

Ajeenkya DY Patil School of Engineering, Lohegaon, Pune.



Final Year Project

Standard Operating Procedure

SoP No: SoP/ 2019 /2.5.1



Vision

Empowerment through quality technical education

Mission

M1: To achieve excellence in teaching, learning and research

M2: To impart skill based education to meet the needs of industry and Society

M3: To excel as a center of excellence in technical education

M4: To inculcate social & ethical values among the students

Quality Policy

We strive to impart the quality technical education through academic excellence and provide best of facilities to satisfy the need & expectations of the students & stakeholders.

Final Year Project

Standard Operating Processes (SoPs)

1. Selection & Allotment Project Coordinator

Consider faculty members with a minimum of 5+ years of experience as Project Coordinator who has a track record of successful project supervision and mentoring.

2. Form Groups of Students and Decide Unique Name (*Format Attached*)

- a. Form groups consisting of 3-5 students each as per SPPU guidelines.
- b. Grant students the autonomy to select their group members.
- c. Allocate sufficient time for students to discuss and establish their groups.
- d. Foster an environment where students contemplate their strengths, weaknesses, and compatibility with potential group members.
- e. Once groups are formed, request each group to provide the names of their members. This information can be collected on paper, through an online form, or using a spreadsheet.
- f. Instruct each group to devise a unique team name. g. Stimulate creativity and remind students to choose a name that is appropriate and respectful. **The unique names for examples** - The Achievers, The Visionaries, The Mavericks, The Dream Team, The Harmony Heroes, The Scholars United, The Problem Solvers, The Dynamic Thinkers, The Game Changers, The Stellar Minds, The Success Seekers, The Renaissance Group, The Elite Alliance, The Trail Seekers, The Intellectual Titans, The Wisdom Warriors, The Bright Sparks, The Thought Leaders, The Academic Avengers, The Synergistic Stars etc. (Dean-Student Development could help here to identify the names).

3. Collect Project Ideas From Faculties (*Format Attached*)

- a. **Faculty Brainstorming:** Encourage faculty members to brainstorm and generate project ideas within their respective areas of expertise. They can consider current research trends, industry demands, and emerging technologies to develop innovative and relevant project titles. Here, faculty can conduct a through literature survey.
- b. **Submission Deadline:** Set a deadline for faculty members to submit their project ideas. This ensures a timely and organized collection process.
- c. **Project Idea Evaluation:** Once the submission deadline has passed, the Project Coordinator should review and evaluate the project ideas. Consider factors such as alignment with departmental goals, feasibility, novelty, and potential student interest.
- d. **Selection and Refinement:** Shortlist the most promising project ideas based on the evaluation criteria. Discuss and refine the project titles, if necessary, in consultation with the respective faculty members who proposed them. Arrange project finalization sessions with all the staff and HoD. Invite Dean- Student Development.
- e. **Project List:** Compile the selected project titles into a catalog or list. Include relevant details such as the faculty member's name, project description, objectives, and any additional requirements or prerequisites.
- f. **Student Access:** Make the project catalog accessible to students who are seeking project opportunities. This can be done through an online platform, notice board, or by sharing the catalog with student representatives.



4. Assign Project Guides to the Students' Groups (*Format Attached*)

Approach 1: Student-Initiated Selection:

- a. **Topic Selection:** Allow students to select project topics from the list of floated project ideas provided by the faculty members.
- b. **Guide Selection:** Once the groups have formed, allow them to choose a project guide from the faculty members who proposed the respective project ideas. Students should select a guide whose expertise aligns with their chosen project topic.
- c. **Confirmation Process:** Facilitate a confirmation process where each student group communicates their chosen project guide to the Project Coordinator. This helps finalize the guide-student group assignments. Students can use the guide confirmation form.

Approach 2: Project Coordinator - Assigned Guides:

- a. **Guide Assignment:** The project coordinator assigns project guides to each student group. The assignment should be based on the expertise of the faculty members and their suitability to guide specific project topics.
- b. **Communication:** Notify each student group about their assigned project guide. Provide them with the necessary contact information and guidelines on how to initiate communication with their guide.
- c. **Introduction Meeting:** Organize an introductory meeting or session where student groups and their assigned guides can meet and discuss the project's scope, objectives, and expectations. This allows for establishing rapport and clarifying any queries or doubts.

Roles and Responsibility of the Project Guide:

- Bring expertise and knowledge related to the project topic or field
- Set clear goals for their project and help them develop a structured plan
- Provide input on project scope, timeline, and milestones, ensuring that students have a roadmap for their work
- Provide continuous feedback on students' progress, offering constructive criticism and suggestions for improvement
- Assess the quality of work and provide guidance on how to enhance project outcomes
- Help students develop essential skills relevant to the project, such as critical thinking, problem-solving, communication, and collaboration
- Promote metacognition and empowers students to become self-directed learners
- Play a vital role in keeping students motivated and engaged throughout the project
- Help students overcome challenges and setbacks
- Help students understand how their project relates to the broader context, industry, or community, fostering a sense of purpose and relevance
- Provide opportunities for presentations, exhibitions, or publications, promoting a sense of accomplishment and pride in students' work

5. Make use of Project Diary Compulsory for All the Groups (*Format Attached*)

A project diary, also known as a project log or journal, is a valuable tool for documenting the progress, challenges, decisions, and learnings throughout the project development process.



Making it compulsory for all groups involved in the final year projects can greatly benefit both students and faculty. Here's how to implement this requirement effectively:

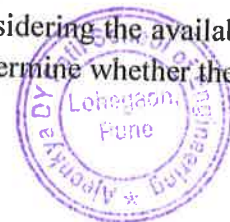
- a. **Introduce the Project Diary Requirement:** At the beginning of the final year project, clearly communicate to all student groups that maintaining a project diary is mandatory. Explain the purpose and benefits of using a project diary for their projects.
- b. **Provide Guidelines and Expectations:** Offer students guidelines on what should be included in the project diary. Suggest regular updates, reflections on progress, decisions, problem-solving approaches, ideas, resources, and meeting summaries.
- c. **Select a Suitable Medium:** Allow students to keep the project diary in the form of a physical notebook.
- d. **Set Regular Checkpoints:** Schedule periodic checkpoints to review and assess the project diaries. This can be done weekly or bi-weekly, depending on the project's timeline and complexity.
- e. **Faculty Monitoring and Feedback:** Faculty members should periodically review the project diaries to ensure students are maintaining it consistently and accurately. Provide feedback and guidance to help students improve their documentation practices.
- f. **Highlighting its Importance:** Emphasize to students that the project diary is not just an administrative requirement but an essential tool for their own benefit. It can help them track their progress, learn from mistakes, and showcase their development and problem-solving skills.
- g. **Linking It to Evaluation:** Explain to students that the project diary will be taken into account during the final project evaluation. Its content may influence the assessment of their planning, decision-making, and overall project management.

By making the use of a project diary compulsory for all groups, students will be encouraged to document their progress in a structured manner, promoting better project management practices and facilitating a more comprehensive evaluation of their work during the final year project assessment.

6. Identification of the Problem

Here are the steps for problem identification, involving students and faculties to generate ideas, and evaluating those ideas based on creativity, innovation, feasibility, and real-world problem-solving:

1. **Involve Faculties:** Involve faculties in the problem identification process.
2. **Brainstorm Ideas:** Faculty should conduct a number of brainstorming sessions with the students to generate a wide range of potential problem ideas. Encourage open discussion, creativity, and the sharing of unique viewpoints. Faculty /mentor can use the ideas generation form to generate ideas focusing on specific problem, area, issue, product, field etc. Make the list of ideas.
3. **Evaluate Creativity and Innovation:** Evaluate the generated ideas from the perspective of creativity and innovation. Consider how each idea challenges existing norms, introduces novel approaches, or offers fresh insights into the problem domain.
4. **Assess Feasibility:** Assess the feasibility of the ideas by considering the available resources, time constraints, and technical or logistical requirements. Determine whether the ideas can be realistically pursued within the given context.



5. **Solve Real-World Problems:** Prioritize ideas that have the potential to address real-world problems. Look for ideas that can make a positive impact, bring about social change, or provide practical solutions to existing challenges.
6. **Consider Problem Domains:** Ensure that the selected problem refers back to a particular practical, scientific, social, or technical domain. This connection helps ground the problem in a specific context and allows for targeted research, analysis, and solution development.
7. **Refine the Problem Statement:** Craft a clear and concise problem statement that captures the essence of the identified problem. The statement should highlight the key aspects, challenges, and desired outcomes of the problem.
8. **Seek Interdisciplinary Collaboration:** Encourage interdisciplinary collaboration by involving faculties and experts from different disciplines.

By following these steps and involving faculties in the problem identification process, a number of ideas can be generated that are creative, innovative, feasible, and have the potential to solve real-world problems within specific domains.

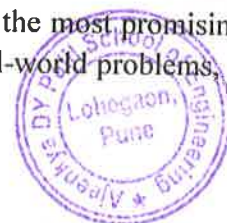
7. Identify sponsored projects from industries –

- a. **Industry Identification:** The initial step involves identifying potential industries that might be interested in sponsoring student projects. Various approaches can be employed, including networking events, industry databases, alumni connections, and building upon past collaborations with companies the institute has engaged with. Additionally, students can seek opportunities through personal references from friends or relatives.
- b. **Student Motivation:** To drive student enthusiasm, they should be encouraged to explore their interests and aspirations. By identifying industries or companies that align with their career goals, students are more likely to be motivated to work on meaningful projects. Providing students with resources and guidance on approaching these industries with well-crafted project proposals or expressions of interest can further boost their confidence.
- c. **Cross-confirmation with Industry:** After an industry expresses interest in sponsoring a project, faculty members play a pivotal role in ensuring project viability. They should engage in discussions with industry representatives or mentors, either by visiting the industry premises or through virtual meetings. This cross-confirmation step is essential to align the proposed project with the industry's specific needs and available resources.
- d. **Submit the Title of the Problem to Project Coordinator:** Once the industry's interest and project feasibility are established, students should promptly submit the project title and details of the identified problem to the project coordinator. This allows for streamlined administrative processes and ensures that the project moves forward smoothly.

By following these steps, students can embark on valuable final year projects that are sponsored by industries, fostering practical learning experiences, and promoting fruitful collaborations between academia and the corporate world.

8. Finalize the Idea, Write the Abstract, and Draw a Rough Sketch

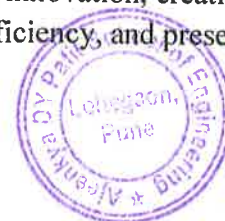
- a. **Idea Finalization:** After evaluating the project ideas, select the most promising and feasible one based on its innovation, creativity, potential to solve real-world problems, and alignment with the evaluation criteria.



- b. **Literature Review:** - Students should conduct a thorough literature survey or review of minimum 20 articles in order to identify the research gap.
- c. **Abstract Writing:**
- Begin the abstract with a concise and attention-grabbing introduction that highlights the project's significance and its potential impact.
 - Briefly describe the problem the project aims to address and the main objectives it seeks to achieve.
 - Summarize the innovative approach or unique features that distinguish the project from existing solutions.
 - Mention the methodologies, techniques, or technologies to be employed in the project.
 - Provide a glimpse of the expected outcomes and the potential benefits for the target audience or society.
 - Conclude with a statement about the project's potential implications and its contribution to the field.
- d. **Rough Sketch:**
- Create a rough sketch or diagram that visually represents the project concept or design. This could be a flowchart, system architecture, user interface wireframe, or any other relevant visualization.
 - The sketch should help convey the core components and functionality of the project in a simplified manner.
 - While it doesn't need to be highly detailed, ensure that the essential elements are clear and understandable.
- e. **Review and Feedback:**
- Share the abstract and rough sketch with the project guide for feedback and suggestions.
 - Incorporate any valuable feedback to refine the abstract and sketch further.
- f. **Finalizing the Abstract and Sketch:**
- Make necessary revisions to the abstract and ensure it is concise, coherent, and accurately represents the project idea.
 - Polish the rough sketch, if required, to enhance its clarity and aesthetics.

9. Arrange Presentation -1

- a. **Project Selection and Prioritization:** Review all the final year project ideas submitted by students. Prioritize projects that demonstrate innovation, creativity, feasibility, and a potential to solve real-world problems.
- b. **Formation of Evaluation Committee:** Assemble a diverse and knowledgeable evaluation committee consisting of faculty members, industry experts, and professionals. Ensure that the committee has expertise in various domains related to the project ideas.
- c. **Setting the Date and Time:** Schedule the presentation event on a date that accommodates the availability of the evaluation committee members and the students presenting their projects.
- d. **Development of Evaluation Criteria:** Create well-defined and comprehensive evaluation criteria that cover various aspects of the projects, including innovation, creativity, feasibility, problem-solving approach, impact on society, technical proficiency, and presentation skills.

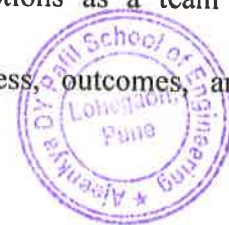


- e. **Notify Students:** Inform all participating students about the presentation schedule, guidelines, and expectations. Advise them to focus on demonstrating the innovative and real-world problem-solving aspects of their projects.
- f. **Presentation Format:** Encourage students to use an engaging and visually appealing presentation format that effectively communicates the uniqueness and potential impact of their project ideas.
- g. **Venue and Technical Setup:** Arrange a suitable venue with proper audio-visual facilities. Ensure that all technical equipment, including projectors and microphones, are tested and functioning correctly.
- h. **Project Presentations:** Allow each student or group to present their project ideas. Emphasize the importance of showcasing the innovative and creative aspects of their work while highlighting how their projects address real-world problems.
- i. **Question and Answer Session:** After each presentation, provide time for the evaluation committee and attendees to ask questions and seek clarification about the project ideas.
- j. **Evaluation and Scoring:** The evaluation committee should assess each project based on the predefined criteria. Encourage thorough discussions and debates among committee members to ensure a comprehensive evaluation process.
- k. **Feedback and Decision:** Gather feedback from the evaluation committee regarding each project's strengths, weaknesses, and potential for improvement. Based on the evaluations, select projects that stand out in terms of innovation, creativity, feasibility, and real-world problem-solving capabilities.
- l. **Announcement of Results:** Announce the selected projects and acknowledge the efforts of all students who presented their ideas. Provide constructive feedback to help students further develop their projects.
- m. **Next Steps:** Outline the subsequent steps for the selected projects, including further development, potential collaborations, mentorship, and support.

By conducting Presentation-1 with a focus on innovation, creativity, feasibility, and solving real-world problems, the evaluation process will foster a culture of critical thinking and problem-solving among the students. It will also encourage the development of projects that have the potential to make a meaningful impact on society and address pressing challenges with innovative solutions.

10. Assessment of the Progress:

- a. The project guide needs to regularly monitor, assess and evaluate the project on a weekly basis.
- b. During the process of monitoring and continuous assessment, individual and team performance is measured.
- c. Each student undergoes an individual assessment that aims to understand their capacity, role, and level of involvement in the project. This assessment provides insights into the individual's contribution and growth within the project diary context.
- d. Group assessment focuses on evaluating the defined roles within the group, the distribution of work, intra-team communication, and the overall cohesion and collaboration exhibited. This assessment ensures that the group effectively functions as a team and achieves collective goals.
- e. Students are required to document their project progress, outcomes, and reflections maintaining the project diary.



11. Synopsis Submission

When submitting the project synopsis, students should ensure that it includes the following components:

- a. Team Members: Provide the names of all team members involved in the project.
- b. Title of the Project Work: Clearly state the title that accurately reflects the project's focus and scope.
- c. Abstract: Include a brief summary of the project, highlighting its objectives, methodology, and key findings or outcomes.
- d. Problem Definition: Clearly define the problem or research question that the project aims to address or investigate. Provide a concise explanation of the significance and relevance of the problem.
- e. Work Done Earlier: If any previous work or research has been conducted on the topic, briefly mention and summarize those findings or contributions. This helps establish the project's context and build upon existing knowledge.
- f. Objectives of the Project: Clearly state the specific objectives or goals that the project aims to achieve. These objectives should align with the problem definition and provide a clear direction for the project.
- g. Methodology of the Project: Describe the methodology or approach that will be used to conduct the project. Explain the research design, data collection methods, tools, and analysis techniques that will be employed.
- h. Application/Significance of the Project: Discuss the potential applications or significance of the project in the relevant field. Highlight the potential impact of the project outcomes or findings.
- i. References: Include a list of references cited in the synopsis, following the appropriate referencing style or format.
- j. Sponsorship Details (if applicable): If the project is sponsored or supported by any external organization or entity, provide relevant details about the sponsorship or support received.

12. Report Writing – as per SPPU guidelines



Final Year Project

Timeline

Sr.	Particular	Timeline	Due Date
1	Decide the Project Coordinator	1 st Week	
2.	Form Groups of Students and Decide Unique Name	1 st Week	
3.	Collect Project Ideas From Faculties	1 st Week	
4.	Submit the List of Faculties Idea to DSD	1 st Week	
4.	Assign Project Guides to the Students' Groups	2 nd Week	
5.	Distribute Project Diary for All the Groups	2 nd Week	
6.	Identification of the Problem	2 nd Week	
7.	Finalize the Idea, Write the Abstract, and Draw a Rough Sketch	2 nd Week	
8.	Submit the List along with the Abstract to DSD	2 nd Week	
9.	Arrange Presentation -1	3 rd Week	
10.	Assessment of the progress	On Weekly Basis	
11	Evaluation of the Project Stage -I	3 rd Month	
12	Submit the evaluated details to DSD	3 rd Month	
13	Arrange Presentation -2	4 th Month	
14	Arrange Presentation -3	6 th Month	
15	Arrange Presentation -4	8 th Month	
16	Report Writing and Submission	8 th Month	
17	Evaluation of the Project Stage -II	9 th Month	
18	Submission of the project title list, patent and publication details to DSD	9 th Month	



Final Year Project

List of Faculty Ideas

Department

Sr.	Name of the Faculty	Title of the Idea	Sign

Project Coordinator Sign



HoD Sign

Guide Confirmation Form

We , hereby confirm our selection of the following guide for my academic final year project and the project title is

Sr.	Name of Group Members	Roll No.	Sign
1			
2			
3			
4			

Guide Name:

Signature of Guide:

Guide Confirmation Form

We , hereby confirm our selection of the following guide for my academic final year project and the project title is

Sr.	Name of Group Members	Roll No.	Sign
1			
2			
3			
4			

Guide Name:

Signature of Guide:



Final Year Project

Group Details

Department

Sr.	Name of the Student	Roll No.	Name of the Group	Name of the guide	Sign

Project Coordinator Sign



HoD Sign

Final Year Projects

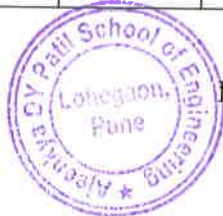
Assessment Phase- I

Department

Sr.	Assessment	Max Marks
1	Problem identification and its relevance to solving the real world problems	10
2	Abstract and a rough sketch submission	5
3	Project diary and discussion with project guide	10
4	Attitude of the student	5
5	Completion of the work (50%)	10
6	Presentation and quality of the project report	10

Sr.	Roll No.	1	2	3	4	5	6	Total

Project Coordinator Sign



HoD Sign

Final Year Projects

Assessment Phase- II

Department

Sr.	Assessment	Max Marks
1	Presentation -2	10
2	Work Progress (65% complete)	10
3	Presentation -3	10
4	Work Progress (80% complete)	10
5	Presentation -4	10
6	Work Progress (100% complete)	20
7	Participation in Project Exhibition	20
8	Paper Publication	10
9	Filling a Patent/Copyright	20
10	Working of the model as per the specification	20
11	Final report submission	10

Sr.	Roll No.	1	2	3	4	5	6	7	8	9	10	11	Total

Project Coordinator Sign

HOD Sign



Final Year Projects Assessment Phase- II

Department

Sr.	Assessment	Max Marks
1	Presentation -2	10
2	Work Progress (65% complete)	5
3	Presentation -3	5
4	Work Progress (80% complete)	5
5	Presentation -4	5
6	Work Progress (100% complete)	10
7	Participation in Project Exhibition	15
8	Paper Publication	10
9	Filing a Patent/Copyright	15
10	Working of the model as per the specification	10
11	Final report submission	10

Sr.	Roll No.	1	2	3	4	5	6	7	8	9	10	11	Total

Project Coordinator Sign

HoD Sign

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