## COMPUTER SCIENCE ASSOCIATE IN SCIENCE DEGREE

## PROGRAM CODE: 2S08408

The Computer Science Associate in Science Degree is designed to prepare students to transfer to colleges and universities that offer bachelor's degrees in computer science. Students with a degree in computer science may pursue careers in many areas of industry, such as aerospace, health, finance, entertainment, and more. Opportunities for specialties in the field include software engineering and development, computer networks and security, telecommunications, mobile computing, game programming, internet and web technology, embedded systems and realtime programming, systems analysis, information technology, distributed computing and artificial intelligence. This degree requires $23-24$ units of which 12 units are in required courses. An additional 11-12 units must be chosen from the lists below. A grade of C or better is required in all courses.

| Code | Title | Units |
| :---: | :---: | :---: |
| Required Courses suggested in the following sequence (12 units): |  |  |
| CSCI 123 F | Introduction to Programming Concepts in C ++ | 4 |
| CSCI 133 F | Data Structures in C++ | 4 |
| MATH 152 F or MATH 152HF | Calculus II (formerly MATH 150BF) Honors Calculus II | 4 |
| Select one course pairing (7-8 units): |  | 7-8 |
| MATH 171 F | Discrete Mathematics | 4 |
| and |  |  |
| MATH 172 F | Graph Theory and Linear Algebra | 4 |
| OR |  |  |
| MATH 170 F | Discrete Structures | 4 |
| and |  |  |
| MATH 255 F | Linear Algebra | 3 |
| Restricted Electives (4 units): |  | 4 |
| CSCI 223 F | C Language for Math and Science | 4 |
| CSCI 241 F | Computer Organization and Assembly Language Programming | 4 |

Total Units
Outcome 1: Write computer programs to solve problems.
Outcome 2: Design and implement Abstract Data Types using objectoriented techniques.

