



Bridge Course

Research Attitude Development

Class: BE – EXTC (A&B)

Gap Identification:

- Lack of research awareness, importance and means and ways to pursue research
- Lack of research attitude and motivation to pursue research
- Lack of basic understanding of subject area and different approaches to solve particular problems.
- Lack of updated knowledge and or information in the chosen area and literature survey to find the research gap.
- Inadequate knowledge on how to define research problem, methodology to be used, planning and means to be used for analysis of the outcomes.
- Lack of knowledge to publish research and its importance, and writing an ethics submission, patents and other aspects.

Course Description:

Provides an overview of the steps involved to design and develop research project starting with problem definition and required literature survey, through to key issues of research design and choices of methodology, planning and analysis and writing an ethics submission. Key underpinning principles of validity and reliability will be emphasized. Both quantitative and qualitative methodologies will be discussed, including critical appraisal of relevant published research papers.

Prerequisites:

Final Year subjects of Electronics and Telecommunication Engineering.

Learning Objectives:

Student shall

1. Conduct Literature Survey
2. Plan the Proposed Work
3. Design, implementation, testing and analysis
4. Derive Results, means to validation the results.
5. Extract Conclusion

6. Potential area for Future Scope and or extension of proposed method for particular application.
7. Publish a paper

Learning Outcomes:

Student will be able to

1. Define research problem
2. Write a literature survey
3. Write Plan to execute proposed work
4. Write project analysis and planning
5. Write the derived results
6. Write the extracted Conclusion
7. Write the future scope of research
8. Publish a paper

Details for Course Conduction:

Sr.	No. of Hours	Date		Units Covered
		BEEEXTC A	BEEEXTC B	
1	08			Introduction What is research? Its importance and scope How to do research?
2				Literature Survey How to conduct a literature survey?
3				Proposed Work Problem definition Scope of the proposed work
4				Analysis and Planning chronological action plan
5	08			Results Results including calculations, tables and figures. Different ways and means to validate the results. Justification and comparison with the existing work
6				Conclusion Summarize the result and conclusion based on the results



7			Potential area for Future Scope and or extension of proposed method for particular application.
8			Paper/ Report Writing
9	04		Publish a paper

Digital Reference:

1. https://onlinecourses.nptel.ac.in/noc16_ge01/preview
2. <https://www.coursera.org/>
3. https://en.wikipedia.org/wiki/Main_Page

Faculty Coordinators:

HOD-EXTC

Sd/-

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Dr. Sujata Kulkarni
Mr. Manoj Chavan

Dr. Vinitkumar Dongre



Publication of the Systematic Review

- Currently research gap identification and description is quite general in AHRQ reviews.
- Examination of the review for gaps may occur at the draft stage. – Engagement too early may lead to revisions if the review is modified.
- The team generating and prioritizing the research gaps may be somewhat different from the team conducting the review. – FRN team should include members with expertise in study designs specific to the content area.