COMPUTER INFORMATION SYSTEMS

Associate in Applied Science Degree | Career Program | Department of Business and Information Systems

Program Description

The field of computer information systems is rich in career opportunities with excellent starting salaries for qualified personnel. Corporations, government agencies, financial institutions, marketing and retail organizations and small firms require the services of computer applications specialists, computer programmers and information technology technicians. The Computer Information Systems Curriculum, based upon your interests, prepares you for various entry-level positions including junior computer programmer, computer operator, computer support specialist, application user specialist, data-entry operator, web page designer and desktop publishing specialist.

Graduates may transfer to related programs offered by four-year colleges. A Cooperative Work Experience course allows students to gain valuable business experience in a supervised setting.

Students interested in the Business Administration Computer Programming Option (AS Degree) in the Business and Information Systems Department should see the Business Administration curriculum information in the college catalog. Students interested in Computer Science (AS Degree) in the Mathematics and Computer Science Department should see the Computer Science curriculum information elsewhere in this college catalog.

Learning Outcomes

Upon successful completion of the Computer Information Systems program requirements, students will be able to:

1. Discuss general knowledge of topics such as accounting, marketing, business ethics, forms of business entities and global business as they relate to the business environment.

2. Prepare and analyze financial statements for internal and external decision-making.

3. Prepare computer programs using current business programming languages.

4. Discuss the uses of various computer operating systems.

5. Demonstrate the ability to successfully engage in business research, information gathering and reporting in an individual and/or group setting.

6. Demonstrate proficiency in performing basic mathematical calculations required in a business setting.

7. Utilize and incorporate basic business technology to produce business documents, spreadsheets and databases.

COMPUTER INFORMATION SYSTEMS CURRICULUM (PATHWAYS)

Curriculum Coordinator: Tanweer Haroon

Required Core

A. English Composition

- ENG 100 English Composition I: Integrated Reading and Writing *OR* ENG 110 English Composition I: Fundamentals of Writing and Rhetoric *OR* ENG 111 English Composition I: Writing and Rhetoric (3 Credits)

- ENG 112 English Composition II: Writing and Rhetoric *OR* ENG 113 Composition II: Writing About Literature *OR* ENG 114 English Composition II: Writing about Fiction *OR* ENG 115 English Composition II: Writing about Drama *OR* ENG 116 English Composition II: Writing about Poetry (3 Credits)

B. Mathematical and Quantitative Reasoning

- MTH 21[1] A Mathematical World *OR* MTH 21.5 A Mathematical World with Algebra *OR* MTH 23 Probability and Statistics *OR* MTH 23.5 Probability and Statistics with Algebra (3 Credits)

C. Life and Physical Science

- SCIENCE[2] AST 111, BIO 11, CHM 17, CHM 111, ENV 11, ESE 11, ESE 12, ESE 13, PHY 11 OR PHY 110 (3-4 Credits)

Flexible Core

A. World Cultures and Global Issues

- HIS 10 History of the Modern World *OR* HIS 11 Introduction to the Modern World (3 Credits)

B. U.S. Experience in its Diversity *OR*
D. Individual and Society

- ECO 12 Macroeconomics *OR* ECO 11 Microeconomics (3 Credits)

Choose one course from Flexible Core A-E[3]

SUBTOTAL 21-22

Major Requirements

- ACC 111[7] Principles of Accounting I (4 Credits)
- BIS 13 Web Development (3 Credits)
- BIS 23 Client-Side Programming (3 Credits)
- BIS 31 Server-Side Programming (3 Credits)
- BUS 110 Introduction to Business Fundamentals (3 Credits)
- COMM 12 Voice and Diction: Business and Professional Speech (2 Credits)
- CWE 31[4, 7] Cooperative Work Experience (2 Credits)
- DAT 30 Intro to Computer Fundamentals and Programming (3 Credits)
- DAT 33[7] Microcomputer Applications (2 Credits)
- DAT 36 Microcomputer Spreadsheet Applications (3 Credits)
- DAT 47 Java Programming (3 Credits)
- DAT 49 Linux Operating System (3 Credits)
- DAT 51 Web Programming with Python (3 Credits)
- KEY 10[7] Keyboarding for Computers (1 Credit)
- Lab Science credit[2] (0-1 Credit)
- FYS 11[5] First Year Seminar (0-1Credit)

SUBTOTAL 38-40

TOTAL 60-61 Credits required for the AAS Degree[6]

[1] Students planning to transfer to a four-year college should take MTH 30 or 31.

[2] Students may select either a 4-credit or a 3-credit science course. Students selecting a 3-credit course must also complete an additional 1-credit lab course to fulfill graduation requirements.

[3] In an effort to provide students with a well-rounded liberal learning experience, students are encouraged to fulfill this requirement by selecting courses from Flexible Core Areas B, C or E as these areas are not already required by this program.

[4] CWE 31 is a two (2) credit course. Students should enroll in CWE 31 one year before graduating or when they have completed 30 credits towards their degree. Students should see the CWE 31 Coordinator in the Department of Business and Information Systems,during their second semester. Students who are employed full-time are not required to complete the internship portion of CWE 31, provided their employer agrees to participate in course-related surveys. Permission must be obtained from the CWE 31 Coordinator or Department Chairperson by submitting documentation of current full-time employment. College Work-Study assignments within CUNY may not be used as substitutes for the CWE internship.

[5] Students must take FYS 11 prior to earning 24 degree or equated credits. Students who have earned 24 or more degree or equated credits are permitted to use the one credit as a free elective. It is highly recommended that students take FYS 11 in their first or second semester. This requirement will be waived for students who have earned 24 or more degree or equated credits at BCC or another college and transfer into this program.

[6] Students transferring into the program with 24 or more degree or equated credits will be exempt from FYS 11 and only required to complete 60 credits to graduate.

[7] Students accepted into the apprenticeship opportunities will enroll in a combination of CWE 41, CWE 42 and CWE 43 in place of ACC 111, CWE 31, DAT 33 and KEY 10. If students have completed any or all of these courses prior to participating in the apprenticeship, alternative course substitutions may be determined.

All options articulate with SUNY Empire State College, Business, Management and Economics and Interdisciplinary Studies baccalaureate programs.