# SUKKUR IBA UNIVERSITY

**DEPARTMENT OF ELECTRICAL ENGINEERING**

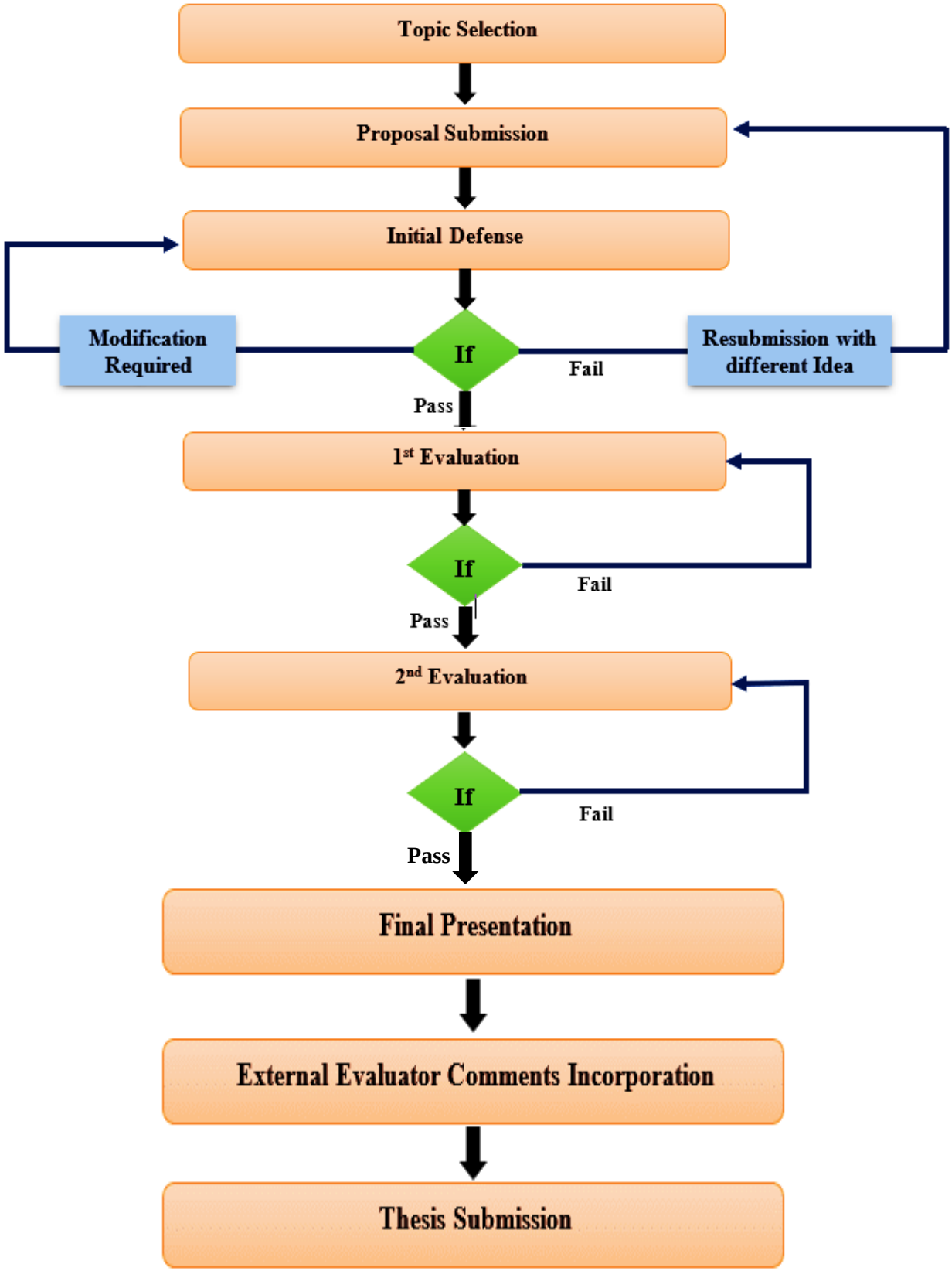

# FYP Handbook

| FYP Timeline | | |
|---|---|---|
| **Activity** | **Presentation Week** | **Total Marks** |
| Evaluation-1 | 20th to 25th September 2021 | 40 |
| Evaluation-2 | 17th to 22th January 2021 | 40 |
| Final Evaluation | June 2022 | Internal : 40 Marks<br>External : 80 Marks |

# FYP Marks Breakdown

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

# Process of Final Year Project



# SUKKUR IBA UNIVERSITY

## DEPARTMENT OF ELECTRICAL ENGINEERING

# The proposed name of the Project

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**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 tile, 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))

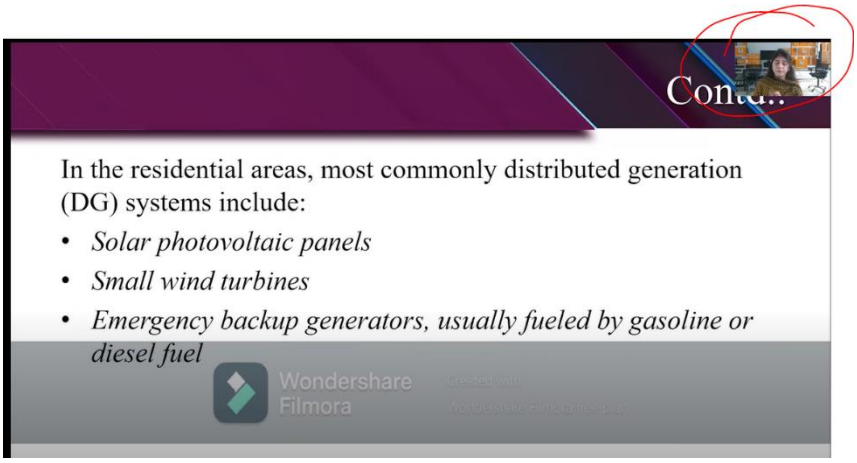
**Short and long video presentation with:**

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.

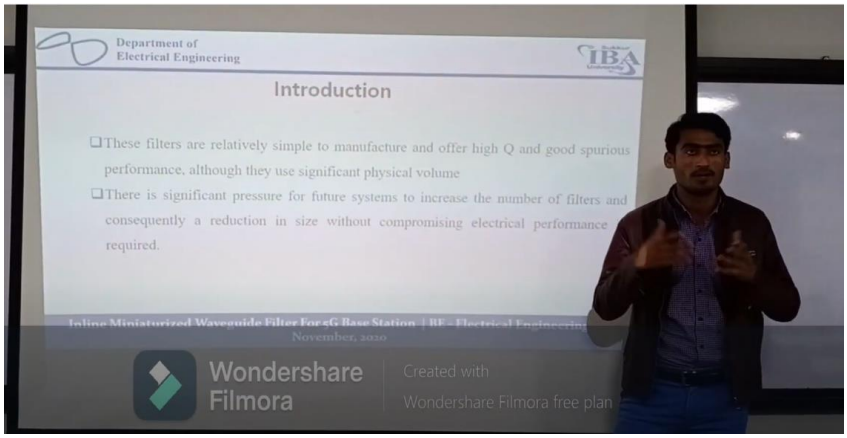
Channel: EE SIBAU: https://www.youtube.com/channel/UC_wia8rRfRyrbqnFRvpc9Ew

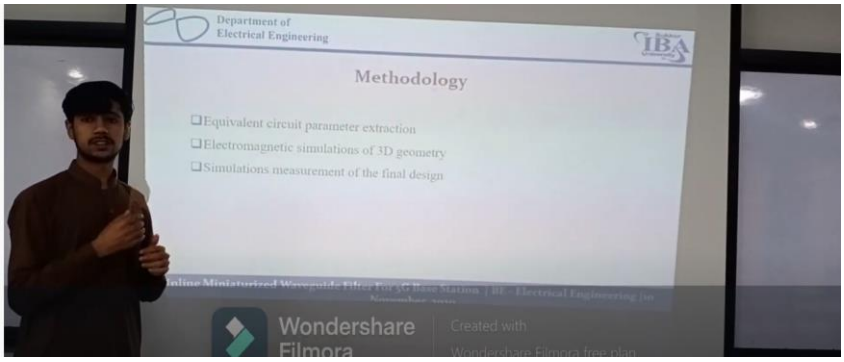
## Recommended style for video:

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

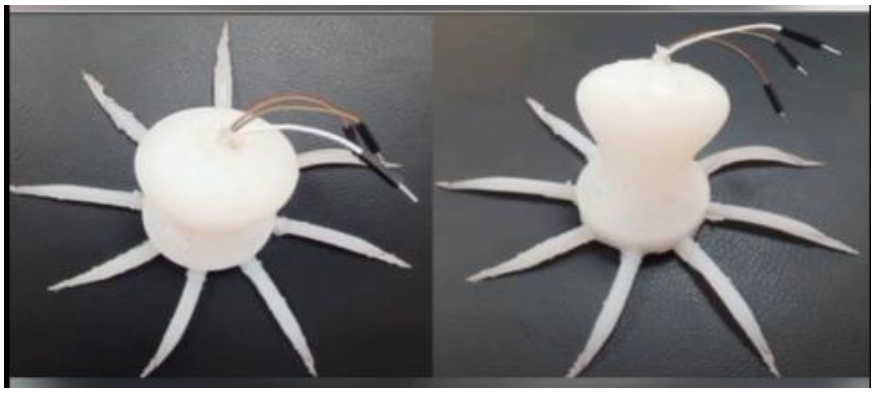



(ii) Stand on right/left side of video presentation and explain + LASER pointer.



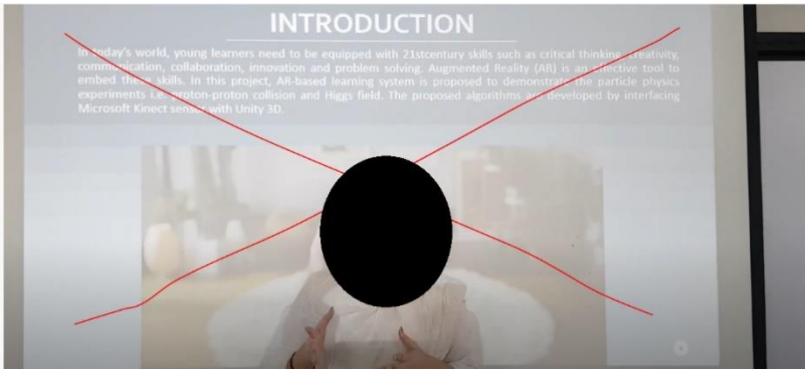

(iii) Demostration must be included after presentation.



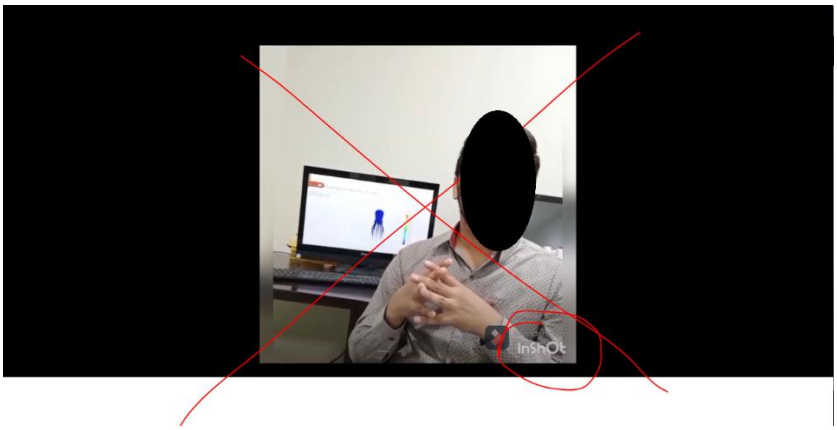
# Not recommended:

Do not read like this. Use LASER pointer.

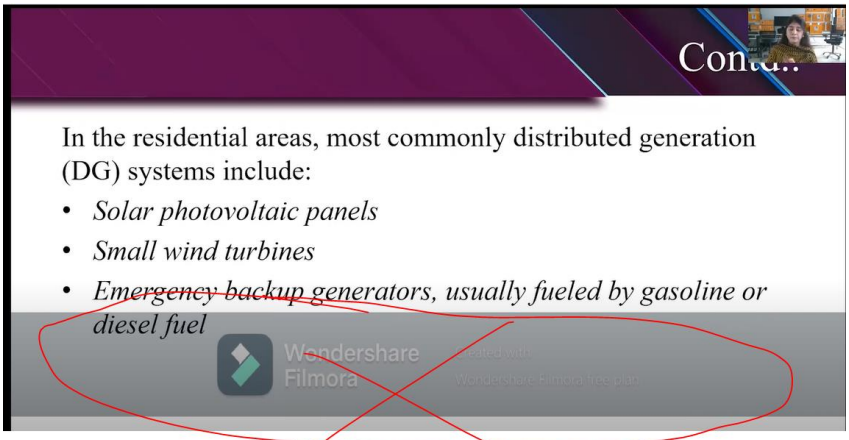

Do not stand in front of projected ppt.



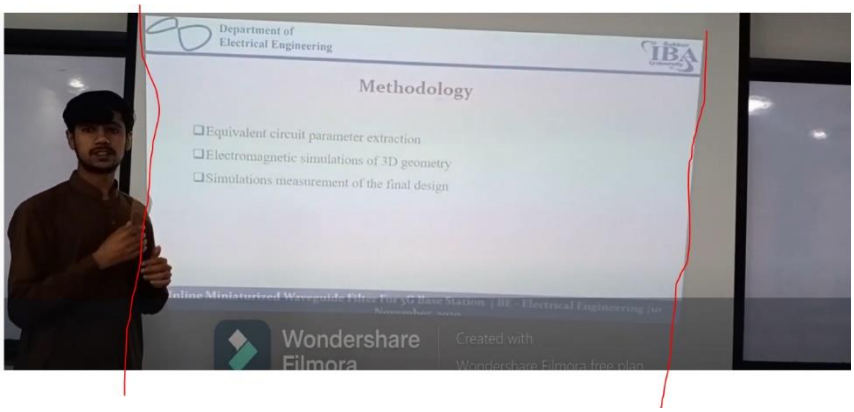

Tick tock style or video that does not cover full screen in YouTube style is not recommended.



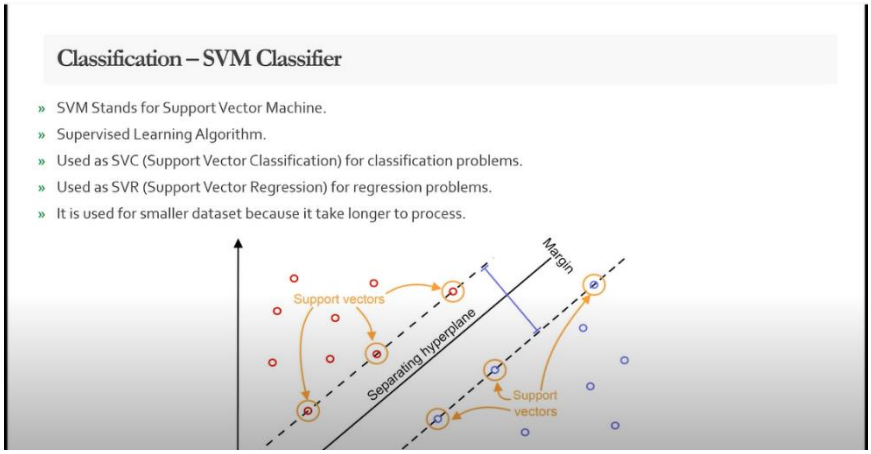

Watermarks are not recommended.



Bad alignment is not recommended.




Just voice over, not recommended.



# 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

# SUKKUR IBA UNIVERSITY

## 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) Student | | | | % Weight | Max Marks | Obtained Score 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) Students | | | | % Weight | Max Marks | Obtained Score 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) Student | | | | % Weight | Max Marks | Obtained Score 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) Students | | | | % Weight | Max Marks | Obtained Score 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 xyz subjects and have some experience with xyz 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 _(provide details)___. 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 of full, may be extended to address other outstanding problems currently faced by the society. |