A DUAL ENROLLMENT CAREER PATHWAY FOR
COMPUTER TECHNOLOGY: SOFTWARE AND
WEB DEVELOPMENT

12th Grade:

**FALL**
- ENG 155 or ENG 101*
- MAT 155 or MAT 120* or MAT 110*

**SPRING**
- ENG 156 or SPC 205*
- CPT 170**

*If you plan to continue education beyond Associate Degree.

**TAP credit available for CPT 170, CPT 270, IST 222 with successful completion of TAP exam. Additional TAP credit may be available. Talk with your high school instructor for more details.

High School Graduation
WITH 12 HOURS OR MORE
COLLEGE CREDIT

**FALL**
- CPT 167
- IST 222**
- Social Science
- Humanities

**SUMMER**
- CPT 212
- IST 191
- IST 237
- General Elective

**SPRING**
- CPT 242
- CPT 283
- CPT 236
- IST 150

- CPT 264
- IST 257
- CPT 208
- IST 272

Graduate from High School with 12 or More Hours of College Credit

- Build a competitive and marketable resume for work in a variety of settings following high school.
- Earn 12 or more hours of college credit (dual enrollment + TAP) that you can use toward an Associate in Applied Science Degree in Computer Technology.
- Successful students are effective problem solvers, detail-oriented, and enjoy mathematics.
- Take your dual enrollment classes at a TCTC Campus alongside college students or at a college site in your district.
- Qualify for positions in a high-demand field expected to increase by 7.6% over the next 4 years.

COMPUTER TECHNOLOGY: SOFTWARE AND WEB DEVELOPMENT EMPHASIS ASSOCIATE IN APPLIED SCIENCE DEGREE

Entry-Level
$33,120 - $46,450
Annually
Median
$61,690 Annually

TriCounty Technical College

TRI-COUNTY TECHNICAL COLLEGE CONTACT:
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**COURSE DESCRIPTIONS**

This degree emphasis in Software and Web Development provides applications software development skills in a variety of languages for delivery on a variety of platforms, such as computers, web, and mobile. Students learn additional skills in multiple areas of information technology, including databases, operating systems, technical support, and networking.

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**CPT 160 - Project Management Essentials for IT Professionals**

- **Class Hours:** 3
- **Lab Hours:** 0
- **Credit Hours:** 3

This course is the study of integrated project management for computer technology professionals with emphasis on the methods & software used by IT professionals, including task lists, Gantt charts, discussion of critical path statistical resource management, scheduling, budgeting,& economic factors.

Prerequisites: CPT 170.

**IST 150 - LINUX System Administration**

- **Class Hours:** 3
- **Lab Hours:** 0
- **Credit Hours:** 3

This course will provide students with the skills necessary to administer a LINUX system, including hardware/software configuration, user and group administration, LINUX network configuration, and file system management.

Prerequisites: CPT 167.

**IST 220 - Data Communications**

- **Class Hours:** 3
- **Lab Hours:** 0
- **Credit Hours:** 3

This course is a study of the fundamentals of data communications. Basic signaling, networking, and various transmission media are covered.

Prerequisites: CPT 167.

**IST 222 - Introduction to Webpage Production**

- **Class Hours:** 3
- **Lab Hours:** 0
- **Credit Hours:** 3

This course is designed to develop skills in using common office and web development software to produce webpage content.

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**MAT 110 - College Algebra**

- **Class Hours:** 3
- **Lab Hours:** 0
- **Credit Hours:** 3

This course includes the following topics: polynomial, rational, logarithmic, and exponential functions; inequalities; systems of equations and inequalities; matrices; determinants; and solutions of higher degree polynomials.

Prerequisites: Satisfactory math placement score or MAT 102 with a grade of C or better. Note: Credit cannot be earned for both MAT 109 and MAT 110.

**MAT 155 - Contemporary Mathematics**

- **Class Hours:** 3
- **Lab Hours:** 0
- **Credit Hours:** 3

This course includes techniques and applications of the following topics: elementary number theory; algebra; geometry; measurement; graph sketching and interpretations, and descriptive statistics.

Prerequisites: Satisfactory math placement score or MAT 032 with a grade of C or better. Note: This course cannot be used for an AA or AS degree.

**MAT 120 - Probability and Statistics**

- **Class Hours:** 3
- **Lab Hours:** 0
- **Credit Hours:** 3

This course includes the following topics: introductory probability and statistics, including organization of data; sample space concepts; random variables; counting problems; binomial and normal distributions; central limit theorem; confidence intervals and test hypothesis for large and small samples; types I and II errors; linear regression and correlation.

Prerequisites: Satisfactory math placement score or MAT 102 with a grade of C or better, or MAT 101 with a grade of A and a satisfactory placement score or RDG 100 with a grade of C or better in ENG 101 with a grade of C or better.

**SPC 205 - Public Speaking**

- **Class Hours:** 3
- **Lab Hours:** 0
- **Credit Hours:** 3

This course is an introduction to principles of public speaking with application of speaking skills.

Prerequisites: A grade of C or higher in ENG 101 or in ENG 103 or in ENG 155 or in ENG 156.