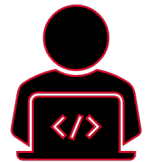# Project Research

INTR8016 – Project research phase (5 credits)

Brian Murphy – BrianM.Murphy@mtu.ie
Alison O'Shea – Alison.OShea@mtu.ie
Noreen Gubbins – Noreen.Gubbins@mtu.ie

16th September 2022

- **Overview of the final year project**
  - Project timeline
  - Assignments and marking scheme
  - Learning outcomes and expectations

- Defining a research question
  - Project scope
  - Research resources
  - Engaging with your supervisor

- Communicating your research
  - Report writing resources
  - Report outline
  - LaTeX

- Plagiarism
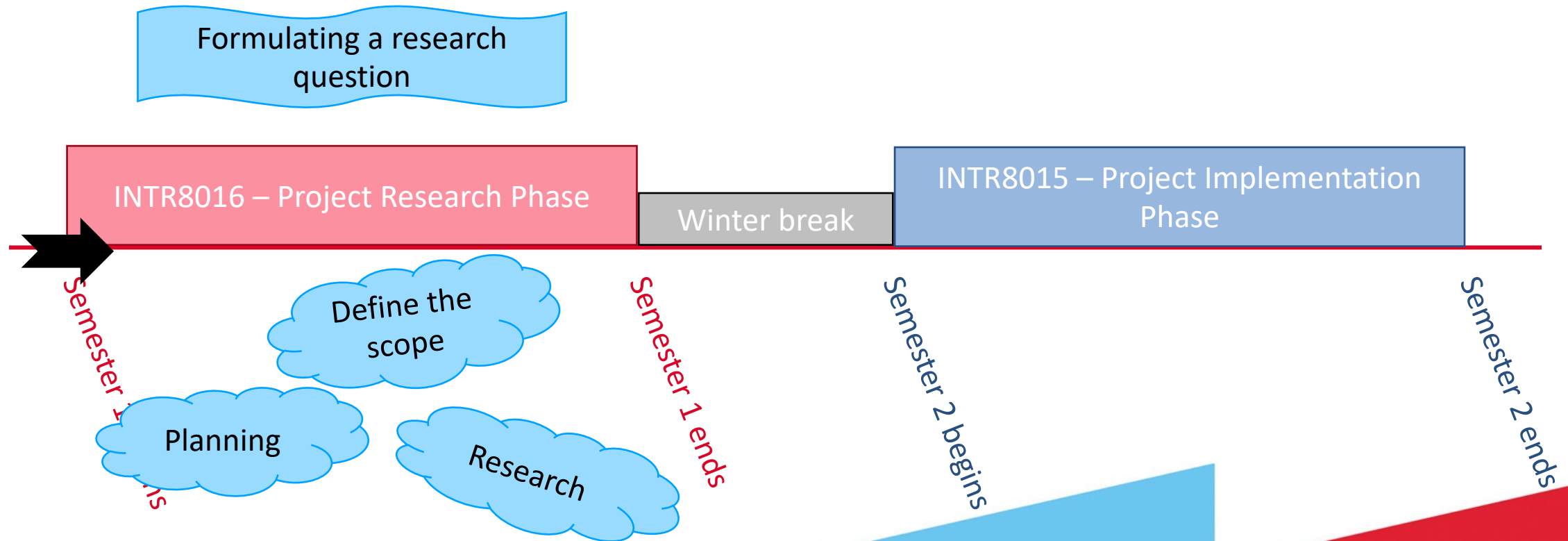 - Definition
  - MTU policy

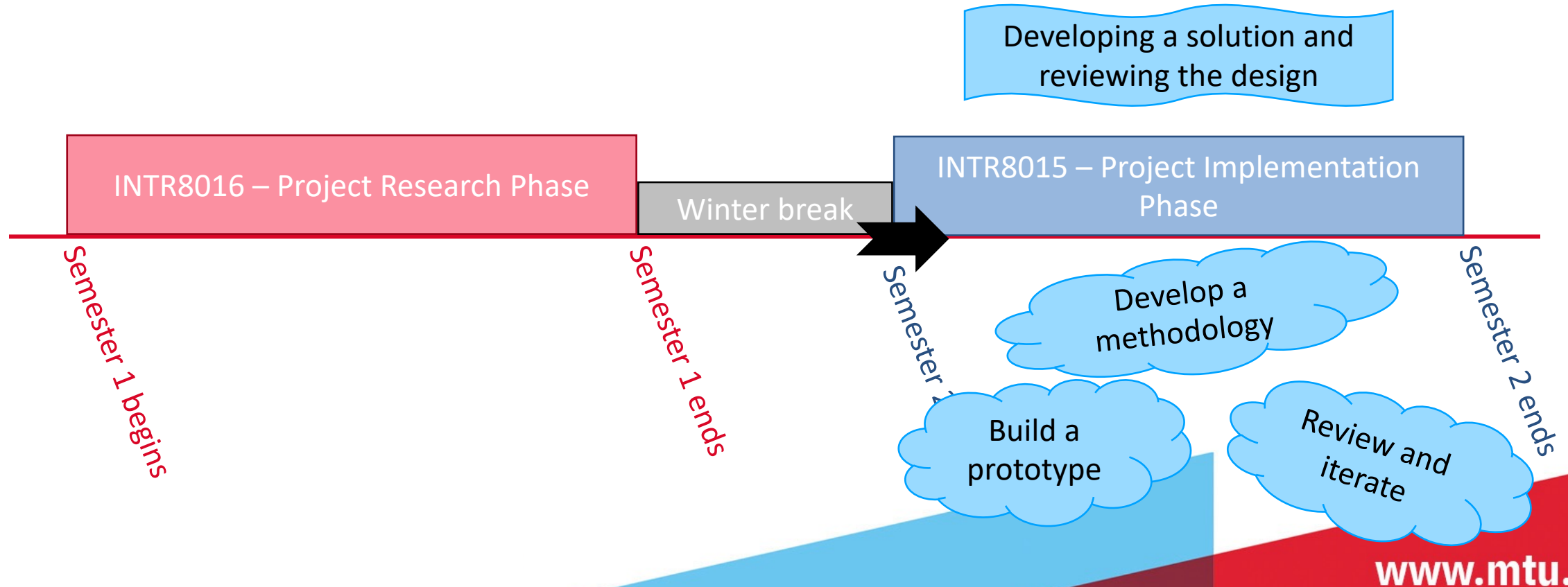# Project timeline
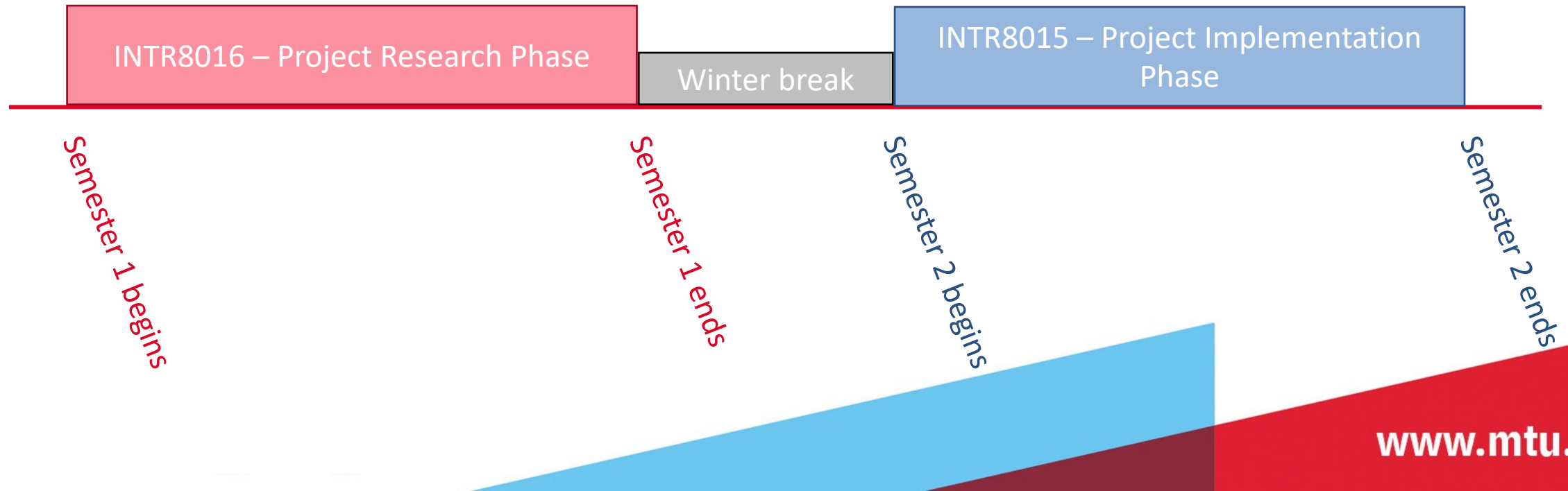
A high level view of your project progression

Project timeline

A high level view of your project progression

Formulating a research question

INTR8016 – Project Research Phase

Winter break

INTR8015 – Project Implementation Phase

Semester 1 begins

Define the scope

Planning

Research

Semester 1 ends

Semester 2 begins

Semester 2 ends

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Project timeline

A high level view of your project progression

Project outputs

Presentation

20% of grade

Written report

80% of grade

Initial supervisor meeting - Friday 23rd September
- At this point you should have arranged to speak with your supervisor and agreed on a set time to meet each week to discuss your project progress

Draft report submission - Friday 5th November
- Submit your first draft of your project report to your supervisor.
- This deadline is during reading week, so you will have a lot of time to ensure that your submission is of a high standard.
- By submitting a good project draft to your supervisor, you can get good quality feedback that will benefit your final report.

Final report submission - Friday 19th December
- Submit your final report on Canvas.

Learning outcomes and expectations

- **LO1** Undertake a comprehensive <u>review of relevant and appropriate literature</u> to determine current knowledge in the project area

- **LO2** Utilising professional skills developed throughout the curriculum, outline a number of <u>viable methodologies</u> to address the identified project area

- **LO3** Select the most likely methodology by exercising professional judgement in <u>evaluating potential courses of actions</u> against appropriate design, safety, commercial and ethical criteria

- **LO4** Develop a <u>project plan</u> to implement the proposed methodology

- **LO5** Demonstrate the appropriate written and oral <u>communication</u> skills required of the professional practitioner

15 minutes

Supervisor meeting

6 hours & 45 minutes

Independent research

Learning outcomes and expectations

- Self-motivated research which is supported by your supervisor
- Develop your project planning and execution skills together with your domain knowledge
- Communication will play a critical role –project assessment and when meeting with your supervisor
- Implementation plan – the work done this semester will lay the foundations for next semester

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Project scope

Ask yourself these questions...

- What can be achieved within the timeline?

- What topics will broaden your domain knowledge?

- Will you have access to the required resources?

Define your project priorities and understand the constraints.
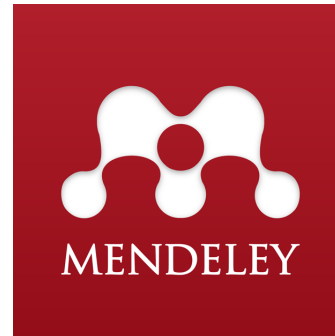
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Research resources

Literature resources

- *https://scholar.google.com*
- *https://ieeexplore.ieee.org*

Reference managers
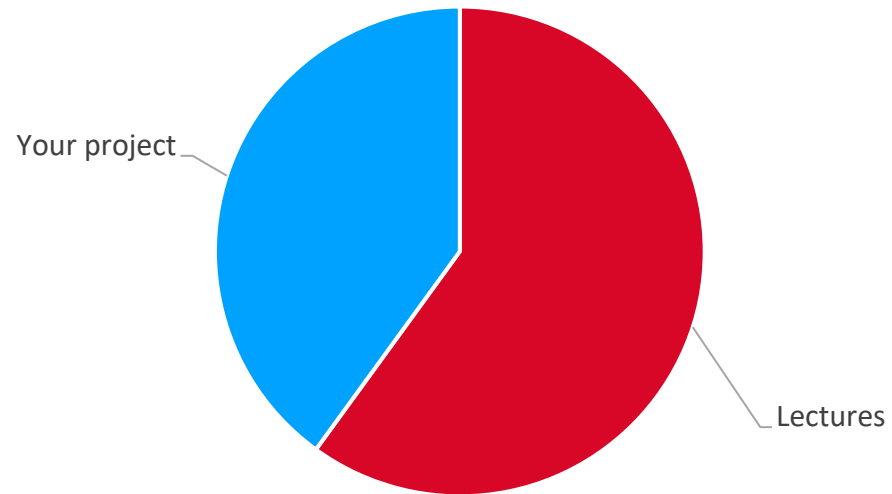
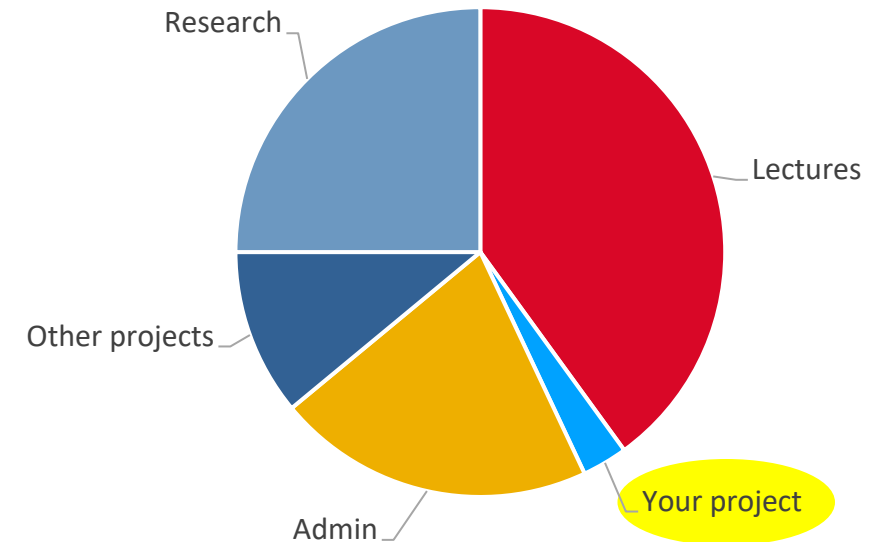- *https://mendeley.com*
- *https://endnote.com/*

Your supervisor

What you think about

What your supervisor thinks about

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Your supervisor

- You need to drive the research and pique their interest
- They will always be busy, so use your time wisely
  - Regular weekly meetings
  - Have an agenda
  - Short recap at the start
  - Email after the meeting
    - What did you agree on?
    - What are the designated tasks?
  - Write a weekly log

Future you will be super thankful

Agenda
1. What we discussed last time
2. Questions/issues
3. What will you do before next week's meeting?
4. Long term goals

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  - **Report writing resources**
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  - **LaTeX**

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  - Definition
  - MTU policy

Writing resources

Ensure that you are referencing all of your sources and stick to a specific style

- APA referencing style – <u>style guide here</u>
- IEEE referencing style – <u>style guide here</u>

Use simple, clear, professional language – <u>useful guide</u>, <u>useful guide</u>

- "The image, which is shown above, comprises of data from 60 unique individual tests which were performed."
- "The above image shows the results of 60 independent tests."

Explain jargon when you first introduce it

- The Central Processing Unit (CPU) requires a lot of power.

http://www.cs.toronto.edu/~miller/Research/writing.html

Project outline

Chapter by chapter outline – approx. 40-45 pages total

- Chapter 1: Introduction (About 3 pages)

- Chapter 2: Background (About 20 pages)

- Chapter 3: Problem - What do we want to do? (About 6 pages)

- Chapter 4: Solution Approach - How are we going to do what we want to do? (About 15 pages).

- Chapter 5: This chapter should comprise 2-3 pages and enumerate conclusions of this phase of work.

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- **Plagiarism**
  - **Definition**
  - **MTU policy**

Plagiarism

Plagiarism is the representation of another author's language, thoughts, ideas, or expressions as one's own original work.

Source: https://en.wikipedia.org/wiki/Plagiarism

Forms of plagiarism

- **Word-for-word plagiarism** (verbatim plagiarism) – direct copying of phrases or passages from a published text without quotation or acknowledgement

- **Paraphrasing plagiarism** (mosaic plagiarism) – when you copy bits and pieces from a source or several sources, changing words here and there without accurately paraphrasing or using quotations appropriately

- **Uncited Quotation** – when you fail to credit the author or the material and provide a trail for the author to follow back in your document

- **Plagiarism from secondary sources** – when original sources are referenced or quoted, but obtained from a secondary source text without looking up the original

MTU policy

To protect the values of academic integrity, many universities and colleges have developed policies to deal with standards of integrity and attempt to define plagiarism and specify its penalties.

MTU treats plagiarism extremely seriously.

MTU policy

The full policy can be found here

11.1 Possible Penalties for Plagiarism and Infringements

If the Institute determines that an infringement or instance of plagiarism has occurred a range of penalties may be applied. The possible penalties in order of severity are:

1.   mark of zero recorded for the assessment item (or part of assessment item) affected

2.   failure of module

3.   failure of the module, without right to be reassessed within the current academic year

4.   failure of the module, without right to be reassessed within the current academic year and without the right to progress to the next stage of the programme until the module in question is completed

5.   failure of the stage (i.e. student is required to repeat the stage in full)

6.   restriction of final award classification

7.   temporary or permanent suspension of studies

Tips for avoiding plagiarism

Report writing shouldn't be scary, if you follow this advice

- Reference your sources. Credit the original author in a citation.

- Keep track of the websites/papers/books/repositories that you consult throughout the project.

- Paraphrase, don't copy directly. If you are copying directly indicate clearly that it is a direct quote.

- Use a plagiarism checker before you submit your work.

Important dates 📅

📄 Information sessions	✅	⋮
📄 Submission deadlines	🚫	⋮

Timetable for information sessions

Week	Time and date	Session title
1	Friday 16/9 4pm	Final Year Project Introduction
2	Friday 23/9 10am	Library Information Session
3	Friday 30/9 4pm	Critical Literature Analysis Workshop
4		
5		
6	Friday 21/10 4pm	Technical Writing Skills Workshop
7	Friday 28/10 4pm	Informal Q&A session
		Reading Week
8		
9		
10		
11	Friday 2/12 4pm	Informal Q&A session
12		

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Best of luck!

Enjoy your project work. For more information, please contact Brian, Alison, or Noreen