



**TENTATIVE—SUBJECT TO CHANGE**  
**ICMT 1030 Industrial Electrical Fundamentals**  
**COURSE SYLLABUS**  
**Spring Semester 2019**

**COURSE INFORMATION**

Credit Hours/Minutes: 4/4500

Class Location: Swainsboro Campus Building 6 Lab 6102

Class Meets: Meets 7 ½ Weeks from 3/5-5/2/19; Monday and Tuesday 4:00PM-8:00PM;

Course Reference Number (CRN): 40132

**INSTRUCTOR CONTACT INFORMATION**

Instructor Name: Tony Criswell

Office Location: Building 6 Lab 6102

Office Hours: Monday and Tuesday 8:00AM- 8:30AM and 2:00PM- 3:30PM; Wednesday and Thursday 8:00AM- 8:30AM and 2:00PM- 3:30PM

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

Phone: 478-289-2235

Fax Number: 478-289-2276

Tutoring Hours: Available upon request

**SOUTHEASTERN TECHNICAL COLLEGE'S (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**

Industrial Electrical and Instrumentation Level 2, 3<sup>rd</sup> edition; ISBN 978-0-13-614390-1; Publisher- Pearson

**REQUIRED SUPPLIES & SOFTWARE**

Hand Tools

Safety Glasses

Note: Although students can use their smart phones and tablets to access their online course(s), exams, discussions, assignments, and other graded activities should be performed on a personal computer. Neither Blackboard nor Georgia Virtual Technical Connection (GVTC) provide technical support for issues relating to the use of a smart phone or tablet so students are advised to not rely on these devices to take an online course.

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

## **COURSE DESCRIPTION**

This course introduces concepts of electrical fundamentals in industrial maintenance

## **MAJOR COURSE COMPETENCIES**

Industrial Safety, National Electrical Code (NEC), Electrical Theory, Alternating Current, Test Equipment, Flow, Pressure, Level, and Temperature, and Process Mathematics.

## **PREREQUISITE(S)**

None

## **COURSE OUTLINE**

1. Industrial Safety
2. National Electrical Code (NEC)
3. Electrical Theory
4. Alternating Current
5. Test Equipment
6. Flow, Pressure, Level, and Temperature
7. Process Mathematics

## **GENERAL EDUCATION CORE COMPETENCIES**

Southeastern Technical College 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 lesson plan. Students are also expected to complete all tests and comprehensive problems on the dates specified on the lesson plan. Students are responsible for policies and procedures included in the Southeastern Technical College (STC) Catalog and Handbook. Industrial Electrical and Maintenance Technician program students must earn a minimum grade of C in this course.

## **TRADITIONAL ATTENDANCE GUIDELINES**

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 also 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 1208

**Vidalia Campus:** Helen Thomas [hthomas@southeasterntech.edu](mailto:hthomas@southeasterntech.edu), 912-538-3126, Building A, Room 108

### **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 advise me and make appropriate arrangements with the appropriate campus coordinator.

**Swainsboro Campus:** Macy Gay [mgay@southeasterntech.edu](mailto:mgay@southeasterntech.edu), 478-289-2274, Building 1, Room 1208

**Vidalia Campus:** Helen Thomas [hthomas@southeasterntech.edu](mailto:hthomas@southeasterntech.edu), 912-538-3126, Building A, Room 108

### **WITHDRAWAL PROCEDURE**

Students wishing to officially withdraw from a course(s) or all courses after the drop/add period and prior to the 65% portion of the semester (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 when the student completes the withdrawal form from the course.

After the 65% portion of the semester, the student will receive a grade for the course. (Please note: A zero will be given for all missed assignments.)

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 speak with a representative of the Financial Aid Office to determine any financial penalties that may be assessed due to the withdrawal. All grades, including grades of 'W' (Withdrawn), will count in attempted hour calculations for the purpose of Financial Aid.

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

### **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.

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 Southeastern Technical College Academic Dishonesty Policy states that 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 Southeastern Technical College Catalog and 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" (Withdrawn Failing) 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 third 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 and its constituent Technical Colleges do not discriminate on the basis of race, color, creed, national or ethnic origin, sex, 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 school is in compliance with Title VI of the Civil Rights Act of 1964, which prohibits discrimination on the basis of race, color, or national origin; with the provisions of Title IX of the Educational Amendments of 1972, which prohibits discrimination on the basis of gender; with the provisions of Section 504 of the Rehabilitation Act of 1973, which prohibits discrimination on the basis of handicap; and with the American with Disabilities Act (ADA).

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 108 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 \(STC\) 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**

<b>Assessment/Assignment</b>	<b>Percentage</b>
Performance Evaluations	60%
Module Exams	30%
Review Questions	10%

## **GRADING SCALE**

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

## ICMT 1030 Industrial Electrical Fundamentals Spring Semester 2019 Lesson Plan

Date/ Week	Module	Content	Assignments & Tests Due Dates	Competency Area
March 4	Class Introduction	Syllabus, Outline, Lab Rules & Regulations coverage	<ul style="list-style-type: none"> <li>• Instructor will go over syllabus, lesson plan, and lab rules,</li> <li>• Read Module 1 in Level 2 Trainee Guide</li> <li>• Answer Review Questions for Module 1</li> </ul>	1 a,b,c
March 5	1	Industrial Safety for Electrical and Instrumentation Technicians	<ul style="list-style-type: none"> <li>• Instructor will discuss information about Industrial Safety for Electrical and Instrumentation Technicians</li> <li>• Read Module 1 in Level 2 Trainee Guide</li> <li>• Answer Review Questions for Module 1</li> </ul>	1 a,c
March 11	1	Industrial Safety for Electrical and Instrumentation Technicians	<ul style="list-style-type: none"> <li>• Instructor will give Module 1 Exam</li> <li>• Students will do Module 1 Performance Profile</li> <li>• Read Module 2 in Trainee Guide</li> <li>• Answer Review Questions for Module 2</li> </ul>	1 a,c
March 12	2	Introduction to the National Electric Code	<ul style="list-style-type: none"> <li>• Instructor will discuss information about Introduction to the National Electric Code</li> <li>• Read Module 2 in Level 2 Trainee Guide</li> <li>• Answer Review Questions for Module 2</li> </ul>	2 a,c
March 18	2	Introduction to the National Electric Code	<ul style="list-style-type: none"> <li>• Instructor will give Module 2 Exam</li> <li>• Students will do Module 2 Performance Profile</li> <li>• Read Module 3 in Trainee Guide</li> <li>• Answer Review Questions for Module 3</li> </ul>	2 a,c
March 19	3	Electrical Theory	<ul style="list-style-type: none"> <li>• Instructor will discuss information about Electrical Theory</li> <li>• Read Module 3 in Level 2 Trainee Guide</li> <li>• Answer Review Questions for Module 3</li> </ul>	3 a,b,c
March 25	3	Electrical Theory	<ul style="list-style-type: none"> <li>• Instructor will give Module 3 Exam</li> <li>• Students will do Module 3 Performance Profile</li> <li>• Read Module 4 in Trainee Guide</li> <li>• Answer Review Questions for Module 4</li> </ul>	3 a,b,c
March 26	4	Alternating Current	<ul style="list-style-type: none"> <li>• Instructor will discuss information about Alternating Current</li> <li>• Read Module 4 in Level 2 Trainee Guide</li> <li>• Answer Review Questions for Module 4</li> </ul>	4 a,b,c
April 1-4			<ul style="list-style-type: none"> <li>• Spring Break</li> </ul>	

<b>Date/ Week</b>	<b>Module</b>	<b>Content</b>	<b>Assignments &amp; Tests Due Dates</b>	<b>Competency Area</b>
April 8	4	Alternating Current	<ul style="list-style-type: none"> <li>• Instructor will give Module 4 Exam</li> <li>• Students will do Module 4 Performance Profile</li> <li>• Read Module 5 in Trainee Guide</li> <li>• Answer Review Questions for Module 5</li> </ul>	4 a,b,c
April 9	5	E&I Test Equipment	<ul style="list-style-type: none"> <li>• Instructor will discuss information about E&amp;I Test Equipment</li> <li>• Read Module 5 in Level 2 Trainee Guide</li> <li>• Answer Review Questions for Module 5</li> </ul>	5 a,c
April 15	5	E&I Test Equipment	<ul style="list-style-type: none"> <li>• Instructor will discuss information about E&amp;I Test Equipment</li> <li>• Read Module 5 in Level 2 Trainee Guide</li> <li>• Answer Review Questions for Module 5</li> </ul>	5 a,c
April 16	5	E&I Test Equipment	<ul style="list-style-type: none"> <li>• Instructor will give Module 5 Exam</li> <li>• Students will do Module 5 Performance Profile</li> <li>• Read Module 6 in Trainee Guide</li> <li>• Answer Review Questions for Module 6</li> </ul>	5 a,c
April 18	6	Flow, Pressure, Level, and Temperature	<ul style="list-style-type: none"> <li>• Instructor will discuss information about Flow, Pressure, Level, and Temperature</li> <li>• Read Module 6 in Level 2 Trainee Guide</li> <li>• Answer Review Questions for Module 6</li> </ul>	6 a,b,c
April 22	6	Flow, Pressure, Level, and Temperature	<ul style="list-style-type: none"> <li>• Instructor will discuss information about Flow, Pressure, Level, and Temperature</li> <li>• Read Module 6 in Level 2 Trainee Guide</li> <li>• Answer Review Questions for Module 6</li> </ul>	6 a,b,c
April 23	6	Flow, Pressure, Level, and Temperature	<ul style="list-style-type: none"> <li>• Instructor will give Module 6 Exam</li> <li>• Read Module 7 in Trainee Guide</li> <li>• Answer Review Questions for Module 7</li> </ul>	6 a,b,c
April 29	7	Process Mathematics	<ul style="list-style-type: none"> <li>• Instructor will discuss information about Process Mathematics</li> <li>• Read Module 7 in Level 2 Trainee Guide</li> <li>• Answer Review Questions for Module 7</li> </ul>	7 a,b,c
April 30	7	Process Mathematics	<ul style="list-style-type: none"> <li>• Instructor will give Module 7 Exam</li> <li>• Students will do Module 7 Performance Profile</li> <li>• Instructor Evaluation</li> </ul>	7 a,b,c

**COMPETENCY AREAS:**

1. Industrial Safety
2. National Electrical Code (NEC)
3. Electrical Theory
4. Alternating Current
5. Test Equipment
6. Flow, Pressure, Level, and Temperature
7. Process Mathematics

**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.