

SUKKUR IBA UNIVERSITY

DEPARTMENT OF ELECTRICAL ENGINEERING



FYP Handbook

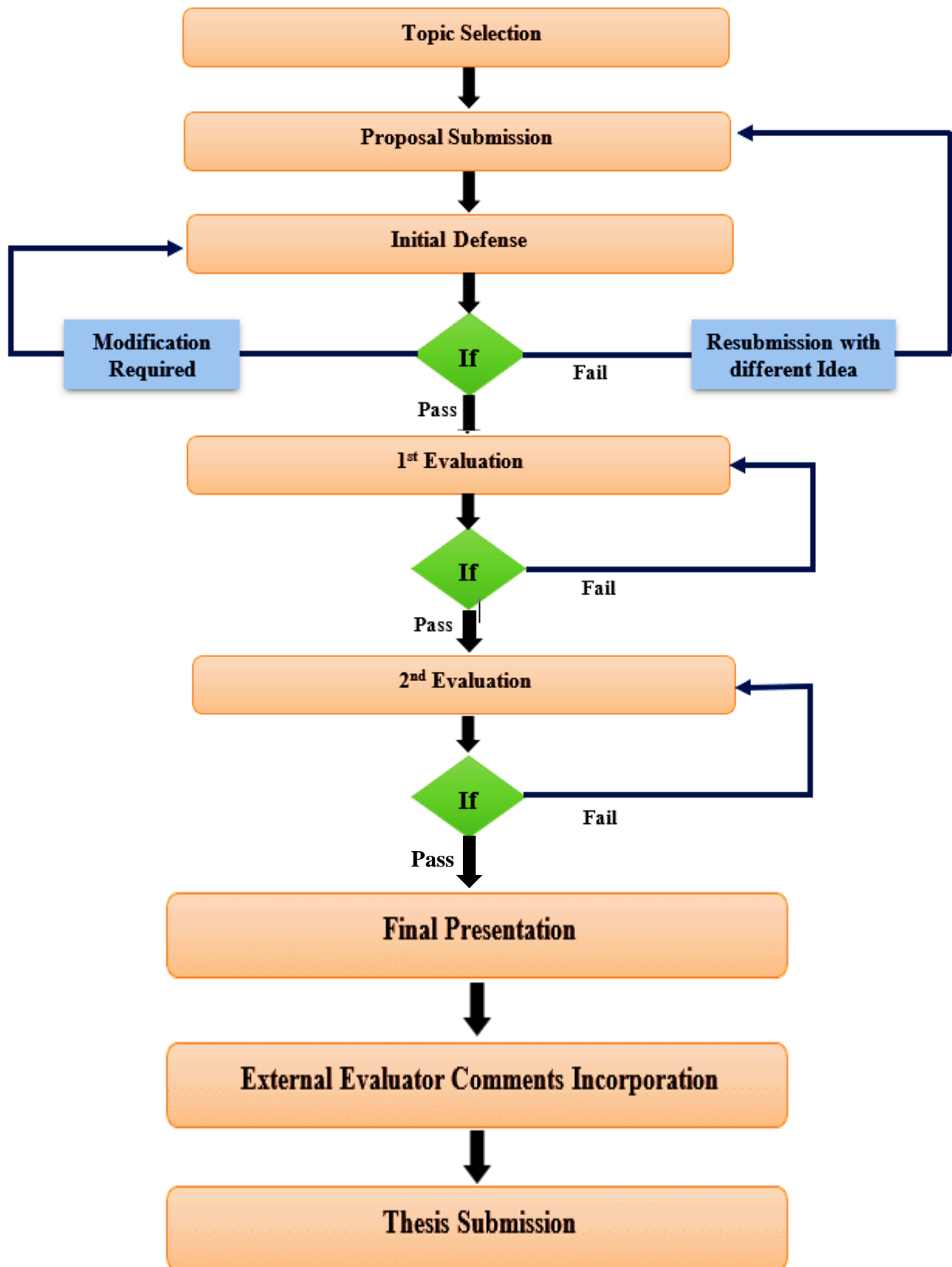
FYP Timeline

Activity	Presentation Week	Total Marks
Evaluation-1	20 th to 25 th September 2021	40
Evaluation-2	17 th to 22 th January 2021	40
Final Evaluation	June 2022	Internal : 40 Marks External : 80 Marks

FYP Marks Breakdown

	Presentation Week	Remarks
Proposal Submission	5 th July 2021	
FYP Proposal Defence	12 th July 2021	
1 st Presentation	20 th to 25 th September 2021	40 Marks
2 nd Presentation	17 th to 22 th January 2021	40 Marks
Final Presentation	June 2022	Internal : 40 Marks External : 80 Marks

Process of Final Year Project



SUKKUR IBA UNIVERSITY

DEPARTMENT OF ELECTRICAL ENGINEERING



The proposed name of the Project

Group Members

Name: _____ CMS ID: _____ Email: _____ Cell No: _____
Name: _____ CMS ID: _____ Email: _____ Cell No: _____

Supervisor:

Co-Supervisor:

Submission Date:

1. Project Overview

Briefly explain in no more than 2 pages what your project is about and what you are going to do in this project.

2. Aims and Objectives of Project

Write down the aims and objectives of your project.

3. Literature Review

If you don't want to add literature review in the overview section above, you can give the literature review here however it should be brief.

4. Methodology for Implementation of Project

You have to explain that how you are planning to carry out this project. This involves explaining what kind of activities you will be doing such as literature review, experimental setup, installation of hardware/software, designing of an algorithm, Data collection, results analysis etc.

5. Project Plan/Gantt Chart

Please put the data in the Gantt chart based on your project description. Also redefine the milestones based on how you can achieve them. The things define here are just to give you an idea how to write a technical document

Task No	Task Name	2020												
		01	02	03	04	05	06	07	08	09	10	11	12	
1	Literature Review	████████████████												
2	Study of Literature		██████████████											
3	Analysis of Proposed Scheme				████████████████████									
4	Preparation of Schemes / Model						██████████		██████████					
5	Implementation of Schemes/Model								████████████████					
6	Analysis & Simulation										██████████████			
7	Final Write-up & Thesis Submission											██████████████		

In the Gantt chart above the numbers from 1-12 represents months of the year.

6. Budget Description

Write about budget required for the proposed project here. Do mention about that how the equipment/experimental setup required will be arranged. E.g., experimental setup is present in university or some other organization's setup will be used or funding is required for the execution of the project.

7. References

Includes all references: articles, media facts, books, reports, regulations, internet articles, papers that you referenced from the text. References can be written in single space with extra space between references as in the format below. There are many different ways to arrange the information and punctuation in a reference listing. The most important thing is to make sure all references are complete and that the format of your references is consistent throughout.

1. Example, S.Z. (2008). How to cite a complete journal reference. *J. Complete Thesis*. 1(2): 47-52.
2. Example, S.Z., Second, W.S. (2007). How to cite a complete conference proceedings paper. In: *Proceedings, 2nd International meeting of Masters Students*, Paper # XW15 (Potsdam NY, November, 2007).
3. If you use the "thesis" reference" style you will get the proper line spacing and indent style without further changes. Above are examples to show complete citation, other formats also acceptable.

Signature of Students
Name of Students
Registration Numbers

8. Supervisor's Comments

Take recommendation of your supervisor for your project work here.

Signature of Supervisor
Name of Supervisor
Designation of Supervisor

9. FYP Committee Remarks

Do not write anything here. For official use only

FYP Evaluator

Guidelines for Preparation of FYP Presentation

Flow of presentation should include following sections. The maximum limit of slides in ppt file should be within 25 slides.

- 1.** Introductory slide (mentioning project title, group members, Supervisor & Co-supervisor name)
- 2.** Introduction
- 3.** Motivation
- 4.** Problem Statement
- 5.** Literature Review (If possible use tabular format for presenting literature work)
- 6.** Aims & Objectives (It's better to fit this content on one slide in bullet form)
- 7.** Methodology (If possible add short clip of fabrication process. In case of mathematical modeling, it is not necessary to read all equations during presentation, just explaining meaning/purpose of mathematical work)
- 8.** Results & Discussion (If possible add short clip of simulation work or hardware system performance)
- 9.** Conclusion
- 10.** Future Recommendation
- 11.** References

Guidelines for making Videos of Final Year Project (FYPs)

You have to submit two videos.

Short video: (2~4 minutes maximum): Animation style with music + text/voice (only important things, just like abstract, conclusion of thesis + thumbnail slide)

Example: Animated video lecture can be seen on EE SIBAU channel:

Long video: Duration of video should be less than 30 minutes. Try to reduce time and cover only important slides/your actual work for video presentation.

Example videos can be seen on EE SIBAU channel

Video sections for long video:

Introduction to team members inside ppt in background + face to face on same time.



Project title, Introduction to Supervisor, co-supervisor

FYP Presentation

FYP demonstration (Hardware, software or both (whichever methodology is adopted and implemented))

FYP poster (show actual poster and just tell that you have summarized your work into poster (don't explain again))

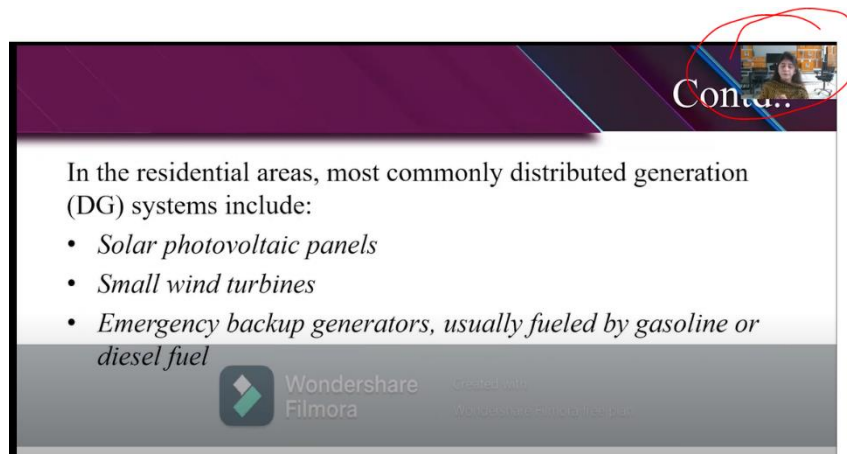
Short and long video presentation with:

- a. Use English language.
- b. High quality video with same dimensions/style as YouTube videos (not as TickTock style)
- c. No water marks of any video recording application.
- d. Clear voice, no noise, same level of voice in whole presentation
- e. No shaky video (Camera should be fixed)
- f. Proper lighting in surroundings with visible PPT text, no shadows, or extra light reflections/shadows.
- g. No background music (we will add)
- h. You can use slide/image/video transitions and in-slide animations are very much encouraged.
- i. Do not stand in front of projected ppt (use LASER pointer).
- j. If you cannot explain something well, skip it from video or explain briefly with confidence to avoid bad impression worldwide.

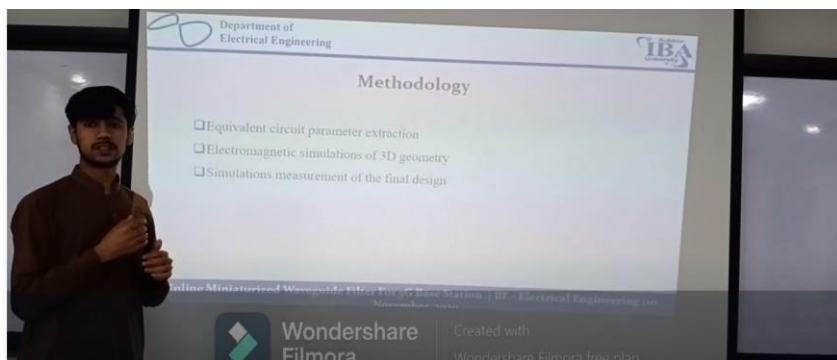
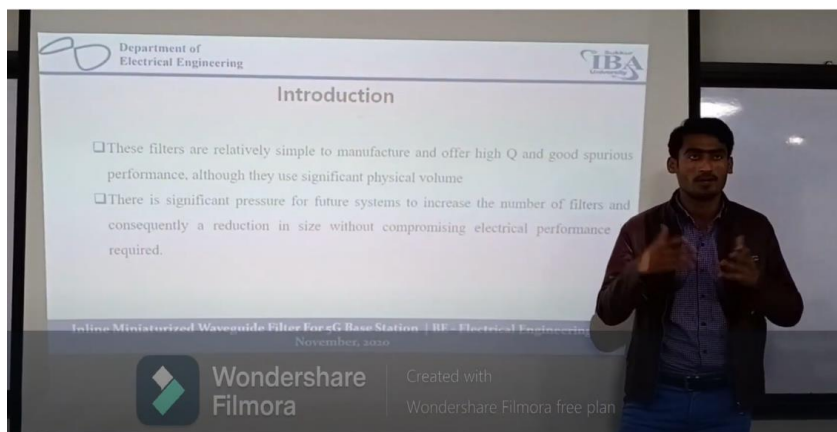
Channel: EE SIBAU: https://www.youtube.com/channel/UC_wia8rRfRyrbqnFRvpc9Ew

Recommended style for video:

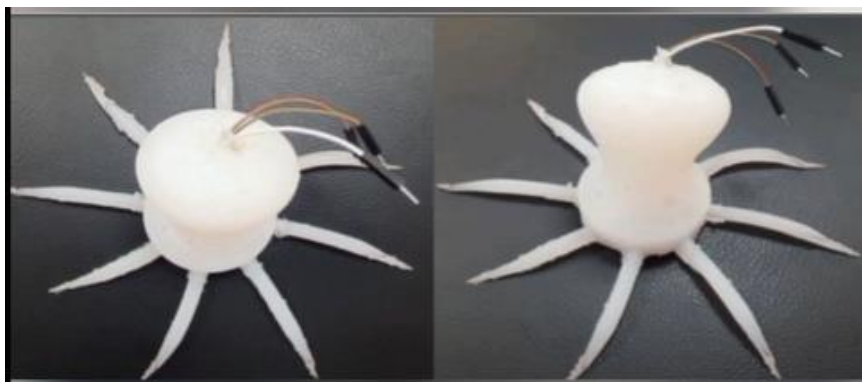
- (i) Small face video + slide + cursor/pointer



- (ii) Stand on right/left side of video presentation and explain + LASER pointer.



- (iii) Demonstration must be included after presentation.

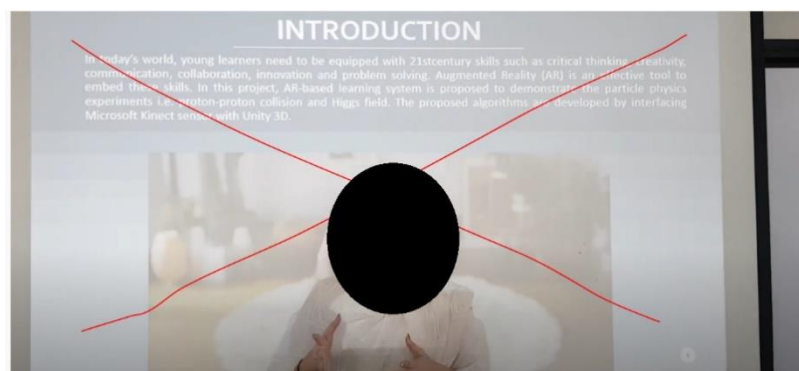


Not recommended:

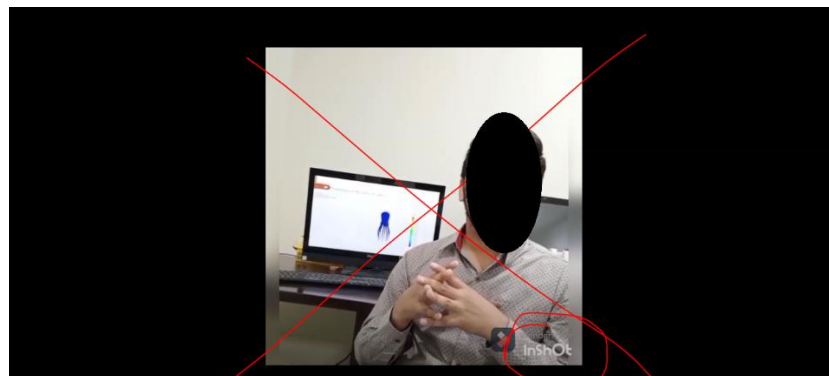
Do not read like this. Use LASER pointer.



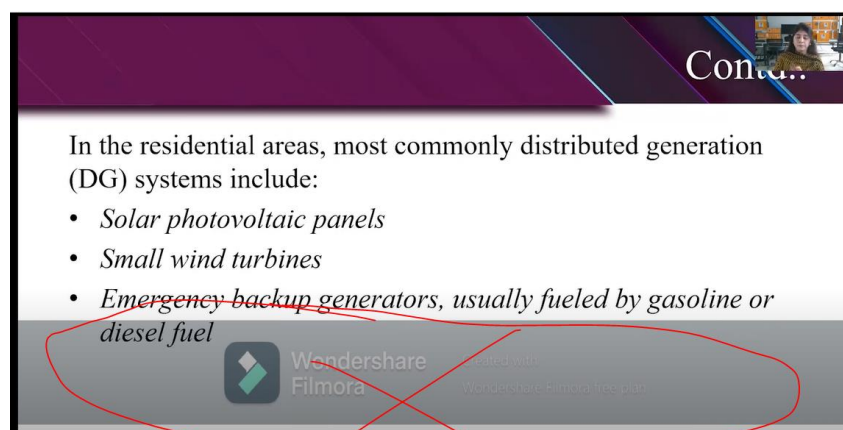
Do not stand in front of projected ppt.



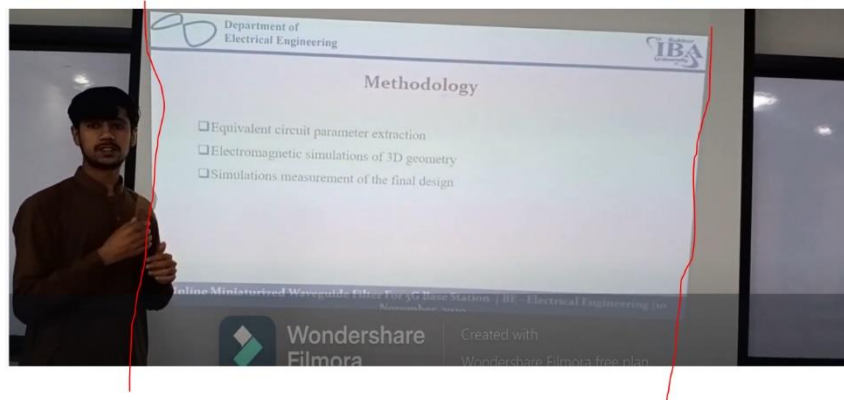
Tick tock style or video that does not cover full screen in YouTube style is not recommended.



Watermarks are not recommended.



Bad alignment is not recommended.



Just voice over, not recommended.

Classification – SVM Classifier

- » SVM Stands for Support Vector Machine.
- » Supervised Learning Algorithm.
- » Used as SVC (Support Vector Classification) for classification problems.
- » Used as SVR (Support Vector Regression) for regression problems.
- » It is used for smaller dataset because it take longer to process.

FYP Progress Report Form

FYP Progress Report

Project Title: _____

<Student 1 Name, Enrollment Number>

<Student 2 Name, Enrollment Number>

<Student 3 Name, Enrollment Number>

Supervisor

<Supervisor Name>

Supervisor Affiliation

<Co-supervisor Name, if necessary>

Co-supervisor Affiliation

Progress Report Submission Date: 26-10-2020

Details of FYP Work:

Final Year Project Work	Hardware Based (%)	Software Based (%)

	In term of (%)	Description
Executed Work		
Remaining Work		

Comments by Supervisor/Co-Supervisor:

Is the FYP Project/Thesis ready for final presentation? Yes No

Signature of Supervisor

FYP (Final Presentation) Check List Form



SUKKUR IBA UNIVERSITY
DEPARTMENT OF ELECTRICAL ENGINEERING
FYP (Final Presentation)
Check List

FYP Title:

Group Members:

S. No.	Description	Check
1.	Presentation File (.ppt)	
2.	Printed Poster (as per given format)	
3.	Printed Thesis (Spiral bound)	
4.	Recorded Video Demonstration of Final Year Project Work (length of video= 20-30 minutes)	

FYP Supervisor

Remarks (FYP) Committee):

FYP Report Compliance Form

FYP Report Compliance Performa

Topic:	
Student Names:	
Supervisor:	
Co-Supervisor:	

Reviews by External Examiner:

Reviews Incorporated:.

Yes

No

Signature of Supervisor

Evaluation Rubrics



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DEPARTMENT OF ELECTRICAL ENGINEERING

Generic Course Learning Outcomes (CLOs) for Final Year Projects (FYP)

CLO	Description	Taxonomy Level	Mapped PLO	Assessment
CLO 1	Describe and comprehend the fundamentals of related subjects	C2	1	E1, FEA
CLO 2	Identify and analyze the problem statement	C4	2	E1, FEA
CLO 3	Have clear idea of the expected outcomes		2	E1, FEA
CLO 4	Know the available tools to build a certain system	C1	5	E1, FEA
CLO 5	Make a technical comparison to choose the most appropriate modern engineering tool	C6	5	E2, FEA
CLO 6	Report the existing literature and identify the state-of-the-art.	C4	4	E1, FEA
CLO 7	Analyze the developed solutions by means of simulations	C4	4	E2, FEA
CLO 8	Develop a novel and reliable solution in an efficient way	C5	3	E3, FEA
CLO 9	The designed solution must meet the project objectives		3	E3, FEA
CLO 10	Relate the solution with the societal needs and demonstrate its extension for other objectives	C3	7	E3, FEA
CLO 11	Practice the professional ethics by not taking undue credit of someone else's work & Providing appropriate citations where applicable	A3	8	E3, FEA
CLO 12	Complete the allocated tasks		9	E1, E2, FEA
CLO 13	Contribute strongly as a team member	A3	9	E1, E2, FEA
CLO 14	Compose high quality technical document	C2	10	E3, FEA
CLO 15	Confidently demonstrate presentation skills		10	E1, E2, FEA
CLO 16	Achieve the expected outcomes	C4	11	E2, E3, FEA
CLO 17	Define the milestones, and continuously evaluate the progress		11	E1, E2, FEA
CLO 18	Identify relevant research and development domains in a broader context and construct on the developed solution to solve given problems	C5	12	E3, FEA



SUKKUR IBA UNIVERSITY
DEPARTMENT OF ELECTRICAL ENGINEERING
 FYP Internal Evaluation-I (Max Marks 40)

Project Title: _____ Date: _____

Student Name: [A= _____, B= _____, C= _____, D= _____] Supervisor: _____

CLO	Description	Mapped PLO	Score (0-10)				% Weight	Max Marks	Obtained Score			
			Student						Students			
			A	B	C	D			A	B	C	D
CLO 1	Knowledge of basic concepts and ability to comprehend them	1					10	4				
CLO 2	Problem Identification and formulation	2					20	8				
CLO 3	Idea of objectives and expected outcomes	2					10	4				
CLO 4	Know the available tools to build a certain system	5					10	4				
CLO 6	Report the existing literature and identify the state-of-the-art.	4					20	8				
CLO 12	Complete the individually allocated tasks	9					5	2				
CLO 13	Contribute strongly as a team member	9					5	2				
CLO 15	Confidently demonstrate presentation skills	10					10	4				
CLO 17	Define the milestones, and continuously evaluate the progress	11					10	4				
Total Obtained Score												

Examiner_Remarks: _____

FYP Coordinator



SUKKUR IBA UNIVERSITY
DEPARTMENT OF ELECTRICAL ENGINEERING
 FYP Internal Evaluation-II (Max Marks 40)

Project Title: _____ Date: _____

Student Name: [A= _____, B= _____, C= _____, D= _____] Supervisor: _____

CLO	Description	Mapped PLO	Score (0-10)				% Weight	Max Marks	Obtained Score			
			Students						Students			
			A	B	C	D			A	B	C	D
CLO 5	Expertise gained in hardware/software tools	5					20	8				
CLO 7	Perform simulations/ experiments and interpret the obtained results	4					30	12				
CLO 12	Completed the individually allocated tasks	9					10	4				
CLO 13	Contribute strongly as a team member	9					10	4				
CLO 15	Confidently demonstrate presentation skills	10					10	4				
CLO 16	Achieve the expected outcomes presented in last evaluation	11					10	4				
CLO 17	Define the next milestones, and continuously evaluate the progress	11					10	4				
Total Obtained Score												

Examiner Remarks: _____

FYP Coordinator



SUKKUR IBA UNIVERSITY
DEPARTMENT OF ELECTRICAL ENGINEERING
 FYP Internal Evaluation-III (Max Marks 40)

Project Title: _____ Date: _____

Student Name: [A= _____, B= _____, C= _____, D= _____] Supervisor: _____

CLO	Description	Mapped PLO	Score (0-10)				% Weight	Max Marks	Obtained Score			
			Student						Students			
			A	B	C	D			A	B	C	D
CLO 8	Develop a novel and reliable solution in an efficient way	3					40	16				
CLO 9	The developed solution meets the project objectives	3					15	6				
CLO 10	Impact of developed solution on society	7					10	4				
CLO 16	Achieve the expected outcomes set in Evaluation-II	11					5	2				
CLO 18	Identify possible extension or application area of the developed solution and plans for implementation	12					5	2				
CLO 11	Practice the professional ethics by not taking undue credit of someone else's work & Providing appropriate citations where applicable	8					5	2				
PLO 14	Composes high quality technical document	10					20	8				
Total Obtained Score												

Examiner Remarks: _____

FYP Coordinator



SUKKUR IBA UNIVERSITY

DEPARTMENT OF ELECTRICAL ENGINEERING FYP Evaluation Form- External Examiner (Max Marks 80)

Project Title: _____ Date: _____

Student Name: [A= _____, B= _____, C= _____, D= _____] Supervisor: _____

CLO	PLO	Description	Score (1-10)				% Weight	Max Mark	Obtained Score			
			Students						Students			
			A	B	C	D			A	B	C	D
CLO 1	1	Knowledge of basic concepts and ability to comprehend them					5	4				
CLO 2	2	Problem Identification					5	4				
CLO 3		Idea of objectives and expected outcomes					5	4				
CLO 4	5	Expertise gained in the hardware and software					5	4				
CLO 5		Comparison with other available tools					5	4				
CLO 6	4	Literature survey, conduct simulation & experiment					5	4				
CLO 7		Results validation and interpretation					5	4				
CLO 8	3	Novelty and reliability					5	4				
CLO 9		Achievement of Objectives					10	8				
CLO 10	9	Individual contribution					5	4				
CLO 11		Usefulness for team					5	4				
CLO 12	7	Impact of the developed solution on society					5	4				
CLO 13	8	Plagiarism and citations					5	4				
CLO 14	10	Quality of report					10	8				
CLO 15		Presentation skills					5	4				
CLO 16	11	Consistency between the expected and achieved outcomes					5	4				
CLO 17		Milestones timeline					5	4				
CLO 18	12	Identify possible extension or application area of the developed solution					5	4				
Total Obtained Score												

Comments: _____

Signature

Final Year Project Proposal Performa

Once agreed, the FYP supervisor is required to produce the FYP proposal in the following format so as to map all the CLOs.

CLO	Generic FYP CLOs	Project Specific Details
CLO 1	Describe and comprehend the fundamentals of related subjects	To successfully undertake this project, the students are expected to know the basics of <u>xyz</u> subjects and have some experience with <u>xyz</u> simulation and design tools
CLO 2	Identify and analyze the problem statement	Provide the detailed problem statements and their analysis
CLO 3	Have clear idea of the expected outcomes	List the expected outcomes
CLO 4	Know the available tools to build a certain system	List the all necessary tools/ techniques / expertise required to complete the project
CLO 5	Make a technical comparison to choose the most appropriate modern engineering tool	
CLO 6	Report the existing literature and identify the state-of-the-art.	Provide a list of articles/ patents that may be used as benchmark solutions covering the state of the art solutions. The students are strongly advised to go through these as soon as possible but continue to look for recently published works throughout the course of the project.
CLO 7	Analyze the developed solution by means of simulations	
CLO 8	Develop a novel and reliable solution in an efficient way	Upon completion of the project, the students will have designed <u>_(provide details)___</u> . The developed system shall successfully address the problem stated in CLO2
CLO 9	The designed solution must meet the project objectives	
CLO 10	Relate the solution with the societal needs and demonstrate its extension for other objectives	Describe the impact of proposed solution on society/ environment.
CLO 11	Practice the professional ethics by not taking undue credit of someone else's work & Providing appropriate citations where applicable	The students are strictly advised not to outsource the project in part or as a whole to a third party, plagiarize any part of the FYP report and/or take undue credit of someone else's work. To ensure this code of conduct, a monthly oral viva and assessment of the project will be conducted, in which each group member will be individually evaluated.
CLO 12	Complete the allocated tasks	Each student is advised to continuously revisit the initially allocated tasks to them and self-assess their achievement on a regular basis throughout the project. Furthermore, the task allocation should be fair enough to enable each student to contribute, more or less, equally to the project.
CLO 13	Contribute strongly as a team member	

CLO 14	Compose high quality technical document	To develop good report writing and presentation skills in the students and to ensure the timely completion of a well written FYP report, the members will be required to submit a short presentation along with a report to supervisor every month.
CLO 15	Confidently demonstrate presentation skills	
CLO 16	Achieve the expected outcomes	Whether successfully completed or not, once the allocated time period for a particular milestone has elapsed, the members shall report to the supervisor, who in return may either update the objectives and milestones or assign another member for assistance to enable rapid completion of the ongoing task. This activity will usually be scheduled with the monthly evaluation.
CLO 17	Define the milestones, and continuously evaluate the progress	
CLO 18	Identify relevant research and development domains in a broader context and construct on the developed solution to solve given problems	Upon completion of each milestone and finally on the project's completion, the members will discuss the possible application areas where this project, whether in part or full, may be extended to address other outstanding problems currently faced by the society.