



**TENTATIVE – SUBJECT TO CHANGE**

**ELTR 1180 Electrical Controls  
COURSE SYLLABUS**

**Hybrid**

**Fall Semester 2019 (202012)**

**COURSE INFORMATION**

Credit Hours/Minutes: 4 Credit Hours/ 4500 Minutes

Class Location: Vidalia Main Lab 429

Class Meets: 40% Hybrid/ 60% F2F Tuesday and Thursday 12:35-2:25 PM

CRN: 20307

Preferred Method of Contact: STC Email

**INSTRUCTOR CONTACT INFORMATION**

Instructor Name: Tony Criswell

Email Address: [Tony Criswell \(tcriswell@southeasterntech.edu\)](mailto:tcriswell@southeasterntech.edu)

Campus/Office Location: Swainsboro Building 6 Lab 6102

Office Hours: Tuesday 2:30- 3:00PM; Thursday 2:30PM- 4:00PM

Phone: 478-289-2235

Fax Number: 478-289-2276

Tutoring Hours: Available upon request

**This course is taught in a hybrid format. Hybrid classes require students to complete a portion of the required contact hours traditionally by attending classes on campus while completing the remaining portion online at the student's convenience with respect to the instructor's requirements.**

**SOUTHEASTERN TECHNICAL COLLEGE (STC) CATALOG AND HANDBOOK**

Students are responsible for all policies and procedures and all other information included in Southeastern Technical College's [Catalog and Handbook \(http://www.southeasterntech.edu/student-affairs/catalog-handbook.php\)](http://www.southeasterntech.edu/student-affairs/catalog-handbook.php).

**REQUIRED TEXT**

- **Motor Controls** by NCCER, Pearson Publishers ISBN 978-1-269-83003-4

**REQUIRED SUPPLIES & SOFTWARE**

Paper and pencil. Tools and safety glasses; 2GB or larger USB jump drive.

Students should not share login credentials with others and should change passwords periodically to maintain security.

## COURSE DESCRIPTION

Introduces line and low voltage switching circuits, manual and automatic controls and devices, and circuits. Emphasis will be placed on switching circuits, manual and automatic controls and devices, line and low voltage switching circuits, and operation, application and ladder diagrams

## MAJOR COURSE COMPETENCIES

Ladder and wire diagrams, switching circuits, manual controls and devices, automatic controls and devices, application and operation of controllers and controls, and variable speed controls.

## PREREQUISITE(S)

None

## COURSE OUTLINE

1. Switching Circuits
2. Manual Controls and Devices
3. Automatic Controls and Devices
4. Application and Operation of Controllers and Controls
5. Variable Speed Controls
6. Ladder and Wire Diagrams

## GENERAL EDUCATION CORE COMPETENCIES

STC has identified the following general education core competencies that graduates will attain:

1. The ability to utilize standard written English.
2. The ability to solve practical mathematical problems.
3. The ability to read, analyze, and interpret information.

## STUDENT REQUIREMENTS

Class attendance is a very important aspect of a student's success in this course. Responsibility for class attendance rests with the student. Regular and punctual attendance at all scheduled classes is expected. Students are expected to complete all work required by the instructor. Unannounced quizzes/assignments may be given. Students that miss an unannounced quiz or assignment will receive a grade of 0. Students are expected to complete all work shown on the attached assignment sheet. Students are also expected to complete all tests and comprehensive problems on the dates specified on the attached calendar. Students are responsible for policies and procedures included in the *STC Catalog*. **Industrial Electrical and Maintenance Technician program students must earn a minimum grade of C in this course.**

## HYBRID ATTENDANCE

Class attendance is a very important aspect of a student's success. Being absent from class prevents students from receiving the full benefit of a course and interrupts the learning process. Southeastern Technical College considers both tardiness and leaving early as types of absenteeism. Responsibility for class attendance rests with the student. Regular and punctual attendance at all scheduled classes is required for student success. Students will be expected to complete all work required by the instructor as described in the individual course syllabus.

Instructors have the right to give unannounced quizzes/assignments. Students who miss an unannounced quiz or assignment will receive a grade of 0. Students who stop attending class, but do not formally withdraw, may receive a grade of "F" (Failing 0-59) and face financial aid repercussions in upcoming semesters.

Instructors are responsible for determining whether missed work may be made up and the content and dates for makeup work is at the discretion of the instructor.

Students will not be withdrawn by an instructor for attendance; however, all instructors will keep records of graded assignments and student participation in course activities. The completion dates of these activities will be used to determine a student's last date of attendance in the event a student withdraws, stops attending, or receives an "F" in a course.

### **STUDENTS WITH DISABILITIES**

Students with disabilities who believe that they may need accommodations in this class based on the impact of a disability are encouraged to contact the appropriate campus coordinator to request services.

**Swainsboro Campus:** Macy Gay [mgay@southeasterntech.edu](mailto:mgay@southeasterntech.edu), 478-289-2274, Building 1, Room 1210

**Vidalia Campus:** Helen Thomas [hthomas@southeasterntech.edu](mailto:hthomas@southeasterntech.edu), 912-538-3126, Building A, Room 165

### **SPECIFIC ABSENCES**

Provisions for Instructional Time missed because of documented absences due to jury duty, military duty, court duty, or required job training will be made at the discretion of the instructor.

### **PREGNANCY**

Southeastern Technical College does not discriminate on the basis of pregnancy. However, we can offer accommodations to students who are pregnant that need special consideration to successfully complete the course. If you think you will need accommodations due to pregnancy, please make arrangements with the appropriate campus coordinator.

**Swainsboro Campus:** Macy Gay [mgay@southeasterntech.edu](mailto:mgay@southeasterntech.edu), 478-289-2274, Building 1, Room 1210

**Vidalia Campus:** Helen Thomas [hthomas@southeasterntech.edu](mailto:hthomas@southeasterntech.edu), 912-538-3126, Building A, Room 165

It is strongly encouraged that requests for consideration be made **PRIOR** to delivery and early enough in the pregnancy to ensure that all the required documentation is secured before the absence occurs. Requests made after delivery **MAY NOT** be accommodated. The coordinator will contact your instructor to discuss accommodations when all required documentation has been received. The instructor will then discuss a plan with you to make up missed assignments.

### **WITHDRAWAL PROCEDURE**

Students wishing to officially withdraw from a course(s) or all courses after the drop/add period and prior to the 65% point of the term in which student is enrolled (date will be posted on the school calendar) must speak with a Career Counselor in Student Affairs and complete a Student Withdrawal Form. A grade of "W" (Withdrawn) is assigned for the course(s) when the student completes the withdrawal form.

Important – Student-initiated withdrawals are not allowed after the 65% point. After the 65% point of the term in which the student is enrolled, the student has earned the right to a letter grade and will receive a grade for the course. Please note: Abandoning a course(s) instead of following official withdrawal procedures may result in a grade of "F" (Failing 0-59) being assigned.

Informing your instructor that you will not return to his/her course, does not satisfy the approved withdrawal procedure outlined above.

There is no refund for partial reduction of hours. Withdrawals may affect students' eligibility for financial aid for the current semester and in the future, so a student must also speak with a representative of the Financial Aid Office to determine any financial penalties that may be assessed due to the withdrawal. A grade of "W" will count in attempted hour calculations for the purpose of Financial Aid.

### **MAKEUP GUIDELINES (TESTS, QUIZZES, HOMEWORK, PROJECTS, ETC...)**

Extenuating circumstances are determined at the instructor's discretion. Unless otherwise scheduled with the instructor, it is expected that the test will be taken the next day, scheduled outside of regular class time. Failure to follow this procedure will result in a grade of zero.

Assignment due dates are listed on the attached lesson schedule. Students are expected to have the assignment completed at the beginning of class on the date that it is due. It is within the instructor's discretion to accept or reject late assignments. Any late assignments accepted will be subject to a ten-point penalty each day the assignment is late. After three class meetings, no late assignments will be accepted; a zero will be recorded.

Unannounced quizzes are subject to be given on any day. A grade of zero will be assigned for any quizzes missed. There will be no makeup of quizzes. Any zeros recorded will be included in the final score calculation

### **ACADEMIC DISHONESTY POLICY**

The STC Academic Dishonesty Policy states All forms of academic dishonesty, including but not limited to cheating on tests, plagiarism, collusion, and falsification of information, will call for discipline. The policy can also be found in the STC Catalog and Student Handbook.

### **PROCEDURE FOR ACADEMIC MISCONDUCT**

The procedure for dealing with academic misconduct and dishonesty is as follows:

#### **1. First Offense**

Student will be assigned a grade of "0" for the test or assignment. Instructor keeps a record in course/program files and notes as first offense. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus. The Registrar will input the incident into Banner for tracking purposes.

#### **2. Second Offense**

Student is given a grade of "WF" for the course in which offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of second offense. The Registrar will input the incident into Banner for tracking purposes.

#### **3. Third Offense**

Student is given a grade of "WF" for the course in which the offense occurs. The instructor will notify the student's program advisor, academic dean, and the Registrar at the student's home campus indicating a "WF" has been issued as a result of second offense. The Vice President for Student Affairs, or designee, will notify the student of suspension from college for a specified period of time. The Registrar will input the incident into Banner for tracking purposes.

## STATEMENT OF NON-DISCRIMINATION

The Technical College System of Georgia (TCSG) and its constituent Technical Colleges do not discriminate on the basis of race, color, creed, national or ethnic origin, gender, religion, disability, age, political affiliation or belief, genetic information, disabled veteran, veteran of the Vietnam Era, spouse of military member, or citizenship status (except in those special circumstances permitted or mandated by law). This nondiscrimination policy encompasses the operation of all technical college-administered programs, federally financed programs, educational programs and activities involving admissions, scholarships and loans, student life, and athletics. It also applies to the recruitment and employment of personnel and contracting for goods and services.

All work and campus environments shall be free from unlawful forms of discrimination, harassment and retaliation as outlined under Title IX of the Educational Amendments of 1972, Title VI and Title VII of the Civil Rights Act of 1964, as amended, the Age Discrimination in Employment Act of 1967, as amended, Executive Order 11246, as amended, the Vietnam Era Veterans Readjustment Act of 1974, as amended, Section 504 of the Rehabilitation Act of 1973, as amended, the Americans With Disabilities Act of 1990, as amended, the Equal Pay Act, Lilly Ledbetter Fair Pay Act of 2009, the Georgia Fair Employment Act of 1978, as amended, the Immigration Reform and Control Act of 1986, the Genetic Information Nondiscrimination Act of 2008, the Workforce Investment Act of 1998 and other related mandates under TCSG Policy, federal or state statutes.

The Technical College System and Technical Colleges shall promote the realization of equal opportunity through a positive continuing program of specific practices designed to ensure the full realization of equal opportunity.

The following individuals have been designated to handle inquiries regarding the nondiscrimination policies:

<b>American With Disabilities Act (ADA)/Section 504 - Equity- Title IX (Students) – Office of Civil Rights (OCR) Compliance Officer</b>	<b>Title VI - Title IX (Employees) – Equal Employment Opportunity Commission (EEOC) Officer</b>
Helen Thomas, Special Needs Specialist Vidalia Campus 3001 East 1 <sup>st</sup> Street, Vidalia Office 165 Phone: 912-538-3126 Email: <a href="mailto:hthomas@southeasterntech.edu">Helen Thomas</a> <a href="mailto:hthomas@southeasterntech.edu">hthomas@southeasterntech.edu</a>	Lanie Jonas, Director of Human Resources Vidalia Campus 3001 East 1 <sup>st</sup> Street, Vidalia Office 138B Phone: 912-538-3230 Email: <a href="mailto:ljonas@southeasterntech.edu">Lanie Jonas</a> <a href="mailto:ljonas@southeasterntech.edu">ljonas@southeasterntech.edu</a>

## ACCESSIBILITY STATEMENT

Southeastern Technical College is committed to making course content accessible to individuals to comply with the requirements of Section 508 of the Rehabilitation Act of Americans with Disabilities Act (ADA). If you find a problem that prevents access, please contact the course instructor.

## GRIEVANCE PROCEDURES

Grievance procedures can be found in the Catalog and Handbook located on Southeastern Technical College's website.

## ACCESS TO TECHNOLOGY

Students can now access Blackboard, Remote Lab Access, Student Email, Library Databases (Galileo), and BannerWeb via the mySTC portal or by clicking the Current Students link on the [Southeastern Technical College's Website \(www.southeasterntech.edu\)](http://www.southeasterntech.edu).

## TECHNICAL COLLEGE SYSTEM OF GEORGIA (TCSG) GUARANTEE/WARRANTY STATEMENT

*The Technical College System of Georgia guarantees employers that graduates of State Technical Colleges shall possess skills and knowledge as prescribed by State Curriculum Standards. Should any graduate employee within two years of graduation be deemed lacking in said skills, that student shall be retrained in any State Technical College at no charge for instructional costs to either the student or the employer.*

## GRADING POLICY

Assessment/Assignment	Percentage
Chapter Review Questions	10%
Labs	60%
Module Exams	30%
Total	100%

## GRADING SCALE

Letter Grade	Range
A	90-100
B	80-89
C	70-79
D	60-69
F	0-59

## ELTR 1180 Electrical Controls

### Fall Semester 2019 Lesson Plan

<b>Date/Week</b>	<b>Chapter/Lesson</b>	<b>Content</b>	<b>Assignments &amp; Tests Due Dates</b>	<b>Competency Area</b>
Begin August 13  End August 20	Complete Lab 1-1 and Lab 1-2	Wire labs 1-2 and 1-2 on the Motor Control trainers in lab.	Read and Review the Motor Control Labs 1-1 and 1-2 in the Motor Control Lab Booklet.	1 A,C,D
Begin August 20  End August 27	Complete Lab 1-3 and 1-4.	Wire labs 1-3 and 1-4 on the Motor Control trainers in lab.	Read and Review the Motor Control Labs 1-3 and 1-4 in the Motor Control Lab Booklet.	2 A,C,D
Begin August 27  End September 3	Complete Lab 1-5.	Wire lab 1-5 on the Motor Control trainers in lab.	Read and Review the Motor Control Labs 1-5 in the Motor Control Lab Booklet.	4 A,B,C,D
Begin September 3  End September 10	Complete Labs 2-1 and 2-2.	Wire labs 2-1 and 2-2 on the Motor Control trainers in lab.	Read and Review the Motor Control Labs 2-1 and 2-2 in the Motor Control Lab Booklet.	2 A,C,D
Begin September 12 End September 19	Complete Lab 2-3	Wire lab 2-3 on the Motor Control trainers in lab.	Read and Review the Motor Control Labs 2-3 in the Motor Control Lab Booklet	2 A,C,D
Begin September 19 End September 26	Complete Lab 2-4	Wire lab 2-4 on the Motor Control trainers in lab.	Read and Review the Motor Control Labs 2-4 in the Motor Control Lab Booklet	2 A,C,D
Begin September 26 End October 3	Complete Lab 2-5	Wire lab 2-5 on the Motor Control trainers in lab.	Read and Review the Motor Control Labs 2-5 in the Motor Control Lab Booklet	2 A,C,D

<b>Date/Week</b>	<b>Chapter/Lesson</b>	<b>Content</b>	<b>Assignments &amp; Tests Due Dates</b>	<b>Competency Area</b>
Begin October 3 End October 10	Complete Labs 3-1 and 3-2	Wire labs 3-1 and 3-2 on the Motor Control trainers in lab.	Read and Review the Motor Control Labs 3-1 and 3-2 in the Motor Control Lab Booklet	2 A,C,D
Begin October 15 End October 22	Complete Labs 3-3 and 3-4	Wire labs 3-3 and 3-4 on the Motor Control trainers in lab.	Read and Review the Motor Control Labs 3-3 and 3-4 in the Motor Control Lab Booklet	2 A,C,D
Begin October 22 End October 29	Complete Labs 3-5 and 3-6	Wire labs 3-5 and 3-6 on the Motor Control trainers in lab.	Read and Review the Motor Control Labs 3-5 and 3-6 in the Motor Control Lab Booklet	2 A,C,D
Begin October 29 End November 5	Control Systems- Module 26211-11	Discuss the various symbols used in motor controls Discuss the various types of diagrams used in motor control Learn to read a control diagram	Read Module 26311-11 of the Motor Control Trainee Guide Answer the module review questions in Module 26311-11 Complete Module 26311-11 Performance Profile Sheet Take the Module 26311-11Exam	2 A,C,D
Begin November 5 End November 12	Motor Controls- Module 26311-11	Discuss control circuits Discuss logic functions	Read Module 26311-11 of the Motor Control Trainee Guide Answer the module review questions in Module 26311-11 Complete Module 26311-11 Performance Profile Sheet Take the Module 26311-11Exam	2 A,C,D
Begin November 14 End November 21	Final Control Projects Individual	Final Control Projects Individual	Final Control Projects Individual	2 A,C,D



Date/Week	Chapter/Lesson	Content	Assignments & Tests Due Dates	Competency Area
Begin November 21  End December 3	Final Control Projects Individual	Final Control Projects Individual	Final Control Projects Individual	2 A,C,D

**Competency Areas:**

1. Electrical Principles and Laws
2. Contacts and Starters
3. Series and Parallel Switches
4. Laboratory procedures and Safety Practices

**General Core Educational Competencies**

- a) The ability to utilize standard written English.
- b) The ability to solve practical mathematical problems.
- c) The ability to read, analyze, and interpret information.