



UTM
UNIVERSITI TEKNOLOGI MALAYSIA

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MBA GRADUATE PROJECT GUIDELINES

MRA 4046/MRB 4046/MRD 4046/MRG 2096/MRF 2096 and MBSA 2923

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1. INTRODUCTION

MBA Graduate Project, which is known as a mini-thesis is a compulsory project for the students to complete at the end of their semester. As such, students should regard their graduate projects as an ideal opportunity and vehicle for integrating what they have learnt during the MBA program and applying these concepts and skills to a real problem at work.

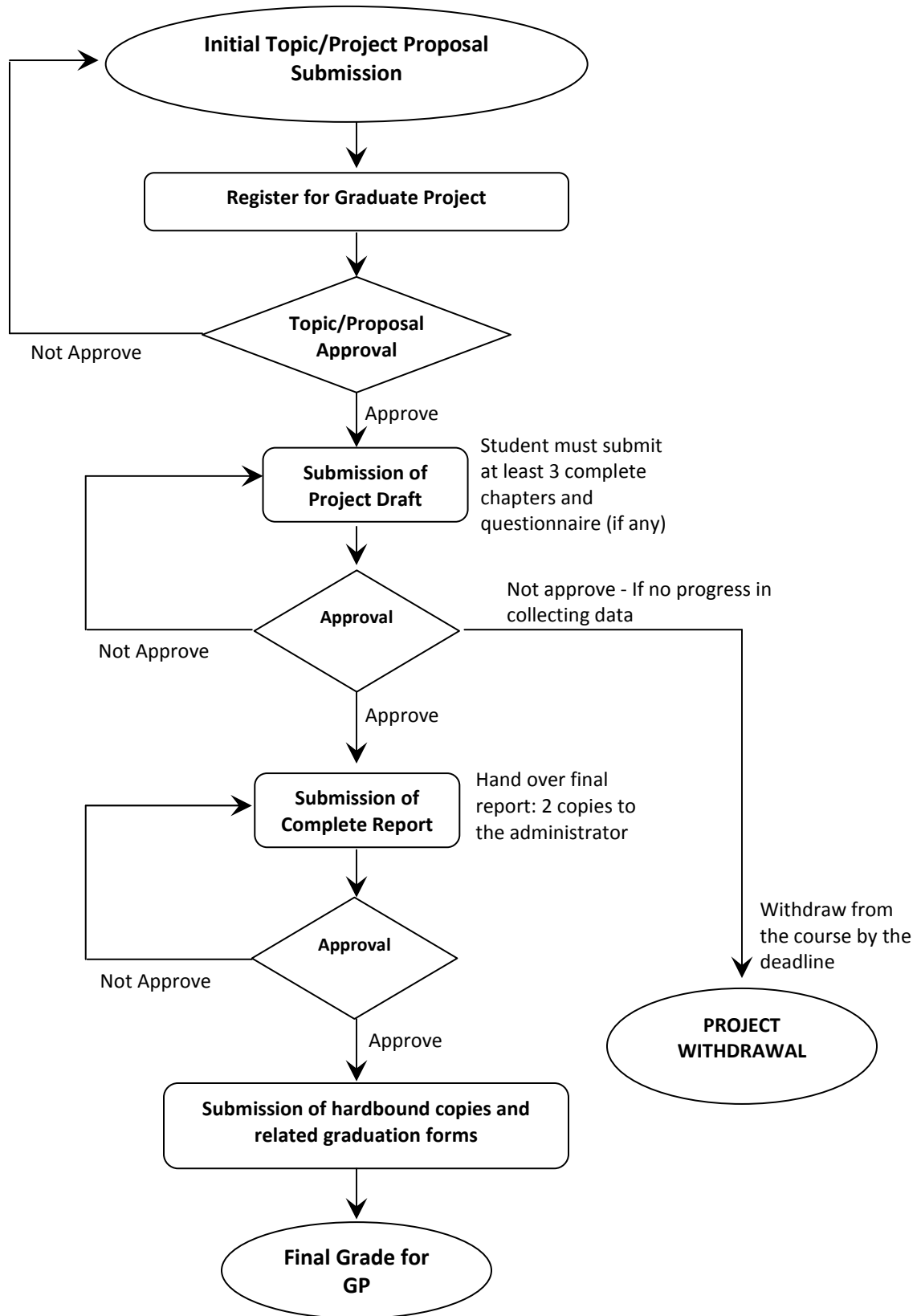
This note aims to provide students with a guide on how to go about the various stages of doing the project and also include information on the formal system devised by the University to supervise and assess projects.

2. OBJECTIVES

The main objectives of the graduate project are as follows:

- a. To provide students with an opportunity to draw together and integrate the knowledge gained and the skills developed from the MBA Program;
- b. To provide students with an opportunity for independent study and to develop an ability to organize work with a view to achieve a specific goal;
- c. To develop students with skills in business strategy, operations or in similar integrated activities appropriate and relevant to their organizations and their personal development needs and goals; and
- d. To undertake an academic project based on sound management principles and intellectual reasoning.

3. MODUS OPERANDI



a. Initial Project Proposal

You must register according to your program as follows:

MRA 4046 – for MBA (Techno-entrepreneurship)

MRB 4046 – for MBA (Strategic Management)

MRD 4046 – for MBA (Healthcare Management)

MRF 2096 – for EMBA

MRG 2096 – for MBA

MBSA 2923 – for New Curriculum

To give a good foundation and in-depth knowledge on how to do an effective research, students are suggested to take Research Methodology course prior to undertaking the Graduate Project. In this course students are advised to prepare their initial project proposal. When considering the initial project proposal, students should look for a critical and analytical approach to the following:

- i. Specification of the goals of the project
- ii. Outline of strategy and methodology for achieving goals
- iii. Literature references with comments as to their relevance
- iv. Identification of specific project topic and its relation to existing similar work
- v. Their understanding of the basic principles underlying the project
- vi. Foreseeable problems and strategies for resolving them.

The initial project proposal comprises of three sections:

1. Project definition
2. Investigation of Project Background
3. Project Plan

The project plan is very important, of which students are assured to achieve the final project objective within a given time. The initial project proposal could be submitted direct to IBS office.

A student who intends to do case writing or corporate/business plan will have to furnish a provisional letter of approval from the selected case company prior to registering for the Graduate Project (See Appendix O). Students will inform the selected case company the data and information needed for the report and request permission to do case study.

b. Registration for Graduate Project

Students who have submitted a complete Initial project proposal or a provisional approval letter from the case company (for those who opt for case writing/corporate plan) may register for the Graduate Project with the Graduate School.

c. Project Approval

The submitted initial project proposal will then be reviewed and approved by the Academic Committee at IBS. The committee will assign appropriate supervisors for students upon the approval of Board of Management. Students are expected to work closely with the assigned supervisors.

d. Appointment and Change of Supervisor

IBS has the right to replace or re-appoint a supervisor. However, a student may request a change of supervisor provided that the request is done officially in writing to the GP coordinator.

A student who has been given a confirmation on a project and supervisor should proceed by meeting and discussing with the supervisor on the first draft report. It is highly recommended that students keep a project diary or a log book throughout the graduate project. At the very least, this should be checked against his or her weekly objectives and should contain details of what have been learnt and the time taken. A supervisor may ask a student to submit a weekly summary based on the diary or log book since these will provide the supervisor and the student progress of the project. Students will find it useful when it comes to writing the Final Project Report.

Supervisors are responsible for:

- a. 70% evaluation of the Final Project Report; 30% will be assessed by the second examiner; however final grade will be subjected to Academic Committee review on the students' Final Project Report.
- b. Advising and guiding the students on the overall direction of the project. Areas to be agreed include:
 - i. Aims of the project
 - ii. Topic area
 - iii. How it will be tackled/broad strategy
 - iv. Project plan
 - v. Resources/facilities required
 - vi. Student's strengths and weaknesses in the project area
 - vii. Feasibility of project aims being achieved
 - viii. Preliminary outline, literature/background research
 - ix. Advice on style and format
 - x. Required academic standards
 - xi. Foreseeable problems

e. First Draft Report

This draft is submitted to the supervisor based on the earlier comments or feedback received on the initial project proposal. The content and format of the report are as follows:

(1) RESEARCH STUDY

I. CHAPTER 1: INTRODUCTION

- Background of the study
- Problem Statement
- Research Questions/Objective of the study
- Significance of the study
- Research Scope
- Definitions – defines important terms

II. CHAPTER 2: LITERATURE REVIEW

- Discusses prior studies relevant to the topic
- Provides current/ update empirical studies in the literature
- Arguments is well-written, synthesized and evaluated
- Hypotheses/ propositions are well developed – based on the identified research gaps (if required)
- Conceptual framework of the research

III. CHAPTER 3: METHODOLOGY

- Data collection method
- Representativeness/issues of sampling
- Describe the questionnaires/interview
- Validity/reliability of the data
- Plan of data analysis (basically what you want to do)

(2) CORPORATE AND BUSINESS PLAN

I. EXECUTIVE SUMMARY – TENTATIVE

This can be changed after completion of the full project

II. INTRODUCTION & COMPANY DESCRIPTION

Problem statement, company history, mission/vision/objective, product description/ uniqueness, key partnership (if any)

III. INDUSTRY & COMPETITOR

External & internal forces (PETSLE), SWOT, identifying competitive forces, attractiveness of the industry, identifying competitors, evaluating the strategies of diversified companies (SBUs)

(3) CASE WRITING

I. MAIN ISSUE OR PROBLEM OF THE CASE

What is the central issue of the case/ what is the key problem that is revolved around the whole case text

II. INTRODUCTION OF THE COMPANY

Founding year, founding father, company history, key people, branches, products/services that are offered by the company

III. INDUSTRY INFORMATION

Description of the industry, competitors etc

IV. CASE STORY

The main case facts central to the key problem

V. CASE CLOSURE

Highlighting the problem once again to through the challenge for the reader

The first draft project should be of reasonable length in total, EXCLUDING appendices, tables and charts.

Students should be aware of the level of academic standard required in the graduate project. Students should also avoid from having too widespread scope of the area. To some extent, students should adjust the specific aim within the context of the level to work expected and the time available. It is preferable to constrain the scope so that the project can be completed without a large number of unanswered questions.

f. Feedback/Comments from the Supervisor

On receipt of feedback from supervisor(s), students will continue to proceed with revising the draft report. Students are expected to proceed and prepare their report in details by adding the following continuous required chapters:

(1) RESEARCH STUDY

I. CHAPTER 4: DATA ANALYSIS

- The results of the research, statistical tests and findings

II. CHAPTER 5: DISCUSSION OF FINDINGS & CONCLUSIONS

- Discussion provides explanations to research questions/research objectives
- Discussion has clearly linked the current study with past literatures
- Implications to management practice and theory
- Suggestions are made for future studies
- Conclusion

(2) CORPORATE AND BUSINESS PLAN

I. MARKET ANALYSIS & MARKETING PLAN

- Feasibility exploration including business model, market segmentation, market targeting, understanding consumer behavior, 4 Ps Strategies, overall strategic focus

II. OPERATIONS & MANAGEMENT

- Viability Analysis covering costing, operation and projected income and return on investment. Cash flow, income statement, balance sheet, breakeven analysis, ratio analysis and risk management.

(3) CASE WRITING

DETAIL REPORT ON ALL POINTS ABOVE (I – V) TOGETHER WITH THE TEACHING NOTES

g. Submission of the Complete Project Report

After revisions on the project papers, students will then end with the final and completed paper, which is to be submitted directly to the respective supervisor for a final evaluation. In any case, if there are minor corrections, students are instructed to revise and resubmit the paper before binding it with a hard cover. **Supervisors submit final grade to IBS office upon signing hardbound copies of the report. Without the hardbound copies, the highest grade a supervisor can give to a student is a C+. C+ should be given to those students who will submit their proposal (chapter 1, 2 & 3) as spiral bound copy to their respective supervisors. Supervisor has to pass that spiral bound chapters along with the grade sheet. If the student fails to show any progress, they will get less than C+ based on their work progress, even supervisors are allowed to provide E grade.**

Students should submit two hardbound copies of the project paper and 1 spiral copy to IBS office along with the submission checklist. **Checklist can be downloaded from the website: www.ibs.utm.my/download/graduate-project. Upon completion of the GP, students must upload the**

soft copy to the website <http://www.ibs.utm.my/myform/view.php?id=30117>. Distribution of the GP reports is as follows:

- Supervisor (1 hard bound copy)
- IBS Office (1 hard bound copy)
- Examiner (1 spiral bound copy)

A student, with an approval from his or her supervisor, may publish a paper extracted from the graduate project, provided acknowledgement is given to the University.

The content of the project paper (excluding references and appendices) should **be between 20,000 – 22,000 words (Research Study; Corporate and Business Plan; Case Writing)**. Students intending to submit a graduate project exceeding the stipulated length must apply to IBS at least 2 months **BEFORE** the date of submission.

Students must provide the turnitin similarity index report and word-count report as attachment to their project papers. The similarity index should not exceed 20%. If any student fails to comply with these norms, they will receive the grade C+ regardless of the marks given by the supervisor. This rule is applicable for late submission as well.

The graduate project must be written in **English**; font size 12, Times New Roman, 1 ½ Spacing. The final graduate project (GP) report must be permanently bound. A Buckram type cover must be used and written with golden ink for the lettering. The minimum size of the letters should be 18 point. **The cover color should be black** (codes: 585). Samples of GP front cover, GP spine, numbering a chapter, sub-headings in the chapter and page continuation are shown in Appendix C, D, L and M respectively. The order of arranging the GP report is as follows:

- GP status validation form (Appendix A)
- Title page (Appendix B)
- Declaration page (Appendix E)
- Acknowledgment page (Appendix F)
- Abstract (English) (Appendix G)
- Abstract (Malay)
- Table of content page (Appendix H)
- List of tables (Appendix I)
- List of figures (Appendix J)
- List of appendices (if any) (Appendix K)
- Content
- List of references (Appendix N)

h. Project Evaluation

Students need to ensure that their completed project papers meet the requirements as follows:

- Similarity index is below 20%
- The content of the project paper (excluding references and appendices) should be between 20,000 – 22,000 words
- On time submission – examiner's copy and office copies are submitted on due time.

Students will be given **a grade of C+** if they fail to meet these requirements. The evaluation criteria for research study, corporate and business plan and case study are shown as follows.

(1) RESEARCH STUDY

Scoring scale 0 = no evidence 1 = little evidence or major flaws 2 = adequate minimum standards 3 = Research well done, few minor omissions, met standards 4 = Research well done, exceeded minimum standards	(a) Weightage (%)	(b) Score (0-4)	(a)x(b)/ 4 Total	Comments
1. Chapter 1 - Introduction Background of the study Problem or need – problem statement and research gap stated clearly; explains causes or events leading to problem or need Research questions, research objectives – stated clearly; appropriate in number Research Significance Research Scope Definitions – defines important terms	15			
2. Chapter 2 – Literature Review Discusses prior studies relevant to the topic Provides current/ update empirical studies in the literature Arguments is well-written, synthesized and evaluated Hypotheses/ propositions are well developed – based on the identified research gaps (if required) Conceptual framework of the research	20			
3. Chapter 3 – Research Methodology Method has a clear research design Choice of method is consistent with research questions/research objectives Instrument design is well developed Provides appropriate sampling design Data collection is clearly explained Analysis techniques are clearly explained	15			
4. Chapter 4 – Data Analysis Consistent with methodology section Well-organized & well-interpreted Analysis is supported with evidences Tables/chart/graphs/diagrams are provided in accordance with the analysis	15			
5. Chapter 5 – Discussion of Finding & Conclusions Discussion provides explanations to research questions/ research objectives Discussion has clearly linked the current study with past literatures The study generates implications to managerial practice and theory Suggestions are made for future studies	15			
6. Writing Continuity/ transitions – includes continuity between topics; includes transitions from topic to topic Sentences – includes complete sentences; uses parallel construction; uses subject-verb agreement Writing mechanics – less than 5 errors in spelling, grammar and punctuation List of Reference	10			
7. Adherence to the Norm Similarity index is maximum 20% On time submission – examiner's copy and office copies are submitted on due time	10			
Total	100			

(2) CORPORATE & BUSINESS PLAN

Scoring scale 0 = no evidence 1 = little evidence or major flaws 2 = adequate minimum standards 3 = Research well done, few minor omissions, met standards 4 = Research well done, exceeded minimum standards	(a) Weightage (%)	(b) Score (0-4)	(a)x(b)/ 4 Total	Comments
1. Cover Page All information present, including: -Name of the Business -Company logo -Any other information that you feel is pertinent	2			
2. Table of Contents Includes each major section. Includes page numbers. Organized and neat.	2			
3. Executive Summary Each key section briefly summarized. Specifically answer the followings: -What business are you in? -Where will you locate and why? -What is your product/service? -How much capital will be needed? -Why should someone invest in your company	4			
4. Business Description Basic information (mailing address, phone number, website, email, etc.) Legal form (partnership, corporation, etc.) – be specific Mission statement Goals & objectives Nature of business, its primary product/service, its current status (start-up/buyout)	5			
5. Product or Service Description Give sufficient detail to enable investors to develop a working understanding of what the company sells May include photographs, schematic drawings, and descriptive scenarios Describe how product/service fills a gap in the market or how your product/service is “better, cheaper, and/or faster” than what is currently available Focus on the benefits of each feature Feature refers to what the product/service is Benefits refer to what the product/service does Growth Strategy	10			
6. Industry, Target Customer, & Competitor Analysis Describe the broader industry in which you will be competing Identify the different segments of the industry Describe in detail the niche in which you plan to participate Specifically identify the target market Review of firm’s top competitors & their relative market share Examine markets that competitors serve & the strategies they employ Describe barriers to entry and articulate strategies for overcoming them Barriers to entry (characteristics of an industry that make it difficult to start new ventures) Describe expected response from competitors	10			
7. Market Analysis Describe how the firm will reach and service customers within a given market Explain the marketing strategy How will customers be identified and attracted? Pricing strategies Selling approach & Type of sales force Describe advertising and promotion campaign Media used—viewer/listener profiles Media costs, Frequency of usage Plans for generating publicity Web presence Credit and pricing policies Budget for marketing plan (Hint: Leverage as much free advertising as possible)	10			

Scoring scale 0 = no evidence 1 = little evidence or major flaws 2 = adequate minimum standards 3 = Research well done, few minor omissions, met standards 4 = Research well done, exceeded minimum standards	(a) Weightage (%)	(b) Score (0-4)	(a)x(b)/4 Total	
8. Location & Layout Location Demographic analysis of location versus target customer profile Traffic, Lease/Rental rates Labor needs & supply, Wage rates Layout, Size requirements & Layout plan (suitable for an appendix)	5			
9. Management Team Emphasize relevant expertise that each team member experience education Duties List & highlight strengths of other stakeholders who will contribute management or consulting expertise Board of Directors, Advisory Board List legal counsel or other professional service firms such as accounting, management, etc.	5			
10. Financial Projections - Accurate, correct format, consistent, realistic Should be conservative but achievable; reasonable yet compelling Sales forecast Lists product(s)/service(s) to be sold Price at which product(s)/service(s) will be sold Number of units of each product/service that will be sold each month Pro-Forma Financial Statements Income Statement (Profit & Loss Statement) Cash Flow Statement, Balance Sheet, Breakeven Analysis, Ratios	20			
11. Loan or Investment Proposal Amount requested Purpose and uses of funds Repayment or "cash out" schedule (exit strategy) Timetable for implementing plan and launching business	5			
12. Appendices The Appendices (beginning on a separate sheet at the end of your plan) can include pertinent information about yourself and your business that is not included elsewhere in the plan. DO NOT REPEAT INFORMATION FROM PREVIOUS SECTIONS. The appendices should be used to complement or supplement your previous information. Some possible details to include are: 1. Organizational structure (if not previously listed), including management structure, organization chart(s), and resumes of key people 2. Major assumptions you have made in preparing the plan 3. Brochures or other published information describing the product(s) and service(s) you provide 4. Layout schematic 5. Details of objectives and goals 6. Catalogue sheets, photographs, or technical information 7. Web page design 8. Anything else that is pertinent	5			
13. Writing Style & Grammar Structured and coherent Spelling, capitalization, punctuation, grammar, word choice, and sentence structure No glaring grammar mistakes and proper use of punctuations	7			
14. Adherence to the Norm Similarity index is maximum 20% On time submission – examiner's copy and office copies are submitted on due time	10			
Total	100			

(3) CASE WRITING

Scoring scale 0 = no evidence 1 = little evidence or major flaws 2 = adequate minimum standards 3 = Research well done, few minor omissions, met standards 4 = Research well done, exceeded minimum standards	(a) Weightage (%)	(b) Score (0-4)	(a)x(b) /4 Total	Comments
A. Teaching Case				
1. Introduction Introduced the case well, where problem of the case implied and interesting. The central issue is relevant and interesting. The problem of the case is interesting and important. Relevance of the case problem(s) to 'solve' the issue(s).	10			
2. Industry Background Is industry background relevant to the central issues? Sufficient information is provided related to the industry.	5			
3. Company Background Is company background relevant to the central issues? Sufficient information is provided related to the company (its operation, industry and competitors).	5			
4. Case Story The case story provides sufficient information to highlight the case problem. The whole case story is properly linked with the central issues and case problem. Appropriate data collection technique is employed.	10			
5. Case Closure The case is properly concluded.	5			
B. Teaching Notes				
1. Case Summary Write a concise summary of the case.	5			
2. Learning objectives The case learning objectives are clearly stated & relevant to the audience.	5			
3. Specific theory(s)/ model(s)/ concept(s) addressed in the case Addressing any particular theory/model/topic within a specific field.	10			
4. Instructed Teaching Approach/ Plan	5			
5. Suggested Case Questions At least five (5) questions.	5			
6. Suggested Case Answer(s)	10			
7. Supports & Clarity on Argument Supports on arguments given through date, charts, tables or diagrams Not long winded but straight to the point	5			
8. Writing style, grammar, sources of information & list of reference is given Interesting, structured and coherent No glaring grammar mistakes and proper use of punctuations List of Reference	10			
10. Adherence to the Norm Similarity index is maximum 20% On time submission – examiner's copy and office copies are submitted on due time	10			
Total:	100			

MBA AWARD

Students who have successfully completed their project papers are entitled to get an award of MBA. However, students should firstly fill-up all the related graduation forms such as application for an award form and transcript request form.

4. STANDARD MARKING SYSTEM

The normal basis of marking as applied at IBS is as follows:

MARKS	GRADE	POINTS	STATUS
90 – 100	A+	4.00	Excellent pass
80 – 89	A	4.00	
75 – 79	A-	3.67	
70 – 74	B+	3.33	Good Pass
65 – 69	B	3.00	
60 – 64	B-	2.67	Pass
55 – 59	C+	2.33	Fail
50 – 54	C	2.00	
45 – 49	C-	1.67	
40 – 44	D+	1.33	
35 – 39	D	1.00	
30 – 34	D-	0.67	
00 – 29	E	0.00	

5. LIST OF SUPERVISORS

Students need to discuss the proposal with the prospective lecturers listed below. However, the Academic/GP Committee has the right to assign a different supervisor based on the workload of the lectures. Students can also suggest a supervisor other than listed below but assignment of the supervisor will be at the Committee discretion.

You can visit <http://www.ibs.utm.my/programmes/phd.html> for information on research interests of the respective lecturers.

APPENDIX A: GRADUATE PROJECT STATUS VALIDATION FORM

UNIVERSITI TEKNOLOGI MALAYSIA

PSZ 19:16 (Pind. 1/07)

DECLARATION OF GRADUATE PROJECT PAPER AND COPYRIGHT

Author's full name : _____

Date of birth : _____

Title : _____

Academic Session : _____

I declare that this graduate project is classified as:

☐

CONFIDENTAL (Contains confidential information under the Official Secret Act 1972)*

☐

RESTRICTED (Contains restricted information as specified by the organization where research was done)

☐

OPEN ACCESS I agree that my graduate project to be published as online open access (full text)

I acknowledged that Universiti Teknologi Malaysia reserves the right as follows:

1. The graduate project is the property of Universiti Teknologi Malaysia.
2. The library of Universiti Teknologi Malaysia has the right to make copies for the purpose of research only.
3. The library has the right to make copies of the graduate project for academic exchange

Certified by :

SIGNATURE

SIGNATURE OF SUPERVISOR

(NEW IC NO./PASSPORT NO.)

NAME OF SUPERVISOR

Date :

Date :

APPENDIX B: EXAMPLE OF A TITLE PAGE

2.5 cm

2.5 cm

**FACTORS AFFECTING CUSTOMER LOYALTY AMONG MOBILE PHONE
SERVIE USERS**

AMEZAN BIN MOHAMAD

A project report submitted in partial fulfillment of the requirements for the award
of the degree of Master of Business Administration (Healthcare Management)

4cm

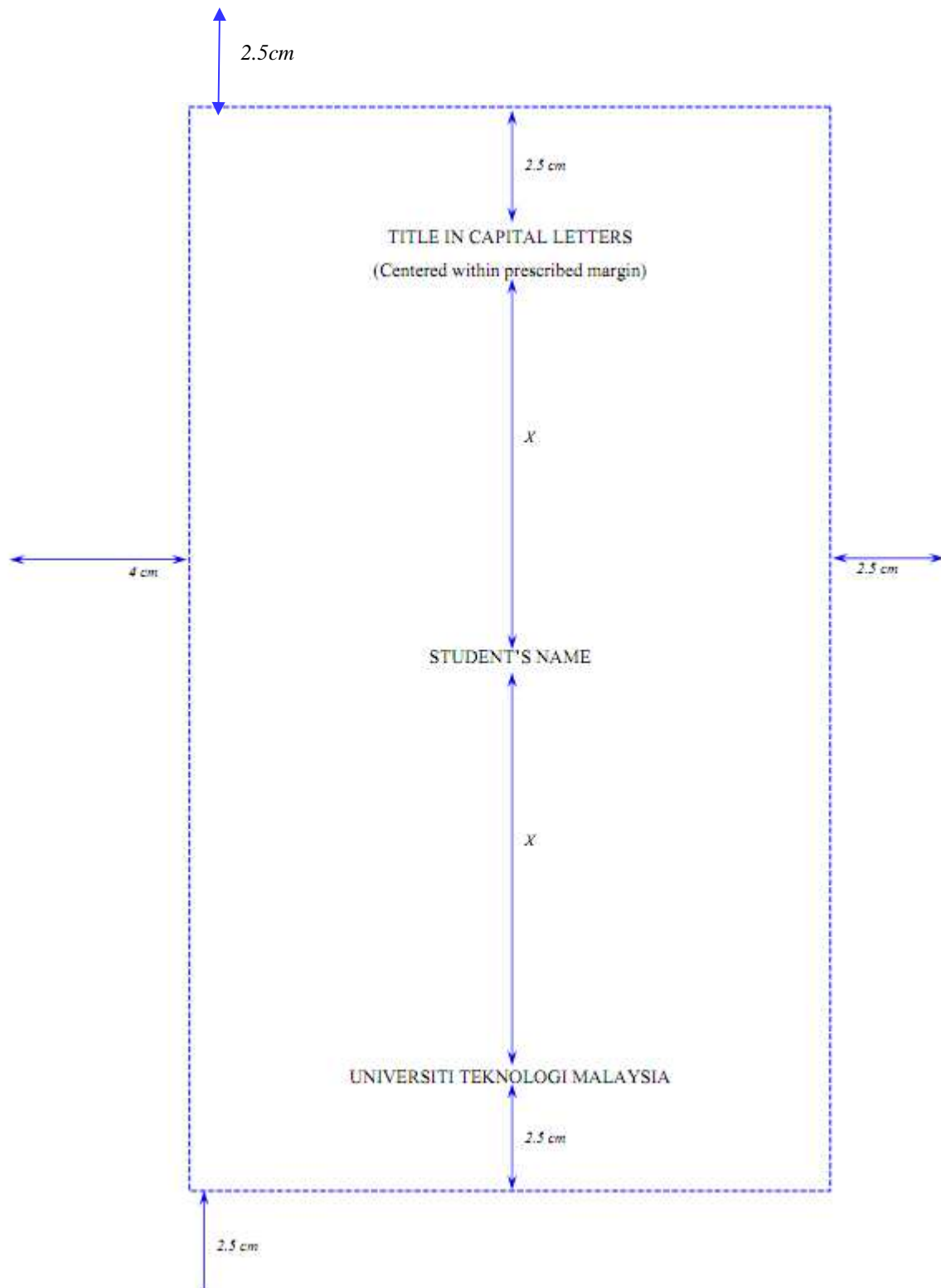
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International Business School
Universiti Teknologi Malaysia

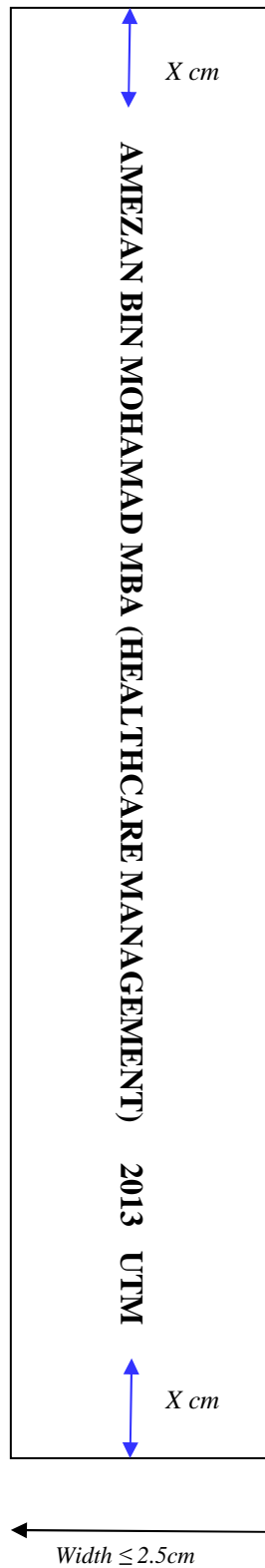
SEPTEMBER 2014

2.5 cm

APPENDIX C: SAMPLE OF GRADUATE PROJECT FRONT COVER



APPENDIX D: SAMPLE OF GRADUATE PROJECT SPINE

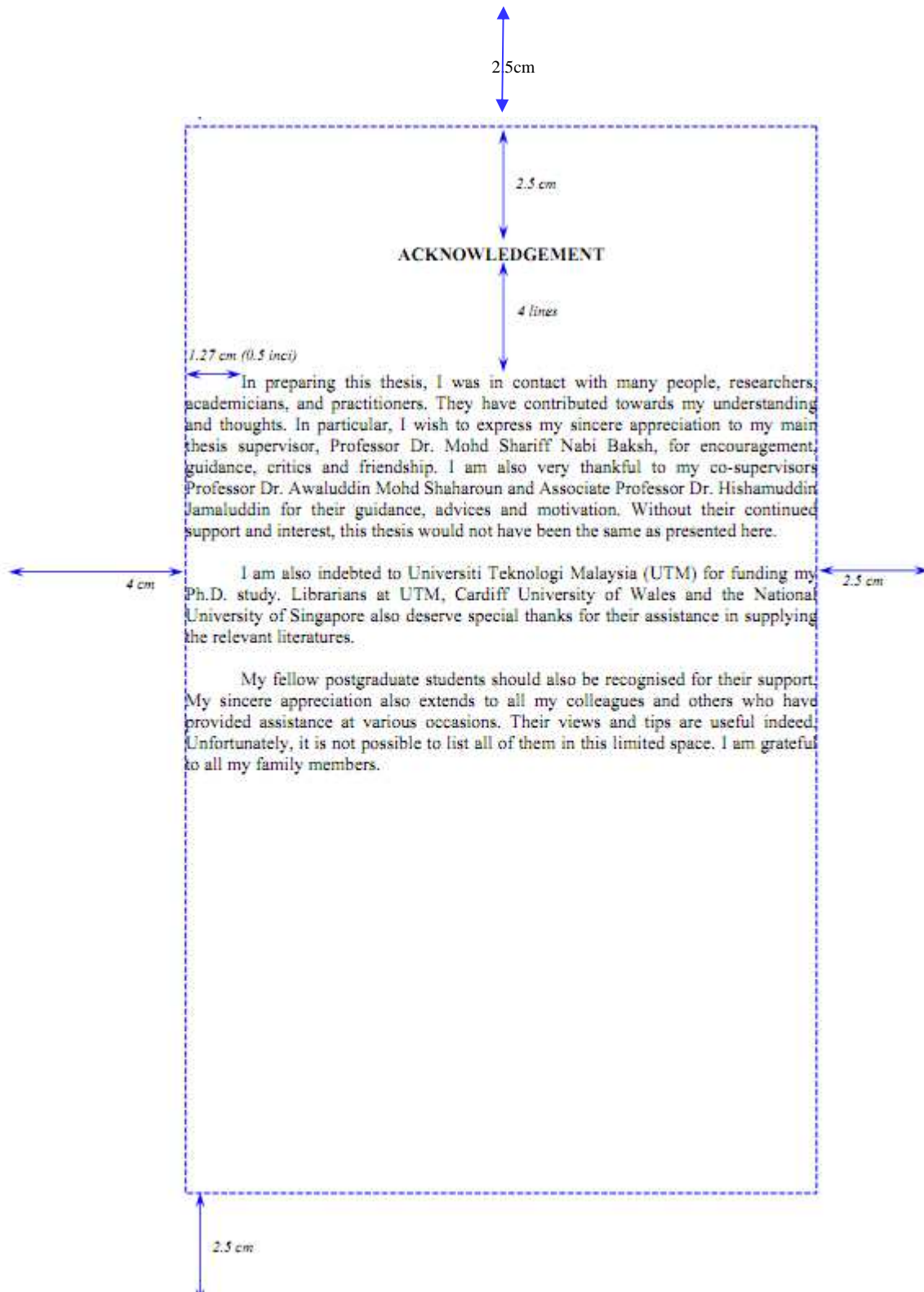


APPENDIX E: SAMPLE OF DECLARATION PAGE

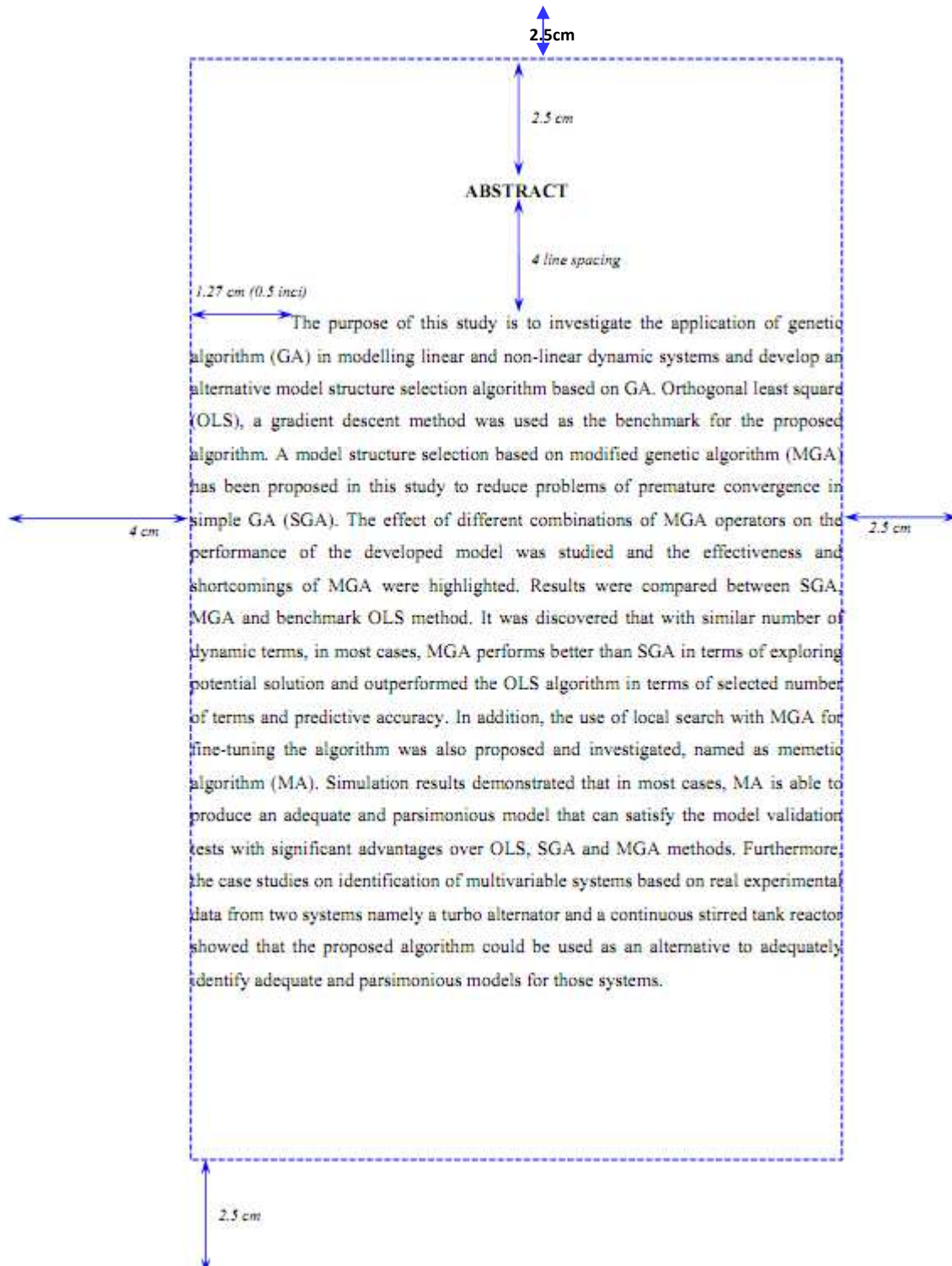
I declare that graduate project entitled “ _____ ” is the result of my own research except as cited in the references. The graduate project has not been accepted for any degree and is not concurrently submitted in candidature of any other degree.

Signature :
Name :
Date :

APPENDIX F: EXAMPLE OF ACKNOWLEDGEMENT PAGE



APPENDIX G: EXAMPLE OF AN ABSTRACT



APPENDIX H: SAMPLE OF A TABLE OF CONTENTS PAGE

2.5 cm

2.5 cm

TABLE OF CONTENTS

4 baris

CHAPTER	TITLE	PAGE
	DECLARATION	ii
	DEDICATION	iii
	ACKNOWLEDGEMENTS	iv
	ABSTRACT	v
	ABSTRAK	vi
	TABLE OF CONTENTS	vii
	LIST OF TABLES	xii
	LIST OF FIGURES	xiv
	LIST OF ABBREVIATIONS	xix
	LIST OF SYMBOLS	xxi
1	ORGANISATION OF THE THESIS	1
1.1	Definition of a Thesis	1
1.2	Organisation of the Thesis	1
1.3	Thesis Status Declaration	1
1.4	Declaration	3
1.4.1	Supervisor's Declaration	4
4	NOTES AND FOOTNOTES	33
4.1	General guideline	33
4.2	Consistency	33
	REFERENCES	35
	Appendices A - Y	37 - 62

2.5 cm

APPENDIX I: EXAMPLE OF A LIST OF TABLES

The diagram illustrates the layout of the 'LIST OF TABLES' section. The title 'LIST OF TABLES' is centered at the top of the list area. Below it, the table is structured with three columns: 'TABLE NO.', 'TITLE', and 'PAGE'. The table is enclosed in a dashed blue border. Dimensions and spacing are indicated by arrows: a 2.5 cm vertical arrow above the title, a 2.5 cm vertical arrow between the title and the first row, a 4 line spacing vertical arrow between the first and second rows, a 4 cm horizontal arrow to the left of the first column, and a 2.5 cm horizontal arrow to the right of the last column. The table content is as follows:

TABLE NO.	TITLE	PAGE
2.1	The role of statistical quality engineering tools and methodologies	16
2.2	Basic ANN models used for control chart pattern recognition	47
2.3	General design strategies/structures for CCPR	49
3.1	The overall research plan	70
3.2	Parameters for simulating individual process variation data	75
3.3	Description of performance measures	92
4.1	Targeted recogniser outputs	103
4.2	Design matrix and results for the preliminary feature screening	108
4.3	Regression analysis for the results of preliminary feature screening	111
4.4	ANOVA for the results of preliminary feature screening	111
4.5	Tentative significant main effects and two-factor interactions	113
4.6	Estimated effects and regression coefficients for the recogniser's performance (reduced model)	116
4.7	ANOVA for the recogniser's performance (reduced model)	116

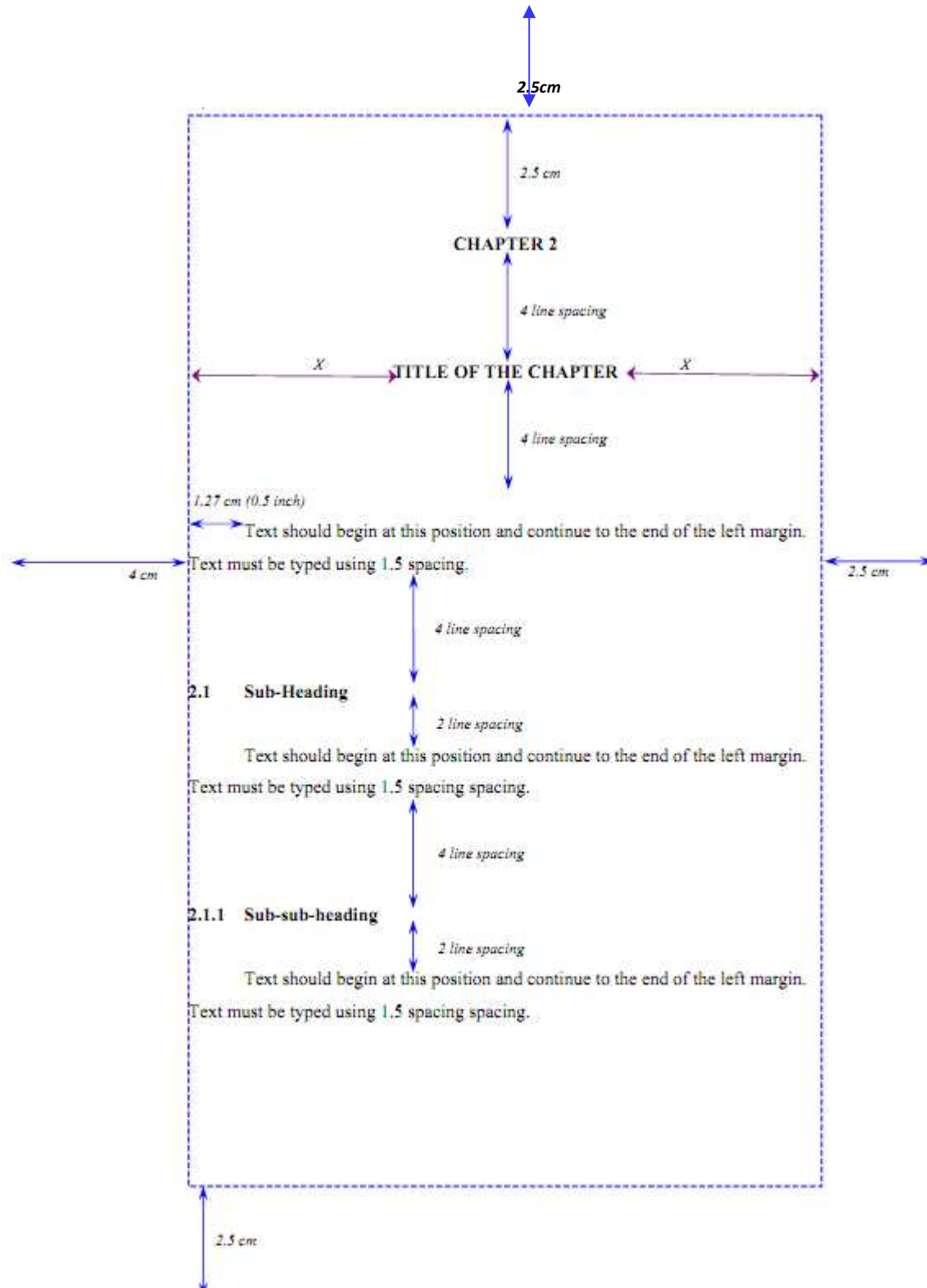
APPENDIX J: EXAMPLE OF A LIST OF FIGURES

FIGURE NO.	TITLE	PAGE
1.1	Trends leading to the problem	2
1.2	Design and development phases of the proposed scheme	7
1.3	Summary of the research contributions	10
1.4	Organisation of the thesis	11
2.1	Chance and assignable causes of process variation (Montgomery, 1996a)	14
2.2	Classification of statistical quality engineering tools	15
2.3	Continuous variability reduction using SPC chart (Revelle and Harrington, 1992)	19
2.4	Classification of research areas in SPC	20
2.5	Advances in process variation monitoring and recognition using SPC charting	25
2.6	Nelson's runs rules (Nelson, 1984)	26
2.7	Typical fully developed patterns on Shewhart control chart (Cheng, 1989)	28

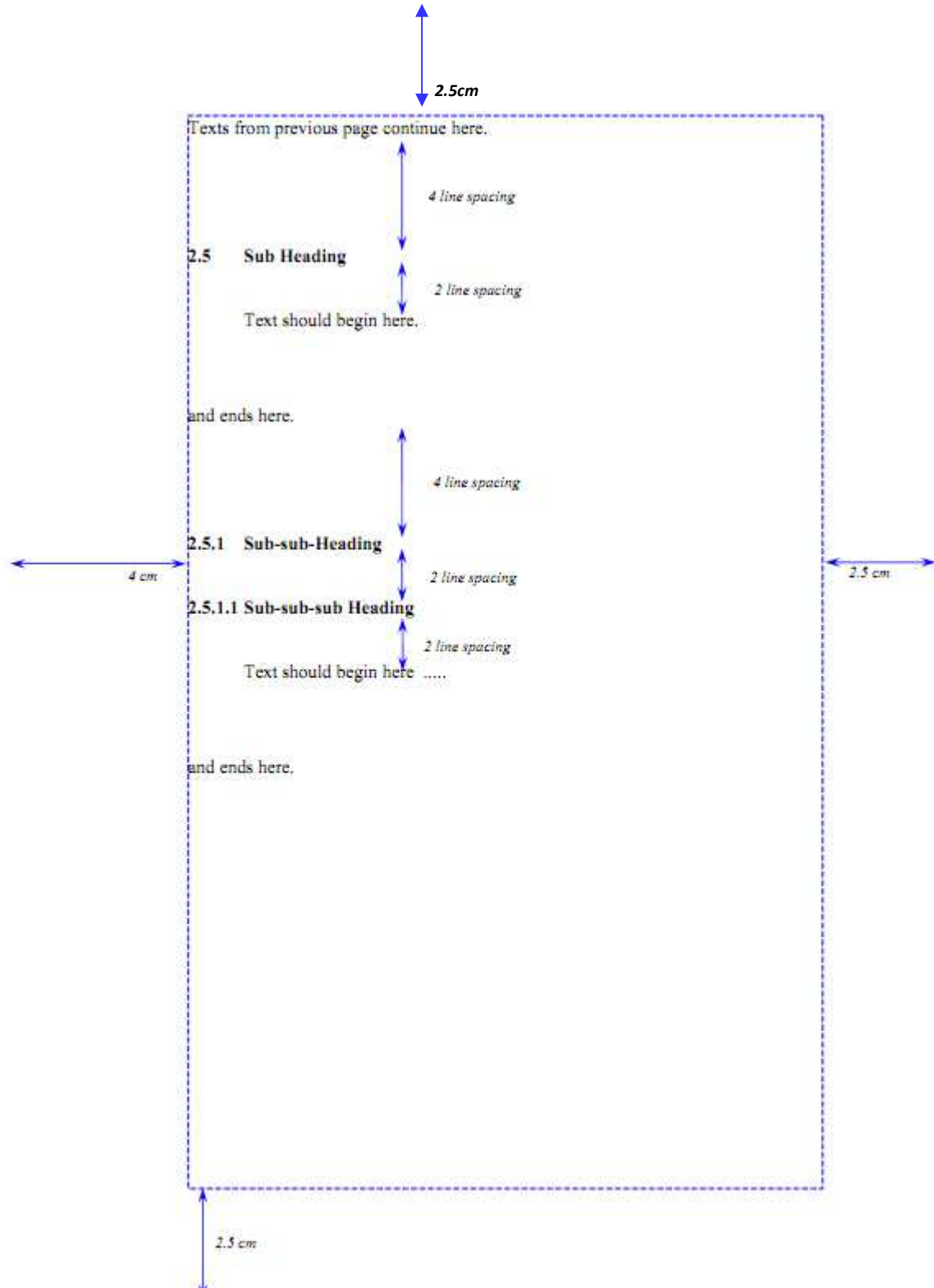
APPENDIX K: EXAMPLE OF A LIST OF APPENDICES

APPENDIX	TITLE	PAGE
A	Examples of possible assignable causes of unnatural control chart patterns	253
B	Models for generating the control chart patterns (data streams)	254
C1	Mathematical expressions for the statistical features	256
C2	Minimum and maximum feature values	259
C3	Analysis of results for experiments to revise the parameter setting	260

APPENDIX L: SAMPLE OF NUMBERING A CHAPTER & SUB-HEADING IN THE CHAPTER



APPENDIX M: SAMPLE OF A PAGE CONTINUATION



APPENDIX N: SAMPLE OF A REFERENCE LIST

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Note: Arranged alphabetically according to author's name.

APPENDIX O: Provisional letter of approval from the selected case company

Date:

Address:

Consent to Provide Information

Title:	
Name of the student:	
Matrix Number:	

I hereby confirm that I have reviewed the above entitled case study. I have no objection to provide my consent to use the given information in order to complete the graduate project of the above mentioned student.

Thank you.

Yours sincerely,

Name:

Position:

Address:

Phone:

Email: