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# FINAL YEAR PROJECT

## (CT61891)

**BRIEFING NO 1**  
(15<sup>TH</sup> MAY 2021)

**BTech in Quantity Surveying**

2017/18 B2  
Semester 6

*(May 2021 – February 2022)*



# 18 CREDIT POINT MODULE

# WHAT IS A RESEARCH PROJECT?

*Research is a systematic investigation into a **problem or situation**, where the intention is **to identify new facts and/or opinions** that will assist in solving the problem or dealing with the situation*

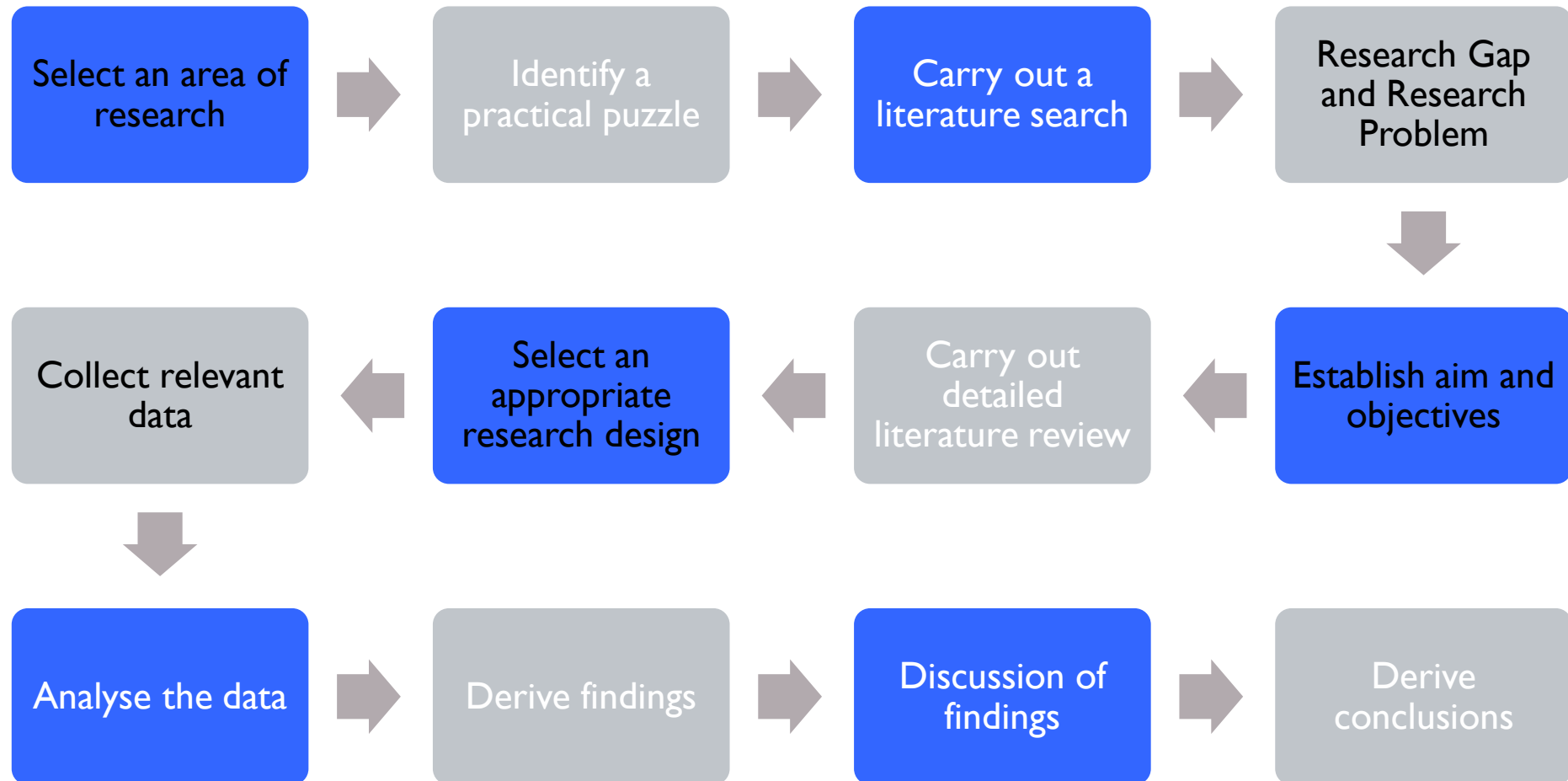
## Research can be undertaken for two different purposes:

1. To solve a currently existing problem (applied research)
2. To contribute to the general body of knowledge in a particular area of interest (basic/fundamental research)

## A research project:

- ❖ Unique
- ❖ Clear definition of scope
- ❖ Constraints of time, resources, and quality
- ❖ Have a beginning – middle - and end

# RESEARCH PROCESS



# LEARNING OUTCOME OF THE MODULE

- Plan, implement and conduct a programme of research
- Identify **a research problem** that is of current relevance to the construction industry by studying around diverse subjects and integrating them together to focus on a selected topic.
- Find, critically analyze and document underpinning **literature** relevant to a chosen research problem with your own views
- Select and apply an appropriate **research methodology** to derive conclusions for the research
- Demonstrate a substantive understanding of a chosen topic and the ability to form an **informed opinion on that topic**
- Communicate the research problem, literature review, methodology, data analysis, findings, discussion and conclusions in a scientific manner, demonstrating **academic written and oral communication skills**



## FROM RESEARCH METHODS MODULE TO FINAL YEAR PROJECT

- ❖ You will only use as much as you need from Research Methods module
- ❖ You are permitted to just cut and paste into Final Year Project
- ❖ Don't use anything that is no longer relevant
- ❖ You will probably need to find more literature
- ❖ You may probably need to find totally new topic

# ASSESSMENT SUBMISSION SCHEDULE

| Assessment No | Deliverables   | Mark (%) | Nature of the assignment                                       | Submission Date  |
|---------------|--|----------|--|--|
| 1             | Research proposal                                    | 10%      | A written report of approximately 2,000 - 3,000 words          | <b>Saturday 19<sup>th</sup> June 2021 by 12pm</b><br>(Week 6)<br>Online submission via LMS   |
| 2             | Interim PowerPoint Presentation                      | 05%      | 5 minutes PP Presentation + 5 minutes Q&A and feedback session | <b>Sunday 4<sup>th</sup> July 2021</b> (Week 8)<br>Time, venue/mode to be confirmed<br>(plus, online submission via LMS)           |
| 3             | Synopsis, Literature review and Research methodology | 20%      | A written report of approximately 3,000 – 4,500 words          | <b>Saturday 21<sup>st</sup> August 2021 by 12pm</b><br>(Week 15)<br>Online submission via LMS                                      |
| 4             | Dissertation (Soft-bound)                            | 35%      | A written report of approximately 6,000 – 8,000 words          | <b>Saturday 15<sup>th</sup> January 2022 by 12pm</b><br>Hard copy submission (Soft-bound)<br>along with online submission via LMS  |
| 5             | PowerPoint Presentation and Q&A Session              | 20%      | 10 minutes PP Presentation + 10 minutes Q&A session            | <b>Sunday 30<sup>th</sup> January 2022</b><br>Time, venue/mode to be confirmed   |
| 6             | Dissertation (Hard-bound) *                          | 10%      | A written report of approximately 6,000 – 8,000 words          | <b>Saturday 12<sup>th</sup> February 2022 by 12pm</b><br>Hard copy submission (Hard-bound)<br>along with online submission via LMS |

# HOW DO YOU APPROACH YOUR RESEARCH PROPOSAL?

- ❖ Refer back to the two assessments completed in the Research Methods module, two PP Presentations and the feedback you received for them.
- ❖ Are you satisfied with the research proposal you compiled previously?
  - ❖ Is it something worth researching?
  - ❖ Is it researchable?
  - ❖ Is your new dissertation supervisor comfortable with your proposed research?
  - ❖ Have you received a good and constructive feedback from the reviewers?
  - ❖ Is it improvable?
- ❖ If you can say YES to the above, you can continue with the previous proposal itself. Just tidy it up.
- ❖ Otherwise, you have to find a new topic.



# WRITING RESEARCH PROPOSALS:

## *THE BIG PICTURE*

Your proposal describes your proposed plan of work:

- **What** you intend to study (gap, research problem, research aim and objectives, scope)
- **How** you intend to study your topic (methodology)
- **Why** this topic needs to be studied (significance)
- **When** you will complete this work (timeline)
- (Occasionally) **Where** you will conduct this work

# PROPOSAL WRITING AND ANXIETY:

## *GENERAL ADVICE*

- Establish a writing schedule
- Begin by free-writing
- Keep a small notebook with you to write down relevant thoughts
- Save your writing into a computer with several back-ups saved into other devices
- Compose different parts in different computer files
- Start with more “clear cut” sections first

# CONTENTS OF RESEARCH PROPOSAL (I)

## 1. Research project title

## 2. Practical puzzle/problem and research background (Introduction)

- Gather needed literature
- State the background of the research topic, including current problems encountered
- Be analytical, summative, and keep balanced (neutral) view

## 3. A brief analysis of current knowledge on your topic.

- (Note: This will be expanded in the “Literature Review” chapter in your Final Year Research Project)

## 4. Research gap

- Need to identify the gap and demonstrate it is an important gap need to be filled.
- Why your research is important

## 5. Research problem statement

## 6. Research aim and objectives

- List 3 to 4 objectives

# CONTENTS OF RESEARCH PROPOSAL (2)

## 7. Research methodology

- Reasoning of the chosen methods

## 8. Significance, Innovations and Benefits

- To academia
- To industry

## 9. Research time plan

- Research process and schedule

## 10. The potential obstacles or limitations of your research (scope)

## 11.11. Structure of the thesis

## 12. References (note: must be up-to-date)

## 13. Appendices (if needed)

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Now that you know which articles are relevant to your topic, I suggest you do this for the relevant journal articles that you have read for your Assignment 1.

| Paper title | Author(s) | Year of Publication | Journal/Source | Research methodology | Key facts/ideas/figures | Remarks/Comment |
|-------------|-----------|---------------------|----------------|----------------------|-------------------------|-----------------|
|             |           |                     |                |                      |                         |                 |
|             |           |                     |                |                      |                         |                 |

Compare the way they use the method and perhaps you can adopt one of their methods or select your own.

# RESEARCH PROJECT TITLE

- Orient your readers to your research topic.
- Indicate the type of study you will conduct.

## Examples:

- Review on Sustainable Building Design and Construction Practices in the Rural Context: The Case of Building Ampara, Sri Lanka
- Analysis of Health and Safety (H&S) Challenges Confronted by Foreign Workers in the Malaysian Construction Industry

## **PRACTICAL PUZZLE/PROBLEM AND RESEARCH BACKGROUND (INTRODUCTION)**

- Establish the general territory (real world or research).
- Describe the broad foundations of your study—provide sufficient background for readers.
- Indicate the general scope of your project.
- Provide an overview of the sections that will appear in your proposal (optional).
- Engage the readers.

# A BRIEF ANALYSIS OF CURRENT KNOWLEDGE ON YOUR TOPIC (I)

- Situates the current study within a wider disciplinary conversation.
- Illustrates the uniqueness, importance of and need for your particular project.
- Demonstrates familiarity with the topic and appropriate approaches to studying it.
- An effective literature review should:
  - Flesh out the background of your study
  - Critically assess important research trends or areas of interest
  - Identify potential gaps in knowledge
  - Establish a need for current and/or future research projects



# A BRIEF ANALYSIS OF CURRENT KNOWLEDGE ON YOUR TOPIC

## (2)

- Categorize the literature into recognizable topic clusters:
  - build on conclusions that lead to your project,
  - demonstrate the places where the literature is lacking
  - stake out the various positions that are relevant to your project,
- Avoid “Smith says X, Jones says Y” literature reviews
- Avoid including all the studies on the subject
- Avoid attacks, praise, and blame
- You are entering a scholarly conversation already in progress. The literature review shows that you’ve been listening and that you have something valuable to say.
- After assessing the literature in your field, you should be able to answer the following questions:
  - Why should we study (further) this research topic/problem?
  - What contributions will my study make to the existing literature?

## RESEARCH GAP

- Once you have outlined the existing knowledge you will be able to identify the gaps in the area that you are planning to research.
- A research gap emerges within a topic or area for which missing information or insufficient information limit the ability to reach a conclusion for a question or problem.
- You could sense a gap in what you are reading, something that is not addressed that you think should be. It may be a gap in the author's arguments or it may be a contradiction between the authors and you.

## RESEARCH PROBLEM STATEMENT

- Consider framing the problem as a question: “What is the problem that needs to be solved?”
- State the problem clearly early in a paragraph.
- Limit the variables you address in stating your problem.

## RESEARCH AIM & OBJECTIVES

- Identify the aim and research objectives of the study.
- Be clear about what your study will not address.
- In addition, this section may:
  - Describe the hypotheses of the study.

# RESEARCH METHODOLOGY

- Introduce the overall methodological design
- Indicate the philosophical underpinning of the research
- Indicate how the approach fits the overall research design
- Describe the specific methods of data collection
- Explain how you intend to analyze and interpret your results (i.e. statistical analysis, theoretical framework)
- Provide background and rationale for selection of methodologies
- Address potential limitations

## **SIGNIFICANCE, INNOVATIONS AND BENEFITS**

- Show the original contributions of your study - Discuss the methodological, substantive, and/or theoretical contribution.
- State the practical and/or theoretical importance of the problem and/or aim of your study.
- Explain how innovative your research is.
- Explain the usefulness or benefits of the study to both the outside world and the research community.

# RESEARCH TIMELINE

## Some things to keep in mind:

- Consult your tutor/supervisor
- Be aware of important dates for submitting and defending dissertation.
- Do not be overly ambitious.
- Remember that your proposed timeline demonstrates your awareness of the various elements of the study.

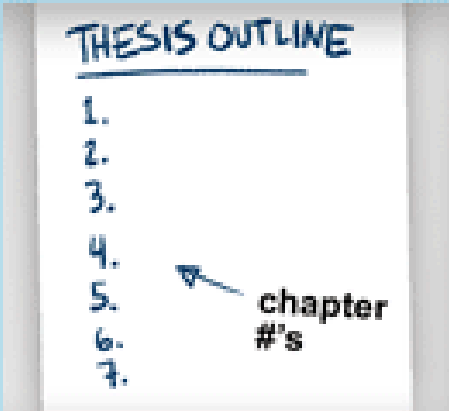
# STRUCTURE OF THE DISSERTATION

## OVERVIEW OF CHAPTERS

### WRITING YOUR THESIS OUTLINE

NOTHING SAYS "I'M ALMOST DONE" TO YOUR ADVISOR/  
SPOUSE/PARENTS LIKE PRETENDING YOU HAVE A PLAN

**STEP 1** Aim for a respectable number of chapters:



5 = "That's IT??"  
6-7 = "Not bad"  
8+ = "Are you crazy??"

**STEP 2** Fill in the "freebies":

**THESIS OUTLINE**

1. INTRODUCTION
2. LIT REVIEW
3. METHODOLOGY
- 4.
- 5.
- 6.
7. CONCLUSIONS

You're half way done!

**STEP 3** Make up titles for the "meat" chapters:

2. LIT REVIEW
3. METHODOLOGY
4. (THAT STUFF YOU DID YOUR FIRST YEAR)
5. (STUFF YOU'RE SUPPOSED TO BE DOING NOW)
6. (MAKE STUFF UP)
7. CONCLUSIONS

(It'll be years before you actually have to work on that later chapter, and by then your thesis topic will have changed anyway)

**STEP 4** Voilà! You just bought yourself another two years



So, how's your thesis going?

i have an outlined!

JORGE CHAM © 2006



## REFERENCES & APPENDICES

- Include working references of key texts that inform your study and methodology.
- Your appendices may include Diagrams, Tables etc.
- Both references and required appendices tend to be discipline specific: know what the requirements are – In this case – HARVARD style

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IMPROVE YOUR  
SKILLS!

# FURTHER NUTS & BOLTS (I)

- Length
  - 2000 - 3000 words not including references
- Style Considerations
  - Tone:

When conveying your attitude in your writing:

    - Try to strike a consistently confident tone.
    - Avoid an apologetic or arrogant tone.
  - Coherence
    - Move from “**old**” information to “**new**” information.
    - Put the most important information at the end of the sentence (stress position).
    - Keep the subject and verb together.
    - Start sentences with **short, easily understood phrases**.
    - Use “**standard**” **transitional phrases**.
- Voice
- Visual Aids
  - Incorporate charts, graphs, diagrams, illustrations, etc., wherever possible, permissible, or practical.

## FURTHER NUTS & BOLTS (2)

### STYLE CONSIDERATIONS - COHERENCE

#### Example:

When rocks erode, they break down into sediment—smaller pieces of rock and minerals. These sediments may eventually travel in water to new sites such as the sea or river beds. The water deposits the sediments in layers that become buried and compacted. In time, the sediment particles are cemented together to form new rocks, known as sedimentary rocks. The layers of sediment in these rocks are often visible without microscopes. (Lay et al., 2000).

## FURTHER NUTS & BOLTS (3)

### VOICE

- Active: I will conduct the bulk of the research during the six-month fieldwork period.
- Passive: The bulk of the research will be conducted during fieldwork.

Reasons to use Passive Voice:

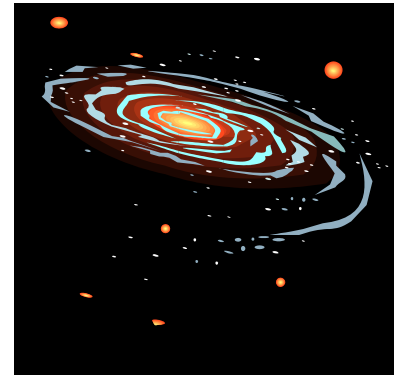
- Your field may prefer its use, especially in describing research design and experimental activities.
- You need to preserve coherence from sentence to sentence.

## FURTHER NUTS & BOLTS (4)

### VOICE

#### EXAMPLE (USING PASSIVE VOICE TO CREATE COHERENCE)

Some astonishing questions about the nature of the universe have been raised by scientists studying black holes in space. A Black Hole *is created by* the collapse of a dead star into a point perhaps no larger than a marble. So much matter compressed into so little volume changes the fabric of space around it in puzzling ways.



# DEVELOPMENT OF RESEARCH PROPOSAL

- ***Are you ready?***

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Demonstration of RESEARCH is  
important  
– not TOPIC



## FOR THOSE WHO NEEDS A NEW TOPIC.....

- Yes, that is possible. Please talk to your supervisors about that.

# YOU & YOUR SUPERVISOR

## ■ Role of student

- Have regular meetings
- Prepare for supervisory sessions
- Keep a record of supervisory sessions
- Keep in regular contact
- Submit regular progress reports and drafts of your work
- Discuss your working relationship
- Keep supervisor informed of your progress
- Be diligent, meet agreed deadlines and respect the multiple demands on your supervisor's time

## ■ Role of supervisor

- Should direct your work so that it is executed in a competent and scholarly manner
- Should guide you in the right direction
- Should assist you to meet set milestones and complete your study within set timeframes.
- Will help you develop research skills
- Will meet ethics and compliance requirements
- Will review submissions and progress

# SUPERVISOR ALLOCATION

**They are the best!**





# HINTS

- ❖ Meet with your supervisor weekly
- ❖ Increase meetings as required
- ❖ Make sure you understand the literature (current knowledge)
- ❖ And .....



# QUESTIONS FOR YOURSELF

- ❖ Do you know how to search literature?
- ❖ Do you know how to do referencing?
- ❖ Have you been to a proof reader and other knowledgeable researcher with your research proposal from the previous module?



RAISE YOUR QUESTIONS WITH  
YOUR SUPERVISOR OR  
COORDINATOR



## NEXT BRIEFING SESSION

- ❖ Week 07 – unless you need it pre-break
- ❖ I will provide a session if you need guidance – let me know by e-mail (or if all of you are asking me the same question)
- ❖ Thorough overview of literature review