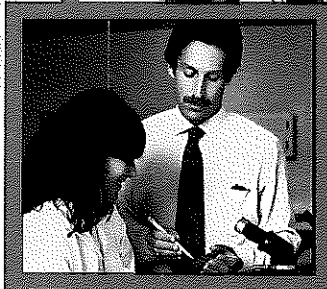
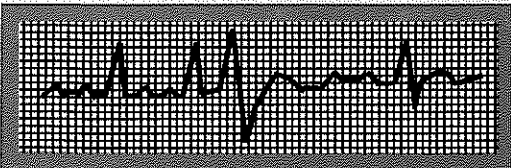
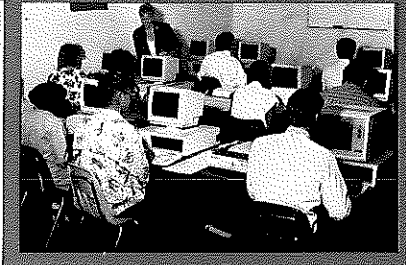
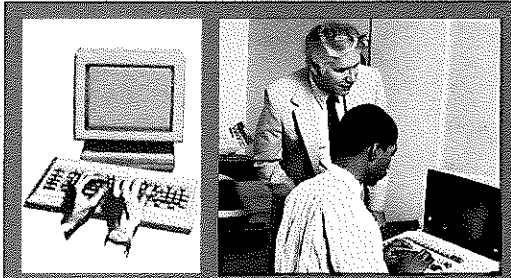


# NATIONAL SCHOOL



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— March 1991 —

CAREER CATALOG 1990 - 91

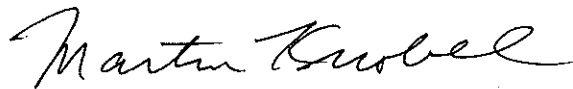
# A Message From The President

*Congratulations for the decision you have made to start career training at National School of Technology!*

*For over ten years, National School has been providing quality education to students seeking careers in the medical, computer and travel fields. Our programs are geared to provide you with the skills necessary to meet the demands of today's fast-paced job market.*

*National School's faculty consists of professionals, with extensive experience in each specialized field — our instructors practice what they teach. Classes are kept small, to allow for personalized instruction and individual attention. Classrooms house the latest high-tech equipment, creating a realistic work environment for practical hands-on training. Our curriculum is career oriented and is enhanced by an internship program, designed to prepare you for work in your chosen field.*

*Our objective is to offer you the training necessary to realize your career goals. We look forward to making your plan to enter National School of Technology one of the best decisions of your life.*

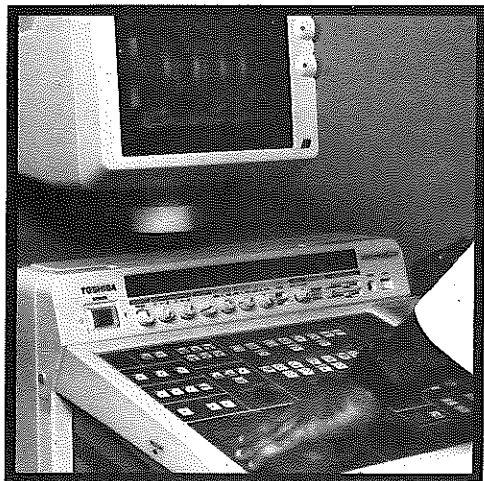


**MARTIN KNOBEL, B.Ed., M.S.**  
**President**



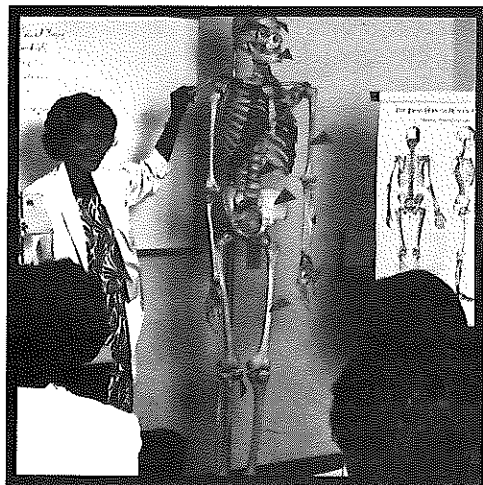
Martin Knobel has the distinction of being one of the few vocational-technical school presidents possessing over 30 years of experience as an educator. He earned a Bachelor of Education from the University of Miami, and a Master of Science in Administration and Supervision from Barry College. He holds a teaching certificate from the State of Florida.

Martin Knobel is the past president of the Florida Association of Accredited Private Schools. He has been a commissioner to the Accrediting Bureau of Health Education Schools since 1981, and a member of the Florida State Board of Independent Postsecondary Vocational, Technical, Trade and Business Schools since 1982. In addition, he holds numerous honors and awards.

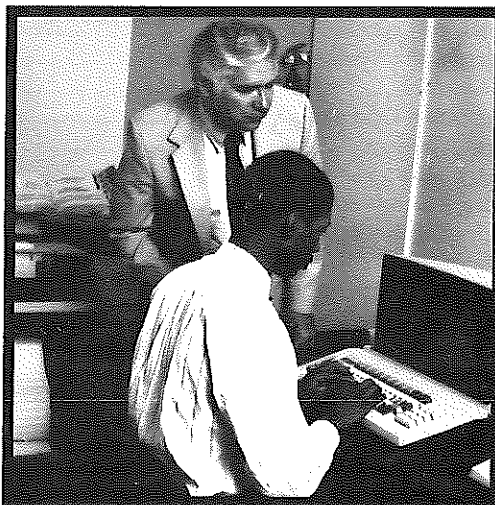


- ◆ Cardiovascular Technologist
- ◆ Echocardiography Technician

- ◆ Medical Assistant



- ◆ Computer Programmer
- ◆ Micro-Computer Operator



- ◆ Travel and Tourism

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# Accreditation and Licensure

National School of Technology, Inc. is institutionally accredited by the National Association of Trade and Technical Schools (NATTS).

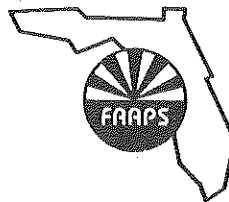
The Medical Assistant Program is accredited by the Accrediting Bureau of Health Education Schools.

The school is licensed by the Florida State Board of Independent Postsecondary Vocational, Technical, Trade and Business Schools 904-488-9504. The North Miami Beach campus holds License #599 and the Hialeah campus holds License #747.

National School is a member of the Florida Association of Accredited Private Schools (FAAPS).



ACCREDITING BUREAU  
OF  
HEALTH EDUCATION SCHOOLS



**NATTS**

Accredited School  
National Association of  
Trade and Technical Schools

# Academic Programs

## Computer Programmer A.S.T.

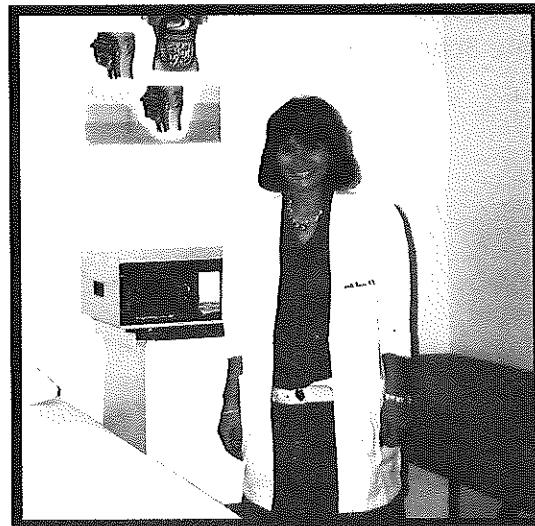
Degree: Associate of Specialized Technology

### *Objective:*

*The objective of this program is to provide the student with the skills necessary to become a competent entry level computer programmer, enabling the student to obtain employment and advance on the job through the programming ranks. In addition to the traditional mini-computer environment, the micro-computer is explored in depth. Graduates are awarded an Associate of Specialized Technology degree.*

### *Career Opportunities:*

*The demand for trained computer programmers exists in almost every employment sector. Career opportunities are found in banks, accounting firms, hospitals, insurance offices, real estate firms, schools, hotels, airports, travel agencies, and law firms.*



# Computer Programmer – Course Outline

NUMBER	SUBJECT	HOURS	NUMBER	SUBJECT	HOURS
MC100	Computer Fundamentals	40	AP600	C-Language	90
MC105	Keyboarding / Data Entry	40	AP615	Introduction to Data Communications	20
MC110	Business Communication	40	AP620	Computer Lab	90
MC115	Business Math	40	AP700	Internship or Project	120
MC120	Operating Systems / Micro-Computer	40			
MC200	Word Processing	40			
MC205	Bookkeeping	40			
MC210	Word Processing Lab	40			
MC215	Spreadsheet Analysis	40			
MC220	Spreadsheet Lab	40			
MC300	Database Programming	60			
MC305	dBASE Lab	60			
MC310	Business Applications	40			
MC315	Business Applications Lab / Data Entry	40			
AP400	COBOL Programming I	90			
AP410	Logic / Flowcharting	20			
AP420	Computer Lab	90			
AP500	COBOL Programming II	100			
AP520	Computer Lab	100			
				<b>Total Clock Hours</b>	<b>1320</b>

*Day Programs – 13 months ♦ Evening Programs – 21 months*

# Academic Programs

## Cardiovascular Technologist A.S.T.

Degree: Associate of Specialized Technology

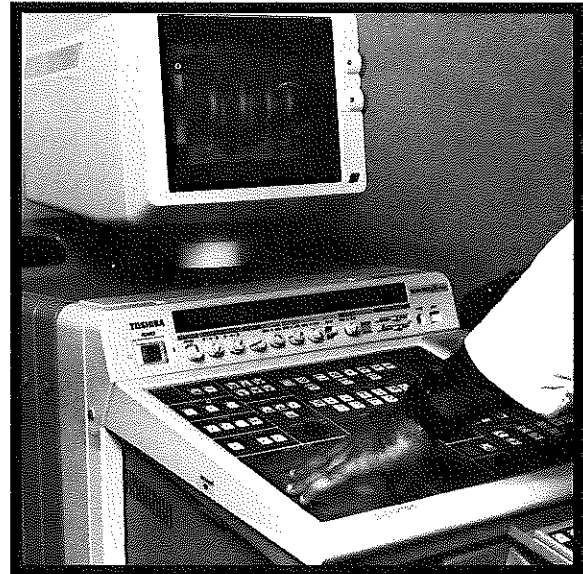
### *Objective:*

*The Cardiovascular Technologists program is a comprehensive study of cardiovascular anatomy and related sciences leading to the understanding of cardiographic diagnostic procedures and technologies. The latest cardiovascular equipment and theory is thoroughly explained through lecture and hands-on training.*

*Graduates will be eligible to take certification offered by the National Association of Cardiovascular Technologists.*

### *Career Opportunities:*

*Cardiovascular Technologists are employed in hospitals, cardiologists' offices, cardiology mobile units and many other health facilities.*





# Cardiovascular Technologist – Course Outline

NUMBER	SUBJECT	HOURS	NUMBER	SUBJECT	HOURS
AV500	Orientation	5	AV720	Cardiovascular Pharmacology	15
AV505	Introduction to The Human Body and Terminology	5	AV725	Pacemaker	20
AV510	Cellular Basis of Anatomy and Physiology	50	AV730	Holter Monitoring	10
AV515	Musculoskeletal System	20	AV735	Stress Testing	15
AV520	Cardiac Anatomy and Physiology	70	AV740	Transesophageal EKG	5
AV525	Vascular Anatomy and Physiology	70	AV745	Electrophysiologic Studies and His Bundle Recording	25
AV530	Embryology	10	AV800	Radiology	50
AV600	Congenital Heart Disease	25	AV805	Cardiac Series	5
AV605	Valvular Heart Disease	25	AV810	Cardiac Catheterization and Angiography	40
AV610	Cardiomyopathy and Myocarditis	25	AV815	Cardiac Nuclear Imaging, CT Scan, MRI	10
AV615	Diseases of the Pericardium	20	AV820	Introduction to Ultrasound and Echocardiographic Anatomy	25
AV620	Cardiac Trauma and Tumors	10	AV825	Peripheral Vascular Disease	15
AV625	Atherosclerosis and Ischemic Heart Disease	25	AV830	Peripheral Vascular Diagnostic Testing	25
AV630	Congestive Heart Failure, Hypertension, Shock and Syncope	35	AV835	Carotid and Vertebral Artery Ultrasound	25
AV635	Emergency First Aid and CPR	30	AV840	History Taking and Physical Examination	5
AV640	Pulmonary Heart Disease, Acid-Base Balance and Respiratory System	20	AV845	Medical Ethics and Jurisprudence	5
AV645	Cardiovascular Disorders in Connective Tissue Disease, Other Hereditary Disorders	15	AV850	Introduction to Computers	25
AV700	Electrophysiology	15	AV900	Internship	280
AV705	Patient Preparation, Lead Placement, Identification of Interference	20	<b>Total Clock Hours</b>		<b>1200</b>
AV710	Vectorcardiography	15			
AV715	Arrhythmia Recognition and Management	90			

**Day Programs – 12 months ♦ Evening Programs – 20 months**

# Academic Programs

## Echocardiographic Technician

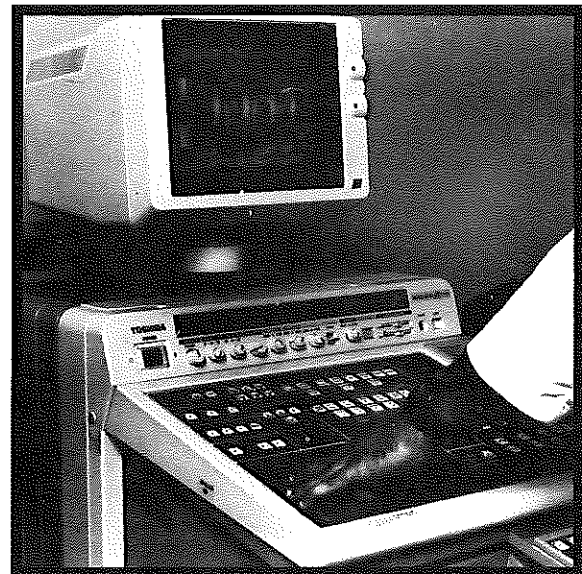
### Diploma Program

#### *Objective:*

*The comprehensive understanding of medicine, as it relates to physiology, disease states and anatomical representations in ultrasound are among the academic goals of the Ultrasound Division. Programs will, therefore, enable the student to perform diagnostic examinations through the acquisition of necessary medical knowledge and techniques in diagnostic ultrasound.*

#### *Career Opportunities:*

*The career outlook is positive in all aspects of ultrasound. It has been reported that throughout the 1990's, the demand for trained technicians will greatly exceed the supply. Financial remuneration is an attractive component to this highly exciting, challenging and respected medical profession.*



# Echocardiographic Technician – Course Outline

<b>NUMBER</b>	<b>SUBJECT</b>	<b>HOURS</b>
EU900	Introduction and Overview	5
EU905	Physics of Ultrasound	75
EU910	Instrumentation and Systems Operations	50
EC915	Cardiac Anatomy and Physiology	100
EC920	Pharmacology	25
EU925	Pathology of the Heart	120
EU930	Congenital Pathology	75
EU935	Examination of the Normal Heart	150
<b>Total Clock Hours</b>		<b>600</b>

*Day Programs – 6 months ✦ Evening Programs – 6 months*

# Academic Programs

## Medical Assistant

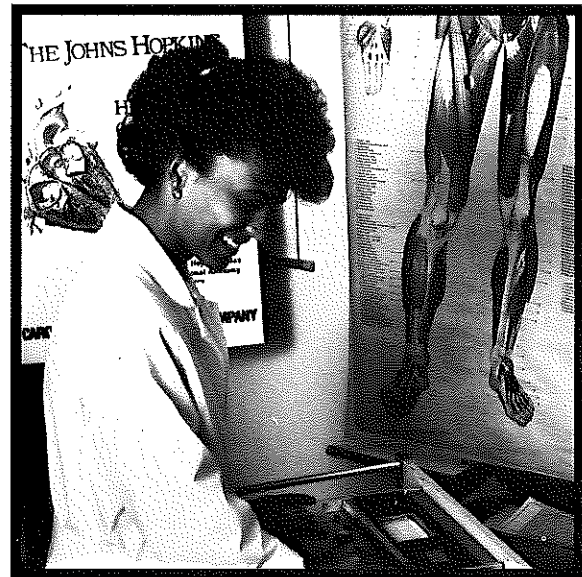
### Diploma Program

#### *Objective:*

*This contemporary training course is designed to teach students the skills necessary for employment in the modern medical facility. A qualified medical assistant is capable of performing a wide range of duties, with a variety of technical detail; thus helping the physician in many clinical situations. Training in medical ethics and professional etiquette, as well as basic office procedures are taught as required elements of the course.*

#### *Career Opportunities:*

*Medical Assistants enjoy secure, prestigious positions. They work with one or more physicians in private practices, clinics, hospitals, laboratories and other health facilities.*



# Medical Assistant – Course Outline

NUMBER	SUBJECT	HOURS	NUMBER	SUBJECT	HOURS
MA105	The Body as a Whole	5	MA300	Introduction to Lab	5
MA110	The Skeletal System	15	MA310	Bacteriology and Sterilization	5
MA115	The Muscular System	15	MA315	Urinalysis	25
MA120	The Cardiovascular System	20	MA320	Hematology	95
MA125	Electrocardiography	40	MA325	Blood Chemistry	20
MA130	The Respiratory System	15	MA330	Medical Radiography	50
MA135	First Aid and C.P.R. Certification	25	MA400	Internship	300
MA140	The Digestive System	15			
MA145	The Nervous System	15			
MA150	The Urinary System	10			
MA155	Reproduction	15			
MA160	The Endocrine System	5			
MA165	The Sensory System	5			
MA200	Medical Ethics / Jurisprudence	10			
MA205	Psychology of Human Relations	5			
MA220	Assisting Arts	75			
MA225	Pharmacology	40			
MA230	Specialized Medical Practices	15			
MA240	Medical Office Management	55			
				<b>Total Clock Hours</b>	<b>900</b>

*Day Programs – 9 months ♦ Evening Programs – 12 months*

# Academic Programs

## Micro-Computer Operator

### Diploma Program

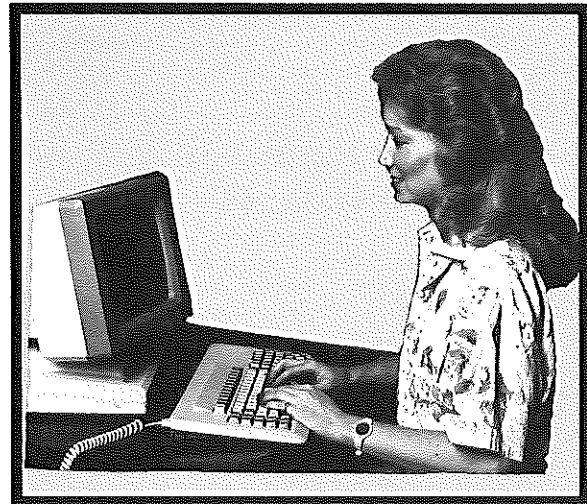
#### *Objective:*

*The objective of this course is to train the student in all aspects of micro-computer use so that he/she may obtain employment in business.*

*Hands-on techniques covered include operating a computer, loading and running a program, using data entry and word processing capabilities, manipulating data, handling electronic files, printing, calculating, using a computer language and softwares. Graduates can go on to become Computer Programmers, A.S.T.*

#### *Career Opportunities:*

*In order to keep pace with today's technology, knowledge of micro-computers is vital. Micro-computer operators are employed by banks, hospitals, retailing firms, schools, travel agencies, medical offices, marketing firms and a variety of other businesses.*



# Micro-Computer Operator – Course Outline

NUMBER	SUBJECT	HOURS
MC100	Computer Fundamentals	40
MC105	Keyboarding / Data Entry	40
MC110	Business Communication	40
MC115	Business Math	40
MC120	Operating Systems / Micro-Computer	40
MC200	Word Processing	40
MC205	Bookkeeping	40
MC210	Word Processing Lab	40
MC215	Spreadsheet Analysis	40
MC220	Spreadsheet Lab	40
MC300	Database Programming	60
MC305	dBASE Lab	60
MC310	Business Applications	40
MC315	Business Applications Lab / Data Entry	40
MC400	Internship or Project	120
<b>Total Clock Hours</b>		<b>720</b>

*Day Programs – 7 months ♦ Evening Programs – 11 months*

# Academic Programs

## Travel and Tourism

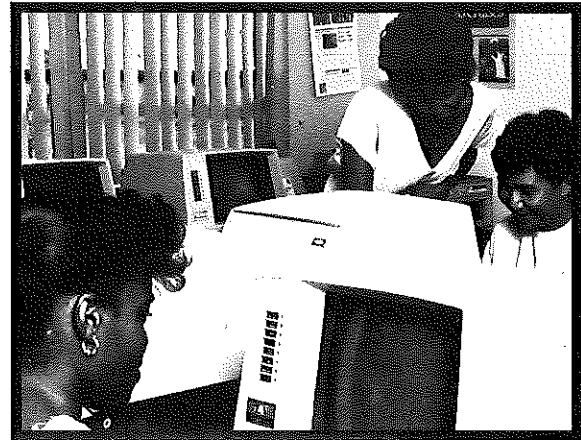
### Diploma Program

#### *Objective:*

*This course is designed to provide a basic foundation and develop skills in preparation for employment in the travel and tourism industry. On-line System One Direct Access (SODA) reservation terminals are utilized to provide students with practical hands-on instruction. Reservations, tariff, ticketing and customer sales are covered in this program.*

#### *Career Opportunities:*

*Employment opportunities exist with airlines, travel agencies, hotel reservation services, car rental companies, and cruise lines.*





# Travel and Tourism – Course Outline

NUMBER	SUBJECT	HOURS
TT100	Introduction to the Travel Industry	5
TT105	North American Geography and Domestic Air	30
TT110	Hotel and Resort Accommodations and Surface Transportation	10
TT115	Telephone and Sales Techniques	25
TT120	Domestic Air Construction and Ticketing	40
TT125	World Geography and International Air	40
TT130	Cruises	20
TT135	Tours	10
TT150	Travel By Rail	5
TT155	Guidelines For Seeking Employment	5
TT160	Agency Marketing	10
TT165	International Fares and Ticketing	15
TT170	Travel Destinations	10
TT175	Office Procedures and Accounting	10
TT180	Computer / Automation Training	85
<b>Total Clock Hours</b>		<b>320</b>

*Day Programs – 3 months ♦ Evening Programs – 5 months*

# General Information

## Institutional Philosophy

The purpose of the school is to provide quality education to students seeking careers in health care, travel and computer related programs.

In an effort to fill the critical needs of these professions for trained personnel, and to provide meaningful and fulfilling careers to capable individuals, the school maintains the highest level of professional dedication.

The school is constantly updating its equipment, curricula and facilities, recognizing our obligation to the students and the professions they serve. The National School of Technology continues to provide quality training for health paraprofessionals, travel and computer personnel.

## History

The school was founded in January, 1977 as National School of Health Technology, Inc. of Florida. Classes began in February, 1977 in North Miami Beach.

In 1982 the school changed its name to National School of Technology, Inc. and moved to the present North Miami Beach location which was designed and built for the school.

In January, 1985 classes began at a campus in Hialeah, Florida which was designated as an additional classroom facility. In June, 1989 the Hialeah Campus was awarded branch status.

## Facilities

National School operates two campuses, each consisting of classrooms, medical, computer and travel laboratories, school offices, financial aid offices and well-lit parking areas.

The medical learning laboratories contain equipment commonly found in the medical environment, such as EKG machines, microscopes, examining tables, blood cell counters, echocardiography equipment and cardiovascular diagnostic equipment.

Our microcomputer labs are equipped with IBM compatible PC computers to allow students to receive hands-on training. Our North Miami Beach campus also has a mini-computer with ten terminals for training computer programming students.

Travel students use on-line System One Direct Access (SODA) travel agent reservation terminals to train travel and tourism students in the latest computer procedures.

A student lounge, equipped with vending machines for food, drinks and snacks, as well as a microwave, is available. Both campuses have handicapped facilities.

## Equal Opportunity Statement

National School does not discriminate in the admission or recruitment of its students. The financial aid program is administered free from discrimination as specified by federal law.

National School is an equal opportunity employer.

## Hours of Operation

The school office is open from 8:00 a.m. to 10:00 p.m., Monday thru Wednesday; from 8:00 a.m. to 6:30 p.m. on Thursday; and from 8:00 a.m. to 5:00 p.m. on Friday.

## Class Size

Class size averages between 15 and 30 students. Medical laboratory students class size will not exceed 20 students, allowing for personal attention and individualized instruction.

## School Holidays

New Year's Day – Martin Luther King Day – Washington's Birthday – Good Friday – Memorial Day – Independence Day – Labor Day – Thanksgiving Weekend – Christmas Vacation. There are two one-week recesses; normally the first week in July and the week of Christmas thru New Year's. Exact vacation dates are announced and additional holidays may be declared by the Director, when warranted.

## Rules and Regulations

Students must attend all classes regularly and arrive punctually. In the event of illness or inability to attend, the student must notify the school in writing, presenting a valid and verifiable excuse. Students must be back in class punctually after all breaks and lunch periods. Students may be suspended when absences and tardiness constitute more than 20 percent of total class hours. Upon readmission to class, the student must make up lost instruction time to the satisfaction of the instructor. Habitual tardiness shall be cause for termination of the student.

The student lounge is open for use during specified lunch and break periods. This is the only area in which students may have food or beverages. Students who wish to smoke may do so only in designated areas.

Public telephones are located in the student lounge. Telephones within the school are for school use only. Incoming calls for students will be accepted only in cases of extreme emergency.

Firearms, drugs, alcoholic beverages and weapons are strictly prohibited.

Students will not play games of chance, use offensive language, make unnecessary noise or engage in behavior unbecoming a professional.

Children are not allowed in classrooms.

Students will be responsible and pay for all property destroyed or damaged. Vandalism will result in immediate expulsion and contract termination without recourse or appeal.

Students must conduct themselves in class with proper decorum, respect and attention to the instructors. They will behave with courtesy and regard for other persons and school property.

Students are expected to attend class in professional attire. All students enrolled in medical classes are required to wear white uniforms, including white shoes. Students training as health paraprofessionals are expected to maintain a high standard of personal cleanliness and grooming. All clothing must be clean and neat. Male students must be clean shaven or maintain beards and mustaches neatly trimmed.

Computer and travel students are expected to dress in clothing that they would wear to their jobs. Shorts are not permitted in the classroom.

All students must keep work areas clean. Class will be dismissed only after the room has been inspected.

Failure to cooperate with school rules and regulations will be considered reason for student suspension or expulsion. Students may appeal expulsion in writing within 72 hours. In the absence of an appeal, the student shall be considered terminated.

## Community Services and Awards

National School of Technology recognizes the importance of community services. As a part of our technical training, we try to instill a feeling of responsibility towards the community in our students and we encourage them to participate as volunteers in various community projects.

National School participates in health fairs and sponsors blood drives in conjunction with the American Red Cross several times each year. For the past eight years, the school has been involved in first aid stations at City of Miami stadiums during events such as Miami Dolphins and Miami Hurricanes football games, concerts and other special events.

In recognition of its efforts and accomplishments in service to the community, National School has received several awards and citations. Mayors of Metro-Dade County, the City of Miami, the City of North Miami Beach and the City of Hialeah have all issued proclamations honoring National School for its community service.

## Memberships

Florida Association of Accredited Private Schools (FAAPS)

Florida Association of Student Financial Aid Administrators (FASFAA)

National Association of Student Financial Aid Administrators (NASFAA)

American Society of Travel Agents, School Member (ASTA)

U.S. Department of Education Region IV Coordinating Council

# Statement of Ownership and Board of Directors

**Martin Knobel**, President  
**Mark Knobel**, Vice-President

**Rickie Knobel**, Treasurer  
**David Knobel**, Vice-President

## BOARD OF ADVISORS

---

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Mehary Medical School  
Albert Einstein College of Medicine  
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University of California, Los Angeles  
University of California  
San Francisco

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Faculty, University of Miami School of  
Medicine

**Sally Rossman, M.T., CCVT**  
President, National Alliance  
of Cardiovascular  
Technologists, Florida Chapter

**George Safirstein, M.D.**  
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Mayo Clinic  
Chief Resident, Mt. Sinai  
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Sherman College of Chiropractic  
Member, Dade County  
Chiropractic Society

**Bernard Stern, M.D.**  
University of Michigan  
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Wayne State School of Medicine  
Detroit Medical Center

## COMPUTER INDUSTRY ADVISORY COUNCIL

---

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National Systems Administrator  
Storer Communications

**Irving M. Silverstein**  
President, Cira Systems, Inc.

**Paul J. Spewak**  
President, Guaranteed Computer Systems, Inc.

## ASSOCIATE MEMBERS

---

**Alan M. Marder**  
Consultants to Industry

**Robert Silverman**  
Source EDP

# Student Services

## Job Placement Assistance

Our Placement Department helps graduates find employment in the fields for which they have been trained. Employment counseling, including resume preparation and interviewing tips, is available.

By assisting students with part-time employment, internships and job placement services for graduates, the Placement Department makes every effort to secure positions for graduates. However, we are not permitted by law, to guarantee employment.

## English as a Second Language (Hialeah Campus)

This special course is designed to provide the student with the basic foundations of English grammar, pronunciation, reading and writing skills. Students will receive instruction in spelling, vocabulary enrichment, sentence structure and conventional punctuation.

## Inglés como Segundo Idioma (Hialeah)

Este curso especial está diseñado para enseñarle al alumno los conocimientos básicos de la gramática, la pronunciación, la lectura y la escritura del idioma Inglés. Los alumnos reciben conocimientos de la ortografía, del vocabulario y de la estructura gramatical.

## Tutoring

Tutoring is available by appointment with instructors. Each thursday evening the school is open to students to work on homework, projects or computers.

## Refresher Courses

Refresher courses are available to graduates at a cost of \$150 per class. Non-lab courses are available free of charge.

## Student Records

Student records are maintained indefinitely. Students may examine their academic records by scheduling an appointment.

## **Transcripts**

Copies of transcripts may be obtained by submitting written request to the school. A fee of \$1 per copy is charged.

## **Counseling**

Counseling is available to students by request.

## **Insurance**

Each medical student is covered by \$1 million of professional liability insurance at no extra charge.

## **Photo Identification Badges**

For security purposes, all students are required to wear a photo identification. This badge is issued by the school and is free of charge. Lost badges must be replaced and cost \$2.50.

## **Registered Medical Assistant Exam**

The school is a site for the Registered Medical Assistant Examination. This exam is given twice yearly. Students are notified of examination dates as they are scheduled.

## **Library**

A library of professional books is available for student use.

## **CPR/First Aid Classes**

Cardiopulmonary-Resuscitation (CPR) and first aid classes are held regularly at the school.

## **Graduation**

Upon successful completion of all prescribed subjects of instruction with a cumulative grade average of 70 percent or better; and satisfaction of all financial obligations to the school, the student will be awarded a diploma.

Graduates of the Computer Programming and Cardiovascular Technology programs earn an Associate of Specialized Technology degree.

Students may participate in the graduation ceremony and will be eligible for placement assistance, providing that all graduation requirements have been met.

# Professional Organizations

Students are encouraged to associate themselves with the professional organizations in their respective career fields for the purpose of continuing education, licensing, certification, employment opportunities and awareness of industry trends.

ASTA South Florida for Travel Professionals

Bon Vivants of Greater Miami for Travel Professionals

Certified Medical Assistant by the American Association of Medical Assistants (CMA/AAMA)

CRT–Basic Certified Radiologic Technologist–Basic, license necessary to take X-rays in the doctor's office, issued by the State of Florida

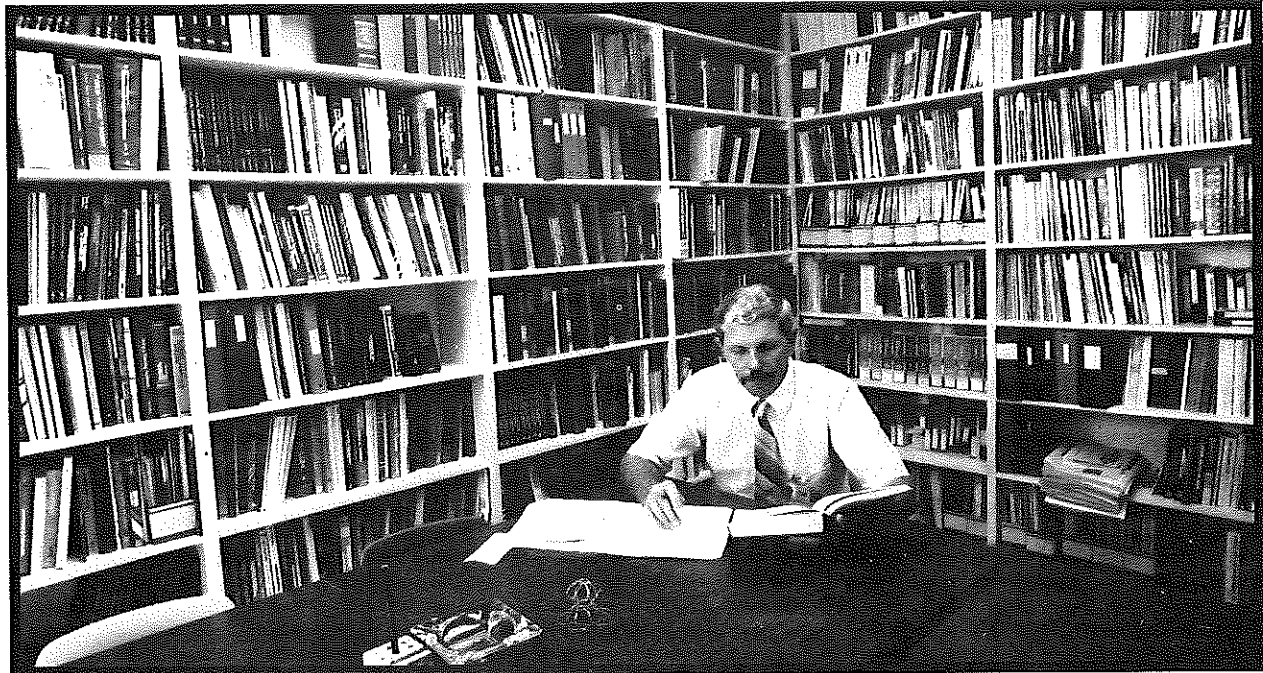
Data Processors Management Association for Computer Programmers, sponsors certification after three years experience (DPMA)

Greater Miami Society of Echocardiography

National Association of Pulmonary Technicians/National Association of Cardiovascular Technologists (NAPT/NACT)

Registered Medical Assistant by the American Medical Technologists (RMA/AMT)

Society of Diagnostic Medical Sonographers (SDMS)





# Academic Information

## Admissions Procedures and Requirements

Applicants will be interviewed by an admissions advisor or admissions representative, who will discuss the program of study, including the applicant's individual motivation and potential for success in training and subsequent employment.

Each applicant must successfully complete the Thurstone Test of Mental Alertness. This general aptitude test is a part of the admissions interview, and guides the admissions advisor in determining the student's ability to meet the requirements of the school's study programs.

Prospective students complete an application for enrollment which is reviewed by the Director. Applicants will be notified whether they have been accepted within seven days. Applicants not accepted will be refunded any fees paid with the application.

Prior training in high school or college is not necessary since the courses are designed to provide quality training regardless of previous educational experience.

Students enrolled in Associate of Specialized Technology degree programs must have a high school diploma or GED prior to acceptance into the program. Applicants who do not have a United States high school diploma or GED can enter the Medical Assistant, Micro-Computer Operator and Travel/Tourism programs after passing a qualification entrance examination (refer to Entrance Examination above). The school urges any non-high school graduate past the age of compulsory school attendance to finish high school through a GED program.

All students are required to submit their Social Security number for identification purposes.

All Allied Health students are required to submit a current certificate of good health.

No person shall be excluded from participation in National School of Technology or be subjected to any form of discrimination because of race, color, sex, handicap or national origin.

## Credit for Previous Training

Credit for previous training may be granted upon receipt of an official transcript from an approved training facility. The amount of credit received will be determined by the Director and any necessary adjustments in the student's program will be made.

## Academic Regulations

Students are expected to maintain the standards of the school in academic, professional and personal achievement.

Any student found cheating in any capacity will receive an immediate "zero" for that subject and will be suspended.

Students may make up missed work by arrangement with the instructor.

## Class Hours and Start Dates

Day class hours range from 8:00 a.m. to 3:00 p.m., Monday thru Friday.

Evening class hours range from 6:00 p.m. to 11:00 p.m., Monday thru Thursday.

Allied health and computer day classes begin approximately every two months. Evening classes start at three month intervals.

Cardiovascular Technologist classes begin every three months during the day and every five months in the evenings.

Echocardiographic Technician classes begin every three months during the day and evening.

Travel and Tourism classes start every three months, day and evening.

Specific class starting dates are announced in advance.

## Grading System

A	93 – 100	Outstanding
B	85 – 92	Above Average
C	77 – 84	Satisfactory
D	70 – 76	Below Average
F	Below 70	Unacceptable

## Changes in Programs and Tuition Charges

The school reserves the right to teach subject areas in any order it deems necessary; to add to or delete from certain courses, programs, or areas of study as circumstances may require; and to make faculty changes.

Changes in training curriculum shall not involve additional cost to currently enrolled students unless a new enrollment agreement is executed for an expanded program.

Students are permitted to make one change at no additional charge. A change is defined as a withdrawal, a change of program of study, a leave of absence, a transfer from day to evening or evening to day class. Students making more than one change will be assessed a \$150 processing fee. Any change made during the first two weeks of school will not apply to this policy.

## Withdrawal and Termination

The student shall have the option to withdraw from the school at any time by giving notice of intent to terminate enrollment to the school office. Should the student be under 18 years of age, notification must be accompanied by a letter from the parent or guardian consenting to the withdrawal.

The school reserves the right to discontinue the enrollment of any student whose academic performance, attendance, or conduct is, for any reason, unsatisfactory. Any student who is absent for a period of one week, without notification to the school and good cause, may be subject to termination at the Director's discretion.

In the case of a student's prolonged illness, accident, death in the family, or other circumstances that make it impractical to complete the course, the student may withdraw without damage to status and the school shall make a settlement which is reasonable and fair to both. One leave of absence may be granted to the student at the Director's discretion.

## Internship or Project

An internship is required as part of all programs of study, except Travel and Tourism. Internship is "on-the-job" training, under the supervision of a skilled professional. Internship sites are arranged by the Placement Director. Completion of a project may be required instead of an internship. This project is undertaken after completion of classroom studies, and is a requirement for graduation.

# Financial Information

## Financial Aid Programs

To make training affordable, National School offers a number of financial aid programs. Eligible students may apply for federal grants and loans including: Pell Grants, Supplemental Education Opportunity Grants (SEOG), Guaranteed Student Loans (GSL), Perkins Loans (formerly NDSL) and Student Loan Supplements (SLS). Parent Loans (PLUS) may be available to parents of dependent students. Non-federal interest bearing loans are available to qualified students.

## Financial Aid Department Hours of Operation

Students may apply for financial assistance in the Financial Aid Offices located in both the North Miami Beach and Hialeah campuses.

Office hours are as follows:

Monday thru Wednesday	9:00 a.m. to 8:30 p.m.
Thursday	9:00 a.m. to 6:00 p.m.
Friday	9:00 a.m. to 5:00 p.m.

## Tuition and Fees

Tuition and fees vary according to the length of the program. For a listing of specific tuition costs refer to insert. Tuition and fees are the responsibility of each student, and arrangements for payment must be made before the first day of class.

## Textbooks, Uniforms and Supplies

All textbooks and handout materials are included in the tuition fees. Each medical student is issued a stethoscope. Supplies, diskettes, coding forms, uniforms, hose and shoes are not included, and cost between \$25 to \$50.

# Satisfactory Progress Statement

Satisfactory progress is necessary in order to maintain eligibility for Title IV financial assistance programs.

Satisfactory progress is defined by the following criteria:

- (1) A grade average of 70 percent
- (2) An attendance average of 80 percent per block
- (3) Meeting the specified conditions for incompletes, withdrawals, repetitions and remedial work

If a student falls below the criteria listed above, consultation with a school official will be scheduled. At that time, the student will be placed on a one block probation during which Title IV funds may be disbursed. At the end of the probationary period, if the student has not satisfied the specified requirements, financial assistance checks will be withheld.

Students may appeal probation decisions to the Director, in writing, within three days.

## Incompletes, Withdrawals, Repetitions, Remedial Work

Students with course incompletes, withdrawals, repetitions and those doing remedial work are eligible to continue receiving financial aid if the following conditions are met:

- (1) The student is otherwise making satisfactory progress
- (2) The time needed to make up and complete course work is within the program time frame

## Maximum Time Frame

To remain eligible for federal funds, financial aid students must complete their programs within a specified time frame:

<b>PROGRAM TIME FRAMES</b>		
<b>MAXIMUM TIME</b>		
<b>PROGRAM</b>	<b>FULL-TIME</b>	<b>PART-TIME</b>
Computer Programmer	18 months	30 months
Cardiovascular Technologist	18 months	30 months
Echocardiographic Technician	9 months	9 months
Medical Assistant	12 months	16 1/2 months
Micro-Computer Operator	9 months	15 months
Travel and Tourism	4 1/2 months	7 1/2 months

Evaluation for satisfactory progress will take place at the end of each block of instruction.

# Change of Status

Students are permitted to make one change at no additional charge. A change is defined as a withdrawal, a change of program of study, a leave of absence, a transfer from day to evening or evening to day class. Students making more than one change will be assessed a \$150 processing fee. Any change made during the first two weeks of School will not apply to this policy.

# Refund Policy

All moneys paid by an applicant will be refunded if requested in writing within three business days after signing an enrollment agreement and making an initial payment.

1. Each student is accepted with the understanding that he or she has registered for an entire program of study. If a student is not accepted, all advance monies will be refunded.
2. If a student is accepted and then withdraws from the course, for any reason, before the class convenes, all monies shall be refunded, except as prescribed by school policy and in no case shall more than \$150 be retained by the school.
3. If the student terminates training within the first week of the course, the school may retain the sum of 10% of the tuition for the course plus \$150, but in no event more than \$350.
4. If the student terminates training after one week, but within the first 25% of the course, the school may retain the sum of 25% of the tuition for the course plus \$150.
5. If the student terminates training after completing more than 25%, but before completing 50% of the course, the school may retain the sum of 50% of the tuition for the course plus \$150.
6. If the student completes 50% or more of the course, the student shall not receive any refund as a matter of right, and is obligated for the full tuition.
7. Registration, Book and Laboratory Fees are non-refundable. A FULL REFUND WILL BE MADE IF APPLICANT CANCELS THIS AGREEMENT WITHIN (3) BUSINESS DAYS AFTER SIGNING.
8. REFUNDS ARE MADE WITHIN 30 DAYS OF THE DATE THAT THE STUDENT OFFICIALLY WITHDRAWS.

# Graduation Ceremonies



National School of Technology holds two graduation ceremonies each year. Students are honored with awards for academic performance, perfect attendance, community service and other outstanding achievements.

Families and friends are invited to attend the event and proudly share in the celebration of the success of National School's graduates.



# COURSE DESCRIPTIONS



## COURSE DESCRIPTIONS

**AP 400 COBOL Programming I 90 Hours**

The concepts of Common Business Oriented Language (COBOL) are discussed. The course utilizes program techniques associated with the American National Standards COBOL-74. The student codes, compiles, handles files, tests and debugs computer programs to solve various business programs.

**AP 410 Logic/Flowcharting 20 Hours**

Development of fundamental skills in programming logic and flowcharting.

**AP 420 Computer Lab 90 Hours**

The student works on programs and projects under the supervision of the instructor.

**AP 500 COBOL Programming II 100 Hours**

This course is an extension of COBOL Programming I. Advanced Program Techniques, such as table handling, file handling, subroutines and subprograms, and multiple file usage. Structured concepts are emphasized in program writing.

**AP 520 Computer Lab 100 Hours**

The student works on programs and projects under the supervision of the instructor.

**AP 600 C-Language 90 Hours**

Development of fundamental skills in C-Language programming. High-low level language comparison. The use of C in advanced micro-computer environments.

**AP 615 Introduction to Data Communications 20 Hours**

Basic data communication concepts are introduced. Line protocols, baud rates, parity error checking, full/half duplex data transmission modes are explained along with their relationships to interdependencies.

**AP 620 Computer Lab 90 Hours**

The student works on programs and projects under the supervision of the instructor.

**AP 700 Internship or Project 120 Hours**

The student completes an internship in a computer facility or a project in the computer lab.

**AV 500 Orientation 5 Hours**

Introduction to the field of cardiovascular technology with a review of the different, latest cardiovascular procedures. General survey of the responsibilities of the CVT including patient management, human relations, history and an overview of medical trends.

**AV 505 Introduction to Human Body & Terminology 5 Hours**

The body as a whole: an overview of all the systems of the body, the organs, & their functions. Familiarization with the medical terminologies, their meanings and how they are derived.

**AV 510 Cellular Basis of Anatomy and Physiology 50 Hours**

Study of the cell, its different parts and functions. Detailed discussion of cell membrane structure and transport, and the role it plays in the generation of action potential.

**AV 515 Musculoskeletal System 20 Hours**

A brief description of overall skeletal plan with particular attention to rib cage. The ultramicroscopic anatomy and physiology of the muscular system is discussed with emphasis on its relationship with the nervous system.

**AV 520 Cardiac Anatomy and Physiology 70 Hours**

Studies the gross and microscopic anatomy of the heart, its position in the body, the propagation of electrical impulses. Covers the cardiac cycle and the forces that bring it about.

**AV 525 Vascular Anatomy and Physiology 70 Hours**

Focuses on the anatomy of the different blood vessels and their distribution in the body; the physical principles behind its function as a transport system.

## COURSE DESCRIPTIONS

- AV 530 Embryology 10 Hours**  
Deals with the origin and development of the primitive heart and its differentiation into adult structures.
- AV 600 Congenital Heart Disease 25 Hours**  
Understanding of the structural and functional changes accompanying the different congenital heart diseases. These are correlated to the diagnostic findings.
- AV 605 Valvular Heart Disease 25 Hours**  
Brief discussion of Rheumatic Fever and its possible cardiac complications. Study of the structural and functional abnormalities accompanying different valvular diseases of the heart.
- AV 610 Cardiomyopathy and Myocarditis 25 Hours**  
Covers the different types of cardiac muscle diseases, their various etiologies, and hemodynamic consequences.
- AV 615 Diseases of the Pericardium 20 Hours**  
Deals with the different pathologies involving the outer covering of the heart and its accompanying hemodynamic changes.
- AV 620 Cardiac Trauma and Tumors 10 Hours**  
Studies the mechanism of the different cardiac traumas and their complications. Different types of cardiac tumors and their presentations are also discussed.
- AV 625 Atherosclerosis and Ischemic Heart Disease 25 Hours**  
Focuses on the pathogenesis of atherosclerosis and how it causes ischemic injury to the heart. Different clinical presentations of IHD are thoroughly discussed and are correlated to the diagnostic findings.
- AV 630 Congestive Heart Failure, Hypertension, Shock, & Syncope 35 Hours**  
Discussion on the pathophysiology of a failing heart, the cardiovascular effects of hypertension, compensatory mechanisms in shock, and how all these disease states can be differentiated from different types of syncope.
- AV 635 Emergency First Aid and CPR 30 Hours**  
Study of emergency patient care and management. Do's and don'ts of First Aid. CPR certification.
- AV 640 Pulmonary Heart Disease, Acid-Base Balance and Respiratory System 20 Hours**  
Review of the respiratory system and its role in the maintenance of acid-base balance. Discussion of the respiratory conditions that have adverse influences on the heart.
- AV 645 Cardiovascular Disorders in Connective Tissue Disease, Other Hereditary Disorders 15 Hours**  
Discussion of cardiovascular conditions associated with common connective tissue and other hereditary disorders.
- AV 700 Electrophysiology 15 Hours**  
Covers the physical principles behind the electrical activity of the heart. These are correlated with the findings in EKG.
- AV 705 Patient Preparation, Lead Placement, Identification of Interference 20 Hours**  
Introduction to portable EKG recorders, their different parts and functions. Preparation of the electrodes, patient preparation, proper placement of electrodes and differentiating artifacts from arrhythmia. Also covers proper equipment care and maintenance. Actual EKG recording.
- AV 710 Vectorcardiography 15 Hours**  
Includes discussion of the principles of vectorcardiography, its similarities and differences from EKG, and different lead placements. Normal and abnormal VCG results are also covered.

## COURSE DESCRIPTIONS

### **AV 715 Arrhythmia Recognition and Management 90 Hours**

Study of the different arrhythmias and the mechanism of generation. Includes daily practice reading of EKGs and discussion on management of cardiac arrest.

### **AV 720 Cardiovascular Pharmacology 15 Hours**

Review of the most commonly used drugs in arrhythmia management – their action, side – effects and effects on EKG. Other cardiovascular drugs are also discussed.

### **AV 725 Pacemaker 20 Hours**

Deals with the uses of pacemakers, the different types and their uses. Includes practice reading of EKGs from pacemaker patients and recognition of pacing malfunctions.

### **AV 730 Holter Monitoring 10 Hours**

Technique of Holter scanning – application in cardiology. Discussion of the different types of monitoring and scanning techniques, lead placements and hook-ups, and sources of artifacts.

### **AV 735 Stress Testing 15 Hours**

Review of exercise physiology and normal EKG changes during exercise. Discussion of the different modalities and protocols used in exercise testing, reasons for termination of test and contraindications.

### **AV 740 Transesophageal EKG 5 Hours**

Covers the indications for the use of transesophageal EKG, the normal expected findings, the hook-ups and lead placements, and possible sources of artifacts.

### **AV 745 Electrophysiologic Studies and His Bundle Recording 25 Hours**

Deals with the different invasive techniques of studying the electrical activity of the heart, the indications, the complications as well as the role of a CVT in the procedure.

### **AV 800 Radiology 50 Hours**

Review of the physical principles of X-ray, the practical aspects of producing films, safety precaution, film processing, darkroom procedures, patient and film positioning; routine and special radiographic examinations.

### **AV 805 Cardiac Series 5 Hours**

Study of the 4 views in the cardiac series with emphasis on the boundaries of the cardiac silhouette for each views. Include discussion common abnormal findings.

### **AV 810 Cardiac Catheterization and Angiography 40 Hours**

Lecture on the surgical technique in cardiac catheterization, indications, equipment, aseptic technique principles, behavior in Cathlab, complications of procedure. Recognition of coronary anatomy.

### **AV 815 Cardiac Nuclear Imaging, CT Scan, MRI 10 Hours**

Discussion on the indications and common abnormal findings in different pathological states with the use of the above modalities.

### **AV 820 Introduction to Ultrasound and Echocardiographic Anatomy 25 Hours**

Brief review of the principles of ultrasound. Identification of Cardiac anatomy as it is seen in the different views on an echograph.

### **AV 825 Peripheral Vascular Disease 15 Hours**

Review of circulatory hemodynamics followed by study of the different arterial and venous disorders.

### **AV 830 Peripheral Vascular Diagnostic Testing 25 Hours**

Introduction to the different arterial and venous diagnostic techniques, the physical principles involved, testing protocols, current diagnostic equipment.

## COURSE DESCRIPTIONS

### **AV 835 Carotid and Vertebral Artery Ultrasound** 25 Hours

Review of Cerebrovascular anatomy and central nervous function. Discussion of the different diagnostic techniques used in testing the adequacy of cerebrovascular circulation with emphasis on 2-D imaging and doppler techniques.

### **AV 840 History Taking and Physical Examination** 5 Hours

The student receives intensive lecture on interview techniques, bedside manners, physical examination, and an introduction to medical transcription.

### **AV 845 Medical Ethics and Jurisprudence** 5 Hours

Discussion on the standards of right and wrong as they relate to the medical profession and personal ethics. The legal liability of the patient as well as the physician. Includes tort law, confidentiality, and privacy rights. "Front Office" procedures are also taken up.

### **AV 850 Introduction to Computers** 25 Hours

Crash course for Keyboarding/Data Entry.

### **AV 900 Internship** 280 Hours

Student is placed in a medical facility where there is an opportunity to observe, assist, learn and perform in an on-the-job setting. Internship is mandatory and must be completed satisfactorily before a student is issued a diploma. The student's supervisor will confirm the student's attendance and will submit evaluations of performance to the school.

### **EC 900 Introduction and Overview** 5 Hours

The history of sonography and related issues in echocardiography, clinical trends, role of the sonographer, ultrasound, echocardiographic technician in the context of various clinical settings.

### **EC 905 Physics of Ultrasound.** 75 Hours

Introduction to fundamental concepts of sound wave physics and mathematics; quantitative analysis, physical units, acoustic waves, velocity of propagation, wavelength and frequency, acoustics and wave variables, phase of wave, intensity and amplitude, acoustic impedance; attenuation, reflection and refraction, principles of Doppler; physical characteristics of continuous and pulsed ultrasound, and color flow mapping, biologic media, image artifacts, sound wave propagation, beam angle, tissue acoustic impedance, linear scans and arrays.

### **EC 910 Instrumentation Systems Operations** 50 Hours

Overview and study of the transducer and focal zones, ultrasonic fields, ultrasonic imaging, pulse echo principle, instrumentation, real time systems, small parts scanners, display systems, standard Doppler controls, testing and calibration procedures, acoustic output measurements, linear scans and arrays, single pass, arc and compound sector scans, artifacts, equipment care, displays, monitors and recording devices, quality control and biologic effects.

### **EC 915 Cardiac Anatomy and Physiology** 100 Hours

Intensive review and study of anatomy with special emphasis on the heart including external appearance, chambers of the heart cardiac valves, coronary circulation, conduction system, cardiac nerves, embryology of the heart, physiologic function of circulation, component parts of circulation, control mechanism, the cardiac cycle, cardiac contraction, functional cardiac anatomy and coronary circulation, pulmonic circulation, systemic circulation.

### **EC 920 Pharmacology** 25 Hours

Review and study of drug actions, interventions and interactions relative to echocardiographic changes with cardiovascular drugs, inotropic and chronotropic, effects and toxicity of digitalis, nitrates and beta blockers, primary action of drug families; cardiac physiologic responses, anti-arrhythmic drugs, anti-coagulants, TPA, fibrinolytics, calcium blockers, vasodilators, antihypertensives.

## COURSE DESCRIPTIONS

### **EC 925 Pathology of the Heart 120 Hours**

Diseases of the heart, mitral valve prolapse, bacterial endocarditis, cardiac tumors, spontaneous valve disruption, calcified mitral annulus, ischemic heart disease, cardiomyopathies, myocarditis and pericardial diseases.

### **EC 930 Congenital Pathology 75 Hours**

Hereditary diseases, hypertrophic diseases, atrial septal defect, ventricular septal defect, Tetralogy of Fallot, truncus arteriosus, transposition, Ebstein's Anomaly, congenital aortic and pulmonic stenosis, congenital aneurysm, and Eisenmenger's Syndrome.

### **EC 935 Examination of the Normal Heart 150 Hours**

Transducer technique and positions for examination; imaging planes, parasternal, apical, subcostal, and suprasternal notch views, cardiac valves, cardiac chambers and walls, vessels and valves, and differentiation.

### **ESL 85 English as a Second Language 100 Hours**

Provides the student with the basic foundations of English grammar, pronunciation, reading, and writing skills. Students will receive instruction in spelling, vocabulary enrichment, sentence structure and conventional punctuation.

### **ESL 90 English as a Second Language – Lab Session 100 Hours**

Development of English pronunciation skills for use in conversation. Enrichment of conversational, reading and writing skills.

### **MA 105 The Body as a Whole 5 Hours**

A general overview of the body, including the cells, tissues, membranes, glands, body water, systems, homeostasis.

### **MA 110 The Skeletal System 15 Hours**

The study of the types of bones, bone markings, bone structure, ossification, articulation, axial skeleton, appendicular skeleton and bone diseases.

### **MA 115 The Muscular System 15 Hours**

The study of muscle fiber, muscle contraction, stretching, motor summation. The names of muscles, diseases of the muscles and related disorders.

### **MA 120 The Cardiovascular System 20 Hours**

A study of the heart and blood vessels, including blood pressure, blood flow, circulation and the lymphatic system, cardiovascular and lymphatic diseases.

### **MA 125 Electrocardiography 40 Hours**

Preparation of the patient, familiarity and care of the equipment; tracings and markings. Artifacts, recognition of abnormalities, editing and mounting of the tracing. Stress testing, Holter monitoring and pacemakers are discussed.

### **MA 130 The Respiratory System 15 Hours**

Study includes the nose, pharynx, larynx, trachea, bronchi, lungs, thorax. Chemistry of oxygen and carbon dioxide transport. Respiratory control, normal and abnormal breathing.

### **MA 135 First Aid and C.P.R. Certification 25 Hours**

A study of emergency patient care. Care and treatments for abdominal pain, animal bites, stroke, bleeding, burns, seizures or convulsions, fainting, foreign bodies, fractures, heart attacks, insect bites, nose bleeds, poisoning, shock, wounds. Do's and don'ts of first aid. Supplies; CPR certification.

### **MA 140 The Digestive System 15 Hours**

A study of the alimentary canal, including the esophagus, stomach, small and large intestines, liver, gall bladder, pancreas. Absorption. Diseases of the digestive system.

### **MA 145 The Nervous System 15 Hours**

The study of neurons, the nerve impulse, reflexes, spinal cord, brain, meninges, autonomic nervous system, and diseases of the nervous system.

### **MA 150 The Urinary System 10 Hours**

A study of the kidneys, ureters, bladder, urine, and urinary diseases.

## COURSE DESCRIPTIONS

- MA 155 Reproduction** **15 Hours**  
Study of the male and female reproductive systems, the reproductive process, and diseases of the reproductive system.
- MA 160 The Endocrine System** **5 Hours**  
The study of the endocrine glands, hormones, and diseases of these glands, including the pituitary, thyroid, parathyroid, adrenal, and pancreas.
- MA 165 The Sensory System** **5 Hours**  
The structure and functions of the eye, ear, and skin. Related diseases.
- MA 200 Medical Ethics / Jurisprudence** **10 Hours**  
A study of the standards of right and wrong as they relate to medicine and the system of laws as they relate to the medical profession. History of ethics, personal ethics.
- MA 205 Psychology of Human Relations** **5 Hours**  
A study of personality formation, self and adult socialization, stress, patient fear and public relations.
- MA 220 Assisting Arts** **75 Hours**  
The study and practice of vital signs, height and weight; explanation of special diets, physical therapy, clinical procedures and examinations; room techniques for assisting the doctor with patient; physical examinations, draping and positioning, medical instrumentation, pre-operative and post-operative care.
- MA 225 Pharmacology** **40 Hours**  
The study and practice of injections, care of syringes and needles; the study of drugs and solutions, toxic effects of drug abuse, legal regulations and standard inventory, dosage, prescriptions, emergency drugs, storage, labeling and terminology.
- MA 230 Specialized Medical Practices** **15 Hours**  
An introduction to the various specialties of medicine (osteopathy, E.N.T., orthopedics, allergy, ophthalmology, pediatrics, gynecology, etc.) and the role of the medical assistant in these specialties.
- MA 240 Medical Office Management** **55 Hours**  
The study of 'Front Office' procedures, including types of insurance (health, government, Medicare, etc.), medical screening, pegboard and processing of these forms. Includes telephone techniques, maintaining patient's medical records, filing, doctor's correspondence and medical terminology.
- MA 300 Introduction to Lab** **5 Hours**  
Students learn to use the microscope, collect specimens and familiarize themselves with various laboratory equipment and supplies. Introduction to venipuncture techniques.
- MA 310 Bacteriology and Sterilization** **5 Hours**  
A study of the classifications of microorganisms (bacteria, viruses, fungi, rickettsiae). Principles and techniques of sterilization used in a doctor's office.
- MA 315 Urinalysis** **25 Hours**  
Covers anatomy and physiology of the urinary system in depth; collection of specimens, testing for specific gravity and pH; chemical analysis for glucose, protein, acetone, bilirubin, and blood. Microscopic examination with interpretation of findings.
- MA 320 Hematology** **90 Hours**  
The study of blood and the blood forming organs, composition and functions of blood. Methods and practice in CBC, RBC, WBC, differentials, hematocrit, sedimentation rate, hemoglobin and coagulation studies.
- MA 325 Blood Chemistry** **20 Hours**  
Routine blood tests (blood cholesterol, glucose, uric acid) findings and interpretation, normal values.
- MA 330 Medical Radiography** **50 Hours**  
X-ray physics and the practical aspects of producing x-ray films. Covers safety precautions; film processing and dark-room procedures; positioning and film critique; routine and special radiographic examinations and procedures. Preparation for state board examination.

## COURSE DESCRIPTIONS

- MA 400 Internship** **300 Hours**  
Student is placed in a medical facility where there is an opportunity to observe, assist, learn and perform in an on-the-job setting. Internship is mandatory and must be completed satisfactorily before a diploma is issued. The student's supervisor will confirm the student's attendance and will submit evaluations of performance to the school.
- MC 100 Computer Fundamentals** **40 Hours**  
An overview of the history and concepts of computers. Types of computers; central processing unit, input/output devices, program and data memory, hardware connection, mass storage, floppy disks, hard disks, etc., software disk operating systems, multi-tasking, real-time, etc., elements of data processing.
- MC 105 Keyboarding / Data Entry** **40 Hours**  
Additional training to upgrade keyboard skills; understanding the role of data entry within the organization; understanding how to use a standard CRT for keyboard entry of data into a computer; entering business oriented data into CRT device and building speed and accuracy using the CRT.
- MC 110 Business Communications and General Office Management** **40 Hours**  
Ethics, conduct, office and telephone etiquette, protocol, dress codes, leadership development; career development, comparison and contrast of micro-computer careers. General management procedures and theory; how to write memos and reports, letter composition, general office communications, resumes.
- MC 115 Business Math** **40 Hours**  
Review of basic arithmetic skills, fundamentals of business math, percentages and fractions, elementary algebra.
- MC 120 Operating Systems / Micro-Computer Technology** **40 Hours**  
Concepts of disk operating systems with special emphasis on MS/DOS. Comparisons with other operating systems and hardware. Proper backup procedures; copy commands; checking disk format; copying. The systems analysis approach in software. Utilities and operating procedures; documentation, general discussion of "off the shelf" software applications.
- MC 200 Word Processing** **40 Hours**  
The concepts of word processing (creating, retrieving, editing and printing text). Merging variable information with documents.
- MC 205 Bookkeeping** **40 Hours**  
Fundamentals of bookkeeping; relationship of bookkeeping to the operation of a small business; the accounting equation and double entry system, closing entries, adjustments, worksheet, trial balance.
- MC 210 Word Processing Lab** **40 Hours**  
Computer implementation of word processing concepts and techniques.
- MC 215 Spreadsheet Analysis** **40 Hours**  
Preparation of reports using the micro-computer as an electronic worksheet, eliminating the use of a calculator. Projects include: sales, cost and profit projection; check-book reconciliation and budget analysis.
- MC 220 Lab** **40 Hours**  
Computer implementation of spreadsheet analysis.
- MC 300 Database Programming** **40 Hours**  
An introduction to data base management systems, including full-screen editing commands, indexed and non-indexed files, and report generation. Various dBASE programs are written to emphasize the use of data base management systems in a business environment.
- MC 305 Lab** **60 Hours**  
Computer implementation of dBASE and operating systems/micro-computer technology.

## COURSE DESCRIPTIONS

- MC 310 Business Applications** **60 Hours**  
Function and support; standard business applications; systems, database, flow, life stream, converting to computer systems from manual systems; accounts payable, main-stream and flow control. Creation of sequential and random files.
- MC 315 Business Applications Lab / Data Entry** **40 Hours**  
Computer implementation of business applications projects. Data entry accuracy and speed drills.
- MC 400 Internship or Project** **120 Hours**  
The student completes an internship in a computer facility or a project in the computer lab.
- TT 100 Introduction** **5 Hours**  
An overview and history of the travel industry. Travel agent job description, employment outlook, related occupations, earnings and benefits.
- TT 105 North American Geography and Domestic Air** **30 Hours**  
Travel geography, major cities and codes, Terminology, codes of airline carriers, major airline routings. Application of major reference guides — North American OAG and Travel Planner. Basic reservation and itinerary construction.
- TT 110 Hotel and Resort Accomodations and Surface Transportation** **10 Hours**  
Hotel and Travel Index, Official Hotel and Resort Guide layout and use. Selecting the right hotel for your client. Overview of the Rental Industry. OAG Ground Transportation Services Manual.
- TT 115 Travel Salesmanship and Telephone Techniques** **25 Hours**  
Introducing the dynamics of the travel agent with emphasis on sales. Exploring and interpreting the non-verbal aspects

of selling, listening, appearance, and body language. Mastering telephone techniques for business and leisure clients. Discussing causes of stress and methods of controlling it.

- TT 120 Domestic Fare Construction and Ticketing** **40 Hours**  
Tariff layout and use, rules, basic fares, including point to point, joint, excursion and special fares, explanation of taxes. Explanation of standard ticket forms, including group tickets and group manifests, prepaid ticket advise, ticket exchange, refunds, MCOs and credit card charge forms. Writing a ticket by hand.
- TT 125 World Geography and International Air** **40 Hours**  
International geography, countries, major cities and codes. Worldwide Official Airline Guide; 24-hour clock; European Edition of Travel Planner, international documentation requirements. Basic international reservation and itinerary construction, tariff and ticketing.
- TT 130 Cruises** **20 Hours**  
Major regional and worldwide cruise areas, major cruise lines, air/sea information and cruise terminology. Use of steamship guides. Freighter travel information. Presenting cruises as a sales opportunity. Exploring major cruise destinations: Caribbean, Bermuda, Hawaii, Mexico, Alaska/Canada, Mediterranean. Answering the five essential questions: who, why, what, where, and when. Use of role playing demonstrating the sales process in each cost determining phase.
- TT 135 Tours** **10 Hours**  
Types of tours (hosted, escorted, independent). How to read a tour brochure. Terminology. Consolidated Air Tour layout and use. Fly/drive tours. Tour Orders. Designing a foreign or domestic independent tour (FIT/DIT). Major Tour Operators and use of worldwide tour guide. Client travel profiles based on time/budget/interests theory. Qualifying the tour client.



## COURSE DESCRIPTIONS

### **TT 150 Travel by Rail**

**5 Hours**

Booking procedures for Amtrak, types of accommodations, rail terminology, ticketing. How to use the Official Railway Guide. Eurorail/Britrail Pass information and booking procedures.

### **TT 155 Guidelines for Seeking Employment**

**20 Hours**

Resume preparation, job interview tips, negotiating salary.

### **TT 160 Agency Marketing**

**10 Hours**

Elements of marketing consisting of product/service/distribution, pricing and promotion. Budget considerations and establishing a marketing mix. Creating a company image. Acquiring new sales, targeting markets, prospecting and making sales calls. Production of a sales proposal. Handling objections and follow-up of the sales process. Designing a sales proposal and making an oral sales presentation.

### **TT 165 International Fares and Ticketing**

**15 Hours**

Tariff layout use and rules of the airline passenger tariff and IATA ticketing handbook. Construction of regular fares using mileage principle, surcharges, higher intermediate points, fictitious construction points, more distant points, unflown sectors, class differentials, add-ons, APEX and children's fares. Explanation of IATA areas. Explanation of charters, bulk fares, baggage and weight limitations and ticket validity as it pertains to international travel. Basic components of international ticketing. Refunds, reissues and special instructions.

### **TT 170 Destinations**

**10 Hours**

Chart covering over 100 countries that includes information on major cities, popular attractions, language, currency, general facts and shopping. Detailed information on 10 destinations: England, France, Germany, Switzerland, Italy, Mexico, Japan, Israel, Egypt and Hawaii. Overview of climate considerations. Use of Pan Am World Guide, travel planners and Culture Grams. Presenting an oral report on a destination research project. Using Travel Trivia game to learn pertinent travel information.

### **TT 175 Office Procedures and Accounting**

**10 Hours**

Handling the procurement, security, disposition and ARC sales reports for traffic documents. Basic principles of travel agency finances. Bookkeeping using cash receipts, accounts receivable, cash disbursements, and ARC international accounting ledgers. Regulations concerning agency bonds and auditing. Suggestions for organization in the area of time management and maintaining brochures. Designing a budget showing profitability margin for an agency.

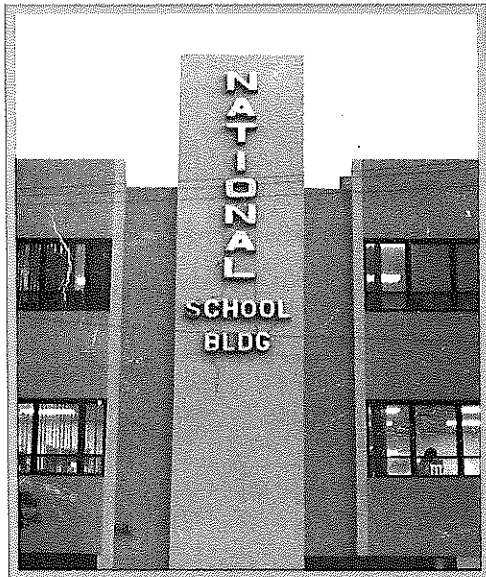
### **TT 180 Computer / Automation Training**

**85 Hours**

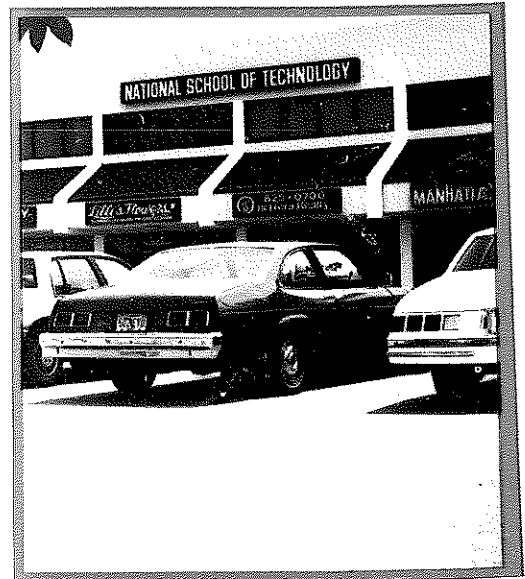
Typing review. On live terminals, students will be able, from memory, to make complete reservations which include: input single and multiple names, input agency and passenger telephone, input ticketing/future ticketing, check city pair availability, manually selling flights, waitlisting/cancel itinerary/rebooking, displaying PNRs. With the aid of reference materials, students will be able to perform the following functions: quote fares, check airline availabilities, change/delete passenger data, reduce number in party, divide names from PNR, price, order cars, special meals, request seat assignments, input remarks, work "Q" system, compute fare/tax/totals, convert currencies, reserve hotels, Phase IV — Pricing.







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