

# RESEARCH PROPOSAL - PRESENTATION AND FORMAT GUIDELINES

## BOARD OF ADVANCED STUDIES AND RESEARCH

### RESEARCH PROPOSAL TEMPLATE FOR M.Sc/MS THESIS

University of Engineering and Technology, Peshawar, Pakistan



Congratulations on fulfilling your requirements for the application of your research proposal. This phase should be completed in a timely manner to ensure that you can get on with your research and thesis writing. The research proposal is your opportunity to plan your research and present this plan to your department's Project Research Evaluation Committee (PREC) members, to convince the PREC members and the university that the research has merit and should be supported.

In order to have clear understanding of your research proposal it is essential that the proposal be written in plain language, brief, defining technical terms and not assuming any prior knowledge of the research committee. The proposal will proceed to the Board of Advanced Studies and Research (BOASAR) for consideration and approval. Sometimes revisions will be requested before the proposal can be finally approved. Do not be discouraged by this. Critical peer review is a normal part of the academic process and does not imply that you do not have the ability or your research will not be successful. It is simply a way of ensuring that the foundations for your research are as sound and strong as possible. Comments received from the committee needs to be reflected in amendments or redrafting as agreed with them.

We aim to ensure that you complete your thesis with the minimum of amendments and the most positive assessment by examiners. Approval of your research proposal is the first step on the journey to achieving an excellent outcome from your research leading towards the award of degree in the relevant field.

### **The Appropriate Length of a Research Proposal**

A good research proposal is as long as it takes, but a guide would be 1500-2500 words. Remember that it is meant to be an accurate overview, not a thesis, so you need to provide enough detail for the reader to understand it. Follow 3C's rule (i.e. Clear, Concise and Coherent).

Finally, remember that a research proposal instantly reflects your potential competence to undertake graduate studies effectively. A proposal is ultimately about your ability to demonstrate that you are capable of M.Sc/MS study, so you should put time and effort into it.

## **Instructions**

1. All headings in Time New Romans (font size 14, bold, non-italic), subheading should be in Time New Romans (font size 13, bold, non-italic), and rest of the text in Time New Romans (font size 12, regular, non-italic). All text should be justified with line spacing 1.5. Page Size: A4 with margins 1" on all sides.
2. Only the proposals submitted according to the given framework and formatting will be entertained by the BOASAR office.

## **Note**

At least one research publication/presentation from the proposed research (in a reputed national or international conference/journal) is mandatory to fulfil one of the requirements for the award of the degree.

**Proposal Title:**



**M.Sc/MS Thesis Research Proposal**

For

M.Sc/MS in (Write your field of specialization here)

Department of (Write name of your department here)

**Submitted By**

Write student name here

**Supervisor**

Write supervisor name here

BOARD OF ADVANCED STUDIES AND RESEARCH  
University of Engineering & Technology, Peshawar, Pakistan



**UNIVERSITY OF ENGINEERING AND TECHNOLOGY,  
PESHAWAR, PAKISTAN  
M.SC/MS THESIS RESEARCH PROPOSAL**

Proposal Title	
Department and Specialization	
Student Name	
Father's Name	
Contact No.	
Email	
Registration No.	
Date of Registration in the Program	
Research Supervisor	
Co-supervisor (if any)	

**Courses Studied**

S. No.	Course No. and Name	Grade
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
		<b>CGPA</b>

## **1. Summary**

Write a brief summary/abstract of your research proposal listing the background, problem statement, objectives, project plan and expected outcomes. The summary should be maximum two paragraphs and 300-400 words long.

## **2. Introduction**

Should be brief and to the point introduction of the research area. Give a brief contextual background to your study. Set the stage for your study. Briefly tell us why this study should be done. Use the proper referencing techniques preferably using EndNote or any other available referencing software. In the introduction, you should use evidence (facts, figures, and works by other authors) to convince us that your chosen research topic is:

Relevant

Not already over-researched

Feasible (in terms of scope, resources and a time frame))

## **3. The Problem Statement**

Clearly state the problem, arising from your background given above, which you have to solve in the proposed research. The problem statement is a concise description of the research question that needs to be addressed. The research problem is your compass for the rest of the steps to follow.

## **4. Aims and Objectives**

Aims and objectives are the foundation on which the entire project is constructed, so they need to be sturdy and durable. No paragraphs are generally required. Write aims and objectives using brief and crisp bullet (or numbered) statements. Make sure to include how the proposed research will be validated.

## **5. Scope/Significance of the study**

Explain the benefits of the research in terms of novel contribution to the repository of knowledge that can be disseminated to the academic community and more broadly to address an important problem and its possible solution for a particular section of the community, such as industry. Answer the following questions: Why is this study being undertaken? What is the possible contribution of this study: scientific, policy, a program, practical contribution?

## **6. Literature Review**

A literature review is an account of what has been published on a topic by accredited scholars and researchers in peer reviewed Journal papers, books and may be from well-reputed conferences organized by renowned societies in the respective discipline of study. The purpose of the literature review is to identify what past research has been carried out and how it links to your research problem. For this purpose, search the relevant cutting-edge research papers through a proper database. The literature review also introduces the theoretical or experimental framework for the study. You will need to:

- Identify theoretical/background literature relevant to the proposed area of research.
- Analyze critically the major literature items you have identified.
- Indicate any gap(s) within the literature, in the knowledge or approaches to the field.
- Indicate how your research relates to and extends the existing literature, showing that your research topic has not been undertaken. Be specific in selection of your research literature.

All the references are required to be cited in literature review section in square brackets e.g. Ali [1], for single author where Ali is his last name. Ajmal and Afzal [2] for two authors with their last names separated by 'and'. Similarly, if the number of authors are more than three, then use Gul *et. al.* [3] where Gul is the last name of the first author. Follow the rule of Cite While You Write (CWYW) and do not let it to be completed at the end. All citations must be accompanied by their relevant completed references list at the end of the proposal. Use of any citation manager software will automatically accomplish the above formatting and autogenerated references list. Finish this section with a one-paragraph summary of the "knowledge" gap you have identified.

Please keep in mind that literature review is **NOT** a list of articles followed by a short summary of what they are about

## 7. Research Methodology

The research methodology covers the methodology for collecting and analyzing information, and the experimental part of the research. The methodology section should identify what data is intended to be collected, how it is to be gathered and how it is to be analyzed. The proposed method(s) to be used for the study should be explained and justified. That is, you need to explain how and why the method is appropriate for the study, and how it is feasible. Any sampling techniques and justification of sample size should be described and justified where appropriate.

This section should include the following:

- Any theoretical Studies: Write about the theoretical studies required.
- Experimental Set Up: Describe about the experimental setup for the proposal.
- Method of Analysis: Discuss the method of analysis to be used for the proposed research.
- Flow chart of how the methodology will be carried out. If possible, outline different phases of your study and how the completion of one phase leads logically into the next. This should match with your timeline defined in the Gantt Chart.

**For Tables use the following format:**

The Tables captions/titles should be above the table as shown below. The data in tables may not be a repetition of the Figures.

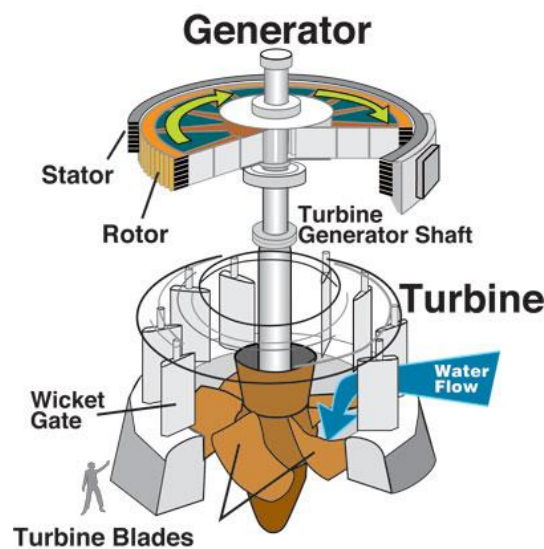
**Table 3:** SPI values for drought classification (Reference if any)

S. No.	Classification	SPI value
1	Extreme wet	$\geq 2.00$
2	Severe wet	1.50 to 1.99
3	Moderate wet	1.00 to 1.49
4	Mild wet	0.50 to 0.99
5	Normal	0.49 to $-0.49$

6	Mild drought	-0.50 to -0.99
7	Moderate drought	-1.00 to -1.49
8	Severe drought	-1.50 to -1.99
9	Extreme drought	$\leq -2.00$

**For Figures use the following format:**

Paste high resolution diagram in picture format with clear and readable labelling. The figure caption/title as shown should be below the figure. The figures should not repeat the data or statistics available in the Tables.



**Figure 4.1:** Turbine demonstration (Reference, if any)

## 8. Expected Results and their Utilization:

Include the following in this section:

- Result Expected: Write down the expected outcome from your research here
- Utilization of Research Results: Write about the expected utilization of result results.
- Indicate how your study will address the aims and objectives of the project that you have identified in the previous sections. Express how your findings can be generalized.



## **9. Experimental Setup/Equipment Required:**

In this section mention how the equipment/software/experimental setup required will be arranged. For example, the required experimental setup is present in our university or some other organization's setup will be used or funding is required for acquiring equipment for the execution of the proposed research.

Are facilities available for the work?	Yes or No?
(Print details here)	
Additional facilities required give details.	Yes or No?
(Print details here)	

## **10. Budget:**

Write about the expected costs of the proposed research. You may budget up to Rs. 30,000 for funding the research project from BOASAR.

Itemized Expenses: (details of expenditure).	
Item	Cost
Total Rs:	

Expenditure on only those items which become the property of the Department will be met by the University. To name some of them:-

- i. Books. Journals, photocopying charges from a book which is not available in our libraries (the book will be registered in the library stock and then issued to the scholar).
- ii. Equipment, material and other such things which the supervisor/Chairman/Secretary BOASAR, deem fit to be purchased by the University.
- iii. Expenses on preparation/printing of thesis will not be paid by the university.
- iv. Labor charges and any travelling allowance is are not permissible.
- v. Chairman/Postgraduate Advisor will ensure that the materials/equipment bought for the project shall be retained in the department.

## 11. Work Schedule Plan:

Proposed starting date	Print date here
Expected date of completion	Print date here

Include a plan of expected progress in Gantt chart form. A sample is provided below:

Activity	201?				201?			
		October	November	.....	January	....	.....	
Literature Collection								
Literature Review								
Phase 1								
Phase 2								
Phase 3								
Thesis Write up								
Submission								

## 12. References:

Only include references that are mentioned in this document. To have consistency in citation and references list, the citation can be made through available citation managers like EndNote, Mendeley, Zetero, ReadCube, Papers, and RefWorks. Using the references managers, will automatically generate the references list which avoids any inconvenience faced during manual entry of the same.

Use the following format (or similar to this) for references. The one used here is from Endnote -Earth Sci Rev

### Example Journal Paper:

Waseem, M., Ajmal, M. and Kim, T.-W., 2015. Development of a new composite drought index for multivariate drought assessment. *Journal of Hydrology*, 527: 30-37.

Basharat, M., Ali, S.U. and Azhar, A.H., 2014. Spatial variation in irrigation demand and supply across canal commands in Punjab: a real integrated water resources management challenge. *Water Policy*, 16 (2): 397-421.

### Example Conference Paper:

Raja, G. and Mirza, M.J., 2004. Performance comparison of advanced video coding H.264 standard with baseline H.263 and H.263+ standards. In *Proc. 4<sup>th</sup> IEEE International Symposium on Communications & Information Technologies, ISCIT 04*, Sapporo, Japan, 743–746.

### Example Book:

Iain, E.G.R., 2003. *Video Codec Design*, Great Britain, John Wiley & Sons ISBN: xx-yyy-zzzz.

### Example Web Link:

MPEG Software Simulation Group, 2004. The MSSG homepage, available on-line at <http://www.mpeg.org/MPEG/MSSG> (Access Date 12-05-2019).

## **Undertaking**

I certify that research work titled “*enter title of your research proposal here*” is my own work. The work has not, in whole or in part, been presented elsewhere for assessment. Where material has been used from other sources, it has been properly acknowledged/referred.

Signature of Student

Name of Student

Registration Number

Print the project title and your Name here as a header on every page of the document

	Name	Signature and Date
<b>Student</b>	Write student name	
<b>Supervisor</b> Remarks:	Write supervisor name	
<b>Recommendation of the Post-Graduate Advisor</b> Remarks:	Write name of Postgraduate Supervisor	
<b>Recommendation and Signature of Project Research Evaluation Committee (PREC):</b> Remarks:	Write name of Member 1	
	Write name of Member 2	
	Write name of Member 3	
<b>Approval by the HOD</b> Remarks:	Write name of the HOD	
<b>Recommendation of the Secretary BOASAR</b>	Write Name of the Secretary BOASAR	
<b>Recommendation of the Dean of faculty .....</b>	Write name of the Dean of Faculty	
<b>Approval by the Vice Chancellor</b>	Write Name of the Vice Chancellor	