

SYLLABUS PART II
EDISON COMMUNITY COLLEGE
ELT 131S Industrial
Controls
3 CREDIT HOURS

Section/Term: ELT-131S-001FS

Class Meeting Time: M/W 8:00am – 9:50am

Location: Room 433

Required items: Open Educational Resource. Free online text.

Faculty: Keith Barga – Associate of Applied Science – Electronics 1988
Ohio State Apprenticeship Council Industrial Electrician 1985
Certificate No. 5393

E-mail: kbarga@edisonohio.edu

Faculty Phone: 937-778-7939

Class Policies

<u>Week</u>	<u>Assignment</u>	<u>Topic</u>
1	Handouts	Safety & Transformers
2	pages 21 - 23	Control Units Lab 1 100pts HW 1 100pts
3	pages 51 - 55	Relays & Solenoids Lab 2 100pts Project 1 100pts
4	pages 37 - 50	Motor Starters HW 2 100pts Project 2 100 pts Lab 3 100 pts Quiz 1 100pts
5	pages 9 - 12	Over Current Protection Research 1 100pts
6	pages 25 - 32	Motion & Pressure Control Research 2 100pts Lab 4 100 pts
7	Hand outs	Temperature, Time, & Count Control Research 3 100 pts
8		Midterm 100 pts
9	pages 69 - 71	Control Circuits Project 3
10	pages 73 - 79	Motors Research 4 100 pts Lab 5 100 pts
11		Motor Start / Stop Circuits

12		Control Methods Quiz 2 100 pts Project 4 100 pts
13	pages 133 - 143	Troubleshooting Lab 6 100 pts
14		Designing Control Systems Project 5 100 pts
15		Review and Wrap Up
16		Final 100 pts

20% Homework
20% Labs
20% Quiz
20% Mid Term
20% Final

Students are expected to have read the assignments before the lecture period.

One page of notes for quizzes, 2 pages of note for mid term and final. The note pages maybe front and back, but not past quizzes. You may use all handouts!

Cheating will not be tolerated and will receive disciplinary action according to current Edison Policy.

Testing Your Faith Act Policy

Edison State Community College is committed to providing an environment respectful of students' beliefs. Students are permitted to be absent for up to 3 days each semester based on their faith, religion, or spiritual belief system with no academic penalty. Students must complete the Testing Your Faith Act Accommodations Form, <https://www.edisonohio.edu/services-support/registration-records>, located in "Forms" and provide a copy to their individual faculty within 14 days from the start of the course. The entire policy can be found in the student handbook at <https://www.edisonohio.edu/services-support/student-resources..>

Homework and Project work is due on the given dates. Late homework or Projects will NOT be accepted. Homework and Project work is not to be done during lecture time.
NO LABS will be made up. Exception (wrap up day)

May have drinks in class, but no food.

No drinks at lab stations.

Keep lab station clean.

Please turn cell phones off.

Do Not work on any Hot labs without an instructor present.

Academic Integrity:

Edison Community College expects students to submit original work for each assignment. The Student Handbook

<https://www.edisonohio.edu/digipub/StudentHandbook/index.html> , pages 28-29 clearly defines academic dishonesty and how Edison handles cases of academic dishonesty.

Using peer support and tutoring services is not considered academic dishonesty, as long as the work is original and in your own voice, meaning you didn't submit work you did previously or "borrow" words/ideas without crediting the source

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Technical Support

For Blackboard Assignment issues, the Instructor should be the first point of contact

For Log-in or other technology issues:

There are several steps you can follow if you have issues logging in to Blackboard or Office.

During business hours:

- Password reset: Log onto office.com with your Edison email and follow the "forgot password" prompts.
- Reach out for help during regular business hours (9-5 Monday-Thursday, 9-4 Friday)
 - email to support@edisonohio.edu
 - call 937-778-8600 and ask for IT Help Desk

After hours:

- Password reset: Log onto office.com with your Edison email and follow the "forgot password" prompts
- Go to www.edisonohio.edu into the Resources tab and click "IT Help Desk" then click "Chat".
- Call 937-778-7957 and talk to the off-campus Blackboard company to get help.

Grading approximately

- 20%** Homework
- 20%** Labs
- 20%** Quizzes
- 20%** Hydraulics exam (in class)
- 20%** Pneumatics exam (in class)

Grading Scale*

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A = 90 – 100%

B = 80 – 89%

C = 70 – 79%

D = 60 – 69%

F = 59% and Below

12 homework assignments 116 points total

5 quizzes 20 points each

13 labs 8 points each

Hydraulics exam 100 points

Pneumatics exam 100 points

Class Schedule

***Homework is due at the beginning of class on Thursdays**

Week 1 8/27

Lecture Ch.1 and 2 Introduction to Hydraulics & Principles of Power Hydraulics
Assignments Due 8/27 Lab 1

Week 2 9/3

Assignments Due 9/3 – Homework 1 15 pts
Lecture Ch.2 Principles of Power Hydraulics
Assignment Due 9/3 Lab 2

Week 3 9/10

Assignments Due 9/10 Homework 2 6 pts Quiz 1
Lecture Ch 3 Hydraulic Pumps
Assignments Due 9/10 Lab 3

Week 4 9/17

Assignments Due 9/17 – Homework 3 8pts
Lecture Ch 4 Hydraulic Cylinders
Assignment Due 9/17 Lab 4

Week 5 9/24

Assignments Due 9/24 Homework 4 8 pts Quiz 2
Lecture Ch 5 Hydraulic Motors
Assignments Due 9/24 Lab 5

Week 6 10/1

Assignments Due 10/1 – Homework 5 8pts
Lecture Ch 6 Hydraulic Directional Control
Assignment Due 10/1 Lab 6

Week 7 10/8

Assignments Due 10/8 Homework 6 13 pts Quiz 3
Lecture Ch 7 Hydraulic Pressure Control
Assignments Due 10/8 Lab 7

Week 8 10/15

Assignments Due 10/15 Homework 7 10 pts
Lecture Ch 8 Hydraulic Flow Control
Assignments Due 10/15 Lab 8

Week 9 10/22

Assignments Due 10/22 Homework 8 9 pts Quiz 4
Lecture Ch 9 Ancillary Hydraulic Components
Assignments Due Lab 9

Week 10 10/29

Assignments Due 10/29 Homework 9 11 pts
Lecture Review for Hydraulics Exam
Assignments Due 10/29 Hydraulics Exam in Class

Week 11 11/5

Lecture Ch 10 Basic Principles of Pneumatics
Due 11/5 Lab 10

Week 12 11/12

Assignments Due 11/12 Homework 10 14 pts Quiz 5
Lecture Ch 11 Pneumatic Power Supply
Due 11/12 Lab 11

Week 13 11/19

Assignments Due 11/19 Homework 11 8 pts
Lecture Ch 12 Pneumatic Components
Due 11/19 Lab 12

Week 14 NO CLASS 11/26 Thanksgiving

Week 15 12/3

Assignments Due 12/1 Homework 12 6 pts
Lecture Ch 13 Electronic Control of Fluid Power
Due 12/3 Ping Pong ball chucker Lab
Review for Final Exam

Week 16 12/8

Assignment Due Final Exam in Class