

BUSINESS

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ACCOUNTING/ COMPUTING

Accounting with
Computers/Diploma
Accounting/Associate in
Science - Business Degree
Accounting/Transfer Curriculum

INFORMATION TECHNOLOGY

E-Commerce, Web Design, and
Development
Information Systems Technology
Senior Network Administrator

MARKETING/ MANAGEMENT

Entrepreneurship
Financial Management/Insurance
General Business
Banking Option
Marketing and Sales Option - Diploma
Retail Management
Software Applications Specialist
Sport Management
Supervision and Management
Diploma
Career Option

OFFICE TECHNOLOGY

Degree Programs
Administrative Secretary
Administrative Medical Secretary
Administrative Medical Secretary/
Transcription Specialist Option
Administrative Legal Secretary

Diploma Programs
General Secretary
Legal Secretary
Medical Secretary
Medical Transcription
Software Applications Specialist

BUSINESS DIVISION

The Business Division provides courses and programs for students who wish to transfer to a baccalaureate degree granting institution, for students who are undecided and are interested in a career option program, or for students who want a specific career program.

Transfer Students

Students need to take courses that will facilitate their transfer to the institution of their choice. Courses that would assist students who are business majors would be accounting, computers, statistics and spreadsheets. Other business courses may also transfer to many institutions (see pages 214-217 for specific degree requirements).

Career Option Students

For students interested in the business area but undecided as to what degree to pursue, career-option programs provide the flexibility these students need. Upon completion of a career-option program a student may choose to pursue a baccalaureate degree or go directly to a chosen occupational area. Career Option programs are available in Accounting/Computing, Marketing/Management, and Office Technology (see pages 214-217 for specific degree requirements).

Career Students

Students who are focused on a particular occupation may choose from a variety of business career programs. These programs follow a curriculum that assists each student in developing the knowledge, skills, and abilities necessary to be successful in his/her chosen field.

The Business Division's highest priority is to assist students in reaching their individual educational goals. Each instructor is dedicated to providing the highest quality instruction to facilitate this process.

ACCOUNTING/ COMPUTING

Accounting with Computers/Diploma
Accounting/Associate in Science -
Business Degree
Accounting/Transfer Curriculum

The focus in this cluster is accounting and computer technology. Each program provides courses that range from entry-level knowledge and skill development to more advanced levels. Students completing these programs are well prepared to be successful in entering the business field or in transferring to another institution.

Accounting with Computers/ Diploma

The Accounting with Computers/Diploma is designed to provide students with the skills, attitudes, and knowledge necessary to enter the field of bookkeeping and accounting; or the courses may be applied toward an Associate in Science-Business degree or an Associate in General Studies degree. The program may be completed in two semesters by following the suggested curriculum, or it may be spread out over three or more semesters. Upon satisfactory completion of the prescribed curriculum with an average grade point of 2.00 (C), the student is awarded a diploma. This recognition is granted to a person who has completed at least thirty (30) semester hours of credit.

The curriculum is implemented with classroom work, laboratory instruction and practice, and computerized accounting. Several accounting simulation projects, including manual and computerized, are completed to give the students experience in keeping a complete set of books. Many hours of computer experience in accounting, keyboarding, and word processing prepare students for full-time employment or for more advanced education in the accounting field.

Some of the occupational areas in which job opportunities may be found are:

- * Accounting Clerk
- * Accounting Technician
- * Accounts Payable
- * Accounts Receivable
- * Bookkeeper
- * Data Entry
- * Data Processing
- * General Office Clerk
- * Payroll

For specific information contact the North Iowa Career Center or the NIACC Business Division.

ENTRANCEREQUIREMENTS

High school graduation or the equivalent.

REQUIRED COURSES:

15:107*Key boarding for Office Technology	3 s.h.
15:110 ElectronicCalculators.....	1 s.h.
15:118 AccountingProcedures	3 s.h.
15:119 AccountingApplications	5 s.h.
15:134 ComputerApplications	3 s.h.
15:155 PayrollAccounting.....	3 s.h.
15:160 ComputerAccounting.....	3 s.h.
15:212 BusinessCommunication.....	3 s.h.
89:150 EmploymentStrategies	1 s.h.

* Pre requisite: Pass keyboarding test at 30 wpm with 3 errors or less.

ELECTIVE COURSES:

15:101 Introduction to Business.....	3 s.h.
15:120 Business Law I	3 s.h.
15:121 Business Law II.....	3 s.h.
15:140 Introduction to Computers and Information Systems.....	3 s.h.
15:144 Principles of Supervision	3 s.h.
15:149 Managing Human Resources	3 s.h.
15:175*ElectronicSpreadsheets.....	3 s.h.
15:211*Word Processing	2 s.h.
15:221 Marketing.....	3 s.h.
15:241 Human Relations	3 s.h.
89:100 CooperativeWorkExperience	2-5 s.h.

* Recommended Electives

For additional electives, see list of Business transfer courses near end of catalog.

SUGGESTED SCHEDULE

(For students planning to complete the program in one academic year)

First Term

15:107 Key boarding for Office Technology	3 s.h.
15:110 ElectronicCalculators.....	1 s.h.
15:118 AccountingProcedures	3 s.h.
15:134 ComputerApplications	3 s.h.
15:212 BusinessCommunication.....	3 s.h.
Elective	2 s.h.
	15 s.h.

Second Term

15:119 AccountingApplications	5 s.h.
15:155 PayrollAccounting.....	3 s.h.
15:160 ComputerAccounting.....	3 s.h.
89:150 EmploymentStrategies	1 s.h.
Elective	3 s.h.
	15 s.h.
Total Hours	30 s.h.

Accounting/Associate in Science - Business Degree

NIACC's Accounting/Associate in Science - Business Program is a dual-purpose program designed to give the students the option of preparing for employment using their accounting and computer skills or transferring to a four-year institution and receiving a baccalaureate degree. For specific placement information or for transfer requirements, please contact the North Iowa Career Center, the NIACC Business Division, or your counselor.

Upon completion of the curriculum with an average grade point of 2.00 (C), the student is awarded an Associate in Science-Business Degree/Accounting. Students who plan to pursue a four-year degree and need to meet general education requirements of transfer institutions should strive for an Associate in Arts degree. Several of the first-year requirements are the same for both the ASB degree and the AA degree.

ENTRANCE REQUIREMENTS
High school graduation or the equivalent.

REQUIRED COURSES/SUGGESTED SCHEDULE

First Term

15:110	Electronic Calculators.....	1 s.h.
15:112	Keyboarding Level I.....	1 s.h.
	OR 15:113 Keyboarding Level II (1 s.h.)	
	OR 15:107 Keyboarding for Office Technology (3 s.h.)	
15:109	Introduction to Accounting.....	3 s.h.
	OR 15:118 Acctg. Procedures (3 s.h.)	
	OR 15:150 Acctg. Principles I (3 s.h.)	
15:134	Computer Applications.....	3 s.h.
	OR 15:140 Introduction to Computers and Information Systems (3 s.h.)	
30:101	Communication Skills I.....	4 s.h.
40:121	Math for Decision Making.....	3 s.h.
	OR Appropriate level math course until minimum requirement is met (3 s.h.)	
		15/17 s.h.

Second Term

15:119	Accounting Applications.....	5 s.h.
	OR 15:151 Acctg. Principles II (3 s.h.)	
15:175	Electronic Spreadsheets.....	3 s.h.
30:102	Communications Skills II.....	4 s.h.
	Elective in Humanities/Social Science.....	3 s.h.
	Elective.....	3 s.h.
		16/18 s.h.

Third Term

15:120	Business Law I.....	3 s.h.
15:160	Computer Accounting.....	3 s.h.
15:241	Human Relations.....	3 s.h.
80:133	Macroeconomics.....	3 s.h.
	Elective.....	3 s.h.
		15 s.h.

Fourth Term

15:155	Payroll Accounting.....	3 s.h.
80:134	Microeconomics.....	3 s.h.
89:150	Employment Strategies.....	1 s.h.
	Business Electives.....	4 s.h.
	Elective.....	3 s.h.
		14 s.h.
Total		60/62 s.h.

Business Electives

15:101	Intro to Business.....	3 s.h.
15:107	Keyboarding/Office Tech.....	3 s.h.
15:114	Computer Literacy.....	1 s.h.
15:118	Accounting Procedures.....	3 s.h.
15:119	Accounting Applications.....	5 s.h.
15:121	Business Law II.....	3 s.h.
15:140	Introduction to Computers and Info Systems.....	3 s.h.
15:141	Intro to MIS.....	3 s.h.
15:150	Accounting Principles I.....	3 s.h.
15:151	Accounting Principles II.....	3 s.h.
15:171	Intro to Entrepreneurship.....	3 s.h.
15:174	Database Management.....	3 s.h.
15:210	Business Statistics.....	3 s.h.
15:211	Word Processing.....	2 s.h.
15:212	Business Communication.....	3 s.h.

Associate in Science - Business Requirements

- * 30 s.h. of 15:xxx courses
- * 8 s.h. of Communications
- * 9 s.h. of Social Sciences and/or Humanities
- * 3 s.h. of Natural Sciences (40:121, Math for Decision Making is minimum required for transfer)
- * A total of 60 s.h.

Accounting/Transfer Curriculum

Some of the courses listed on this page which apply toward an Associate in Science - Business degree will not count as transfer courses for an Associate in Arts degree. Please refer to the NIACC College Catalog for specific requirements or contact your counselor for assistance in determining your schedule to meet your goal.

COURSE DESCRIPTIONS -

Accounting/Computing

15:101 Introduction to Business (3 s.h.)An overview of the phases and functions of the business enterprise. Units of instruction include the organization, financing, production, and contemporary issues in business. The course provides an awareness and understanding of the complexities of the business world. (45-0)

15:107 Keyboarding for Office Technology (3 s.h.)
Prerequisite: 15:112, Keyboarding Level I, and/or 15:113, Keyboarding Level II, OR keyboarding skill of 30 wpm (words a minute) with 3 or less errors on a 3-minute timed writing. This course covers the continued development of speed and accuracy on the alphabetic, numeric, and symbol keys. Students develop skills in formatting, producing, and proofreading the following documents: memos, letters, envelopes, tables, reports, and other miscellaneous business documents. (30-30)

15:109 Introduction to Accounting (3 s.h.) A basic understanding of the process of collecting and using financial information in business. (45-0)

15:110 Electronic Calculators (1 s.h.) [Structured or Open Entry/Open Exit] A study of the 10-key, electronic calculator. Applied business problems on the calculator. This course has been designated as a pass/no pass course. (5-20)

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Open Entry/Open Exit

15:112 Keyboarding Level I (1 s.h.) [Open Entry/Open Exit] Prerequisite: None. This course covers the development of keyboarding techniques using the touch method on the computer to learn/review the alphabetic keys. The keyboarding goal is a minimum rate of 20 words a minute with 3 or less errors. Students with little or no keyboarding skill would begin at this level. This course has been designated as a pass/no pass course. (0-30)

15:113 Keyboarding Level II (1 s.h.) [Open Entry/Open Exit] Prerequisite: Keyboarding Level I OR ability to keyboard at 20 words a minute. This course covers the development of the touch method on the computer keyboard to learn/review the alphabetic, numeric, and symbol keys. The keyboarding goal is a minimum rate of 30 words a minute with 3 or less errors. This course has been designated as a pass/no pass course. (0-30)

15:114 Computer Literacy (1 s.h.) [Open Entry/Open Exit] Prerequisite: None. Emphasis on using the computer as a tool to create personal and business documents. Introductory windows, word processing, spreadsheet, presentation, database, and Internet units give students an opportunity to view software capabilities and use some of the features. Students with little or no computer background are encouraged to take this

course. This course has been designated as a pass/no pass course. (0-30)

15:211 Word Processing (2 s.h.) This course is designed to introduce students to computers and the fundamentals of word processing. The students will progress from basic through intermediate features of word processing software. Also Open Entry/Open Exit. (20-20)

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15:118 Accounting Procedures (3 s.h.)An introductory course using a procedural approach applying the principles of debit and credit, recording of data in various journals, posting to the ledgers, the worksheet, financial statements, adjusting and closing entries, depreciation and inventory methods, plant assets, deferrals and accruals. (45-0)

15:119 Accounting Applications (5 s.h.) Prerequisite: 15:118 Accounting Procedures or 15:150 Accounting Principles with a grade of "C" or above. A continuation of Accounting Procedures including voucher system, partnerships, and corporations. Includes completion of an accounting simulation project. (75-0)

15:120 Business Law I (3 s.h.) Law as applied to business transactions and business relationships. An introduction to jurisprudence and the courts, contracts, commercial paper, sales, and security agreements. (45-0)

15:121 Business Law II (3 s.h.) Prerequisite: 15:120, Business Law I, or permission of the instructor. A continuation of 15:120. Agency, corporations, partnerships, bailments, real property, wills, trusts, insurance, bankruptcy, and government regulation of business. Some information on international law and liability of accountants. (45-0)

15:134 Computer Applications (3 s.h.) Emphasis on business applications of computer software. Students do business problems using word processing, electronic spreadsheet, and database management software. Students are also exposed to Windows operating systems, presentation software, and the Internet. (30-30)

15:140 Introduction to Computers and Information Systems (3 s.h.) Emphasis on computer literacy and business applications of computer software. Students do business problems using electronic spreadsheets, word processing software, database management software, and presentation software. Students also are exposed to some programming and web page development. (45-0)

15:141 Management Information Systems I (3 s.h.) Prerequisite: 15:140, Introduction to Computers and Information Systems, or permission of the instructor. The primary goal of MIS I is to prepare students to be productive participants in an information society. The course is designed to develop a broad understanding of business information systems, various ways to discern information from an information system, and look at ways to distribute this information. The student will also learn the basic principles and techniques for developing simple computer-based information systems for managerial decision

support systems through an extensive group project component of the course. (45-0)

15:144 Principles of Supervision (3 s.h.) This course is designed for individuals who hold, or who will hold, supervisory positions. The course involves the study of the major managerial functions (planning, organizing, staffing, directing, and controlling) and is augmented by other pervasive areas of supervision such as communication, motivation, decision-making, and human relations. (45-0)

15:149 Managing Human Resources (3 s.h.) Course describes the transition from personnel management to human resources management. The focus is on the systematic process of recruitment, selection, development, and appraising employees. (45-0)

15:150 Accounting Principles I (3 s.h.) An introductory accounting course: analyzing transactions, matching principle, adjusting and closing entries, financial statements, receivables, inventories, fixed assets and intangible assets, current liabilities, corporations (capital stock transactions, dividends, income and taxes, stockholder's equity, investment in stocks), bonds payable, investment in bonds. (45-0)

15:151 Accounting Principles II (3 s.h.) Prerequisite: 15:150 Accounting Principles I, or equivalent. Course covers Statement of Cash Flows, financial statement analysis, job order and process cost systems, cost behavior, budgeting, standard costing, differential analysis and product pricing, capital investment analysis, activity-based costing, and just-in-time manufacturing. Emphasis is on management's use of accounting information. (45-0)

15:155 Payroll Accounting (3 s.h.) Prerequisite: 15:109 Introduction to Accounting or 15:118 Accounting Procedures or 15:150 Accounting Principles I with a grade of "C" or above. A study of basic business taxes. Emphasis on payroll taxes including social security taxes, income taxes, and unemployment taxes; completion of quarterly and annual reports and a payroll simulation project. (45-0)

15:160 Computer Accounting (3 s.h.) Prerequisite: 15:109 Introduction to Accounting or 15:118 Accounting Procedures or 15:150 Accounting Principles I with a grade of "C" or above. Designed to provide students with realistic experience with automated accounting consisting of five systems: general ledger, accounts payable, accounts receivable, depreciation, and payroll. Students will find themselves as having taken an accounting position in a company already using a computerized accounting system. Students will be working in an individualized instruction environment. (45-0)

15:171 Introduction to Entrepreneurship (3 s.h.) Prerequisite: 15:101, Introduction to Business. This course provides students with an introduction to entrepreneurship and new venture creation. Students will

examine the characteristics of successful entrepreneurs and develop insight on developing and enhancing creativity and innovation. Students will also learn the process of assessing new venture proposals and understand the components of a business/feasibility plan. (45-0)

15:174 Database Management (3 s.h.) Prerequisite: 15:140, Introduction to Computers and Information Systems, or permission of the instructor. This course introduces students to database concepts, with topics such as database structure and design, planning, modeling, database software and servers, SQL, reports, fault tolerance, and administration being covered. Exposure to current and popular database systems will be provided. (30-30)

15:175 Electronic Spreadsheets (3 s.h.) Prerequisite: 15:140, Introduction to Computers and Information Systems, or 15:134, Computer Applications. Learn the fundamentals of spreadsheets, databases, and business graphics using appropriate software. (30-30)

15:210 Business Statistics (3 s.h.) Prerequisite: 40:125, Quantitative Methods; 40:140, Intro to Statistics; or 40:151, College Algebra & Trig I. The use of statistical methods as an analytical tool in business situations. Data collection, tabular and graphical presentations, frequency distributions, probability, sampling, data analysis, hypothesis testing and regression, and correlation analysis. The use of statistical software is incorporated into the course. (45-0)

15:211 Word Processing (2 s.h.) This course is designed to introduce students to computers and the fundamentals of word processing. The students will progress from basic through intermediate features of word processing software. Also Open Entry/Open Exit. (20-20)

15:212 Business Communication (3 s.h.) This course will help the student become an effective communicator in the business world. Basic written communication will be emphasized through practice in grammar structure, vocabulary building, and organization of thoughts. These skills will then be implemented when the student plans and writes business letters and interoffice memoranda. A secondary emphasis will be placed on oral communication, listening skills, and nonverbal communication. (45-0)

15:221 Marketing (3 s.h.) A study of the role of marketing in society as well as a study of target market (customer) determination and selection, product strategy, channels of distribution, pricing concepts, and promotional activities that are used in business today. (45-0)

15:241 Human Relations (3 s.h.) The study of how people satisfy both personal growth needs and organizational goals in their careers. Although also interested in the why of human behavior, human relations goes further and looks at what can be done to anticipate problems, resolve them, or prevent them from happening.

This field emphasizes knowledge that can be applied in practical ways to problems of interpersonal relations at work or in our personal life. Significant developments in recent years in the workplace have increased the importance of interpersonal skills in almost every type of work setting; these trends provide support for the necessity of acquiring competence in human relations. (45-0)

30:101 Communication Skills I (4 s.h.) Improvement of skills in reading, writing, speaking, and listening, with an emphasis on expository methods of development and personal experience as supporting material. Students may be requested to use word processors and the Writer's Workbench analyses programs, the Writer's Workbench STEPS programs, and the structuring sentences video series. Students must meet minimum competency requirements in writing and speaking to receive a grade of "C" or higher. (60-0)

30:102 Communication Skills II (4 s.h.) Prerequisite: 30:101, Communication Skills I. Students must have earned a "C" or higher grade in Communication Skills I before enrolling in Communication Skills II. A continuation of 30:101 with an emphasis on argumentative and persuasive writing and speaking, on research methods, and on language. Students may be requested to use word processors, Writer's Workbench analyses, Writer's Workbench STEPS, and sentence structuring videos. Students must meet minimum competency requirements in writing and speaking to receive a grade of "C" or higher. (60-0)

40:121 Mathematics for Decision Making (3 s.h.) Prerequisite: Basic Arithmetic and Algebra skills as shown by one of the following: 1. A score of 16 or higher on the ACT Math Test or the ASSET Numerical Math Skills Test, or a score of 51 or higher on the Pre-Algebra part of the COMPASS Test AND a grade of "C" or better in 40:060, Beginning Algebra (at NIACC), or equivalent; 2. A score of 20 or higher on the ACT Math Test or the ASSET Numerical Math Skills Test or 51-75 on the Algebra section of the COMPASS test. Mathematics for Decision Making provides a survey of mathematics topics that includes sets, logic, probability, statistics, sets of numbers, algebra, geometry, and consumer math. This course will fulfill 3 hours of Natural Sciences requirement for the A.A. Degree. (45-0)

80:133 Macroeconomics (3 s.h.) An introductory study of how people use scarce resources to satisfy unlimited wants. After an introduction to economics, the emphasis is on the determination of national income, output, employment, and the general price level in the national economy including an examination of the money and banking system. (45-0)

80:134 Microeconomics (3 s.h.) Prerequisite: 80:133, Macroeconomics. An introductory study of how people use scarce resources to satisfy unlimited wants. The emphasis is on the behavior and decisionmaking by individual consumers, entrepreneurs, workers, and other resource owners in the product and resource markets

and the resulting effects on the efficiency with which resources are used. (45-0)

89:100 B-C-D-E Cooperative Work Experience (2-5 s.h.) Practical training on the job under the cooperative supervision of the college and work supervisor. Designed primarily for the college-transfer students to provide an experience that: (1) is directly related to their college program and career objectives; or (2) will help them test out career interest and/or discover new career possibilities. Credit is determined on the basis of one semester of credit for each 60 hours of approved employment to be completed in a term. Appropriate learning objectives is an essential factor in the approval process. This course is repeatable up to 12 semesters hours. (0-120 to 300)

89:150 Employment Strategies (1 s.h.) Develop skills necessary to enter the job market and experience long-term career growth. Students learn basic job seeking techniques, job keeping skills, and strategies for continued growth. (15-0)

INFORMATION TECHNOLOGY

E-Commerce, Web Design and Development

E-Commerce, Web Design and Development provides students an opportunity to gain both a general knowledge of this dynamic profession as well as greater levels of specialization in a student-chosen option of study. As such, each graduate will be exposed to a common core of knowledge in E-Commerce, Web Design and Development as well as specialized education in one of four programmatic options: 1) Web Application Development; 2) Web Graphic Design; 3) E-Business; and 4) E-Entrepreneurship.

Web Application Development

Plans and takes responsibility for the success of a Web business operation/venture. Often works in a team environment with talented professionals. Experienced and knowledgeable about configuring and maintaining server, network or security systems for Intranet or Web operations. Experienced in the design and development of software, middleware, or systems utilizing new technology and demonstrating and delivering services through a Web presence. Experienced site designer and developer, including the management of teams to implement the business Web plan.

Web Graphic Design

Directs and implements the creative development and utilization of all Web-based tools; creates and implements new technology that increases efficiency of product/service delivery systems and improves client/user interactivity. Often works in a team environment with talented professionals. Experienced in the design and production of graphics/images that are compatible with Web standards, proficiently utilizes standard graphics applications with skills producing vector images, bit map images, HTML, animation 2D, and photo manipulation. Directs the visual identity of Web site design as well as ensures content production is met on time and within budget.

E-Business

Provide strategic e-commerce marketing planning, including competitive analysis, electronic business planning, systems planning and organizational structuring to support and enhance the company's overall marketing efforts. Develops complete business strategy, technology architecture and planning, design and development of new applications utilizing the Web/Internet, Intranet, EDI, and security audits. Often works in a team environment with talented professionals. Experienced in Web technology surrounding delivery methods and systems, is able to plan and create marketing strategies for full service/product exposure using the Web's state-of-the-art technology, and is able to rationalize and formulate new/current marketing techniques for an organization's

return on investment (ROI) and cost savings. Directs corporate Web marketing and e-business strategies involving product/service delivery, advertising, coordination of public and media relations, special events, overseeing customer support and satisfaction surveys. Directs Web departments toward meeting business objectives. Focus is to develop overall strategy and implementation of corporate Web efforts including brand management, look and feel, site content, product and service delivery. Team with a wide variety of internal departments to coordinate Web operations.

E-Entrepreneurship

Perceives and utilizes the Internet as a strategic advantage to achieve business goals. Designs and builds complex electronic business systems for e-commerce start-ups. Often works in a team environment with talented professionals. Understands that the Web inherently involves the creation, transformation of relationships for value creation within organizations, between organizations (business-to-business e-commerce), and between organizations and individuals (business-to-consumer e-commerce). Skilled in developing and implementing a business plan, including marketing and financial resource development and management. Accepts higher risks with the potential for higher rewards.

Upon completion of the curriculum with an average grade point of 2.00 (C), the student is awarded an Associate in Science-Business Degree in E-Commerce, Web Design and Development.

ENTRANCEREQUIREMENTS

1. Completion of Algebra II in high school with a "C" or better, or
2. College Intermediate Algebra or equivalent with a "C" or better, or
3. COMPASS Algebra test with a score of 76 - 100, or
4. ACT math score of 20 or above.
5. Students must have completed 15:140, Introduction to Computers and Information Systems, or equivalent before entering this program.

SUGGESTED SCHEDULE

E-Commerce Core Courses

15:156 Networking I	4 s.h.
15:167 Network Security	3 s.h.
15:169 Media Experience	3 s.h.
15:186 Internet Programming I	3 s.h.
15:191 Introduction to E-Commerce	3 s.h.
15:194 E-Commerce Cases	4 s.h.
15:196 Structure and Design	3 s.h.
15:201 Visual Communication	3 s.h.
	26 s.h.

General Education Requirements

Communications	8 s.h.
Social Sciences and/or Humanities	9 s.h.
Natural Sciences	3 s.h.
	20 s.h.

E-Business Specialization Requirements

15:101 Introduction to Business.....	3 s.h.
15:142 Principles of Management.....	3 s.h.
15:197 Internet Law.....	3 s.h.
15:221 Marketing.....	3 s.h.
Electives.....	6-10 s.h.
	18-22 s.h.

E-Entrepreneurship Specialization Requirements

15:171 Introduction to Entrepreneurship.....	3 s.h.
15:172 Managing the Entrepreneurial Venture..	3 s.h.
15:173 Seminar in Entrepreneurship.....	3 s.h.
15:197 Internet Law.....	3 s.h.
Electives.....	6-10 s.h.
	18-22 s.h.

Web Application Development Specialization Requirements

15:187 Internet Programming II.....	3 s.h.
15:188 Web Server Development.....	4 s.h.
15:199 Web Application Development	3 s.h.
15:202 Web Design.....	3 s.h.
15:203 Server Side Scripting.....	4 s.h.
15:204 Java.....	4 s.h.
	21 s.h.

Web Graphic Design Specialization Requirements

10:201 2-D Design	3 s.h.
10:202 Graphic Design.....	3 s.h.
10:220 Digital Illustration	3 s.h.
15:202 Web Design.....	3 s.h.
Electives.....	4-9 s.h.
	16-21 s.h.

Note: Summer enrollment is required.

Information Systems Technology

NIACC's Information Systems Technology Program is a diverse program allowing students to choose their career path. The IST program incorporates several options -- Network Administration, Management Information Systems, Desktop Systems, and Web System Support. Students have the option of obtaining employment using their computer skills or transferring to a four-year institution and receiving a baccalaureate degree.

The program provides opportunities for students to pursue a variety of computer professional certifications including: Cisco's Certified Network Associate, Microsoft's Certified System Engineer, Novell's Certified Administrator, and A+ Certification.

Graduates may work as LAN or WAN administrators or specialists, Web systems support, PC support, help desk administrators, or many other positions in the technology field.

Upon completion of the curriculum with an average grade point of 2.00 (C), the student is awarded an Associate in Science-Business Degree in Information Systems Technology.

ENTRANCEREQUIREMENTS

1. Completion of Algebra II in high school with a "C" or better, or
2. College Intermediate Algebra or equivalent with a "C" or better, or
3. COM PASS Algebra test with a score of 76 - 100, or
4. ACT math score of 20 or above.
5. Students must have completed 15:140, Introduction to Computers and Information Systems, or equivalent before entering this program.

SUGGESTED SCHEDULE

First Year - IST Core Classes

15:141 Management Information Systems I.....	3 s.h.
15:156 Networking I.....	4 s.h.
15:157 Networking II	4 s.h.
15:161 Operating Systems I.....	3 s.h.
15:177 Operating Systems II.....	3 s.h.
15:169 Media Experience.....	3 s.h.
15:196 Structure & Design (3 s.h.--MIS requirement only in place of Media Experience)	
	20 s.h.

First Year - General Education Requirements

Communications	8 s.h.
Social Sciences and/or Humanities	9 s.h.
Natural Sciences.....	3 s.h.
	20 s.h.
Total Hours	40 s.h.

2nd Year Options**

Network Administration

15:158	Networking III	4 s.h.
15:159	Networking IV	4 s.h.
15:163	Network Operating Systems	4 s.h.
15:166	Inter/Intranet Application Management ..	4 s.h.
15:167	Network Security	3 s.h.
	Elective*	4 s.h.
		23 s.h.

MIS

15:164	Groupware Applications I	4 s.h.
15:165	Groupware Applications II	4 s.h.
15:168	Introduction to Programming	4 s.h.
15:169	Media Experience	3 s.h.
15:174	Database Management	3 s.h.
15:204	Java	4 s.h.
		22 s.h.

Desktop Systems

15:163	Network Operating Systems	4 s.h.
15:164	Groupware Applications I	4 s.h.
15:165	Groupware Applications II	4 s.h.
15:174	Database Management	3 s.h.
15:176	Advanced Desktop Applications	3 s.h.
15:178	Hardware Service and Support	4 s.h.
		22 s.h.

Web Systems Support

15:163	Network Operating Systems	4 s.h.
15:164	Groupware Applications I	4 s.h.
15:165	Groupware Applications II	4 s.h.
15:166	Inter/Intranet Application Management ..	4 s.h.
15:167	Network Security	3 s.h.
		19 s.h.

*Choose one of the following electives for the Network Administration option:

15:179	Novell Administration	4 s.h.
15:164	Groupware Applications I	4 s.h.
15:178	Hardware Service and Repair	4 s.h.

** The program requires 60 credit hours for completion.

Note: Summer enrollment may be required.

Note: Some second year options can not be completed at night.

Recommended Elective Courses are as follows:

15:142	Principles of Management	3 s.h.
15:109	Introduction to Accounting	3 s.h.
	OR	
	15:118 Accounting Procedures (3 s.h.)	
	OR	
	15:150 Accounting Principles I (3 s.h.)	
15:151	Accounting Principles II	3 s.h.
15:171	Intro to Entrepreneurship	3 s.h.
15:172	Managing the Entrepreneurial Venture ..	3 s.h.
15:173	Seminar in Entrepreneurship	3 s.h.
15:175	Electronic Spreadsheets	3 s.h.

Senior Network Administration

The Senior Network Administrator Program is designed to prepare students for employment in network design and implementation in Fortune 500 corporations, Internet services providers, telephone companies, and consulting companies. This program allows the student to prepare for several Cisco Certifications including:

The CCNP certification (Cisco Certified Network Professional) indicates advanced or journeyman knowledge of network design. With a CCNP, a network professional can install, configure, and operate LAN, WAN, and dial access services for organizations with networks from 100 to more than 500 nodes, including but not limited to these protocols and topics: IP, IGRP, IPX, Async Routing, AppleTalk, Extended Access Lists, IP RIP, Route Redistribution, RIP, Route Summarization, OSPF, VLSM, BGP, Serial, Frame Relay, ISDN, ISL, X.25, DDR, PSTN, PPP, VLANs, Ethernet, Access Lists, 802.10, FDDI, Transparent and Translational Bridging.

The CCDP certification (Cisco Certified Design Professional) indicates advanced or journeyman knowledge of network design. With a CCDP, a network professional can design routed and switched networks involving LAN, WAN, and dial access services for businesses and organizations with 100 to more than 500 nodes.

Students also gain project management skills and study emerging Internet and networking technologies.

NIACC's computer labs are equipped with the latest in computers and networking equipment to allow students the highest quality hands-on experience. Classes are lead by Cisco certified instructors.

ENTRANCEREQUIREMENTS

To enroll in the Senior Network Administrator Program, students must meet at least one of the following requirements:

- * Passed the CCNA exam and have a computer-related college degree, such as MIS.
- * Passed the CCNA exam and have 2 years of professional computer experience, preferably in networking.
- * Completed Networking I-IV from NIACC or an other Cisco Academy with 70% or better final Cisco assessments.
- * Successfully completed equivalent corporate Cisco CCNA training.

Students must also meet all other general NIACC and IST requirements.

Individuals who do not meet these requirements, and wish to attain the CCNA and/or CCNP certification, should complete NIACC's Information Systems Technology Program.

Classes may be scheduled day or night and students may need to take summer classes to complete the program in a timely manner.

REQUIRED TECHNICAL COURSES/SUGGESTED SCHEDULE**

15:277 Network Routing.....	5 s.h.
15:278 Network Remote Access	5 s.h.
15:285 Multi-Layer Switching	5 s.h.
15:286 Network Support.....	5 s.h.
15:287 Emerging Remote Access Technologies...	3 s.h.
15:288 Network Design I	3 s.h.
15:289 Network Design II	4 s.h.
15:290 Fundamentals of Project Management..	4 s.h.
Total Hours	34 s.h.

**Courses at night will be 8 weeks in duration. Day courses will follow the NIACC academic calendar.

In order to receive the A.S.B. degree in Senior Network Administration, students must satisfactorily complete the above technical core courses, satisfy 20 s.h. of general education (per page 215), complete 6 s.h. of elective credits, and maintain an overall 2.00 (C) grade point average.

COURSE DESCRIPTIONS

E-Commerce, Web Design and Development Information Systems Technology Senior Network Administration

10:201 Two-Dimensional Design (3 s.h.) Students/artists explore the process of visual problem solving through participation in class critiques of individual projects. Perception and structure: exploring visual order emphasizing two-dimensional concepts. (20-50)

10:202 Graphic Design (3 s.h.) Prerequisite: 10:201, Two-Dimensional Design. Creative problem solving through the exploration of aesthetic and technical aspects of graphic design using computer-aided design software. (20-50)

10:220 Digital Illustration (3 s.h.) Prerequisite: 10:201, Two-Dimensional Design. Recommended: 10:150, Creative Photography, or 10:202, Graphic Design. Creation and manipulation of digital imagery is explored in the context of creative expression. User interactivity, animation, full-color printing, and computer art theories are covered. The student completes visual projects with instructor guidance. (30-30)

15:101 Introduction to Business (3 s.h.) An overview of the phases and functions of the business enterprise. Units of instruction include the organization, financing, production, and contemporary issues in business. The course provides an awareness and understanding of the complexities of the business world. (45-0)

15:140 Introduction to Computers and Information Systems (3 s.h.) Emphasis on computer literacy and business applications of computer software. Students do business problems using electronic spreadsheets,

word processing software, database management software, and presentation software. Students also are exposed to web use, file management, and simple web page development. (45-0)

15:141 Management Information Systems I (3 s.h.)

Prerequisite: 15:140, Introduction to Computers and Information Systems, or permission of the instructor. The primary goal of MIS I is to prepare students to be productive participants in an information society. The course is designed to develop a broad understanding of business information systems, various ways to discern information from an information system, and look at ways to distribute this information. The student will also learn the basic principles and techniques for developing simple computer-based information systems for managerial decision support systems through an extensive group project component of the course. (45-0)

15:142 Principles of Management (3 s.h.)

15:101, Introduction to Business, is recommended. Provides students with a general introductory management learning experience. Role of management in today's business environment; management's influence on employee productivity, employee satisfaction and organizational effectiveness; major control devices of management. (45-0)

15:156 Networking I (4 s.h.) Prerequisite: 15:140, Introduction to Computers and Information Systems or permission of the instructor. This course provides an overview of networking, including such topics as networking advantages, OSI layers, addressing and routing protocols, and LAN design, topologies, and cabling. (60-0)

15:157 Networking II (4 s.h.) Prerequisite: 15:156, Networking I or permission of the instructor. A continuation of Networking I. Provides overview of Ethernet, token ring, ATM, and FDDI; examines routing and addressing issues; studies router setup and configuration; examines LAN design, testing, and switching; and studies TCP/IP protocol and addressing. (45-30)

15:158 Networking III (4 s.h.) Prerequisite: 15:157, Networking II or permission of the instructor. A continuation of Networking II. Addresses such topics as advanced router configurations, LAN switching, networking management, and advanced network design. (45-30)

15:159 Networking IV (4 s.h.) Prerequisite: 15:158, Networking III or permission of the instructor. A continuation of Networking III. Using primarily hands-on, project-based learning, this course includes advanced network design projects and advanced network management projects. Wide Area Networks are discussed. (45-30)

15:161 Operating Systems I (3 s.h.) Prerequisite: 15:140, Introduction to Computers and Information Systems or permission of the instructor. This course introduces students to the use of such popular operating systems as Microsoft DOS, Windows 98, Windows 2000 Professional, and Windows NT Workstation. This course also addresses operating system interface and

controls; file system management; application management; and network client configuration. (30-30)

15:163 Network Operating Systems (4 s.h.) Prerequisite: 15:177, Operating Systems II, or permission of the instructor. This course goes into detail on topics of network operating system such as design, planning, installation, configuration, security, performance, administration, troubleshooting, fault tolerance, and disaster recovery. Client setup, file and print sharing, directory services, remote access, along with other network services will be explored. (30-60)

15:164 Groupware Applications I (4 s.h.) Prerequisite: 15:140, Introduction to Computers and Information Systems; 15:156, Networking I; and 15:161, Operating Systems or permission of the instructor. This course provides an introduction to such applications as electronic mail, shared calendars, document sharing, and applications within a networked environment. The course will also include an examination of groupware application features, groupware configuration and management, the relation of desktop applications to group products, a comparison of specific groupware products, and implementation issues related to groupware applications. (45-30)

15:165 Groupware Applications II (4 s.h.) Prerequisite: 15:164, Groupware Applications I or permission of the instructor. This course builds on the Groupware Applications I. The course covers such topics as the advantages and disadvantages of groupware applications, implementation considerations, server installation requirements, initial configuration, and troubleshooting. (45-30)

15:166 Inter/Intranet Application Management (4 s.h.) Prerequisite: 15:163, Network Operating Systems, and 15:177, Operating Systems II, or permission of the instructor. This course enables students to design, set up, configure, and manage Internet and Intranet services such as web, e-mail, DNS, security, and FTP along with gaining knowledge and insight into management of emerging Internet technologies. (30-60)

15:167 Network Security (3 s.h.) Prerequisite: 15:156, Networking I or permission of the instructor. This course will provide an overview of issues related to security in a networked environment, including such topics as security and disaster recovery, security within information services, security within an organization, virus protection, and Internet security/fire walls. (30-30)

15:168 Introduction to Programming (4 s.h.) Prerequisite: 15:140, Introduction to Computers and Information Systems, and 15:196, Structure and Design, or permission of the instructor. This course provides students exposure to computer program design, structure, development, and troubleshooting through an examination of such topics as logic concepts, variables, input/output, iterative constructs, conditional flow, modular design, and the comparison of programming languages. (45-30)

15:169 Media Experience (3 s.h.) Prerequisite: 15:140, Introduction to Computers and Information Systems or permission of the instructor. This course covers comprehensively the latest version of HTML. Students will learn good coding practices and be introduced to web development tools and FTP programs. Students will also be introduced to CSS (Cascading Style Sheets), image management, and basic JavaScript. (30-30)

15:171 Introduction to Entrepreneurship (3 s.h.) Prerequisite: 15:101, Introduction to Business. This course provides students with an introduction to entrepreneurship and new venture creation. Students will examine the characteristics of successful entrepreneurs and develop insight on developing and enhancing creativity and innovation. Students will also learn the process of assessing new venture proposals and understand the components of a business/feasibility plan. (45-0)

15:172 Managing the Entrepreneurial Venture (3 s.h.) 15:101, Introduction to Business, or 15:171, Introduction to Entrepreneurship, are recommended. The course provides students with the tools necessary to manage and grow a small business. Students will examine the characteristics of successful small businesses and develop insights on developing strategies for successfully growing existing ventures. Students will also learn the process of evaluating the marketing and financial needs of the venture and understand the components of a business plan. (45-0)

15:173 Seminar in Entrepreneurship (3 s.h.) Prerequisite: 15:171, Introduction to Entrepreneurship, and 15:172, Managing the Entrepreneurial Venture. Course will combine group discussions with an actual case project at a local entrepreneurial firm. Students will have an opportunity to apply business skills learned throughout their NIACC program as they complete a project for a local entrepreneurial venture. Students also will discover key entrepreneurial success characteristics. (38-15)

15:174 Database Management (3 s.h.) Prerequisite: 15:140, Introduction to Computers and Information Systems, or permission of the instructor. This course introduces students to database concepts, with topics such as database structure and design, planning, modeling, database software and servers, SQL, reports, fault tolerance, and administration being covered. Exposure to current and popular database systems will be provided. (30-30)

15:176 Advanced Desktop Applications (3 s.h.) Prerequisite: 15:140, Introduction to Computers and Information Systems or permission of the instructor. Advanced topics in desktop computer applications will be studied in this course. Students will also examine integrated software packages such as Microsoft Office Professional in this class. They will utilize integrated software to solve several business problems presented to them allowing them to gain an understanding of integrated software, as well as other desktop applications,

through hands-on experience. The course will be project-based, providing the student with a collaborative environment. (30-30)

15:177 Operating Systems II (3 sh.) Prerequisite: 15:140, Introduction to Computers and Information Systems, and 15:161, Operating Systems I, or permission of the instructor. This course is a continuation of Operating Systems I. It addresses advanced topics such as file management, shell programming, security, network and service administration, fault tolerance, recovery, troubleshooting, and operating system structure. This will be accomplished by studying the Unix or Linux operating systems. (30-30)

15:178 Hardware Service and Support (4 sh.) Prerequisite: 15:140, Introduction to Computers and Information Systems, 15:161, Operating Systems I, or permission of instructor. This course prepares the student to properly install, configure, upgrade, troubleshoot and repair microcomputer hardware. This includes basic knowledge of desktop and portable systems, basic networking concepts, and printers. The student must also demonstrate knowledge of safety and common preventive maintenance procedures. Topics include advanced DOS and Windows concepts such as batch files and memory management, installing and uninstalling software, basic hardware installation, and troubleshooting. (30-60)

15:179 Novell Administration (4 s.h.) Prerequisite: 15:161, Operating Systems I or permission of the instructor. This course provides an overview of where networking operating systems fit into the network solution, including such topics as the components and features of a network operating system, major network operating systems, operating system setup and configuration, network client issues, WAN issues, and network operating system selection criteria. (45-30)

15:186 Internet Programming I (3 s.h.) Prerequisite: 15:169, Media Experience, and 15:196, Structure and Design, or permission of the instructor. This course will teach the fundamentals of client-side web scripting with JavaScript. Students will learn about browser-related object models and their associated properties, events, and methods. Students will work with these models to create documents on the fly, create pop-up documents, manage images, manage framesets, create roll-overs, enable and validate form elements, manage cookies, create and maintain basic databases, define and enable custom objects, and create various web-related tools. (30-30)

15:187 Internet Programming II (3 s.h.) Prerequisite: 15:186, Internet Programming I or permission of the instructor. This course will allow students to continue building their JavaScripting tools while learning how to program in PERL. Students will learn how to access server documents, create and manage databases, and build bulletin boards. A lot of time will be spent building solutions that require PERL, HTML, and JavaScript together. (30-30)

15:188 Web Server Development (4 s.h.) Prerequisite: 15:187, Internet Programming II or permission of the instructor. This course gives students a solid understanding of what is going on behind the scenes of a Web site and the Internet. Students will learn the concepts and components that make up Web servers along with how to support and maintain these servers. Topics such as planning, configurations, testing, protocols, services, performance, disaster recovery, security, fault tolerance, databases, indexing, clients, transactions, SSL, and DNS will be covered. The course will provide experience with popular web servers and software. (30-60)

15:191 Introduction to E-Commerce (3 s.h.) Prerequisite: 15:140, Introduction to Computers and Information Systems or permission of the instructor. This course provides students with foundational skills and general information about electronic business solutions on the World Wide Web. Topics will include features of Internet marketing, sales, computer graphics, and network security. Students will also be introduced to Internet-related programming concepts and tools used to create web-based solutions. (30-30)

15:194 E-Commerce Cases (4 s.h.) Prerequisite: 15:140, Introduction to Computers and Information Systems or permission of the instructor. Investigate current E-Commerce basics and real life scenarios regarding electronic business practices. This capstone course will tie together previous E-Commerce courses to real life applications. (30-60)

15:196 Structure and Design (3 s.h.) Prerequisite: 15:140, Introduction to Computers and Information Systems or permission of the instructor. A fundamental requirement for people in the Information Technology field is the ability to organize a solution to a problem. This, in and of itself, is a difficult task. Often, however, this skill takes a backseat to learning code or is lost in the complexity of the task. Structure and Design concentrates on the process of developing a logical algorithmic solution to a problem. (45-0)

15:197 Internet Law (3 s.h.) Prerequisite: 15:140, Introduction to Computers and Information Systems or permission of the instructor. Students will learn and examine legal issues associated with e-commerce, including but limited to, intellectual property protection, rights of privacy, content control, anti-trust, and problems of jurisdiction. (45-0)

15:199 Web Application Development (3 s.h.) Prerequisite: 15:187, Internet Programming II or permission of the instructor. This course will build on the student's prior Internet Programming knowledge and give them an overview of various web application development resources, tools, languages, and technologies. Students will be introduced to various current tools and technologies available to a Web Developer for development and begin to understand the situations each works best in. Emphasis will be on compare and contrast techniques, proper planning, relating the syntax and elements to other tools and languages, knowledge transfer, how interaction takes place, design, and devel-

oping an understanding and use of programming resources. (30-30)

15:201 Visual Communication (3 s.h.) Prerequisite: 15:140, Introduction to Computers and Information Systems or permission of the instructor. This course is an introduction to visual problem solving and communication through the World Wide Web. This course will cover basic technical terminology, an overview of software and equipment for web graphic design and an introduction into digital imagery. Studio assignments will be digitized and sent electronically for evaluation and critique. The goal is to expand student competency in basic visual and technical skills, developing and understanding of how perception relates to communication, and expose students to current issues related to web graphic design. (30-30)

15:202 Web Design (3 s.h.) Prerequisite: 15:201, Visual Communications or permission of the instructor. This course is an expansion of graphic design concepts merging traditional page design, typography, and digital imagery into the concepts and practices of web design. This studio course will cover the preparation of digital images, compositional dynamics, and sequencing of images into a complete working web design. Students will work with current graphic and digital imaging software and web authoring software. (30-30)

15:203 Server Side Scripting (4 s.h.) Prerequisite: 15:204, Java, or permission of the instructor. Students will learn to develop and implement web applications using server side scripting with emphasis on a single language. Additional server side scripting languages and technologies will be discussed. Much of the languages object model and methods will be covered with focus on how to work with these objects and procedures. Students will gain hands-on experience while writing real world-based web applications from the ground up. Database basics will also be learned along with SQL. Simple databases will be created for use with web application back-ends. Students will learn to access and modify their databases by building front-ends for them using server side scripting and embedded SQL. Sufficient time will be spent building solutions that require using ASP, HTML, JavaScript, and various other server side scripting technologies together. (30-60)

15:204 Java (4 s.h.) Prerequisite: 15:187, Internet Programming II, or permission of the instructor. This course introduces students to doing purely object-oriented programming using the Java syntax. Emphasis is placed on using Java for web development. Students learn how to create their own objects and employ these objects as solutions to common real world-based web problems using applications and applets. Students will learn to create interactive elements and simple GUI elements. Use of the java.awt components, event-handling model, containers, and layout managers will also be emphasized. File handling techniques and multithreading will be presented, along with JavaBeans. Applications and applets will be built from bottom up to facilitate in deeper understanding of the concepts used in OOP. (30-60)

15:221 Marketing (3 s.h.) A study of the role of marketing in society as well as a study of target market (customer) determination and selection, product strategy, channels of distribution, pricing concepts, and promotional activities that are used in business today. (45-0)

15:277 Network Routing (5 s.h.) Prerequisite: 15:159, Networking IV or permission of the instructor. This course focuses on advanced routing using Cisco routers connected in local-area networks (LANs) and wide-area networks (WANs) typically found at medium to large network sites. Upon completion of this training course, the student will be able to select and implement the appropriate Cisco IOS services required to build a scalable routed network. (45-60)

15:278 Network Remote Access (5 s.h.) Prerequisite: 15:277, Network Routing or permission of the instructor. Remote Access focuses on advanced WAN configurations, building remote access networks. The course teaches students how to build a remote access network to interconnect central sites to branch offices and home offices for telecommuters. The course further teaches students how to control access to the central site and how to maximize bandwidth utilization over the remote links. (45-60)

15:285 Multi-Layer Switching (5 s.h.) Prerequisite: 15:277, Network Routing or permission of the instructor. This course leads to the CCNP or CCDP. In this course, network administrators learn how to build campus networks using multilayer switching technologies over high speed Ethernet. This course includes both routing and switching concepts, covering both Layer 2 and Layer 3 technologies. (45-60)

15:286 Network Support (5 s.h.) Prerequisite: 15:277, Network Routing; 15:278, Network Remote Access; and, 15:185, Multi-Layer Switching, or permission of the instructor. This course leads to the CCNP. This course teaches students how to baseline and troubleshoot an environment using Cisco routers and switches for multi-protocol client hosts and servers connected with the following: Ethernet and Fast Ethernet LANS, Serial, Frame Relay, and ISDN BRI WANs. The course provides students with methodical practice using specific Cisco IOS software and Catalyst software tools to diagnose and correct problems on widely installed Cisco products. (45-60)

15:287 Emerging Remote Access Technologies (3 s.h.) Prerequisite: 15:159, Networking IV or permission of the instructor. Introduces end-to-end Digital Subscriber Line (DSL) and cable modem technologies with focus on hands-on lab training for technicians on installing, configuring and troubleshooting DSL CPE equipment and infrastructure in a small business environment. Also touches upon Wireless and other emerging technologies communications. (30-30)

15:288 Network Design I (3 s.h.) Prerequisite: 15:158, Networking III or permission of the instructor. This course leads to the CCDA certification. The CCDA certification (Cisco Certified Design Associate) indicates a foundation or apprentice knowledge of network design for the small office/home office (SOHO) market.

CCDA certified professionals can design routed and switched networks involving LAN, WAN, and dial access services for businesses and organizations with networks of fewer than 100 nodes. (45-0)

15:289 Network Design II (4 s.h.) Prerequisite: 15:288, Network Design I; 15:277, Network Routing; 15:278, Network Remote Access; and 15:285, Multi-Layered Switching; or permission of the instructor. This course leads to the CCDP certification. The CCDP certification (Cisco Certified Design Professional) indicates advanced or journey man knowledge of network design. With a CCDP, a network professional can design routed and switched networks involving LAN, WAN, and dial access services for businesses and organizations with 100 to more than 500 nodes. (60-0)

15:290 Fundamentals of Project Management (4 s.h.) Prerequisites: 15:141, MIS I and 15:158, Networking III, or permission of the instructor. Fundamentals of Project Management defines a project and the role of projects in business. Students identify and demonstrate the basic knowledge areas of Project Management and the Project Management Framework. These knowledge areas focus on managing project components including: Integration, Scope, Time (scheduling), Cost, Quality, Human Resource, Communications, Risk, and Procurement. Fundamentals of Project Management clarifies the relationship between Project Management and other management disciplines including general management knowledge and practice, and application-area knowledge and practice. Students learn to apply the breakdown of project phases and processes and construct project plans that employ project phasing and knowledge areas. Students also learn to identify the aspects of project-based organizational systems and classify business organizations by type and project characteristics. Critical Path Method (CPM) project scheduling is learned and utilized to coordinate project planning, execution and analysis throughout a project life cycle. (45-30)

MARKETING/ MANAGEMENT

Entrepreneurship

Financial Management/Insurance

General Business

Banking Option
Marketing and Sales Option -
Diploma

Retail Management

Software Applications Specialist
Certificate

Sport and Fitness Management

Supervision and Management
Diploma
Career Option

MARKETING/MANAGEMENT

Programs in this area are broad in scope and provide each student with a variety of skills necessary to be successful in the business environment. Marketing and management opportunities are readily available for students that have well-developed "high tech and high touch" skills.

Entrepreneurship and Small Business Management

The John Pappajohn Business and Entrepreneurial Center began operations at NIACC in April 1997. The center offers comprehensive entrepreneurial training and support programs for entrepreneurs, small business owners, and students.

The program provides students with an understanding of the many facets of entrepreneurship. Students will learn the process of identifying a business opportunity and developing an organization to establish a new venture. The curriculum will provide students with the proper tools to evaluate the feasibility of a new venture and to identify the available resources for assisting an entrepreneur during the start-up phase of the business.

Once a new venture has been launched, a new divergent set of challenges face the entrepreneur. The entrepreneur is typically responsible for strategic planning, financial management, marketing, human resource management, and operations. Although the entrepreneur may not be required to have a strong grasp of every specific detail, he/she must have a solid understanding of the critical issues facing the business. Thus, students will also receive instruction on managerial functions as associated with owning a small business.

NIACC is working to combine classroom instruction with practical experience to enhance the development of a student's entrepreneurial and small business management skills. For specific information about the program, contact the NIACC Business Division or Pappajohn Center.

Integration into NIACC's Credit Program

The entrepreneurship option is included as an additional component of the Marketing/Management program in the Business Division. However, we do not believe the courses should be limited to business students.

We offer three courses with primary emphasis within the Business Division: (1) Introduction to Entrepreneurship; (2) Managing the Entrepreneurial Venture; and (3) Seminar in Entrepreneurship. A brief description of the courses is provided below.

15:171 Introduction to Entrepreneurship (3 s.h.)

Prerequisite: 15:101, Introduction to Business. This course provides students with an introduction to entrepreneurship and new venture creation. Students will examine the characteristics of successful entrepreneurs and develop insight on developing and enhancing creativity and innovation. Students will also learn the process of assessing new venture proposals and understand the components of a business/feasibility plan. (45-0)

15:172 Managing the Entrepreneurial Venture (3 s.h.)

15:101, Introduction to Business, or 15:171, Introduction to Entrepreneurship, are recommended. The course provides students with the tools necessary to manage and grow a small business. Students will examine the characteristics of successful small businesses and develop insights on developing strategies for successfully growing existing ventures. Students will also learn the process of evaluating the marketing and financial needs of the venture and understand the components of a business plan. (45-0)

15:173 Seminar in Entrepreneurship (3 s.h.)

Prerequisite: 15:171, Introduction to Entrepreneurship, and 15:172, Managing the Entrepreneurial Venture. Course will combine group discussions with an actual case project at a local entrepreneurial firm. Students will have an opportunity to apply business skills learned throughout their NIACC program as they complete a project for a local entrepreneurial venture. Students also will discover key entrepreneurial success characteristics. (38-15)

Financial Management/ Insurance Program

Associate in Science-Business (ASB)

NIACC's Financial Management/Insurance Program is designed to prepare graduates with employable skills related to the insurance and financial management career fields.

The purpose of this degree is to provide a degree goal for students who choose to follow a course of study designed to give the student the option of obtaining employment in business.

Upon the completion of the curriculum with a grade point average of 2.00 (C), the student is awarded an Associate in Science-Business Degree/Financial Management (see pages 214-217 for specific degree requirements).

Students who know they wish to pursue a four-year degree and want to meet general education requirements of transfer institutions should pursue the A.A. degree.

REQUIRED COURSES/SUGGESTED SCHEDULE

(Two-Year Program)

First Term

15:101 Introduction to Business.....	3 s.h.
15:140 Introduction to Computers and Information Systems.....	3 s.h.
15:190 General Insurance.....	3 s.h.
30:101 Communication Skills I.....	4 s.h.
40:121 Mathematics for Decision Making.....	3 s.h.
	16 s.h.

Second Term

15:175 Electronic Spreadsheets	3 s.h.
15:195 Property & Casualty Insurance.....	3 s.h.
30:102 Communication Skills II	4 s.h.
40:125 Quantitative Methods	3 s.h.
General Education Elective	3 s.h.
	16 s.h.

Third Term

15:109 Intro to Accounting	3 s.h.
OR 15:118 Acctg. Procedures (3 s.h.)	
OR 15:150 Acctg. Principles I (3 s.h.)	
15:120 Business Law I	3 s.h.
15:200 Life, Health, & Disability Insurance.....	3 s.h.
80:133 Macroeconomics	3 s.h.
Elective	3 s.h.
	15 s.h.

Fourth Term

15:121 Business Law II	3 s.h.
15:151 Accounting Principles II.....	3 s.h.
OR 15:119 Acctg. Apps. (5 s.h.)	
80:134 Microeconomics	3 s.h.
89:100 Cooperative Work Experience.....	3 s.h.
Elective	3 s.h.
	15 s.h.
Total Hours	62 s.h.

Elective Courses

15:107 Keyboarding for Office Technology	3 s.h.
15:110 Electronic Calculators.....	1 s.h.
15:112 Keyboarding Level I.....	1 s.h.
15:113 Keyboarding Level II.....	1 s.h.
15:142 Prin. of Management.....	3 s.h.
15:160 Computer Accounting.....	3 s.h.
15:210 Business Statistics	3 s.h.
15:221 Marketing.....	3 s.h.
15:223 Prin. of Selling.....	3 s.h.
15:241 Human Relations.....	3 s.h.
89:150 Employment Strategies	1 s.h.

General Business

NIACC's General Business Program is a dual-purpose program designed to give the student the option of obtaining employment upon graduation or transferring to a four-year institution. It is for the student who is interested in business but does not have a particular area in mind.

Graduates are generally placed in sales, management, or general business (office, shipping and receiving, quality control) positions within industrial and retail firms. For specific placement information, contact the North Iowa Career Center or the NIACC Business Division.

Upon the completion of the curriculum with a grade point average of 2.00 (C), the student is awarded an Associate in Science-Business Degree/General Business (see pages 214-217 for specific degree requirements). Students who know they wish to pursue a four-year degree and want to meet general education requirements of transfer institutions, should pursue the A.A. degree (see pages 200-203). This will necessitate a slightly different curriculum.

ENTRANCEREQUIREMENTS

High school graduation or the equivalent.

REQUIRED COURSES/SUGGESTED SCHEDULE

First Year

15:101	Introduction to Business.....	3 s.h.
15:120	Business Law I	3 s.h.
15:121	Business Law II	3 s.h.
15:134	Computer Applications	3 s.h.
	OR 15:140 Introduction to Computers and Information Systems (3 s.h.)	
30:101	Communication Skills I	4 s.h.
30:102	Communication Skills II	4 s.h.
40:121	Mathematics ¹	3 s.h.
80:133	Macroeconomics	3 s.h.
80:134	Microeconomics	3 s.h.
	Elective	3 s.h.
		32 s.h.

Second Year

15:109	Intro to Accounting	3 s.h.
	OR 15:118 Acctg. Procedures (3 s.h.)	
	OR 15:150 Acctg. Principles I (3 s.h.)	
15:142	Principles of Management.....	3 s.h.
15:175	Electronic Spreadsheets	3 s.h.
15:221	Marketing.....	3 s.h.
15:241	Human Relations	3 s.h.
40:125	Quantitative Methods	3 s.h.
	Elective in Humanities or Social Science.....	3 s.h.
	Elective ²	7 s.h.
		28 s.h.
	Total Hours	60 s.h.

Elective Courses

15:110	Electronic Calculators.....	1 s.h.
15:144	Principles of Supervision	3 s.h.
15:149	Managing Human Resources	3 s.h.
15:151	Accounting Principles II	3 s.h.
15:171	Introduction to Entrepreneurship	3 s.h.
15:172	Managing the Entrepreneurial Venture..	3 s.h.
15:173	Seminar in Entrepreneurship.....	3 s.h.
15:190	General Insurance.....	3 s.h.
15:210	Business Statistics	3 s.h.
15:222	Principles of Advertising	3 s.h.
15:223	Principles of Selling	3 s.h.
89:100	Cooperative Work Experience	2-5 s.h.
89:150	Employment Strategies	1 s.h.

¹ 40:121 or higher level math course

² Recommended electives

General Business/Banking Option

This program is designed to help persons presently employed in banking to further their careers and to prepare students entering the job market for entry-level positions in banking and other financial firms. For specific placement information, contact the North Iowa Career Center or the NIACC Business Division.

Upon completion of the curriculum with an average grade point of 2.00 (C), the student is awarded an Associate in Science-Business Degree/General Business-Banking (see pages 214-217 for specific requirements). Students who know they wish to pursue a four-year degree and want to meet general education requirements of transfer institutions should pursue the A.A. degree (see pages 214-217). This will necessitate a slightly different curriculum.

Successful graduates can find job opportunities in the following occupational areas:

- * Commercial/Ag Lender
- * Consumer Lending
- * Marketing Officer
- * Night Processor
- * Personal Banker
- * Proof Operator
- * Real Estate Lending
- * Retail Banking Officer
- * Teller
- * Teller Manager

ENTRANCEREQUIREMENTS

High school graduation or the equivalent.

REQUIRED COURSES/SUGGESTED SCHEDULE

First Year

15:109	Intro to Accounting	3 s.h.
	OR 15:118 Acctg. Procedures (3 s.h.)	
	OR 15:150 Acctg. Principles I (3 s.h.)	
15:151	Accounting Principles II	3 s.h.
15:170	Principles of Banking Operation	3 s.h.
30:101	Communication Skills I	3-4 s.h.
30:102	Communication Skills II	3-4 s.h.
80:101	General Psychology	3 s.h.
80:133	Macroeconomics	3 s.h.
85:101	Public Speaking ¹	2 s.h.
	Mathematics ²	3 s.h.
	Electives	4-5 s.h.
		30-33 s.h.

Second Year

15:120	Business Law I	3 s.h.
15:121	Business Law II	3 s.h.
15:140	Introduction to Computers and Information Systems	3 s.h.
15:241	Human Relations	3 s.h.
40:125	Quantitative Methods	3 s.h.
	Elective in Humanities or Social Science	3 s.h.
	Electives	9-12 s.h.
		27-30 s.h.
Total Hours		60 s.h.

Elective Courses

15:101	Introduction to Business	3 s.h.
15:107	Keyboarding for Office Technology	3 s.h.
15:110	Electronic Calculators	1 s.h.
15:112	Keyboarding Level I	1 s.h.
15:113	Keyboarding Level II	1 s.h.
15:142	Principles of Management	3 s.h.
15:171	Introduction to Entrepreneurship	3 s.h.
15:172	Managing the Entrepreneurial Venture	3 s.h.
15:173	Seminar in Entrepreneurship	3 s.h.
15:175	Electronic Spreadsheets	3 s.h.
30:120	College Reading Skills	3 s.h.
80:110	Sociology	3 s.h.
80:111	Social Problems	3 s.h.
80:120	Intro to American Government	3 s.h.
80:121	American, State and Local Government	3 s.h.
80:134	Microeconomics	3 s.h.
89:150	Employment Strategies	1 s.h.
90:105	Business Math	2 s.h.

¹Not required if the student enrolls for Communication Skills (8 s.h.)
²40:121 or higher level math course

General Business/Marketing and Sales Option

Diploma Program

Marketing and Sales is a 30-semester hour program designed to meet the needs of the adult who is attending classes primarily at night. Successful completion of the curriculum should make a graduate employable in sales and marketing. In addition, all the courses apply toward the two-year Associate in Science-Business degree.

Upon satisfactory completion of the prescribed curriculum with an average grade point of 2.00 (C), the student is awarded a diploma.

ENTRANCEREQUIREMENTS

High school graduation or equivalent.

Successful graduates can find job opportunities in the following occupational areas

- * Sales clerk
- * Sales representative
- * Management trainee

REQUIRED COURSES/SUGGESTED SCHEDULE

15:120	Business Law I	3 s.h.
15:142	Principles of Management.....	3 s.h.
15:109	Intro to Accounting	3 s.h.
	OR 15:118 Acctg. Procedures (3 s.h.)	
	OR 15:150 Acctg. Principles I (3 s.h.)	
15:221	Marketing.....	3 s.h.
15:222	Principles of Advertising.....	3 s.h.
15:223	Principles of Selling.....	3 s.h.
30:101	Communication Skills I (30:101C).....	3 s.h.
80:133	Macroeconomics	3 s.h.
85:101	Public Speaking OR.....	2 s.h.
	85:105 Group Discussion (2 s.h.)	
	Electives.....	4 s.h.
	Total Hours	30 s.h.

Elective Courses

15:101	Intro to Business.....	3 s.h.
15:110	Electronic Calculators.....	1 s.h.
15:121	Business Law II	3 s.h.
15:134	Computer Applications	3 s.h.
15:140	Introduction to Computers and Information Systems.....	3 s.h.
15:144	Principles of Supervision	3 s.h.
15:149	Managing Human Resources	3 s.h.
15:151	Accounting Principles II ¹	3 s.h.
15:171	Introduction to Entrepreneurship	3 s.h.
15:172	Managing the Entrepreneurial Venture ..	3 s.h.
15:173	Seminar in Entrepreneurship.....	3 s.h.
15:175	Electronic Spreadsheets	3 s.h.

15:241	Human Relations	3 s.h.
30:102	Communication Skills II (30:101C) ²	3 s.h.
80:134	Microeconomics	3 s.h.
89:100	Cooperative Work Experience	2-5 s.h.
	Mathematics.....	3 s.h.

¹ Prerequisite Accounting Principles I

² Prerequisite Communication Skills I

Retail Management

Retail Management is a career program designed to prepare graduates for a career in the field of retailing. Graduates usually have retail management or business ownership as a personal career goal.

The retail program curriculum is a combination of classroom instruction and learning on the job. The classroom instruction focuses on basic business principles that business people need to know. It also teaches the basics of retailing. The retail field experience (on-the-job) provides the student the opportunity to apply the classroom learning on the job as well as learn from the employer. The retail field experience also allows the student to gain valuable work experience and build a resume while enrolled in college.

When the prescribed curriculum is completed with a grade point of 2.00 or above, the student is awarded an Associate in Applied Science Degree in Retail Management.

Successful graduates can find employment opportunities in the field of retailing which offers a wide assortment of job possibilities. Visit careersinretailing.com for examples of career opportunities. For specific placement information regarding this program, contact the NIACC Workforce Development Center or the program coordinator.

ENTRANCE REQUIREMENTS

Students planning on entering this program should complete a college application. They should be a high school graduate or the equivalent. It is strongly recommended that they meet with the program coordinator to discuss the program as it relates to their career goals.

SUGGESTED SCHEDULE

Semester One

15:101	Introduction to Business.....	3 s.h.
15:223	Principles of Selling.....	3 s.h.
90:105	Business Math.....	2 s.h.
90:125	Retailing.....	3 s.h.
90:123	Retail Field Experience.....	5 s.h.
		16 s.h.

Semester Two

15:134	Computer Applications.....	3 s.h.
15:212	Business Communication.....	3 s.h.
15:221	Marketing.....	3 s.h.
15:241	Human Relations.....	3 s.h.
90:126	Retail Field Experience.....	5 s.h.
		17 s.h.

Semester Three

15:109	Introduction to Accounting.....	3 s.h.
15:144	Principles of Supervision.....	3 s.h.
89:150	Employment Strategies.....	1 s.h.
90:233	Retail Field Experience.....	5 s.h.
	Elective.....	3 s.h.
		15 s.h.

Semester Four

15:120	Business Law I.....	3 s.h.
15:142	Principles of Management.....	3 s.h.
90:234	Retail Buying.....	3 s.h.
	Elective.....	3 s.h.
		12 s.h.
Total Hours		60 s.h.

Retail Field Experience

The retail field experience portion of this curriculum is a very important part of the curriculum. Once a student has determined the program meets his/her educational needs, he/she should meet with the program coordinator as soon as possible to discuss the necessary employment.

The following list contains recommended electives based on the idea of strengthening a student's business expertise:

15:149	Managing Human Resources.....	3 s.h.
15:171	Introduction to Entrepreneurship.....	3 s.h.
15:172	Managing the Entrepreneurial Venture..	3 s.h.
15:173	Seminar in Entrepreneurship.....	3 s.h.
15:175	Electronic Spreadsheets.....	3 s.h.
15:222	Principles of Advertising.....	3 s.h.
80:133	Macroeconomics.....	3 s.h.
80:134	Microeconomics.....	3 s.h.
90:237	Retail Field Experience.....	5 s.h.

While the above courses are recommended electives, other courses may be taken with the approval of the program coordinator.

Software Applications Specialist - Certificate

The Software Applications Specialist-Certificate is designed to expose students to Microsoft software and prepare students to take the Microsoft Office User Specialist (MOUS) examination.

These courses are business electives and may apply to diplomas or degrees. Many of these courses are offered on an arranged basis or on line.

Upon satisfactory completion of the prescribed curriculum (at least 15 semester hours) with an average grade point of 2.00 (C), the student is awarded a certificate.

ENTRANCEREQUIREMENTS

High school graduation or the equivalent.

REQUIRED COURSES

15:134 Computer Applications	3 s.h.
15:136* Advanced Document Processing	3 s.h.
15:175** Electronic Spreadsheet	3 s.h.
15:211 Word Processing	2 s.h.
15:225 Microsoft Access	1 s.h.
15:226 Microsoft PowerPoint	1 s.h.
15:227 Microsoft Outlook	1 s.h.
15:228*** Software Integration.....	1 s.h.
	15 s.h.

* Prerequisites: 15:134 and 15:211

** Prerequisites: 15:134 or 15:140

*** Prerequisites: 15:134, 15:136, 15:175, 15:211, 15:225, 15:226, and 15:227

Sport and Fitness Management

Associate in Science-Business (ASB)

Sport and Fitness Management is a field of study which prepares students for careers in the sport, recreation, and fitness industry. Students in the program will learn principles of business, including marketing, finance, management, and law while applying those principles to different areas of the sport industry.

As a key part of the sport and fitness management degree at NIACC, students will be required to gain internship credit for 3-6 semester hours. Internships give students the opportunity to apply their knowledge gained in the classroom to work in the field.

Upon completion of the curriculum with an average grade point of 2.00 (C), the student is awarded an Associate in Science-Business Degree/Sport and Fitness Management. (see pages 214-217 for specific requirements).

Students who know they wish to pursue a four-year degree and want to meet general education requirements of transfer institutions should pursue the A.A. degree (see pages 214-217). This will necessitate a slightly different curriculum.

Students who graduate with a 4-year sport and fitness management degree will be prepared for employment in a wide range of fields, including intercollegiate athletics, high school athletics, professional sport, recreation and fitness organizations, and a variety of other sport-related businesses. Employment opportunities abound in the sport and recreation field.

ENTRANCEREQUIREMENTS

High school graduation or the equivalent.

REQUIRED COURSES/SUGGESTED SCHEDULE

General Education Requirements

Communications	8 s.h.
Natural Sciences.....	3 s.h.
Humanities/Social Sciences.....	9 s.h.
	20 s.h.

Sport and Fitness Management Courses

15:126 Introduction to Sport Management.....	3 s.h.
15:127 Current Issues in Sport	3 s.h.
15:128 Internship in Sport Management	3-6 s.h.
	9-12 s.h.

Business Courses

15:109 Intro to Accounting	3 s.h.
OR 15:118 Acctg. Procedures (3 s.h.)	
OR 15:150 Acctg. Principles I (3 s.h.)	
15:241 Human Relations.....	3 s.h.
15:134 Computer Applications	3 s.h.
OR 15:140 Introduction to Computers and Information Systems (3 s.h.)	
Elective Business courses (15 pre fix)*	9-12 s.h.
15:101 Introduction to Business (3 s.h.)	
15:120 Business Law I (3 s.h.)	
15:142 Principles of Management (3 s.h.)	
15:144 Principles of Supervision (3 s.h.)	
15:175 Electronic Spreadsheets (3 s.h.)	
15:212 Business Communications (3 s.h.)	
15:221 Marketing (3 s.h.)	
15:222 Principles of Advertising (3 s.h.)	

18-21 s.h.

*For additional Business electives, see list of Business transfer courses on page 157.

Electives10 s.h.

Recommended Physical Education Courses:

60:113 Physical Fitness (1 s.h.)	
60:114 Physical Fitness Lab (1 s.h.)	
60:115 Games & Officiating I (2 s.h.)	
60:116 Games & Officiating II (2 s.h.)	
60:118 Care & Prevention of Athletic Injuries (2 s.h.)	
60:150 Theory, Ethics, and Professional Responsibility of Coaching Interscholastic Athletics (1 s.h.)	
60:152 Introduction to Anatomy and Physiology for Coaching (1 s.h.)	
60:153 Human Development in Sports (1 s.h.)	

10 s.h.

Total Hours

60 s.h.

Supervision and Management

Diploma Program

The Supervision and Management Diploma Program is designed to meet the needs of students who want a foundation in developing skills in the areas of supervising people and the overall management of a business enterprise.

Successful completion of the program will assist students in developing an awareness and understanding to organize, coordinate, and evaluate the functions of a unit, department, or branch of an organization either in an industrial management or administrative capacity.

All the courses taken in the diploma program apply to the Supervision and Management Career Option Program.

Upon satisfactory completion of the prescribed curriculum with an average grade point of 2.00 (C), the student is awarded a diploma. This recognition is granted to a person who has completed at least thirty (30) semester hours of credit.

Successful graduates can find job opportunities in the following occupational areas:

- * Supervisor clerks * Supervisor, accounting
- * Department supervisor * Supervisor, assembly stock
- * Supervisor, audit clerks * Supervisor, coding clerk

SUGGESTED SCHEDULE

15:109 Intro to Accounting	3 s.h.
OR 15:118 Acctg. Procedures (3 s.h.)	
OR 15:150 Acctg. Prin. I (3 s.h.)	
15:120 Business Law I	3 s.h.
15:140 Introduction to Computers and Information Systems.....	3 s.h.
15:142 Principles of Management.....	3 s.h.
15:144 Principles of Supervision	3 s.h.
15:149 Managing Human Resources	3 s.h.
15:241 Human Relations	3 s.h.
30:101 Communication Skills I	4 s.h.
80:133 Macroeconomics	3 s.h.
Elective	3 s.h.
Total Hours	31 s.h.

Career Option

NIACC's Supervision and Management Program is designed to prepare graduates with interests in the area of supervising people and being part of the overall management of a business enterprise.

The intent of this program is to develop abilities to organize, coordinate, and evaluate the functions of a unit, department, or branch of an organization either in an industrial management or administrative management capacity.

Upon completion of the prescribed curriculum with an average grade point of 2.00 (C), the student is awarded an Associate in Science-Business Degree/Supervision and Management.

Students in the Supervision and Management Career Option Program supplement the diploma program with the following additional courses:

REQUIRED COURSES/SUGGESTED SCHEDULE

15:121 Business Law II	3 s.h.
15:151 Accounting Principles II	3 s.h.
15:221 Marketing.....	3 s.h.
30:102 Communication Skills II	4 s.h.
40:121 Mathematics for Decision Making	3 s.h.
80:134 Microeconomics	3 s.h.
Social Science or Humanities Elective ...	3 s.h.
General Electives	7 s.h.
	29 s.h.
Total Hours	60 s.h.

Recommended electives:

15:171 Introduction to Entrepreneurship	3 s.h.
15:172 Managing the Entrepreneurial Venture ..	3 s.h.
15:173 Seminar in Entrepreneurship.....	3 s.h.
15:175 Electronic Spreadsheets	3 s.h.
89:100 Cooperative Work Experience, as arranged	

COURSE DESCRIPTIONS

**Financial Management/Insurance
General Business
General Business/Banking Option
General Business/Marketing and Sales
Option
Retail Management
Software Applications Specialist
Certificate
Sport and Fitness Management
Supervision and Management
Diploma and Career Option**

15:101 Introduction to Business (3 s.h.) An overview of the phases and functions of the business enterprise. Units of instruction include the organization, financing, production, and contemporary issues in business. The course provides an awareness and understanding of the complexities of the business world. (45-0)

15:107 Keyboarding for Office Technology (3 s.h.) Prerequisite: 15:112, Keyboarding Level I, and/or 15:113, Keyboarding Level II, OR keyboarding skill of 30 wpm (words a minute) with 3 or less errors on a 3-minute timed writing. This course covers the continued development of speed and accuracy on the alphabetic, numeric, and symbol keys. Students develop skills in formatting, proofing, and proofreading the following documents: memos, letters, envelopes, tables, reports, and other miscellaneous business documents. (30-30)

15:109 Introduction to Accounting (3 s.h.) A basic understanding of the process of collecting and using financial information in business. (45-0)

15:110 Electronic Calculators (1 s.h.) [Structured or Open Entry/Open Exit] A study of the 10-key, electronic calculator. Applied business problems on the calculator. This course has been designated as a pass/no pass course. (5-20)

* * * * *

Open Entry/Open Exit

15:112 Keyboarding Level I (1 s.h.) [Open Entry/Open Exit] Prerequisite: None. This course covers the development of keyboarding techniques using the touch method on the computer to learn/review the alphabetic keys. The keyboarding goal is a minimum rate of 20 words a minute with 3 or less errors. Students with little or no keyboarding skill would be gin at this level. This course has been designated as a pass/no pass course. (0-30)

15:113 Keyboarding Level II (1 s.h.) [Open Entry/Open Exit] Prerequisite: Keyboarding Level I OR ability to keyboard at 20 words a minute. This course covers the development of the touch method on the computer keyboard to learn/review the alphabetic, numeric, and symbol keys. The keyboarding goal is a minimum rate of 30 words a minute with 3 or less errors. This course has been designated as a pass/no pass course. (0-30)

* * * * *

15:118 Accounting Procedures (3 s.h.) An introductory course using a procedural approach applying the principles of debit and credit, recording of data in various journals, posting to the ledgers, the worksheet, financial statements, adjusting and closing entries, depreciation and inventory methods, plant assets, deferrals and accruals. (45-0)

15:119 Accounting Applications (5 s.h.) Prerequisite: 15:118 Accounting Procedures or 15:150 Accounting Principles with a grade of "C" or above. A continuation of Accounting Procedures including voucher system, partnerships, and corporations. Includes completion of an accounting simulation project. (75-0)

15:120 Business Law I (3 s.h.) Law as applied to business transactions and business relationships. An introduction to jurisprudence and the courts, contracts, commercial paper, sales, and security agreements. (45-0)

15:121 Business Law II (3 s.h.) Prerequisite: 15:120, Business Law I, or permission of the instructor. A continuation of 15:120. Agency, corporations, partnerships, bailments, real property, wills, trusts, insurance, bankruptcy, and government regulation of business. Some information on international law and liability of accountants. (45-0)

15:126 Introduction to Sport Management (3 s.h.) For individuals entering into the sport and physical education profession, it is critical to understand the theory and practice of ethical management principles in sport/fitness organizations. Administrators need to understand marketing, financial and legal aspects regarding the management of facilities, events, and organizations. These principles are applied to organizations within interscholastic, intercollegiate, international and professional sport along with the health/fitness and community recreation industries. (45-0)

15:127 Current Issues in Sport (3 s.h.) Prerequisite: 15:126, Introduction to Sport Management. Sport, health/fitness, and recreation organizations have been facing many changes in recent years. These changes have exposed many problems that these organizations must solve in order to ensure future success. This class is designed to expose students to these issues in order to prepare them for management careers in the sport, health/fitness, and recreation fields. (45-0)

15:128 Internship in Sport Management (1-3 s.h.) Prerequisite: Recommended 15:126, Introduction to Sport Management, or permission of instructor. This course is repeatable for up to six credits. For individuals entering into the sport and physical education profession, it is critical to gain practical experience in the field. Internships in sport management are designed to give the student an inside look at the day-to-day operation of businesses in the sport industry. They are also designed to give each student work experience within the chosen industry. (15-165)

15:134 Computer Applications (3 s.h.) Emphasis on business applications of computer software. Students do business problems using word processing, electronic spreadsheet, and database management software. Students are also exposed to Windows operating systems, presentation software, and the Internet. (30-30)

15:136 Advanced Document Processing (3 s.h.)
Prerequisites: 15:134, Computer Applications, and 15:211, Word Processing. Students will learn intermediate to advanced functions of Microsoft Word including customizing templates, recording macros, creating on-screen forms, managing long documents, creating hyperlinks, and publishing on the World Wide Web. Upon completion of the course, the students may be prepared to take the MOUS (Microsoft Office User Specialist) expert exam for Microsoft Word 2000. (30-30)

15:140 Introduction to Computers and Information Systems (3 s.h.) Emphasis on computer literacy and business applications of computer software. Students do business problems using electronic spreadsheets, word processing software, database management software, and presentation software. Students also are exposed to some programming and web page development. (45-0)

15:142 Principles of Management (3 s.h.) 15:101, Introduction to Business, is recommended. Provides students with a general introductory management learning experience. Role of management in today's business environment; management's influence on employee productivity, employee satisfaction and organizational effectiveness; and, major control devices of management. (45-0)

15:144 Principles of Supervision (3 s.h.) This course is designed for individuals who hold, or who will hold, supervisory positions. The course involves the study of the major managerial functions (planning, organizing, staffing, directing, and controlling) and is augmented by other pervasive areas of supervision such as communication, motivation, decision making, and human relations. (45-0)

15:149 Managing Human Resources (3 s.h.) Course describes the transition from personnel management to human resources management. The focus is on the systematic process of recruitment, selection, developing, and appraising employees. (45-0)

15:150 Accounting Principles I (3 s.h.) An introductory accounting course: analyzing transactions, matching principle, adjusting and closing entries, financial statements, receivables, inventories, fixed assets and intangible assets, current liabilities, corporations (capital stock transactions, dividends, income and taxes, stockholder's equity, investment in stocks), bonds payable, investment in bonds. (45-0)

15:151 Accounting Principles II (3 s.h.) Prerequisite: 15:150, Accounting Principles I, or equivalent. Course covers Statement of Cash Flows, financial statement

analysis, job order and process cost systems, cost behavior, budgeting, standard costing, differential analysis and product pricing, capital investment analysis, activity-based costing, and just-in-time manufacturing. Emphasis is on management's use of accounting information. (45-0)

15:160 Computer Accounting (3 s.h.) Prerequisite: 15:109 Introduction to Accounting or 15:118 Accounting Procedures or 15:150 Accounting Principles I with a grade of "C" or above. Designed to provide students with realistic experience with automated accounting consisting of five systems: general ledger, accounts payable, accounts receivable, depreciation, and payroll. Students will find themselves as having taken an accounting position in a company already using a computerized accounting system. Students will be working in an individualized instruction environment. (45-0)

15:170 Principles of Banking (3 s.h.) Fundamental bank functions presented in a descriptive fashion so that the beginning banker may view the profession in a broad (and operational) perspective. (45-0)

15:171 Introduction to Entrepreneurship (3 s.h.)
Prerequisite: 15:101, Introduction to Business. This course provides students with an introduction to entrepreneurship and new venture creation. Students will examine the characteristics of successful entrepreneurs and develop insight on developing and enhancing creativity and innovation. Students will also learn the process of assessing new venture proposals and understand the components of a business/feasibility plan. (45-0)

15:172 Managing the Entrepreneurial Venture (3 s.h.) 15:101, Introduction to Business, or 15:171, Introduction to Entrepreneurship, are recommended. The course provides students with the tools necessary to manage and grow a small business. Students will examine the characteristics of successful small businesses and develop insights on developing strategies for successfully growing existing ventures. Students will also learn the process of evaluating the marketing and financial needs of the venture and understand the components of a business plan. (45-0)

15:173 Seminar in Entrepreneurship (3 s.h.) Prerequisite: 15:171, Introduction to Entrepreneurship, and 15:172, Managing the Entrepreneurial Venture. Course will combine group discussions with an actual case project at a local entrepreneurial firm. Students will have an opportunity to apply business skills learned through out their NIACC program as they complete a project for a local entrepreneurial venture. Students also will discover key entrepreneurial success characteristics. (38-15)

15:175 Electronic Spreadsheets (3 s.h.) Prerequisite: 15:140, Introduction to Computer and Information Systems or 15:134, Computer Applications. Learn the fundamentals of spreadsheets, databases, and business graphics using appropriate software. (30-30)

15:190 General Insurance (3 s.h.) Principles of insurance and risk, including personal and business viewpoints in regard to life, health, property, and liability risks. (45-0)

15:195 Property and Casualty Insurance (3 s.h.) This course is designed to provide instruction that will provide a high level of understanding of property and casualty insurance. Topics covered will include fire, homeowners, dwelling, auto, business and professional liability, crime and fidelity, workers' compensation, and applications from a personal and commercial perspective. (45-0)

15:200 Life, Health, and Disability Insurance (3 s.h.) Prerequisite: 15:190, General Insurance. This course is designed to provide instruction in a variety of areas giving the student a good understanding of life insurance, health insurance, and the role and application within the industry. (45-0)

15:210 Business Statistics (3 s.h.) Prerequisite: 40:125, Quantitative Methods; 40:140, Intro to Statistics; or 40:151, College Algebra & Trig I. The use of statistical methods as an analytical tool in business situations. Data collection, tabular and graphical presentations, frequency distributions, probability, sampling, data analysis, hypothesis testing and regression, and correlation analysis. The use of statistical software is incorporated into the course. (45-0)

15:211 Word Processing (2 s.h.) This course is designed to introduce students to computers and the fundamentals of word processing. The students will progress from basic through intermediate features of word processing software. Also Open Entry/Open Exit. (20-20)

15:212 Business Communication (3 s.h.) This course will help the student become an effective communicator in the business world. Basic written communication will be emphasized through practice in grammar structure, vocabulary building, and organization of thoughts. These skills will then be implemented when the student plans and writes business letters and interoffice memoranda. A secondary emphasis will be placed on oral communication, listening skills, and nonverbal communication. (45-0)

15:221 Marketing (3 s.h.) A study of the role of marketing in society as well as a study of target market (customer) determination and selection, product strategy, channels of distribution, pricing concepts, and promotional activities that are used in business today. (45-0)

15:222 Principles of Advertising (3 s.h.) Principles and practices in commonly used advertising media. (45-0)

15:223 Principles of Selling (3 s.h.) This course is centered around the study of concepts and practices used by professional salespeople in today's market-driven economy. The course also includes a study of selling as a promotional strategy used by marketers. (45-0)

15:225 Microsoft Access (1 s.h.) This course is designed to take students through the core competencies for Microsoft Access in preparation for the Microsoft Office User Specialist (MOUS) certification test. (5-20)

15:226 Microsoft PowerPoint (1 s.h.) This course is designed to take students through the core competencies for Microsoft PowerPoint in preparation for the Microsoft Office User Specialist (MOUS) certification test. (5-20)

15:227 Microsoft Outlook (1 s.h.) The course is designed to take students through the core competencies for Microsoft Outlook in preparation for the Microsoft Office User Specialist (MOUS) certification test. (5-20)

15:228 Software Integration (1 s.h.) The student will integrate concepts learned from Microsoft Word, Access, PowerPoint, Excel, and Outlook in a project approach. (5-20)

15:241 Human Relations (3 s.h.) The study of how people satisfy both personal growth needs and organizational goals in their careers. Although also interested in the why of human behavior, human relations goes further and looks at what can be done to anticipate problems, resolve them, or prevent them from happening. This field emphasizes knowledge that can be applied in practical ways to problems of interpersonal relations at work or in our personal life. Significant developments in recent years in the workplace have increased the importance of interpersonal skills in almost every type of work setting; these trends provide support for the necessity of acquiring competence in human relations. (45-0)

30:101 Communication Skills I (4 s.h.) Improvement of skills in reading, writing, speaking, and listening, with an emphasis on expository methods of development and personal experience as supporting material. Students may be requested to use word processors and the Writer's Workbench analyses programs, the Writer's Workbench STEPS programs, and the structuring sentences video series. Students must meet minimum competency requirements in writing and speaking to receive a grade of "C" or higher. (60-0)

30:101C Communication Skills I (3 s.h.) Improvement of skills in reading and writing with an emphasis on expository methods of development and personal experience as supporting material. Students may be requested to use word processors and the Writer's Workbench analyses programs, the Writer's Workbench STEPS programs, and the structuring sentences video series. Students must meet minimum competency requirements in writing to receive a grade of "C" or higher. (45-0)

30:102 Communication Skills II (4 s.h.) Prerequisite: 30:101, Communication Skills I. Students must have earned a "C" or higher grade in Communication Skills I before enrolling in Communication Skills II. A continuation of 30:101 with an emphasis on argumentative and persuasive writing and speaking, on research methods, and on language. Students may be requested to use word processors, Writer's Workbench analyses, Writer's Workbench STEPS, and sentence structuring videos.

Students must meet minimum competency requirements in writing and speaking to receive a grade of "C" or higher. (60-0)

30:102C Communication Skills II (3 s.h.) Prerequisite: 30:101C, Communication Skills I. Students must have earned a "C" or higher grade in Communication Skills I before enrolling in Communication Skills II. A continuation of 30:101C with an emphasis on argumentative and persuasive writing, on research methods, and on language. Students may be requested to use word processors, Writer's Workbench analyses, Writer's Workbench STEPS, and sentence structuring videos. Students must meet minimum competency requirements in writing to receive a grade of "C" or higher. (45-0)

30:120 College Reading Skills (3 s.h.) Designed to help students become more efficient and effective in reading college textbooks, required materials, leisure articles, and books. Course adapts to the style and needs of each individual to improve vocabulary, comprehension, rate, and study skills. (45-0)

40:121 Mathematics for Decision Making (3 s.h.) Prerequisite: Basic Arithmetic and Algebra skills as shown by one of the following: 1. A score of 16 or higher on the ACT Math Test or the ASSET Numerical Math Skills Test, or a score of 51 or higher on the Pre-Algebra part of the COMPASS Test AND a grade of "C" or better in 40:060, Beginning Algebra (at NIACC) or equivalent; 2. A score of 20 or higher on the ACT Math Test or the ASSET Numerical Math Skills Test or 51-75 on the Algebra section of the COMPASS test. Mathematics for Decision Making provides a survey of mathematics topics that includes sets, logic, probability, statistics, sets of numbers, algebra, geometry, and consumer math. This course will fulfill 3 hours of Natural Sciences requirement for the A.A. Degree. (45-0)

40:125 Quantitative Methods (3 s.h.) Prerequisite: Two years of high school algebra with a "C" or higher or 40:120, Intermediate Algebra, with a "C" or higher. Furnishes the student with the mathematics required for an understanding of various quantitative methods used in business. Set theory, linear programming, matrices, probability, linear systems, and applications. (45-0)

60:113 Physical Fitness (1 s.h.) A lecture course designed to teach the student about the importance of being physically fit. The course material will provide insight into various methods of testing physical fitness as well as identifying what good physical fitness is. The student will be able to assess his/her own level of physical fitness. (15-0)

60:114 Physical Fitness Lab (1 s.h.) A lab course designed to increase a person's interest of his/her own level of physical fitness. The course provides activities with which the student can improve his/her level of physical fitness in the areas of strength, flexibility, and endurance. The student will be required to participate in class activities twice a week. (0-30)

60:115 Games and Officiating I (2 s.h.) Guiding principles and standards: rules, mechanics, and procedures for competitive sports of officiating. Students will work toward becoming a registered official in the Iowa Athletic Associations. Emphasis will be on football officiating, volleyball officiating, and boys' and girls' basketball officiating. Each student will gain actual officiating experience. (28-4)

60:116 Games and Officiating II (2 s.h.) Prerequisite: 60:115, Games and Officiating I. This course is a continuation of 60:115. Attention directed toward the study of wrestling, track, baseball, and softball. (28-4)

60:118 Care and Prevention of Athletic Injuries (2 s.h.) Recommended: one semester course in anatomy and physiology. Introductory preparation in athletic training, injury, treatment techniques, taping, wrapping, etc. Preventative measures to reduce athletic injuries. Course may be used to fulfill partial requirement for Iowa Coaching Certification. (30-0)

60:150 Theory, Ethics, and Professional Responsibilities of Coaching Interscholastic Athletics (1 s.h.) Guiding principles and techniques of coaching interscholastic athletics. Discussion of theory, ethics, and professional responsibilities as they relate to coaching interscholastic athletes. (20-0)

60:152 Introduction to Anatomy and Physiology for Coaching (1 s.h.) An introduction to anatomy and physiology with stress on the relationship to athletic actions. This course is designed as an introductory course for prospective coaches with little or no background in anatomy and physiology. (15-0)

60:153 Human Development in Sports (1 s.h.) A one-semester course with emphasis on human growth and development and relationship to physical activity, with special attention to children and adolescents. (15-0)

80:101 General Psychology (3 s.h.) Corequisite: New students with entering ACT or COMPASS reading scores below college level will be required to co-enroll in 30:120, College Reading Skills. An introduction to the scientific study of behavior; a brief history of psychology as a science, and topics fundamental to human behavior including developmental issues, sensory abilities, cognitive performance, social and emotional factors in behavior, and abnormal behavior and therapies. (45-0)

80:110 Sociology (3 s.h.) An introductory survey course, sociology is the scientific study of society. Inquires into what holds societies together, what causes societies to change, and how social forces affect our daily lives. Topics covered include: culture and society, socialization, social research, groups, organizations, institutions, deviance, gender, race and ethnicity. An emphasis is placed on cultural diversity. (45-0)

80:111 Social Problems (3 s.h.) Prerequisite: 80:110, Sociology, is strongly recommended. Introduction to the study of contemporary social problems. The course

examines how social problems are identified, explores underlying conditions and causes of social problems, and considers possible solutions and policy implications. Emphasis is on sociological and critical thinking frameworks. Topics of exploration include: mental illness, substance abuse, crime, prejudice and discrimination, prostitution, poverty, and more. (45-0)

80:120 Introduction to American Government (3 s.h.) A survey of the American federal system of government including a description and analysis of the constitution, the legislative, executive, and judicial branches of government, and the American political process. (45-0)

80:121 American State and Local Government (3 s.h.) A survey of state and local governments in the United States including an analysis of federal-state relations, state constitutions, state and local legislative, executive, and judicial systems, and major issues in state and local politics. (45-0)

80:133 Macroeconomics (3 s.h.) An introductory study of how people use scarce resources to satisfy unlimited wants. After an introduction to economics, the emphasis is on the determination of national income, output, employment, and the general price level in the national economy including an examination of the money and banking system. (45-0)

80:134 Microeconomics (3 s.h.) Prerequisite: 80:133, Macroeconomics. An introductory study of how people use scarce resources to satisfy unlimited wants. The emphasis is on the behavior and decisionmaking by individual consumers, entrepreneurs, workers, and other resource owners in the product and resource markets and the resulting effects on the efficiency with which resources are used. (45-0)

85:101 Public Speaking (2 s.h.) Public speaking as an intellectual tool for use in argumentation and persuasion in a democratic society. (30-0)

85:105 Group Discussion (2 s.h.) Principles and techniques of group discussion methods and procedures based on parliamentary methods. (30-0)

89:100 B-C-D-E Cooperative Work Experience (2-5 s.h.) Practical training on the job under the cooperative supervision of the college and work supervisor. Designed primarily for the college-transfer students to provide an experience that: (1) is directly related to their college program and career objectives; or (2) will help them test out a career interest and/or discover new career possibilities. Credit is determined on the basis of one semester of credit for each 60 hours of approved employment to be completed in a term. Appropriateness of learning objectives is an essential factor in the approval process. This course is repeatable up to 12 semesters hours. (0-120 to 300)

89:150 Employment Strategies (1 s.h.) Develop skills necessary to enter the job market and experience long-term career growth. Students learn basic job seeking techniques, job keeping skills, and strategies for continued growth. (15-0)

90:105 Business Math (2 s.h.) Mathematical applications that apply to a variety of business problems. Topics covered include mathematical fundamentals; accounting applications including banking, payroll, and taxes; figuring percentages related to commissions, discounts, and markups; business problems in credit and interest; business and personal insurance; inventory and turnover; financial statements; and employment tests. (30-0)

90:123 Retail Field Experience (5 s.h.) The on-the-job training component of the Retail Management Program. (15-225)

90:125 Retailing (3 s.h.) The study of the selling of goods and services to ultimate consumers, involving distribution, inventory control, site selection, pricing, and other topics pertinent to successful retail business operations. (45-0)

90:126 Retail Field Experience (5 s.h.) Prerequisite: 90:123, Retail Field Experience. The on-the-job training component of the Retail Management Program. (15-225)

90:233 Retail Field Experience (5 s.h.) Prerequisite: 90:123 and 90:126, Retail Field Experience. The on-the-job training component of the Retail Management Program. (15-225)

90:234 Retail Buying Fundamentals (3 s.h.) Buying duties and policies, how to buy, how much to buy, buying methods, source selection, price lines, and sales records. Product knowledge and analysis relative to the buying function and value analysis of products. (30-30)

90:237 Retail Field Experience (5 s.h.) Prerequisite: 90:123, 90:126, and 90:233, Retail Field Experience. The on-the-job training component of the Retail Management Program. (15-225)

95:130 Communications I (3 s.h.) Study designed to assist students in improving and/or refining skills in the areas of reading, writing, listening, and speaking to help meet communication needs in college and for success and advancement in a career. (45-0)

Quotable Quote:

The truth of the matter is that you always know the right thing to do. The hard part is doing it.

-Gen. H. Norman Schwarzkopf

OFFICE TECHNOLOGY

Degree Programs

Administrative Secretary
Administrative Medical Secretary
**Administrative Medical Secretary/
Transcription Specialist Option**
Administrative Legal Secretary

Diploma Programs

General Secretary
Legal Secretary
Medical Secretary
Medical Transcription

OFFICE TECHNOLOGY

Office Technology Programs provide for a rapidly changing occupational cluster. Employment opportunities are available for graduates with well-developed "people and technical skills."

NIACC's Office Technology Programs are dual-purpose programs designed to give the student the option of obtaining employment upon graduation or transferring to a four-year institution.

Upon the completion of the curriculum with a grade point average of 2.00 (C), the student is awarded an associate degree (see pages 214-217 for specific degree requirements).

Students who know they want to pursue a four-year degree and want to meet general education requirements at transfer institutions should pursue the A.A. degree (see pages 214-217).

Administrative Secretary - Degree

The Administrative Secretary Degree Program is designed to prepare students for employment with financial institutions, retail establishments, manufacturers, private organizations, and Civil Service.

The graduate's duties include: transcribing dictation; keyboarding correspondence, reports, and records; filing; handling telephone services; making appointments and receiving visitors; ordering supplies; making travel arrangements; taking care of general office administration; and using computers for word processing.

NIACC's office technology classrooms are equipped with the latest in computers, office machines, and equipment and are staffed by qualified instructors in the secretarial field.

Upon satisfactory completion of the prescribed curriculum (at least 60 semester hours) with an average grade point of 2.00 (C), the student is awarded an Associate in Science Business Degree/Administrative Secretary.

ENTRANCE REQUIREMENTS

High school graduation or the equivalent.

Successful graduates can find job opportunities in the following occupational areas:

- * Executivesecretary * Administrative assistant
- * Recordsmanager * Receptionist
- * Office manager * Information processing supervisor

REQUIRED COURSES/SUGGESTED SCHEDULE

First Year

First Term

15:107*Key boarding for Office Technology	3 s.h.
15:109 Intro to Accounting	3 s.h.
OR 15:118 Acctg. Procedures (3 s.h.)	
OR 15:150 Acctg. Prin. (3 s.h.)	
15:110 Electronic Calculators.....	1 s.h.
30:101 Communication Skills I	4 s.h.
Humanities Elective OR	
Social Science	3 s.h.
	14 s.h.

*Pre req ui site: 15:112, 15:113 OR ability to pass keyboarding test 30 wam with 3 errors or less

Sec ond Term

15:211 Word Processing	2 s.h.
30:102 Communication Skills II	4 s.h.
Business Electives	10 s.h.
	16 s.h.

Sec ond Year

First Term

15:134 Computer Applications	3 s.h.
OR 15:140 Introduction to Computers and	
Information Systems (3 s.h.)	
15:212 Business Communication.....	3 s.h.
Humanities Elective.....	3 s.h.
Social Science Elective	3 s.h.
Business Electives	4 s.h.
	16 s.h.

Sec ond Term

15:136* Advanced Document Processing	3 s.h.
15:175** Electronic Spreadsheets	3 s.h.
15:218*** Professional Office Procedures	4 s.h.
89:150 Employment Strategies	1 s.h.
Natural Science Elective	3 s.h.
	14 s.h.

* Pre req ui sites: 15:211 and 15:134 or 15:140

** Pre req ui sites: 15:134 or 15:140

*** Pre req ui sites: 15:211 and 15:212

Recommended electives

15:101 Intro to Business.....	3 s.h.
15:142 Principles of Management.....	3 s.h.
15:221 Marketing.....	3 s.h.
15:225 Microsoft Access	1 s.h.
15:226 Microsoft PowerPoint	1 s.h.
15:227 Microsoft Outlook	1 s.h.
15:228 Software Integration.....	1 s.h.
15:241 Human Relations	3 s.h.
15:280 On-the-Job Training	1-6 s.h.

Students have the opportunity to focus on courses that will be most appropriate to help prepare them for employment. However, each student should seek the advice of the program coordinator and/or the student's advisor in making course selections.

Administrative Medical Secretary - Degree

The Administrative Medical Secretary Degree Program is designed to prepare students for employment in physicians' offices, hospitals, clinics, public health departments, Civil Service, medical laboratories, pharmaceutical houses, insurance companies, business and industrial firms with large medical departments, and foundations devoted to medical research.

The graduate's duties include preparing correspondence and medical records, filing, mailing, ordering supplies, handling telephone services, making appointments and receiving visitors, taking care of general office administration, and using a computer for word processing.

NIACC's office technology classrooms are equipped with the latest in computers, office machines, and equipment and are staffed by qualified instructors in the secretarial field.

Upon satisfactory completion of the prescribed curriculum (at least 60 semester hours) with an average grade point of 2.00 (C), the student is awarded an Associate in Science - Medical Secretary Degree.

ENTRANCEREQUIREMENTS

High school graduation or the equivalent.

Successful graduates can find job opportunities in the following occupational areas:

- * Medical secretary
- * Appointment clerk
- * Receptionist
- * Medical records manager
- * Medical information processing operator

REQUIRED COURSES/SUGGESTED SCHEDULE

First Year

First Term

- 15:107* Keyboarding for Office Technology 3 s.h.
- 15:109 Intro to Accounting 3 s.h.
OR 15:118 Acctg. Procedures (3 s.h.)
OR 15:150 Acctg. Prin. (3 s.h.)
- 15:110 Electronic Calculators 1 s.h.
- 30:101 Communication Skills I 4 s.h.
- 94:104 Body Structure & Function 4 s.h.
OR 70:111 Human Biology (4 s.h.)

15 s.h.

*Pre req ui site: 15:112, 15:113 OR ability to pass keyboarding test at 30 wpm with 3 errors or less

Second Term

- 15:134 Computer Applications 3 s.h.
OR 15:140 Introduction to Computers and
Information Systems (3 s.h.)
 - 15:211 Word Processing 2 s.h.
 - 30:102 Communication Skills II 4 s.h.
 - 70:101 Biological Principles 3 s.h.
 - 70:102L Biological Principles Lab 1 s.h.
 - Electives 3 s.h.
- 16 s.h.**

Second Year

First Term

- 15:175* Electronic Spreadsheets 3 s.h.
 - 15:212 Business Communication 3 s.h.
 - 15:251 Medical Terminology I 3 s.h.
 - Electives 6 s.h.
- 15 s.h.**

*Pre req ui site: 15:134 or 15:140

Second Term

- 15:136* Advanced Document Processing 3 s.h.
 - 15:250** Basic Medical Insurance & Coding 2 s.h.
 - 15:252 Medical Terminology II 3 s.h.
 - 15:259** Medical Office Procedures 3 s.h.
 - 89:150 Employment Strategies 1 s.h.
 - 90:134 Pharmacology 2 s.h.
- 14 s.h.**

*Pre req ui sites: 15:134 OR 15:140 and 15:211

**Prerequisite: 94:104 or permission from instructor and 15:251

***Pre req ui sites: 15:211 and 15:212

Recommended Electives

- 15:142 Principles of Management 3 s.h.
- 15:225 Microsoft Access 1 s.h.
- 15:226 Microsoft PowerPoint 1 s.h.
- 15:227 Microsoft Outlook 1 s.h.
- 15:228 Software Integration 1 s.h.
- 15:241 Human Relations 3 s.h.
- 15:280 On-the-Job Training 1-6 s.h.
- 70:250 Anatomy and Physiology I 4 s.h.
- 90:141 Clinical Procedures I and Lab 4 s.h.

Students have the opportunity to focus on courses that will be most appropriate to help prepare them for employment. However, each student should seek the advice of the program coordinator and/or the student's advisor in making course selections.

Administrative Medical Secretary Degree Transcription Specialist Option

The Administrative Medical Secretary Degree Transcription Specialist Program is designed to prepare students for employment in physicians' offices, hospitals, clinics, public health departments, Civil Service, medical laboratories, pharmaceutical houses, insurance companies, business and industrial firms with large medical departments, and foundations devoted to medical research.

The transcription specialist's duties primarily include transcribing medical documents and preparing correspondence and medical records; other secretarial duties include filing, mailing, ordering supplies, handling telephone services, making appointments and receiving visitors, taking care of general office administration, and using a computer for word processing.

NIACC's office technology classrooms are equipped with the latest in computers, office machines, and equipment and are staffed by qualified instructors in the field. Upon satisfactory completion of the prescribed curriculum (at least 60 semester hours) with an average grade point of 2.00 (C), the student is awarded an Associate in Science Degree/Medical Secretary with a Transcription Specialist Certificate.

ENTRANCE REQUIREMENTS

High School graduation or the equivalent.

REQUIRED COURSES/SUGGESTED SCHEDULE

First Year

First Term

15:107* Keyboarding for Office Technology	3 s.h.
15:211 Word Processing	2 s.h.
15:251 Medical Terminology I	3 s.h.
30:101 Communication Skills I	4 s.h.
94:104 Body Structure and Function	4 s.h.
OR 70:111 Human Biology (4 s.h.)	

16 s.h.

*Pre req ui site: 15:112, 15:113 OR ability to pass keyboarding test at 30 wpm with 3 errors or less.

Sec ond Term

15:109 Intro to Accounting	3 s.h.
OR 15:118 Acctg. Pro ce dures (3 s.h.)	
OR 15:150 Acctg. Prin. (3 s.h.)	
15:110 Electronic Calculators	1 s.h.
15:249 Medical Transcription I	3 s.h.
15:252 Medical Terminology II	3 s.h.
30:102 Communication Skills II	4 s.h.
90:140 Lab Tests	1 s.h.

15 s.h.

Sec ond Year

First Term

15:134 Computer Applications	3 s.h.
OR 15:140 In tro duction to Com puters and In for ma tion Sys tems (3 s.h.)	
15:212 Business Communication	3 s.h.
15:256* Medical Transcription II	3 s.h.
70:250 Anatomy and Physiology I	4 s.h.
89:150 Employment Strategies	1 s.h.

14 s.h.

*Pre req ui sites: 15:249

Sec ond Term

15:175*** Electronic Spreadsheets	3 s.h.
15:250* Basic Medical Insurance and Coding	2 s.h.
15:259** Medical Office Procedures	3 s.h.
15:265** Medical Transcription III	3 s.h.
90:134 Pharmacology	2 s.h.
Electives (Strongly rec om mend	2 s.h.
70:251***** OR Anatomy and Phys iology II, 4 s.h.)	

15 s.h.

*Pre req ui sites: 94:104/70:101/70:250 or per mis sion from in-
struc tor and 15:251

**Pre req ui sites: 15:249

***Pre req ui sites: 15:211 and 15:212

****Pre req ui sites: 15:134 OR 15:140

*****Strongly rec om mend pre req ui site 70:250

Sum mer Term:

Strongly recommend taking 90:147, Pathophysiology as your elective from Sec ond Year, Sec ond Term. This course is only offered in the sum mer ses sion. Pre req ui sites: 15:251 and 70:250; corequisite 70:251.

Administrative Legal Secretary - Degree

The Administrative Legal Secretary Degree Program is designed to prepare students for employment in law offices, insurance companies, financial institutions, courts, and police departments as well as in legal departments of business firms and government offices.

The graduate's duties include preparing letters, memos, court and client documents; filing; handling telephone services; making appointments and receiving clients; ordering supplies; making travel arrangements; taking care of general office administration, and using a computer for word processing.

NIACC's office technology classrooms are equipped with the latest in computers, office machines, and equipment and are staffed by qualified instructors in the secretarial field.

Upon satisfactory completion of the prescribed curriculum (at least 60 semester hours) with an average grade point of 2.00 (C), the student is awarded an Associate in Science Business Degree/Administrative Legal Secretary.

ENTRANCE REQUIREMENTS

High school graduation or the equivalent.

Successful graduates can find job opportunities in the following occupational areas:

- * Legal secretary
- * Receptionist
- * Legal transcriber
- * Legal records manager
- * Legal information processing operator
- * Appointment clerk

REQUIRED COURSES/SUGGESTED SCHEDULE

First Year

First Term

15:107* Keybrdng for Of fice Tech nol ogy.....	3 s.h.
15:109 Intro to Ac count ing	3 s.h.
OR 15:118 Acctg. Pro ce dures (3 s.h.)	
OR 15:150 Acctg. Prin. (3 s.h.)	
15:110 Electronic Calculators.....	1 s.h.
30:101 Com muni ca tion Skills I	4 s.h.
80:120 Intro to Amer i can Gov ern ment	3 s.h.
	14 s.h.

*Pre req ui site: 15:112, 15:113 OR abil ity to pass key boarding test at 30 wpm with 3 er rors or less

Sec ond Term

15:211 Word Pro cessing	2 s.h.
30:102 Com muni ca tion Skills II	4 s.h.
Social Science/Humanities Electives	6 s.h.
Business Elective	3 s.h.
	15 s.h.

Sec ond Year

First Term

15:120 Busi ness Law I	3 s.h.
15:134 Com puter Ap pli ca tions	3 s.h.
OR 15:140 In tro duc tion to Com puters and In for ma tion Sys tems (3 s.h.)	
15:212 Busi ness Com mu ni ca tion.....	3 s.h.
Nat u ral Sci ence Elec tive	3 s.h.
Busi ness Elec tive	3 s.h.
	15 s.h.

Sec ond Term

15:122* Legal Of fice Pro ce dures.....	5 s.h.
15:136** Ad vanced Doc u ment Pro cess ing	3 s.h.
15:175*** Elec tronic Spread sheets.....	3 s.h.
89:150 Em ploy ment Strat e gies	1 s.h.
Busi ness Elec tives	4 s.h.
	16 s.h.

*Pre req ui sites: 15:211 and 15:212

**Pre req ui sites: 15:211 and 15:134 OR 15:140

***Pre req ui site: 15:134 or 15:140

Re com mended Elec tives

15:101 In tro duc tion to Busi ness.....	3 s.h.
15:121 Busi ness Law II.....	3 s.h.
15:225 Mi cro soft Ac cess	1 s.h.
15:226 Mi cro soft Power Point	1 s.h.
15:227 Mi cro soft Out look	1 s.h.
15:228 Soft ware In te gra tion	
15:142 Prin ciples of Man a gement.....	3 s.h.
15:241 Hu man Re la tions	3 s.h.
15:280 On-the-Job Training	1-6 s.h.

Stu dents have the op por tu nity to fo cus on courses that will be most ap pro pri ate to help pre pare them for em ploy ment. How ever, each stu dent should seek the ad vice of the pro gram co or di na tor and/or his/her ad visor in mak ing course se lec tions.

Quotable Quote:

The world is before you, and you need not take it or leave it as it was when you came in.

-James Baldwin

COURSE DESCRIPTIONS - (Degree Programs)

Administrative Secretary Administrative Legal Secretary Administrative Medical Secretary/ Transcription Specialist Option

15:101 Introduction to Business (3 s.h.) An overview of the phases and functions of the business enterprise. Units of instruction include the organization, financing, production, and contemporary issues in business. The course provides an awareness and understanding of the complexities of the business world. (45-0)

15:107 Keyboarding for Office Technology (3 s.h.)
Prerequisite: 15:112, Keyboarding Level I, and/or 15:113, Keyboarding Level II, OR keyboarding skill of 30 wpm (words a minute) with 3 or less errors on a 3-minute timed writing. This course covers the continued development of speed and accuracy on the alphabetic, numeric, and symbol keys. Students develop skills in formatting, producing, and proofreading the following documents: memos, letters, envelopes, tables, reports, and other miscellaneous business documents. (30-30)

15:109 Introduction to Accounting (3 s.h.) A basic understanding of the process of collecting and using financial information in business. (45-0)

15:110 Electronic Calculators (1 s.h.) [Structured or Open Entry/Open Exit] A study of the 10-key, electronic calculator. Applied business problems on the calculator. This course has been designated as a pass/no pass course. (5-20)

15:118 Accounting Procedures (3 s.h.) An introductory course using a procedural approach applying the principles of debit and credit, recording of data in various journals, posting to the ledgers, the worksheet, financial statements, adjusting and closing entries, depreciation and inventory methods, plant assets, deferrals and accruals. (45-0)

15:120 Business Law I (3 s.h.) Law as applied to business transactions and business relationships. An introduction to jurisprudence and the courts, contracts, commercial paper, sales, and security agreements. (45-0)

15:121 Business Law II (3 s.h.) Prerequisite: 15:120, Business Law I, recommended. A continuation of 15:120. Agencies, corporations, partnerships, bailments, real property, wills, trusts, insurance, bankruptcy, and government regulation of business. Some information on international law and liability of accountants. (45-0)

15:122 Legal Office Procedures (5 s.h.) Prerequisite: 15:211, Word Processing, and 15:212, Business Communication. Management of a lawyer's office that includes topics covering general legal documents, personal and real property, business organizations and meetings, bankruptcies, wills and estates, civil cases,

and family law. Includes using a word processor, developing transcription skills, using the Internet to access information, filing, handling telephone services, discussing professionalism, applying grammar rules, and taking care of general office administration. Students are expected to spend time outside of class working in the computer lab. (60-30)

15:134 Computer Applications (3 s.h.) Emphasis on business applications of computer software. Students do business problems using word processing, electronic spreadsheet, and database management software. Students are also exposed to Windows operating systems, presentation software, and the Internet. (30-30)

15:136 Advanced Document Processing (3 s.h.)
Prerequisites: 15:134, Computer Applications, and 15:211, Word Processing. Students will learn intermediate to advanced functions of Microsoft Word including customizing templates, recording macros, creating on-screen forms, managing long documents, creating hyperlinks, and publishing on the World Wide Web. Upon completion of the course, the students may be prepared to take the MOUS (Microsoft Office User Specialist) expert exam for Microsoft Word 2000. (30-30)

15:140 Introduction to Computers and Information Systems (3 s.h.) Emphasis on computer literacy and business applications of computer software. Students do business problems using electronic spreadsheets, word processing software, database management software, and presentation software. Students also are exposed to some programming and web page development. (45-0)

15:142 Principles of Management (3 s.h.) 15:101, Introduction to Business, is recommended. Provides students with a general introductory management learning experience. Role of management in today's business environment; management's influence on employee productivity, employee satisfaction and organizational effectiveness; major control devices of management. (45-0)

15:150 Accounting Principles I (3 s.h.) An introductory accounting course: analyzing transactions, matching principle, adjusting and closing entries, financial statements, receivables, inventories, fixed assets and intangible assets, current liabilities, corporations (capital stock transactions, dividends, income and taxes, stockholder's equity, investment in stocks), bonds payable, investment in bonds. (45-0)

15:175 Electronic Spreadsheets (3 s.h.) Prerequisite: 15:140, Introduction to Computers and Information Systems, or 15:134, Computer Applications. Learn the fundamentals of spreadsheets, databases, and business graphics using appropriate software. (30-30)

15:211 Word Processing (2 s.h.) This course is designed to introduce students to computers and the fundamentals of word processing. The students will progress from basic through intermediate features of word processing software. Also Open Entry/Open Exit. (20-20)

15:212 Business Communication (3 s.h.) This course will help the student become an effective communicator in the business world. Basic written communication will be emphasized through practice in grammar structure, vocabulary building, and organization of thoughts. These skills will then be implemented when the student plans and writes business letters and interoffice memoranda. A secondary emphasis will be placed on oral communication, listening skills, and nonverbal communication. (45-0)

15:218 Professional Office Procedures (4 s.h.) Prerequisite: 15:211, Word Processing and 15:212, Business Communication. Office procedures and techniques necessary to perform general office duties. Includes using a word processor, developing transcription skills, using the Internet to access information, filing, handling telephone services, discussing professionalism, applying grammar rules, and taking care of general office administration. Students are expected to spend time outside of class working in the computer lab. (40-30)

15:221 Marketing (3 s.h.) A study of the role of marketing in society as well as a study of target market (customer) determination and selection, product strategy, channels of distribution, pricing concepts and promotional activities that are used in business today. (45-0)

15:225 Microsoft Access (1 s.h.) This course is designed to take students through the core competencies for Microsoft Access in preparation for the Microsoft Office User Specialist (MOUS) certification test. (5-20)

15:226 Microsoft PowerPoint (1 s.h.) This course is designed to take students through the core competencies for Microsoft PowerPoint in preparation for the Microsoft Office User Specialist (MOUS) certification test. (5-20)

15:227 Microsoft Outlook (1 s.h.) The course is designed to take students through the core competencies for Microsoft Outlook in preparation for the Microsoft Office User Specialist (MOUS) certification test. (5-20)

15:228 Software Integration (1 s.h.) The student will integrate concepts learned from Microsoft Word, Access, PowerPoint, Excel, and Outlook in a project approach. (5-20)

15:241 Human Relations (3 s.h.) The study of how people satisfy both personal growth needs and organizational goals in their careers. Although also interested in the why of human behavior, human relations goes further and looks at what can be done to anticipate problems, resolve them, or prevent them from happening. This field emphasizes knowledge that can be applied in practical ways to problems of interpersonal relations at work or in our personal life. Significant developments in recent years in the workplace have increased the importance of interpersonal skills in almost every type of work setting; these trends provide support for the necessity of acquiring competence in human relations. (45-0)

15:249 Medical Transcription I (3 s.h.) This course is designed to simulate medical transcription practices used in a healthcare environment. The main objective is to provide the student with knowledge of the content and formats of medical documents and reports typically dictated in physicians' offices, hospital clinics, and hospital ancillary and support facilities. (15-60)

15:250 Basic Medical Insurance and Coding (2 s.h.) Prerequisite: 15:251, Medical Terminology I, and 94:104, Body Structure and Function. This course will provide the students with an overview of medical health insurance claims, submission guidelines, and basic coding procedures. In addition, the student will work through a number of relevant case studies. (30-0)

15:251 Medical Terminology I (3 s.h.) A study of medical terminology which should be taken concurrently with 70:250, Anatomy and Physiology, or 94:104, Body Structure and Function, as a part of the Medical Secretary and Medical Assistant curriculum. Introduction of basic medical terminology utilizing a programmed, word-building system to learn word parts to construct and analyze new terms. Emphasis is placed on spelling, definition, usage, and pronunciation. (45-0)

15:252 Medical Terminology II (3 s.h.) Prerequisite: None. However, 15:251, Medical Terminology I is highly desirable. A continuation of 15:251. To be taken concurrently with 70:251, Anatomy & Physiology, by those in the Medical Secretary curriculum. A brief review of basic medical terminology followed by a systems approach to learning terms as so called with the anatomical, physiological, and pathological aspects of the body. Classifications of associated pharmaceutical agents are studied with each related system. (45-0)

15:256 Medical Transcription II (3 s.h.) Prerequisite: 15:249, Medical Transcription I. This course is designed to introduce students to hospital dictation. The students will progress through various levels of dictation including some advanced documents. (15-60)

15:259 Medical Office Procedures (3 s.h.) Prerequisite: 15:211, Word Processing, and 15:212, Business Communication. Management of a medical office that includes preparing correspondence and patient records, using the Internet to access information, filing, handling telephone services, making and keeping appointments, developing transcription skills, composing letters, discussing professionalism, applying grammar rules, and taking care of general office duties. Also includes medical ethics and etiquette, medical law, and use of a computer for word processing. Students are expected to spend time outside of class working in the computer lab. (45-0)

15:265 Medical Transcription III (3 s.h.) Prerequisite: 15:249, Medical Transcription I. This course is designed to introduce students to live medical dictation from the clinical and radiology settings. The students will also be applying the issues of confidentiality and using medical reference books. (15-60)

15:280 On-the-Job Training (1-3 s.h.) On-the-Job Training is designed to provide a student an opportunity to apply his/her skills in a job setting. The On-the-Job experience is coordinated with an identified school coordinator and on-site sponsor. This is repeatable credit for a maximum of 6 hours. (0-60 to 180)

30:101 Communication Skills I (4 s.h.) Improvement of skills in reading, writing, speaking, and listening, with an emphasis on expository methods of development and personal experience as supporting material. Students may be requested to use word processors and the Writer's Workbench analyses programs, the Writer's Workbench STEPS programs, and the structuring sentences video series. Students must meet minimum competency requirements in writing and speaking to receive a grade of "C" or higher. (60-0)

30:102 Communication Skills II (4 s.h.) Prerequisite: 30:101, Communication Skills I. Students must have earned a "C" or higher grade in Communication Skills I before enrolling in Communication Skills II. A continuation of 30:101 with an emphasis on argumentative and persuasive writing and speaking, on research methods, and on language. Students may be requested to use word processors, Writer's Workbench analyses, Writer's Workbench STEPS, and sentence structuring videos. Students must meet minimum competency requirements in writing and speaking to receive a grade of "C" or higher. (60-0)

70:101 Biological Principles (3 s.h.) Study of organismic biology including organization, metabolism, and reproduction of living systems. Includes evolutionary patterns, inheritance, growth, development, ecosystems, and structure-function relationships among organisms. (45-0)

70:102L Biological Principles Laboratory (1 s.h.) Prerequisite: Credit for 70:101 or current enrollment in 70:101. (0-30)

70:111 Human Biology (4 s.h.) Course provides overview of human biology for nonscience majors. Includes study of cells, tissues, organs, and systems with emphasis on interrelatedness. Coverage also includes genetics, aging, human ecology, and aspects of various human diseases. (45-30)

70:250 Anatomy and Physiology I (4 s.h.) Prerequisite: 70:111, Human Biology or 70:101, Biological Principles, highly recommended. A study of the human body emphasizing the complementary nature of structure and function, molecular and cellular interactions, homeostasis, and metabolic processes. A cadsection constitutes a major portion of the laboratory exercises. 70:250 includes a study of cells, tissue, membranes, skeletal, muscular, and reproductive systems. (45-30)

70:251 Anatomy and Physiology II (4 s.h.) Prerequisite: Successful completion of 70:250, Anatomy and Physiology I, strongly recommended. A continuation of 70:250, Anatomy and Physiology I. Includes a study of the circulatory, respiratory, digestive, endocrine, and

nervous systems. Cadsections continued, plus kidney, brain, and eye dissections. (45-30)

80:120 Introduction to American Government (3 s.h.) A survey of the American federal system of government including a description and analysis of the constitution, the legislative, executive and judicial branches of government, and the American political process. (45-0)

89:150 Employment Strategies (1 s.h.) Develop skills necessary to enter the job market and experience long-term career growth. Students learn basic job seeking techniques, job keeping skills, and strategies for continued growth. (15-0)

90:134 Basic Pharmacology (2 s.h.) Provides a basic foundation of the study of drugs including general concepts, biological factors affecting the action of drugs, and effects of medications on body systems. Includes allergy overview, the medication order, and discussion of legal and ethical issues related to pharmacology. (30-0)

90:140 Laboratory Tests (1 s.h.) To familiarize the student with lab tests and their normal ranges in the areas of hematology, urology, and microbiology. (15-0)

90:141 Clinical Procedures I (4 s.h.) Assist physician with examinations and treatments, prepare patients for examinations and diagnostic procedures, administer first aid and CPR, maintain and use aseptic techniques, obtain and record patient data. Perform routine tests, sterilize instruments, and learn related terminology. (45-30)

90:147 Pathophysiology (3 s.h.) Prerequisite: 15:251, Medical Terminology I; 70:250, Anatomy & Physiology I; and Corequisite: 70:251, Anatomy & Physiology II. Presents clinical disorders and diseases commonly treated in physical therapy. Pathology, etiology, diagnosis, signs, symptoms, and prognosis will be covered. (45-0)

94:104 Body Structure and Function (4 s.h.) A basic study of the anatomy and physiology of the human body. Study progresses from the cell to tissues, organs and systems with emphasis on their interrelatedness. Discussion includes some of the alterations which occur in illness. Usage of applicable medical terminology is stressed. (45-30)

General Secretary - Diploma

The General Secretary Program is designed to prepare students for employment with financial institutions, retail establishments, manufacturers, private organizations, and Civil Service.

The graduate's duties include keyboarding, filing, record keeping, operating office machines, transcribing, using a computer for word processing, handling telephone services, and taking care of general office administration.

NIACC's office technology classrooms are equipped with the latest in computers, office machines, and equipment and are staffed by qualified instructors in the secretarial field.

Upon satisfactory completion of the prescribed curriculum (at least 30 semester hours) with an average grade point of 2.00 (C), the student is awarded a diploma.

ENTRANCE REQUIREMENTS

High school graduation or the equivalent.

Successful graduates can find job opportunities in the following occupational areas:

- * Secretary
- * Receptionist
- * Records manager
- * Information processing operator
- * Machine transcriber

Recommended Electives

15:101 Introduction to Business.....	3 s.h.
15:136 Advanced Document Processing	3 s.h.
15:225 Microsoft Access	1 s.h.
15:226 Microsoft PowerPoint	1 s.h.
15:227 Microsoft Outlook	1 s.h.
15:228 Software Integration.....	1 s.h.
15:241 Human Relations.....	3 s.h.
15:280 On-the-Job Training	1-6 s.h.

REQUIRED COURSES/SUGGESTED SCHEDULE

First Term

15:107* Keybrdng for Office Technology.....	3 s.h.
15:109 Intro to Accounting	3 s.h.
OR 15:118 Acctg. Procedures (3 s.h.)	
OR 15:150 Acctg. Prin. (3 s.h.)	
15:110 Electronic Calculators.....	1 s.h.
15:134 Computer Applications	3 s.h.
OR 15:140 Introduction to Computers and	
In formation Systems (3 s.h.)	
15:211 Word Processing	2 s.h.
15:212 Business Communication.....	3 s.h.

15 s.h.

*Pre requisite: 15:112, 15:113, OR ability to pass keyboarding test at 30 wpm with 3 errors or less

Second Term

15:175* Electronic Spreadsheets	3 s.h.
15:218** Professional Office Procedures	4 s.h.
89:150 Employment Strategies	1 s.h.
Business Electives	7 s.h.

15 s.h.

*Pre requisite: 15:134 or 15:140

**Pre requisites: 15:211 and 15:212

Legal Secretary - Diploma

The Legal Secretary Program is designed to prepare students for employment with law offices, insurance companies, financial institutions, courts and police departments, as well as in legal departments of business firms and government offices.

The graduate's duties include preparing letters, memos, court and client documents; filing; handling telephone services; making appointments and receiving clients; ordering supplies; making travel arrangements; taking care of general office administration; and using a computer for word processing.

NIACC's office technology classrooms are equipped with the latest in computers, office machines, and equipment and are staffed by qualified instructors in the secretarial field.

Upon satisfactory completion of the prescribed curriculum (at least 30 semester hours) with an average grade point of 2.00 (C), the student is awarded a diploma.

ENTRANCEREQUIREMENTS

High school graduation or the equivalent.

Successful graduates can find job opportunities in the following occupational areas:

- * Legal secretary
- * Receptionist
- * Legal transcriber
- * Legal records manager
- * Appointment clerk
- * Legal information processing operator

REQUIRED COURSES/SUGGESTED SCHEDULE

First Term

15:107* Keybrdng for Of fice Tech nol ogy.....	3 s.h.
15:109 Intro to Accounting	3 s.h.
OR 15:118 Acctg. Pro ce dures (3 s.h.)	
OR 15:150 Acctg. Prin. (3 s.h.)	
15:110 Electronic Calculators.....	1 s.h.
15:134 Com puter Apps.	3 s.h.
OR 15:140 In tro duc tion to Com puters and In for ma tion Sys tems (3 s.h.)	
15:211 Word Pro cessing	2 s.h.
15:212 Busi ness Com mu ni ca tion.....	3 s.h.
	15 s.h.

*Pre requisite: 15:112, 15:113, OR ability to pass keyboarding test at 30 wpm with 3 errors or less

Sec ond Term

15:120 Busi ness Law I	3 s.h.
15:122* Legal Of fice Pro ce dures.....	5 s.h.
89:150 Em ploy ment Strat e gies	1 s.h.
Elective	6 s.h.
	15 s.h.

*Pre requisites: 15:211 and 15:212

Recommended Electives

15:101 Intro duc tion to Busi ness.....	3 s.h.
15:136 Ad vanced Doc u ment Pro cessing	3 s.h.
15:175 Elec tronic Sp read sheets	3 s.h.
15:225 Mi cro soft Ac cess	1 s.h.
15:226 Mi cro soft Pow er Point	1 s.h.
15:227 Mi cro soft Out look	1 s.h.
15:228 Soft ware In te gra tion.....	1 s.h.
15:241 Hu man Re la tions	3 s.h.
15:280 On-the-Job Training	1-6 s.h.

Medical Secretary - Diploma

The Medical Secretary Diploma Program is designed to prepare students for employment in physicians' offices, hospitals, clinics, public health departments, Civil Service, medical laboratories, pharmaceutical houses, insurance companies, business and industrial firms with large medical departments, and foundations devoted to medical research.

The graduate's duties include preparing correspondence and medical records, filing, mailing, ordering supplies, handling telephone services, making appointments and receiving visitors, taking care of general office administration, and using a computer for word processing.

NIACC's office technology classrooms are equipped with the latest in computers, office machines, and equipment and are staffed by qualified instructors in the secretarial field.

Upon satisfactory completion of the prescribed curriculum (at least 30 semester hours) with an average grade point of 2.00 (C), the student is awarded a diploma.

ENTRANCEREQUIREMENTS

High school graduation or the equivalent.

Successful graduates can find job opportunities in the following occupational areas:

- * Medical secretary * Appointment clerk
- * Medical records manager * Receptionist
- * Medical information processing operator

REQUIRED COURSES/SUGGESTED SCHEDULE

First Term

15:107* Keybrdng for Of fice Tech nol ogy.....	3 s.h.
15:211 Word Pro cessing	2 s.h.
15:212 Business Communication	3 s.h.
15:251 Medical Terminology I.....	3 s.h.
94:104 Body Struc ture & Func tion	4 s.h.
	15 s.h.

*Pre requisites: 15:112, 15:113 OR ability to pass keyboarding test at 30 wpm with 3 errors or less

Sec ond Term

15:109 Intro to Ac counting	3 s.h.
OR 15:118 Acctg. Pro ce dures (3 s.h.)	
OR 15:150 Acctg. Prin. (3 s.h.)	
15:110 Electronic Calculators.....	1 s.h.
15:250* Ba sic Med i cal In sur ance and Cod ing.....	2 s.h.
15:252 Med i cal Ter mi nol ogy II	3 s.h.
15:259**Med i cal Of fice Pro ce dures	3 s.h.
89:150 Em ploy ment Strat egies	1 s.h.
90:134 Phar macol ogy	2 s.h.
	15 s.h.

*Pre requisites: 94:104 and 15:251

**Pre requisites: 15:211 and 15:212

Medical Transcription - Diploma

The Medical Transcription Diploma Program is designed to prepare students for employment in physicians' offices, hospitals, clinics, public health departments, Civil Service, medical laboratories, pharmaceutical houses, insurance companies, business and industrial firms with large medical departments, and foundations devoted to medical research.

NIACC's office technology classrooms are equipped with the latest in computers, office machines, and equipment and are staffed by qualified instructors in the field.

Upon satisfactory completion of the prescribed curriculum (at least 30 semester hours) with an average grade point of 2.00 (C), the student is awarded a diploma.

ENTRANCEREQUIREMENTS

High school graduation or the equivalent. Keyboarding speed of at least 45 words per minute with no more than two errors.

REQUIRED COURSES/SUGGESTED SCHEDULE

First Term

15:249 Med i cal Tran scrip tion I	3 s.h.
15:211 Word Pro cessing	2 s.h.
15:212 Business Communication.....	3 s.h.
15:251 Med i cal Ter mi nol ogy I.....	3 s.h.
94:104 Body Struc ture and Func tion	4 s.h.
OR 70:111 Hu man Bi ol ogy (4 s.h.)	
	15 s.h.

Sec ond Term

15:252 Med i cal Ter mi nol ogy II	3 s.h.
15:256* Med i cal Tran scrip tion II	3 s.h.
15:265* Med i cal Tran scrip tion III	3 s.h.
90:140 Lab Tests.....	1 s.h.
90:134 Phar macol ogy	2 s.h.
Electives (Strongly recommend.....)	4 s.h.
70:111 Hu man Bi ol ogy or	
70:250 Anat omy & Phys i ol ogy I)	
	16 s.h.

*Prerequisites: 15:249

Software Applications Specialist - Certificate

The Software Applications Specialist-Certificate is designed to expose students to Microsoft software and prepare students to take the Microsoft Office User Specialist (MOUS) examination.

These courses are business electives and may apply to diplomas or degrees. Many of these courses are offered on an arranged basis or on line.

Upon satisfactory completion of the prescribed curriculum (at least 15 semester hours) with an average grade point of 2.00 (C), the student is awarded a certificate.

ENTRANCEREQUIREMENTS

High school graduation or the equivalent.

REQUIRED COURSES

15:134 Computer Applications	3 s.h.
15:136* Advanced Document Processing	3 s.h.
15:175** Electronic Spreadsheet	3 s.h.
15:211 Word Processing	2 s.h.
15:225 Microsoft Access	1 s.h.
15:226 Microsoft PowerPoint	1 s.h.
15:227 Microsoft Outlook	1 s.h.
15:228*** Software Integration.....	1 s.h.
	15 s.h.

* Prerequisites: 15:134 and 15:211

** Prerequisites: 15:134 or 15:140

*** Prerequisites: 15:134, 15:136, 15:175, 15:211, 15:225, 15:226, and 15:227

COURSE DESCRIPTIONS - Diploma Programs

General Secretary
Legal Secretary
Medical Secretary
Medical Transcription
Software Applications Specialist

15:101 Introduction to Business (3 s.h.) An overview of the phases and functions of the business enterprise. Units of instruction include the organization, financing, production, and contemporary issues in business. The course provides an awareness and understanding of the complexities of the business world. (45-0)

15:107 Keyboarding for Office Technology (3 s.h.)
Prerequisite: 15:112, Keyboarding Level I, and/or 15:113, Keyboarding Level II, OR keyboarding skill of 30 wpm (words a minute) with 3 or less errors on a 3-minute timed writing. This course covers the continued development of speed and accuracy on the alphabetic, numeric, and symbol keys. Students develop skills in formatting, producing, and proofreading the following documents: memos, letters, envelopes, tables, reports, and other miscellaneous business documents. (30-30)

15:109 Introduction to Accounting (3 s.h.) A basic understanding of the process of collecting and using financial information in business. (45-0)

15:110 Electronic Calculators (1 s.h.) [Structured or Open Entry/Open Exit] A study of the 10-key, electronic calculator. Applied business problems on the calculator. This course has been designated as a pass/no pass course. (5-20)

15:118 Accounting Procedures (3 s.h.) An introductory course using a procedural approach applying the principles of debit and credit, recording of data in various journals, posting to the ledgers, the worksheet, financial statements, adjusting and closing entries, depreciation and inventory methods, plant assets, deferrals and accruals. (45-0)

15:120 Business Law I (3 s.h.) Law as applied to business transactions and business relationships. An introduction to jurisprudence and the courts, contracts, commercial paper, sales, and security agreements. (45-0)

15:122 Legal Office Procedures (5 s.h.) Prerequisite: 15:211, Word Processing, and 15:212, Business Communication. Management of a lawyer's office that includes topics covering general legal documents, personal and real property, business organizations and meetings, bankruptcies, wills and estates, civil cases, and family law. Includes using a word processor, developing transcription skills, using the Internet to access information, filing, handling telephone services, discussing professionalism, applying grammar rules, and taking care of general office administration. Students are expected to spend time outside of class working in the computer lab. (60-30)

15:136 Advanced Document Processing (3 s.h.)
Prerequisites: 15:134, Computer Applications, and 15:211, Word Processing. Students will learn intermediate to advanced functions of Microsoft Word including customizing templates, recording macros, creating on-screen forms, managing long documents, creating hyperlinks, and publishing on the World Wide Web. Upon completion of the course, the students may be prepared to take the MOUS (Microsoft Office User Specialist) expert exam for Microsoft Word 2000. (30-30)

15:140 Introduction to Computers and Information Systems (3 s.h.) Emphasis on computer literacy and business applications of computer software. Students do business problems using electronic spreadsheets, word processing software, database management software, and presentation software. Students also are exposed to some programming and web page development. (45-0)

15:150 Accounting Principles I (3 s.h.) An introductory accounting course: analyzing transactions, matching principle, adjusting and closing entries, financial statements, receivables, inventories, fixed assets and intangible assets, current liabilities, corporations (capital stock transactions, dividends, income and taxes, stockholder's equity, investment in stocks), bonds payable, investment in bonds. (45-0)

15:175 Electronic Spreadsheets (3 s.h.) Prerequisite: 15:140, Introduction to Computers and Information Systems or 15:134, Computer Applications. Learn the fundamentals of spreadsheets, databases, and business graphics using appropriate software. (30-30)

15:211 Word Processing (2 s.h.) This course is designed to introduce students to computers and the fundamentals of word processing. The students will progress from basic through intermediate features of word processing software. Also Open Entry/Open Exit. (20-20)

15:212 Business Communication (3 s.h.) This course will help the student become an effective communicator in the business world. Basic written communication will be emphasized through practice in grammar structure, vocabulary building, and organization of thoughts. These skills will then be implemented when the student plans and writes business letters and interoffice memoranda. A secondary emphasis will be placed on oral communication, listening skills, and nonverbal communication. (45-0)

15:218 Professional Office Procedures (4 s.h.) Prerequisite: 15:211, Word Processing and 15:212, Business Communication. Office procedures and techniques necessary to perform general office duties. Includes using a word processor, developing transcription skills, using the Internet to access information, filing, handling telephone services, discussing professionalism, applying grammar rules, and taking care of general office administration. Students are expected to spend time outside of class working in the computer lab. (45-30)

15:221 Marketing (3 s.h.) A study of the role of marketing in society as well as a study of target market (customer) determination and selection, product strategy, channels of distribution, pricing concepts, and promotional activities that are used in business today. (45-0)

15:225 Microsoft Access (1 s.h.) This course is designed to take students through the core competencies for Microsoft Access in preparation for the Microsoft Office User Specialist (MOUS) certification test. (5-20)

15:226 Microsoft PowerPoint (1 s.h.) This course is designed to take students through the core competencies for Microsoft PowerPoint in preparation for the Microsoft Office User Specialist (MOUS) certification test. (5-20)

15:227 Microsoft Outlook (1 s.h.) The course is designed to take students through the core competencies for Microsoft Outlook in preparation for the Microsoft Office User Specialist (MOUS) certification test. (5-20)

15:228 Software Integration (1 s.h.) The student will integrate concepts learned from Microsoft Word, Access, PowerPoint, Excel, and Outlook in a project approach. (5-20)

15:241 Human Relations (3 s.h.) The study of how people satisfy both personal growth needs and organizational goals in their careers. Although also interested in the why of human behavior, human relations goes further and looks at what can be done to anticipate problems, resolve them, or prevent them from happening. This field emphasizes knowledge that can be applied in practical ways to problems of interpersonal relations at work or in our personal life. Significant developments in recent years in the workplace have increased the importance of interpersonal skills in almost every type of work setting; these trends provide support for the necessity of acquiring competence in human relations. (45-0)

15:249 Medical Transcription I (3 s.h.) This course is designed to simulate medical transcription practices used in a healthcare environment. The main objective is to provide the student with knowledge of the content and formats of medical documents and reports typically dictated in physicians' offices, hospital clinics, and hospital ancillary and support facilities. (15-60)

15:250 Basic Medical Insurance and Coding (2 s.h.) Prerequisite: 15:251, Medical Terminology I, and 94:104, Body Structure and Function. This course will provide the students with an overview of medical health insurance claims, submission guidelines, and basic coding procedures. In addition, the student will work through a number of relevant case studies. (30-0)

15:251 Medical Terminology I (3 s.h.) A study of medical terminology which should be taken concurrently with 70:250, Anatomy and Physiology, or 94:104, Body Structure and Function, as a part of the Medical Secretary and Medical Assistant curriculum. Introduction of

basic medical terminology utilizing a programmed, word-building system to learn word parts to construct and analyze new terms. Emphasis is placed on spelling, definition, usage, and pronunciation. (45-0)

15:252 Medical Terminology II (3 s.h.) Prerequisite: None. However, 15:251, Medical Terminology I is highly desirable. A continuation of 15:251. To be taken concurrently with 70:251, Anatomy & Physiology, by those in the Medical Secretary curriculum. A brief review of basic medical terminology followed by a systems approach to learning terms as associated with the anatomical, physiological, and pathological aspects of the body. Classifications of associated pharmaceutical agents are studied with each related system. (45-0)

15:256 Medical Transcription II (3 s.h.) Prerequisite: 15:249, Medical Transcription I. This course is designed to introduce students to hospital dictation. The students will progress through various levels of dictation including some advanced documents. (15-60)

15:259 Medical Office Procedures (3 s.h.) Prerequisite: 15:211, Word Processing, and 15:212, Business Communication. Management of a medical office that includes preparing correspondence and patient records, using the Internet to access information, filing, handling telephone services, making and keeping appointments, developing transcription skills, composing letters, discussing professionalism, applying grammar rules, and taking care of general office duties. Also includes medical ethics and etiquette, medical law, and use of computer for word processing. Students are expected to spend time outside of class working in the computer lab. (45-0)

15:265 Medical Transcription III (3 s.h.) Prerequisite: 15:249, Medical Transcription I. This course is designed to introduce students to live medical dictation from the clinical and radiology settings. The students will also be applying the issues of confidentiality and using medical reference books. (15-60)

15:280 On-the-Job Training (1-3 s.h.) On-the-Job Training is designed to provide a student an opportunity to apply his/her skills in a job setting. The On-the-Job experience is coordinated with an identified school coordinator and on-site sponsor. This is repeatable credit for a maximum of 6 hours. (0-60 to 180)

89:150 Employment Strategies (1 s.h.) Develop skills necessary to enter the job market and experience long-term career growth. Students learn basic job seeking techniques, job keeping skills, and strategies for continued growth. (15-0)

90:134 Pharmacology (2 s.h.) Provides a basic foundation of the study of drugs including general concepts, biological factors affecting the action of drugs, and effects of medications on body systems. Includes allergic overview, the medication order, and discussion of legal and ethical issues related to pharmacology. (30-0)

90:140 Laboratory Tests (1 s.h.) To familiarize the student with lab tests and their normal ranges in the areas of hematology, urology, and microbiology. (15-0)

94:104 Body Structure and Function (4 s.h.) A basic study of the anatomy and physiology of the human body. Study progresses from the cell to tissues, organs and systems with emphasis on their interrelatedness. Discussion includes some of the alterations which occur in illness. Usage of applicable medical terminology is stressed. (45-30)

Medical Assistant

Information regarding the Medical Assistant Program can be found in the Health Section of Career Programs.

Are you considering transferring to a four-year college or university?

Students who earn associate degrees in the Business programs at NIACC may wish to apply their studies toward a bachelor's degree in business-related fields at a four-year college or university. For further information on such options in business studies as accounting, business education, entrepreneurship, finance, insurance, management, management information systems, marketing, and real estate at Buena Vista University, Drake University, Iowa State University, Minnesota State University-Mankato, Simpson College, University of Iowa, University of Northern Iowa, Upper Iowa University, and Wartburg College, please see pages 125-149 in the catalog or speak with a NIACC advisor.