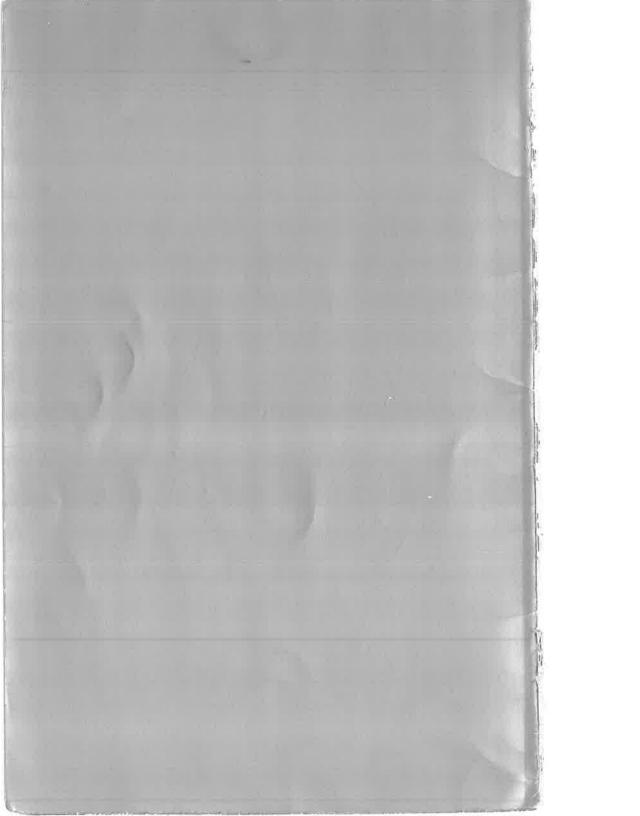
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**National Education Center** 

Catalog 1984-1985

National Institute of Technology Campus 5514 Big Tyler Road Cross Lanes, WV 25313 (304) 776-6290



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Facilities, Calendar, Tuition & Fees; Refund Policy; School Policies; Program Descriptions (Length, Objectives, Scope & Sequence, Degrees, Diplomas and Certificates Offered, Equipment, Class Size)...See Addendum.

#### **About National Education Centers**

This school is part of a nationwide chain of National Education Centers across the U.S., owned and operated by 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 resources development.

With headquarters in Newport Beach, California, and through schools across the U.S., National Education Centers provide vital, joboriented 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, business 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.



## Educational Philosophy

## Admission Requirements

It is our 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.

Applicants must be high school graduates or be able to qualify under the G.E.D. Testing Programs. It is the responsibility of the applicant to furnish proof of high school graduation or G.E.D. evaluation PRIOR to entering school.

#### **Exceptions:**

If an applicant does not meet the Entrance Requirement but, in the opinion of the School Director or Education Coordinator, can benefit from the training offered an exception can be made.

The student must then qualify for enrollment by passing the Entrance Test for the program in which they wish to enroll.

## Summary of 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 experience.

- —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.

## 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 starting date. To apply, complete the Qualification Questionnaire or 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 for 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.
- Student Health Notice for Allied Health programs (must be submitted by class start).
- Payment of Registration Fee.

## Acceptance by the School

Once the completed Enrollment Agreement and items mentioned above have been submitted, the school reviews the Qualification Questionnaire 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.

#### **Tuition and Fees**

See supplementary information in the addendum to this Catalog.

## 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 (including student dishonesty, unprofessional conduct, use of profanity, insubordination, violation of safety rules, use of alcohol or drugs on school property, 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 school has a dress code appropriate for each program. Students are required to follow the Dress Code for the program in which they are enrolled. Infractions 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.

#### Classroom Size

To provide meaningful instruction and training, classes are limited in size. The maximum student/instructor ratio is contained in the current addendum to this catalog.



## Rules and Regulations (Continued)

#### **Measure of Course Duration**

The School measures it 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 10 week term.

For laboratory class periods, one quarter hour equals two clock hours per week for a 10 week term.

For externship work experience, six quarter hours are assigned for 160 clock hours during a four 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 schools reserve 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 (Modular System)

Students may be suspended from school if they do not maintain Satisfactory Attendance as described by the school in the addendum of this catalog.

Students may be suspended from school if they are absent three days in any Module or have more than a total of nine absences during the entire program. Students who are absent four or more days in any Module MUST repeat that Module prior to graduation.

**NOTE:** Under extenuating circumstances, more than nine absences may be approved by the school Director; any absences beyond the total of nine for the program are required to be made up prior to graduation, either during Externship or additional class hours.

## Attendance (Quarter System)

Students may be suspended from school if they do not maintain Satisfactory Attendance each Quarter.

Students maintain Satisfactory Attendance if they attend 90% of the scheduled class time per Quarter. Any student whose attendance falls between 80%—90% is placed on Probation. If the student's attendance falls below 80%, the student is subject to termination from the school.

NOTE: Under extenuating circumstances, a student may continue in the school if the attendance falls below 80%. This exception is made by the school Director and appropriate documentation for the exception is kept in the student's file.

#### **Tardiness**

Each student is expected to be in class on time, Students who enter class after the class begins or who leave early, shall be counted as tardy. Accumulation of four tardies within a quarter or module is counted as an absence.

#### Leave of Absence Policy

Under extenuating circumstances, students may be permitted to interrupt their training with a leave of absence (L.O.A.).

Approval for the leave of absence will be granted by the school director.

#### **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 studying materials issued by their instructors.

#### **Grading Standards**

| A-100-90 | 4.0 | $\uparrow$        |
|----------|-----|-------------------|
| B— 89-80 | 3.0 |                   |
| C 79-70  | 2.0 | (Satisfactory     |
|          |     | Progress)         |
| D 69-65  | 1.0 | (Not Satisfactory |
|          |     | Progress)         |
| F— 64- 0 | 0   | (Failed) ↓        |

### Make-up Work

Students are required to make up all assignments and work missed as 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.

#### Transfer of Credit

Information concerning other schools which accept our credits toward their degree programs can be obtained by contacting the office of the School Director.

#### **Credit for Previous Training**

The school maintains a written record of the previous education and training of all students and appropriate credit is granted for previous education and training with the training period shortened proportionately and the person and interested agencies so notified. Any one interested in credit for previous training should make a written request to the school at least one month prior to the start of the program to allow for evaluation of the request.

#### **Student Progress Counseling**

Educational objectives, grades, attendance and conduct will normally be reviewed on a regular basis. If a student is failing or not following attendance, conduct or dress rules, the student will be counseled. Failure to correct deficiencies may result in termination. Students desiring academic counseling are encouraged to contact a member of the Education Department.

#### Withdrawals

If a student finds it necessary to withdraw from school, it is the student's responsibility to immediately notify the school in writing.

#### **Dismissal Procedures**

Students may be terminated by the School for Cause. Examples include but are not limited to the following:

- 1. Excessive Absences or Tardies
- 2. Failure to maintain Satisfactory Academic Progress
- 3. Cheating
- 4. Conduct that reflects poorly on the school or other students
- 5 Inability to meet financial obligations

Students to be terminated are notified in writing and may appeal the decision by filing a written

## Rules and Regulations (Continued)

appeal to the School Director within one week of Notice of Termination.

#### **Exit Interviews**

Students who discontinue their training for any reason are required to have an Exit Interview with the School Director before any formal processing of a request for leave or discontinuation may be granted.

#### **Allied Health**

Students entering an Allied Health program must present a Health Notice to the school PRIOR to beginning the program which evidences

the student's good health and which is prepared by the student's physician. Health Notice forms are furnished by the school.

Due to X-ray requirements, applicants for Allied Health programs must be at least 17 years of age when they begin classes.

## **Veteran Students**

Absence and Tardiness rules are governed by V.A. regulations. For benefit purposes, absences and tardies may be computed in a manner different from that described in this catalog.



## Financial Aid and Tuition Assistance

This school is eligible to participate in several financial assistance programs. The largest program is the Guaranteed Student Loan (GSL). Those who qualify for assistance can borrow up to \$2500 under this program. This type of loan is secured through a financial institution (bank, savings and loan, etc.) and is guaranteed by the U.S. Government. Repayment is made according to standard terms set forth by the Government. We are also eligible to participate in the Parent Loan for Undergraduate Students (PLUS) loan program. Loan origination fees may be deducted from the loan by the institution making the loan as set forth by government regulations.

We are also eligible for the following Federal education assistance programs:

PELL—previously Basic Educational Opportunity Grant

SEOG—Supplemental Educational Opportunity Grant

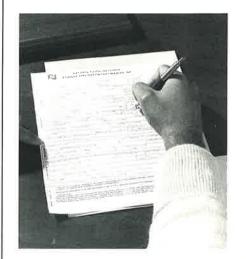
NDSL—National Direct Student Loan

Additional information may be obtained by contacting one of our authorized representatives or by writing to the Director of Financial Aid at the School.

Those students interested in applying for school benefits from VA, BIA, Vocational Rehabilitation or Social Security should contact their local agency or write the School for further information.

## Statement of Non-Discrimination

National Education Center 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.



## 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 postsecondary 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.
  - 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, 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.
- 6. As a postsecondary 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.

#### Student Services

#### Orientation

Although the school does not maintain dormitory facilities, students who are relocating and must arrange their own housing may request additional assistance from the School Director.

#### Car Pooling

If you are interested in driving in a car pool or need a ride to school, see your Student Services Representative. You will receive the help you need to solve your transportation problem.

#### Student Employment

The school will assist students in locating part-time or full-time employment to assist them in meeting their living expenses during their studies.

Employment assistance includes:

- Counseling to prepare for an interview
- 2. A list of specific job openings, when available.
- 3. Assistance with securing an interview.

#### Tutoring

Tutoring is available on an as-needed basis. To schedule tutoring, contact a member of the Education Department.

#### **Field Trips**

It is the school's belief that course material is greatly enhanced by student exposure to real life applications. Where appropriate, visits to industry or professional offices where interesting or different methods can be observed are frequently arranged.

#### **Special Lectures**

In order to expose students to various industry applications or current methods, guest speakers may be invited, as appropriate and as permitted by class schedules.

#### Student Services

Contact a member of the Education Department for other student services that may be provided by the school.

## Graduate Placement Assistance

Graduates are counseled regarding opportunities for job interviews. While no ethical school can guarantee employment, this school makes a sincere effort toward successful placement of its graduates.

During the last month of training, each student desiring job placement assistance is expected to make application to the Placement Director. Each student participates in proper interviewing conduct and procedures, preparing resumes and letters of introduction, prior to the school arranging placement interviews. Student referrals for job placement results from direct contact between the school placement officer and prospective employer representatives. Prospective

employers may visit the school from time to time for recruitment purposes. Following graduation, or at any time thereafter, graduates may avail themselves of the school's placement assistance program. The school will make a reasonable effort to satisfy the wishes of a graduate as to location and type of employment. The more flexible a graduate can be regarding initial employment, the easier it is for the school to assist in placement.

**NOTE:** Failure on the student's part to follow placement procedures may result in discontinuation of placement services.



National Education Center-

Allentown Business School Campus, Allentown, PA

National Education Center-

Vale Technical Institute Campus, Blairsville, PA

National Education Center—

Thompson Institute Campus, Harrisburg, PA

National Education Center—

Thompson Institute Campus, Philadelphia, PA (Branch)

National Education Center—

Kentucky College of Technology Campus, Louisville, KY

National Education Center—

RETS Campus, Nutley, NJ

National Education Center—

Kansas City Business College Campus, Kansas City, MO

National Education Center—

Brown Institute Campus, Minneapolis, MN

National Education Center—

Brown Institute Campus, Ft. Lauderdale, FL

National Education Center-

Bauder College Campus, Ft. Lauderdale, FL

National Education Center—

Arkansas College of Technology Campus, Little Rock, AR

National Education Center-

Tampa Technical Institute Campus, Tampa, FL

National Education Center—

Spartan School of Aeronautics Campus, Tulsa, OK

National Education Center-

Arizona Automotive Institute Campus, Glendale, AZ

National Education Center—

Skadron College of Business Campus, San Bernardino, CA

National Education Center-

Rhode Island Trades Shops School Campus, Providence, RI

The following schools are accredited by the Accrediting Commission of the Association of Independent College & Schools:

National Education Center—

Allentown Business School Campus

National Education Center-

Thompson Institute Campus, Philadelphia & Harrisburg

National Education Center—

Kansas City Business College Campus

National Education Center-

Skadron College of Business Campus

National Education Center—

Sawyer Campus, Anaheim, L.A. & Sacramento

The remainder of the affiliated schools are accredited by the Accrediting Commission of the National Association of Trade & Technical Schools.

### **National Education Centers**

#### Affiliated Institutions: National Education Center— Bryman Campus Located In:

Anaheim, CA

Canoga Park, CA

Long Beach, CA

Los Angeles, CA

Orange, CA (Branch)

Phoenix, AZ

Rosemead, CA

San Francisco, CA

San Jose, CA

Torrance, CA

Atlanta, GA

Houston, TX

Brookline, MA

East Brunswick, NJ

Oak Park, IL

#### National Education Center— National Institute of Technology Campus Located In:

Cross Lanes, WV

Cuyahoga Falls, OH

East Detroit, MI (Branch)

Livonia, MI

Wyoming, MI

West Des Moines, IA

Homewood, AL

Dallas, TX

Oklahoma City, OK

Universal City, TX

Cypress, CA (Ext)

### National Eduction Center— Sawyer Campus Located in:

Los Angeles, CA

Anaheim, CA

Sacramento, CA

phase lock loop principles, are also studied.

#### **ELECTRONICS 202**

The theory and operation of microprocessors are thoroughly examined. Assembly language programming with program debugging techniques are also studied. Several families of microprocessors are examined. The hardware and software implications of using different IC families are compared. All the necessary support hardware is also taught such as, memory devices and architecture, drivers, decoders, executive programs, etc.

#### **ELECTRONICS 203**

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 dielectic heating, temperature controls, etc. Numerical controlled machines and programmable controllers are taught in detail. Television concepts are also taught as needed for the development of CRT terminals. Several other terminals are also taught.

#### **ELECTRONICS 301**

This quarter provides a comprehensive study of computers and computer peripherals which includes the theory and operation of card punchers, card readers, cassette, data communications equipment, disk packs, floppy disks, line printers, magnetic recording devices, magnetic tape stations and modems. Basic programming is extensively taught along with an introduction to several business languages.

# ELECTRONICS LABORATORY 101 Resistors, capacitors and inductors are utilized to construct DC and AC circuits and then pertinent voltage, current and

power measurements are performed. There are also laboratory projects to demonstrate the principles of electromagnetism and automotive electrical

systems.

Appropriate test equipment, such as the oscilloscope and the volt-ohmmilliammeter, are used to either troubleshoot or analyze circuit conditions.

ELECTRONICS LABORATORY 102
A solid state superheterodyne receiver is constructed which afford the student an opportunity to test and examine many of the circuits that are discussed in lecture. Besides the circuits in the radio, various other amplifiers, oscillators, and power supplies are constructed and pertinent measurements are performed. Practical troubleshooting techniques that utilize the signal generator, oscilloscope and VOM are emphasized throughout this phase.

ELECTRONICS LABORATORY 103 Many of the power supplies and amplifiers designed and discussed in theory are constructed and tested. Measurements of gain, input-and output impedance, frequency response, etc. are performed.

#### **ELECTRONICS 104**

Linear integrated circuits and specialized ICs are also used as the student learns to interpret manufacturer's data sheets and application notes.

ELECTRONICS LABORATORY 201
The digital circuits discussed in theory are constructed using digital ICs. The student will learn through the construction of several prototypes, the importance of decoupling, fan-in and fan-out limitations and interfacing techniques. Through the designing, construction and troubleshooting of these prototypes, the student will experience many of the same problems that will be encountered when later working in the field.

ELECTRONICS LABORATORY 202
During this phase, the students will write machine language programs, enter and debug these programs, and construct many interfaces as they learn microprocessors. Hands-on experience with RAMS, ROMS, and other microprocessor support chips will enable the student to better understand the microprocessor based systems that will be encountered in

industrial electronics and computers. Serial to parallel and parallel to serial conversion techniques, as well as digital to analog and analog to digital conversion as they apply to microprocessors, are also examined.

ELECTRONICS LABORATORY 203 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.

ELECTRONICS LABORATORY 301
The students breadboard digital circuits that are representative of the individual sections of the computer.
Hands-on experience with computer hardware is achieved through extensive examination and troubleshooting of on-site computers. During the last half of this phase, the students select a project which they individually must conceive, research, design, prototype, debug and present to their class.

#### MATHEMATICS 101

The basic fundamentals of arithmetic, which include addition, subtraction, multiplication, division, fractions, decimals, powers, roots, scientific notation, ratio and proportion, are reviewed and applied to Ohm's Law, the power formulas. The calculator and its applications are also presented in this phase. Basic algebra is reviewed and applied to linear equations, graphs, factoring, exponents and radicals, which provides preparation for comprehension of advanced electronic formulas.

#### MATHEMATICS 102

This phase applies the Pythagorean theorem to resistive-capacitive, resistive-inductive, and resistive capacitive-inductive circuits. The techniques for solving linear equations and story problems are emphasized through a continuation of basic algebra. The trigonometric functions are introduced and applied to simple and complex AC circuits.

#### MATHEMATICS 103

This phase provides a thorough study of common logarithms and their applications. Logarithms are used to solve multiplication, division, roots and power problems. They are also extensively applied to voltage, current and power calculations through decibel problems.

#### MATHEMATICS 104

During this module, previously learned formulas and math techniques are applied to the design of operational amplifiers and specialized filter circuits.

#### MATHEMATICS 201

The binary, octal and hexidecimal numbering systems and conversion techniques between the systems are studied during this phase. Digital arithmetic and codes are also covered including Boolean algebra and Karnaugh mapping. In addition, the Thevinen, Norton and Superposition theorems are studied and applied to electronic circuit analysis.

#### MATHEMATICS 202

This phase provides additional study in algebra which includes transposition, binomial and trinomial factoring, and solution of multi-variable linear equations. The fundamentals of trigonometry and J operators are reviewed and utilized.

#### **MATHEMATICS 203**

This phase provides an introduction to calculus, which includes algebraic graphs, functions, limits, increments and derivatives. These early principles of calculus are applied to average and instantaneous rate of change problems including transient waveform analysis.

#### MATHEMATICS 301

This phase provides additional studies in calculus with emphasis on differentiation and integration. The terminal objective of this quarter is to enable the student to pursue advanced electronics theory.

#### **ENGINEERING DRAWING 101**

A study and application of basic drafting techniques which includes graphic symbols, basic lines and line weights, lettering, geometrical constructions, various types of views and projections, dimensioning, notes, and a familiarization with JIC standards.

#### **ENGINEERING DRAWING 102**

This phase applies the basic drafting techniques that were studied in Drawing 101 to schematic diagrams. Schematics of solid state devices are emphasized and the layout and design of printed circuit boards is taught.

#### TECHNICAL WRITING 101

The basic principles of grammar, punctuation, sentence and paragraph construction are reviewed in preparation for technical report writing.

### TECHNICAL WRITING 201

During this phase, the student will study the fundamentals of technical writing which include methods for logical organization of ideas and a format for technical reports. Experience is achieved in this area by submitting technical reports on the laboratory projects that are conducted throughout the quarter.

#### **COMMUNICATIONS 201**

This course emphasizes the accurate and effective communication by written word of data and/or ideas. Resumes, technical and business correspondence are also studied during this phase.

#### **COMMUNICATIONS 301**

The basic principles of oral expression are explored during this phase. The students receive experience in this area by giving oral presentations on technical topics. Particular emphasis is given throughout the quarter to communications within the work environment beginning with the employment interview.

#### PHYSICS 201

This phase explores the basic principles of force, motion, work, energy, power, friction, rotation, torque, gears, pulleys which provide preparation for the mechanical aspects of electronic devices. The nature of light and the principles of optical instruments are also studied.

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## ELECTRONIC ENGINEERING TECHNOLOGY

#### **ELECTRONICS 101**

A study of the fundamental principles of electrical conduction includes the effects of series and parallel resistors, capacitors and inductors on voltage, current and power. The principles of magnetism and electromagnetism will be explored through solenoids, alternators, generators and motors. Some of the electrical principles studied in this quarter will be illustrated with the automotive electrical system.

#### **ELECTRONICS 102**

A comprehensive study of solid state principles and circuits which includes the static and dynamic characteristics of low and high frequency amplifiers. The operating characteristics of rectifiers will be studied and applied to power supply circuits. The operation and function of basic electronic circuits, such as AF amplifiers, RF amplifiers, detectors, AGC, various relaxation oscillators, mixers, antenna input circuits, as they apply to AM/FM radio/transmitters/receivers are analyzed. In addition, basic troubleshooting will be presented.

#### **ELECTRONICS 103**

Design Techniques using discrete solid state components are studied with emphasis on power supplies and single and cascade amplifiers.

#### **ELECTRONICS 104**

A comprehensive study of design techniques using manufacturers data sheets for linear integrated circuits, and their applications as active filters, comparators and function generators.

#### **ELECTRONICS 201**

A presentation of the building blocks of digital electronics which includes basic gates, encoders, decoders, flipflops, counters, shift registers, multiplexers, demultiplexers, digital readouts, basic arithmetic units and digital integrated circuits. Applications of digital electronics are also examined. Analog-to-digital and digital-to-analog conversion techniques, along with IC timers and

phase lock loop principles, are also studied.

#### **ELECTRONICS 202**

The theory and operation of microprocessors are thoroughly examined. Assembly language programming with program debugging techniques are also studied. Several families of microprocessors are examined. The hardware and software implications of using different IC families are compared. All the necessary support hardware is also taught such as, memory devices and architecture, drivers, decoders, executive programs, etc.

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ELECTRONICS LABORATORY 101
Resistors, capacitors and inductors are utilized to construct DC and AC circuits and then pertinent voltage, current and power measurements are performed. There are also laboratory projects to demonstrate the principles of electromagnetism and automotive electrical systems.

Appropriate test equipment, such as the oscilloscope and the volt-ohmmilliammeter, are used to either troubleshoot or analyze circuit conditions.

ELECTRONICS LABORATORY 102
A solid state superheterodyne receiver is constructed which afford the student an opportunity to test and examine many of the circuits that are discussed in lecture. Besides the circuits in the radio, various other amplifiers, oscillators, and power supplies are constructed and pertinent measurements are performed. Practical troubleshooting techniques that utilize the signal generator, oscilloscope and VOM are emphasized throughout this phase.

ELECTRONICS LABORATORY 103 Many of the power supplies and amplifiers designed and discussed in theory are constructed and tested. Measurements of gain, input and output impedance, frequency response, etc. are performed.

#### **ELECTRONICS 104**

Linear integrated circuits and specialized ICs are also used as the student learns to interpret manufacturer's data sheets and application notes.

ELECTRONICS LABORATORY 201
The digital circuits discussed in theory are constructed using digital ICs. The student will learn through the construction of several prototypes, the importance of decoupling, fan-in and fan-out limitations and interfacing techniques. Through the designing, construction and troubleshooting of these prototypes, the student will experience many of the same problems that will be encountered when later working in the field.

ELECTRONICS LABORATORY 202
During this phase, the students will write machine language programs, enter and debug these programs, and construct many interfaces as they learn microprocessors. Hands-on experience with RAMS, ROMS, and other microprocessor support chips will enable the student to better understand the microprocessor based systems that will be encountered in

industrial electronics and computers. Serial to parallel and parallel to serial conversion techniques, as well as digital to analog and analog to digital conversion as they apply to microprocessors, are also examined.

ELECTRONICS LABORATORY 203 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.

ELECTRONICS LABORATORY 301
The students breadboard digital circuits that are representative of the individual sections of the computer.
Hands-on experience with computer hardware is achieved through extensive examination and troubleshooting of on-site computers. During the last half of this phase, the students select a project which they individually must conceive, research, design, prototype, debug and present to their class.

### **MATHEMATICS 101**

The basic fundamentals of arithmetic, which include addition, subtraction, multiplication, division, fractions, decimals, powers, roots, scientific notation, ratio and proportion, are reviewed and applied to Ohm's Law, the power formulas. The calculator and its applications are also presented in this phase. Basic algebra is reviewed and applied to linear equations, graphs, factoring, exponents and radicals, which provides preparation for comprehension of advanced electronic formulas.

#### MATHEMATICS 102

This phase applies the Pythagorean theorem to resistive-capacitive, resistive-inductive, and resistive capacitive-inductive circuits. The techniques for solving linear equations and story problems are emphasized through a continuation of basic algebra. The trigonometric functions are introduced and applied to simple and complex AC circuits.

#### **MATHEMATICS 103**

This phase provides a thorough study of common logarithms and their applications. Logarithms are used to solve multiplication, division, roots and power problems. They are also extensively applied to voltage, current and power calculations through decibel problems.

#### MATHEMATICS 104

During this module, previously learned formulas and math techniques are applied to the design of operational amplifiers and specialized filter circuits.

#### **MATHEMATICS 201**

The binary, octal and hexidecimal numbering systems and conversion techniques between the systems are studied during this phase. Digital arithmetic and codes are also covered including Boolean algebra and Karnaugh mapping. In addition, the Thevinen, Norton and Superposition theorems are studied and applied to electronic circuit analysis.

#### **MATHEMATICS 202**

This phase provides additional study in algebra which includes transposition, binomial and trinomial factoring, and solution of multi-variable linear equations. The fundamentals of trigonometry and J operators are reviewed and utilized.

#### **MATHEMATICS 203**

This phase provides an introduction to calculus, which includes algebraic graphs, functions, limits, increments and derivatives. These early principles of calculus are applied to average and instantaneous rate of change problems including transient waveform analysis.

#### MATHEMATICS 301

This phase provides additional studies in calculus with emphasis on differentiation and integration. The terminal objective of this quarter is to enable the student to pursue advanced electronics theory.

#### **ENGINEERING DRAWING 101**

A study and application of basic drafting techniques which includes graphic symbols, basic lines and line weights, lettering, geometrical constructions, various types of views and projections, dimensioning, notes, and a familiarization with JIC standards.

#### **ENGINEERING DRAWING 102**

This phase applies the basic drafting techniques that were studied in Drawing 101 to schematic diagrams. Schematics of solid state devices are emphasized and the layout and design of printed circuit boards is taught.

#### **TECHNICAL WRITING 101**

The basic principles of grammar, punctuation, sentence and paragraph construction are reviewed in preparation for technical report writing.

### **TECHNICAL WRITING 201**

During this phase, the student will study the fundamentals of technical writing which include methods for logical organization of ideas and a format for technical reports. Experience is achieved in this area by submitting technical reports on the laboratory projects that are conducted throughout the quarter.

#### **COMMUNICATIONS 201**

This course emphasizes the accurate and effective communication by written word of data and/or ideas. Resumes, technical and business correspondence are also studied during this phase.

#### **COMMUNICATIONS 301**

The basic principles of oral expression are explored during this phase. The students receive experience in this area by giving oral presentations on technical topics. Particular emphasis is given throughout the quarter to communications within the work environment beginning with the employment interview.

#### PHYSICS 201

This phase explores the basic principles of force, motion, work, energy, power, friction, rotation, torque, gears, pulleys which provide preparation for the mechanical aspects of electronic devices. The nature of light and the principles of optical instruments are also studied.

Printed 1984—Cross Lns., W. Virginia

## ELECTRONIC ENGINEERING TECHNOLOGY

#### **ELECTRONICS 101**

A study of the fundamental principles of electrical conduction includes the effects of series and parallel resistors, capacitors and inductors on voltage, current and power. The principles of magnetism and electromagnetism will be explored through solenoids, alternators, generators and motors. Some of the electrical principles studied in this quarter will be illustrated with the automotive electrical system.

#### **ELECTRONICS 102**

A comprehensive study of solid state principles and circuits which includes the static and dynamic characteristics of low and high frequency amplifiers. The operating characteristics of rectifiers will be studied and applied to power supply circuits. The operation and function of basic electronic circuits, such as AF amplifiers, RF amplifiers, detectors, AGC, various relaxation oscillators, mixers, antenna input circuits, as they apply to AM/FM radio/transmitters/receivers are analyzed. In addition, basic troubleshooting will be presented.

#### **ELECTRONICS 103**

Design Techniques using discrete solid state components are studied with emphasis on power supplies and single and cascade amplifiers.

#### **ELECTRONICS 104**

A comprehensive study of design techniques using manufacturers data sheets for linear integrated circuits, and their applications as active filters, comparators and function generators.

#### **ELECTRONICS 201**

A presentation of the building blocks of digital electronics which includes basic gates, encoders, decoders, flipflops, counters, shift registers, multiplexers, demultiplexers, digital readouts, basic arithmetic units and digital integrated circuits. Applications of digital electronics are also examined. Analog-to-digital and digital-to-analog conversion techniques, along with IC timers and

phase lock loop principles, are also studied.

#### **ELECTRONICS 202**

The theory and operation of microprocessors are thoroughly examined. Assembly language programming with program debugging techniques are also studied. Several families of microprocessors are examined. The hardware and software implications of using different IC families are compared. All the necessary support hardware is also taught such as, memory devices and architecture, drivers, decoders, executive programs, etc.

#### **ELECTRONICS 203**

This guarter 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 dielectic heating, temperature controls, etc. Numerical controlled machines and programmable controllers are taught in detail. Television concepts are also taught as needed for the development of CRT terminals. Several other terminals are also taught.

#### **ELECTRONICS 301**

This quarter provides a comprehensive study of computers and computer peripherals which includes the theory and operation of card punchers, card readers, cassette, data communications equipment, disk packs, floppy disks, line printers, magnetic recording devices, magnetic tape stations and modems. Basic programming is extensively taught along with an introduction to several business languages.

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Resistors, capacitors and inductors are utilized to construct DC and AC circuits and then pertinent voltage, current and power measurements are performed. There are also laboratory projects to demonstrate the principles of electromagnetism and automotive electrical systems.

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## BUSINESS COMPUTER PROGRAMMING ASSOCIATE DEGREE PROGRAM

Objectives: The Business Computer Programming Course is designed to prepare the student for an entry-level position in data processing as a junior programmer or operator. The principles discussed in lectures are reinforced with hands-on training on the IBM System/34 computer located in the classroom at the school.

|                                       | CONTACT | QUARTER |
|---------------------------------------|---------|---------|
| COURSE                                | HOURS   | CREDITS |
| QUARTER I                             | 400     | 44.05   |
| BASIC 101                             | 180     | 11.25   |
| Data Processing 101                   | 60      | 5.0     |
| QUARTER II                            |         |         |
| RPG II 102                            | 180     | 11.25   |
| Business Math 101                     | 60      | 3.75    |
| QUARTER III                           |         |         |
| Advanced RPG II 103                   | 240     | 15      |
| QUARTER IV                            |         |         |
| COBOL 104                             | 180     | 11.25   |
| Business Systems and Applications 101 | 60      | 5.0     |
| Lab 104                               |         |         |
| QUARTER V                             |         |         |
| Advanced COBOL 201                    | 200     | 12.5    |
| Technical Writing 101                 | 40      | 3.25    |
| Lab 201                               |         |         |
| QUARTER VI                            |         |         |
| Systems Analysis 201                  | 200     | 12.5    |
| Communications 201                    | 40      | 3.25    |
| Lab 202                               | ÷====0  |         |
| TOTAL                                 | 1440    | 93.5    |

Upon the successful completion of all areas of the 18 month (1440 clock hour) program an Associate Degree will be awarded.

#### Equipment

IBM System 34-Mini Computer System using an F-25 Printer

## **Business Computer Programming**

#### QUARTER ONE:

A. This course is designed for students beginning to study programming and includes BASIC, computer systems, and the use of IBM System-34 peripherals.

#### QUARTER TWO:

- A. This quarter has two objectives:
  - This quarter is designed to provide the student with an understanding of RPGII and IBM System-34 utilities.
  - 2. The second objective involves the study of business mathematics.

#### QUARTER THREE:

- A. The purpose of this quarter is to present advanced RPGII.
- B. In addition, the student will learn to operate the system console and learn to use data file utility.

#### QUARTER FOUR:

- A. This course is an introduction to structured COBOL.
- B. The student will also have an understanding of the roll of the computer in business and basic accounting principles.

#### QUARTER FIVE:

- A. This quarter is a study of advanced COBOL programming.
- B. Technical Writing skills are also covered this quarter.

#### QUARTER SIX:

- A. This final quarter will provide the student with exposure to business systems analysis.
- B. Technical communication skills will be covered.
- C. And the student will be responsible for writing a full-fledged program geared to business applications.

#### **Computer Programming**

With the advent of the age of microelectronics, computers are now in everyone's lives—to stay. In today's world of business, the computer has become the common denominator of efficient business, with information systems personnel contributing daily to the vital decisions in business operations. There is virtually no aspect of our economy that does not depend either directly or indirectly on computers and the people behind them. Computers must be programmed by well-trained, logical, and creative people who are familiar with a variety of languages and business situations. Our training provides skill courses and laboratory work to produce the professional for entry into this growing field. This can truly be called "the 21st century" career.

## BUSINESS COMPUTER PROGRAMMING ASSOCIATE DEGREE PROGRAM

Objectives: The Business Computer Programming Course is designed to prepare the student for an entry-level position in data processing as a junior programmer or operator. The principles discussed in lectures are reinforced with hands-on training on the IBM System/34 computer located in the classroom at the school.

|                                       | CONTACT | QUARTER |
|---------------------------------------|---------|---------|
| COURSE                                | HOURS   | CREDITS |
| QUARTER I                             |         |         |
| BASIC 101                             | 180     | 11.25   |
| Data Processing 101                   | 60      | 5.0     |
| QUARTER II                            |         |         |
| RPG II 102                            | 180     | 11.25   |
| Business Math 101                     | 60      | 3.75    |
| QUARTER III                           |         |         |
| Advanced RPG II 103                   | 240     | 15      |
| QUARTER IV                            |         |         |
| COBOL 104                             | 180     | 11.25   |
| Business Systems and Applications 101 | 60      | 5.0     |
| Lab 104                               |         |         |
| QUARTER V                             |         |         |
| Advanced COBOL 201                    | 200     | 12.5    |
| Technical Writing 101                 | 40      | 3.25    |
| Lab 201                               |         |         |
| QUARTER VI                            |         |         |
| Systems Analysis 201                  | 200     | 12.5    |
| Communications 201                    | 40      | 3.25    |
| Lab 202                               |         |         |
| TOTAL                                 | 1440    | 93.5    |

Upon the successful completion of all areas of the 18 month (1440 clock hour) program an Associate Degree will be awarded.

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- B. The student will also have an understanding of the roll of the computer in business and basic accounting principles.

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- B. Technical Writing skills are also covered this quarter.

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- B. Technical communication skills will be covered.
- C. And the student will be responsible for writing a full-fledged program geared to business applications.

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## ELECTRONICS ENGINEERING TECHNOLOGY

#### 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 be able to specialize in one of the following areas: Computer Electronics, Industrial Electronics or Electronic Engineering Technology.

| COURSES                           | CONTACT<br>HOURS | QUARTER<br>HOURS |
|-----------------------------------|------------------|------------------|
| Quarter I                         |                  |                  |
| Electronics 101                   | 100.0            | 8.3              |
| Laboratory 101                    | 90.0             | 3.6              |
| Mathematics 101                   | 50.0             | 4.1              |
| Quarter II                        | 00.0             | ***              |
| Electronics 102                   | 100.0            | 8.3              |
| Laboratory 102                    | 72.0             | 3.0              |
| Mathematics 102                   | 50.0             | 4.1              |
| Engineering Drawing 101           | 18.0             | .6               |
| Quarter III                       |                  |                  |
| Electronics 103                   | 80.0             | 6.7              |
| Laboratory 103                    | 72.0             | 3.0              |
| Mathematics 103                   | 50.0             | 4.1              |
| Engineering Drawing 102           | 18.0             | .6               |
| English Communications 101        | 20.0             | 1.6              |
| Quarter IV                        |                  |                  |
| Electronics 104                   | 80.0             | 6.7              |
| Laboratory 104                    | 90.0             | 3.6              |
| Mathematics 104                   | 50.0             | 4.1              |
| English Communications 201        | 20.0             | 1.6              |
| Quarter V                         |                  |                  |
| Electronics 201                   | 100.0            | 8.3              |
| Laboratory 201                    | 90.0             | 3.6              |
| Mathematics 201                   | 30.0             | 2.5              |
| Technical Writing 101             | 20.0             | 1.6              |
| Quarter VI                        |                  |                  |
| Electronics 202                   | 80.0             | 6.7              |
| Laboratory 202                    | 90.0             | 3.6              |
| Mathematics 202                   | 30.0             | 2.5              |
| Physics 201                       | 20.0             | 1.6              |
| Technical Writing 201 Quarter VII | 20.0             | 1.6              |
| Electronics 203                   | 100.0            | 0.0              |
| Laboratory 203                    | 100.0            | 8.3<br>3.6       |
| Mathematics 203                   | 90.0             |                  |
| Technical Writing 301             | 30.0<br>20.0     | 2.5<br>1.6       |
| Quarter VIII                      | 20.0             | 1.0              |
| Electronics 301                   | 110.0            | 9.2              |
| Laboratory 301                    | 90.0             | 3.6              |
| Mathematics 301                   | 20.0             | 1.6              |
| Technical Writing 401             | 20.0             | 1.6              |
| Course Totals                     | 1920.0           | 128.0            |

Upon successful completion of all areas of the 24 month (1,920 clock hour) program, an Associate Degree will be awarded.

#### **Electronics**

#### **EQUIPMENT LIST**

Audio Frequency Generators

Capacitance Meters

Computer Training Systems

Experiment Boards

Frequency Counters

Logic Analyzers

Microprocessor Training Devices

Pulse Generators

Signal Generators

Single and Dual Trace Oscilloscopes

Volt-ohm Meters

#### **Electronics**

The electronics industry is one of the fastest growing fields today. Employment opportunities in electronics are exceptionally good. The American Electronics Association estimates its members alone will need 48,000 additional technicians by 1985. Advances in technology steadily create additional jobs and opportunities for advancement in this field.

National Education Center's Electronics Programs provide the student with knowledge and skills necessary to gain 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 Center's Electronics Programs include ample "hands on" training on state-of-the-art 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 30 students.

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#### **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 be able to specialize in one of the following areas: Computer Electronics, Industrial Electronics or Electronic Engineering Technology.

| COMPORE  | CONTACT  | QUARTER    |
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| COURSES  | HOURS    | HOURS      |
| Quarter I  |          |            |
| Electronics 101  | 100.0    | 8.3        |
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| Technical Writing 201                                      | -20.0    | 1.6        |
| Quarter VII  | 20.0     | 1.0        |
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Volt-ohm Meters

#### Electronics

The electronics industry is one of the fastest growing fields today. Employment opportunities in electronics are exceptionally good. The American Electronics Association estimates its members alone will need 48,000 additional technicians by 1985. Advances in technology steadily create additional jobs and opportunities for advancement in this field.

National Education Center's Electronics Programs provide the student with knowledge and skills necessary to gain 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 Center's Electronics Programs include ample "hands on" training on state-of-the-art 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 30 students.

## ELECTRONICS ENGINEERING TECHNOLOGY

#### 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 be able to specialize in one of the following areas: Computer Electronics, Industrial Electronics or Electronic Engineering Technology.

| COURSES                                       | CONTACT<br>Hours | QUARTER<br>Hours |
|---|------------------|------------------|
| Quarter I                                     |                  |                  |
| Electronics 101                               | 100.0            | 8.3              |
| Laboratory 101                                | 90.0             | 3.6              |
| Mathematics 101 Quarter II                    | 50.0             | 4.1              |
| Electronics 102                               | 400.0            |                  |
| Laboratory 102                                | 100.0            | 8.3              |
| Mathematics 102                               | 72.0<br>50.0     | 3.0              |
| Engineering Drawing 101                       | 18.0             | 4.1<br>.6        |
| Quarter III                                   | 10.0             | .0               |
| Electronics 103                               | 80.0             | 6.7              |
| Laboratory 103                                | 72.0             | 3.0              |
| Mathematics 103                               | 50.0             | 4.1              |
| Engineering Drawing 102 Technical Writing 101 | 18.0             | .6               |
| Quarter IV                                    | 20.0             | 1.6              |
| Electronics 104                               | 90.0             | 0.7              |
| Laboratory 104                                | 80.0<br>90.0     | 6.7<br>3.6       |
| Mathematics 104                               | 50.0             | 3.6<br>4.1       |
| Technical Writing 201                         | 20.0             | 1.6              |
| Quarter V                                     | 20.0             | 1.0              |
| Electronics 201                               | 120.0            | 8.3              |
| Laboratory 201                                | 90.0             | 3.6              |
| Mathematics 201                               | 30.0             | 2.5              |
| Quarter VI                                    |                  | 1.6              |
| Electronics 202                               | 100.0            | . ~              |
| Laboratory 202                                | 100.0<br>90.0    | 6.7              |
| Mathematics 202                               | 50.0             | 3.6<br>2.5       |
|   | 50.0             | 2.5<br>1.6       |
| 0   |                  | 1.6              |
| Quarter VII                                   |                  | 1.0              |
| Electronics 203                               | 100.0            | 8.3              |
| Laboratory 203<br>Mathematics 203             | 90.0             | 3.6              |
| English Communication 301                     | 30.0             | 2.5              |
| Quarter VIII                                  | 20.0             | 1.6              |
| Electronics 301                               | 110.0            | 0.0              |
| Laboratory 301                                | 110.0<br>90.0    | 9.2<br>3.6       |
| Mathematics 301                               | 20.0             | 3.6<br>1.6       |
| English Communication 401                     | 20.0             | 1.6              |
| Course Totals                                 | 1920.0           | 128.0            |
| ######################################        | .020.0           | 140.0            |

Upon successful completion of all areas of the 24 month (1,920 clock hour) program, an Associate Degree will be awarded.

#### **Electronics**

#### **EQUIPMENT LIST**

Audio Frequency Generators
Capacitance Meters
Computer Training Systems
Experiment Boards
Frequency Counters
Logic Analyzers
Microprocessor Training Devices
Pulse Generators
Signal Generators
Single and Dual Trace Oscilloscopes
Volt-ohm Meters

#### **Electronics**

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Average class size is 30 students.

#### 1985 Holidays

Presidents Day 2/18 Spring Holiday 4/5 Memorial Day 5/27 Independence Day 7/4, 7/5 Labor Day 9/2 Thanksgiving 11/28, 11/29 Christmas Recess 12/23, 24, 25, 26, 27, 30, 31, 1/1, 2, & 3/86

## School Policies

#### Students Dress Code

Dress and grooming are expected to be appropriate and in keeping with acceptable business attire. Cleanliness and neatness are stressed. Many employers visit our campus 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. Please use good taste.

Listed below are items that are acceptable for classroom wear:

FEMALE STUDENT: Slacks, Skirts.

Dresses, Sweaters and Jackets.
Closed Shoes.
Eye Protectors
will be required
when necessary.

MALE STUDENT:

Slacks, Sport Shirts, Sweaters and Jackets. Closed Shoes. Eye Protectors will be required when necessary.

ITEMS NOT ACCEPTABLE for classroom wear: Shoes must be appropriate to the outfit. Sandals, Gym Shoes, etc. are not acceptable. Jeans, Army Pants, Carpenter Pants, Overalls, Bare Midriffs, Bra Tops, Shorts, Tee Shirts. Warmup Suits and other similar attire are not acceptable.

Students dressed inappropriately will not be admitted to class and/or exams. Excessive abuse of this policy will result in Dress Code Probation.

#### 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 contract 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.

#### **Conduct Standards**

Since you are preparing for a good job in business, your conduct should be that which is normally required in a business office. Use of profanity, alcoholic beverages or drugs on school property are all grounds for immediate suspension. No eating, drinking or smoking is permitted in the classrooms.

#### **Entrance Requirement**

In addition to having a high school transcript or G.E.D. certificate, applicants may also be required to pass an entrance test in order to enroll in the school's programs.

## Satisfactory Progress

### **Definition of Satisfactory Progress**

To remain eligible for Financial Aid, students must continue to make acceptable academic progress.

The student must be enrolled in an eligible program of instruction and must either:

 Be maintaining a minimum cumulative grade point average (GPA) of 2.0;

or

2. Be on academic probation.

If, at the end of the Probationary Quarter, the student's cumulative grade point average is less than 2.0, the student will be suspended from school and will be ineligible for further financial assistance.

### **Probationary Status**

Students not meeting the Grading Standards will be placed on Probation. Probation will extend through one Quarter.

#### Academic Probation

Students are placed on Academic Probation for a period of one Quarter if they have failed to maintain a cumulative grade point average of at least 2.0 as measured at the end of the last Quarter.

Students are removed from academic probation if they achieve a cumulative grade point average of 2.0 at the end of their Probationary Quarter.

#### Repeating of Course Work

To continue in the program, students who fail any course must retake those courses. If the student is required to repeat Quarters of training due to academic failure, the length of their program will be extended up to an additional two Quarters.

#### **Appeal Process**

If a student feels that there are extenuating reasons for failing to maintain satisfactory academic progress they may appeal this decision by petitioning the school director, in writing, within five (5) days of the end of the Quarter documenting, in detail, the extenuating circumstances. A decision on the appeal will be made in writing within seven (7) working days and the student so notified.

#### Reinstatement

A student who has been terminated by failing to maintain satisfactory academic progress may be reinstated through the Appeal Process. If the appeal is approved by the school director, the student will be scheduled to return to school after remaining out of school for a minimum of one Quarter.

A student will not be eligible for financial aid during the Reinstatement Quarter. If the student achieves a cumulative GPA of 2.0 or better by the end of the Reinstatement Quarter, he or 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 may qualify for graduation while on probation if, at the end of the Probationary Quarter, the student meets the Satisfactory Progress requirements.

A student is not eligible for graduation if:

- 1. The student does not have a cumulative grade point average of 2.0.
- 2. The student does not meet their financial obligations to the school.

#### **Termination**

A student may be terminated for failure to meet the Academic Standards.

#### Monitoring

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

## SCHEDULE OF CLASSES—Quarter Programs

1984-Winter Quarter

Start

1/23/84 Monday . . . . 4/13/84 Friday

Quarter Break-None

1984 Spring Quarter

Start

End

End

4/16/84 Monday . . . . . 7/6/84

Wednesday

Quarter Break-7/9, 10, 11, 12, 13

1984 Summer Quarter

Start

End

7/16/84 Monday . . . . 10/5/84 Friday

Quarter Break-10/8, 9, 10, 11, 12

1984 Fall Quarter

Start

End

10/15/84 . . . . . . . . . . . . 1/18/85

Quarter Break-None

#### 1984 Holidays

Presidents Day 2/20

Spring Holiday 4/20

Memorial Day 5/28

Independence Day 7/4

Labor Day 9/3

Thanksgiving 11/22, 23

Christmas Recess 12/24, 25, 26, 27,

28, 29, 30, 31, 1/1, 2, 3 & 4/85

\_\_\_\_\_\_

#### 1985-Winter Quarter

Start

End

1/21/85 Monday . . . 4/12/85 Friday

Quarter Break-None

#### 1985-Spring Quarter

Start

End

4/15/85 Monday ....7/3/85

Wednesday

Quarter Break-7/8, 9, 10, 11, 12

#### 1985-Summer Quarter

Start

End

7/15/85 Monday ....10/4/85 Friday

Quarter Break-10/7, 8, 9, 10, 11

1985-Fall Quarter

Start

End

10/14/85 Monday ...1/17/86 Friday

Quarter Break-None

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Schedule of Classes, Holidays/School Policies

## **Refund Policy**

Refunds will be calculated from the date of withdrawal, which is the last date of actual attendance. If a student does not start classes, all tuition paid will be refunded. Refunds 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 after cancellation or termination.

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

Miscellaneous Fees: The school will retain all miscellaneous fees for each quarter started. All fees for quarters beyond the quarter of withdrawal shall be refunded in full.

## **TUITION AND FEES**

| COURSE                                |    | ENGTH<br>CLOCK HOURS | QUARTER<br>HOURS<br>OF CREDIT | REG<br>FEE | TUITION | TOTAL<br>COURSE<br>PRICE |
|---------------------------------------|----|----------------------|-------------------------------|------------|---------|--------------------------|
| Electronics Engineering<br>Technology | 24 | 1920                 | 128                           | \$150      | \$8,800 | \$8,950                  |
| Computer Programming                  | 18 | 1440                 | 93.5                          | \$150      | \$7,890 | \$8,040                  |

**Books and Supplies**Books and supplies are not included in tuition. The cost of such items is approximately \$75 to \$100 per quarter.

## **Facility**

The facility consists of 18,000 square feet, equipped with central air and heat, the total capacity of this school is 1200 students. There is ample off street parking.

## History

National Education Center—National Institute of Technology Campus was originally a United Electronics Institute. The school was acquired by National Education Corporation in 1981 and the name was changed to National Institute of Technology as part of the Technical Schools Group. In 1983, the school's name was changed to National Education Center.

## Accreditations, Approvals and Memberships

- Accredited by the Accrediting Commission of the National Association of Trade and Technical Schools.
- Authorized by the Board of Regents, West Virginia State Department of Education to grant associate degrees to graduates.
- 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.
- Provide training services for the State Department of Vocational Rehabilitation.

National Education Center National Institute of Technology Campus 5514 Big Tyler Road Cross Lanes, West Virginia 25313 (304) 776-6290

#### Administration

Teresa Arrington Director Clytie Lovejoy Financial Aid Officer Robert Cralgo Placement Director