

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.

Students must select either the Computer Programming Option or the Web Page Development Option by the time they have earned 12 degree credits.

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: Mr. Tanweer Haroon

Required Core

A. English Composition

- ENG 110 Fundamentals of Composition and Rhetoric *OR* ENG 111 Composition and Rhetoric I (3 Credits)
- ENG 112 Composition and Rhetoric II *OR* ENG 114 Written Composition and Prose Fiction *OR* ENG 115 Written Composition and Drama *OR* ENG 116 Written Composition and Poetry (3 Credits)

B. Mathematical and Quantitative Reasoning

- MTH 21¹ Survey of Mathematics I *OR* MTH 23 Probability and Statistics (3 Credits)

C. Life and Physical Science

- SCIENCE² 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-E³

SUBTOTAL 21-22

Major Requirements

- ACC 111 Principles of Accounting I (4 Credits)
- BIS 13 Web Development(3 Credits)
- BUS 10 Introduction to Business (3 Credits)
- BUS 111⁴ Applications of Mathematics for Business (3 Credits)
- COMM 12 Voice and Diction: Business and Professional Speech (2 Credits)
- CWE 31⁵ Cooperative Work Experience (2 Credits)
- DAT 30 Introduction to Computer Fundamentals and Programming (3 Credits)
- DAT 33 Microcomputer Applications (2 Credits)
- DAT 35 Visual BASIC Programming (3 Credits)
- FYS 11⁶ First Year Seminar (0-1 Credit)
- KEY 10 Keyboarding for Computers (1 Credit)
- LAB SCIENCE Credit² (0-1 Credit)

DEGREE OPTIONS

Student must choose an option to graduate:

- Computer Programming
- Web Page Development

Computer Programming Option Requirements:

- DAT 38 Database Management Applications (3 Credits)
- DAT 47 JAVA Programming (3 Credits)
- DAT 48 Advanced JAVA Programming (3 Credits)
- DAT 49 Linux Operating System (3 Credits)

Webpage Development Option Requirements:

- BIS 12 Multimedia Theory and Applications for Business (3 Credits)
- BIS 23 Client-Side Programming (3 Credits)
- BIS 31 Server-Side Programming (3 Credits)
- DAT 38 Database Management Applications (3 Credits)

SUBTOTAL 39-40

TOTAL 60-61 Credits required for the AAS Degree⁷

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 Students who have completed MTH 6 (or three years high school mathematics) and intend to transfer to a four-year college may take BUS 41 instead of BUS 111.

⁵ CWE 31 is a two (2) credit course. A student should enroll in CWE one year before graduating or when starting the third semester. See the CWE advisor in Loew Hall, Career Services, during the second semester. Students who are employed full-time are not required to complete CWE. A waiver must be obtained from the Department Chairperson by submitting documentation of current full-time employment. After a written waiver of CWE is obtained, the student must substitute the required CWE credits with any course(s) offered by the Business and Information Systems Department. College Work-Study assignments within CUNY may not be used as substitutes for the CWE internship.

⁶ 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.

⁷ Students transferring into the program with 24 or more degree or equated credits will be required to complete only 60 credits to graduate.

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