Degree Description

Enhances the technical skills of student from non-technical backgrounds to work in today's marketplace.

Marketable Skills

1. Understand and apply computing terminology and concepts used in the workplace- Critical Thinking/Communication.

2. Apply fundamentals of computer programming in structured design concepts- Critical Thinking/Communication.

3. Configure, use, and troubleshoot computer operating systems and/or application software Critical Thinking.

4. Use the Internet to locate, transfer, research and publish information at a level appropriate for the academic and work environment. Critical Thinking/Communication.

5. Install and evaluate desktop and network security protocols and principles- Critical Thinking.

COSC 1336 Programming Fundamentals I	3 hours
IMED 1316 Web Design I	3 hours
ITSW 1307 Introduction to Database	3 hours
ITSW 1304 Introduction to Spreadsheets *or* ITSE 2309 Database Programming *or* ITSY 1342 Information Tech Security	3 hours
	12 hours

Total hours: **12 hours**

Course Descriptions

COSC 1336 Programming Fundamentals I

Introduces the fundamental concepts of structured programming and provides a comprehensive introduction to programming for computer science and technology majors. Topics include software development methodology, data types, control structures, functions, arrays, and the mechanics of running, testing and debugging. This course assumes computer literacy. Semester Hours 3 (3 lec)

IMED 1316 Web Design I

Introduces Internet Web page design and related graphic design issues, including mark-up languages, websites, Internet access software, and interactive topics. Students should be proficient with Windows functions, mousing and keyboarding skills. Semester Hours 3 (2 lec/2 lab)

ITSW 1307 Introduction to Database

Introduces relational and non-relational database theory and the practical applications of a contemporary databases. Topics may adapt to changes in industry practices. Semester Hours 3 (2 lec/2 lab)

ITSW 1304 Introduction to Spreadsheets

Introduces the concepts, procedures and importance of electronic spreadsheets. Semester Hours 3 (2 lec/2 lab)

ITSE 2309 Database Programming

Covers database development using database programming techniques emphasizing database structures, modeling, and database access. Semester Hours 3 (2 lec/2 lab)

ITSY 1342 Information Tech Security

Instruction in security for network computer hardware, software, virtualization, and data, including physical security; backup procedures; relevant tools; encryption; and protection from viruses. Topics may adapt to changes in industry practices. Students will learn to ensure the physical security of file servers and other network components using best practices; develop backup procedures to provide for data security; use network operating system features to implement network security; describe the nature of computer viruses, their methods of spreading, and means of protecting networks from viruses; use relevant tools to provide for network security; and use encryption techniques to protect network data. Semester Hours 3 (2 lec/2 lab)