

## SREE BUDDHA COLLEGE OF ENGINEERING, PATTOOR

Affiliated to APJ ABDUL KALAM TECHNOLOGICAL UNIVERSITY, KERALA(KTU)

# HANDBOOK

## Courses: Seminar and Project Preliminary (----451)Project (----492)

DEPARTMENT:	 
NAME OF STUDENT:	 
YEAR:	 ROLL NO:
ВАТСН:	 

#### PREAMBLE

The seminar and project are student-driven and student-initiated courses. It is a long-term commitment that requires students to integratemultiple curriculums and learning styles. The students should bring their creativity and innovation to develop new products, processes and ideas. Students must remain in contact with supervisors on a regular basis and maintain all due dates. Through seminar, the students will be exposed to the new developments in their area of interest. They will further gain an experience in carrying out literature review for their project work. Project requires research, communication skills, and a hands-on approach to learning. It is a culminating activity to show off what has been gained through class room learning, and a chance for students to interact with the community in a meaningful way.

Naturally, the student will continue to gain engineering experience after graduation but the final year project will be his/her first exposure to the engineering practices. It is essential that the student learn from this exposure and practice all of the engineering methodologies involved. It is particularly important that the student learn not just to apply what is known, but to apply it with judgment, with the ability to assess what is being done and to be critical of it. There is another reason why the final year project is so important: it will inevitably be used as a discriminator to decide how good an engineering student is.

This Handbook gives a brief outline of the procedure to be followed for the seminar as well as the project work as per the guidelines issued by KTU. Further, the instructions on the preparation of the seminar and project report are also documented. The Assessment record should be used by the Project coordinator for recording assessment of all the activities done during the course duration.

During the Covid -19 period, these courses should be delivered, as instructed by the KTU.

Dr. K. Krishnakumar Principal, SBCE

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## SECTION-A

# **GUIDELINES FOR**

## **SEMINAR AND PROJECT**

## 1. SYLLABUS

## KTU SYLLABUS ----451 SEMINAR AND PROJECT PRELIMINARY

Course code	Course Name	L-T-P - Credits	Year of Introduction						
451	Seminar and Project Preliminary	0-1-4-2	2016						
Prerequisite : Ni	1	· · · · · · · · ·							
Course Objecti	ves								
To develop skill	To develop skills in doing literature survey, technical presentation and report preparation.								
To enable projec	ct identification and execution of pre-	liminary works on f	final semester project						
Course Plan									
engineering, get approval of faculty concerned, collect sufficient literature on the topic, study it thoroughly, prepare own report and present in the class. <b>Project preliminary:</b> Identify suitable project relevant to the branch of study. Form project team									
supervisor.		1 0							
Present the proje approved by the	Present the project proposal before the assessment board (excluding the external expert) and get it approved by the board.								
The preliminary work to be completed: (1) Literature survey (2) Formulation of objectives (3) Formulation of hypothesis/design/methodology (4) Formulation of work plan (5) Seeking funds (6) Preparation of preliminary report									
Note: The same project should be continued in the eighth semester by the same project team.									
Expected Outco	ome I be able to								

- i. Analyse a current topic of professional interest and present it before an audience
- ii. Identify an engineering problem, analyse it and propose a work plan to solve it.

## Evaluation

Seminar: 50 marks

(Distribution of marks for the seminar is as follows: i. Presentation: 40% ii. Ability to answer questions: 30% & iii. Report: 30%)

Project preliminary:50 marks

(Progress evaluation by the supervisor: 40% and progress evaluation by the assessment board excluding external expert: 60%. Two progress evaluations, mid semester and end semester, are mandatory.)

Note: All evaluations are mandatory for course completion and for awarding the final grade.

As per KTU ordinance, students have to prepare a detailed report on the topic of the seminar and submit it to the teacher concerned. The seminar is to be of 20 minutes duration with another 5 minutes given for questions and answers. All students in the class have to attend the seminar without fail. Evaluation will be based on the report, seminar presentation as well as on the ability of the student to answer the questions put forward. Faculty member in charge of the seminar and another faculty member in the department nominated by the Head of the Department shall be the evaluators for the seminar.

## KTU SYLLABUS ----492PROJECT

Course code	Course Name	Credits	Year of Introduction
492	Project	6	2016

## Prerequisite : Nil

## **Course Objectives**

- To apply engineering knowledge in practical problem solving
- To foster innovation in design of products, processes or systems
- To develop creative thinking in finding viable solutions to engineering problems

## **Course Plan**

In depth study of the topic assigned in the light of the preliminary report prepared in the seventh semester.

Review and finalization of the approach to the problem relating to the assigned topic Preparing a detailed action plan for conducting the investigation, including team work.

Detailed Analysis/Modelling/Simulation/Design/Problem Solving/Experiment as needed Final development of product/process, testing, results, conclusions and future directions Preparing a paper for Conference presentation/Publication in Journals, if possible Preparing a report in the standard format for being evaluated by the dept. assessment board Final project presentation and viva voce by the assessment board including external expert

## Expected outcome

The students will be able to

- i. Think innovatively on the development of components, products, processes ortechnologies in the engineering field
- ii. Apply knowledge gained in solving real life engineering problems

## Evaluation

Maximum Marks: 100

(i) Two progress assessments -20% by the faculty supervisor(s)

(ii) Final project report-30% by the assessment board

(iii) Project presentation and viva voce-50% by the assessment board

Note: All the three evaluations are mandatory for course completion and for awarding the final grade.

As per KTU ordinance, final Semester Project Students, either individually or in a small batch not exceeding four, have to do a project approved by their faculty supervisor. If the project work is not completed satisfactorily, the student has to put in more work and appear again for assessment on a specified date, not earlier than one month after the first evaluation. If the student fails in the project, a fresh registration for the project for one semester is mandatory.

The project assessment board shall consist of the following members.

Chairman: Head of the Department

Members: Project Supervisor(s) of the student

One faculty member from the Department

One faculty member from a sister Department

An external expert, either from an academic/research institute or industry

### 2. COURSE OUTCOMES

### ----451: Seminar and Project Preliminary

On successful completion of this course, the students will be able to:

CO1: Analyse a current topic of professional interest and present it before an audience.

CO2:Identify an engineering problem, analyse it and propose a work plan to solve it.

### ----492: Project

On successful completion of this course, the students will be able to:

**CO1:** Apply critical and creative thinking in the design of engineering projects.

**CO2:** Create and apply appropriate techniques, resources, and IT tools to solve complex engineering problems.

CO3: Plan and manage time effectively as a team.

**CO4:** Design socially relevant and commercially viable devices or systems.

**CO5:** Use fundamental knowledge and skills in engineering and apply it effectively on a project.

**CO6:** Communicate with engineers and the community at large in written and oral forms.

#### 3. MAPPING OF COURSE OUTCOMES WITH POS AND PSOS

СО	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
1	3									3					3
2	3	3					2		3	3			3	3	

### ---451- SEMINAR AND PROJECT PRELIMINARY

#### ----492- PROJECT

СО	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
1	3		3										3		
2					3									3	
3									3		3				3
4			3				3	2					3		
5	3												3		
6										3			3		

#### 4. GUIDELINES FOR THE SEMINAR (----451)

Seminar is a task assigned to undergraduate or postgraduate students for almost all courses. Successful completion of seminar work can be measured in terms of various skill developments among students. Various skills can be named as enhancing research article reading ability, understanding of topic, knowledge up-gradation and critical evaluation of the selected topic. The skill developments also include improving communication, technical presentation, report preparation etc.

As per the B.Tech curriculum of KTU, each student shall identify a topic of current relevance in his/her branch of engineering, get approval of faculty concerned, collect sufficient literature on the topic, study it thoroughly, prepare own report and present in the class. The guidelines to be followed by the students for the seminar are given in the following sections.

#### **GENERAL INSTRUCTIONS**

- Each student has to give a seminar on a professional topic of relevance in his/her branch of engineering in consultation with the faculty member in charge of the seminar in the Department.
- The relevance of the topic includes its validity in the present scenario, developments in that particular field, the extent to which fact can be collected etc. Selected topic shall be supported by at least 3 top quality journal papers.
- The students shall submit an abstract with a brief description of the selected seminar topic in about 400 words (1 page).
- The selected seminar topics will be intimated to the students and based on the topic, a guide will be allotted to each of them from the faculty members of the department.
- The student will be directed to the concerned guiding faculty, to get the seminar topic approved.
- Students have to collect sufficient literature on the topic, study it thoroughly and prepare his/ her own detailed seminar report and submit it to the Guide.
- Each student has to present his/her reportin a seminar in the class.
- During the period when Covid 19 pandemic restrictions are applicable for functioning of College, all seminars will be conducted online through the Google Meet platform.
- The seminar for each student will be for 20 minutes duration with another 5 minutes given for questions and discussions.

- All students in the class have to attend the seminar without fail.
- Evaluation will be based on the report, seminar presentation as well as on the ability of the student to answer the questions.
- **Appendix II** shows the guidelines for preparing seminar/project preliminary/ project final report.

## **INTERACTION WITH THE GUIDE**

- During each stage of preparation of report and presentation, discussion has to be carried out with the guide and the same should be documented in the seminar diary.
- Students shall maintain a record notebook/file to record discussions with the guide, literature survey details, derivations etc.
- It is recommended that the students shall meet their guides regularly during the course of the seminar and submit draft reports as and when requested by them.

## GUIDELINES FOR PRESENTATION(FOR BOTH SEMINAR AND PROJECT)

- The schedule for the seminar presentation will be published and the students have to strictly follow the schedule. Changes will be allowed only for relevantcases, with the approval of respective guides and the HOD.
- Students shall use Microsoft PowerPoint for the presentation. The presentation slides must be approved by the respective guides.
- The time allotted for the presentation for each student will be 20 minutes with another 5 minutes given for questions and discussions.
- The students must submit a copy of draft report signed by their guides, on the date of their presentation. The draft report should strictly adhere to the prescribed format. *Students will not be allowed to present the report without the approval of the guides, and will be directed to repeat the seminar for which marks will be reduced.*
- The student must also distribute copies of the abstract of the topic to all the staff members present at the venue.
- Medium of communication will only be English. Presentation should be audible.
- Reading out of study materials as such will not be entertained during the seminar.
- The students must have a clean appearance while presenting the seminar.
- The students are directed to maintain strict discipline during the seminar sessions.

• It is the duty of the student to make sure that the respective guides are present for their seminar presentation.

## **POWERPOINT PRESENTATIONS**

- The slide design must be simple with white background.
- The presentation should contain the opening slides (*name of the topic, name of student, name of guide etc.*) and closing slides (*thank you, questions etc.*).
- Select fonts such as Arial or Helvetica which are easy to read. The minimum font size shall be 24.
- The contents of each slide should be given as points and must be properly aligned.
- The slide should not be crowded with too many sentences.
- Clearly title each slide. Use a larger font (35-45 points) or different color for the title.
- Use different colors, sizes and styles (e.g., bold) for impact.
- Do not use sentences with UPPERCASE words, except for titles.
- Source of any picture included in the slides should be given below it.
- Check the spelling and grammar.
- The slides should be properly numbered.
- Avoid reading out the presentation material.
- Avoid speaking too quickly.
- Be confident, and enthusiastic.

### 5. PROJECT WORK

### **Project Procedure**

The procedure will be as follows:

- 1. The project assessment board is constituted as per the KTU guidelines.
- 2. The project coordinator invites project proposals from faculty and studentsseparately.
- 3. The project proposal in the format provided in **Appendix 1**should be submitted in softcopy within two weeks.
- 4. The projectassessment board holds a meeting immediately to discuss the suitability of the project proposals and discuss any changes or modifications with the concerned staff member/students if needed.

- 5. The project coordinator will display a list of accepted project proposals together with the name of the supervisor in the notice board.
- 6. The students should meet the supervisor regularly and the project progress should be recorded in the project diary.
- 7. The students have to prepare a project timeline showing the time schedule for executing the project. The schedule should indicate the time likely to be spent for literature review, carrying out experiments and documenting the project report.
- 8. The students are required to submit the report of project phase–I to the project coordinator after getting it approved by the supervisor at the end of the seventh semester. Project phase II is the final stage of the project and its report has to be submitted to the project coordinator at the end of the eighth semester.

**Appendix II** shows the guidelines for preparing seminar/project preliminary/ project final report. A sample project report is provided as **Appendix III.** 

- 9. Students should strictly follow the procedure provided in the seminar/ project diary.
- 10. Poor attendance/performance by any student should, immediately, be reported in written form to the project coordinator.

## SREE BUDDHA COLLEGE OF ENGINEEERING, PATTOOR



## Activities Calendar – Seminar and Project Academic Year 2020-2021



[The Project starts from the sixth semester]

Week	Events/ Activities								
	Semester 6 (PROJECT PHASE- 0)	Semester 7 (PROJECT PHASE-I)	Semester 8 (PROJECT PHASE-II)						
1		PHASE-I starts according to the plan. Students start Literature Review	PHASE-II starts according to the plan. Students meet with the Supervisor(s) to discuss on project activities done in semester seven.						
2	PROJECT team formation	Students present project proposalbefore the Assessment Board to get it approved	Continue the Design /Detailed analysis/Modeling/Simulation/Experiment as per the requirements of the project						
3		Students start detailed Literature survey							
4									
5	Project Proposals from								
6	students and faculty members	Problem formulation, Formulation of objectives and design/methodology							
7									
8		Progress Evaluation – Mid Term							
9		Formulation of work plan	Progress Evaluation – Mid Term						
10		Begins the Design /Detailed analysis/Modeling/Simulation/Experiment as per the requirements of the project	Final development of product/process, testing, results, conclusions and future directions						

11			
12			
13	Announcement of PROJECT teams and project titles (carried on to next semester as Phase I)		Make project ready for demonstration
14			
15		Submit preliminary report to Supervisor	Submit 1 <sup>st</sup> draft of final report
16		Progress Evaluation – End semester	Project Demonstration and Final Presentation
17			Submit bound report with CD and project (if required)
18		Project Carried to next semester (as PROJECT PHASE-II)	

#### 6. PLAGIARISM

Plagiarism is the unethical practice of using words or ideas (either planned or accidental) of another author/researcher or your own previous works without proper acknowledgment. It is considered as a serious academic and intellectual offense and can result in highly negative consequences such as paper retractions and loss of author credibility and reputation. Normally, a similarity percentage of less than 15% would probably indicate that plagiarism has not occurred. However, if the 15% of matching text is one continuous block this could still be considered as plagiarism. A high percentage would probably be anything over 25%. Students should take proper care to avoid plagiarism in their project work and the report.

#### 7. TEAMWORK ASSESSMENT

Supervisors should use the Teamwork Assessment form for the assessment of the involvement of each student member in the project group (Forms and procedure aregiven in Section-C of this handbook).

## **SECTION-B**



## **SUMMARY REPORT**

## PART I: SEMINAR

Topic of the Seminar:
Name of the Supervisor(s):

## PARTII: PROJECT (Phase I and II)

Title of Project:
Name of the Supervisor(s):

## **Group Members**

1)	 .Roll No
2)	 Roll No
3)	 Roll No
4)	 Roll No

## MEMBERS OF THE ASSESSMENT BOARD

1)		•••••••••••••••••		•••••
2)	• • • • • • • • • • • • • • • • • • • •		• • • • • • • • • • • • • • • • • • • •	
3)			••••••	
4)				
5)				
0)	•••••••••••••••••••	•••••••		••••••

Seminar/ Project Coordinator	Supervisor	HoD
0	1	

#### **Approval of the Topic & Abstract**

PARTI: SEMINAR (----451)

1. Topic of the Seminar:.....

2. Name of the Supervisor:.....

Approved

Date:....

Date.....

**Signature of the Seminar Coordinator** 

i. Discussion with Supervisor(s)

**Remarks:** 

Signature of the Supervisor

ii. Discussion with Supervisor(s) Date.....

**Remarks:** 

Signature of the Supervisor

Date.....

iii. Discussion with Supervisor(s)

**Remarks:** 

**Signature of the Supervisor** 

3. References of the Seminar	
[1].	
[2].	
[3].	
[4].	
[5].	
[6].	
[7].	
[8].	
[9].	
[10].	
[11].	
[12].	
[13].	

Signature of the Supervisor	
5. Seminar Presentation Remarks:	Date
Signature of the Seminar Coordinator	Signature of the Supervisor
6. Submission of Seminar Report (Draft) Remarks:	Date
	Signature of the Supervisor
7. Submission of Seminar Report (Final) Remarks:	Date
	Signature of the Supervisor

4. Approval for Presentation

**Remarks:** 

Date.....

Signature of the Supervisor

## PART II-PROJECT- PHASE I (----451)

1. Topic of the project:	••••••
2. Name of the Supervisor(s):	
Approval of the Topic & Abstract	
	Date
Approved	
Signature of the Project Coordinator	
3. Literature Survey	Date
Remarks:	
Signature of the Supervisor	
4.Formulation of Objectives	Date

**Remarks:** 

Signature of the Supervisor

## 5. Formulation of hypothesis/design/methodology

Date.....

**Remarks:** 

Signature of the Supervisor

6. Formulation of work plan (Time line)

**Remarks:** 

Signature of the Supervisor

7. Seeking funds

**Remarks:** 

**Signature of the Supervisor(s)** 

Date.....

Date.....

## PROGRESS EVALUATION-I (MID SEMESTER)

**Details of work in progress** 

**Commentsof Supervisor** 

**Remarks of Assessment Board** 

## PROGRESS EVALUATION-II (END SEMESTER)

**Details of work done** 

**Comments of Supervisor** 

**Remarks of Assessment Board** 

8. Preparation of preliminary report(Draft)

Date.....

**Remarks:** 

Signature of the Supervisor

9. Preparation of preliminary report (Final)

Date.....

**Remarks:** 

## PROJECT PHASE-II (----492)

Date.....

Title of the Project:

Abstract:

## Assessment of work completed in PHASE I

## Details of work completed

Date.....

Suggestions by the Supervisor:

Progress Assessment-I

Details of work completedDate.....

**Comments of Supervisor** 

**Remarks of Assessment Board** 

**Progress Assessment-II** 

Details of work completedDate.....

**Comments of Supervisor** 

**Remarks of Assessment Board** 

## **Progress Assessment–III (Final)**

Details of work completedDate.....

**Comments of Supervisor** 

**Remarks of Assessment Board** 

## **RESULTS AND CONCLUSION**

Details of Results and ConclusionDate.....

Suggestions by the Supervisor:

# PREPARATION OF PAPER FOR CONFERENCE PRESENTATION/PUBLICATION IN JOURNALS/ PATENTS

## **Details of paper preparation/applying for patents**

Date.....

**Suggestions by the Supervisor(s):** 

#### FINAL PROJECT REPORT

**Presentation before Supervisor(s) Remarks:** 

**Signature of Supervisor(s)** 

Approval of the project **Remarks:** 

Submission of draft copy of projectreport **Remarks:** 

**Signature of Supervisor(s)** 

Date.....

Submission of final projectreport **Remarks:** 

**Signature of Supervisor(s)** 

**Signature of Supervisor(s)** 

Date.....

Date.....

Date.....

## PROJECT PRESENTAION AND VIVA VOCE

Details of project presentation and viva voce

Date.....

Signature of Supervisor(s)

## LIST OF PAPERS PUBLISHED &PATENTS APPLIED

Details of papers published/patents applied from this project

Funds received:

## SECTION-C

# SEMINAR AND PROJECT ASSESSMENT

DEPARTMENT OF \_\_\_\_\_ ENGINEERING

## SEMINAR (---- 451)

		Marks Distribution					
Roll No:	Name of Student	Presentation (20 Marks)	Answering Questions (15 Marks)	Report (15 Marks)	Total (50 Marks)		
1.			,				
2.							
3.							
4.							
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22.							
23.							
24.							
25.							
26.							
27.							
28.							
29.							

		Marks Distribution					
Roll No:	Name of Student	Presentation (20 Marks)	Answering Questions (15 Marks)	Report (15 Marks)	Total (50 Marks)		
30.							
31.							
32.							
33.							
34.							
35.							
36.							
37.							
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50.							
51.							
52.							
53.							
54.							
55.							
56.							
57.							
58.							
59.							

64.				
Signatu	re of the Seminar/ Project C	oordinator	Date	

Signature of HoD

Date.....

39

		Marks Distribution					
Roll No:	Name of Student	Presentation (20 Marks)	Answering Questions (15 Marks)	Report (15 Marks)	Total (50 Marks)		
60.							
61.							
62.							
63.							
64.							

## PROJECT-PHASE I (----451)

		Marks Distribution					
Roll No:	Name of Student	Progress Evaluation-1 Supervisor (10 Marks)	Progress Evaluation-2 Supervisor (10 Marks)	Preliminary report Assessment Board (10Marks)	Progress Evaluation Assessment Board (10 Marks) Mid semester	Progress Evaluation Assessment Board (10 Marks) End semester	Total (50 marks)
1.							
2.							
3.							
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							

		Marks Distribution					
Roll No:	Name of Student	Progress Evaluation-1 <i>Supervisor</i> (10 Marks)	Progress Evaluation-2 Supervisor (10 Marks)	Preliminary report Assessment Board (10Marks)	Progress Evaluation Assessment Board (10 Marks) Mid semester	Progress Evaluation Assessment Board (10 Marks) End semester	Total (50 marks)
17.							
18.							
19.							
20.							
21.							
22.							
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24.							
25.							
26.							
27.							
28.							
29.							
30.							
31.							
32.							
33.							
34.							

		Marks Distribution					
Roll No:	Name of Student	Progress Evaluation-1 <i>Supervisor</i> (10 Marks)	Progress Evaluation-2 Supervisor (10 Marks)	Preliminary report Assessment Board (10Marks)	Progress Evaluation Assessment Board (10 Marks) Mid semester	Progress Evaluation Assessment Board (10 Marks) End semester	Total (50 marks)
35.							
36.							
37.							
38.							
39.							
40.							
41.							
42.							
43.							
44.							
45.							
46.							
47.							
48.							
49.							
50.							
51.							
52.							

Marks Distribution								
Roll No:	Name of Student	Progress Evaluation-1 Supervisor (10 Marks)	Progress Evaluation-2 Supervisor (10 Marks)	Preliminary report Assessment Board (10Marks)	Progress Evaluation Assessment Board (10 Marks) Mid semester	Progress Evaluation Assessment Board (10 Marks) End semester	Total (50 marks)	
53.								
54.								
55.								
56.								
57.								
58.								
59.								
60.								
61.								
62.								
63.								
64.								

Signature of the Seminar/ Project Coordinator

Signature of HoD

Date.....

43

Date.....

Date.....

## PROJECT-PHASE II (----492)

	FINAL Evaluation by Assessment Board									
Roll No:	Name of Student	Progress Evaluation-1 Supervisor (10 Marks)	Frogress Evaluation-2 Supervisor (10 Marks)	Assessment Board (30 Marks) End semester	Quality of slides (10 Marks)	Time Management (5 Marks)	Presentation Skill (15 Marks)	Answering Queries (15 Marks)	Innovation/ Paper publication/ Patents (5 Marks)	Total (100 Marks)
1.										
2.										
3.										
4.										
5.										
6.										
7.										
8.										
9.										
10.										
11.										
12.										
13.										
14.										
15.										
16.										
17.										

				Evaluation by Assessment Board					
Roll No:	Name of StudentProgress Evaluation-1 Supervisor (10 Marks)Progress 	Quality of slides (10 Marks)	Time Management (5 Marks)	Presentation Skill (15 Marks)	Answering Queries (15 Marks)	Innovation/ Paper publication/ Patents (5 Marks)	Total (100 Marks)		
18.									
19.									
20.									
21.									
22.									
23.									
24.									
25.									
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27.									
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29.									
30.									
31.									
32.									
33.									
34.									
35.									

			 FINAL REPORT		Evaluation by Assessment Board				
Roll No:	Name of StudentProgress Evaluation-1Progress Evaluation-2Assessment Board (30 Marks)Name of StudentSupervisor (10 Marks)Supervisor (10 Marks)Assessment Board (30 Marks)	Quality of slides (10 Marks)	Time Management (5 Marks)	Presentation Skill (15 Marks)	Answering Queries (15 Marks)	Innovation/ Paper publication/ Patents (5 Marks)	Total (100 Marks)		
36.									
37.									
38.									
39.									
40.									
41.									
42.									
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50.									
51.									
52.									
53.									

		December	D	FINAL REPORT	Evaluation by Assessment Board					
Roll Nar No:	Name of Student	Frogress Evaluation-1 Supervisor (10 Marks)	Progress Evaluation-2 Supervisor (10 Marks)	Assessment Board (30 Marks) End semester	Quality of slides (10 Marks)	Time Management (5 Marks)	Presentation Skill (15 Marks)	Answering Queries (15 Marks)	Innovation/ Paper publication/ Patents (5 Marks)	Total (100 Marks)
54.										
55.										
56.										
57.										
58.										
59.										
60.										

Signature of the Seminar/ Project Coordinator

Date.....

Signature of HoDDate.....

## SECTION-D

## **APPENDICES**

#### **APPENDIX -I**



## SREE BUDDHA COLLEGE OF ENGINEEERING PATTOR DEPARTMENT OF \_\_\_\_\_\_ ENGINEERING

## **PROJECT PROPOSAL FORM**

Date:

**PROJECT TOPIC:** 

Main Field of Study:

Abstract:

**Objectives:** 

**Computer Usage:** 

**Approximate Budget:** 

Proposed by;

Name of faculty/ Students:

## **APPENDIX-III**

## GUIDELINES FOR PREPARING SEMINAR/PROJECT PRELIMNARY/PROJECT FINAL REPORT

The sequence in which the seminar/project preliminary/ projectfinal report material should be arranged and bound should be as follows:

- 1. Cover Page & Title Page
- 2. Declaration (Required only for the project final report) (See Sample given)
- 3. Certificate (See Sample Given)
- 4. Acknowledgements
- 5. Abstract
- 6. Table of Contents
- 7. List of tables (No., Title and Page No shall be given)
- 8. List of figures (No., Title and Page No shall be given)
- 9. Abbreviations: List all abbreviations and their expansions
- 10. Notation: List all symbols used in the report, give units in case of dimensional quantities
- 11. Chapters (Introduction to Conclusion)( Main headings, Sub headings & page no. shall be given) (see sample given)
- 12. References
- 13. Conference presentations and Journal Publications
- 14. Appendices, if any (programs, data sheets, derivations, etc.)

### Abstract:

Abstract should be one page summary of the seminar report (Maximum 2 pages for project report) typed in 1.5 line spacing. Font: Times New Roman, Size 12, Justified

### Acknowledgement:

1.5 line spacing. Font: Times New Roman, Size 12, Justified

### List of Tables & List of Figures:

Font: Times New Roman, Size 12, Justified.One and a half spacing should be adopted for typing the matter under this head.

## **Chapters:**

**CHAPTERS of Seminar report** (See sample given below)

- First ChapterIntroduction General Background
- Body of Seminar report (Number of chapters can be decided based on the seminar topic)
- Last ChapterConclusion

## CHAPTERS of Project Preliminary report (See sample given below)

- CHAPTER 1 Introduction General Background
- CHAPTER 2 Literature Survey/Review
- **CHAPTER3** Project Objectives and Methodology
- CHAPTER 4 Work Plan and Approximate Budget
- CHAPTER 5 Theory/ Modeling / Experimentation etc. asapplicable
- CHAPTER 6Conclusion

### **CHAPTERS of Final project report** (See sample given below)

- **CHAPTER 1** Introduction General Background, Scope etc.
- **CHAPTER 2** Literature Survey/Review
- **CHAPTER3** Project Objectives and Methodology
- **CHAPTER4**Theory/ Modeling / Experimentation etc. asapplicable (If both theoretical/computational and experimental works are there, better explain them in separate chapters.)
- **CHAPTER 4** Results and Discussion (If both theoretical/computational and experimental works are there explain them in separate chapters)
- **CHAPTER 5** Conclusions Conclusions, Recommendations, scope for further work etc.

## Page Layout:

Paper size: A4

Page Numbers should be located at bottom center of the page

Headers/ Footers are not permitted

## Margins 2.54 cm (1") all sides

### **Paragraph Layout:**

Font: Times New Roman Font Size: Chapter Headings: 14 Bold, Capitals

1<sup>st</sup>Level Heading (Main headings): 12 Bold Capitals

2<sup>nd</sup>Level Heading (Sub headings): 12 Bold Sentence Case

3<sup>rd</sup>Level Headings: 12 Italics

## Report matter: 12font size, Font: Times New Roman, 1.5 line spacing. Justified

Main headings shall be numbered as 1.1, 1.2, 1.3,.... 2.1, 2.2, 2.3.....etc.

Sub headings shall be numbered as 1.1.1,1.1.2,.....2.1.1,2.1..2.....etc.

All figures, sketches, photos and tables shall be titled.

Justification: All paragraphs should have full justification

Line spacing: One and a half spacing for all paragraphs

No tab space should be provided at the beginning of each paragraph.

- Begin each chapter in a new page.
- Begin paragraph in the line next to the heading. Leave one line space after paragraph and the next heading. Do not begin a new section at the end of a page. Minimum two lines must follow a main heading/sub heading in a page.
- Begin all paragraphs left justified. Leave 12 pt space after paragraphs. OR. Start paragraphs indenting 10 character space in the beginning and in this case no space is to be given after paragraph.

## Tables and Figures:

Tables and figures should be inserted in line with text as and where it is referred in the text. All tables/figures should be numbered.

Title of the table should be positioned above the table and Captions of figures should be placed below the figure centrally aligned.

- Figures, sketches, equations and tables shall be serially numbered chapter wise (Eg. 2.1,2.2...... 3.1,3.2.....).
- All figures, sketches, photos and tables shall be titled.
- Figure no. and title (12 Regular) shall be given below the figure.
- Table no and title (12 Regular) shall be given above the table.
- Figures, Tables etc in Landscape format shall be put in such a way that they can be viewed from right side.
- Figures, Tables, Sketches and Equations shall be **centre justified**.

- Figures, sketches, tables shall be placed immediately after the paragraph in which they are referred
- Give reference no within square brackets for figures, sketches, photos tables which are adapted from the references.

## <u>Graphs</u>:

All graphs should be clearly visible. The axes titles and legends should be legible.

## *Equations*:

Equations should be numbered sequentially, preferably in the same font and size of the text.

• Use equation editor for equations.

## Spelling and Grammar

Spelling and grammar of each chapter should be checkedbefore submission.

## **References:**

References should be cited in the text as follows:

Single author: First author (Year)

Two authors: First author & second author (Year)

Three or more authors: First author et al. (Year)

References should be listed in single spacing (*left-justified*) at the end of the last chapter in the alphabetic order of the first author in the following format.

Authors' names, Title of publication, Name of journal (in italics), Volume Number, Pages The orders of references in the list can be either in the order of the year of publications or in the order of references cited in the text.

References are provided for journals, conferences and books. A typical illustrative list given below relates to the citation examples which are different for Journals, Conferences proceedings and Books.All references listed must be cited in the text, all cited references shall be listed in the REFERENCES. Authors' name shall be exactly as in the reference material. All authors shall be included in the REFERENCES. However in the text, if more than two authors are there it can be cited by giving name of the first author followed by et.al. eg. Andrewset.al (1989)

## **References shall be as per the following format (Spacing single)**

i. **Journal/conference/symposium/seminar/workshop papers:**- Authors (inbold ) (Year), Title of paper, Name of Journal/ Conference/ Symposium/ seminar/ workshop (in italics), Issue No., Pages

- ii. **Books:** -Author(s) (Bold), Title (in italics), Publisher, Edition, Year of Publication.
- iii. Online Books: Author. (Year, month day). Title. (edition) [Type of medium].Volume (issue). Available: site/path/file
- iv. Patents: Author, Title of patent, Patent No., Month day, year.

#### (Journal paper)

- Andrews, G.E and Bradley, D. (1972). The Burning Velocity of Methane-Air Mixtures, *J.Cle. Pro*, 6, 2100-2113
- Bruun, H.H (1976). A Note on Static and Dynamic Calibration of Constant temperature Hot-wire Probes, *J.Fluid.Mech*, 76, 145-155

#### (Reference book)

- Bradshaw, P. An Introduction to Turbulence and its Measurement, Pergamon Press, 1971.
- G.O. Young, Synthetic structure of industrial plastics, in *Plastics*, 2<sup>nd</sup> Ed., Vol.3, J. Peters, Ed. New York: McGraw Hill, 1964, 15-64

### (Periodical)

5. J.U. Duncombe, Infrared navigation – Part I : An Assessment of feasibility, *IEEETrans. Electron Devices*, Vol. ED-11, No.1, 34-39, Jan 1959

#### (Report)

6. E.E. Reber, R.L. Michelland C.J. Carter, Oxygen absorptionintheearth's

atmosphere, Aerspace Corp., Los Angeles, CA, Tech. Rep. TR-0200 (4230-46)-3, Nov1988.

#### (Paper published in conference or symposium proceedings)

 Lefebvre, A.H. (1965) Progress and Problems in Gas Turbine Combustion, 10<sup>th</sup>Symposium (International) on Combustion, The Combustion Institute, Pittsburg, 1129-1137.

### (Online book)

8. Jones (1991, May 10), Networks, (2<sup>nd</sup> Ed.) [Online]. Available: <u>http://www.atm.com</u>

(Online journal)

 R.J. Vidmar, (1992, Aug.). On the use of atmospheric plasmas as electromagnetic reflectors. IEEE Trans. Plasma Sci. [Online].21(3), 876-880. Available:<u>http://www.halcyon.com/pub/journals/21ps03-vidmar</u>

#### **Page numbering:**

From acknowledgement to first page of chapter 1 use Roman numerals (font size 12, bottom centered)

From the first page of Chapter 1 onwards use Arabic numerals (12 Regular font, bottomcentered)

Start page number as 1 from Chapter 1.

#### **Binding:**

The seminar report and Project Preliminary report in A4 size must be soft bound in white color with black letters.

Final Project Report in A4 size must be HARD bound in white color with black letters.

#### Important

(i) A typed draft report as per the above guidelines has to be prepared and submitted to the guide(s), at least one week before the final evaluation of the project. The draft report shall be corrected and approved by the guide(s). This signed draft report is to be produced before the evaluation committee at the time of final evaluation of the project.

(ii) The final report is to be made after the final project evaluation is over. The corrections and suggestions made by the evaluation committee are to be incorporated in the final report. Submit the final report along with the draft report, within one week after final project evaluation, to the Project coordinator for getting signature of the Head of the Dept.

(iii) Submit six copies of ABSTRACT (max. 2 pages) to the Project coordinator three days before the date of final project evaluation.

Note: - A sample report is given. This report is only a sample and the titles and contents are randomly included and have no significance other than conveying the format.

A sample of the cover page and the inside cover page is shown below:

TITLE(16 Bold all capitals – Times New Roman)
PROJECT REPORT(12 Regular- all capitals )
submitted by
NAME: (14 Bold- all capitals)
Reg. No (12 Bold)
to
the APJ Abdul Kalam Technological University
in partial fulfillment of the requirements for the award of the Degree
of
Bachelor of Technology in Engineering (12 Italics )
(COLLEGE EMBLEM)
Department of Engineering (14 Bold, leading capitals)
Name of college
Place
Month, Year (14 Regular)

#### **APPENDIX-III**

## SAMPLEPROJECTREPORT

## NUMERICAL SIMULATION AND EXPERIMENTAL INVESTIGATION OF FLOW PAST A CIRCULAR CYLINDER

A PROJECT REPORT

Submitted by

## NAME

## **Register Number**

to

The APJ Abdul Kalam Technological University

in partial fulfillment of the requirements for the award of the Degree

of

Bachelor of Technology

In

\_\_\_\_\_ Engineering



Department of \_\_\_\_\_

Engineering

Name of college

Place

MONTH YEAR (eg. MAY 2020)

### **DECLARATION (14 Bold)**

I/We undersigned hereby declare that the project report ("Title of project"), submitted for partial fulfillment of the requirements for the award of degree of Bachelor of Technology of the APJ Abdul Kalam Technological University, Kerala is a bonafide work done by me/us under supervision of (Name of supervisor(s)). This submission represents my/our ideas in my/our own words and where ideas or words of others have been included, I/we have adequately and accurately cited and referenced the original sources. I/We also declare that I/we have adhered to ethics of academic honesty and integrity and have not misrepresented or fabricated any data or idea or fact or source in my/our submission. I/We understand that any violation of the above will be a cause for disciplinary action by the institute and/or the University and can also evoke penal action from the sources which have thus not been properly cited or from whom proper permission has not been obtained. This report has not been previously formed the basis for the award of any degree, diploma or similar title of any other University. (*Times New Roman font, 12 size, 1.5 line spacing, Justified*).

Place

Date

Signature Name of the student/s (12 Bold)

## DEPARTMENT OF \_\_\_\_\_ ENGINEERING NAME OF THE COLLEGE, PLACE (14-Bold)

(COLLEGE EMBLEM)

## **CERTIFICATE** (14 Bold)

This is to certify that the seminar/project preliminary/project report entitled "**Title** (14 Bold)" submitted by "Name/s with Register Number in brackets (12 Bold)" to the APJ Abdul Kalam Technological University in partial fulfillment of the requirements for the award of the Degree of Bachelor of Technology in \_\_\_\_\_\_ Engineering is a bonafide record of the seminar/project work carried out by him/them under our guidance and supervision. This report in any form has not been submitted to any other University or Institute for any purpose. (Times New Roman font, 12 size, 1.5 line spacing, Justified).

Supervisor name	Project Coordinator name	Head of the Dept name (12
bold)		
Supervisor	<b>Project Coordinator</b>	Head of the Department
(12 bold)		
< <designation>&gt;&lt;&lt;</designation>	<designation>&gt;&lt;<designation>&gt;</designation></designation>	
< <department>&gt;&lt;&lt;</department>	Department>>< <department>&gt;</department>	

<<college>><<college>

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	1.3. Scheme	5
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	2.2. XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	•••
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LIST OF PUBLICATIONS

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3.2	Xxxxxxxxxxxxxxxxxx	
3.3	Xxxxxxxxxxxxxxxxxx	
4.1	Xxxxxxxxxxxxxx	

## **ABBREVIATIONS**

(List in the alphabetical order)

- HAS High Altitude Simulation
- LMTD Logarithmic Mean Temperature Difference
- PDF Probability Density Function

.....

.....

## NOTATION

(List in the alphabetical order)

Area, m<sup>2</sup> А Voltage, V Temperature, K Е Т ..... Greek Symbols Diffusivity, m<sup>2</sup>/s α Shear Stress, MPa τ *Superscripts* ..... **Subscripts** .....

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## CHAPTER 1 INTRODUCTION

## 1.1 GENERAL BACKGROUND(Main Heading)

Research is a process of arriving at an appropriate solution to a problem through a systematic approach

philosophy. (Leave 12 pt space after paragraph)

## CHAPTER 2 LITERATURE SURVEY

## 2.1 THEORETICAL INVESTIGATIONS

## 2.1.1 Optimisation studies (Sub heading)

.....



 Table 2.3 Effect of voltage

(Title of table is to be given above the table)

Sl.	Voltage (mV)	Current (mA)	Force (N)	Power (W)
No				
1	nn	mm	XX.X	уу.уу
2	nn	mm	XX.X	уу.уу
3	nn	mm	XX.X	уу.уу
4	nn	mm	XX.X	уу.уу
5	nn	mm	XX.X	уу.уу
6	nn	mm	XX.X	уу.уу
7	nn	mm	XX.X	уу.уу

.....

.....

The most commonly used mathematical model is exponential model (Goel and Okumoto, 1996) given as under:

$$m(t) = a \left( 1 - e^{-bt} \right) \tag{2.7}$$

.....

2.2 MODELLING (Minimum two lines must follow a main heading/sub heading in a page.)

.....

## CHAPTER 4 RESULTS AND DISCUSSION

## 4.1 XXXXXXXXXXXX

The results of various	 	 





## Fig. 4.1 Variation of nitrate concentration in different medium

······

## REFERENCES

#### (Journal paper)

- Andrews, G.E and Bradley, D. (1972). The Burning Velocity of Methane-Air Mixtures, *J. Cle. Pro*, 6, 2100-2113
- Bruun, H.H (1976). A Note on Static and Dynamic Calibration of Constant temperature Hot-wire Probes, *J.Fluid.Mech*, 76, 145-155

#### (Reference book)

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#### (Periodical)

12. J.U. Duncombe, Infrared navigation – Part I : An Assessment of feasibility, *IEEETrans. Electron Devices*, Vol. ED-11, No.1, 34-39, Jan 1959

#### (Report)

13. E.E. Reber, R.L. Michelland C.J. Carter, Oxygen absorption in the earth's

atmosphere, Aerspace Corp., Los Angeles, CA, Tech. Rep. TR-0200 (4230-46)-3, Nov1988.

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- R.J. Vidmar, (1992, Aug.). On the use of atmospheric plasmas as electromagnetic reflectors. IEEE Trans. Plasma Sci. [Online].21(3), 876-880.
   Available:http://www.halcyon.com/pub/journals/21ps03-vidmar

## **APPENDIX** – A

## A.1 XXXXXXXXXX (same format as that of chapters)

 	 	 •••••
 	 	 •••••

\* The above report format is taken from the M.Tech thesis guidelines issued by KTU...