ELTR1090 Commercial Wiring II

Course Description

This course is a continuation of the study in commercial wiring practices and procedures. Topics include: conduit installation and system design concepts.

Credit Hours

3

Prerequisites

None

Terms Offered

Every Semester

Outcomes

Commercial Services

- Calculate and install the conductor size for entrance requirements.
- Calculate the size and capacity for service panels.
- Install a service panel.
- Define and discuss how harmonics affect the electrical systems and appliances harmonics.

Conduit Installation

- Measure, chisel, cut, and/or drill the structure for a conduit system.
- Measure, cut, run, and/or terminate wiring through a conduit system.
- Identify and install rigid conduit.
- Properly ground a conduit system.
- Install and identify PVC conduit, connectors, and boxes to structures.
- Identify and install EMT.
- Identify and install permissible flexible conduit.

Systems Designs Concepts

- Identify and choose appropriate raceways for various conditions.
- Plan an installation of a raceway, wireway, and surface metal raceway.
- Identify hazards of working with conduit systems.

Required Textbooks/Materials

978 -0-357-42576-3- 20th edition Electrical Wiring Commercial, Cengage Learning (publisher) Simmons & Mullin(author)

Institutional Mission

Atlanta Technical College, a unit of the Technical College System of Georgia, provides lifelong educational opportunities and experiences through academic and innovative career preparation, service learning, and

multiple program delivery modalities that lead to technical certificates, diplomas, and associate degrees and make student development and success possible in a competitive global economy

Required Technology

One of the following operating systems is required: Microsoft Windows OS (XP, Vista); Apple Mac OS X (10.0) or above, Unix/Linux, or Chrome OS. Internet Access - DSL or cable is recommended. Recommended Software - Adobe Acrobat Reader; Macromedia Flash 7.0+; Macromedia: Shockwave; QuickTime; Windows Media

Blackboard

Once you have access to Blackboard you will be enrolled in the Student Learning Community Organization (SLC). The SLC offers Blackboard training and other valuable college resources.

Select this link to review a Bb Orientation Video

Select this link to review the Bb Technical Support Guide

Attendance

The educational programs at Atlanta Technical College reflect those requirements and standards that are necessary for future successful employment in business and industry. Employers expect their employees to be present and to be on time for work each and every day. Likewise, Atlanta Technical College expects each student to be present and to be on time each and every day for all classes. Absences prevent students from receiving full course benefits, disrupt orderly course progress, and diminish the quality of group interaction in class. The college considers both tardiness and early departure from class as forms of absenteeism.

Instructors have both the right and the responsibility to develop reasonable attendance expectations appropriate to the type, level, delivery method, and frequency of class meetings for their courses; communicate the expectations to students clearly via their syllabi addenda; and apply the consequences of failing to meet the expectations fairly and consistently to all enrolled students.

Instructors are responsible for determining whether work missed may be made up, and any make-up work allowed is scheduled at the discretion of instructors. Procedures for make-up work are detailed in syllabi addenda.

Documented absences for military duty, observed religious holidays, judicial proceedings in response to a subpoena, summons for jury duty, or other court-ordered process which requires the attendance of the student at the judicial proceeding are excused. Students absent from class for any reason are still responsible for all work missed. Students should enroll only in those classes that they can reasonably expect to attend on a regular basis.

Students who stop attending classes without officially withdrawing from class risk earning a final grade of F. If a student does not officially withdraw the instructor may issue a final grade of F and the last date of attendance, which will be last day that the student attended class or participated in an academically related activity.

In the event of severe weather or other emergencies, students are expected to continue participating in learning activities via Blackboard, @student.atlantatech.edu email account, or other modality. I

Failure to attend class the first week may result in students being turned in as no-shows. See No-Show Policy for further information.

Course Withdrawal

WITHDRAWING FROM CLASS(ES)
Withdrawals can jeopardize the student's current and future financial aid eligibility. Specifically, students must complete and pass 67% of all classes attempted. Each withdrawal W as well as grades of D, F, I, IP, WP, and WF counts against the student's completion rate. Also, if a student withdraws prior to the 60% point of the term, he/she could be required to repay at least a portion of the aid received for the semester. Consequently, it is imperative that students maintain their attendance (stay in class) or consistently log on to an online course to avoid jeopardizing eligibility for financial aid and having to repay funds. Students will be permitted to withdraw from their courses until the last day of class as published on the academic calendar as Classes End. The student will receive a grade of W should this occur prior to the 60% point in the semester/term, and a grade of WP (withdrawal passing) or WF (withdrawal failing) should this occur after the 60% point in the term. The grade will be determined based on the student's academic performance up to the time the student ceases to be enrolled. The last date of attendance will be recorded as the last day that the student attended class or participated in an academically related activity. Students who take hybrid or on-line courses must log-in to the courses according to the course syllabus to be counted "present" and receive credit for attendance. It is the responsibility of the student to know what each hybrid or on-line course requires. Any student reported as a "no-show" by an instructor will be administratively removed from that class and will not be eligible for reinstatement in the current semester. "No-shows" or withdrawals can jeopardize current and future financial aid eligibility.

STUDENT WITHDRAWAL PROCEDURE
Withdrawing before the 60% Withdrawal Deadline.
The sole responsibility to officially withdraw from the college or specific class(es) lies with the student. The withdrawal without academic penalty period begins the fourth day of each term. Students are not eligible for a refund when they withdraw from a class during the withdrawal time frame. Students may withdraw from classes and receive a grade of W during the first 60% of the academic term. A grade of W does not affect a student's semester or cumulative grade point average or academic standing. The dates are identified as the Withdrawal without academic penalty for each term on the Academic Calendar.

Withdrawing before the 60% withdrawal deadline can be done through the online student registration system; directions on how to use the registration system can be found on the Atlanta Technical College Website. Students can drop all but one class through the online registration system. To drop the last class students must contact the Office of Enrollment Services. Students can stop by the Office of Enrollment Services in the Student Success Center and complete an official withdrawal form, or they must submit an email to the ATCRegistrar@atlantatech.edu email account. This email must come from the student's Atlanta Technical College @student.Atlantatech.edu email account and contain the students name, student identification number, the class, and course registration number (CRN). The Office of Enrollment Services will not process requests when students send the information from any other email account.

Withdrawing after the 60% Withdrawal Deadline
After the 60% withdrawal deadline, students may withdraw from classes until the last day of class as published on the academic calendar as Classes End. After the 60% withdrawal deadline, instructors must assign a grade of WP (withdrawal passing) or WF (withdrawal failing). Grades of WP and WF affect students' satisfactory academic progress for financial aid purposes. Grades of WF also affect students' academic standing. The instructor will calculate the withdrawal grade at the point they are notified that the student is requesting to be withdrawn from the class. Students who stop attending classes without officially withdrawing from class risk earning a final grade of F. If a student does not officially withdraw the instructor issue a final grade of F and the last date of attendance, which will be last day that the student attended class or participated in an academically related activity.

To withdraw after the 60% withdrawal deadline students can stop by the Office of Enrollment Services in the Student Success Center and complete an official withdrawal form, or they must submit an email to the ATCRegistrar@atlantatech.edu email account. This email must come from the student's Atlanta Technical College @student.Atlantatech.edu email account and contain the student's name, student identification number, the class, and course registration number (CRN). The form will be submitted to an Enrollment Services Counselor who will contact the instructor and request the last date of attendance and a grade of WP or WF. Instructors will assign grades of WP if student are passing at the time of the withdrawal or grades of WF if students are failing at the time of withdrawal. Grades of WF are calculated into semester grade point averages as grades of F.

Grading Scale

Grades are issued at the end of each semester. A grade of "C" or better is required for most programs in all classes for graduation. However, there are some programs that may require a "B" or better; therefore, it is recommended that students consult with their specific program advisor.

Grades	Numerical Equivalent	Grade Points
A	90-100	4
B	80-89	3
C	70-79	2
D	60-69	1
F	0-59	0

Other grades allowed by Atlanta Technical College include:

EX	Exempted by Examination	Not Computed
W	Withdrew	Not Computed (Only Given Before 60% Deadline)

WP	Withdrew Passing	Not Computed (Given After 60% Deadline – See Below)
WF	Withdrew Failing	Computed (Given After 60% Deadline – See Below)
TR	Transfer Credit	Not Computed (Displayed as TRA, TRB, or TRC – See Below)
AU	Audited	Not Computed
S	Satisfactory	Not Computed
U	Unsatisfactory	Not Computed
I	Incomplete*	Not Computed

*Course Requirements for removal of an incomplete must be satisfactorily completed prior to the following semester's mid-term date.

I Indicates that student has an "incomplete" but has satisfactorily completed a substantial portion of the course work. For NON-ACADEMIC reasons beyond their control, the student has not been able to complete some specific part or amount of the work required. An "I" must be satisfactorily changed to a letter grade by the midpoint of the next semester, or it will be changed to the grade of "F" by the Office of Enrollment Services. Students must get approval from the instructor prior to the end of the semester to be eligible for an "I" grade. No credit is given and no grade points are calculated.

IP Indicates that a course continues beyond the end of the semester. An "IP" must be satisfactorily changed to a letter grade by the midpoint of the next semester, or it will be changed to the grade of "F" by the Office of Enrollment Services. No Credit is given and no grade points are calculated.

W Students who withdraw before the 60% point of the semester receive a grade of "W" Withdrew. No credit is given and no grade points are calculated.

WP Indicates students who withdraw passing from a course after the 60% point of the semester receive a grade of "WP Withdrew Passing," if they were passing the course at the time of withdrawal. No credit is given and no grade points are calculated.

WF Indicates students who withdraw from a course after the 60% point of a semester (or course) receive a grade of "WF-Withdrew Failing," if they were failing the course at the time of withdrawal. The "WF" grade is calculated as an "F" in the grade point average.

EXE Indicates that a student has exempted a course through examination or through the articulated Tech Prep programs. Credit is given but grade points are not calculated. Instructors must submit an Exemption Form to the Office of Enrollment Services to report an exemption.

EXP Indicates the student has been awarded transfer credit though essential learning/prior learning assessment

TR Indicates that a student has been awarded transfer credit from AP. CLEP or IB examinations.

TRA, TRB, TRC Indicates that a student has been awarded transfer credit from another institution. Credit is given but no grade points are calculated. If a student earns credit for a course taken at Atlanta Technical College for which transfer credit has been awarded, then the transfer credit will be deleted from the student's record.

TRM Indicates that a student has been awarded transfer credit from their military experience.

AC Indicates articulated credit earned by students as a part of formal articulation agreements.

AU Indicates an audited course. No grade is given, no credit hours are earned and grade points are not calculated. Auditing a course must be initiated during the registration process. Approval for an audit cannot be granted after participation in classroom instruction. Instructors must submit an Audit Form to the Office of Enrollment Services to report an audit. Audited classes are not eligible for financial aid.

Z indicates students whose academic performance was affected by the COVID-19 global pandemic. A grade of Z is the functional equivalent of a grade of W; the course in which a student received a Z grade does factor into total credit hours attempted for financial aid calculations but does not affect overall GPA.

Student Handbook

All policies and procedures are listed in the Student Handbook, including procedures for filing a grievance. Select this link to review the Student Handbook.

Academic Integrity

Academic integrity is expected at all times. Any student found to have engaged in academic misconduct such as cheating, plagiarism, or collusion is subject to disciplinary sanctions as outlined in the Student Code of Conduct detailed in the ATC Catalog and Student Handbook.https://atlantatech.edu/wp-content/uploads/Student-Handbook_081820.pdf

Essential Workplace Skills

A Workplace Essential Skills grade will be given each semester for specified courses. The Workplace Essential Skills grade will not affect the academic grade point average (GPA) of a student; that is, Workplace Essential Skills grades remain separate from academic grades. Workplace Essential Skills grades will be reported each semester.

The Workplace Essential Skills program is designed to evaluate and encourage good work habits that ensure job retention and career advancement.

Employability skills refer to the basic academic, interpersonal, reasoning, problem solving skills, and Workplace Essential Skills that, when transferred to the occupational settings, facilitate job acquisition, retention, and advancement.

The Essential Workplace Skills:

1. Leadership
2. Communication
3. Organization
4. Productivity
5. Teamwork
6. Professionalism
7. Resourcefulness

Students of core and program courses will receive a Workplace Essential Skills grade. Instructors will give Workplace Essential Skills assignments throughout the semester. Workplace Essential Skills grades are optional for developmental courses and for grades of W, WF, or WP. Workplace Essential Skills grades will not be used for grades of AC, AU, EX, I, IP, or TR.

Approved Workplace Essential Skills Grades

3 = Exceeds Expectations

2 = Meets Expectations

1 = Needs Improvement

0 = Unacceptable

Learning Resources

The student is expected and encouraged to use the school library which is located on the main campus in building G. The library has media equipment for faculty and staff use for instructional purposes. There are over 130 computers, a multimedia room equipped with audio and audiovisual resources, and printing, copying, faxing, and scanning services. Seating is available throughout the library along with study carrels, six study rooms for reserve, one conference room and a Digital Classroom used for class instruction. Atlanta Technical College's library operating hours are Monday-Thursday, 7:30 a.m. - 8:00 p.m.; Friday, 7:30 a.m. – 4:00 p.m. Students may use the library located at Atlanta Metropolitan State College, or any other library within their access, to gather further information about the topic under discussion in class, or about any topic of interest to the student. If a particular resource cannot be obtained at the ATC Library, a student may use the Interlibrary Loan (ILL) service to locate the item(s). This service borrows books, articles and other resources from other libraries within the region. The ILL form may be accessed via the webpage under the Library's home page. Students are also expected and encouraged to use available Internet resources, as well as relevant periodicals, books, and electronic resources. Most course textbooks may be checked out for a two-hour, in-house library use only.

Tutorial Support

Tutorial support is available by each instructor during designated office hours. Remediation/tutorial support may be teacher or student initiated depending on the student's progress. Several programs of study offer services through peer counselors and mentors. Atlanta Technical College also offers math,

English, reading, and study skills tutorials through the Academic Success Center. Located in room 2118, the Learning Support Center provides an open study area, face-to-face tutorial, Internet access, and various tutorial computer software. Students may also find out how to access our 24/7 online tutorial programs by visiting the Academic Success Center. The Academic Success Center's operating hours are Monday-Thursday, 9:00 a.m. - 8:00 p.m.; Friday, 9:00a.m. – 2:00 p.m.; Saturday, 9:00 a.m. – 1:00 p.m.

Financial Aid

The Financial Aid office is located in the Dennard Building, Room 125, and the phone number is 404.225.4716. Financial Aid information, resources, and specialists are located on our Atlanta Tech website: Financial Aid.

To better serve our student population we now have the QLESS ticketing system. You may Join the Line to be assisted in person during operating hours or Schedule an Appointment during a set time and day with your assigned Financial Aid Specialist.

Select this link to join the line or schedule an appointment.

Select this link to learn more about QLESS.

For information about tuition & fees, refunds and payment plans visit The Office of Student Accounts.

Non-Discrimination Policy

As set forth in its student catalog, Atlanta Technical College does 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 nondiscrimination policy encompasses the operation of all technical college administered programs, programs financed by the federal government including any Workforce Innovation and Opportunity Act (WIOA) Title I financed programs, educational programs and activities, including admissions, scholarships and loans, student life, and athletics. It also encompasses the recruitment and employment of personnel and contracting for goods and services.

Atlanta Technical College 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 person has been designated to handle inquiries regarding the nondiscrimination policies: Director of Student Services, Atlanta Technical College, Academic Building, Suite C1109A (Student Success Center), 404.225.4446. Email: mgoss@atlantatech.edu.

To request reasonable accommodations upon enrollment (Section 504/ADA), contact Director of Student Services, Atlanta Technical College, Academic Building, Suite C1109A, 404.225.4446. Email: mgoss@atlantatech.edu. Atlanta Technical College, 1560 Metropolitan Parkway, SW, Atlanta, GA 30310.

American with Disabilities Act

Atlanta Technical College strives to provide equal access to education for all students. Students with a documented disability are eligible to receive reasonable academic adjustments and auxiliary aids in the classroom and/or for testing at Atlanta Technical College once the appropriate documentation of the disability has been submitted to the Director of Student Services.

To request reasonable accommodations upon enrollment (Section 504/ADA), contact Kymberly Savage, Resource Accommodation Specialist for Special Needs and Special Populations at Atlanta Technical College, Academic and Student Affairs Division, Academic Building, Suite C1109A, 404.225.4441. Email: ksavage@atlantatech.edu.

Warranty

Curriculum standards have been developed with direct involvement of business and industry. These standards serve as the industry-validated specifications for each occupational program. The TCSG guarantee to every one of our students is this: *If one of our graduates educated under a standard program or his/her employer finds that the graduate is deficient in one or more competencies as defined in the standards, the technical college will retrain the employee at no instructional cost to the employee or the employer. This guarantee is in effect for a period of two years after graduation.*

Accreditation

Atlanta Technical College is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award associate degrees, diplomas, and technical certificates of credit. The Southern Association of Colleges and Schools Commission on Colleges is located at 1866 Southern Lane, Decatur, GA 30033, 404.679.4500; website: http://sacscoc.org/. Inquiries to the Commission should relate only to the college's accreditation status and not to general admission information.

Continuation of Instruction Plan

All classes at Atlanta Technical College use the Blackboard Learning Management System which allows for the continuation of classes even if the school is closed due to inclement weather or any other reason. In the event of school closure, continue to work on your class through Blackboard and be sure to check your Blackboard course and student email for class information from your instructor.