

ELECTRONIC CIRCUITS 2 LABORATORY

EXPERIMENTS LIST (2022)

Order of the Parts can be change during the semester depending on the topics covered in the EC 2 lesson.

Part 1: Frequency response of amplifiers

1. Measuring Frequency Band Of Inverting Amplifiers (1.7)
2. Analyzing Frequency-Gain Relation Of Inverting Amplifier (1.8)
3. Analyzing The Phase Shift in Amplifier (1.9)
4. Analyzing Input And Output Signal Range Of Operational Amplifiers (1.10)

Part 2: Filters and Peak Deterctor:

1. Analyzing Operational Amplifier Operating As Low Pass Active Filter (3.7)
2. Analyzing Operational Amplifier Operating As High Pass Active Filter (3.8)
3. Analyzing Operational Amplifier Operating As Peak Detector (3.9)

Part 3: Linear Applications of Op-Amp

1. Analyzing Operational Amplifier Operating As Summing Amplifier (2.3)
2. Analyzing Operational Amplifier Operating As Differential Amplifier (2.4)
3. Analyzing Operational Amplifier Operating As Differentiator (2.5)
4. Analyzing Operational Amplifier Operating As Integrator (2.6)

Part 4: Non-Linear Applications of Op-Amp

1. Analyzing Operational Amplifier Operating As Comparator (2.1)
2. Analyzing Operational Amplifier Operating As Comparator (2.2)
3. Analyzing Operational Amplifier Operating As Logarithmic Amplifier (2.7)
4. Analyzing Operational Amplifiers Operating As Instrumentation Amplifier (2.8)

Part 5: Analyzing Non-Ideal Characteristics of Operational Amplifier (Op-Amp)

1. Adjusting Output Offset Voltage of Operational Amplifiers (1.2)
2. Measuring The Input Bias Current of Operational Amplifiers (1.3)
3. Measuring The Input Offset Current and Input Offset Voltage Of Operational Amplifiers (1.4)
4. Measuring Input And Output Impedances Of Inverting Amplifiers (1.6)

Part 6: Multivibrators:

1. Analyzing Astable Multivibrators Constructed by Operational Amplifiers (4.1)
2. Analyzing Monostable Multivibrators Constructed By Operational Amplifiers (4.2)
3. Analyzing Bistable Multivibrators Constructed By Operational Amplifiers (4.3)
4. Analyzing Symmetric Square Wave Generator Constructed By Operational Amplifier (4.4)

Part 7: Wave generation with 555 / 2206

1. Analyzing Symmetric Square Wave Generator Constructed by 555 IC (4.5)
2. Analyzing Pulse Width Modulation Mode (Asymmetric) Square Wave Generator Constructed by Op-Amp (4.6)
3. Analyzing Asymmetric Square Wave Generator Constructed by 555 IC (4.7)
4. Analyzing Triangular, Sinusoidal And Square Wave Generator Constructed by Xr 2206 IC (4.8)

Part 8: Operation Classes of Transistor

1. Examination of Class A Amplifier (10.1)
2. Examination of Class B Amplifier (10.2)
3. Examination of Class C Amplifier (10.3)

Part 9: Oscillators

1. Examination of RC Phase Shift Oscillators (14.1)
2. Examination of LC Oscillators (14.2)
3. Examination of Parallel Hartley Oscillators (14.3)

Part 10: Oscillators

1. Examination of Colpitts Oscillators (14.4)
2. Examination of Crystal Oscillators (14.5)
3. Examination of Wien Oscillators (14.6)