
Marketing (1973)
Manager, Covey's Little America and Ben Lomond Hotel; Food Service Director, University of Utah, Sales and Marketing B.S., M.B.A.
- BLACKHAM, Delice A.**
General Education (1966)
Carpenter Apprenticeship; Journeyman Carpenter, Motor Machinist Mate, U.S. Navy; Training Division, KC C; MDTA Instructor, UTC/Provo; Training Superintendent, Bacchus Works, Hercules, Inc.; B.S.; M. Ed., T&I.

- BLOMQUIST, Berit** **General Education** (1974)
Granite School District, LDS Church Genealogy Department, Oulsteroteau, Finland Clerical Work Comptometer Operator B.A.
- BOLINDER, J. Robert** **Major Appliance Repair** (1972)
Major Appliance Repair for General Electric, Electronic Systems Repair at Tooele Army Depot, Service Repair at Castle Company T&I.
- BOULTON, Franklin F.** **Machine Shop** (1958)
Machinist, McGee & Hogan Machine Works, H.A.F.B., Instructor, Calif. Poly. State College Assoc. Degree, Weber State College, B.S., M.S., T&I.
- BOWN, J. Ralph** **General Education** (1959)
Machinist, McGee & Hogan Machine Works, H.A.F.B., Teacher, Salt Lake City, Utah; Instructor, U. of U.; Consultant Methods & Management, Owner-Operator Welding Shop and Firescreen Fabricating Firm. B.S., M.S.; T&I.
- BRINGHURST, George S.** **Welding** (1950)
Welding, Comb., Bechtel Corp., S.L.C. Board of Education. A.A.S., T&I.
- BRINKERHOFF, Joseph D.** **General Education** (1964)
Instructor, Granite Schools, Weltech College, Electronic Technician, Thiokol Chemical Corp. B.S., U.S.A.F. Certificate; T&I.
- BROWN, Carol W.** **Accounting** (1970)
Instructor of Accounting, U. of U.; Accountant, Elmer Fix & Co., CPA's; Property Manager, Wood & Brown Properties; Mountain States Fence Co. B.S., M.S., CPA Certificate.
- BRUNSON, Ronald M.** **Machine Shop** (1960)
Machinist, D & R.G.W., Chesapeake & Ohio railroad, Comb. Welder Railroad Certificate; A.A.S., B.S., T&I, M.I.E., Machinist U.S. Navy, Professional Teaching Certificate.
- BURCH, H. Kent** **Heavy Duty Mechanics** (1966)
Heavy Duty Mechanic, Gibbons & Reed, Morrison-Knudsen, Acme-Vickrey, A.A.S., B.S., M.I.E., T&I.
- BUTLER, Alexandra K.** **Health Occupations** (1967)
Nursing Supervisor, Cottonwood Hospital, Salt Lake General Hospital, R.N. (Utah), B.S., T&I.
- BUTLER, George W.** **Welding** (1973)
Welder Fitter, Mark Steel, Chicago Bridge and Iron, and Ajax Presses, A.A.S., T&I.
- CAMERON, John E.** **Automotive** (1963)
Auto Mechanics, Gledhill Dodge, etc. McSweeney's Auto School, Certificate, T&I.
- CHAPA, Tillie A.** **Health Occupations** (1973)
Nurse, Special Education Team, Granite School District, Staff Nurse, Thomas Dee and LDS Hospitals, Officer, Utah Air National Guard R.N.; A.S.; B.S.
- CHILD, Ralph S.** **Accounting** (1965)
Insurance Underwriter, Manager, Safeway Stores, Certificate, B.S., T&I.
- CHRISTENSEN, Dallis J.** **Electronics** (1967)
Warrant Radio Electrician, U.S. Navy, Flight instructor, U.S. Navy, Instructor, Weltech College, Technical Advisor, Philippine Dept. of Ed.; Navy Electronics School, Navy Nuclear Weapons School, Navy CIC School, Eastman Kodak Chemical Milling; B.S., M.S., T&I.

- COTTAM, Lester G.** **Machine Shop** (1966)
Machinist, U.S. Mining and Smelting Co., Hill Air Force Base, Rice
Machine Works, Watchmaker, Engraver, A.A.S.; B.S., T&I
- COX, Robert J.** **Accounting** (1975)
V.P.'s Staff, Standard Oil Co. of Calif., Mkt. Rep., Standard Oil of
Calif.; Owner/Manager of own business, Employment Manager,
LDS Hospital, Salt Lake City, B.S., M.B.A., T&I
- CROOKSTON, Barbara** **Health Occupations** (1972)
General Duty Nurse, S.L. County, Head Nurse and Director of
Nursing, Valley West Hospital, School Nurse for Granite School
District, R.N., B.S.
- CROSSEN, Manford Wayne** **Electronics** (1970)
Principal Engineer, Univac, Supervising Service Engineer, West-
inghouse Electric Corp.; Nuclear Design Engineer, Convair,
B.S.E.E., M.S.I.E.
- CULLIGAN, James J.** **Electronics** (1956)
Senior Electronics Technician, Sperry Utah, H.A.F.B., etc., A.A.S.,
Delehanty Institute of Radio & T.V. Certificate, T&I
- CURTIS, Randolph C.** **Printing** (1977)
Bindery Leadman & Miehle operator, Valley Graphics, Press Op-
erator, Award Printing, Pressroom Supervisor, American Bank
Stationary Co., A.A.S.
- DALY, Gladys** **Health Occupations** (1970)
General Duty Nurse, Tooele Valley Hospital, R.N. duty, hospitals
in various states, R.N., B.S.
- DARNELL, Richard** **Electronics** (1971)
Electronics Equipment Specialist, Tooele Army Depot, Electron-
ics Technician, Sperry Rand, H.A.F.B.
- DAVIS, Juana M.** **Pre-Tech** (1975)
Private Secretary, Tax Examiner, IRS, Teaching Assistant
- DAVIS, R. Ben** **Electricity** (1976)
Field Service Representative, Reggo Inc., M&T Chemical, Instruc-
tor, UTC - Provo
- DAVIS, Raymond Leon** **Building Construction** (1972)
Draftsman, Nelson Architects; General Contractor, Carpenter, In-
structor, Jordan, Murray Schools, B.S., M.I.E., T&I
- DAVIS, Sherwood L.** **Drafting & Design** (1969)
Designer, Edo Western Corp., and Sperry Utah, Draftsman,
Douglas Aircraft, A.A.S., B.S.
- DEAN, Ross E.** **Building Construction** (1959)
Carpenter, W. J. Dean & Sons, Licensed Contractor, B.A., M.S.,
T&I
- DENSLEY, Mary Lou** **Executive Secretary** (1961)
Secretarial, Instructor Jordan School District; San Juan School
District; R. S. Christensen Cent. Secretary, Intermountain West
B.S.; T&I; M.I.E.
- DICKSON, Ivan L.** **Automotive** (1972)
U.S. Navy, Gail Bywater Technician Service, T&I, A.A.S.
- EDMONDS, Horace B.** **Electronics** (1963)
Supervisor, Hercules, Inc., Technician, Hill Air Force Base, etc.
Radio Institute Certificate, A.A.S., T&I
- EGAN, W. Gerald** **Marketing** (1969)
Systems Engineer and Salesman, Heuristic Concepts, Inc., and
IBM Corp.; Systems Analyst, Recognition Equipment, Inc., Audi-
tor, Utah Sand & Gravel, B.S., T&I, M.S.

- ELLISON, Thomas R.** **Drafting & Design** (1965)
Designer, Hercules Powder Co., Dallons Labs, etc. A.I.D.D., A.A.S., B.S., T&I
- ERICKSON, Ann** **General Education** (1968)
Secretarial, Instructor, Murray Schools, B.S., M. Ed., T&I
- ERICKSON, Ree** **General Education** (1972)
Service Instructor Representative, Ford Motor Co.; Service Manager, Bennett Truckland, Service Manager, Cline Auto Sales, B.S., T&I
- EVANS, Glenda Joy** **Health Occupations** (1977)
OR Scrub Nurse, LDS Hospital; OR Charge Nurse, Valley West Hospital, Coronary Care Staff Nurse, Cottonwood Hospital and Valley West Hospital; Staff Nurse, Medical Floor, LDS Hospital; School Nurse, Granite School District, Public Health Nurse, Salt Lake County. R.N., B.S.
- FORD, Frankie Lynn** **Marketing** (1973)
Owner/Buyer, Ms. McCoy's Fashions; Freelance Fashion Show Coordinator Franchise Food Production's, Management Training, United Air Lines Sales Office, San Francisco; Marketing and Secretarial Division, Kelly Girl; Analyst Assistant and Sales Secretary, Stone and Webster Securities, Certificate, B.S., M.S.
- FULMER, June** **General Education** (1978)
Counselor, high school; counselor, elementary school; psychiatric aide, Utah State Mental Hospital, counselor, Odyssey House; B.A., M.A. University of New Mexico
- GAILLARD, Donald** **General Education - Skills Center** (1972)
Speech Therapist, Job Corps; Instructor, VIP, Assistant Director Salt Lake Skills Center. A.S., B.S.
- GARDNER, Pamela Jean** **General Education** (1978)
Instructor, B.Y.U.; Secretary, University of Utah, University of Washington, Claude T. Lindsay, Inc.; Co-Owner, Gardner Construction Co. B.A.
- GILES, Gerald L.** **Pre-Tech** (1972)
Assistant Manager, Bowman's Market, Instructor, Granite Schools. B.A., M.A., T&I
- GREGG, Mary Anne** **General Education** (1969)
Instructor, Salt Lake City and Granite Schools. B.A., M.S.
- GROVER, Neal D.** **Auto Body Repair** (1964)
Owner-Operator, Grover's Auto Body & Fender Shop, etc. UTC Certificate, A.A.S., T&I, B.S., M.I.E., N.I.A.S.E. Certificate
- HALL, Ken** **Architectural Drafting** (1968)
Chief Designer and Draftsman, various architectural firms; Registered Practicing Architect, Registered Landscape Architect, A.I.A., A.A.S., T&I
- HANSEN, Dorothy H.** **Health Occupations** (1964)
Supervisor, Dee Memorial Hospital, Hill Air Force Base Hospital, etc. LDS Hospital Certificate, R.N. (Utah), T&I
- HANSEN, Levern** **Auto Body Repair** (1949)
Auto Body Repairman, Fisher Pontiac, etc. Weber State College Certificate, T&I
- HARPER, Frank M.** **Electricity** (1974)
L.D.O. U.S. Navy engineer and Damage Control Officer; Navy Advanced Electrical School; Licensed Journeyman Electrician, T&I

- HITE, Thamer S.** **Barbering — Men's Hairstyling** (1962)
Barber and Cosmetologist, UTC Certificate, Carel's Institute of Beauty Culture Certificate, Barber's License, Barber Teacher's License, Cosmetologist License, Cosmetology Teacher's License, T&I.
- HOFFMAN, Larry** **Data Processing** (1978)
Programmer/Analyst; Health Industries, Ielco & Federal Resources; Operating Systems Programmer, Sperry Univac, First Security Bank, Evening Instructor, U.T.C.
- HOLT, Rex B.** **Accounting** (1969)
Instructor, Granite Schools; Vice President and Accountant, American Crane Inc., Estimator and Office Manager, Jarman Steel Erectors. B.S., M.S.; Business Administration Certificate.
- HOMER, Michael M.** **Business Management** (1972)
Industrial Management Experience; Utah Public Schools teaching experience; Teaching Certificate. B.S., M.B.A., U. of U.
- HUDDLESTONE, Ralph** **Commercial Art** (1971)
Art Director, Jarman & Skaggs Advertising, Ross Journey & Associates. B.S., M.A.; T&I.
- INGRAM, William Wayne** **Electronics** (1973)
Optronics Lab, Hill Air Force Base; Journeyman Marine Electrician, Wilamette Iron & Steel and Lockheed; Tech. Rep. R.C.A. First Class F.C.C. License, A.A.S.; T&I.
- ITALASANO, Joe** **Barbering — Men's Hairstyling** (1974)
Barber, Bob's Barber Shop, Owner/Manager, Joe's Barber Shop, Utah Barber Instructor's License.
- JANSEN, Lawrence C.** **Architectural Drafting** (1974)
Chief Draftsman and Designer in various Architectural offices. Registered Architect in private practice A.I.A., B. Arch.
- JENKINS, June M.** **Health Occupations** (1975)
Staff Nurse, Head Nurse, Salt Lake County General Hospital; Assistant Instructor, University of Utah College of Nursing; Nursing In-Service Coordinator, Holy Cross Hospital; Part-time Instructor, Utah Technical College at Salt Lake; R.N., B.S.
- JENSEN, L. Carl** **General Education** (1972)
Building Construction, M.A.C. Construction, Inc., Owner, Temple Valley Construction; Instructor, Dixie College. B.S., M.S.
- JENSEN, Lynn H.** **Skills Center** (1977)
Lang Company, EIMCO, Salt Lake City Corporation, Self Employed. Certificate A.S.M.E.
- JOHNSON, Anna Lee O.** **Secretarial** (1966)
Secretarial, Allen & Garcia Co. Federal Civil Service, Business Instructor, Tooele School District. A.S., B.S., M.I.E., T&I.
- JOHNSON, George Henry** **Architectural Drafting** (1972)
Designer-Draftsman, LDS Church and various Architectural Offices, Registered Architect in private practice. A.I.A.; B.F.A.; B. Arch.
- JONES, Kenneth Wendell** **Pre-Tech** (1976)
Manager, Director, Instructor Evelyn Wood Reading Dynamics, Sales Manager, Sylvania (Flasco), Teacher, Jordan School District, Salt Lake School District, Delpasco School District, Instructor of Communications and Sales for S.T.I. Corp. B.S.

JORDAN, I Douglas

Commercial Art (1971)

Evans Advertising, Freelance Artist, Art Director for Utah Farms Advertising, U.T.C. Commercial Art, Art Center College of Design, Los Angeles, CA, Advertising Consultant, B.A., T&I

JORGENSEN, Dorene D.

Business - Skills Center (1972)

Clerical, Tooele Army Depot, Teletype Operator, Mountain States Telephone, Instructor, Salt Lake Skills Center. A.A., B.A.

JULANDER, Hal D.

Automotive (1966)

Line Mechanic, Hinckley Dodge, Chrysler and Ford Training Schools. B.S.; T&I, N.I.A.S.E. Certificate

KIRK, Roselyn N.

General Education (1978)

Newspaper reporter, Davis County Newspapers, Instructor in English and Journalism, Granite School District. B.S., M. Ed.

KRANENDONK, Daniel

Heavy Duty Mechanics (1967)

Shop Foreman, Archer Tractor Co., Service Manager, Heiner Equipment Supply Co. T&I

LAJEUNESSE, R. Jon

Skills Center (1976)

Long Line Truck Driver, I.M.L. Freight, Consolidated Freightways

LANEY, William K.

General Education (1976)

Painting Contractor, Teacher, Greeley, Colorado and Salt Lake City, Utah, B.S., M.E.D.

LARSON, John A.

Heavy Duty Mechanics (1969)

Heavy Duty Mechanic, Wheeler Machinery, Nevada Rock and Sand, Industrial Construction, and Cashman Equipment. B.S., M.I.E., T&I

LATHAM, Patricia

Skills Center (1978)

Reading Specialist, Houston Independent School District, Houston Community College. B.A., M. Ed.

LAWRENCE, Stanley William

Electronics (1976)

Technician for Bell System, IBM, Texas Instruments, Stabro Laboratories, and Utah Technical College at Salt Lake, FCC Technicians License. A.A.S., T&I

LEMA, Joseph Jr.

Commercial Art (1972)

Instructor, Layton School of Art, Wisconsin, Artist-Designer, Frank Mayer & Associates, Wisconsin. B.A.

LITTLE, Ralph K.

Marketing (1978)

Owner/Broker, Ralph K. Little & Company, Woodbury Company, Commercial Real Estate, Sales Manager, Foothill Realtors and Leavitt Realty, Century 21, Max B. Clark, Realtors, Utah State Certified Real Estate Instructor, Salesman and Broker. B.A.

LOOMIS, William H.

Pre-Tech (1971)

Air Force Weather Station Chief, Railroad Labor-Carpenter-Agent, Cattle Ranches, Cat Skinner-Mechanic, Contract Truck-Owner, Diesel Line Driver, Teacher in Salt Lake City Schools. B.S., N.S.F., T&I

LUKE, Shirlene

Business - Skills Center (1974)

Secretary, Finance Department, LDS Church. B.S.

LUNT, Judith Lee

General Education (1969)

Instructor, Davis Schools and California, Secretary, Harrison and Johnson. A.A., B.S.

MAGNUSSON, Kjartan T.

General Education (1972)

Clerk Stenographer, U.S. Army, Building Construction, Instructor, University of Nebraska, Dickinson State College, Utah State Prison. B.A., T&I, M. Ed.

- MATTHEWS, Tommie G.** **Pre-Tech** (1971)
Instructor, Utah and Arizona Schools; Clearfield Job Corps Center; The Church College of Western Samoa. B.S., M. Ed., T&I
- McBRIDE, Audrey J.** **Health Occupations** (1976)
Staff Nurse, Medical-Surgical areas, LDS and Las Vegas Hospitals; Staff and Head Nurse, Medical, General Surgery and Orthopedics, V.A. Hospital at Salt Lake City. R.N., B.S.
- MERRILL, Don L.** **General Education** (1978)
Carpenter Superintendent, General Contractor, Salt Lake County Plan Reviewer; Teacher, Kearns Junior High School and Kearns High School. B.S.
- METOS, Linda** **Secretarial** (1976)
Instructor, Salt Lake City School District, Secretary, Law Firm, Z.C.M.I., Librarian's Certificate. B.S.
- MILLER, Glenn C.** **Welding/Machine Shop** (1976)
Owner, Standard Oil Station; Owner, Star Valley Machine Shop; Co-Owner Star Valley Electronics, Cattle Rancher, Cert. Plumber, Cert. Carpenter
- MIYATAKE, George** **Foreign Auto Repair — Skills Center** (1972)
Mechanic, EIMCO, Wheeler Machinery, Instructor, Salt Lake Skills Center, Service Manager, Bonneville Engine & Automotive Repair.
- MORAWETZ, Gayle C.** **Business — Skills Center** (1972)
Bookkeeping, Albertson's, Inc.; Secretarial, Utah State University and various freight lines, Instructor, Granite School District and Salt Lake Skills Center, Real Estate Sales License. B.S., T&I, M.S.
- MOSS, Mark D.** **Accounting** (1977)
Arch Accounting Service, Accountant. A.S., A.A.S.
- MOULTON, J. Heber** **Marketing** (1972)
Utah Motor Transport Association, Petroleum Refining Distribution and Transportation Companies, Petroleum Refinery Accounting. B.S., M.B.E.
- NELSON, Margaret Ann** **Health Occupations** (1969)
Staff Nurse, Head Nurse and Supervisor, Salt Lake County General Hospital; Head Nurse, V.A. Hospital. R.N., A.S., B.S., T&I
- NELSON, Victor J.** **Building Construction** (1972)
Contractor, Carpenter, Kramer Construction Co.; Foreman, IJ Construction Co.; Instructor for Home Builders Association. B.S.
- NIELSON, Joseph F.** **Brickmasonry Training** (1973)
Supervisor and Counselor, Salt Lake County NYC Program, Brickmason, Child's Construction, Fred Hales, Reed S. Miner, and F&S Construction.
- NIELSON, Robert S.** **Automotive** (1969)
Mechanic, Gail Bywater, U.S. Navy, etc. General Motors Training Center Certificate, T&I, N.I.A.S.E. Certificate
- NIEVES, Robert M.** **Skills Center** (1974)
Instructor, Basic School, USMC, Warehousing and Purchasing, Parts Counterman, Zion Motors; Parts Man, Naylor Equipment, Parts Manager, Redd Motors, Graduate of N.A.D.A. Parts School, Detroit, Michigan.

- NINOW, Richard** **Architectural Drafting** (1966)
Designer, Draftsman, Construction Supervisor, Alberta, Canada
Head Draftsman in local Architect's Office; Cape Technical College Certificate, A.A.S., T&I, Associate Member A.I.A.
- NOBLE, Jeanne L.** **Skills Center** (1975)
Clerical Instructor, Stevens Henager College, Salt Lake City; Administrative Assistant, Utah Biomedical Test Laboratory, Salt Lake City. B.S.; M.S.
- NUTTALL, Thomas L.** **Marketing** (1978)
Bakery Department Supervisor, Dan's Foods, Bakery Manager, Pleasant Grove Bakery.
- OLSEN, James R.** **Printing** (1970)
Four Color Pressman, Paragon Press; Rocky Mountain Bank Note, Technical Trade School. B.S.; T&I
- ONTIVEROS, Seth** **Welding - Skills Center** (1972)
Welder; Emco, Eaton Metal, Allen Steel, Instructor, Salt Lake Skills Center. T&I.
- OSBORNE, Thomas G.** **General Education** (1968)
Instructor, Salt Lake City Schools, Tabulating Equipment and Computer Operator, Souvall Brothers. A.S., B.S., M.S.; T&I
- PARR, A. Reed** **General Education** (1967)
Instructor, Granite Schools, etc., B.S., M.I.E., T&I.
- PASTORE, Harold P.** **Electronics**, (1976) Senior Chief Electronics Technician.
U.S.N., Electronics Instructor, U.S.N. A.A.S., B.S.; T&I
- PAULSEN, Don Wayne** **Building Construction** (1971)
Carpenter, General Contractor, Residential and Commercial, Cabinet and Mill Foreman, Skyline Builders, LDS Church, Bach Construction, Hammon Cabinet and Fixture. A.A.S., B.S., T&I
- PIDCOCK, Gerald B.** **Drafting & Design** (1974)
Draftsman Designer, Elmco, University Mobility, Hercules Powder Co., Commercial Consultant, Dolphyn Engineering. Cert.
- POULSEN, LuAnn C.** **Skills Center** (1977)
Instructor, Salt Lake School District and Granite School District, Clerical, Hercules, Inc. and Sperry Rand. B.S.
- POULSEN, Violet N.** **Health Occupations** (1957)
House Supervisor, Cottonwood Hospital, General Staff Duty, Salt Lake General County Hospital, etc. Salt Lake General Hospital Certificate. R.N. Utah; B.S., T&I
- POWELL, John** **Pre-Tech** (1972)
Salesman, Arthur Frank. B.A., M.A., T&I.
- REINHOLD, Allen K.** **Commercial Art** (1969)
Instructor, BYU, Granite and Emery County Schools; Artist, BYU Audio Visual Department and Utah Division of Social Services; Illustrator, Bookcraft, Inc.; Freelance Artist. B.A.; M.A.; T&I.
- REISNER, Reed H.** **Electronics** (1968)
Communications Officer, U.S.M.C.; Liaison Engineer, Douglas Aircraft Co., Broadcast Engineer, KUER, Instructor Los Angeles City Schools, Electronics Instructor, RCA Institute, Inc. A.A., B.V.E., M.I.E.; T&I.
- RICHARDS, Marlene K.** **Health Occupations** (1968)
General Duty Head Nurse and Supervisor, Salt Lake County Hospital, General Duty, Valley West Hospital, Head Nurse, Hercules, Inc. R.N. (Utah), T&I.

- RODI, J. Rita** **Secretarial** (1966)
Secretary, Cornwall General Hospital; Office Manager, Morton-Parker Ltd.; Commercial Teacher, Cornwall Collegiate & Vocational School, Ontario, Canada. A.A.S.; B.A.; M.S.; T&I.
- SALMOND, J. Lowell** **General Education** (1963)
Electronics Technician, Thiokol Chemical Corporation; Instructor, Weber State College, Ogden Business College Certificate. B.S.; M.I.E.Z.; T&I.
- SEAMAN, Karl** **Drafting & Design** (1968)
Designer, Checker and Draftsman, Thiokol, Hercules, Eimco; etc. T&I, A.A.S., B.S., M.S., Certified Engineering Technician, I.C.E.T., A.I.D.D.; T&I.
- SHAW, Merrill A.** **Electricity** (1972)
U.S.A.A.F. Tech. Schools; U.S.A.A.F. Certificate A&E, Estimator, Shop Supt., Service Dept., Mgt. Lindberg, Peterson & Northwest Electric Co., Seattle, Washington. T&I.
- SHEEHY, Jeri J.** **Cosmetology** (1978)
Operator at Auerbach's Salon; Owner-Operator, Delta, Utah; Manager, Syndi-Cut Salons; Instructor, Continental College of Beauty; Cosmetology Instructor's License.
- SHEPHERD, Heber J.** **Furniture Upholstery** (1966)
Owner-Operator, Shepherd Furniture Co.; Furniture Design and Upholstery for Dinwoody Furniture Co. and J. and M. Furniture Co.; Teacher, Granite School District. B.S.
- SMITH, Don J.** **General Education** (1972)
Internal Auditor, Salt Lake County, Auditor, Peat Marwick (CPA), Ernst & Ernst (CPA), Business Manager. B.S.
- SMITH, Hyrum M.** **Heavy Duty Mechanics** (1971)
Mechanic, IML., Cummins Diesel, Lindner & Wood, Barton Truck Line, Ireco Chemical, Kiewit, Ringsby, Diamond T Utah, Provsigaard Constr., Newman Const., Zion Motors, Butterfield Trucking, Clark Tank Lines.
- SMITH, Jay L.** **Electronics** (1978)
Electronic Repair Technician; International Electronics Service Department Manager; House of Music Owner/Operator; Precision Electronics, FCC First Class Radio-Telephone License.
- SNYDER, Lois** **Commercial Art** (1977)
Owner-Operator, Quick Draw Art Studio; Freelance Artist, Advertising Consultant, Instructor, Montana Public Schools; Salt Lake City School District; Clearfield Job Corps; Elementary Art Specialist, San Francisco City Schools; UTC Instructor, Colorado University, University of Montana, University of Utah, Art Center College of Design, Los Angeles. CA, B.A., M.A.
- SORENSEN, Dale W.** **Building Construction** (1955)
Contractor, Carpenter, General Contractor, Young Construction Co., Fitzer Cabinet & Mill, New York Trade School Certificate. T&I.
- SOUTHWICK, Ray M.** **Automotive** (1965)
Mechanic, Fred A. Carlsson, Bountiful Motors, Rick Warner Ford, etc. B.S.; M.I.E.; General Motors Institute Certificate, T&I.
- SPAINHOWER, Charles S.** **Auto Body Repair** (1973)
Paint Shop Foreman, By's Body and Paint; Painter, Town and Country Rambler, and Les Jenson Collision Repair.

- STEPHENS, Lewis P.** **Marketing** (1974)
Store Manager, W. T. Grant and Company, and R. C. Willey, Director of Management Affairs, Placement Director, Instructor, Department Head Enrollment Counselor, Stevens Henager College. B.S., M.S.; N.A.S.D., Insurance, I.A.F.P.
- STEVENS, Del Mar W.** **Building Construction** (1971)
Carpenter, Whitesides Construction, James Redford Construction, Sprinter Construction and Packard Brothers Construction. Contractor's License, A.A.S.; T&I
- STEWART, Calvin B.** Carpenter, Project Director, Modern Home Builders, etc. U.S. Army Certificate, Contractor's License. B.S., M.S., T&I
- SUDBERRY, Paul K.** **Automotive Parts Sales Training** (1978)
Mechanic, Wheeler Cadillac and Olds, Owner-Operator, Front End, Tune-Up, and Parts Department, Mechanic, Pioneer Lincoln Mercury, Service Manager, Sears Auto Department and Parts Department School Certificate
- TATE, Linda C.** **Cosmetology** (1975)
Owner-Stylist, The Beauty Shop; Stylist, Glen's Cottonwood Salon, Faye Rose Beauty Fair, Hotel Utah Beauty Salon; Instructor, Robert Steur College of Beauty, Continental Beauty College, Utah State Cosmetology Instructor License; Darrell and Joseph Beauty College Certificate
- TAYLOR, Bonita** **Health Occupations** (1978)
Medical-Surgical Nursing Duty, Health Coordinator Community College. R.N., B.S.
- THOMSON, A. Clair** **General Education** (1957)
Instructor, South Sanpete, Logan and Nebo School Districts and UTC; Supervisor of Evening School, Supervisor of Instruction, UTC; Carpenter. B.S., M.I.E., T&I
- THORPE, Allan** **Electricity** (1974)
Journeyman Electrician; Manager, J. C. Plucknet Electrical Contractor. Certified Electrical Inspector, I.C.E.F., I.C.B.O.
- TILT, Lloyd V.** **General Education** (1951)
Body Man, Auto Painter, J. C. Burgess Dodge-Plymouth, Teacher-Counselor, Davis County School District; Evening School Supervisor, Day School Supervisor; Dean of Students, Utah Technical College; Consultant on apprentice and employee selection with Z.C.M.I. Office Supply, Hercules, Kennecott, Pipe Trades Training program, Electricians Training Program, 3 yrs. Army-Air Force. B.S.; M.S.
- TINNIN, Claude Patrick** **Printing** (1969)
Linotype Operator and Makeup Man, Union City, Tennessee; Makeup Man, Plough, Inc. Memphis, Tennessee, Press Operator, Thrower Printing Co., Kenneth, Missouri, Proofreader, Salt Lake Tribune. B.S., M.I.E.; T&I
- UDY, John A.** **Welding** (1968)
Maintenance and Machine Shop Welder, Research and Production Foreman, Thiokol Chemical Corp., Journeyman Welder, Bish's Sheet Metal Co. A.A.S., B.S.; T&I; M.I.E.
- VAN DYKE, Fred B.** **Commercial Art** (1978)
Commercial Artist, Bailey and Montague, Thiokol Chemical Sales, A. B. Dick Co., Los Angeles Art Center. B.F.A.
- VAN DYKE, Merrill** **Automotive - Skills Center** (1972)
Mechanic, Fred A. Carlsson, Pearson's Pontiac, Laury Miller Pontiac; Instructor, Wayne High School, VIP, HRC and Salt Lake Skills Center.

- VAN OS, Huibert** **Machine Shop** (1965)
Machinist, Eimco Corporation. Eimco Corporation Certificate, A.A.S.; T&I.
- VAN OS, Jerry A.** **Accounting** (1978)
Senior Accountant, H. Sherwood & Co., Certified Public Accountants; Sperry Rand Corp. B.S., M.B.A., C.P.A., State of Utah.
- WALKER, Loretta A.** **General Education** (1974)
Secretary, Knight Adjustment, Recreation Leader, Salt Lake County Recreation Department and Salt Lake Kiwanis-Felt Girls Club; Teacher, Salt Lake City School District and Granite School District. B.A.; M. Ed.
- WALKER, Dwayne** **Mechanical Drafting** (1962)
Quality Control, Douglas Aircraft, Dept. Head Drafting & Design, Tulsa Technical College, Principal Designer, Engineer Supervisor Designer & Drafting, Sperry Univac.
- WALL, Shirlene W.** **Secretarial** (1973)
Secretary, Boyd Bunnell Law Office, Eastern Utah Electric, Insurance Agent, U.S.U. and Zions Bank, Teacher, Carbon County and San Juan School Districts. A.S.; B.S.
- WARNICK, Boyd L.** **Marketing** (1977)
Driver, Dispatcher, Safety Supervisor, Operations Manager, Owner, various transportation companies, Economist, U.S.D.A., Sales and Sales Management, Eimco Corp., Vice President & Sales Manager, Cambelt International Corp. B.S.; M.S.
- WATT, D. Cyril** **General Education** (1978)
Teacher, Math Chairman, Jordan School District, Plant Operator, Finish, Concrete, Loading, Otto Buehner Co., Supervisor, Dyna Flex Corp., Materials Plant Operator, Fogle Red-E Mix, Carpenter, Concrete Forms, ECO Development and Construction, B.F.A.
- WEAVER, Richard** **Auto Body — Skills Center** (1972)
Mechanic and Body & Fender, Kenely, Melon Jacques, Openshaws; Instructor, Job Corps, Salt Lake Skills Center, Owner, Weaver Auto Repair.
- WEBB, David L.** **Drafting & Design** (1976)
Draftsman, McNally Mtn. Steel Co.; Jelco Engineering; Tooele Army Depot, Jelco Inc., Willard C. Nelson Assoc. A.A.S.
- WEIR, J. Harold** **Electricity** (1971)
Licensed Master Electrician, Senior Engineer, LTV Electrosystems, Hercules Field Engineer, Western Mobile Depot Manager, Engineer Rebuilders, Weir Motor Supply U.S.N. Electronics Certificate; B.S.; A.S.E.E.; T&I, M.I.E.
- WESTLEY, David C.** **Welding** (1975)
Chicago Bridge, Welding Fabricator, General Dynamics, Welder, Bechtel Corp., Boilermaker. A.A.S.; T&I.
- WESTON, David F.** **Small Industrial Engines & Recreational Vehicle Maintenance** (1972)
Owner-Operator, Weston's Automotive; Mechanic, Streater Chevrolet, Sessions Texaco. Certificates from General Aviation School, Reciprocal Engine School, G.M. Schools; Teaching Assistant and Instructor Salt Lake Skills Center. B.S.
- WILLIAMS, Sally** **Business — Skills Center** (1975)
Primary Children's Hospital, Utah Retail Grocers Assoc.; Teaching Assistant and Instructor, Salt Lake Skills Center. B.S.

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- WISAN, Richard C.** **General Education** (1971)
Technical Writer, Sperry Rand Corp., Freelance Writer, Instructor
BYU, Instructor Salt Lake City and Granite School Districts.
B.S., M.S.
- WITT, Joseph W.** **Automotive** (1971)
Service Supervisor, Freed Chrysler-Plymouth Inc., Auto Instruc-
tor, Jordan and Hillcrest Human Resource Center, Mechanic,
Moulton Mfg. Co., Witt Bros. Excavating. B.S., N.I.A.S.E. Certifi-
cate
- WOOD, James** **General Education** (1972)
Civil Engineer & Surveyor, Maxwell M. Hart, Manchester, Eng-
land; Job Shop Welder; Vocational Welding Instructor, Granite
School District; British Technical Teachers Certificate, Regis-
tered Securities Dealer, Insurance Broker; General Agent. B.S.,
N.A.S.D., T&I.
- WOOD, Neal F.** **Welding** (1974)
Certified Welder, Thiokol Chemical Corporation and Lang Com-
pany. U.S.U. Welding Certificate; B.S., T&I.
- WORLEY, Julie A.** **Skills Center** (1975)
Teacher, Green River High School, Secretary, Insurance Office,
Hill Air Force Base and V.A. Hospital, Salt Lake City. B.S.
- YENCHIK, Joseph V.** **Drafting & Design** (1968)
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