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 127 Python Programming I (3-0-3)
Offered Fall, Spring, and Summer Semesters
Prerequisite: CPT 113
This course is a study of Python programming and covers the language syntax and algorithm design. Students also learn how Python can be used for many purposes in information systems.

CPT 170 Computer Applications I (3-0-3)
Offered Fall, Spring, and Summer Semesters
This course introduces computer applications software, including word processing, databases, spreadsheets, graphs and their integration.

CPT 189 Data Science I (3-0-3)
Offered Fall Semester
Prerequisites: CPT 168 or CPT 127 and 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 227 Python Programming II (3-0-3)
Offered Spring and Fall Semesters
Prerequisites: CPT 168 or CPT 127 and IST 272
This course is a study of advanced topics of Python programming. Topics covered can include applications of web development, gaming, data science, cybersecurity, machine learning, artificial intelligence, and quantum computing.

CPT 230 C# Programming I (3-0-3)
Offered Fall and Summer Semesters
Prerequisites: CPT 168 or CPT 127
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
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 Java Programming I (3-0-3)
Offered Fall and Spring Semesters
Prerequisite: CPT 127 or 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 Java Programming II (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-reading, 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 enrollment
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 Department Head Permission
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 Computer Applications II (3-0-3)
Offered Fall, Spring, and Summer Semesters
Prerequisite: CPT 170
This course emphasizes the integration of popular computer software packages using advanced concepts in computer applications software.

CPT 273 Data Visualization (3-0-3)
Offered Spring Semester
Prerequisites: CPT 168 or CPT 127, CPT 170, IST 272
Co-requisite: IST 278
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 enrollment
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 enrollment
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.