2025-2026 TTC Catalog - Computer Technology (CPT)

CPT 001 - Computer Technology Non-Equivalent

Lec: 0 **Lab:** 0 **Credit:** *

Indicates credit given for computer course work transferred from another college for which there is no equivalent course at TTC. *Hours vary.

Division: Business Technology

CPT 101 - Introduction to Computers

Lec: 3.0 **Lab:** 0 **Credit:** 3.0

Course Offered

Fall
Spring
Summer

This course covers basic computer history, theory and applications, including word processing, spreadsheets, databases, and the operating system.

Prerequisite

RWR 100

and

MAT 033

Grade Type: Letter Grade

Division: Business Technology

CPT 114 - Computers and Programming

Lec: 3.0 **Lab:** 0 **Credit:** 3.0

Course Offered

Fall
Spring
Summer

This course introduces computer concepts and programming. Topics include basic concepts of computer architecture, files, memory and input/output devices. Programming is done in a modern high-level language.

Prerequisite

MAT 033

or

MAT 101

or

MAT 102

or

MAT 110

or

MAT 120

or

MAT 155

Grade Type: Letter Grade

Restrictions: Restrictions apply for Programming majors. See advisor.

Division: Business Technology

CPT 162 - Introduction to Web Page Publishing

Lec: 3.0 **Lab:** 0 **Credit:** 3.0

Course Offered

Fall
Spring
Summer

This course is a study of the fundamentals of web page design and implementation.

Prerequisite

MAT 033

or

MAT 101

or

MAT 102

or

MAT 110

or

MAT 120

or

MAT 155

Grade Type: Letter Grade

Division: Business Technology

CPT 167 - Introduction to Programming Logic

Lec: 3.0 **Lab:** 0 **Credit:** 3.0

Course Offered

Fall
Spring
Summer

This course introduces foundation concepts in structured programming. Problem solving and algorithm development through pseudo code and flowcharting is emphasized. Solutions are developed using the basic control structures of sequential, decision and iteration.

Prerequisite

CPT 114

with a minimum grade of C

Grade Type: Letter Grade

Division: Business Technology

CPT 172 - Microcomputer Database

Lec: 3.0 **Lab:** 0 **Credit:** 3.0

Course Offered

Fall
Spring
Summer

This course introduces microcomputer database concepts, including generating reports from databases and creating, maintaining and modifying databases using Microsoft Access.

Prerequisite

MAT 033

or

MAT 101

or

MAT 102

or

MAT 110

or

MAT 120

or

MAT 155

Grade Type: Letter Grade

Division: Business Technology

CPT 174 - Microcomputer Spreadsheets

Lec: 3.0 **Lab:** 0 **Credit:** 3.0

Course Offered

Fall
Spring
Summer

This course introduces the use of spreadsheet software on the microcomputer. Topics include creating, editing, using formulas, using functions and producing graphs using Microsoft Excel.

Prerequisite

MAT 033

or

MAT 101

or

MAT 102

or

MAT 110

or

MAT 120

or

MAT 155

Grade Type: Letter Grade

Division: Business Technology

CPT 179 - Microcomputer Word Processing

Lec: 3.0 **Lab:** 0 **Credit:** 3.0

Course Offered

Fall
Spring
Summer

This course introduces microcomputer word processing. Topics include creating, editing, formatting and printing documents using Microsoft Word.

Grade Type: Letter Grade

Division: Business Technology

CPT 180 - Shell Scripting

Lec: 3.0 **Lab:** 0 **Credit:** 3.0

Course Offered

Fall
Spring
Summer

This course is a study of shell scripting and emphasizes the designing, coding, and testing of scripts. This course will cover shell scripting from both the command line and the Graphical User Interface.

Prerequisite

MAT 033

and

CPT 114

or

IST 165

or

IST 190

Grade Type: Letter Grade

Division: Business Technology

CPT 187 - Object-Oriented Logic and Design

Lec: 3.0 **Lab:** 0 **Credit:** 3.0

Course Offered

Fall
Spring
Summer

This is a study in the planning and implementation of object-oriented programs.

Prerequisite

CPT 167

with a minimum grade of C

Grade Type: Letter Grade

Division: Business Technology

CPT 202 - SQL Programming I

Lec: 3.0 **Lab:** 0 **Credit:** 3.0

Course Offered

Fall
Spring
Summer

This course is an introduction to the writing of basic Structured Query Language (SQL) used in creating tables, inserting data, retrieving data, and manipulating data from database.

Prerequisite

CPT 242

Grade Type: Letter Grade

Division: Business Technology

CPT 208 - Special Topics in Computer Technology

Lec: 3.0 **Lab:** 0 **Credit:** 3.0

Course Offered

Spring

This course focuses on changes in computer technology.

Departmental Approval

Grade Type: Letter Grade

Division: Business Technology

CPT 209 - Computer Systems Management

Lec: 3.0 **Lab:** 0 **Credit:** 3.0

Course Offered

Fall
Spring
Summer

This course examines the methods and procedures used in maintaining microcomputer systems. Topics include hardware and software installation, configuration, operations and troubleshooting. This course examines the interaction of people, systems and computers. Strategic management issues unique to the information technology environment are discussed. Specialties include remote support technician, help desk technician, call center technician specialist, representative, depot technician and bench technician. Emphasis will be placed on computer design, operating systems, internetworking of devices and general information security concepts. This course will cover learning objectives associated with the CompTIA A+ certification exam. Emphasis will be placed on individual hardware components, BIOS, firmware, troubleshooting computer design, operating systems, internetworking of devices and general information security concepts.

Grade Type: Letter Grade

Division: Business Technology

CPT 210 - Computer Resource Management

Lec: 3.0 **Lab:** 0 **Credit:** 3.0

Course Offered

Fall
Spring
Summer

This course examines the interaction of people, systems and computers. Strategic management issues unique to the information technology environment are discussed. This course will cover learning objectives associated with CompTIA A+ core certification test. Specialties include remote support technician, help desk technician, call center technician specialist, representative, depot technician and bench technician. Emphasis will be placed on computer design, operating systems, internetworking of devices and general information security concepts.

Grade Type: Letter Grade

Division: Business Technology

CPT 237 - Advanced Java Programming

Lec: 3.0 **Lab:** 0 **Credit:** 3.0

Course Offered

Fall
Spring

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.

Prerequisite

CPT 187

with a minimum grade of C

Grade Type: Letter Grade

Division: Business Technology

CPT 238 - Internet Scripting

Lec: 3.0 **Lab:** 0 **Credit:** 3.0

Course Offered

Fall
Spring

This course is a study of Internet programming including the syntax of scripting languages and Internet programming concepts and examines topics related to client-side scripting language programming as well as introducing topics related to server-side scripting.

Prerequisite

IST 239

with a minimum grade of "C."

Grade Type: Letter Grade

Division: Business Technology

CPT 242 - Database

Lec: 3.0 **Lab:** 0 **Credit:** 3.0

Course Offered

Fall
Spring

Summer

This course introduces database models and the fundamentals of database design. Topics include database structure, database processing and application programs that access a database. Upon completion of this course the student will be able to 1) demonstrate the fundamental skills needed to successfully design and implement a database, 2) demonstrate a thorough understanding of database concepts and technologies, and 3) be able to use and understand SQL commands.

Grade Type: Letter Grade

Division: Business Technology

CPT 244 - Data Structures

Lec: 3.0 **Lab:** 0 **Credit:** 3.0

Course Offered

Spring
Summer

This course examines data structures widely used in programming. Topics include linked lists, stacks, queues, trees, and sorting and searching techniques.

Prerequisite

CPT 237

with a minimum grade of C

Grade Type: Letter Grade

Division: Business Technology

CPT 262 - Advanced Web Page Publishing

Lec: 3.0 **Lab:** 0 **Credit:** 3.0

Course Offered

Fall
Spring

This course is a study of advanced techniques in web page design and implementation.

Prerequisite

CPT 162

and

CPT 114

Grade Type: Letter Grade

CPT 264 - Systems and Procedures

Lec: 3.0 **Lab:** 0 **Credit:** 3.0

Course Offered

Fall
Spring
Summer

This course covers system analysis, design, development and implementation.

Prerequisite

CPT 114

and

CPT 162

and

CPT 242

and

IST 166

and

ENG 101

Grade Type: Letter Grade

Division: Business Technology

CPT 270 - Advanced Microcomputer Applications

Lec: 3.0 **Lab:** 0 **Credit:** 3.0

Course Offered

Fall
Spring
Summer

This course emphasizes the integration of popular microcomputer software packages using advanced concepts in microcomputer applications software.

Prerequisite

CPT 174

and

CPT 179

and

CPT 290

Grade Type: Letter Grade

Division: Business Technology

CPT 275 - Computer Technology Senior Project

Lec: 3.0 **Lab:** 0 **Credit:** 3.0

Course Offered

Fall
Spring

This course includes the design, development, testing, and implementation of an instructor approved project. Students will work in teams to design and develop a project that incorporates the knowledge they have gained at TTC. Depending on the project, the areas of knowledge may include project management, web development, database design and implementation, file processing, backend server code, scripting and user interface creation.

Prerequisite

ENG 101

or

ENG 102

and

CPT 202

and

CPT 237

and

IST 239

and

Corequisite

CPT 238

or

CPT 283

or

IST 235

Grade Type: Letter Grade

Division: Business Technology

CPT 282 - Information Systems Security

Lec: 3.0 **Lab:** 0 **Credit:** 3.0

Course Offered

Fall
Spring
Summer

This course is the study of the protection of information and equipment in computer systems. Topics include all aspects of systems protection, including physical security, hardware, software and communications security. Students will learn about risk assessment, business continuity planning, privacy and regulatory compliance. Addresses technical, legal and ethical issues.

Grade Type: Letter Grade

Division: Business Technology

CPT 283 - PHP Programming I

Lec: 3.0 **Lab:** 0 **Credit:** 3.0

Course Offered

Fall
Spring

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.

Prerequisite

CPT 162

and

CPT 114

Grade Type: Letter Grade

Division: Business Technology

CPT 290 - Microcomputer Multimedia Concepts and Applications

Lec: 3.0 **Lab:** 0 **Credit:** 3.0

Course Offered

Fall
Spring
Summer

This course will cover introductory microcomputer multimedia concepts and applications. The course will utilize text, graphics, animation, sound, video, and various multimedia applications in the design, development and creation of multimedia presentations.

Grade Type: Letter Grade

Division: Business Technology

CPT 297 - Big Data Analytics

Lec: 3.0 **Lab:** 0 **Credit:** 3.0

Course Offered

Spring

This course introduces big data concepts and the fundamentals of providing efficient analytics for extremely large datasets.

Grade Type: Letter Grade

Division: Business Technology

CPT 298 - Introduction to Software as a Service (SaaS)

Lec: 3.0 **Lab:** 0 **Credit:** 3.0

Course Offered

Spring

This course introduces Software as a Service (SaaS) as it pertains to cloud computing technologies. Topics include installing various environment configurations on multiple computing system platforms and developing and deploying software applications in a cloud environment.

Prerequisite

CPT 180

and

Corequisite

IST 190

Grade Type: Letter Grade

Division: Business Technology