Eastern Oklahoma State College
Program Review
Computer Information Systems, AS (11) and embedded Coding Certificate
2018

Brenda Kennedy, Department Chairperson, reviewed the Computer Information Systems Department following the guidelines provided by the Office of Academic Affairs. Data from the Office of Institutional Research and CAAP Tests summaries were assimilated and compiled in the following self-study report.

Program Name

Computer Information System – Software Development Option
    Program Code: 06
    Hegis Code: 5101
    Cip Code: 521205
Computer Information System – Business Option
    Program Code: 06
    Hegis Code: 5101
    Cip Code: 521205
Computer Information System – Forensic Option
    Program Code: 06
    Hegis Code: 5101
    Cip Code: 52105

Computer Information System – Coding Certificate program

Centrality of the Program to the Institutional Mission
Eastern Oklahoma State College, as a public community college, is committed to providing a broad range of higher educational programs to the constituents of its service area. The inclusion of the Computer Information Systems program enables students successfully completing the Computer Information Systems degree plan at Eastern, to develop the attitudes, knowledge, qualities, and skills necessary to enter into baccalaureate programs at four-year colleges and universities that specialize in computer programming and applications development.

Students completing an Associate of Science degree in Computer Information Systems should be able to demonstrate the following competencies:
1. Logical, analytical, and creative thinking ability.
2. Communication using extensive computer terminology.
3. Programming using modular structure and techniques.
4. Programming ability in at least two languages.
5. Advanced programming in at least one language.
6. In depth understanding of at least one operating system.
7. Understanding of and ability to use various software applications.
8. Acceptance to changes and advancements in computer science.

Type of Degree
Associate in Science in Computer Information Systems

Program Goals and Objectives
The following are the primary goals and objectives for the Computer Information Systems program:
1. To acquaint students with the many and varied uses of computers.
2. To present the functions of all computers in detail including input and output devices, and the central processing unit.
3. To introduce the most popular software applications packages currently being used.
4. To offer instruction in writing computer programs in at least two currently used languages that will be readily acceptable at four-year institutions.
5. To assure that CIS courses offered and required at Eastern be able to transfer and substitute to four-year colleges and universities.

The above benchmarks will be achieved in the following ways:
1. Quality instruction that is maintained by keeping current with the rapidly changing field of computer science.
2. Quality equipment to ensure the ability to use the most current software available.
3. Adequate student access to laboratories which will allow required time to use computers, printers, and software.
4. Constant and periodic evaluations of students to assure the class objectives are being met.
5. Continuously monitoring upper-division requirements at four-year institutions and the needs of industry and business.

List of Faculty in Program and Qualifications

Brenda Kennedy	Full Time Faculty	B.S. Math Ed./minor CIS, M.S. Math/CIS Ed.
Kellye Semeski	Full Time Faculty	B.S. CIS M M.S. Tech Ed.

Resources Required for Program
  I. **Financial Resources:**
    a. <u>Operational Budget</u> – An annual operational budget is prepared for the Computer Information Systems Program and submitted to the Vice–President of Academic Affairs. The operational budget delineates the financial needs of the Computer Information Systems Program in such areas as supplies and operating expenses, property, furniture, equipment, and travel. The Vice–President of Academic Affairs, and other areas of administration involved in the budgetary process, review the budgetary request and allocate funds based on available finances and program needs.

Adequate funds are available to insure that students in the Computer Information Systems Program are provided with the best possible quality academic program in the area of Computer Information System.

 b. <u>Capital Expenditures</u> – During the past years the Computer Information Systems Program prepared a capital expenditures request. This request is then submitted to the Vice–President of Academic Affairs. The capital expenditure request delineates the instructional equipment needs for the Computer Information Systems Program. These funds have been utilized to purchase computer hardware, computer software, and software updates, computer projection systems, etc.

II. Library Collections:

The library at Eastern Oklahoma State College contains numerous books, textbooks, periodicals, reference materials and many online resources which are available for student utilization to assist in the completion of term papers, homework assignments, and general course work in the area of Computer Science. Library resources are more than adequate of the needs of students in the Computer Information Systems program. In addition to reference materials, the library provides computers for students to utilize to prepare reports, complete assignments, etc. In addition to the reference materials available in the library, the Eastern Oklahoma State College library is affiliated with an interlibrary loan program provided by On-Line Computerized Library Center. Students may secure magazine articles, books, and textbooks within three (3) to five (5) working days through the interlibrary loan program. The library staff is always willing to secure any requested materials if funds are available.

III. Equipment:

The Computer Information Systems Program depends entirely on the availability of its equipment. At present this consists of two (2) laboratories each with twenty (20) microcomputers networked in the Eastern Oklahoma State College Computer Service Center. This gives the Computer Information Systems program access to file servers for varied needs in programming development. In addition, the program uses the Eastern Oklahoma State College administration file server. The computer hardware and software being utilized is in excellent condition. Upgrading to keep it current is an ongoing process.

IV. Support services provided for the students of the Computer Information Systems Program include offices for financial aid, student placement, student support services, business office, bookstore, registrar's office, food services, learning resources center, student religious centers, and advisement.

Program Uniqueness

The Computer Information Systems Program introduces the student to the field of computer software design and development. It also provides the student with a general knowledge of the varied career opportunities available while pursuing a Bachelor of Science degree in Computer Information Systems. The primary goal of this program is to ensure that students leaving Eastern Oklahoma State College will possess the necessary background to be successful upon transferring to a four-year institution of higher education as a junior.

Number of Majors

Enrollment for the past five years are provided in Table 1.

Table 1

	CIS – Software Development, Business & Forensics option	
Year	**Head Count**	
2014	10	
2015	11	
2016	13	
2017	12	
2018	10	
	CIS Coding Certificate	
Year	**Head Count**	
2018	2	

Method and Frequency of Curriculum Review and Evaluation

Review and evaluation of the curriculum for the Computer Information Systems Program is a continuous process. The general education course requirements are reviewed on a yearly basis to ensure that the forty (40) hours of general education courses that Computer Information System majors are taking are transferable to four-year institutions of higher education. The major course and supporting/elective course requirements are reviewed on a yearly basis to ensure that the twenty-four (24) hours of computer courses that Computer Information System majors are taking are transferable to four-year institutions of higher education. If the review and evaluation process reveal that a change in curriculum is needed, the changes are prepared and submitted to the Dean of Academic Affairs for review and consideration.

Methods and Procedures for Measuring Program Objectives and Outcomes

The following methods will be utilized by the Computer Science Program to measure program objectives and outcomes:

A. First time enrolling students in the Computer Information Systems Program will be administered an assessment pre-test. The assessment pre-test will be administered because students enrolling in the program possess varying degrees of academic knowledge and skills as pertains to the field of computers. The results of the assessment pre-test will be utilized to determine the academic strengths and weaknesses of each student. The results of the assessment test will be utilized to place students in the courses for which they are academically prepared.

B. A correlation study of the Assessment Test scores, ACT scores, age, GED, and high school transcript will be conducted each academic year. The study will provide data that will be utilized to assist in enrollment of students and to determine the success of students in the program.

C. Students completing the program will be administered an assessment post-test, with the results being compared to the results of the assessment pre-

test. A comparison of the assessment test data will be utilized to evaluate student progress in the development of computer related knowledge.
D. A program evaluation form will be given to each student completing the Computer Information Systems Program.
E. Whenever possible, contact will be made with the institution of higher education to which the student transfers to determine the student's academic performance.
F. We will continue to evaluate and analyze our program to insure the students in this major receive the highest quality of education possible.

Number of Graduates

The average number of graduates for the past five years has been 9.4 in Computer Information Systems. The breakdown of graduates by years is shown in Table 2.

Table 2

Year	Computer Information Systems
2014	1
2015	1
2016	1
2017	1
2018	1
	Coding Certificate
2018	1

Discrepancies found when completing the low-productivity report. Double majors were not given credit with the second degree conferred to the State

Outcomes for Degree Programs

Students graduating from the Computer Information Systems program at Eastern should have the knowledge and skills required to be successful when transferring to like programs at a senior college with a minimum of difficulty regarding course transfer or ability to compete.

Attachments

Degree Plan
List of Major Courses and Descriptions

Outcomes for Coding Certificate

Newly created as a certificate program to enhance Math and Engineering majors. Students complete the four major programming courses: Logic & Algorithms, Beginning C++ Programming, Advanced C++ Programming, and Java Programming. A coding certificate is awarded when a student completes successfully those four courses.