



Course Syllabus
SEMESTER
School of Science Technology Engineering and Mathematics

Course Name:	Electronics II
Course & Section Number:	EET 211-XXX
Meeting Day(s) & Time(s):	
Credits:	3
Contact Hours:	5 (Lecture: 2, Lab: 3)
Text:	See Course Materials
Instructor's Name:*	
Office Hours & Location:	
OCC Phone:	
OCC Email:** Additional Contact Information:	

*Please call me NAME; it is my preferred name. If you have a preferred name, please let me know so I can use it.

**Please use only Owen's email for course communications.

Catalog description:

This course is a continuation of Electronics I. Topics include: power applications, oscillators, multivibrators, digital-to-analog and analog-to-digital conversion techniques, timers, voltage-controlled oscillators, phase locked loops, and sample and hold. This course includes a weekly

hands-on lab. The lab experiments are designed to verify and reinforce the concepts presented in the lecture.

Prerequisites:

MTH170 and MTH173 or MTH175

Course Materials:

Textbook: Electronic Devices and Circuit Theory, Boylestad, Robert L., Nashelsky, Louis, 11th Edition, ISBN13: 9780132622264

*If a **print book, e-book, or access code** is required for class, you can access the Owens Community College e-Campus Bookstore by accessing the online link, called “Find Books” on the course schedule for each course section. See the example below.*

Course		Course Title					Credit Hrs.	Course Fees	Seats	
Academic Period		Academic Period Dates		Class Type	Course Links					
Days	Times		Room Dates	Instructor	Meeting Type	Building/Room	Location			
SKT131-002		Electrical Prints					3	\$0	20	16
2025 Fall Semester		2025-08-25 - 2025-12-11		Face-to-Face		[Course Info] [Find Books]				
T	8:00 AM - 10:40 AM		2025-08-25 - 2025-12-11	Todd Schick		Lecture	DC 111	Toledo		
Last day to add: Aug 29, 2025 -- Last day to drop: Dec 11, 2025										
Refund deadlines: Aug 29, 2025 (100%) -- Sep 05, 2025 (60%) -- Sep 12, 2025 (50%)										

OER and Owens Community College Library Resources (Open Educational Resources are free online materials for instructor and student use. Some OER material may be available in print in the Owens Community College Library.)

Inclusive Access (I.A.) Materials are included in the cost of the course to save students money through lower negotiated rates with publishers. Courses containing I.A. materials will have it noted on the online class schedule. If your course includes I.A. digital materials, you will receive an email with subject line, “Your inclusive Access Materials,” and it will include any codes or digital links.

The email will come to your Owens Community College email from the Owens e-Campus Bookstore on the first day of class, if not before. Be sure to check your spam (junk email) if you do not find it in your inbox. If the email is not in your inbox or spam folder, contact your instructor immediately. You may also see a folder at the top of your course labelled “Course Materials by eCampus.” This folder will contain any needed codes or links to needed materials. If the I.A. materials also include a printed book or are in print form, the item will be shipped to your address of record automatically based on your enrollment in the course. Please note that some courses do not include printed materials in I.A and those materials would need to be purchased separately using the link on the course schedule. When you access the Find Books link you will see which items in a course are included in I.A.

What You Will Learn in the Course

Course Objectives:

Course will:

- Illustrate how to design, simulate, build, test and troubleshoot oscillator circuits.
- Illustrate how to design, simulate, build, test and troubleshoot linear and switching regulated DC power supplies.
- Illustrate how to design, simulate, build, test and troubleshoot active filter circuits.
- Illustrate how to design, simulate, build, test and troubleshoot ADC and DAC circuits.
- Illustrate how to design, simulate, build and test voltage-controlled oscillator circuits.
- Illustrate how to design, simulate, build, test and troubleshoot phase locked loop circuits.
- Explain and test DC and AC motors.

Student Learning Outcomes: Students will:

Outcome	Where Assessed
1- Student is able to build a working oscillator circuit.	HW Week 7, Lab Week 7, Midterm
2- Student is able to build a working active filter circuit.	HW 3&4, Lab Week 3&4, Midterm
3- Student is able to build a functioning ADC/DAC circuit.	HW Week 10&11, Lab Week 10&11, Final Exam
4- Student is able to build a working phase locked loop circuit.	HW Week 13, Lab Week 13, Final Exam
5- Student is able to build a working regulated DC Power Supply.	HW Week 5&6, Lab Week 5&6, Midterm
6- Student is able to build a working Voltage Controlled Oscillator.	HW Week 12, Lab Week 12, Final Exam
7- Student can describe the parts of a motor.	Final Exam

Program Outcomes:

The following program outcomes are assessed in this course

Outcome	Where Assessed
Demonstrate the application of discrete devices in digital, and analog circuits.	Lab Average, Homework Average

Institutional General Education Competencies:

As a student at Owens Community College, you will take General Education courses as part of your degree program. While specific to the General Education courses, will be reinforced in many of your degree program major courses and may be measured in your capstone course(s) and others as identified.

Competency	Where Assessed
Think analytically, critically, and creatively.	Final Exam

Technology, Lab, and File Requirements:

None

Academic Support

Disability Services Resource Center: If you have a disability or acquire one, you may be entitled to receive reasonable accommodations intended to assure you an equal opportunity to participate in and benefit from the program. To receive more information or to register for accommodations, please contact the Disability Resource Center at 567-661-7007, email disability@owens.edu, visit <https://www.owens.edu/disability/>, or stop by College Hall 124.

Tutoring Services: Owens Community College offers academic tutoring and assistance in a variety of subjects including: accounting, computing, economics, mathematics, science, and writing. For more information go to: <https://www.owens.edu/successcenters/>.

Counseling Services: Counseling Services provides assistance to students experiencing personal, educational, interpersonal/relationship, family, social, or psychological difficulties. If you feel you may benefit from this service, please contact them at counselingservices@owens.edu. More information is at <https://www.owens.edu/counseling/>.

Campus and Community Connections: The Center for Campus and Community Connections (College Hall 151) is a walk-in office created to provide retention support through resource stability initiatives and community connections. Go here for more information: <https://www.owens.edu/connection/> or contact connections@owens.edu

Owens Library: The Owens Library offers two locations (Toledo and Findlay) as well as online resources. For more information visit <https://www.owens.edu/library/>.

Students can find more information on campus resources, student support, student life, and security at this [link](#).

General Information

Student Code of Conduct: All students are expected to follow Owens Community College's Student Code of Conduct, which includes academic honesty, encompassing plagiarism. See the Board Policy for more information.

Anti-Discrimination and Harassment & Title IX/Sexual Misconduct: All students, faculty, and staff are expected to follow Owens Community College's Anti-Discrimination and Harassment Policy and the College's Title IX Policy/Sexual Misconduct Procedures and

Guidelines. The College strictly prohibits and will not tolerate harassment, discrimination, intimidation, or hostile/offensive working or learning environments.

Religious Accommodations: A student seeking an accommodation for an absence permitted under Ohio's Testing Your Faith Act must provide the instructor with a written email notice with the specific dates for an absence, and must do so not later than fourteen (14) days after the first day of instruction. Alternative accommodations are not retroactive, and no academic penalty will be imposed for an absence under the policy*. The request for an alternative accommodation will be kept confidential. Students with questions about a religious accommodation under Ohio's Testing your Faith Act may contact the College's Office of Academic Affairs: provost@owens.edu The policy may be found on the Owens website: [3358:11-2-63 Accommodation](#) for a Student Absence for the Observance of Religious Beliefs and Practices Policy

Document Collection: Throughout the semester, your instructors may ask for a variety of assignments including tests and/or quizzes for student learning of institutional general education competencies or program assessment. Please save all your class materials until the end of the semester.

Classroom Admittance: OCC classes shall only be attended by the officially registered OCC students or perspective students, instructor of record, guest lecturer, or substitute. Visitors are not permitted to be in the classroom and should not be invited to attend or participate in the class. See [FERPA](#) regulations for more information.

Use of AI Tools: This course permits you to use artificial intelligence (AI) tools, such as chatbots, text generators, paraphrasers, summarizers, or solvers, to get guidance on assignments, as long as you do so in an ethical and responsible manner. Essentially, you can think of these tools as ways to help you learn but not to entirely create work for assignments like discussion board posts, essays, presentation slides, and so on. AI is more like your tutor or TA, not a replacement for your independent thinking.

This means that you must:

- Not use AI tools to replace your own thinking or analysis or to avoid engaging with the course content.
- Cite or explain any AI tools you use. Provide the name of the AI tool, the date of access, the URL of the interface, and the specific prompt or query you used to generate the output.
- Be transparent and honest about how you used the AI tool and how it contributed to your assignment. Explain what you learned from the AI tool, how you verified its accuracy and reliability, how you integrated its output with your own work, and how you acknowledged its limitations and biases.

You are accountable for any mistakes or errors made by the AI tool. Always check and edit the output before submitting your work. If you discover any inaccuracies or inconsistencies in the output after submission, notify the instructor immediately and correct them as soon as possible. Using AI tools in an unethical or irresponsible manner, such as copying or paraphrasing the output without citation or transparency, using the output as your own work without verification or integration, or using the output to misrepresent your knowledge or skills, is considered a form

of academic dishonesty and will result in a zero grade for the assignment and possible disciplinary action. If you have any questions about what constitutes ethical and responsible use of AI tools, please consult with the instructor **before** submitting your work.

NOTE: Some instructors will also list specific acceptable and unacceptable uses or include a statement like “All written assignments, projects, and exams must be completed independently.”

Student Responsibilities & Instructor Expectations

1. No smoking, drinking, or eating, in classrooms or laboratories.
2. In the event of an absence from class, it is the student’s responsibility to obtain missed notes, handouts, and assignments from your fellow classmates.
3. Absence is not an excuse for late work. Absence with prior approval from the instructor might help to keep your participation credit.
4. The student must maintain a clean and orderly work area in the laboratory. All equipment and parts must be returned to their proper locations at the completion of lab.
5. Each student must hand in individual laboratory reports. Laboratory reports will be due one week after the scheduled experiment. Late assignments will not be accepted unless prior arrangements have been made. Late lab reports may be accepted with “late credit”
6. No makeup quizzes or tests will be given without prior approval from the instructor or a doctor’s note.
7. Laboratory work and Homework assignments will be due one week after the scheduled assignment(s).
8. All lecture materials and assignments will be posted on the course Blackboard site. All completed assignments must be submitted via the course Blackboard gradebook.

Laboratory Procedure and Grading:

1. The instructor shall check all student Lab experiments for proper functionality.
2. Laboratory reports shall consist of the following:
 - a. Cover sheet.
 - b. An organized presentation of the experimental results. Include schematics, collected data in tabulated format with units, calculations (show entire work in the report) and answers to questions.
 - c. A brief summary and conclusion (The emphasis should be technical). This must be type written
 - d. Laboratory experiment handout.
 - e. Completed Pre-lab with calculations.

How Grades are Determined and Major Assignments

The final course grade is to be computed using the following weights:

Evaluation Measure	Value	Student Learning Outcome Assessed
Homework Average	10%	1, 2, 3, 4
Midterm Exam	15%	1, 2
Lab Reports Average	50%	1, 2, 3, 4
Final Exam	25%	1, 2, 3, 4, 5

Grading Procedure:

Grades will be calculated on the following scale.

90% and Above	A
80% to Less than 90%	B
70% to Less than 80%	C
60% to Less than 70%	D
Less Than 60%	F

Tentative Class Assignments:

Lecture Date and Topic **Lab Date and Topic** **Exam and Date**

Week	SLO	Topic	Activity
1 DATE	2	Op-Amp Applications (Review)	Reading: Posted lecture notes Homework: Basic Op-Amps Lab: Basic Op-Amp Circuits
2 DATE	2	Instrumentation Op-Amps and Applications	Reading: Posted lecture notes Homework: Other Op-Amp Applications Lab: Instrumentation Op-Amps
3 DATE	2	LP & HP Active Filters	Reading: Posted lecture notes Homework: LP & HP Active Filters Lab: LP & HP Active Filters
4 DATE	2	Band-pass & Band-reject Active Filters	Reading: Posted lecture notes Homework: BP & BR Active Filters Lab: Band-pass & Band-reject Active Filters
5 DATE	5	3-Terminal Voltage Regulators	Reading: Posted lecture notes Homework: 3-Terminal Voltage Regulators Lab: 3-Terminal Voltage Regulators
6 DATE	5	Linear Voltage Regulators	Reading: Posted lecture notes Homework: Linear Voltage Regulators Lab: Linear Voltage Regulators

7 DATE	1	Timers and Oscillators	Reading: Posted lecture note Homework: Timers and Oscillators Lab: Timers and Oscillators
8 DATE	1 & 2	Midterm Exam	Lab: Makeup Lab
9 DATE	3	Sample and Hold Principles	Reading: Posted lecture notes Homework: Sample and Hold Lab: Sample and Hold Circuits
10 DATE	3	Digital to Analog Conversion	Reading: Posted lecture notes Homework: D/A Conversion Lab: D/A Conversion
11 DATE	3	Analog to Digital Conversion	Reading: Posted lecture notes Homework: A/D Conversion Lab: Combined D/A and A/D Circuit
12 DATE	6	Voltage Controlled Oscillator (VCO)	Reading: Posted lecture notes Homework: VCO Lab: Voltage Controlled Oscillator
13 DATE	4	Phase Locked Loop (PLL)	Reading: Posted lecture notes Homework: PLL Lab: Phase Locked Loop
14 DATE		Design Considerations: Sensing Circuits	Reading: Posted lecture notes Homework: None Lab: No Lab (Thanksgiving)
15 DATE	7	Motors Discussion All Lab Reports and Homework Must be submitted no later than Saturday, December 6th.	Reading: Posted lecture notes Homework: None Lab: Make-up Lab
16 DATE	1-5	Final Exam	

Disclaimer: The instructor reserves the right to amend this syllabus as deemed necessary and will communicate such amendment to the students in the course. Please note that while unlikely, there is a possibility courses might need to change the delivery method due to external issues like public health concerns, weather issues, etc. If this happens, the college will communicate any changes via email and/or other communication methods.