

1. Course Name:	
<b>Electronic Circuits I</b>	
2. Course Code:	
MIE21202	
3. Semester / Year:	
<b>Semester</b>	
4. Description Preparation Date:	
<b>9-12-2025</b>	
5. Available Attendance Forms:	
<b>Weekly (Theory: 2 hours, Practically: 2 hours)</b>	
6. Number of Credit Hours (Total) / Number of Units (Total)	
Total Hour:125Total Units:5	
7. Course administrator's name (mention all, if more than one name)	
Assist. Lec. Huda Abbas Fadhel	
8. Course Objectives	
Course Objective	1. The graduate gets scientific and applied skills of electronic circuits. 2. The graduated students will gain the ability of knowledge of different parts of electronic circuits. 3. Development and training the engineering technical staffs on the electronic circuits. 4. Preparation the research and studies to improve and develop the action of electronic circuits. 5. Prepare application engineers in technical and electronic engineering. 6. Put the proposals and alternatives for the electronic devices.
9. Teaching and Learning Strategies	
Strategie	The main strategy will be encourage active participation and engagement of students through activities such as group discussions, hands-on experiments, problem-solving tasks, and case studies. This approach promotes critical thinking, collaboration, and knowledge application and encourages students to explore and discover knowledge through inquiry and investigation. Pose open-ended questions or problem scenarios that require learners to research, analyze, and draw conclusions independently.

### Course Description Form

## 1. Course Structure

Week	Hours	Required Learning Outcomes	Learning method	Evaluation method
1	Th.:2 Pr.:2	Introduction -	Lec. &lab	Exam
2	Th.:2 Pr.:2	Semiconductors materials	Lect. &lab	Quiz
3	Th.:2 Pr.:2	Diode Configurations .	Lect. & lab	H.W
4	Th.:2 Pr.:2	Diode Networks with a dc and ac Source	Lect. &.lab	Exam
5	Th.:2 Pr.:2	Zener Diodes	Lect. & lab	Quiz
6	Th.:2 Pr.:2	Bipolar junction transistor	Lect. & lab	H.W
7	Th.:2 Pr.:2	Mid-term Exam	Lect. &lab	Exam
8	Th.:2 Pr.:2	DC biasing BJTs .	Lect. & lab	Quiz
9	Th.:2 Pr.:2	Multiple BJT Networks.	Lect. &lab	H.W
10	Th.:2 Pr.:2	Field effect transistor and MOSFET.	Lect. &lab	Exam
11	Th.:2 Pr.:2	Depletion-Type MOSFET	Lect. &.lab	Quiz
12	Th.:2 Pr.:2	Enhancement type MOSFET .	Lect. &lab	H.W
13	Th.:2 Pr.:2	BJT AC Analysis	Lect. & Lab	Exam
14	Th.:2 Pr.:2	BJT Transistor Modeling and Effect of RL at Rs	Lect. & Lab	Quiz
15	Th.:2 Pr.:2	Preparatory week before final exam	Lect. & Lab	H.W

## 2. Course Evaluation

The grade distribution is as follows: Assignment 8% , Lab 8% , Quizzes 16%,Report 8% ,Midterm Exam 10% , Final exam: 50%

## 3. Learning and Teaching Resources

Required textbooks (curricular books any)	1. Electronic devices and circuit theory 11th edition, Robert L. Boylestad , Louis Nashelsky
Main references (sources)	
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	<a href="https://www.coursera.org/browse/physical-science-and-engineering/electrical-engineering">https://www.coursera.org/browse/physical-science-and-engineering/electrical-engineering</a>