



Additional Research Policy Guidelines



Dr. Ambedkar Institute of Technology, Bengaluru – 56

Research and Development Centre

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Approved of Research Policy.

1 Guidelines for preparing the Project Proposals:

1.1 Introduction:

Begin with a clear and concise introduction that outlines the purpose of your project. Clearly state the societal issue you aim to address if the project falls under this category

1.2 Background and Rationale:

- Provide background information of the project, explaining its significance and relevance to the society.
- Justify why addressing this issue is important and highlight the potential positive impact of your project.

1.3 Objectives:

- Clearly define the specific objectives of your project. What do you hope to achieve in this project.
- Ensure that your objectives are measurable, achievable, and aligned with the overall goal of the project.

1.4 Scope and Deliverables:

- Define the scope of your project, including the geographical area, target audience, and the duration of the project.
- Clearly outline the deliverables you expect to achieve by the end of the project.



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1.5 Methodology:

- Describe the approach and methods you plan to use to achieve your objectives.
- Include details about any research, surveys, or data collection methods you will employ.

1.6 Technology and Innovation:

- If applicable, highlight any technological innovations or engineering solutions that will be employed in your project.
- Explain how these technologies contribute to the effectiveness and sustainability of your project.

1.7 Budget:

- Provide a detailed budget for your project, including estimated costs for materials, equipment, salary of personnel, and any other relevant expenses.
- Clearly indicate if you are seeking funding and, if so, how much.

1.8 Timeline:

- Develop a realistic timeline that outlines the key milestones and activities of your project.
- Ensure that the timeline aligns with the duration of the project and the deadlines for specific deliverables.

1.9 Partnerships and Collaborations:

- Identify any potential partnerships with other organizations, NGOs, or local authorities that can support or enhance the quality of project.



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- Highlight the benefits of these collaborations and how they contribute to the success of the project.

1.10 Community Engagement:

- Explain how you plan to engage with the community and ensure their participation throughout the project, if such and this is envisaged.
- Demonstrate that your project respects the cultural, social, and economic context of the community.

1.11 Sustainability and Impact Assessment:

- Discuss how your project will be sustained beyond its initial implementation.
- Describe the methods you will use to assess the impact of your project on the community.

1.12 Risk Assessment and Mitigation:

- Identify potential risks that could impact the success of your project.
- Propose strategies to mitigate these risks and ensure the smooth implementation of your project.

1.13 Ethical Considerations:

- Address any ethical considerations related to your project, ensuring that it respects human rights, environmental concerns, and other ethical principles.



1.14 Conclusion:

- Summarize the key points of your proposal and reiterate the importance of your project in addressing the identified societal issue.

1.15 Appendices:

- Include any additional documents or supporting materials, such as letters of support, relevant research, or detailed project plans.
- By following these guidelines, you can create a comprehensive societal project proposal that effectively communicates your ideas and plans to the relevant stakeholders.

2 Types of Project Proposals

In an engineering college, students often engage in a variety of projects that span different disciplines and industries. The types of project proposals can vary based on the specific focus, goals, and requirements of the project. Here are several types of project proposals commonly encountered in engineering colleges:

2.1 Research Proposal:

- Focuses on conducting original research in a specific field of engineering.
- Outlines the research question, objectives, methodology, and expected outcomes.

2.2 Design and Development Proposal:

- Involves designing and developing a new product, system software, or solution.



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- Describes the design process, materials, and technologies to be used.

2.3 Community Outreach or Social Impact Proposal:

- Aims to address societal issues or contribute positively to the community.
- Outlines the project's social impact, objectives, and community engagement strategies.

2.4 Environmental Sustainability Proposal:

- Focuses on projects that promote environmental sustainability and conservation.
- Includes details on eco-friendly technologies, energy efficiency, or waste reduction.

2.5 Software Development Proposal:

- Involves developing software applications, algorithms, or systems.
- Describes the software development life cycle, programming languages, and functionalities.

2.6 Infrastructure Development Proposal:

- Concentrates on the planning and construction of physical infrastructure.
- Includes details on materials, construction methods, and project management.

2.7 Renewable Energy Proposal:

- Aims to harness and utilize renewable energy sources.



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- Describes the type of renewable energy (solar, wind, etc.) and the technology involved.

2.8 Process Improvement Proposal:

- Focuses on optimizing existing processes within an organization or industry.
- Outlines the current process, identifies inefficiencies, and proposes improvements.

2.9 Feasibility Study Proposal:

- Assesses the viability and practicality of a particular project or idea.
- Includes market research, cost analysis, and risk assessment.

2.10 Robotics and Automation Proposal:

- Involves designing and building robotic systems for various applications.
- Describes the robotics technology, control systems, and applications.

2.11 Biotechnology Proposal:

- Focuses on projects related to biotechnology applications.
- Describes genetic engineering, bioinformatics, or biomedical research.

2.12 IoT (Internet of Things) Proposal:

- Involves the integration of IoT technologies into various systems.
- Describes the IoT devices, sensors, and data analytics involved.



2.13 Telecommunication Proposal:

- Focuses on projects related to communication systems.
- Describes the telecommunications technology, network design, and protocols.

2.14 Aerospace or Aeronautical Proposal:

- Concentrates on projects related to aircraft or spacecraft.
- Describes the design, propulsion systems, and aerodynamics.

2.15 Healthcare Technology Proposal:

- Involves the development of technologies for healthcare applications.
- Describes medical devices, telemedicine solutions, or health informatics.

2.16 Cybersecurity Proposal:

- Focuses on projects related to securing digital systems and networks.
- Describes cybersecurity technologies, encryption methods, and threat analysis.

2.17 Humanitarian Engineering Proposal:

- Aim to address global challenges and improve living conditions in underserved communities.
- Includes social, economic, and technological aspects of the proposed solution.

When preparing a project proposal, it is important to tailor the document to the specific requirements of the project and the



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expectations of the faculty or institution overseeing the project. Each type of proposal will have unique considerations and components based on the nature of the project and the engineering discipline involved.

3 Expert Committee for Evaluation of the Project and Approval of the Project:

The following internal committee is constituted by the former Secretary:

1. Dr. Sooryanarayana, HOD, Maths, Chairman of the Committee
2. Dr.Vijayakumar, Dean(FA), Member of the Committee
3. Dr.T.N.Raju, HOD, Mechanical Engineering, Member of the Committee
4. Dr.C.R.Mahesh, Assistant Professor, Department of IEM, Member of the Committee

Signature of the Dean(R&D)

Signature of the Principal