FINAL YEAR PROJECT HANDBOOK 2019

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1.0 INTRODUCTION

The Final Year Project (FYP) consists of two courses namely Final Year Project 1 (FYP1) and Final Year Project 2 (FYP2), offered in two consecutive semesters. The main objective of these two courses is to inculcate students with problem solving, analyzing, synthesizing and evaluation skills in the field of Electrical Engineering. Identifying project supervisor is done during semester 6 and the supervisor must agree to supervise the student at the beginning of semester 7. Students then register for FYP1 with two credit hours. Upon successful completion of FYP1 course, students shall continue their project work by enrolling FYP2, a five-credit hour course in semester 8.

The general course outcomes (CO) for FYP1 and FYP2 are listed in APPENDIX A.

2.0 MANAGEMENT, ROLES AND RESPONSIBILITY

The Final Year Project project is generally managed by the FYP Coordinators, Project Supervisor (SV) and Technical Paper Assessment Panel (TPAP). However, students also play an important role in ensuring the smooth operation of the Final Year Project.

2.1 FINAL YEAR PROJECT COORDINATOR

Final Year Project Coordinator is led by an FYP Coordinator (PC) and assisted by FYP1 and FYP2 Coordinators (PC1 and PC2). FYP Coordinator is an academician appointed by the Deputy Dean of Academic Affairs from any centres for studies at the faculty. PC in general is accountable for the following duties:

i) Coordinate meeting/discussion with all FYP1 and FYP2 Coordinators.

ii) Facilitate technical paper presentations for students of FYP2.

iii) Responsible for preparing final performance report of FYP2.

FYP1 and FYP2 Coordinators, however, are appointed among academicians from various centres for studies at the faculty. The coordinators are accountable for the following duties:

FYP1 Coordinator (PC1):

i) Facilitate the process of FYP1 registration and ensure all students have SV.

ii) Disseminate information and related procedure to students and SV

iii) Compile, upload and validate final marks via Result Entry System (RES). Coordinators are also required to submit the final marks to the Academic Unit, Faculty of Electrical Engineering.

iv) Analyse student's performance and prepare CQI report

v) Submit list of FYP1 students to FYP2 coordinator.

FYP2 Coordinator (PC2):

i) Verify students' registrations in FYP online system according to Student Information Management System (SIMS).

ii) Disseminate information and related procedure to students and SV

iii) Organise technical paper presentations for students of FYP2.

iv) Compile, upload and validate final marks via Result Entry System (RES). Coordinators are also required to submit the final marks to the Academic Unit, Faculty of Electrical Engineering.

v) Analyse students' performance and prepare CQI report

vi) Facilitate claim process of students' allowances provided (if any) by the faculty.

vii) Collect the approved FYP report in the form of compact disc (CD).

2.2 PROJECT SUPERVISOR

The Project Supervisor (SV) consists of lecturers at the Faculty of Electrical Engineering. SV are given trust and responsibilities to guide their students in completing their Final Year Project. It is expected that SV would closely monitor the work done for FYP1 and FYP2.

The followings are among the roles of a SV towards FYP coordinator and students of his/her supervision:

i) SV should response to the students request in FYP online system and accept the minimum number of supervisees assigned by FYP1 coordinator

ii) Discuss suitable/potential project title that fulfil the EAC requirements.

iii) Discuss the main objectives, project activities and project schedules during FYP1.

iv) Supervise, encourage and give motivation in performing the project work successfully.

v) Monitor progress through giving validation, suggestions/comments and endorsing the logbook after each meeting and ensure that minimum number of meetings is fulfil.

vi) Proofread proposal, technical paper and FYP report before final submission.

vii) Ensure the students submit the TP and FYP report to their Turnitin account for plagiarism screening.

viii) Evaluate proposal and FYP report.

ix) Endorse the submission form of proposal, TP and FYP report.

x) SV must notify students and coordinator of non-availability at the faculty due to other work commitment.

xi) SV is allowed to assign another lecturer as co-supervisor (Co-SV) if necessary. PC1 should be notified if there is Co-SV involved in the project.

2.3 TECHNICAL PAPER ASSESSMENT PANEL

Selected faculty members with wide knowledge and experience in the area of specialisation will be appointed as members in the Technical Paper Assessment Panel (TPAP) for FYP2.

The roles of each member are outlined as follows:

i) Evaluate the Technical Paper.

ii) Evaluate the Technical Paper presentation. In the event of TPAP is not able to attend the poster presentation day (due to emergency leave or urgent meeting), TPAP must arrange another date for the student to present their work.

iii) Give recommendations to students to improve their FYP.

iv) Submit all marks to FYP2 coordinator through FYP online system within 2 days.

2.4 STUDENTS

All students are required to complete both FYP1 and FYP2, as a partial fulfilment for the award of the degree. Students are expected to be independent and able to work under minimum supervision. Students are expected to plan their work and adhere to the project schedules that have been prepared to ensure the project can be completed within 2 semesters.

The roles of students are as follows:

i) Identify SV during semester 6 of his/her study plan.

ii) Register for FYP1 or FYP2 as required for both FYP online system and SIMS.

iii) Discuss the project title (FYP1) and scope of work with SV.

iv) Record all project activities in a logbook.

v) Meet SV regularly as scheduled and record all meetings through FYP online system.

vi) Submit drafts of proposal (FYP1), technical paper (FYP2) and FYP report (FYP2) to SV (for proofreading and evaluation).

vii) Present and defence the technical paper (FYP2) to the TPAP.

viii) Write the proposal (FYP1), technical paper (FYP2) and FYP report (FYP2) in an ethical manner by avoiding plagiarism.

ix) Safeguard assets when using any equipment or facilities of UiTM.

x) Maintain good image and discipline when getting project related information from industries.

xi) Fulfilling deadlines regarding Final Year Project activities.

xii) Consult SV when making any changes to the initial proposed project work.

xiii) Practise individual safety standard while carrying out the project work.

xiv) Students are not encouraged to change SV. However, for exceptional reason, he/she can submit a special request letter with reasonable justifications to the Head of Programme. **Students who failed FYP1 and FYP2 can change SV with the approval of the Head of Programme.**

3.0 FINAL YEAR PROJECT 1

3.1 INTRODUCTION

Students are expected to discuss project topics and scope of work with their SV before commencing their work. Once the project title and scope of work have been established, students are advised to start immediately their project work. Students have to PASS their FYP1 before they can continue FYP2.

SV will be assigned by FYP1 coordinator using his/her discretion in the case of students without SV after week 3.

3.2 ASSESSMENT

The assessment of FYP1 consists of two major parts as depicted in Table 1 below:

Table 1: Assessment for FYP1

No.	Components	Marks	Evaluator
1.	Project Proposal	40	SV
2.	Work Progress	60	SV

After completing the project proposals, students are required to submit their project proposals together with the completed form (APPENDIX B: LM.UiTM.FKE(O).08/01). SV completes the work progress and project proposal evaluation through FYP online system.

Students who are failed must repeat the whole process described above.

The summary of activities for FYP1 is tabulated in the following Table 2. However, please consult the FYP Coordinator for the exact schedule of these activities.

Table 2: Summary of Significant Activities for FYP1

No	Activities	Timeline
1.	Student Register for FYP1	Week 1 - 2
2.	Students update Personal Info and FYP Title (Online)	Week 1 - 3
3.	Students Add Progress Report (Online) - (at least 10 reports)	Week 1 - 14
4.	SV evaluates student progress (Online)	Phase 1: Week 1 - 8 Phase 2: Week 9 - 14
5.	Students begin to submit Project Proposal to SV	Week 10
6.	Students make any correction/amendment to the proposal	Week 10 - 12
7.	SV evaluates FYP1 Proposal (Online)	Week 13 - 14
8.	PC1 compiles and upload marks into RES	Week 16

Assessment for FYP1 will be done online. Students and SV are required to register through FYP online system.

Link : http://www.fee-uitm.com/fyp/
First Time Login for Registration : login: **<student ID>**
password: **abc1234**

3.3 PROJECT PROPOSAL

The objective of project proposal is to explain the scope and nature of work to be carried out. The major contents of a proposal are described as in Table 3.

Table 3: Project Proposal Description

No.	Contents	Description
1.	Title of project	Provide a concise, accurate and informative title.
2.	Abstract	Describe an overview and summary of the proposed project.
3.	Introduction	Explain the nature of problem and motivation of work; describe the existing techniques in solving the problem; describe briefly the proposed technique and the expected results.
4.	Literature Review	This section includes a fully referenced review and discussions of previous studies, which are relevant to the research.
5.	Methodology	Explain the proposed technique/model for the work; describe the procedure/overall design flow (requires a flowchart of project activities). This may involve the following: Simulation, Design, Hardware Construction, Analysis, Field Tests and others.
6.	Plan schedules	Including Gantt charts for project activities and milestones for both semesters.
7.	References	All references or resources must be listed in IEEE paper format.

3.4 WORK PROGRESS

Students are required to maintain a logbook describing all activities conducted throughout the project work (for FYP1 and FYP2). Table 4 shows the suggested items to be recorded in the logbook. It is necessary that students should obtain their SV initials on the logbook at the end of each meeting or discussion.

Table 4: Suggested Items to be Recorded in FYP Logbook

Date	Project Activities	Supervisor comments

4.0 FINAL YEAR PROJECT 2

4.1 INTRODUCTION

The FYP2 is the continuation of the project work outlined from FYP1. Students are required to complete their project at a satisfactory level before they can submit their technical papers and FYP report.

4.2 ASSESSMENT

The assessment of FYP2 consists of four major parts as depicted in Table 5 below.

Table 5: Assessments for FYP2

No.	Components	Marks	Evaluator
1.	Technical Paper Evaluation	25	TPAP
2.	Technical Paper (Poster) Presentation	15	TPAP
3.	Student Progress Evaluation	30	SV
4.	Final Year Project Report Evaluation	30	SV

The summary of assessment activities for FYP2 is tabulated as shown in Table 6. However, please consult the FYP2 Coordinator for the exact schedule of these assessment activities.

Table 6: Summary of Significant Activities for FYP2

	ACTIVITIES	TIMELINE
1.	Student add progress report (Online) - (at least 14 reports).	Week 1 - 14
2.	SV Evaluate FYP Progress Report (Online).	Phase 1: Week 1 - 8 Phase 2: Week 9 - 14
3.	Students submit two (2) copies of technical paper and the submission form (LM.UiTM.FKE(O).08/03 - APPENDIX B) to SV for endorsement/approval. Students submit draft report to SV. Students return two (2) copies of technical paper and the required forms to PC2 after being endorsed/approved by SV.	Week 12
4.	PC2 distributes all technical paper to TPAP.	Week 13
5.	Students present their project works to TPAP. TPAP evaluate poster presentation and technical paper (Online).	Week 14 (Within 2 days after presentation)
6.	Students make the necessary corrections to address comments by TPAP and prepare first draft of FYP report to be checked by SV. SV reviews and makes comments on FYP report. Students do the final corrections.	Week 14 - 15
7.	Students submit one (1) hardbound of their FYP report attached/bounded together with technical paper and CD that contains of FYP report, technical proposal and the submission form (LM.UiTM.FKE(O).08/05 - APPENDIX B) to their SV for endorsement/approval.	Week 16
8	SV evaluates FYP report (Online)	Week 16
9	Students submit the submission form endorsed by the SV together with a copy of final CD that contains of FYP report, technical proposal and other related files to PC2	Week 16
10	PC2 finalises, validates and uploads final marks into RES	Week 16

4.2.1 TECHNICAL PAPER EVALUATION

At the end of the semester, students are required to write a technical paper in enhancing students' capability in technical writing based on their technical works. This activity would assist the students to report their work professionally according to a specific format and guidelines given by the Institute of Electrical and Electronics Engineers (IEEE). The general requirement for the technical paper is as follows:

i) The technical paper should strictly follow the IEEE two-column format. Template available from the IEEE website:

   https://www.ieee.org >web>org>conferences>Conference-template-A4

ii) The technical paper is limited to a maximum of eight (8) pages.

iii) Page numbering should be done accordingly.

iv) The technical paper should represent the student's actual work and findings.

4.2.2 TECHNICAL PAPER (POSTER) PRESENTATION

The main objective of this activity is to give opportunity to the students to present their work, findings and achievements of the project. Apart from that, the presentation would also assist the TPAP in clarifying any materials written in the technical paper from the students. On top of that, students will be evaluated based on their communication and presentation skills. The Poster format and guide is listed as below. Component features of a good poster presentation are elaborated in APPENDIX C.

4.2.2.1 Poster Format And Guidelines:

Poster must be in portrait format with A1 size. The recommended template available in APPENDIX D.

4.2.3 STUDENT PROGRESS EVALUATION

Students are expected to meet their respective supervisors regularly to present their progress work. In addition, students are required to maintain their logbooks accordingly. Only students with satisfactory progress are allowed to submit their technical paper and FYP report. Component features to get satisfactory progress are elaborated in APPENDIX C.

4.2.4 FINAL YEAR PROJECT REPORT EVALUATION

Students are required to present their complete project work in the form of well-structured report. The motive is to enhance students' writing skill and it is popularly considered as the ultimate task in an undergraduate degree program. Component features of the writing techniques are elaborated in APPENDIX C.

Using the format and structure of the FYP report given in APPENDIX E (**Guidelines for Writing Final Year Project Report**), the general requirement of the FYP report is as follows:

i) Should be of in between 9000 - 12000 words.

ii) Should be written in the prescribed format (refer to the guideline).

iii) The thesis should be bounded using **BLACK** hard-cover binding. The cover of the final CD that contains of FYP report, technical proposal and other related files should be in **PURPLE** (refer to APPENDIX E)

NOTE: Since the FYP Report is submitted in partial fulfilment of the requirements for the degree, students **must ensure** that the FYP Report is finally submitted to SV and PC2 to **pass** the FYP2.

5.0 PLAGIARISM

The Faculty of Electrical Engineering enforces **UiTM's plagiarism policy** that expands on **Section 8A of the Education Institution Act 176**. Plagiarism includes using words of others (and also one's own previous work) without appropriate acknowledgment or citation or permission; paraphrasing, translating, resubmitting one's own work, claiming work done by others (including for a fee) as one's own; fabricating data and doctoring data. For more information regarding plagiarism, please refer to **'Avoiding Plagiarism: A Guide For Students'** published by Institute of Quality and Knowledge Advancement (InQKA) UiTM available from INQKA website (www.inqka.uitm.edu.my). The suggested Similarity Index **MUST NOT exceed 30%**.

6.0 CONCLUSIONS

The Final Year Degree Project is a core course designed for the final year degree students to acquire new knowledge and gain experience in project works not only related to Electrical Engineering but also to other related technical areas. This course is expected to provide the students with an informal training on the key elements of project management such as time management, research planning and scheduling, communication skills, problem solving and lifelong learning. Apart from that, this course will also help to prepare the students with necessary skills for pursuing a postgraduate degree in the future.

APPENDIX A

Course outcome for FYP1:

i) Propose solutions to research problem using proper investigation method

ii) Apply ethical principles on research development

iii) Perform research works independently

Course Outcome for FYP2:

i) Acquire skills to conduct investigation and apply data analysis using research based knowledge approach in solving complex engineering problems

ii) Present the research project effectively.

iii) Ability to adhere ethical research principle and commit professional engineering practices.

iv) Find or generate needed information / data / idea using appropriate approach methods

APPENDIX B

LM.UiTM.FKE(O).08/01

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FINAL YEAR PROJECT 1

SUBMISSION OF PROJECT PROPOSAL

STUDENT'S NAME	**:**	
STUDENT'S UiTM ID	**:**	
COURSE CODE	**:**	
PROJECT TITLE		
This is to certify that the above student has submitted the project proposal to the project supervisor (SV).		
SV's NAME	**:**	
SV's SIGNATURE	**:**	
DATE OF SUBMISSION	**:**	

1) ***Student needs to <u>fill in and submit this form together with the project proposal</u> to his/her SV for endorsement/approval.***
2) ***SV needs to <u>return all endorsed/approved/evaluated forms</u> to the FYP1 Coordinator.***

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FINAL YEAR PROJECT 2

SUBMISSION OF PROJECT TECHNICAL PAPER

STUDENT'S NAME	**:**	
STUDENT'S UiTM ID	**:**	
COURSE CODE	**:**	
PROJECT TITLE		
This is to certify that the above student has submitted the project technical paper to the project supervisor (SV).		
SV's NAME	**:**	
SV's SIGNATURE	**:**	
DATE OF SUBMISSION	**:**	

1) ***Student needs to <u>fill in and submit this form together with the technical paper</u> to his/her SV for endorsement/approval.***
2) ***Student needs to return <u>this endorsed/approved form attached together with the technical paper</u> to the FYP2 Coordinator.***

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FINAL YEAR PROJECT 2

SUBMISSION OF PROJECT REPORT

STUDENT'S NAME	**:**	
STUDENT'S UiTM ID	**:**	
COURSE CODE	**:**	
PROJECT TITLE		
This is to certify that the above student has submitted the project report to the project supervisor (SV).		
SV's NAME	**:**	
SV's SIGNATURE	**:**	
DATE OF SUBMISSION	**:**	

1) ***Student needs to <u>fill in and submit this form and report</u> to his/her SV for endorsement/approval.***
2) ***Student needs to return <u>this endorsed/approved form and report</u> to the FYP2 Coordinator.***
3) ***SV needs to <u>submit evaluation marks</u> to the FYP2 Coordinator.***

APPENDIX C

STUDENT'S PROGRESS EVALUATION (30 MARKS) *MARKS BY SUPERVISOR

Assessment Criteria	CO	PO	PLO	LOD	Marks Allocated	Marks (M)					Weighted Marks Obtained (WMO)
						1	2	3	4	5	
Work Responsibility • Able to put the responsibility in according to planned schedule. • Able to complete documentation of work progress in a logbook for a given timeline	3	8	6	4	10	Does not perform assigned task within the scope of work even with close supervision Log book is improperly documented, follow the work schedule less than 30%	Perform assigned task within the scope of work with close supervision Log book shows a few documentation, follow the work schedule 50%	Perform assigned task within the scope of work and meets expectation with minimal supervision Log book shows some documentation, follow the work schedule 75%	Perform assigned task within the scope of work and beyond expectation with minimal supervision Log book shows complete documentation, follow the work schedule 100%.	Perform assigned task beyond the scope of work and beyond expectation with minimal supervision Log book shows complete documentation, ahead of the work schedule	=(M X 1)
Life-long Learning • Autonomous learning • Inquisitive mind	4	11	7	7	10	Not able to self learn and complete specific task in a given time	Limited ability to self-learn and experience difficulty in completing a task in a given time	Sufficient ability to self-learn and exhibit some initiative in completing a task in a given time	Good ability to self-learn and exhibit initiative in completing a task in a given time	Excellent ability to self-learn and exhibit initiative in completing a task in a given time	=(M X 2)
Work Ethics and plagiarism • Able to practice good working culture, such as good moral, timeliness as well as being efficient and productive. • Ethical in completing task	3	8	6	4	10	Practice inappropriate working culture. Not ethical In completing tasks	Practice less appropriate working culture. Unethical at work in many tasks	practice good working culture Unethical at work in some tasks	practice good working culture Ethical at work in most tasks	Always practice excellent working culture Ethical at work in all tasks	=(M X 2)
Max Marks					30.00	**Total Evaluated Marks (TEM)**					
						Total WMO.TPE (30%) i.e TEM					

REPORT EVALUATION (30 MARKS) *MARKS BY SUPERVISOR

Assessment Criteria	CO	PO	PLO	LOD	Marks Allocated	Marks (M)					Weighted Marks Obtained (WMO)
						1	2	3	4	5	
Abstract : • Objective(s) • Methodology • Findings • Conclusion	1	4	3	6	5	Abstract is incomplete	Abstract is poorly described	Abstract is described but not comprehensive	Abstract is described comprehensively	Abstract is comprehensive and very well organized	=(M X 1)
Introduction : • Background of Study • Problem Statement • Objectives • Scope of Work and limitations • Thesis Organization	1	4	3	6	10	Introduction is not related to the scope of study	Introduction is moderately related to the scope of study	Introduction is related to the scope of study and is well organized	Introduction is specifically related to the scope of study and is well organized	Introduction is specifically related to the scope of work, is well organized and contains a critical discussion	=(M X 2)
Literature Review (Analysis) : • Students should be able to review the references within the scope of study • Students should also be able to perform analysis on previous works • Explain the need for study	4	11	7	7	20	Literature review is irrelevant to study	Explain previous studies, but no discussions on pros and cons	Explain previous studies, with insufficient discussions on pros and cons	Explain previous studies, with good discussions on pros and cons. No explanation of the need of study at the end	Explain previous studies related with good discussions on pros and cons, and finally explain the need of the study	=(M X 4)
Literature Review (Information Gathering) : • Relevant reference • Recent references • Sufficient references	4	11	7	7	15	References are not relevant and insufficient	Some references are relevant but insufficient	References are relevant and sufficient but not recent	References are relevant, sufficient and some are gathered from recent sources	References are relevant, sufficient and most are gathered from recent sources	=(M X 3)
Methodology/Project Work : • Functions of techniques • Algorithm, flow charts or pseudo codes of the programming codes or hardware design or block diagram • Operation methods towards achieving the project outcomes	1	4	3	6	15	No definite methodology has been described	The methodology described is unreliable	A reliable methodology is described	A clear and reliable methodology is described	A clear and reliable methodology which fulfils the objectives of the study is described	=(M X 3)
Results and Discussions : • Exhibit the significant results based on the project 's objectives • Discus and analyze the results of the project	1	4	3	6	15	Results do not meet the project's objectives	All/ few results validate some of the project's objectives with inaccurate or wrong	Few results validate some of the project's objectives with correct discussion and analysis	All/ most results validate some of the project's objectives with correct discussion and analysis	All results validate all of the project's objectives with correct discussion and analysis	=(M X 3)

							discussion and analysis				
Conclusions and Recommendations for Future Work : • Students should be able to conclude the findings in addressing all objectives of the project • Recommendation for future work	1	4	3	6	10	Only recommendation of future work fulfilled but not clearly stated	Only conclusion fulfilled but not clearly stated	All elements fulfilled but not clearly stated	All elements fulfilled but only conclusion clearly stated	All elements fulfilled and clearly stated	=(M X 2)
Written Communication • Clearly written • Coherently written • Systematically Written	2	9	4	5	10	Unable to write the thesis clearly, coherently and systematically	Able to write the thesis with limited clarity, coherency and systematically	Able to write the thesis clearly, coherently and systematically but with minor corrections needed	Able to write the thesis clearly, coherently and systematically	Able to write the thesis with excellent clarity, coherency and system	=(M X 2)
Max Marks					100.00					**Total Evaluated Marks (TEM)**	
										Total WMO.TPE (30%) i.e TEM x 0.30	

POSTER PRESENTATION (15 MARKS) *MARKS BY PANEL

Assessment Criteria	CO	PO	PLO	LOD	Marks Allocated	Marks (M)					Weighted Marks Obtained (WMO)
						1	2	3	4	5	
Picture / Graphics	2	9	4	5	15.00	All pictures, graphics and texts are not clear or relevant	Very few of the pictures, graphics and text are clear and relevant	Few of the pictures, graphics and text are clear and relevant	Most of the pictures, graphics and text are clear and relevant	All pictures, graphics and text are clear and relevant	=(M X 3)
Shows deeper understanding of the issue and draws conclusions	2	9	4	5	35.00	Unable to answer all questions with acceptable explanation Conclusions are less significant/ unable to draw any acceptable	Unable to answer most questions with acceptable explanation Conclusions are less significant/ unable to draw any	Able to answer few questions with acceptable explanation Conclusions are less significant/ unable to draw any acceptable	Able to answer most of the questions with acceptable explanation Able to draw acceptable 3conclusion	Able to answer all questions with acceptable explanation. Able to draw good conclusions based on the project's objectives	=(M X 7)

						conclusion	acceptable conclusion	conclusions	based on the project's objectives		
Presentation and delivery	2	9	4	5	35.00	Spoken and visual presentation is difficult to follow and understand. No eye contact and very difficult to hear	Attempts to integrate spoken and visual presentation. Delivery features little eye contact and / or use of diction.	Integrates spoken and visual presentation well. Delivery includes some eye contact and reasonable diction	Good integration of spoken and visual presentation. Confident and capable delivery feature eye contact and clear diction	Excellent integration of spoken and visual presentation. Very confident and compelling delivery feature frequent eye contact and good diction.	=(M X 7)
Creativity and Impact	2	9	4	5	15.00	The impact of this research is not significant but offers creativity	The project demonstrates some creativity and inventiveness	The project mostly demonstrates creativity and inventiveness.	The project demonstrates creativity and inventiveness.	The impact of this research is very significant and can be utilized for commercialization.	=(M X 3)
Max Marks					100.00					**Total Evaluated Marks (TEM)**	
										Total WMO.TPE (15%) i.e TEM x 0.15	

TECHNICAL PAPER EVALUATION (25 MARKS) *MARKS BY PANEL

Assessment Criteria	CO	PO	PLO	LOD	Marks Allocated	Marks (M)					Weighted Marks Obtained (WMO)
						1	2	3	4	5	
Abstract : • Objective(s) • Methodology • Findings • Conclusion	1	4	3	6	10.00	Abstract were very poorly described	Abstract were poorly described	Abstract were described but were not comprehensive	Abstract were described comprehensively	Abstract were comprehensive and very well organized	=(M X 2)
Introduction : Paragraph of the introduction should mention the followings:- • Overview of Study • Literature review with relevant and latest references • Problem Statements • Objectives and Scope of Study Note: Those components are not	4	11	7	7	30.00	Introduction is not related to the scope of study	Introduction is moderately related to the scope of study	Introduction is related to the scope of study and is well organized	Introduction is specifically related to the scope of study and is well organized	Introduction is specifically related to the body of knowledge, is well organized and contains a critical discussion	=(M X 6)

meant as the sub-sections											
Methodology : This section should include the followings:- • Functions of techniques • Algorithm, flow charts or pseudo codes of the programming codes • Hardware design or block diagram • Operation methods towards achieving the project outcomes	1	4	3	6	35.00	No definite methodology has been described	The methodology described is unreliable	A reliable methodology was described	A clear and reliable methodology was described	A clear and reliable methodology which fulfils the objectives of the study was described	=(M X 7)
Results and Discussions : This section should:- • Exhibit the significant results based on the project 's objectives • Discus and analyze the results of the project	1	4	3	6	15.00	Results do not meet the project's objectives	All/ few results validate some of the project's objectives with inaccurate or wrong discussion and analysis	Few results validate some of the project's objectives with correct discussion and analysis	All/ most results validate some of the project's objectives with correct discussion and analysis	All results validate all of the project's objectives with correct discussion and analysis	=(M X 3)
Conclusion : • Students should be able to conclude the findings in addressing all objectives of the project	1	4	3	6	10.00	Conclusion are very poor	Conclusion - are made accordance to analysis of result but doesn't fulfil the objectives	Conclusion are made accordance to analysis and fulfil some of the objective	Conclusion are made accordance to analysis and fulfil most of the objective	Conclusion are made accordance to analysis and fulfil all of the objective	=(M X 2)
Max Marks					100.00	**Total Evaluated Marks (TEM)**					
						Total WMO.TPE (25%) i.e TEM x 0.25					

APPENDIX D

Poster Guideline for FYP 2 (Poster Size A1)

TITLE

Nor Danisha Binti Zulkifli (UiTM ID) , Supervisor , Co. Supervisor
Affiliation , Contact information

Abstract

In this paper, we report the first attempt to use natural rubber as a substrate in the design of flexible microstrip patch antennas. The effects of dielectric properties of rubber on the performance of microstrip patch antennas are presented. The patch geometry has been designed and optimized at a frequency of 10 GHz. It has been found that for a fixed substrate thickness, the antenna directivity and return loss decrease with increasing relative permittivity. However for a given permittivity, increasing the substrate thickness will result in lower return loss but higher directivity. Hence, some trade-off must be made between these parameters in order to obtain an optimum design.

Introduction

Results

Objective

Conclusion

Methodology

Acknowledgement (if applicable)

Exp : grant, etc

APPENDIX E

GUIDELINES FOR WRITING FINAL YEAR PROJECT REPORT

NOTE: *This thesis formatting guideline is supported by the MS Word Template which can be downloaded from:*

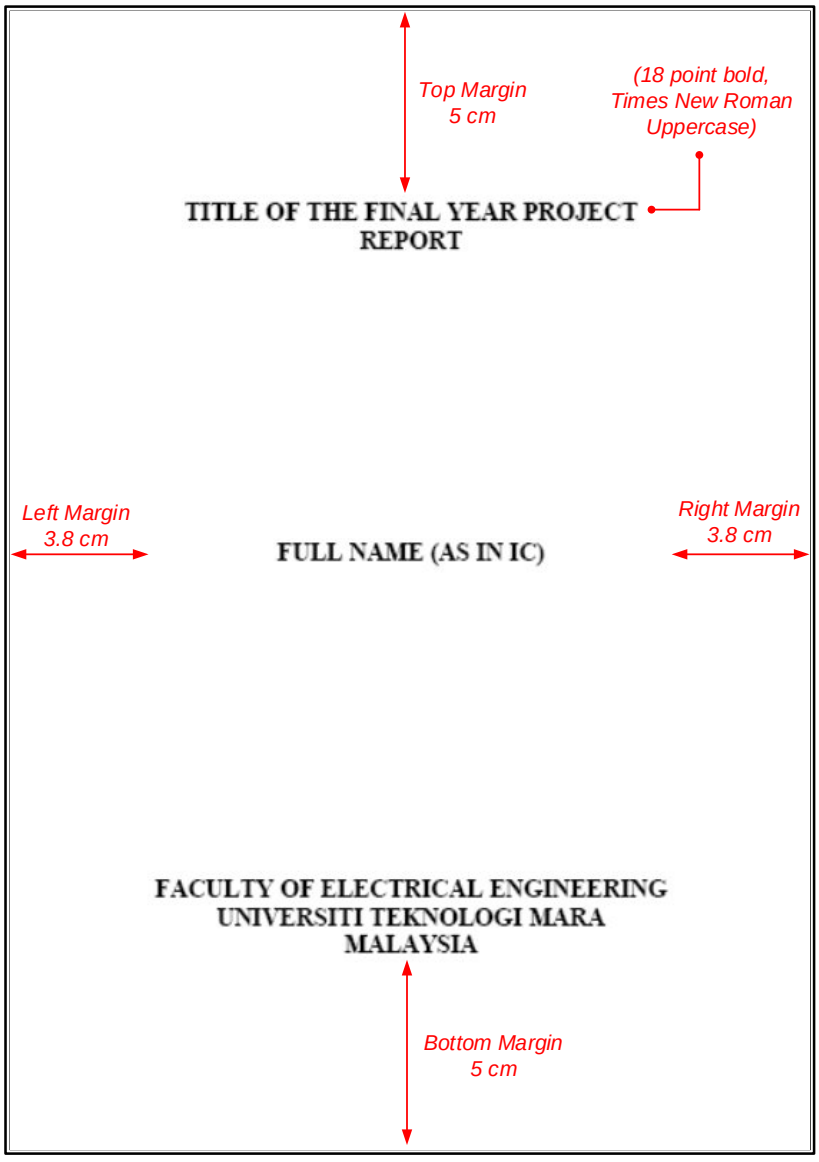
https://fke.uitm.edu.my/v5x/index.php/2015-05-19-08-35-18/final-year-project

1.0 Front Cover of Report

The front cover of the Final Year Project Report should contain the project title, author's full name as appeared in the IC, the faculty and university. This information should be typed in following format:

a) Times New Roman font with 18-point bold uppercase (capital letter).
b) All letters must be printed in gold.
c) Hardbound cover must be in **black**.

Format of the cover page is as shown below:



2.0 Spine of Report

The spine of the thesis should consist of name of author, name of degree programme (B. ENG. (HONS) ELECTRICAL ENGINEERING) as well as the month and the year of the thesis submission (NOVEMBER 2008). Font type is Times New Roman, uppercase, bold and gold printed. Please follow the format shown below:

(Top) *(Center)* *(Bottom)*

(Electrical or Electronics)

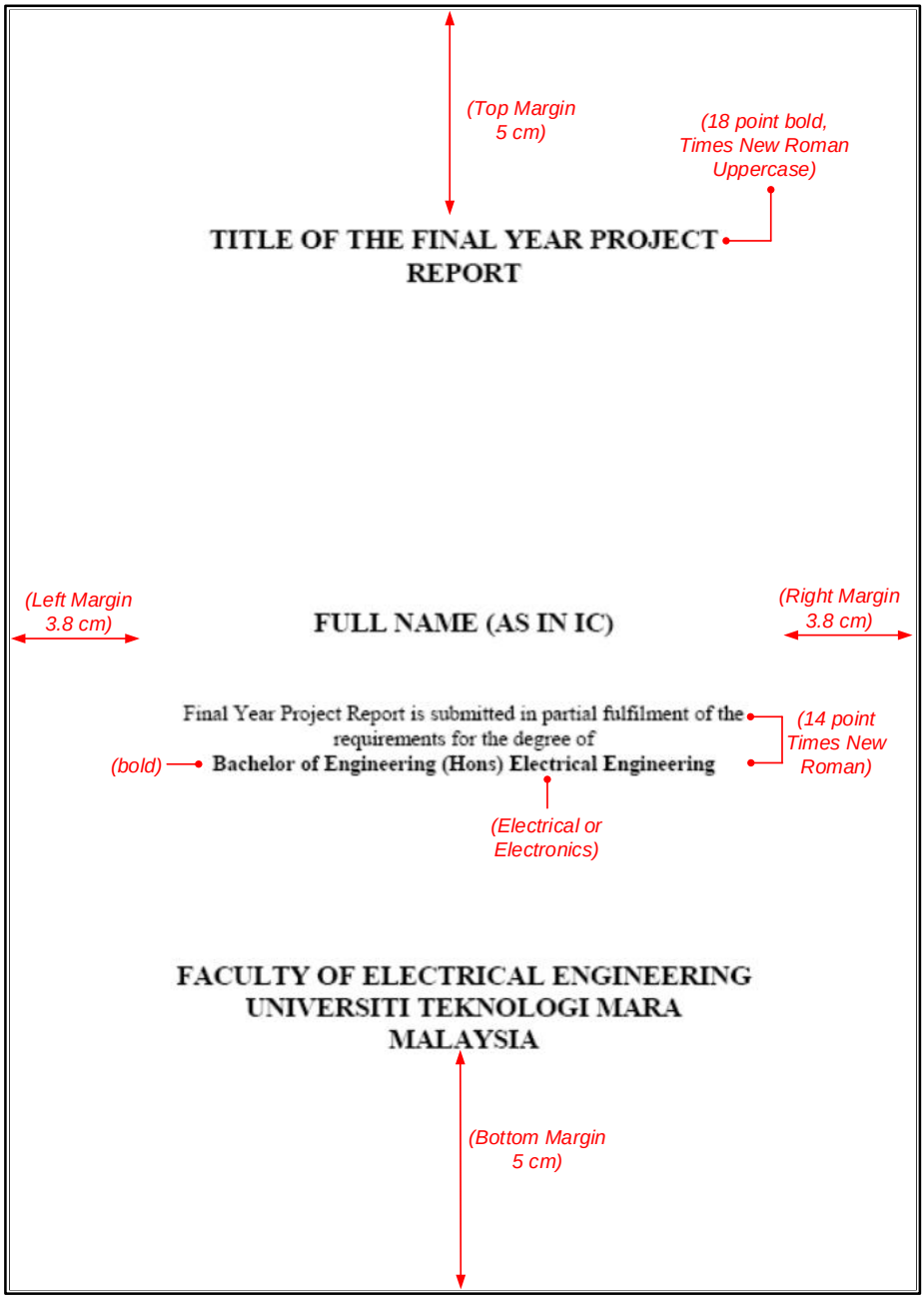
NAME **B. ENG. (HONS) ELECTRICAL ENGINEERING** **MONTH YEAR**

1 cm *1*

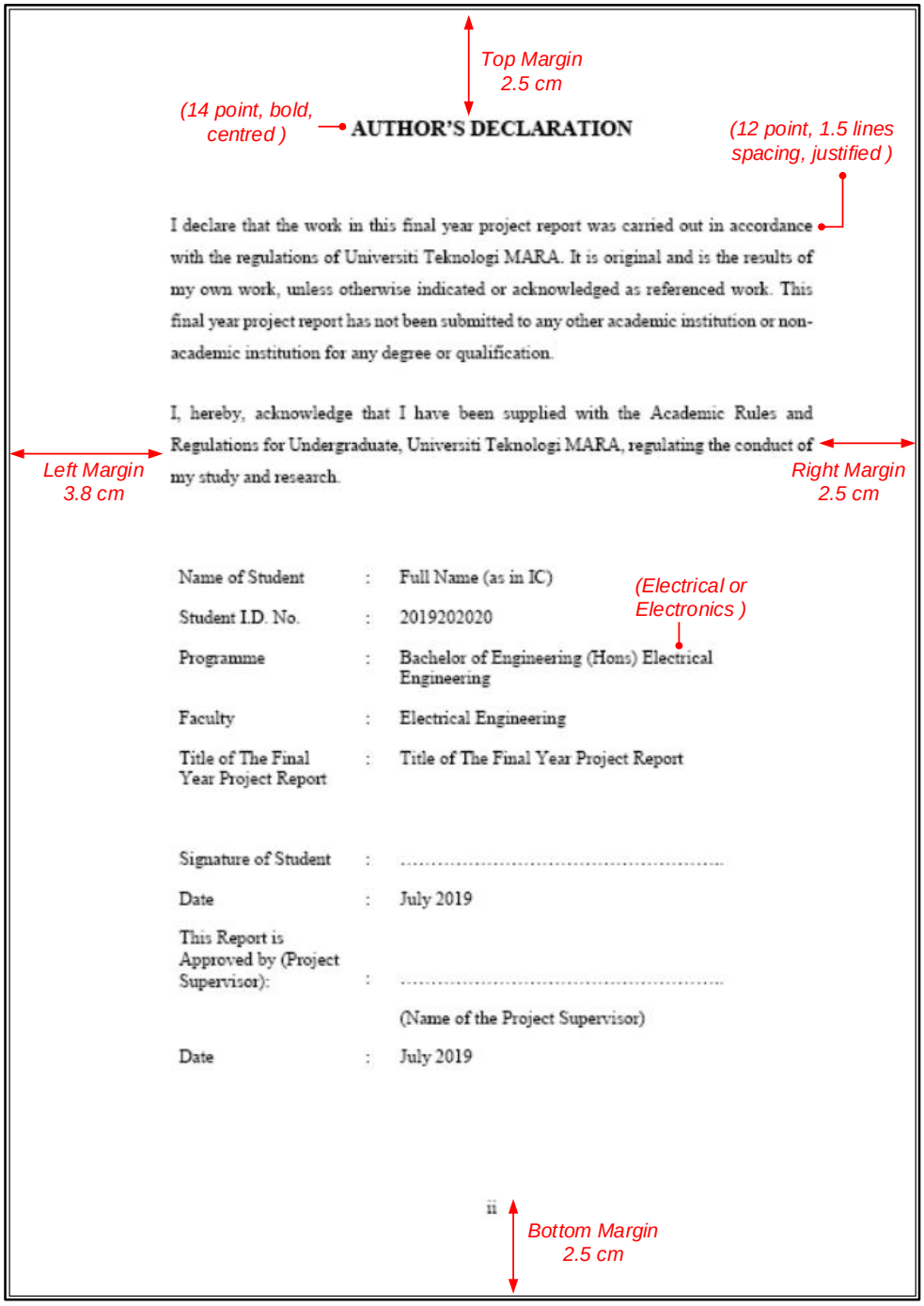
cm

3.0 Title Page

Title page consists of an additional declaration statement by the author as shown below:



4.0 Author's Declaration Page



5.0 Format of Report

a) Length of the report: Total number of words for the report should be in between **9,000 to 13,000** words. The total number of words does not include endnotes, quotations, appendixes, tables, and diagrams.

b) Font Style: Times New Roman

c) Text Size and Style:

USAGE	FONT SIZE/STYLE
SECTION HEADING	14 point bold (Uppercase)
CHAPTER HEADING	14 point bold (Uppercase)
1.1 Heading	12 point bold (Title Case)
1.1.1 Sub Heading 1	12 point bold (Title Case)
1.1.1.1 Sub Heading 2	12 point bold italic (Title Case)
Body text	12 point

d) Line Spacing:

USAGE	LINE SPACING
Abstract / Acknowledgement	1
Body Text	1.5

e) Margins except for Cover and Title Page:

LOCATION	MARGIN
Left	3.8 cm
Right	2.5 cm
Bottom	2.5 cm
Top	2.5 cm

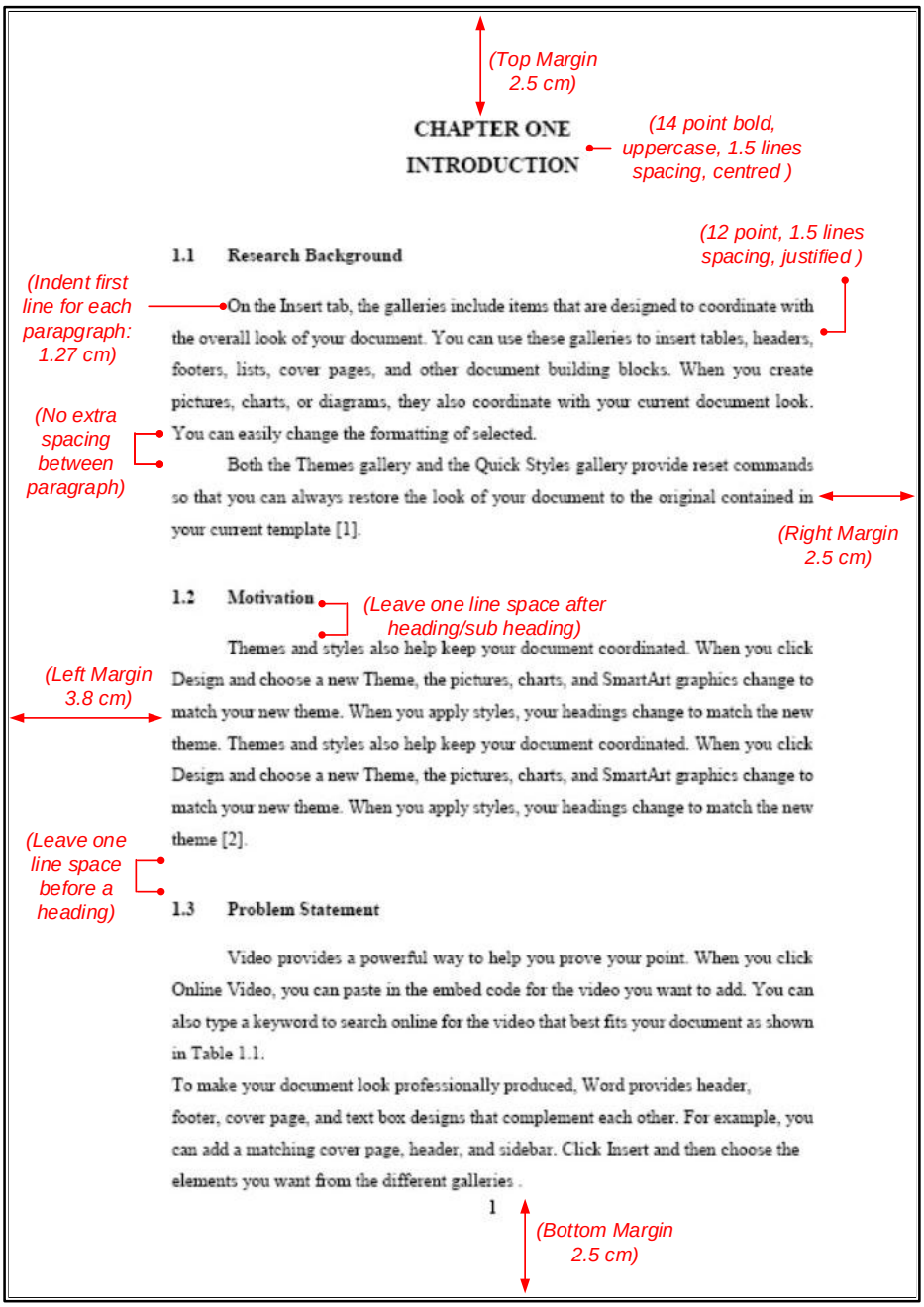
f) Alignment:

USAGE	ALIGNMENT
Chapter number	Centre
Headings and sub-headings	Left
Text	Justified

g) Page Numbering

Page numbers are located at the **bottom-centre** of each page. Roman format is used for Preface page (pages appear before Chapter One) and Arabic format is used for the rest of the report.

h) Example of First Page of each Chapter:



6.0 Content of Thesis

a) Abstract

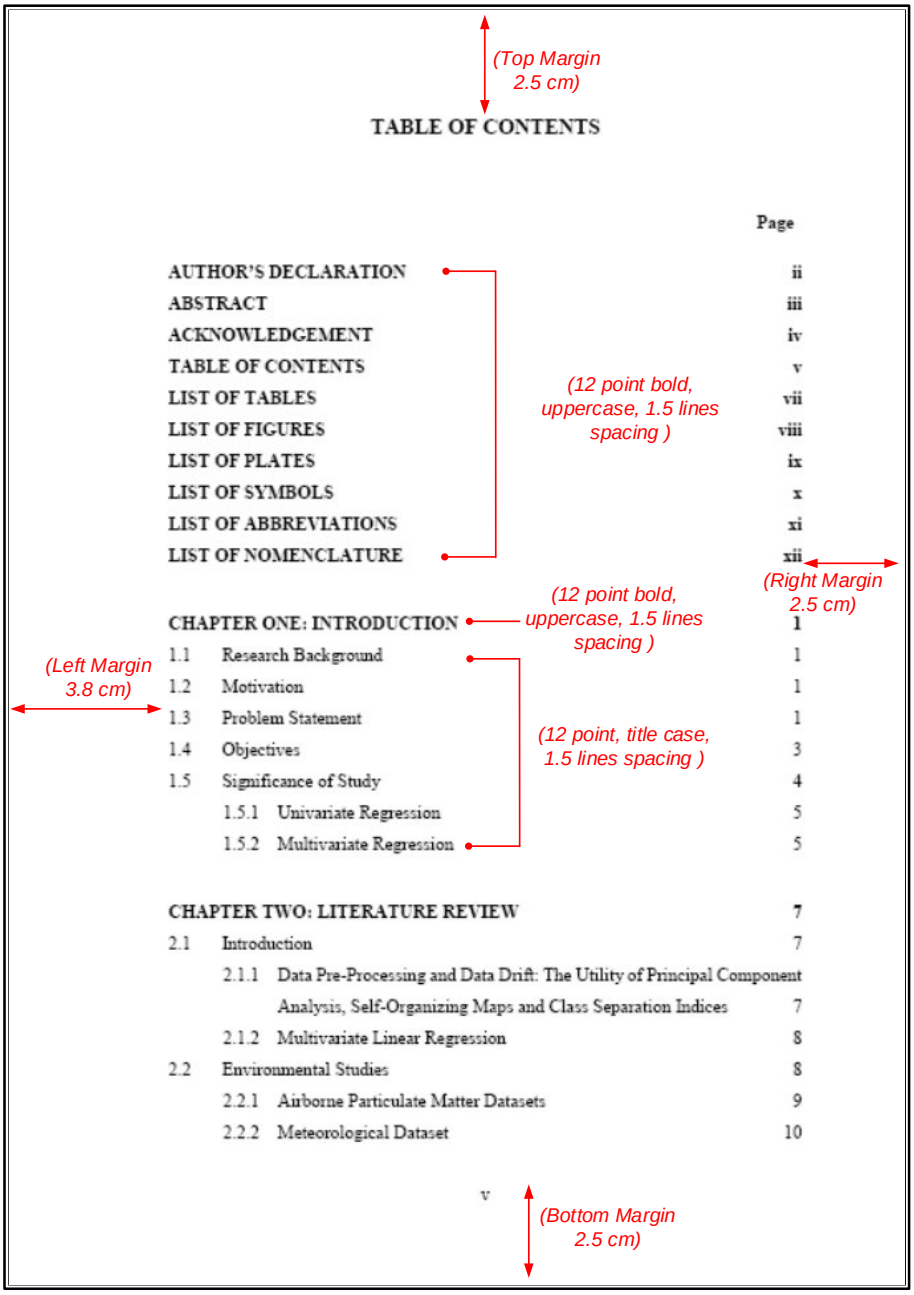
An Abstract is a synopsis of the thesis. It should describe an overview of the scientific studies presented in the thesis. It should be written, usually in ONE paragraph, concisely and attractive enough for the reader to continue and complete reading the full report. The abstract should give a brief statement of the research problems, aims of the research, methodologies used, key findings in the context of the whole study, and implications of the study. It should be typed in single spacing and should be with minimum of 200 words and up to ONLY one page. Do not exceed more than one page.

b) Acknowledgement

A brief statement of appreciation in recognition of any special assistance rendered to the student during the period of research should be included. It should be typed in single spacing and should not exceed one page in length. Here, authors are given the opportunities to express their appreciation of any important assistance or contribution received from relevant individuals or organizations. Limit to ONE (1) page

c) Table of Contents

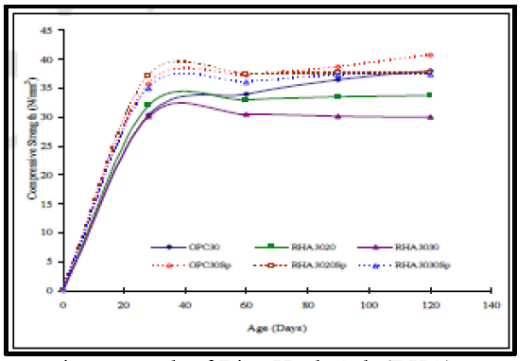
This section should outline the different contents of the thesis and the respective page number. It also shows the breadth and scope of the chapters covered in the thesis. Titles of chapters, headings, and subheadings must be listed in the Table of Contents and must be worded exactly as they appear in the body of the report. All headings and sub-headings are numbered and to be justified to the left with page numbering on the right as shown below.



d) List of Figures (Plates) and Figure (Plate) Caption

A list of figures outlined the schematic diagrams, drawings, graphs and flowcharts presented in the thesis. All figures should be numbered accordingly so that their chapters and sequence are known. The location of each figure is also described by specifying the page number that displays the figure.

The same format also applies to Plates. Plates are printed images and photos.



(Clear, centred, must be enclosed by a box)

(12 point, Title Case, 1 line spacing, centred, no spacing between box and caption)

(Chapter number) *(Figure number)*

Figure 3.1 Compressive strength of Rice Husk Ash (RHA) concrete of Grade 30

3.2.1 Individual Transformation

(1 line spacing between caption and the following paragraph/heading)

On the Insert tab, the galleries include items that are designed to coordinate with the overall look of your document. You can use these galleries to insert tables, headers,

e) List of Tables and Table Caption

All tables should be numbered accordingly so that their chapters and sequence are known. The location of each table is also described by specifying the page number that displays the table.

(12 point, Title Case, 1 line spacing, left flushed, no spacing between caption and Table, Caption must be next line to Table numbering)

(Chapter number) *(Figure number)*

Table 2.5 The Statistical Information of APM Dataset

Batch	No of samples	Average per month	Percentage of LoD (Coarse APM)	Percentage of LoD (Fine APM)
1	100	8 samples	1.70%	6.48%
2	102	9 samples	9.29%	9.09%
3	176	9 samples	2.65%	4.34%

(Left and right lines must be removed, Font size minimum 9-point)

f) List of Symbols and Abbreviations

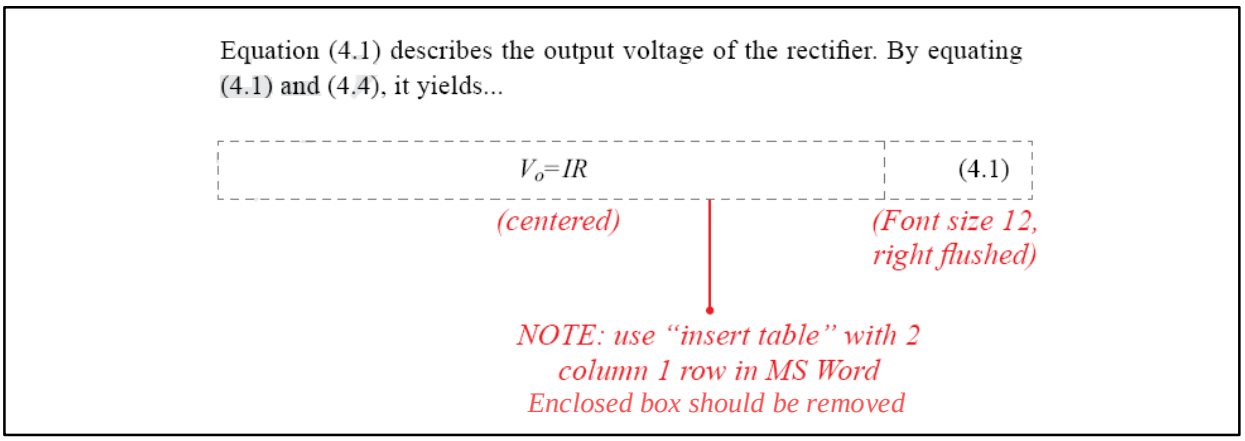
All abbreviations and symbols used in the thesis should be arranged in alphabetical order. Apart from that, Roman letters should be followed by Greek symbols.

g) Equations and Formulae

Every equation should be centred and numbered continuously, according to the chapters and in

parentheses “()” aligned to the right. Font size of 12. (Note: In MS Word, insert a table with two columns and one row to add a new equation to the thesis.

Use the word “Equation (1)” at the start of a sentence only, but in text just use the number (e.g., “in (1)”), unless describing an equation (e.g.“refer to Darlington equation (1)”).



h) Introduction

This section mainly consists of three parts. The first part should present an overview of the problem that has been the main focus of the work. Previous research conducted to overcome the problem should be explained briefly before describing the needs of your work to solve the problem. In short, this part should present the background of the study that motivates the author to do the proposed work. In the second part, the objectives of the work should be presented to outline the justifications for the work. Objectives should be specific and concise in describing the goals of the study. In addition, objectives should be easily measurable, i.e they can be quantified using the results of the study. Once the objectives have been established, the scope of study could be presented. This is the last part of this section that narrows down the breadth of the work conducted in the study. It specifies the boundaries of the work by explaining the limitations and constraints of the research.

i) Literature Review

In this section, the background of the area of research is presented before describing the previous and existing trends in solving the problem in the research area. It should also explain the limitation of previous research and how the proposed work could contribute to solve the problem better.

j) Methodology

In this section, the experimental approach is explained in a sequential and logical order (step-by-step approach). The flow chart may help to explain the methodology of the work. Past tense in the passive voice is usually used to describe the procedures and work in this section.

k) Results and Discussions

The results of the work should be presented in this section. The results may include tables, graphs, flow charts, drawings, schematic diagrams and photographs. However, all illustrations must be accompanied with written explanation to show the significance of the results obtained from the study. Any relationship, similarities and differences in the results should also be explained.

l) Conclusions

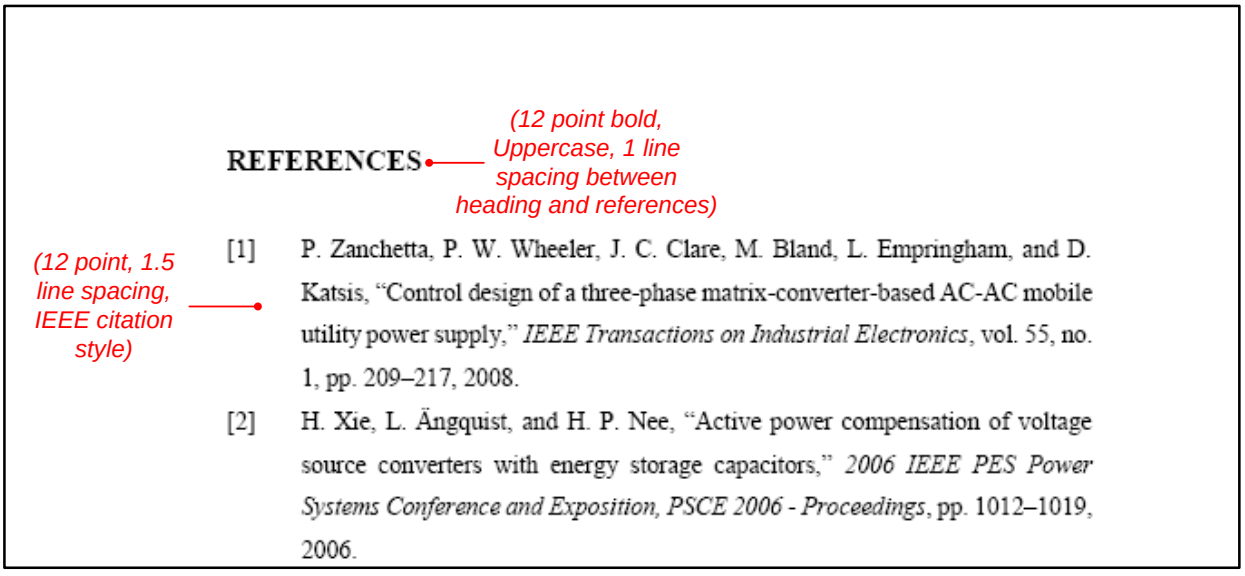
This is the last section of a thesis. It is aimed to review the different chapters in the thesis and provide a proper ending to the thesis. No new information should be introduced in this section. The conclusion may begin with the restatement of the objectives of the study followed by a review of the results to determine whether the objectives have been confirmed or rejected. Apart from that, the results are also evaluated based on the limitations of the study. In short, this section allows the author to evaluate his/her research.

m) Recommendations for Future Work

The recommendations for future work are usually related to the shortcomings of the work presented in the thesis. In this section, recommendations should be made to improve the results and overcome any limitation of the work presented in the thesis. However, it is also possible to include any recommendation outside the scope of the work presented in the thesis as an extension of the work done by the author.

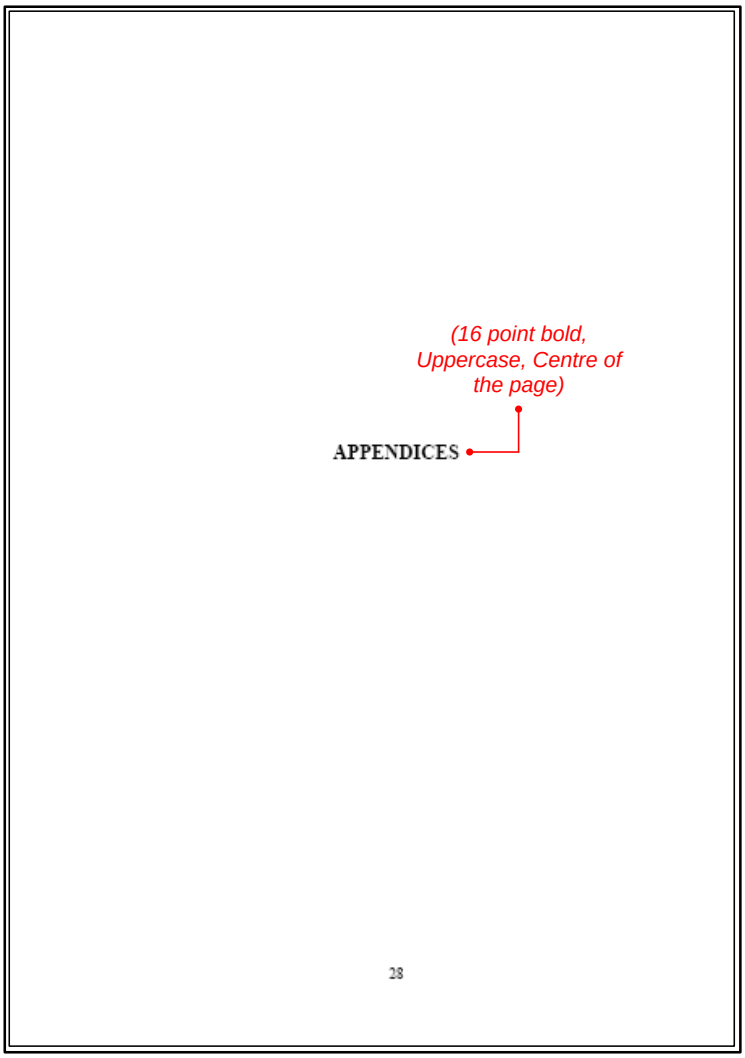
n) References

List only the references that have been referred in the thesis. The IEEE citation style should be adhered to when writing the references.

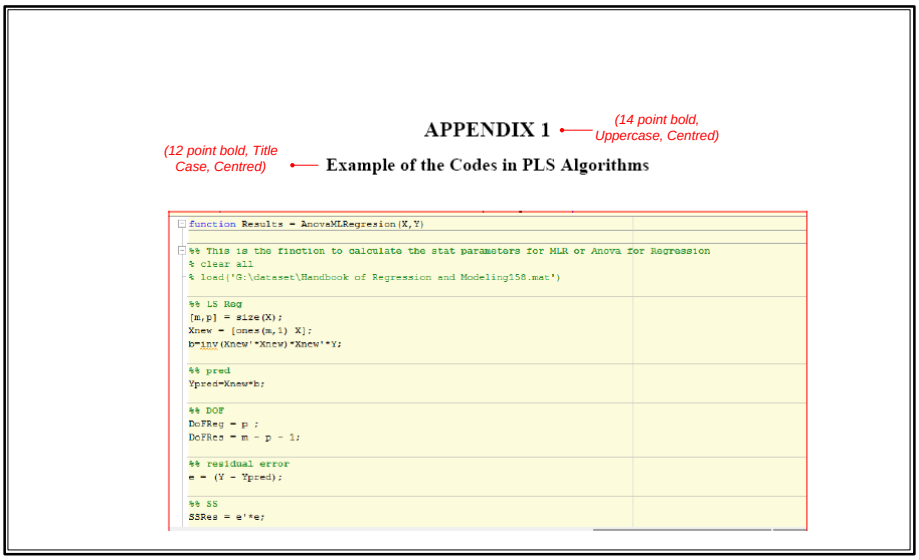


o) Appendices

Separator Page:



Appendices Heading:



7.0 Format for Cover of CD

The cover of the final CD that contains of FYP report, technical proposal and other related files should be in PURPLE: