

COMPUTER SCIENCE (CSC)

CSC100AA / Introduction to Computer Science (C++)

3 Credits / 4.0 Periods for Lecture & Lab

Concepts of problem solving, structured programming in C++, fundamental algorithms and techniques, and computer system concepts. Social and ethical responsibilities. Intended for majors other than Computer Science. Prerequisites: A grade of C or better in MAT095, or MAT096, or MAT114, or MAT115, or MAT12+, or an appropriate District placement for MAT15+ or higher, or permission of Instructor or Department/Division Chair.

Fulfills: Computer/Statistics/Quantitative Applications [CS]; Computer/Stats/Quantitative Apps [CS]-in combo

Division: Business and Computing Studies

CSC110AA / Introduction to Computer Science (Java)

3 Credits / 4.0 Periods for Lecture & Lab

Concepts of problem-solving, structured and object-oriented programming in Java, fundamental algorithms and techniques and computer system concepts. Social and ethical responsibilities. Intended for Computer Science and Computer Systems Engineering majors.

Prerequisites: A grade of C or better in MAT095, or MAT096, or MAT114, or MAT115, or MAT12+, or an appropriate District placement for MAT15+ or higher, or permission of Instructor or Department/Division Chair.

Fulfills: Computer/Statistics/Quantitative Applications [CS]; Computer/Stats/Quantitative Apps [CS]-in combo

Division: Business and Computing Studies

CSC110AB / Introduction to Computer Science (Java)

4 Credits / 4.0 Periods for Lecture & Lab

Concepts of problem-solving, structured and object-oriented programming in Java, fundamental algorithms and techniques and computer system concepts. Social and ethical responsibilities. Intended for Computer Science and Computer Systems Engineering majors.

Prerequisites: A grade of C or better in MAT095, or MAT096, or MAT114, or MAT115, or MAT12+, or an appropriate District placement for MAT15+ or higher, or permission of Instructor or Department/Division Chair.

Fulfills: Computer/Statistics/Quantitative Applications [CS]; Computer/Stats/Quantitative Apps [CS]-in combo

Division: Business and Computing Studies

CSC120 / Digital Design Fundamentals

4 Credits / 6.0 Periods for Lecture & Lab

Number systems, conversion methods, binary and complement arithmetic, Boolean switching algebra and circuit minimization techniques. Analysis and design of combinational logic, flip-flops, simple counters, registers, ROMs, PLDs, synchronous and asynchronous sequential circuits, and state reduction techniques. Building physical circuits. Prerequisites: None. Corequisites: CSC100 or CSC110 or permission of Instructor or Division or Department Chair.

Crosslisted: EEE120

Fulfills: Computer/Statistics/Quantitative Applications [CS]; Computer/Stats/Quantitative Apps [CS]-in combo

Division: Business and Computing Studies

CSC180AA / Computer Literacy

3 Credits / 4.0 Periods for Lecture & Lab

Introduction to computers and technology and their impact on society. Explores technology, current topics in computing, applications and related issues. Students gain fluency in integrating technology to solve problems using computational thinking. Use of application software to create documents, spreadsheets, databases, e-mail and text files, and use of Internet browsers. Prerequisites: None.

Fulfills: Computer/Statistics/Quantitative Applications [CS]; Computer/Stats/Quantitative Apps [CS]-in combo

Division: Business and Computing Studies

CSC180AB / Computer Literacy

4 Credits / 4.0 Periods for Lecture

Introduction to computers and technology and their impact on society. Explores technology, current topics in computing, applications and related issues. Students gain fluency in integrating technology to solve problems using computational thinking. Use of application software to create documents, spreadsheets, databases, e-mail and text files, and use of Internet browsers. Prerequisites: None.

Fulfills: Computer/Statistics/Quantitative Applications [CS]; Computer/Stats/Quantitative Apps [CS]-in combo

Division: Business and Computing Studies

CSC181AA / Applied Problem Solving With Visual Basic

3 Credits / 4.0 Periods for Lecture & Lab

Introduction to systematic definition of problems, solution formulation, and testing. Visual BASIC programming language applied to problems in mathematics, science, and business. Prerequisites: None.

Division: Business and Computing Studies

CSC181AB / Applied Problem Solving With Visual Basic

4 Credits / 4.0 Periods for Lecture

Introduction to systematic definition of problems, solution formulation, and testing. Visual BASIC programming language applied to problems in mathematics, science, and business. Prerequisites: None.

Fulfills: Computer/Statistics/Quantitative Applications [CS]; Computer/Stats/Quantitative Apps [CS]-in combo

Division: Business and Computing Studies

CSC182AA / Principles Of Programming With C#.NET

3 Credits / 4.0 Periods for Lecture & Lab

Introduction to object-oriented program analysis, design, and development using Visual C#.NET. Includes general concepts, data types, expressions, flow control, methods, classes, arrays, event-driven models, Windows applications, and Web applications. Prerequisites: None.

Fulfills: Computer/Statistics/Quantitative Applications [CS]; Computer/Stats/Quantitative Apps [CS]-in combo

Division: Business and Computing Studies

CSC205AA / Object Oriented Programming and Data Structures

3 Credits / 4.0 Periods for Lecture & Lab

Covers Object-Oriented design and programming; elementary data structures; arrays; lists; stacks; queues; binary trees; recursion; searching and sorting algorithms. Prerequisites: A grade of C or better in CSC110 or permission of Instructor.

Fulfills: Computer/Statistics/Quantitative Applications [CS]; Computer/Stats/Quantitative Apps [CS]-in combo

Division: Business and Computing Studies

CSC220 / Programming for Computer Engineering

3 Credits / 5.0 Periods for Lecture & Lab

Introduction to procedural programming (C/C++) and hardware description language (VHDL). Prerequisites: A grade of C or better in (CSC/EEE120 and CSC205), or permission of Instructor or Division or Department Chair.

Division: Business and Computing Studies

CSC230 / Computer Organization and Assembly Language

4 Credits / 5.0 Periods for Lecture & Lab

Assembly language programming including input/output (I/O) programming and exception/interrupt handling. Register-level computer organization, I/O interfaces, assemblers, and linkers. Processor organization and design, data path, control, pipelining, and input/output. Memory organization with cache and virtual memory. Prerequisites: A grade of C or better in [(CSC100 or CSC110) and CSC/EEE120], or permission of Instructor or Division or Department Chair.

Crosslisted: EEE230

Division: Business and Computing Studies

CSC240 / Introduction to Different Programming Languages

3 Credits / 5.0 Periods for Lecture & Lab

Introduction to procedural (C/C++), applicative (LISP), and declarative (Prolog) languages.

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