1981

Bachelor Degree Programs For Students Working in Business and Industry August 1981

Nova Southeastern University

NOVA UNIVERSITY
CENTER FOR SCIENCE AND ENGINEERING

BACHELOR DEGREE PROGRAMS
For Students Working In Business And Industry

● ELECTRICAL ENGINEERING ● COMPUTER SCIENCE

● COMPUTER SYSTEMS

Develop Your Technical Potential

Part Time and Full Time Degree Programs

Designed for the Working Adult in Cooperation with Industry

"Second Bachelor" Programs for those who now need a Technical Degree

FORMAT

Classes will meet for 4.5 hours for 9 sessions either in the evening from 6-10:30 PM or on Saturday from 8:30 AM-1:00 PM at the main Nova campus, or at industrial sites.

ADMISSION REQUIREMENTS

Students must be high school graduates (or equivalent), and take the Nova College Placement Test, which will evaluate ability to read, write, and perform mathematical calculations (hand calculator permitted) on the level needed for college work. College Board or Miller Analogy scores may be substituted by students in lieu of Placement Test. A student may take up to 2 courses as a Special Student or while in the process of applying before taking the Placement Test.

CAN I TAKE A COURSE OR TWO WITHOUT ENROLLING IN A DEGREE PROGRAM?

YES. In this case, you check "Special Student" on the application form. You do not have to take the Placement Test to take one or two courses as a "special student."

HOW DO I APPLY FOR ADMISSION?

Complete the application forms and return with a non-refundable $20.00 application fee by mail or in person. All checks should be made payable to NOVA UNIVERSITY. All materials should be sent to Nova College, Registrar's Office, Nova University, 3301 College Avenue, Fort Lauderdale, FL 33314.

HOW DO I REGISTER?

Discuss your needs with the counselor, by phone or in person, complete the registration form. It should be returned with a check in the appropriate amount made out to NOVA UNIVERSITY, and sent to the same address as indicated in the admission question above.

WHAT IS THE COST OF ATTENDING?

Application fee (non-refundable):	$20.00
Registration fee:	$10.00
Tuition (per credit)	$85.00
Late registration fee (after Aug. 7)	$10.00

WHAT CREDIT CARDS CAN I USE?

Master Charge
VISA
Hollywood Buy-O-Matic

FOR INFORMATION CALL:

BROWARD COUNTY: 475-7650
DADE COUNTY: 940-6447, Ext. 7649/50 (toll free)
PALM BEACH COUNTY: 732-6600, Ext. 7649/50 (toll free)

Nova University / College Avenue / Fort Lauderdale, Florida 33314

Nova University is fully accredited by the Southern Association of Colleges & Schools

THIS IS NOT A REGISTRATION FORM

Please mail to: Dr. Anna Mae Walsh Burke
Nova University
3301 College Avenue
Ft. Lauderdale, FL 33314

_____ Electrical Engineering
_____ Computer Science
_____ Computer Systems
_____ Computer Systems/Technical Communication

Please send information on Corporate Division Programs:

NAME _____ HOME PHONE _____

ADDRESS _____ EMPLOYER _____

_____ BUSINESS PHONE _____

(City) (State) (Zip)

COURSES BEGINNING AUGUST 17, 1981

COURSE NO.	DESCRIPTION	DAY	SECTION	TIME	LOCATION
CS 160	Fundamentals of Logic Design	M	A	6:00pm-10:30pm	Coral Springs
ETR 255	Electricity Lab	M	A	6:00pm-10:30pm	P 3rd Fl
ETR 335	Electronics Lab I	M	A	6:00pm-10:30pm	P 3rd Fl
CS 170	Computer Programming I	T	A	6:00pm-10:30pm	P 208
CS 305	Computer Programming II	T	A	6:00pm-10:30pm	P 209
ETR 210	Networks I	T	A	6:00pm-10:30pm	P 107
CS 170	Computer Programming I	W	B	6:00pm-10:30pm	P 209
MAT 150	College Mathematics	W	A	6:00pm-10:30pm	P 210
PHY-160	Physics III	W	A	6:00pm-10:30pm	P 106
EE-410	Electromagnetic Theory	Th	A	6:00pm-10:30pm	P 107
CS 220	Business Oriented Language (COBOL)	Th	A	6:00pm-10:30pm	P 208
CS 310	Programming Techniques	Th	A	6:00pm-10:30pm	P 209
MAT 220	Calculus II	Th	A	6:00pm-10:30pm	P 210
CS 420	Operating System Concepts	S	A	8:30am-1:00pm	P 208
ETR 330	Electronics I	S	A	8:30am-1:00pm	P 209

COURSE DESCRIPTIONS

CS-160 Fundamentals of Logic Design (Formerly called Digital Systems)
An introduction to elementary digital logic circuits, Boolean algebra, Karnaugh maps, digital counters, other basic circuit elements. Number sets, modules, binary, octal and hexadecimal number systems are investigated and related to digital computing structures.

CS-170 Computer Programming I
An introduction to good programming techniques including flow charting, code design, debugging techniques and documentation, problem-solving methods and algorithm development to be used in the design of computer programs. The language, BASIC, will be taught as part of this course. An introduction to the use of microcomputers and computer terminals.

CS-220 Business Oriented Language (COBOL)
A detailed study of COBOL languages with application to business problems, identifications, environment, data and procedure divisions, syntax structure. File organization is discussed in connection with the data processing system.

CS-305 Computer Programming II
A continuation of CS-170 which involves higher-level languages and more complex problems including random and sequential file structures. **Prerequisite: Knowledge of Basic and Fortran.**

CS-310 Programming Techniques
Advanced programming techniques including algorithm analysis, structured programming techniques, program design, large program development and management. **Prerequisite: Basic and Fortran.**

CS-420 Operating System Concepts
Methods in the analysis and design of large-scale systems, including concepts of processes, linear address space, resource allocation, protection and advanced topics in operational systems implementation. **Prerequisite: Computer Programming II or Equivalent.**

EE-410 Electromagnetic Theory
Fundamentals of static electric and magnetic fields, electro-quasi-statics potential and voltage, charge singularities, boundary conditions, as well as Maxwell's equations in cartesian, spherical and cylindrical coordinates subject to given boundary conditions, Ampere's law, Gauss' law, electric and magnetic functions. **Prerequisite: Physics II, Calculus III.**

ETR-210 Networks I
Definitions of charge, current, voltage, energy, Ohm's Law, Kirchoff's Law, networks, resistance, voltage, Current Power, Nodal Analysis, mesh analysis, principle of superposition, power transfer, Thevenin and power theorems. Two port networks. **Prerequisite: Calculus I.**

ETR-255 Electricity Laboratory
Basic lab to complement Networks theory courses.

ETR-330 Electronics I
Physical theory and analysis of semi-conductor properties, circuits containing non-linear elements, semiconductor diodes, zener diodes, conduction in semiconductors, transistor characteristics, large system signal analysis, small models, single-stage amplifiers. **Prerequisite: Networks I or Equivalent.**

ETR-335 Electronics Lab I—(1 cr.)
Lab work to complement electronics theory course. **Prerequisite: Electronics I.**

MAT-150 College Mathematics (Precalculus)
Review of algebra, trigonometric functions, graphs of functions, logarithms, exponents, functions of the natural number, introduction of calculus, concept of limits, integrals.

MAT-220 Calculus II
Riemann sums, the definite integral, methods of integration, continuation of exponential logarithmic functions, inverse trigonometric functions, L'Hopital's rule, and improper integrals. **Prerequisite: Calculus I or Equivalent.**

PHY-160 Physics III
Thermodynamics, Entropy, Wave Motion & Optics, temperature, heat and kinetic theory; reflection and refraction of light, interference and defraction polarization radiation. **Prerequisite or Co-requisite: Calculus I.**

SUMMARY OF PROGRAM REQUIREMENTS

All courses are 3 semester hours of credit unless otherwise indicated.

EE	CS	MATH	SYS	SYS/TC		
x	x	x	x	x		Communications (3 cr.)
x	x	x	x	x		Communications (3 cr.)
x	x	x	x	x		Social Science (3 cr.)
x	x	x	x	x		Social Science (3 cr.)
x	x	x	x	x		Humanities (3 cr.)
x	x	x	x	x		Humanities (3 cr.)
x	x	x	x	x		Behavioral Science (3 cr.)
x	x	x	x	x		Behavioral Science (3 cr.)
	x		x	x	MAT-150	College Mathematics
x	x	x	x	x	MAT-210	Calculus I
x	x	x			MAT-220	Calculus II
x		x			MAT-305	Calculus III
x		x			MAT-310	Differential Equations
x		x			MAT-320	Advanced Calculus
x	x	x			MAT-420	Linear Algebra
		x			MAT-430	Fns. of a Complex Variable
x	x	x			MAT-440	Numerical Analysis
		x			MAT-450	Probability & Statistics
x	x	x			PHY-140	Physics I
x	x	x			PHY-150	Physics II
x	x	x			PHY-160	Physics III
x	x	x			PHY-212	Science of Matter or Chemistry
x		x			PHY-310	Modern Physics
			x	x		Physical or/Life Science (9 cr.)
x	x	x	x	x	CS-160	Fundamentals of Logic Design
x	x	x	x	x	CS-170	Computer Programming I
x	x	x	x	x	CS-210	Fortran
	x	x	x	x	CS-220	Business Oriented Language (COBOL)
x	x	x		x	CS-240	Digital Design
x	x	x	x	x	CS-305	Computer Programming II
	x	x	x	x	CS-310	Programming Techniques
	x	x	x	x	CS-320	Organization of Programming Languages
	x	x	x	x	CS-330	Structured Programming (PASCAL)
	x	x	x	x	CS-340	Introduction to File Processing
x	x			x	CS-350	Computer Circuit Design
x	x			x	CS-360	Computer Architecture
x	x				CS-410	System Design & Analysis
	x		x	x	CS-420	Operating System Concepts
					CS-430	Simulation & Modeling
					CS-440	Microcomputers
	x		x	x	CS-450	Data Base Management Systems Design

EE	CS	MATH	SYS	SYS/TC		
	x		x	x	CS-460	Assemblers and System Programming
			x	x	CS-470	Information Systems Analysis and Design
x	x			x	ETR-210	Networks I
x					ETR-255	Electricity Laboratory (1 cr.)
x					ETR-310	Networks II
x	x				ETR-330	Electronics I
x					ETR-335	Electronics Lab I (1 cr.)
x					ETR-340	Electronics II
x					ETR-345	Electronics Lab II (1 cr.)
x					ETR-420	Electronics III
x					ETR-430	Networks III
x					EE-410	Electromagnetic Theory
x					EE-420	Field Transmission Lines
x					EE-430	Fund. of Communication Systems
x					EE-440	Energy Systems
x					EE-450	Control Systems
x					EE-460	Micro-electronics
x					EE-470	Elect. Eng. Analysis/Design
x				x	TEC-220	Engineering Drawing (3 cr.)
x				x	TEC-320	Technical Communication
x				x	TEC-330	Technical Writing
x				x	TEC-370	Technical Documentation I
x				x	TEC-380	Technical Documentation II
x				x	TEC-470	Seminar in Technical Communication
9	15	24	12	12		Electives (in credits)
			x			30 credits in Business or other approved discipline

PROGRAM REQUIREMENTS		DEGREE CODE
B.S. Electrical Engineering (EE)	138 credits	460
B.S. Computer Science (CS)	120 credits	463
B.S. Computer Systems (SYS)	120 credits	464
B.S. Computer Systems/Technical Communications (SYS/TC)	120 credits	464
B.S. Mathematics	120 credits	462

100 level are beginning courses

200 and 300 level are intermediate courses

400 level are advanced courses

NOVA UNIVERSITY
3301 College Avenue
Fort Lauderdale, FL 33314

ELECTRICAL ENGINEERING
COMPUTER SCIENCE
MATHEMATICS

WHAT ARE REGISTRATION POLICIES?

How to Drop and Add Courses.

The first week of classes is the Drop/Add Period. After a class has met once you must receive written permission from the instructor or your counselor to add the class. The normal refund policy applies to a course dropped during the drop and add period unless another course of equal credit, with the same term beginning date, is added in its place.

The Registrar's Office must be notified in writing of the course to be dropped. This may be done by completing a change of Registration form available in the Registrar's Office or by mailing a simple written note to the Registrar's Office.

Tuition Refund Policy

The following refund policy will be computed based upon the date written notification of the drop is received by the Registrar's Office:

100% refund prior to the first class meeting.

75% refund prior to the second class meeting, regardless of class attendance.

50% refund prior to the third class meeting, regardless of class attendance.

Fees are non-refundable.

NOVA COLLEGE OFFERS A NUMBER OF ADDITIONAL DEGREE PROGRAMS IN BOTH DAY AND EVENING FORMAT.

For Information Call: 475-7340

After the third class meeting, a student may withdraw from a course by completing a "Withdrawal Form" available in the Registrar's Office. After one half of the course is completed, instructor's or counselor's approval is required to withdraw from a course.

How to Withdraw

If you wish to withdraw from a course after the refund period is over you must submit a completed withdrawal form to the registration office within the first half of the course. Between that time and the last class meeting before the final exam, you may withdraw and obtain a "W" only with the consent of the instructor or academic counselor on the withdrawal form. You are expected to attend all classes and may be administratively withdrawn if you fail to meet attendance requirements of the instructor.

How to Take an Incomplete

With the written approval of the course instructor, you may have up to one additional term to complete the course and receive a letter grade. An incomplete form must be completed and signed by the instructor in order to receive a grade of "I". The grade of "I" remains permanently on the record if the work is not completed within the extension period.

FINANCIAL AID

Nova University participates in various governmental financial aid programs for the benefit of its students.

For information call: 475-7410