### **Report Structure and Guidelines:**

For each lab section a written report is due, the deadline for which will be posted to Moodle. While experimental work is expected to be carried out in groups, each student is expected to complete and individual write up for each lab. You will be required to submit your report to Turnitin.

Turnitin is a plagiarism and AI detection program which will produce a similarity score. Any student report found with a sufficiently high similarity score will be investigated, and if warranted a Level 1 Plagiarism resolution instigated. If a student repeatedly plagiarises work, or if a more serious instance occurs, a Level 2 resolution may follow. Further information can be found in the Academic Regulations for Undergraduate and Taught Postgraduate Programmes at <a href="https://wit.ie/about\_wit/documents">https://wit.ie/about\_wit/documents</a> and policies/for students

Each report should include a **Title, Date** along with your **Name** and **Student Number**, and include the following sections:

#### 1. Introduction and Aim:

Introduce the experiment and state the reason for doing the experiment. What are you trying to find out? Should be only one sentence long.

### 2. Theory

Explain the relevant theory for the report i.e. Amplifiers/Filters/etc. Define the quantity/quantities you are trying to get a value for. What are the physical/electrical principles under investigation? Write down any relevant equations on which the experiment is based and explain them in detail.

### 3. Experimental Method and Results:

The experiments are broken into parts, thus for each individual experimental part of the lab, the following should be included:

#### a. Circuit Diagram

Show the equipment used and its arrangement, this could be drawn using Multisim or copied from the lab manual if provided. You should also provide an photo of your circuit setup.

# b. Experimental Method

Describe how the experiment was carried out. Say what was done, not what the lab manual says was supposed to be done. Be clear and concise. Remember:

- Do not use numbered points on side of page write in paragraphs.
- Write in past passive tense. "The experiment was carried out..." etc.

### c. Results and Discussion:

Copy any measurement data from your experiment. Use tables where appropriate to display this data, label each column in the table and include the units used. The discussion is a general review of the experiment.

Did you attain your aim stated at the start of the experiment? If not, why not? If a graph was produced then you should comment on the shape of the graph, and the relation of the quantities

You are expected to explain why your result didn't agree with the true value (your result will never be exactly equal to the correct value). Carefully assess any inaccuracy associated with each measurement made in the experiment, and suggest possible improvements.

# 4. Conclusion

One paragraph stating what is now known as a result of performing the overall experiment.

### **Marking Guidelines**

### 1. Content (30 points):

<39%: Little to no relevant content; many inaccuracies.</p>
40-49%: Limited relevant content; numerous inaccuracies.
50-59%: Basic content coverage with some inaccuracies.
60-69&: Good content coverage with few inaccuracies.

>70%: Comprehensive content with high accuracy and depth.

# 2. Organization & Clarity (40 points):

<39%: Poorly organized; lacks structure. Extremely unclear; difficult to understand.

40-49%: Limited organization; structure is unclear. Significant language issues.

50-59%: Adequate organization; structure is somewhat clear, some language issues.

60-69%: Well-organized; structure is clear, minor language issues.

>70%: Highly organized; structure enhances readability. Exceptionally clear; well-constructed sentences.

# 4. Analysis & Interpretation (30 points):

<39%: Lack of analysis; no interpretation.

40-49%: Minimal analysis; incorrect or incomplete interpretation.

50-59%: Basic analysis; limited interpretation.

60-69%: Good analysis; reasonable interpretation.

>70%: In-depth analysis; insightful interpretation.

# 5. References & Citations (15 points):

<39%: No or incorrect citations/references.

40-49%: Limited or inaccurate citations/references.

50-59%: Basic citations/references with minor inaccuracies.

60-69%: Good citations/references; few inaccuracies.

>70%: Accurate and thorough citations/references.

# 7. Conclusion (15 points):

<39%: No or unclear conclusion.

40-49%: Weak or incomplete conclusion.

50-59%: Basic conclusion; partially summarizes findings.

60-69%: Good conclusion; summarizes findings.

>70%: Excellent conclusion; effectively summarizes and reflects on findings.