

TECH010

COMMUNICATION ENGINEERING

Check list: Operational Amplifiers, Capacitors & Reactance

Before Easter you should have completed:-

Tick boxes below

1. Engineering CAL (Room 201 Sm.)

Analogue Electronics module

- Introduction to Amplifiers, chapters 1, 2, and 3 sections 1 - 8
- Operational Amplifiers, All chapters except ch. 5.

2. Electronic Workbench (Room 201 Sm.)

- (Capacitor Timing Circuits: from TECH008)
- The Operational Amplifier
- The Reactance of a Capacitor
- (Excel sheet on Reactance (optional))
- Tone Controls (Filters)

3. Tom Duncan

Op-amps

- Read chapters: 48,53,54,56, (59 optional),

Answer the following questions (to be placed in portfolio):-

- p. 107 [48], qu. 1, 2, 3
- p. 119 [54] qu. 1, 2
- p. 122 [56] qu. 1, 2
- p. 128 [60] qu. 1, 4, 5, 9, 10

4. Laboratory

Spent two sessions in the laboratory and completed the laboratory sheet:

- section 1: the comparitor
- section 2: the amplifier
- section 3: the oscillator (beginning only)

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Portfolio Check List

This **must** be placed in your portfolio after the Contents page

Tick box below when completed

1. Engineering CAL (Room 201 Sm.)

Analogue Electronics module

Introduction to Amplifiers, chapters 1, 2, and 3 sections 1 - 8

Operational Amplifiers, All chapters except ch. 5.

Data Communications module

2. Electronic Workbench (Room 201 Sm.)

The Operational Amplifier

Tone Controls (Filters)

The Reactance of a Capacitor

(Excel sheet on Reactance (optional)

(Capacitor Timing Circuits: from TECH008)

Basic Communications

3. Tom Duncan

Op Amps Answer the following questions (to be placed in portfolio):-

p. 107 [48], qu. 1, 2, 3

p. 119 [54] qu. 1, 2

p. 122 [56] qu. 1, 2

p. 128 [60] qu. 1, 4, 5, 9, 10

Audio p192 qu. 1-4,6,7

Radio p215 qu. 4,5 & Wave equation handout:

4. Laboratory

Op Amps

Modulation & Detection

5. Design Project (already marked and returned)

6. Other

Student course notes

Summary sheets

Organ Project:

Learning Diary