

Electrical & Electronics II

AUTO - 2160 001

Course Description

This ASE-EF accredited course continues the study of automotive electrical and electronic systems. Students demonstrate their proficiency in the diagnosis, repair, and service of modern automotive electrical systems using electrical measuring devices and wiring diagrams. This lecture/lab course is part 2 of a 3-part course. It is recommended that students take AUTO 2130 and AUTO 2120 in the same semester as this course.

Prereq: Successful completion of all TEAU (SLTC) Courses: TEAU 1010, TEAU 1050, TEAU 1100, TEAU 1140, TEAU 1150, TEAU 1160, TEAU 1210, TEAU 1240, TEAU 1250, and TEAU 1270.

Semester(s): All

Course Student Learning Outcomes

- Demonstrate proficiency in ASE-EF Electrical/Electronic Systems Automobile Service Technology (AST) Tasks in accordance with industry standards.
- Assigned lab work to complete in a professional manner, by working in teams in automotive labs that emulate industry automotive shops.

Course Prerequisites

Successful completion of all TEAU (Salt Lake Technical College) Courses: TEAU 1010, TEAU 1050, TEAU 1100, TEAU 1140, TEAU 1150, TEAU 1160, TEAU 1210, TEAU 1240, TEAU 1250, and TEAU 1270.

Engagement Plan

- I will respond to email within 24 to 48 hours. I will offer feedback on major assignments within 5 days. The best way to contact me is via the Canvas Inbox, as I will prioritize this email over other modes of communication.

Keys for Success (how to succeed in the course)

- I expect professionalism. I believe that conducting yourself in this manner will be beneficial in your career.
- Team concepts that are commonplace within the industry at dealerships and aftermarket shops are incorporated in this course. Work in a collegial manner.
- Students are to check their Canvas site daily.
- Contact or message the instructor in the event of an illness or absence and advise instructor of your attendance if arriving after roll is taken.

Required Text or Materials

Title: Automotive Electrical and Electronics

Subtitle: Today's Technician series Classroom and Shop manuals

ISBN: 9780357766484

Authors: Barry Hollembeak

Publisher: Delmar Cengage Publishing

Publication Date: 2024

Edition: 8th Edition

For more information on textbook accessibility, contact Accessibility & Disability Services at ads@slcc.edu.

Additional Materials

Hand tools to perform automotive repairs and a DVOM (digital Volt/Ohmmeter)

Brief Description of Assignments/Exams

Quizzes for each section and a final exam are given for Electrical and Electronics. These tests are closed book unless specified and can include multiple choice, true/false, fill-in the blank and essay type questions. Refer to the pages within the Canvas modules for assignment dates, points, and grading.

Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
	A-Tech Charging System	Assignment	25
	A-Tech Lighting System	Assignment	25
	A-Tech Power Door Locks	Assignment	25
	A-Tech Power Seats	Assignment	25
	A-Tech Starting System	Assignment	25
	CL 19-19 Quiz 6: Expected Voltage	Assignment	20
	CL-1919 # 13 Assignment	Assignment	13
	CL-1919 #10 Assignment	Assignment	3
	CL-1919 #11 Assignment	Assignment	5
	CL-1919 #12 Assignment	Assignment	13

Due Date	Assignment Name	Assignment Type	Points
	CL-1919 #14 Assignment	Assignment	8
	CL-1919 #15 Assignment	Assignment	8
	CL-1919 #6 Assignment	Assignment	15
	CL-1919 #7 Assignment	Assignment	7
	CL-1919 #8 Assignment	Assignment	2
	CL-1919 #9 Assignment	Assignment	4
	CL-1919 Prequiz: Ohms Law	Quiz	0
	CL-1919 Quiz 1: Ohms Law	Quiz	12
	CL-1919 Quiz 2: Series Circuit	Quiz	5
	CL-1919 Quiz 3: Voltage Drop Testing	Quiz	5
	CL-1919 Quiz 4: Parallel Circuit	Quiz	10
	CL-1919 Quiz 5: Combo Circuit	Quiz	7
	Final Exam	Assignment	200
	Introduce Yourself	Discussion	0
	Introduce Yourself	Discussion	0

Due Date	Assignment Name	Assignment Type	Points
	Introduce Yourself	Discussion	0
	Introduce Yourself	Discussion	0
	Job Sheet 22	Assignment	30
	Job Sheet 32	Assignment	20
	Job Sheet 37	Assignment	20
	Roll Call Attendance	Assignment	100
	Schematic Reading - EVTM - Horn Circuit	Assignment	20
	Schematic Reading - EVTM - Power Mirrors	Assignment	25
	Schematic Reading - EVTM - Power Windows	Assignment	20
	Schematic Reading - EVTM -Power Door Locks	Assignment	20
11/10/25	Chapter 1 Quiz	Quiz	20
11/10/25	Chapter 1 Quiz	Quiz	20
11/11/25	Chapter 2 Fill-in-blank	Assignment	10
11/11/25	Chapter 2 Quiz	Quiz	20
11/11/25	Acknowledgement of Syllabus	Quiz	1
11/13/25	Chapter 1 Fill-in-blank	Assignment	10
11/13/25	Chapter 3 Fill-in-blank	Assignment	10
11/13/25	Chapter 3 Quiz	Quiz	20

Due Date	Assignment Name	Assignment Type	Points
11/17/25	Chapter 4 Fill-in-the-blank	Assignment	10
11/17/25	Chapter 4 Quiz	Quiz	20
11/18/25	Case Study #1	Assignment	30
11/18/25	Case Study #2	Assignment	23
11/19/25	Chapter 5 Fill-in-the-blank	Assignment	10
11/19/25	Chapter 5 Quiz	Quiz	20
11/25/25	Case Study #3	Assignment	18
12/2/25	Chapter 6 Fill-in-the-blank	Assignment	10
12/2/25	Chapter 6 Quiz	Quiz	20
12/2/25	Job Sheet 4	Assignment	30
12/4/25	Chapter 7 Fill-in-the-blank	Assignment	10
12/4/25	Chapter 7 Quiz	Quiz	20

Grading Scale

Grades are calculated by percentage using the standard college grading scale.

How to Navigate to Canvas

Institutional Policies

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements. By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

For more information, navigate to the Institutional Policies tab on the [Institutional Syllabus](#) page.

Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, visit the [Institutional Syllabus](#) page under the Tutoring and Learning Support tab. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

Advising and Counseling Support Services

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the challenges of college life. To learn more about the resources available to you and how to access them, visit the [Institutional Syllabus](#) page under the Advising and Counseling Support Services tab. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

Student Academic Calendar

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

[SLCC Student Academic Calendar](#)

Additional Policies

Safety glasses are required in lab areas.