## COMPUTER SCIENCE, BS

## Program Description

This degree provides a solid background in computer science with supporting coursework in applied mathematics and business. Adding an appropriate minor field of study can complement the program, as well as give the graduate a competitive edge in the work force.

## Program Learning Outcomes

- Analyze the needs of a user, design a computer software system to satisfy those needs, and write and debug computer programs needed for that system. (Analyze Needs)
- Evaluate and implement solutions to programming problems using appropriate algorithms, programming languages, user interfaces, and utilities. (Implement)
- Evaluate changes in technology, software, and user needs based on accepted and updated best practices in the field. (Best Practices)
- Communicate technical information relative to problems and solutions to both other professionals in the field as well as involved non-technical persons. (Communication)


## Degree Requirements

| Code | Title | Hours |
| :---: | :---: | :---: |
| Departmental Requirements |  |  |
| Departmental GPA minimum of 2.50 or higher |  |  |
| CSCI 103 | Survey of Computer Science | 3 |
| CSCI 105 | Intro to Computer Programming | 3 |
| CSCI 106 | Web Page Design \& Development | 3 |
| CSCI 121 | Principles of Programming | 4 |
| CSCI 201 | Data Structures and Algorithms | 4 |
| CSCI 211 | Database Applications | 4 |
| CSCI 221 | Computer Networks | 3 |
| CSCI 263 | Managing Computer Security | 3 |
| CSCI 291 | Computer Science Project | 4 |
| CSCI 321 | Computer Graphics | 3 |
| CSCI 327 | Web App Design \& Development | 3 |
| CSCI 341 | Discrete Structures Comp Sci | 4 |
| CSCI 342 | Adv Programming Techniques | 4 |
| CSCI 351 | App Interface Development | 3 |
| CSCI 371 | Multi-Platform App Development | 3 |
| CSCI 411 | Data Analytics | 3 |
| CSCI 415 | Computer Org Architecture | 3 |
| CSCI 434 | Operating Systems Concepts | 3 |
| CSCI 418 | Senior Project I | 3 |
| CSCI 419 | Senior Project II | 3 |
| Mathematics Requirements |  |  |
| MATH 131 | College Trigonometry | 3 |
| MATH 112 or MATH 151 | Calculus Business/Life Science Calculus I | 4 |
| MATH 207 | Prin of Statistical Methods | 3 |
| MATH 215 | Fund Concepts of Mathematics | 4 |
| Other Requirements |  |  |
| BUSN 121 | Introduction to Business | 3 |


| ENGL 306 | Technical Writing | 3 |
| :--- | ---: | ---: |
| Free Electives | $\mathbf{1 3 - 1 6}$ |  |
| Total Hours | $\mathbf{9 9 - 1 0 2}$ |  |

General Education: All LSSU bachelor's degree candidates must complete the LSSU General Education Requirements.

A minimum of 124 credits (at the 100 level or higher) must be earned for graduation with a cumulative gpa of 2.00 or higher. A gpa of 2.50 or higher is required in your Major, and a gpa of $\mathbf{2 . 0 0}$ or higher is required in your General Education Requirements.

