

CPT - COMPUTER TECHNOLOGY

CPT 113 Information Systems (3-0-3)

Offered Fall, Spring and Summer Semesters

This course is an introduction to the principles and technologies used in modern management information systems.

CPT 168 Programming Logic and Design (3-0-3)

Offered Fall, Spring and Summer Semesters

Prerequisites: CPT 113

This course examines problem-solving techniques applied to program design. Topics include a variety of documentation techniques as a means of solution presentation. Basic computer programming will be taught using the Python language.

CPT 170 Microcomputer Applications (3-0-3)

Offered Fall, Spring and Summer Semesters

This course introduces microcomputer applications software, including word processing, databases, spreadsheets, graphs and their integration.

CPT 187 Object-Oriented Logic & Design (3-0-3)

Offered Spring Semester

Prerequisites: CPT 168 and IST 272

This is a study in the planning and implementation of object-oriented programs. Python programming is used for this course.

CPT 189 Data Science I (3-0-3)

Offered Fall Semester

Prerequisites: CPT 168, CPT 170, IST 272

This course is an introduction to foundational topics in data science. Topics include data collection, integration, management, modeling, analysis, visualization, presentation, and decision making.

CPT 209 Computer Systems Management (3-0-3)

Offered Fall, Spring and Summer Semesters

This course examines the methods and procedures used in maintaining microcomputer systems. Topics include hardware and software installation, configuration, operations and troubleshooting.

CPT 230 C# Programming I (3-0-3)

Offered Fall and Summer Semesters

Prerequisites: CPT 113 and CPT 168

This course introduces designing, coding, testing and debugging C# programs. Topics include procedural, functional and object-oriented techniques; programming; IDEs; .NET; processing data; data types; I/O; decision processing; control structures; modularized coding with methods; and arrays.

CPT 231 C# Programming II (3-0-3)

Offered Fall and Spring Semesters

Prerequisite: CPT 230

Co-requisite: IST 272 (required)

This course focuses on advanced programming concepts for C#. Topics include advanced string and character processing, user-defined classes and advanced .NET, multiform projects, inheritance and polymorphism, database processing, exception handling and GUIs with Windows Forms.

CPT 234 C Programming I (2-3-3)

Offered Fall and Spring Semesters

Prerequisites: EGR 269 or CPT 170 or CPT 113

This introductory course in C programming emphasizes the designing, coding, testing and debugging of C programs involving input/output operations, data types, storage classes, decision structures, looping, functions, preprocessor directives, arrays and simple pointers.

CPT 236 Introduction to Java Programming (3-0-3)

Offered Fall and Spring Semesters

Prerequisite: CPT 168

This course is an introduction to Java programming. Topics will cover Java syntax and classes for use in the development of Java applications and applets.

CPT 237 Advanced Java Programming (3-0-3)

Offered Fall and Spring Semesters

Prerequisite: CPT 236

This course is a study of advanced topics of the Java programming language by building on a basic knowledge of the Java language. Topics covered will include multi-threading, swing classes, swing event models, advanced layout managers, the JavaBean component model, network programming and server-side programming.

CPT 239 Active Server Pages (3-0-3)

Offered based on need

Prerequisites: CPT 230, IST 226, IST 272

This course is a study of Active Server Pages (ASP) programming to build, implement and execute ASP scripts and examines topics related to the syntax of server-side ASP scripting as well as the use of ASP with databases.

CPT 257 Operating Systems (3-0-3)

Offered Fall, Spring and Summer Semesters

This course examines the theory of operating systems and how the operating system theory is implemented in current operating systems.

CPT 264 Systems & Procedures (3-0-3)

Offered Fall, Spring and Summer Semesters

Prerequisites: CPT 267; and (CPT 231 or CPT 237 or CPT 273 or CPT 289 or IST 191 or IST 203 or IST 258 or IST 292 or IST 293 or IST 294 or BUS 190); and (SPC 205, SPC 208, or SPC 209); and MAT 109 or higher college transferable math*** Instructor or DH consent also required
This course covers the techniques of system analysis, design, development and implementation.

CPT 267 Technical Support Concepts (3-0-3)

Offered Fall, Spring and Summer Semesters

Prerequisites: CPT 209, CPT 257

This course is a study of technical support/help desk concepts and techniques for supporting computers and computer services.

CPT 270 Advanced Microcomputer Applications (3-0-3)

Offered Fall, Spring and Summer Semesters

Prerequisite: CPT 170

This course emphasizes the integration of popular microcomputer software packages using advanced concepts in microcomputer applications software. Note: MSOFFICE is used.

CPT 273 Data Visualization (3-0-3)

Offered Spring Semester

Prerequisites: CPT 170, CPT 187

Co-requisite: IST 278 (recommended)

This course explores key concepts in data visualization and reporting. Topics include methods used in graphical representation of data, exploration and reporting of data, and basic predictive modeling methods.

CPT 275 Computer Technology Senior Project (3-0-3)

Offered Fall, Spring and Summer Semesters

Prerequisites: CPT 264; and CPT 231 or CPT 237 or IST 203 or IST 204 or IST 258 or IST 191 or IST 292 or IST 294; and SPC 205, SPC 208 or SPC 209; and MAT 103 or MAT 109 or MAT 120 or higher math

This course includes the design, development, testing and implementation of an instructor-approved project.

CPT 280 SCWE in Computer Technology (0-12-3)

Offered based on need

Prerequisite: Departmental Approval

This course integrates computer technology skills within an approved work site related to the computer industry.

CPT 283 PHP Programming I (3-0-3)

Offered based on need

Prerequisites: CPT 168, IST 226 and IST 272

This course is an introduction to the PHP programming language and will cover topics related to the syntax of PHP language and how PHP can be used to design and develop dynamic, database-driven web pages.

CPT 289 Data Science II (3-0-3)

Offered Spring Semester

Prerequisites: CPT 189, IST 272

This course explores popular data science programming tools. Students will review and assess the features, capabilities, and limitations of open-source, commercial, and cloud-based solutions.