

# School Catalog



A Nationwide
Network Dedicated
To Quality Training
For Today's Job
Market.



# TABLE OF CONTENTS

About National Education Centers
Educational Philosophy3
Summary of Accreditation Criteria and Standards3
Enrollment Procedures4
Personal Interviewing
Enrolling for Training
Acceptance by the School
Admission Policy
<b>Rules and Regulations</b>
Personal Conduct
Measure of Course Duration
Attendance Policy
Tardiness Policy
Leave of Absence Policy
Grading Standards
Make-up Work
Dismissal Policy
Veteran Students
Student Services11, 12
Housing Assistance
Car Pooling
Student Employment
Tutoring
Field Trips
Special Lectures
Drug Prevention Program
Financial Aid and Tuition Assistance
Voluntary Pre-Payment Plan14
Privacy Act14, 15
Class Schedules
Tuition & Fees; Refund Policy
Graduate Placement Assistance
Programs Offered:
Business Technology22, 23
Electronics
Secretarial Science24, 25
Course Descriptions
Administration and Faculty
·

# **NATIONAL EDUCATION CENTER**

National Institute of Technology Campus 18000 Newburgh Road Livonia, Michigan 48152 313/464-7387

**REVISED EDITION DECEMBER 1988** 

## **About National Education Centers**



National Education Center, National Institute of Technology Campus, is part of the nationwide operation of National Education Centers, Inc.; a subsidiary of National Education Corporation.

In an age where technology and training hold the keys to advancement for individuals and companies alike, National Education Centers, a division of National Education Corporation, has emerged as a leader in human resource development.

With headquarters in Irvine, California, and through schools across the U.S., National Education Centers provide vital, job-oriented training in high-growth, high-technology areas of business and industry.

From its beginning almost 30 years ago, National Education Corporation has grown to the point where it now encompasses numerous schools throughout the United States offering courses in such diverse areas as computer programming, drafting, electronics, avionics, aviation mechanics, flight training, fashion design and merchandising, accounting, auto and diesel repair, busines administration, secretarial skills, medical and dental assisting, and radio and television broadcasting.

Great emphasis is placed on "hands-on" training. Students learn their skills using modern equipment similar to the kind they can expect to find on the job.

# School History

National Education Center — National Institute of Technology Campus was originally a member of RETS Electronic Schools, which was established in 1935. The school was acquired by National Education Corporation in 1978 and in 1979, was made a part of the Technical Schools Group. In 1981, the school's name was changed to National Institute of Technology. The name was again changed in 1983 to National Education Center, National Institute of Technology Campus.

# Description of Facility

The school is located on 30 acres; the building features 37,000 square feet and includes 27 classrooms, administrative offices and a student recreation area. There is ample free parking.

# Educational Philosophy

It is the school's philosophy to provide various quality programs with an emphasis on hands-on training that are sound in concept, implemented by a competent and dedicated faculty and geared to serve those seeking a solid foundation in knowledge and skills required to obtain employment in their chosen fields. Programs offered are relevant to employers' needs and are in areas which offer strong long-term employment opportunities to the school's graduates.

## Accreditation Criteria and Standards

This school has voluntarily undergone an accrediting evaluation by a team of competent examiners including subject experts and specialists in occupational education and private school administration.

The accreditation standards and criteria ensure that this school:

- Accepts only qualified applicants.
- Has specific job-oriented training objectives.
- Offers organized, comprehensive training in current occupational practices.
- Provides necessary student services.
- Provides safe and sufficient facilities and equipment.
- Assures that graduates are qualified for employment.
- Has qualified administrators with records of integrity.
- Maintains permanent student records.
- Is financially sound.
- Is fair in all financial dealings.
- Has continuing programs of self-improvement.

# Accreditations, Approvals and Memberships

- Accredited by the Accrediting Commission of the National Association of Trade and Technical Schools.
- · Licensed by the State of Michigan Department of Education.
- Member of the Michigan Organization of Private Vocational Schools.
- Authorized under Federal law to enroll Nonimmigrant, Alien Students.
- Eligible students may obtain Social Security Benefits.
- Eligible instruction under the Guaranteed Student Loan Program.
- Eligible institution for National Direct Student Loan, Supplemental Education Opportunity Grant and PELL Grant Programs.
- Provides training services for the State Department of Vocational Rehabilitation.

# Admissions Policy

The school shall require for admission into its diploma or certificate programs a high school diploma, recognized equivalency certificate or qualify under the Ability-to-Benefit provision. A nationally-recognized, standardized test will be administered to all applicants at the time of enrollment. The results of this test will determine the applicant's entrance and placement in the educational program.

#### **Enrollment Procedures**

It is suggested that application for admission be made as soon as possible in order to be officially accepted for a specific program and start date. To apply, complete the Application Form and bring it to the school, or call for a priority appointment to visit the school, and receive a tour of its facilities.

#### Personal Interview

The school requires a personal interview with each applicant prior to acceptance. The school prefers that parent(s) or spouse also attend the interview. This gives both the applicant and family an opportunity to see the school's equipment and facilities and to ask specific questions relating to the school, curriculum and the career being considered. The personal interview also gives the school the opportunity to meet the applicant to determine acceptability for entering the school.

# **Enrolling and Training**

The school follows an open enrollment system allowing individuals to apply up to one year in advance of a scheduled class start. The following items are required to be completed at the time of application:

- Request for High School or College Transcript or G.E.D. Certificate.
- Enrollment Agreement (must be signed by parent or guardian if applicant is under 18 years of age).
- Financial Aid Forms, if applicant wishes to apply for Financial Aid.
- Complete the Admissions Test.
- Payment of the Registration Fee.

# Acceptance by the School

Once the completed Enrollment Agreement and items mentioned above have been submitted, the school reviews the Application and the applicant is informed of its decision within seven days. If an applicant is not accepted by the school, all fees paid to the school are refunded.

The school reserves the right to reject a student previously accepted if the items listed above are not successfully completed.

# Rules and Regulations

## **Personal Property**

The school assumes no responsibility for loss or damage to a student's personal property, or vehicle, nor loss by theft of any vehicle or any of its contents, in, on or adjacent to school property.

## Weather Emergencies

The school reserves the right to close the school during a weather emergency or other "acts of God." Under these conditions, the student will not be charged with an official absence. Course material will be made up to ensure completion of the entire course.

#### **Personal Conduct**

Students are required to follow rules of conduct that are typically expected in the working world. Students may be placed on probation or terminated for violation of the School's Personal Conduct Rules (includes student dishonesty, unprofessional conduct, use of profanity, insubordination, violation of safety rules, use of alcohol or drugs on school property, vandalism of the school property or equipment, etc.). The student will be removed from probation if, in the opinion of the School Director, the student demonstrates adherence to the Personal Conduct Rules.

#### **Dress Code**

The purpose of our school is to give students training which will enable them to obtain jobs in their chosen fields. Since we have many employers who visit the school in order to interview students for jobs, give lectures, etc., it is important that they gain a favorable impression of the appearance and conduct of the student body — otherwise, employers will hesitate to hire our graduates. As a student, you may have limited funds, so your wardrobe need not be expensive or extensive, simply appropriate.

Because you will be working with a variety of office and/or industrial equipment in your program, certain items of clothing such as sandals, thongs, bare midriffs, bra-tops, cut-offs and shorts are not acceptable for classroom wear due to safety considerations. A student's clothing and appearance must be acceptable to the Education Department.

Excessive abuse of the dress code will result in the student being placed on probation. The student will be removed from probation only If, in the opinion of the School Director, the student demonstrates adherence to the school dress code. Continued infractions of the dress code may result in the student being terminated by the school. If terminated, the student may re-enter the following quarter with permission of the School Director.

#### Health

It is most important that you take proper care of your health so you can do your best in school. This means regular hours, plenty of sleep, sufficient exercise and nutritional food. If you are seriously ill or contact a communicable disease, you should stay home and recover but remember to notify the school immediately. All medical and dental appointments should be made after school hours.

# **Clothing and Personal Property**

All personal property is the sole responsibility of the student and the school can assume no liability for loss. Mark your personal property clearly with your name and address.

#### Measure of Course Duration

The school measures its programs in two ways, quarter hours of credit to allow comparability with other post-secondary schools and clock hours to allow measurement of the programs on this basis where required.

Quarter Hours are defined as follows:

For non-laboratory class periods, one quarter hour equals one clock hour per week for a 12 week term.

For laboratory class periods, one quarter hour equals two clock hours per week for a 12 week term.

Clock Hours are defined as follows:

A clock hour is one class period of approximately 50 minutes in length where lecture, demonstration, and similar class activities are conducted.

# Changes to Courses, Schedules, Etc.

The school reserves the right to make changes in the equipment and curriculum to reflect the latest technology, to reset class schedules and hours, to consolidate classes, and change locations.

## **Attendance Policy**

Satisfactory Student Attendance is established when the student is present in his/her assigned classroom for at least 80% of the scheduled contact time of any course or quarter.

If the student is not present for at least 80% of the scheduled contact time of any course or quarter, then Satisfactory Student Attendance has not been established.

If Satisfactory Student Attendance has not been maintained for a scheduled course or quarter, then the student receives a grade of "F" and he/she must repeat that scheduled course or quarter.

National Education Center - Livonia Campus does not permit a student to "Make-up" absences which have been accrued on his/her attendance record.

## **Tardiness Policy**

If a student is tardy to class or if he/she leaves class early on four different occasions, then the student will accrue one absence on his/her attendance record.

## Leave of Absence Policy

A student who is actively enrolled in a NEC training program may be granted one Leave of Absence (L.O.A.) for certain specific and acceptable purposes, per academic year.

The granted Leave of Absence should be of a reasonable duration and cannot exceed the length of one grading period.

The student's written request for Leave of Absence, properly approved, dated, and signed by both the student and either the School Director, Educational Director or appropriate Department Head, will be maintained in the student's files.

There are only two types of authorized Leaves of Absence: Ordinary Leave of Absence and Medical Leave of Absence. An Ordinary Leave of Absence is granted for either military of mandatory civic duties. A Medical Leave of Absence is granted for documented medical reasons such as serious illness, required surgery, and temporary disabilities (including pregnancy disability). All requests for a Medical LOA must be accompanied by a written recommendation or prescription from the student's personal physician.

If the length of the granted LOA is such that Satisfactory Student Attendance cannot possibly be maintained during the affected module, class or quarter, then the student must repeat that module, class or quarter.

If the student fails to return from the Leave of Absence on the date indicated in the written request, he/she will be terminated from the NEC training program.

# **Required Study Time**

Outside study, apart from regular classroom work, is regularly required in order to successfully complete the required course assignments. The amount of time will vary according to the individual student's abilities. All assignments must be turned in at the designated time. Students are responsible for reading any study materials issued by their instructors.

# **Grading Standards**

Α	100-90 4.0	
B-	89-80 3.0	
C -	79-70 2.0	
D-	69-60 1.0	
F —	59- 00 (Failing)	

#### SATISFACTORY ACADEMIC PROGRESS

In order to maintain Satisfactory Academic Progress, a student must achieve a cumulative Grade Point Average (GPA) of 2.0 or higher and must complete the training program within a time period which may not exceed a maximum of 1.5 times the planned program length.

The Education Department will monitor Satisfactory Academic Progress by calculating the cumulative GPA for each student at the end of the quarter. If the cumulative GPA is less than 2.0, the student is notified in writing that he/she is not maintaining Satisfactory Academic Progress. The student must then be placed on academic probation, which will begin at the start of the next quarter.

## Initial Probationary Quarter

If, by the end of this probationary quarter, the student achieves a cumulative GPA of 2.0 or higher, then he/she is removed from probationary status and is notified in writing that he/she has achieved the status of being in "Good Academic Standing."

If, by the end of the probationary quarter, the student has not achieved a cumulative GPA of 2.0, but has achieved a GPA of 2.0 or higher for the quarter, then the student may continue his/her program in a second probationary quarter with the approval of the school.

If, by the end of the probationary quarter, the student has not achieved a GPA of 2.0 or higher for that quarter, the student's training will be interrupted by the school.

# Second Probationary Quarter

If, at the end of the second probationary quarter, the student achieves a cumulative GPA of 2.0 or higher, then he/she is removed from probationary status and is notified in writing that he/she has achieved the status of being in "Good Academic Standing."

If, at the end of the second probationary quarter, the student has not achieved a cumulative GPA of 2.0 or higher, his/her training will be interrupted by the school.

# Repeating a Course

A NEC student may repeat a failed course only once.

When a NEC student repeats a course, the last grade received for that course replaces the original grade (even if the original course grade was higher), and is used, along with the student's other grades, to calculate the quarter or module and cumulative grade point (or percent) average (GPA). The most recent grade for a repeated course will be the only grade for that course to appear on the student's transcript.

## **Student Appeal Process**

If a student's training is interrupted for any reason, he/she must be informed of his/her right to appeal that decision. The student must initiate the appeals process by submitting a written request for "Readmittance to NEC Schools and Programs" to the Education Director or appropriate Department Head.

#### Reinstatement

A student who has been terminated for failing to maintain Satisfactory Academic Progress may be reinstated through the appeal process.

A student will not be eligible for financial aid during the reinstatement quarter. If the student achieves a grade point average (GPA) of 2.0 or better by the end of the reinstatement quarter, he/she will be considered to be making Satisfactory Academic Progress and will be eligible for financial aid consideration in subsequent quarters.

## **Graduation Requirements**

A student is eligible for graduation if he/she:

- A) has successfully completed all required courses.
- B) has a cumulative GPA of 2.0 for all quarters.
- C) has met his/her financial obligations to the school.
- D) has passed the graduate exam, if applicable.

A student may qualify for graduation while on probation if, at the end of the probationary quarter, the student meets the Satisfactory Academic Progress requirements.

# Monitoring

Satisfactory Progress will be monitored by the institution at the end of each quarter. Notice of Probationary Status will be in writing.

# Make-up Work

Students are required to make up all assignments and work missed as a result of absence. The instructor may assign additional make-up work to be completed for each absence; this will be assigned as outside work.

Tests missed because of an absence must be made up on the day the student returns to school unless other arrangements have been made by the instructor, with the school Administration's approval.

# **Program Transfers**

Permission must be obtained from the School Director for a transfer from one program to another or for a requested change in schedule.

# Financial Aid and Tuition Assistance (Continued)

# Statement of Non-Discrimination

National Education Centers does not discriminate on the basis of sex, age, physical handicap, race, creed or religion in admissions, counseling, training, placement, employment or any other of its activities. The School's Director is the Title IX Coordinator and will receive any inquiries under the sex discrimination provisions of the Educational Amendments of 1972.

# **Handicapped Students**

Handicapped students should make arrangements to meet with the Director prior to the start of class to review facilities for the handicapped.

# Voluntary Pre-Payment Plan

The school provides a voluntary prepayment plan to students and their families to help reduce the balance due upon entry. Details are available upon request from the Financial Aid Office.

# Privacy Act

The school has established a policy for the release of student and/or graduate information. The policy is available upon request from the administrative offices.

# **Examination of Student Records**

- All students attending this post-secondary institution shall have the right to review their academic records, including grades, attendance and counseling. (Parental Financial Information is excepted.)
- Records are supervised by the School Director and access is afforded by School Officials for purposes of recording grades, attendance and counseling, as well as determining financial aid eligibility.
- 3. Students may request a review by writing the School Director at the address set forth in the catalog and such review will be allowed at regular school hours under appropriate supervision. Students may also obtain copies of their records at a charge of \$0.10 per page.
- 4. Challenging the record for purposes of correcting or deleting any of the contents must be done in writing stating fully the reason therefore. However, grades and course evaluations can only be challenged on the grounds that they are improperly recorded.
  - a. The instructor and/or counselor involved will review the written challenge and, if desirable, meet with the student and then make a determination to retain, change or delete the disputed data.

## Privacy Act (Continued)

- b. Should further review be requested by the student, the School Director will conduct a hearing at which the student shall be afforded a full and fair opportunity to present evidence relevant to the disputed issues. The student shall be notified of the Director's decision which will be final.
- c. A copy of the challenge and/or a written explanation respecting the contents of the student record will be included as part of the student's permanent record.
- 5. "Directory Information" showing student's name, address, telephone number, birth date and place, program undertaken, dates of attendance and certificate awarded may be provided to third parties by the school, unless the request to omit such information is presented in writing within 10 days of date of enrollment.
- As a post-secondary educational institute, parental access to student's records will be allowed without prior consent if the student is a dependent as defined in Section 152 of the Internal Revenue Code of 1954.

## 1989 and 1990 Quarter Class Schedule

# QUARTER START SCHEDULE FOR 1989 Summer Quarter July 17 (Monday) - October 6 (Friday) Holidays: Labor Day - September 4......(1 day) Quarter Break: October 9, 10, 11, 12, 13......(5 days) Fall Quarter October 16 (Monday) - January 12 (Friday) Holidays: Thanksgiving - November 23, 24 . . . . . . . . . . . . (2 days) Christmas - December 25, 26, 27, 28, 29 . . . . . . . . . (5 days) Martin Luther King Day - January 16 . . . . . . . . . . (1 day) Quarter Break: None QUARTER START SCHEDULE FOR 1990 Winter Quarter January 16 (Tuesday) - April 5 (Friday) Holidays: Presidents' Day (observed) - February 19......(1 day) Quarter Break: April 9-13 Spring Quarter April 16 (Monday) - July 6 (Friday) Holidays: Memorial Day (observed) - May 28 . . . . . . . . . . . . . . . . (1 day) Summer Quarter July 16 (Monday) - October 5 (Friday) Holidays: Labor Day - September 3......(1 day) Quarter Break: October 8, 9, 10, 11, 12......(5 days) **Fall Quarter** October 15 (Monday) - January 18, 1991 (Friday) Holidays: Thanksgiving - November 22-23.....(2 days)

Quarter Break: None

#### Tuition and Fees

(Includes Books & Supplies)

(	о оприн		Length of Course			
COURSE	MONTHS	CLOCK HOURS	QUARTER HOURS OF CREDIT	REG. FEE	TUITION	TOTAL COURSE PRICE
Electronics Engineering Technology	21 18	1680 1440	105.0 90.0	\$95 \$95	See Catalog See Catalog	•
Business Technology	18	1440	104	\$95	See Catalog	Addendum
Computer Accounting Systems	12	960	69	\$95	See Catalog	Addendum
Secretarial Science: Legal Executive	12 12	960 960	59 64	\$95 \$95	See Catalog See Catalog	

#### Cancellation:

When you enroll in a course of study, you reserve a place for yourself which cannot be made available to another student. The refund and cancellation policy is based upon fairness to you and to the school. This Enrollment Agreement does not constitute a contract until it has been approved by an official of the school. If this Agreement is not accepted by the school, all monies will be refunded. Applicant may cancel this Agreement at any time before the commencement of his/her classes. Notice of cancellation should be sent to the school at the address appearing in this Agreement by Certified or Registered mail, postage prepaid. Cancellation shall be effective as of the date of mailing. If cancellation is effected within three (3) business days of applicant's execution of this Agreement and before the start of clases, applicant shall receive a refund of all monies paid. If cancellation is effected more than three (3) business days after applicant's execution of the Agreement and before the start of classes, school will retain the Registration Fee and refund any other monies paid in excess thereof. Any monies due the applicant will be refunded within thirty (30) days from cancellation or, failure to appear on or before the first day of class.

## Tuition and Fees (Continued)

## **Refund Policy**

If a student does not start classes, all tuition will be refunded. Refunds for students who do attend classes will be calculated from the last date of attendance. Any monies due the student shall be refunded within thirty (30) days from the last date of student attendance. Refunds for students who withdraw after starting school or are terminated by the school will be computed as follows:

Withdrawal during first week...Amount retained by school \$350.00.

Withdrawal after first week but within 25% of course...School retains 25% of total tuition plus \$150.00.

Withdrawal after 25% but within 50% of course...School retains 50% of tuition plus \$150.00.

Withdrawal after 50% of course...School retains 100% of tuition.

For courses longer than 1 year (12 months) in length, the cancellation and settlement policy shall apply to the stated course price attributable to each school year.

All of the stated course price attributable to the period beyond the first year will be refunded when the student terminates during the first year.

All monies due the applicant or student shall be refunded within 30 days from the last day of attendance.

Refunds to students eligible to receive benefits under the G.l. Bill will be computed in accordance with applicable refund provisions.

# **Books and Supplies:**

The cost of books and supplies is included in tuition.

# **Repeat Time**

A student who repeats a quarter of training for academic or attendance reasons is required to continue regular tuition payments as agreed to upon initial enrollment. The student will not, however, be charged for more than the total number of quarters in the course as contracted. The student must pass all subjects and maintain at least 80% attendance during the repeat quarter.

A maximum completion time of 1.5 times the program length is allowed; however, no individual quarter may be repeated more than once.

## **Electronics**

The electronics industry is one of the fastest growing fields today. Employment opportunities in electronics are exceptionally good. Advances in technology steadily create additional jobs and opportunities for advancement in this field.

National Education Centers' Electronics Programs provide the students with knowledge and skills necessary to gain entry level employment as Electronic Technicians. Modern training methods and equipment provide the students with the background needed to keep pace with exciting changes taking place in this field. National Education Centers' Electronics Programs include ample "hands-on" training on actual equipment.

Students learn to use meters, oscilloscopes, signal function generators, analog, digital and microprocessor trainers and computers in the course of instruction.

Average class size is 35 students.

#### Electronics

#### **EQUIPMENT LIST**

- 10 Single Trace Oscilloscopes
- 65 Volt-Ohm Meters
- 30 Direct Current Power Supplies
- 50 Audio Generators
- 60 Digital Electronic Training Devices
- 110 Dual Trace Oscilloscopes
  - 2 Logic Probes
  - 55 Microprocessor Training Devices
  - 20 DVMS (Digital Volt Meters)

Specialized training devices suited to optional areas of specialization selected by individual schools.

#### POOL EQUIPMENT

- 1 Logic Analyzer
- 2 Frequency Counters
- 1 100 MHz Oscilloscope
- 1 Digital Storage Oscilloscope
- 10 IBM Personal Computers
- 2 Square "D" 300 Programmable Controllers
- 2 Square "D" 100 Programmable Controllers
- 2 Omron Symax Controllers

## **Electronics** (Continued)

# **ELECTRONICS TECHNOLOGY - Diploma Program**

## Objective:

This program provides students with the skills and knowledge needed to gain entry-level employment as electronic technicians. At the completion of this program, students will be able to use test equipment to analyze, design, or repair electronic circuits. Students will learn the fundamentals of AC and DC electricity, solid state electronics, digital electronics and microprocessor technology. Students will specialize in Electronic Engineering Technology. Other areas of specialization such as Computer and Industrial Electronics are available at selected schools. At the completion of this program, a diploma will be awarded.

EL1	Fundamental Studies	Quarter Credits	Clock Hours
	Reading For Electronics 104	5	60
	Math For Electronics 105	5	60
	Fabrication 106	3	72
	Survey 107	2	48
		15	240
EL2	Basic Electricity & Electronics		
	Electronics Theory 111	7	84
	Electronics Lab 112	5	120
	Applied Mathematics 113	3	36
		15	240
EL3	Semiconductors: Circuits & Devices		
	Electronics Theory 121	7	84
	Electronics Lab 122	5	120
	Applied Mathematics 123	2	24
	Technical Drawing Lab 124	1	12
		15	240
EL4	Microelectronics: Devices & Applications		
	Electronics Theory 131	8	96
	Electronics Lab 132	5	120
	Technical Writing 133	2	24
		15	240

Continued on next page...

# Electronics (Continued)

# **ELECTRONICS TECHNOLOGY - Diploma Program (Continued)**

EL5	Digital Circuits	Quarter Credits	Clock Hours
	Electronics Theory 241	10	120
	Electronics Lab 242	5	120
		15	240
EL6	Microprocessor Technology		
	Electronics Theory 251	9	108
	Electronics Lab 252	5	120
	Applied Mathematics 253	1	12
		15	240
EL7A	Electronics Engineering Computers		
	Electronics Theory 261	8	96
	Electronics Lab 262	5	120
	Professional Career Development 263	2	24
		15	240
EL7B	Electronics Engineering Industrial		
	Electronics Theory 264	8	96
	Electronics Lab 265	5	120
	Professional Career Development 263	2	24
		15	240

# **Business Programs**

## **BUSINESS TECHNOLOGY - 18 Months**

National Education Centers' Business Technology program provides training in many disciplines—accounting, computer applications, management, and communications. Accounting is essential to the effective operations of any business organization. The computer has become an integral part of business operations, and the ability to utilize software has become a necessity in today's office. Managerial skills are necessary for business personnel: gathering accurate, up-to-date information is the basis for decision making and business forecasting in the organizational setting. Development of communication skills provides effective interpersonal and organizational interaction. With training focused in these areas, the student will be prepared to enter various careers in business.

Graduates are well-qualified for entry-level positions in banking, insurance, finance, information processing, marketing, management, and government. Upon successful completion of the six quarter program, a diploma will be awarded.

Quarter	Course Number	Course Title	Clock Hours	Quarter Credits
	GE100	English I	60	5.0
,	SS105	Keyboarding	60	3.0
	BE130	Business Math	60	4.0
	BE110	Intro. to Business Technology	60	4.0
			240	16.0
II	AC100	Principles of Accounting I	60	4.0
	SS110	Word Processing I	60	3.0
	BE150	Management Concepts	60	5.0
	GE110	English II	60	5.0
			240	17.0
111	AC110	Principles of Accounting II	60	4.0
	BE160	Principles of Economics	60	5.0
	IS140	Spreadsheet Management	60	4.0
	LS100	Business Law	60	5.0
			240	18.0

Continued on next page...

# **Business Programs (Continued)**

# **BUSINESS TECHNOLOGY - 18 Months (Continued)**

Quarter	Course Number	Course Title	Clock Hours	Quarter Credits
IV	AC120	Principles of Accounting III	60	4.0
	BE140	Business Presentations	60	5.0
	BE260	Personnel & Human Resource		
	10440	Management	60	5.0
	IS110	Programming in BASIC	60	4.0
			240	18.0
	- Certii	ficate in Computer Accounting Syste	ms —	
V	AC130	Cost Management	60	4.0
	AC140	Accounting & Information Systems	60	4.0
	BE170	Principles of Marketing	60	5.0
	IS150	Data Base Management	60	4.0
			240	17.0
VI	AC150	Federal & State Income Tax	60	4.0
	BE250	Small Business Management	60	5.0
	GE230	Professional Career Development	60	5.0
	IS270	Interactive Operating Systems	60	4.0
			240	18.0
		Grand Total	1440	104.0

- Diploma in Business Technology -

# **Business Technology**

#### **EQUIPMENT LIST**

IBM Compatible Personal Computers Monochrome Display 256K-640K Internal Memory

#### **PRINTERS**

Panasonic KXP-1080-i Near Letter Quality Printers IBM Selectric Typewriters Calculators

#### Secretarial Science

#### **LEGAL AND EXECUTIVE SECRETARIAL SCIENCE - 12 Months**

Competent, highly-skilled professional legal and executive secretaries are in high demand in today's business world. The diverse responsibilities and challenges of their positions make them an indispensable part of the management team. National Education Centers' Legal and Executive Secretarial Science program is designed to provide students with the skills needed in the modern business office.

The student is given training in typing, word processing, computer applications, and transcription. Management and administrative skills essential to the organization are developed.

Graduates are well-qualified, highly-trained executive and legal secretaries who can assume entry-level positions in business, industry, and government. Upon successful completion of the program, a certificate will be awarded.

Quarter	Course Number	Course Title	Clock Hours	Quarter Credits
1	SS100	Typing I	60	3.0
	BE130	Business Math	60	4.0
	SS245	Electronic Office Procedures	60	4.0
	GE100	English I	60	5.0
		-	240	16.0
11	SS200	Typing II	60	3.0
•	SS110	Word Processing I	60	3.0
	SS140	Secretarial Office Procedures	60	5.0
	SS250	Electronic Transcription I	60	4.0
			240	15.0
Ш	SS300	Typing III	60	3.0
	BE180	Business Correspondence	60	4.0
	SS210	Word Processing II	60	3.0
	GE230	Professional Career Development	60	5.0
			240	15.0
IV	IS140	Spreadsheet Management	60	4.0
Executive	SS130	Shorthand (Speedwriting)	120	6.0
	SS350	Electronic Transcription II	60	3.0
			240	13.0
		Total Executive	960	59.0

Continued on next page...

# Secretarial Science (Continued)

# LEGAL AND EXECUTIVE SECRETARIAL SCIENCE - 12 Months (Continued)

Quarter	Course Number	Course Title		Quarter Credits
IV	BE140	Business Presentations	60	5.0
Legal	LS100	Business Law	60	5.0
	IS130	Legal Terminology & Transcription	60	4.0
	IS140	Spreadsheet Management	60	4.0
			240	18.0
		Total Legal	960	64.0

#### Secretarial Science

#### **EQUIPMENT LIST**

IBM Compatible Personal Computers Monochrome Display 256K-640K Internal Memory

#### PRINTERS

Panasonic KXP-1080-i Near Letter Quality Printers NEC Spinwriter 8800 IBM Selectric Typewriters Calculators Transcribers

# **Course Descriptions**

#### **Business**

## AC100 Principles of Accounting I

**Quarter Credits 4.0** 

CATALOG DESCRIPTION: This course introduces basic accounting principles. Through the recording of transactions of a single proprietorship, the students obtain an understanding of the accounting cycle.

Prerequisite: None

# AC110 Principles of Accounting II

Quarter Credits 4.0

CATALOG DESCRIPTION: Purchases, sales inventory, and prepaid expenses are studied in the single proprietorship, partnership, and corporation. Included are problems of manufacturing enterprises, supplemental statements, and statement analysis.

Prerequisite: None

#### AC120 Principles of Accounting III

**Quarter Credits 4.0** 

CATALOG DESCRIPTION: The corporate organization, accounting for capital stock, corporate earnings, and corporate bonds are the topics covered. Problems relating to the voucher system, the annual report, and accounting for manufacturing and branch operations are completed.

Prerequisite: AC110

# AC130 Cost Management

**Quarter Credits 4.0** 

CATALOG DESCRIPTION: This initial course in cost accounting provides data for three major purposes: Planning and controlling routine operations; nonroutine decisions, policy making and long-range planning; inventory valuation and income determination.

Prerequisite: AC120

## **AC140 Accounting and Information Systems**

**Quarter Credits 4.0** 

CATALOG DESCRIPTION: This course provides a realistic approach to automated accounting principles with emphasis on the five major accounting systems: general ledger, depreciation, accounts payable, and payroll. Each system is introduced separately and then integrated with the other systems.

Prerequisite: AC120

#### AC150 Federal & State Income Tax

**Quarter Credits 4.0** 

CATALOG DESCRIPTION: Practical study emphasizes the underlying principles of the Internal Revenue Code and State codes as applied to individual sole proprietors, partnerships, and corporations. Tax rules are applied in the preparation of income tax returns.

Prerequisite: AC120

#### **Business** (Continued)

#### BE110 Introduction to Business Technology

Quarter Credits 4.0

CATALOG DESCRIPTION: This course provides the student with an understanding of how accounting, marketing, management and information processing are integrated in business. Modern office technology is covered as the student learns about automation and personal computer applications.

Prerequisite: None

#### **BE130 Business Math**

Quarter Credits 4.0

CATALOG DESCRIPTION: This course begins with a review of fundamental mathematical operations and presents techniques to develop speed and accuracy when using calculators. Through the use of equations and formulas, students solve a variety of business-related problems.

Prerequisite: None

#### **BE140 Business Presentations**

Quarter Credits 5.0

CATALOG DESCRIPTION: This course emphasizes the importance of effective speaking in public settings, especially the business world. It enlightens students in the preparation of a speech—its organization, research techniques, language usage, delivery, and visual aids. Interactive decision-making in business through group discussions is explored.

Prerequisite: None

## **BE150 Management Concepts**

**Quarter Credits 5.0** 

CATALOG DESCRIPTION: This course assists the student in perceiving the relationships between business and the social sciences. The social and intellectual history of management and the evolution of management philosophy and practices are examined. The course surveys the major approaches to management theory and the basic functions of planning, organizing, staffing, directing, controlling, problem solving and decision making.

Prerequisite: None

## **BE160 Principles of Economics**

**Quarter Credits 5.0** 

CATALOG DESCRIPTION: This course is an introduction to the economic process. Topics studied include macroeconomics, the basics of microeconomics, the economics of markets, money and banking, and international influences.

Prerequisite: None

#### Business (Continued)

## **BE170 Principles of Marketing**

Quarter Credits 5.0

CATALOG DESCRIPTION: The basic concepts of marketing and its universal functions are examined. The role of buyers and the social issues involved in the marketing process are also included in the course.

Prerequisite: None

#### **BE180 Business Correspondence**

**Quarter Credits 4.0** 

CATALOG DESCRIPTION: The student learns to develop writing power through proper sentence structure and use of advanced writing techniques. The presentation of basic psychological drives that motivate human behavior gives students insight needed to elicit positive responses from written communications. Finally, the student learns principles and procedures for creative and effective writing of special-purpose letters and communications for a company.

Prerequisite: GE100

#### BE250 Small Business Management

Quarter Credits 5.0

CATALOG DESCRIPTION: This course is an indepth look at entrepreneurship, its current status and its future. Students study the benefits of the small business, how to start one, the marketing and management techniques, and financial and administrative controls.

Prerequisite: BE150

# BE260 Personnel & Human Resources Management Quarter Credits 5.0

CATALOG DESCRIPTION: This course introduces students to the theoretical and practical aspects of personnel and human resource management. Topics include equal employment opportunity, staffing the organization, training and developing, appraising and compensating human resources, organizational maintenance, and union and organization interfaces.

Prerequisite: None

#### GE100 English I

Quarter Credits 5.0

CATALOG DESCRIPTION: This course is designed to review the mechanics of English, to strengthen the student's spelling abilities and to teach the student how to communicate more effectively through the written word.

Prerequisite: None

#### **Business** (Continued)

#### GE110 English II

Quarter Credits 5.0

CATALOG DESCRIPTION: This course is a continuation of English I. The emphasis is on effective writing principles, punctuation, and vocabulary building.

Prerequisite: GE100

## GE230 Professional Career Development

**Quarter Credits 5.0** 

CATALOG DESCRIPTION: This course is offered in the last quarter of the student's program. It focuses on student awareness and achievement in the areas of resume preparation, job hunting, interviewing, employment expectations, and effective communication and public relations. It also deals with human relations in the organizational structure.

Prerequisite: None

#### IS110 Programming in BASIC

**Quarter Credits 4.0** 

CATALOG DESCRIPTION: This course introduces students to BASIC, a popular microcomputer programming language. The intent is to demonstrate the way in which a computer's processing may be controlled and how packaged software is developed in a like manner. Major commands and techniques will be illustrated, and short programs written involving problem-solving assignments. Concentration will be on the development of simple algorithms which are suitable for computer solutions.

Prerequisite: BE110

## IS140 Spreadsheet Management

Quarter Credits 4.0

CATALOG DESCRIPTION: In this course students will learn to create and manage spreadsheets on the microcomputer. Major emphasis is placed on business and accounting applications with specific understanding of rationale for use. Minor emphasis is placed on data base management, modeling(s), and simulations, if time allows. Specific worksheet projects will be developed in coordination with parallel learning in accounting.

Prerequisite: BE110

# IS150 Data Base Management

**Quarter Credits 4.0** 

CATALOG DESCRIPTION: This course stresses the applications to which data base software may be implemented. Emphasis is placed on developing skills which lead to successful software usage in a variety of applications. These applications should be accounting-oriented and tied to the reports and manual processing taught in the accounting classes.

Prerequisite: BE110

#### **Business** (Continued)

#### IS270 Interactive Operating Systems

**Quarter Credits 4.0** 

CATALOG DESCRIPTION: The intent of this course is to combine and extend the student's knowledge of business data processing systems. In addition to learning an integrated software package (Framework or Symphony), students develop an entire hardware/software system in a simulated business environment.

Prerequisite: IS140, IS150

#### LS100 Business Law

Quarter Credits 5.0

CATALOG DESCRIPTION: The course is the presentation of the various facets of law as applied to the business world. Areas of substantive law studies include consumerism, contracts, sales, personal and real property, negotiable instruments, business entities, wills and estates, and insurance.

Prerequisite: None

#### SS100 Typing I

**Quarter Credits 3.0** 

CATALOG DESCRIPTION: In this course the student develops touch control of the keyboard and proper typing techniques. While building a basic typing speed and accuracy skill, the student practices the production of letters, tables, reports, and other kinds of personal and business communications.

Prerequisite: None

#### SS105 Keyboarding

Quarter Credits 3.0

CATALOG DESCRIPTION: The purpose of this course is to develop basic keyboarding skills that will enable the student to function efficiently on a computer terminal.

Prerequisite: None

# SS110 Word Processing I

Quarter Credits 3.0

CATALOG DESCRIPTION: This course introduces the student to Word Processing and its place in the automated office. The handling of information—keyboarding, revising, moving, storing, printing, etc.—is dealt with in theory and, when possible, with "hands-on" applications.

Prerequisite: SS100 or SS105

#### **Business** (Continued)

#### SS140 Secretarial Office Procedures

Quarter Credits 5:0

CATALOG DESCRIPTION: This course deals with the responsibilities inherent in the position titled "secretary." It encompasses all aspects of making the business office run smoothly such as oral communications, typing procedures, information processing, administrative responsibilities, and record management. Technological changes in the office environment are discussed.

Prerequisite: None

#### SS200 Typing II

**Quarter Credits 3.0** 

CATALOG DESCRIPTION: This second typing course continues the development of basic typing skills and emphasizes the production of various kinds of business correspondence, tabulations, manuscripts, and forms from unarranged and rough-draft copy sources. A minimum speed of 40 words per minute is the speed goal.

Prerequisite: SS100

## SS210 Word Processing II

**Quarter Credits 3.0** 

CATALOG DESCRIPTION: This course is a continuation of Word Processing I. Application of word processing concepts and functions are accomplished using a dedicated word processor or word processing software on a microcomputer.

Prerequisite: SS110

#### SS245 Electronic Office Procedures

Quarter Credits 4.0

CATALOG DESCRIPTION: This course is an overview of modern office technology and its effect on business. It provides the student with an understanding of information processing tasks and procedures and covers administrative support functions and the various roles of office workers in the electronic office.

Prerequisite: None

#### SS250 Electronic Transcription I

Quarter Credits 4.0

CATALOG DESCRIPTION: In this course the student learns how to efficiently operate dictation equipment and apply language-usage and other skills to the production of all kinds of written communications.

Prerequisite: None

#### Business (Continued)

## SS300 Typing III

**Quarter Credits 3.0** 

CATALOG DESCRIPTION: This course further develops the student's speed and accuracy skills. It focuses heavily on the production of a wide variety of business communications directly related to the student's field of study. A minimum of 50 words per minute is the speed goal.

Prerequisite: SS200

## SS350 Electronic Transcription II

**Quarter Credits 3.0** 

CATALOG DESCRIPTION: This course is a continuation of Electronic Transcription I. It is designed to develop accuracy and proficiency in machine transcription. The students sharpen their ability to proofread and edit copy and increase their listening power. Spelling and vocabulary words are emphasized.

Prerequisite: SS250

#### **ELECTRONICS**

## Reading for Electronics 105

**Quarter Credits 5.0** 

This course is designed to help the student enter the academic setting by identifying thinking and study skills, personal characteristics, and patterns of human interaction. It introduces the student to the field of electronics through information gathering, presentation of specific employment opportunities, and selective readings about the field of electronics.

#### Math for Electronics 105

Quarter Credits 5.0

A review of basic math skills. Included are fractions, decimals, percents, signed numbers, roots and exponents and basic equations.

#### Fabrication 106

Quarter Credits 3.0

The building of simple electronic circuits and soldering skills are emphasized.

#### Survey 107

**Quarter Credits 2.0** 

This course is designed to be a general survey of the field of electronics, the tools used by technicians, notations and conversions of units, schematic representations, and sources of electricity. Special emphasis is placed on reinforcing the math skills presented in Math for Electronics 105.

#### ELECTRONICS (Continued)

#### **Electronics Theory 111**

Quarter Credits 7.0

A study of the principles of direct and alternating current. Included are the effects resistors, capacitors and inductors have on voltage, current and power when used in various circuits.

#### Electronics Lab 112

Quarter Credits 5.0

Students become familiar with and use tools and test equipment to construct and analyze basic electric and electronic circuits. Personal safety and the proper use of tools and equipment is stressed. The equipment used in this course includes: soldering iron - pencil type, "breadboards," multimeter (volt-ohm-milliammeter), oscilloscope, and power supply.

# \* Applied Mathematics 113

Quarter Credits 3.0

A review of basic mathematics as applied to the laws and formulas used in electronics. Students become proficient in the use of a scientific calculator to complete electronic formulas.

#### Electronics Theory 121

Quarter Credits 8.0

A comprehensive study of solid state principles and circuits. The students are introduced to diodes, transistors and other solid state electronic devices and learn how resistors, capacitors, conductors, rectifiers, amplifiers and oscillators work together to control electric current. Basic power supply and amplifier circuits are also studied.

#### Electronics Lab 122

Quarter Credits 4.0

Circuit analysis and troubleshooting techniques are learned in the construction and calibration of a radio receiver. Students learn to read and draw electronic symbols (schematics). The equipment used includes soldering iron - pencil type, solderless prototype boards (breadboards), scientific calculator, multimeter (VOM-volt-ohm-milliammeter), oscilloscope, power supply, alternating current power source, RF signal generator, transistor radio receiver kit and drawing set.

# Mathematics 123

Quarter Credits 2.0

Students review and use the basics of algebra to solve electronic equations. Logarithms and vector additions are used to understand and analyze the operation of electronic components and circuits.

## Technical Drawing Lab 124

Quarter Credits 1.0

Students learn to read and draw electronic symbols (schematics), and draw electronic circuit and block diagrams.

#### **ELECTRONICS** (Continued)

#### Electronics Theory 131

#### **Quarter Credits 8.0**

This course is an introduction to the field of miniature electronics made possible by the development of integrated circuits. The difference between discrete components and integrated circuits and how this allows the size of complex electronic circuits to be greatly reduced is studied. This course also serves as a transition between analog and digital electronics.

#### Electronics Lab 132

#### **Quarter Credits 5.0**

Students study the construction and operation of various specialized microelectronic devices. The equipment used includes soldering iron-pencil type, solderless prototype boards (breadboards), scientific calculator, multimeter (VOM-volt-ohm-milliammeter), dual trace oscilloscope, direct current power supply, and analog/digital electronics trainer.

#### **Technical Writing 133**

#### Quarter Credits 2.0

Students learn to organize and write comprehensive lab reports using proper sentence structure and grammar.

#### **Electronics Theory 241**

## **Quarter Credits 10.0**

A study of digital electronics including the construction and operation of digital electronic circuits and devices, binary math, logic gates, multivibrators, flip-flop, shift registers and LED displays. Digital analog and analog-to-digital conversion are also covered.

#### Electronics Lab 242

#### Quarter Credits 5.0

Digital electronic circuits are constructed, studied and analyzed on a specialized training device. Equipment used includes: direct current power supply, dual trace oscilloscope and analog/digital electronics trainer.

#### Electronics Theory 251

#### **Quarter Credits 9.0**

Microprocessors are the key elements in modern computers. Advances in microprocessor technology have allowed computers to become smaller, faster and more efficient. Students explore the theory, construction, and operation of microprocessors, and because a microprocessor is a programmable logic device, students learn introductory programming in machine and BASIC languages. Microprocessor applications other than to computers are also studied.

#### **ELECTRONICS** (Continued)

#### Electric Lab 252

Quarter Credits 5.0

Students learn the operation of microprocessors by conducting experiments on a Motorola 6800 series microprocessor trainer. Equipment used is a dual trace oscilloscope in addition to microprocessor trainer.



## **Applied Mathematics 253**

**Quarter Credits 1.0** 

A study of the principles of mathematics that apply to microprocessor and computer applications.

#### **Professional Career Development 263**

**Quarter Credits 2.0** 

Students learn to make effective oral and written presentations. Students also learn to properly complete letters of application, resumes, follow up and "thank you" letters in preparation for seeking employment.

## Computer Lab EL262

Quarter Credits 5.0

The student will receive extensive "hands-on" experience with computers in both hardware and software aspects. Students will perform troubleshooting on computer circuits. Students will also control external peripheral devices with programs written by themselves.

#### Industrial Electronics EL264

Quarter Credits 8.0

This quarter is an introduction to the application of electronics in the industrial environment. With the use of all previously learned material, the student studies industrial systems and transducers. All previously studied material will be applied to motor controls, conversion devices, proximity controls, sequence timing, induction and dielectric heating, temperature controls, etc. Numerical controlled machines and programmable controllers are also taught as needed for the development of CRT terminals. Several other terminals are also taught.

#### Industrial Lab EL265

Quarter Credits 5.0

Industrial circuits and systems are constructed during this phase utilizing the technologies previously learned. Logical test procedures and troubleshooting techniques are emphasized throughout this quarter. Practical experience is also gained through exposure to on-site computer peripherals.

#### Computer Electronics EL261

**Quarter Credits 8.0** 

This quarter provides a comprehensive study of computers and computer peripherals. Advanced microprocessors will be studied in the form of programming the 8088 in machine language. The student will begin programming in BASIC. In addition to programming the student shall be introduced to peripheral devices such as keyboards, monitors, and printers. Modems, disk drives and tape drives will also be studied.

## Administration

John E. Moore School President

Thomas W. Gerwatowski Education Director

Stanley Mars
Admissions Director

Sara Zarzycki Business Manager

Nancy Kennedy Financial Aid Director

Jean Lessien Placement Director Officers of NEC, Inc.

Harvey Goldstein
Chairman of the Board & President

Vince Pisano Vice-President -Finance and Administration

**Gerry Kosentos** Vice-President - Operations

**Board of Directors** 

Harvey Goldstein Chairman of the Board

Jeffrey A. Brill

#### National Education Centers

The following schools are accredited by the Accrediting Commission of the National Association of Trade and Technical Schools:

## National Education Center - Bryman Campus located in:

Anaheim, CA Canoga Park, CA Chicago, IL (Extension) Oak Lawn, IL (Branch of Oak Park, IL) Oak Park, IL Long Beach, CA Los Angeles, CA San Jose, CA Torrance, CA San Francisco, CA Rosemead, CA Phoenix, AZ Atlanta, GA Houston, TX - North Campus (Branch of Houston -South Campus) Houston, TX - South Campus Brookline, MA Detroit, MI

## National Education Center · National Institute of Technology Campus located in:

Anaheim, CA
Cross Lanes, WV
Cuyahoga Falls, OH
East Detrolt, MI
Livonia, MI
Wyoming, MI
West Des Moines, IA
Homewood, AL
Dallas, TX
Universal City, TX

The following schools are accredited by the Accrediting Commission of the Association of Independent Colleges and Schools:

National Education Center -Sawyer Campus Los Angeles, CA National Education Center · Sawyer Campus Sacramento, CA National Education Center -Allentown Business School Campus Allentown, PA National Education Center -Thompson Institute Campus Harrisburg, PA National Education Center -Thompson Institute Campus Philadelphia, PA National Education Center -Kansas City Business College Campus Kansas City, MO National Education Center -Skadron College of Business Campus San Bernardino, CA National Education Center -Temple School Campus Silver Spring, MD National Education Center -Temple School Campus Baltimore, MD National Education Center -Temple School Campus Bailey's Crossroads, VA National Education Center -Kee Business College Campus Norfolk, VA National Education Center -Kee Business College Campus Newport News, VA National Education Center -Kee Business College Campus Portsmouth, VA National Education Center -Kee Business College Campus Richmond, VA





# Leaders in Vocational Training

National Education Centers have been providing comprehensive vocational training that is responsive to the changing needs of business and industry for more than 30 years.

To keep up with the pace of an increasingly sophisticated world, National Education offers handson instruction that uses the same technology and equipment found in today's workplace. Courses are continually updated to meet current employment requirements. At National Education, you will learn the valuable technical skills that can help place you in the job of your choice after graduation.

More than 50 campuses located in 22 states offer training in fields ranging from health care, secretarial sciences and electronics to business management and computer science. Whichever field you have selected, National Education can teach you the skills you need to succeed.

