

Amrutvahini Sheti & Shikshan Vikas Sanstha's  
**AMRUTVAHINI COLLEGE OF ENGINEERING**  
**SANGAMNER**

**DEPARTMENT OF ELECTRONICS ENGINEERING**

**LOG BOOK**  
**PROJECT STAGE - I AND STAGE - II**

Project Title: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Sr. No.	Name of Student	Roll No	Exam Seat No.

Year of study: 20    - 20

Name of Project Guide: \_\_\_\_\_

## Course Summary

### Project Stage I

Class:		BE (Elex.)		Course Type:		Core		
Semester:		VII		Syllabus Pattern:		2015		
Course Code:		404208		Credits:		02		
Teaching Scheme			University Examination Scheme					
Theory	Practical	Tutorial	Theory			Lab		
(hrs/week)	(hrs/week)	(hrs/week)	Online	Insem	Endsem	Term Work	Practical	Oral
---	---	2 hrs	---	---	---	---	--	50

### Project Stage II

Class:		BE (Elex.)		Course Type:		Core		
Semester:		VIII		Syllabus Pattern:		2015		
Course Code:		404215		Credits:		06		
Teaching Scheme			University Examination Scheme					
Theory	Practical	Tutorial	Theory			Lab		
(hrs/week)	(hrs/week)	(hrs/week)	Online	Insem	Endsem	Term Work	Practical	Oral
---	---	6 hrs	---	---	---	150	--	50

## Course Outcomes

### Project Stage I

CO	Course Outcome
CO1	Ability to conduct literature search to identify and formulate the engineering problem
CO2	Ability to engage in independent study and apply the mathematical, science, engineering concepts and management principles necessary to solve the identified engineering problem
CO3	Ability to identify the community that shall benefit through the solution to the identified engineering problem and also demonstrate concern for environment
CO4	Ability to select the engineering tools/components for solving the identified engineering problem
CO5	Ability to engage in effective written communication through the project report, engage in effective oral communication through presentation of the project work
CO6	Ability to perform in the team, contribute to the team and mentor/lead the team

### Project Stage II

CO	Course Outcome
CO1	Ability to engage in independent study and apply the mathematical, science, engineering concepts and management principles necessary to solve the identified engineering problem
CO2	Ability to apply the identified concepts and engineering tools to arrive at design solution(s) for the identified engineering problem
CO3	Ability to analyze and interpret results of experiments conducted on the designed solution(s) to arrive at valid conclusions
CO4	Ability to engage in effective written communication through the project report, research paper, poster presentation and engage in effective oral communication through presentation of the project work.
CO5	Ability to perform in the team, contribute to the team and mentor/lead the team
CO6	Ability to abide by the norms of professional ethics

**Rubrics - Project Stage I**

Sr. No.	Parameter	> 90%	70 to 90%	< 70%
1	Identification of problem and problem statement	Identified three different problems and finalized one for possible implementation with appropriate problem statement.	Identified two different problems and finalized one for possible implementation with appropriate problem statement.	Identified one problem and finalized for possible implementation with appropriate problem statement.
2	Literature Survey for the synopsis	Referred and cited more than 10 research papers.	Referred and cited 05 to 10 research papers.	Referred and cited to less than 05 research papers.
3	Aim and Objectives	Provided well-conceived and clearly stated aim and objectives, and the goal is achievable.	Stated aim and objectives, and the goal is achievable.	Stated aim and objectives, and the goal is partially achievable.
4	Social, environmental, and technical issues	A sophisticated understanding of social, environmental, and technical issues related to the project is evident.	Shows a good understanding of social, environmental, and technical issues related to the project.	Does not consider some important social, environmental, and/or technical issues related to the project
5	Methodology, selection of components and tools.	Students select and implement sound methodologies to achieve the goal, selects appropriate components and modern tools.	Students select and implement reasonable methodologies to achieve the goal, selects appropriate components and tools.	Weaknesses in methodology, students do not approach project systematically.
6	System or subsystem design, partial implementation	Completed design with sound methodology and implemented subsystems.	Completed design with reasonable methodology and implemented subsystems.	Completed only design aspect.
7	Project documentation, Project report, technical writing	Project report is according to the specified format. Report is well organized, includes aim, objectives, methodology, literature survey, description of key concepts, and conclusion.	Project report is according to the specified format. Report is well organized. However lacks clear description of key concepts and literature survey is inadequate.	Project report is not according to the specified format. Report is not organized properly, lacks description of key concepts, literature survey is inadequate.
8	Demonstration and Presentation	The presentation contained an adequate material, demonstrated good volume, eye contact, enthusiasm and confidence. Presented in a creative way.	The presentation contained an adequate material, demonstrated fair volume, eye contact was broken with audience.	The presentation contained an adequate material, demonstrated with little or no audience eye contact and lacked confidence.
9	Contribution as a team member	The individual contributed in a valuable way to the project. The team worked well together.	The individual did not contribute as heavily as others but did meet all responsibilities.	The individual did not contribute to the project and did not meet responsibilities. Team did not collaborate or communicate well.

**Rubrics - Project Stage II**

Sr. No.	Parameter	> 90%	70 to 90%	< 70%
1	Skills, Technical knowledge	Demonstrated adequate skills to use modern tools. Extensive knowledge and awareness related to the project.	Demonstrated adequate skills to use modern tools. Fair knowledge and awareness related to the project.	Fair skills to use modern tools. Poor knowledge and awareness related to the project.
2	Project Management and finance	Proposed and implemented Gantt chart; with clear distribution of workload among the team members. Budget analysis provided for most of the resources.	Proposed Gantt chart included; without clear distribution of workload. Budget analysis provided for some of the resources.	Gantt chart not provided; No distribution of workload. No budget analysis included
3	Analyze Results	Appropriate analysis of results with the help of relevant data, figures plots and charts.	Appropriate analysis of results with the help of relevant data and figures. However, plots and charts missing.	Analysis of results not done properly.
4	Summary and conclusion	Appropriate summary and conclusion stating limitations, possible improvements and future extensions.	Appropriate summary and conclusion. However, did not state limitations, possible improvements and future extensions.	Inappropriate summary and conclusion. Did not state limitations, possible improvements and future extensions.
5	Project documentation, Project report, technical writing	Project report is according to the specified format. Report is well organized, includes aim, objectives, methodology, literature survey, description of key concepts, and conclusion.	Project report is according to the specified format. Report is well organized. However lacks clear description of key concepts and literature survey is inadequate.	Project report is not according to the specified format. Report is not organized properly, lacks description of key concepts, literature survey is inadequate.
6	Publications and participation in project exhibition	Published 01 paper on the work in international journal or Participated and won prize in project competition.	Presented 01 paper on the work in conference or Participated in project competition.	Participated in poster presentation. However, did not publish paper or participate in project competition.
7	Originality score and ethics	Similarity Index of project report is less than 30%. Students are aware of the IEEE code of ethics. The students demonstrate ethical and professional engineering work in their project work.	Similarity Index of project report is between 30% to 40%. Students are aware of the IEEE code of ethics. The students are aware that engineers have a responsibility to work in an ethical and professional manner.	Similarity Index of project report is more than 40%. Students are not aware of the IEEE code of ethics. Students do not fully understand what it means to work in an ethical and professional manner.
8	Demonstration and Presentation	The presentation contained an adequate material, demonstrated good volume, eye contact, enthusiasm and confidence. Presented in a creative way.	The presentation contained an adequate material, demonstrated fair volume, eye contact was broken with audience.	The presentation contained an adequate material, demonstrated with little or no audience eye contact and lacked confidence.
9	Contribution as a team member	The individual contributed in a valuable way to the project. The team worked well together. Treated other team members respectfully.	The individual did not contribute as heavily as others but did meet all responsibilities.	The individual did not contribute to the project and did not meet responsibilities. Team did not collaborate or communicate well.

## Evaluation Parameters and Marks Distribution

### Project Stage I

Sr. No.	Parameter	CO mapped	Internal	External
1	Identification of problem and problem statement	CO1	4	
2	Literature Survey for the synopsis	CO1	4	
3	Aim and Objectives	CO1	4	
4	Social, environmental, and technical issues	CO3	4	
5	Methodology, selection of components and tools.	CO4	4	
6	System or subsystem design, partial implementation	CO2	5	
7	Project documentation, Project report, technical writing	CO5	5	
8	Demonstration and Presentation	CO5	5+5=10	40
9	Contribution as a team member	CO6	5+5=10	10
<b>Total</b>			<b>50</b>	<b>50</b>

### Project Stage II

Sr. No.	Parameter	CO mapped	Internal	External
1	Skills, Technical knowledge	CO1, CO2	15	
2	Project Management and finance	CO1	5	
3	Analyze Results	CO3	5	
4	Summary and conclusion	CO3	5	
5	Project documentation, Project report, technical writing	CO4	20	
6	Publications	CO4	5	
7	Originality score and ethics	CO6	5	
8	Demonstration and Presentation	CO4	10+10=20	40
9	Contribution as a team member	CO5	10+10=20	10
<b>Total</b>			<b>100</b>	<b>50</b>

**Evaluation Sheet (Phase I of Project Stage I)**

Sr. No.	Parameter	CO	Max Marks	Marks Obtained	
1	Identification of problem and problem statement	CO1	4		
2	Literature Survey for the synopsis	CO1	4		
3	Aim and Objectives	CO1	4		
4	Social, environmental, and technical issues	CO3	4		
5	Demonstration and Presentation	CO5	5	Roll No.	Marks
				Roll No.	Marks
				Roll No.	Marks
				Roll No.	Marks
6	Contribution as a team member	CO6	5	Roll No.	Marks
				Roll No.	Marks
				Roll No.	Marks
				Roll No.	Marks

Sr. No.	Name of Student	Roll No.	Total Marks

Project Guide

Project Coordinator

HOD

**Evaluation Sheet (Phase II of Project Stage I)**

Sr. No.	Parameter	CO	Max Marks	Marks Obtained	
1	Methodology, selection of components and tools.	CO4	4		
2	System or subsystem design, partial implementation	CO2	5		
3	Project documentation, Project report, technical writing	CO5	5		
4	Demonstration and Presentation	CO5	5	Roll No.	Marks
				Roll No.	Marks
				Roll No.	Marks
				Roll No.	Marks
5	Contribution as a team member	CO6	5	Roll No.	Marks
				Roll No.	Marks
				Roll No.	Marks
				Roll No.	Marks

Sr. No.	Name of Student	Roll No.	Total Marks

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**Evaluation of Project Stage I**

<b>Sr. No.</b>	<b>Name of Student</b>	<b>Roll No.</b>	<b>Marks Phase I</b>	<b>Marks Phase II</b>	<b>Total Marks</b>

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**Evaluation Sheet (Phase I of Project Stage II)**

Sr. No.	Parameter	CO	Max Marks	Marks Obtained	
1	Skills, Technical knowledge	CO1,CO2	15		
2	Project Management and finance	CO1	5		
3	Demonstration and Presentation	CO4	10	Roll No.	Marks
				Roll No.	Marks
				Roll No.	Marks
				Roll No.	Marks
4	Contribution as a team member	CO5	10	Roll No.	Marks
				Roll No.	Marks
				Roll No.	Marks
				Roll No.	Marks

Sr. No.	Name of Student	Roll No.	Total Marks

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**Evaluation Sheet (Phase II of Project Stage II)**

Sr. No.	Parameter	CO	Max Marks	Marks Obtained	
1	Analyze Results	CO3	5		
2	Summary and conclusion	CO3	5		
3	Project documentation, Project report, technical writing	CO4	20		
4	Publications	CO4	5		
5	Originality score and ethics	CO6	5		
6	Demonstration and Presentation	CO4	10	Roll No.	Marks
				Roll No.	Marks
				Roll No.	Marks
				Roll No.	Marks
7	Contribution as a team member	CO5	10	Roll No.	Marks
				Roll No.	Marks
				Roll No.	Marks
				Roll No.	Marks

Sr. No.	Name of Student	Roll No.	Total Marks

**Project Guide****Project Coordinator****HOD**

**Evaluation of Project Stage II**

<b>Sr. No.</b>	<b>Name of Student</b>	<b>Roll No.</b>	<b>Marks Phase I</b>	<b>Marks Phase II</b>	<b>Total Marks</b>

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## Progress Sheet

Week No.	Dates	Task assigned	Task Completed	Sign (Students)	Sign (Guide)
1					
2					
3					
4					

**Remark & Sign of Project Guide:**

## Progress Sheet

Week No.	Dates	Task assigned	Task Completed	Sign (Students)	Sign (Guide)
1					
2					
3					
4					

**Remark & Sign of Project Guide:**

## Progress Sheet

Week No.	Dates	Task assigned	Task Completed	Sign (Students)	Sign (Guide)
1					
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**Remark & Sign of Project Guide:**

## Progress Sheet

Week No.	Dates	Task assigned	Task Completed	Sign (Students)	Sign (Guide)
1					
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3					
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**Remark & Sign of Project Guide:**



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Week No.	Dates	Task assigned	Task Completed	Sign (Students)	Sign (Guide)
1					
2					
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**Remark & Sign of Project Guide:**

## Progress Sheet

Week No.	Dates	Task assigned	Task Completed	Sign (Students)	Sign (Guide)
1					
2					
3					
4					

**Remark & Sign of Project Guide:**

## Progress Sheet

Week No.	Dates	Task assigned	Task Completed	Sign (Students)	Sign (Guide)
1					
2					
3					
4					

**Remark & Sign of Project Guide:**

## Progress Sheet

Week No.	Dates	Task assigned	Task Completed	Sign (Students)	Sign (Guide)
1					
2					
3					
4					

**Remark & Sign of Project Guide:**

## Progress Sheet

Week No.	Dates	Task assigned	Task Completed	Sign (Students)	Sign (Guide)
1					
2					
3					
4					

**Remark & Sign of Project Guide:**

## Progress Sheet

Week No.	Dates	Task assigned	Task Completed	Sign (Students)	Sign (Guide)
1					
2					
3					
4					

**Remark & Sign of Project Guide:**

## **Vision and Mission of the Institute**

### **Vision**

To create opportunities for rural students to become able engineers and technocrats through continual excellence in engineering education.

### **Mission**

Our mission is to create self-disciplined, physically fit, mentally robust and morally strong engineers and technocrats with high degree of integrity and sense of purpose who are capable to meet challenges of ever advancing technology for the benefit of mankind and nature. We, the management, the faculty and staff, therefore promise to strive hard and commit ourselves to achieve this objective through a continuous process of learning and appreciation of needs of time.

## **Vision and Mission of the Department**

### **Vision**

To contribute for improving wellbeing of the students from rural background by imparting quality education in the field of Electronics Engineering.

### **Mission**

1. To impart basic understanding of Electronics Engineering built on a foundation of basic sciences, mathematics.
2. The faculty and staff of the department is committed to train our students to become proficient at putting theory into practice, capable of lifelong learning and be aware of the social and environmental issues.
3. The department is dedicated to endow students with the knowledge, technical skills and values that prepare them to excel as engineers and leaders in their profession.



**PROGRAM EDUCATIONAL OBJECTIVES (PEOs)**

**Electronics engineering graduates will be able to-**

1. Demonstrate the ability to analyse and solve engineering problems through application of knowledge of mathematics, science, and engineering.
2. Design, test and implement electronic systems using modern tools and technologies.
3. Demonstrate leadership, understand professional and ethical responsibilities and contribute for the betterment of the society.
4. Communicate effectively and function well as a team member and be able to manage projects in a multi-disciplinary environment.
5. Pursue lifelong learning in the broadest context of ever advancing technological change and the needs of time.

**PROGRAMME SPECIFIC OUTCOMES (PSOs)**

**The graduate is expected to acquire**

1. An ability to identify, formulate and solve electronics engineering problems.
2. An ability to design electronics circuits, conduct experiments, analyse and interpret data.
3. Skill to use modern electronics engineering tools, software and equipment.

**PROGRAM OUTCOMES (POs)****Engineering Graduates will be able to:**

1. **Engineering knowledge:** Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
2. **Problem analysis:** Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
3. **Design/development of solutions:** Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
4. **Conduct investigations of complex problems:** Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
5. **Modern tool usage:** Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.
6. **The engineer and society:** Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
7. **Environment and sustainability:** Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
8. **Ethics:** Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
9. **Individual and team work:** Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
10. **Communication:** Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

11. **Project management and finance:** Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
12. **Life-long learning:** Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

## IEEE Code of Ethics

We do hereby commit ourselves to the highest ethical and professional conduct and agree:

I. To uphold the highest standards of integrity, responsible behavior, and ethical conduct in professional activities.

1. To hold paramount the safety, health, and welfare of the public, to strive to comply with ethical design and sustainable development practices, to protect the privacy of others, and to disclose promptly factors that might endanger the public or the environment;
2. To improve the understanding by individuals and society of the capabilities and societal implications of conventional and emerging technologies, including intelligent systems;
3. To avoid real or perceived conflicts of interest whenever possible, and to disclose them to affected parties when they do exist;
4. To avoid unlawful conduct in professional activities, and to reject bribery in all its forms;
5. To seek, accept, and offer honest criticism of technical work, to acknowledge and correct errors, to be honest and realistic in stating claims or estimates based on available data, and to credit properly the contributions of others;
6. To maintain and improve our technical competence and to undertake technological tasks for others only if qualified by training or experience, or after full disclosure of pertinent limitations;

II. To treat all persons fairly and with respect, to not engage in harassment or discrimination, and to avoid injuring others.

7. To treat all persons fairly and with respect, and to not engage in discrimination based on characteristics such as race, religion, gender, disability, age, national origin, sexual orientation, gender identity, or gender expression;
8. To not engage in harassment of any kind, including sexual harassment or bullying behavior;
9. To avoid injuring others, their property, reputation, or employment by false or malicious actions, rumors or any other verbal or physical abuses;

III. To strive to ensure this code is upheld by colleagues and co-workers.

10. To support colleagues and co-workers in following this code of ethics, to strive to ensure the code is upheld, and to not retaliate against individuals reporting a violation.