I hereby confirm that I have examined this project paper entitled:

# ENTREPRENEURIAL EDUCATION AND ITS IMPACT TOWARDS ENTREPRENURIAL INTENTION AMONG STUDENT IN MALAYSIAN ENGINEERING UNIVERSITY

# By NUR ATIQAH BINTI ROSLI

I hereby acknowledge that this project paper has been accepted as part fulfilment for the degree of Bachelor of Technopreneurship (Hons)

Signature	:
Supervisor's Name	i
Date	:
Signature	:
Panel's Name	:
Date	:

# ENTREPRENEURIAL EDUCATION AND ITS IMPACT TOWARD ENTREPRENEURIAL INTENTION AMONG STUDENT IN MALAYSIAN ENGINEERING UNIVERSITY

## NUR ATIQAH BINTI ROSLI

Report submitted in fulfilment of the requirement for the degree of Bachelor of Technopreneurship (Hons)

Faculty of Technology Management and Technopreneurship
University Teknikal Malaysia Melaka

**JUNE 2017** 

	e research proj	is the result of my own research except as cited in the fect has not been for any degree and is not concurrently in candidature of any other degree."
S	Signature	:
1	Name	:
Ι	Date	:

#### **DEDICATION**

This thesis is dedicated to my father Rosli bin Jois and my mother Site Zaiton binti Ismail, who taught me the value of education and made sacrifices to me to get the opportunity that they did not have. I am honoured to have their as my parents. Thank you for giving me chance to prove and improve myself through all my walk of life. To all my family thank you for believing me for allowing me further my studies. Lastly to my loved one, Nor Rauduan bin Othman, thank you for your understanding and unconditional support to me.

#### **ACKNOWLEDGEMENT**

Alhamdulillah. Thanks to Allah, whom with His willing giving me an opportunity to complete this research paper entitled "Entrepreneurial Education and its impact towards Entrepreneurial Intention among student in Malaysian engineering university" to fulfil the compulsory requirements of Universiti Teknikal Malaysia Melaka (UTeM) and the Faculty of Technology Management and Technopreneurship (FPTT). I would like to thank, without implicating, to my fellow classmates, supervisor, lectures, family and friends for helping me working on this research project.

I would like to express my deepest thanks to Ir. Budiono Hardjono a lecturer at FPTT and also assign as my supervisor who had guided me for the task during two semesters in session 2016/2017. Also sincere appreciation and thanks to Dr. Chew Boon Cheong and Prof. Dr. Hj Salleh bin Yahya for sharing their experience and knowledge in the Research Methodology and Marketing Research subject that really helped me through the writing of this research.

Lastly, deepest thanks and appreciation to my family members, their endless support, encouragement, and full support during the report completion from the beginning till the end.

Thank you very much.

#### **ABSTRACT**

Entrepreneurial intention defined as willingness of individuals to perform entrepreneurial behaviour, to engage in entrepreneurial action, to be self-employed, or to establish new business. Students' entrepreneurial intention may be affected by different factors. Entrepreneurial education is found to determine students' willingness to engage into entrepreneurial intention in future. This research project which aimed to identify the elements of entrepreneurial education such as syllabus, pedagogy and co-curriculum which will be the most significant to entrepreneurial intention among student in Malaysian engineering university and also to examine the factors that affect the entrepreneurial intention among student in Malaysian engineering university. Besides, this research investigate the relationship between entrepreneurial education and the entrepreneurial intention among student in Malaysian engineering university. The primary data of this study was gathered by distributing 300 survey questionnaires to respondents at five chosen Malaysian engineering university, namely UTeM, UTHM, UTM, UniMAP and UMP. The data gathered were analysed using descriptive analysis. The finding sees that there is a significant relationship between the entrepreneurial intention (dependent variable) and the entrepreneurial education (independent variables).

Keywords: entrepreneurial education, entrepreneurial intention, syllabus, pedagogy, co-curriculum, Malaysian engineering university

#### **ABSTRAK**

Hasrat keusahawanan ditakrifkan sebagai kesediaan individu untuk melakukan tingkah laku keusahawanan untuk melibatkan diri dalam tindakan keusahawanan, untuk bekerja sendiri, atau untuk mewujudkan perniagaan baru. Hasrat keusahawanan pelajar boleh dipengaruhi oleh faktor-faktor yang berbeza. Pendidikan keusahawanan didapati menentukan kesediaan pelajar untuk melibatkan diri ke dalam niat keusahawanan pada masa akan datang. Projek penyelidikan yang bertujuan untuk mengenal pasti unsur-unsur pendidikan keusahawanan seperti sukatan pelajaran, pedagogi dan kokurikulum yang akan menjadi yang paling penting kepada kecenderungan keusahawanan di kalangan pelajar di universiti kejuruteraan Malaysia dan juga untuk mengkaji faktor yang mempengaruhi niat keusahawanan di kalangan pelajar di universiti kejuruteraan Malaysia. Di samping itu, kajian ini mengkaji hubungan antara pendidikan keusahawanan dan niat keusahawanan di kalangan pelajar di universiti kejuruteraan Malaysia. Data utama kajian ini dikumpulkan dengan mengedarkan 300 borang soal selidik kepada responden di lima pilihan universiti kejuruteraan Malaysia, iaitu UTeM, UTHM, UTM, UniMAP dan UMP. Data yang dikumpul dianalisis dengan menggunakan analisis deskriptif. Dapatan melihat bahawa terdapat hubungan yang signifikan di antara niat (pembolehubah bersandar) dan pendidikan keusahawanan keusahawanan (pembolehubah bebas).

Kata kunci: pendidikan keusahawanan, niat keusahawanan, sukatan pelajaran, pedagogi, kokurikulum, universiti kejuruteraan Malaysia

# TABLE OF CONTENTS

CHA	APT]	ER 1: INTRODUCTION	. 1
1.1	1	Research Background	. 1
1.2	2	Research Problem	. 3
1.3	3	Research Question	4
1.4	4	Research Objective	4
1.5	5	Research Hypothesis	. 4
1.6	5	Research Scope	. 5
1.7	7	Research Limitation	. 5
1.8	3	Research Significance	6
1.9	)	Summary	6
CHA	<b>APT</b>	ER 2 : LITERATURE REVIEW	. 7
2.1	1	Entrepreneurial Intention (EI)	. 7
2.2	2	Entrepreneurial Education (EE)	9
2.3	3	Factors of EE	10
	2.3.1	Syllabus	10
	2.3.2	Pedagogy	11
	2.3.3	3 Co-curriculum	14
2.4	4	Summary	17
2.5	5	Theoretical Framework	17
CHA	<b>APT</b>	ER 3: RESEARCH METHODOLOGY	18
3.1	1	Introduction	18
3.2	2	Research Design	18
3.3	3	Methodological Choice	19
3.4	1	Data Source	20

3.4.1 Primary Data	20
3.4.2 Secondary Data	20
3.5 Location of Research	21
3.6 Research Strategy	21
3.7 Sampling Design	21
3.7.1 Sample Size	22
3.8 Research Instrument	23
3.8.1 Questionnaire Development	23
3.9 Horizon Time	25
3.10 Pilot Test	26
3.11 Scientific Canon	26
3.11.1 Reliability Test	27
3.11.2 Validity Test	27
3.12 Data Analysis	28
3.12.1 Descriptive Analysis	28
3.12.2 Pearson Correlation	28
3.12.3 Multiple Regression	30
3.12.4 Hypothesis Testing	30
3.13 Summary	31
CHAPTER 4: DATA ANALYSIS AND FINDING	32
4.1 Introduction	32
4.2 Pilot Test	32
4.3 Frequency Analysis	34
4.3.1 Demographic Profile	34
4.4 Validity and Reliability Test	39
4.4.1 Validity Test	39
4 4 2 Reliability Test	40

	4.5	Descriptive Anal	ysis	41
	4.5.	Syllabus		41
	4.5.	Pedagogy		42
	4.5.	3 Co-curriculu	ım	43
	4.6	Pearson Correlati	ion Coefficient	43
	4.7	Multiple Regress	ion Analysis (MRA)	45
	4.8	Hypothesis Testin	ng	48
	4.9	Summary		49
(	СНАРТ	ER 5: CONCLU	SION AND RECOMMENDATION	50
	5.1	Introduction		50
	5.2	Summary of Stati	istical Analysis	50
	5.2.	Frequency A	nalysis	50
	5.2.	2 Reliability T	est	51
	5.2.	Pearson Corn	relation Test	51
	5.2.	Regression A	Analysis	51
	5.3	Implication of the	e Research	52
	5.3.	Implication of	on Academic	52
	5.3.	2 Implication of	on Managerial	52
	5.4	Limitation of the	Research	52
	5.6	Recommendation	n for Future Study	53
R	REFER	ENCES		54
Survey Questionnaire		56		
	Gantt chart PSM 1 62			
	Contt short DSM 2			

# LIST OF TABLE

Table 1: Example of theoretical schools of thought and associated pedagogies 1	14
Table 2: Example framework in understanding the official and enacted co-curriculum	ım
	15
Table 3: Targeted Respondent	22
Table 4: Five-point Likert Scale's Table	23
Table 5: Section in Questionnaire	24
Table 6: Measurement of Entrepreneurial Education	24
Table 7: Measurement of Entrepreneurial Intention	25
Table 8: Pearson Product Moment Correlation (PPMC)	29
Table 9: Case Summary of Pilot Test	33
Table 10: Reliability Statistics of Pilot Test	33
Table 11: Respondent's Gender	34
Table 12: Respondent's Age	35
Table 13: Respondent's Race	36
Table 14: Respondent's Academic Level	37
Table 15: Respondent's Universities	38
Table 16: Case Summary of full Reliability	40
Table 17: Reliability Statistics of full Reliability	40
Table 18: Range of Mean Score	41

Table 19: Descriptive Analysis of Syllabus	41
Table 20: Descriptive Analysis of Pedagogy	42
Table 21: Descriptive Analysis of Co-curriculum	43
Table 22: Rules of thumb about Correlation Coefficient	43
Table 23: Correlation (DV is EI)	44
Table 24: Model Summary of Multiple Regression Analysis	45
Table 25: ANOVA <sup>a</sup>	46
Table 26: Coefficients <sup>a</sup>	46
Table 27: T. Table	40

# LIST OF FIGURE

Figure 1: Theoretical Framework	17
Figure 2: Respondent's Gender	34
Figure 3: Respondent's Age	35
Figure 4: Respondent's Race	36
Figure 5: Respondent's Academic Level	37
Figure 6: Respondent's Universities	38
Figure 7: Gantt chart PSM 1	62
Figure 8: Gantt chart PSM 2	63

## LIST OF SYMBOL

EE = Entrepreneurial Education EI = Entrepreneurial Intention EI = Entrepreneurial Education EI = Entrepreneurial Education

#### CHAPTER 1

#### INTRODUCTION

### 1.1 Research Background

Entrepreneurship is the process of creating something new with value by devoting the necessary time and effort, assuming the accompanying financial, psychic, social risk and receiving the resulting rewards of monetary and personal satisfaction and independence. Therefore, entrepreneurship become important of focus attention and is recognised worldwide including Malaysia. The increasing interest in entrepreneurship in Malaysia can be seen in the current developments, such as globalisation and the emergence of knowledge-based industries. Entrepreneurship is seen as a possible solution to global competition and corporate downsizing which as contributed to the problem of unemployment, especially among the graduates in Malaysia (Ragayah & Smith 2005; Ooi 2008). The research topic focuses on the 'entrepreneurial education and its impact towards entrepreneurial intention among student in Malaysian Engineering University'.

In Malaysia, the twenty first century has seen as the beginning of entrepreneurship education resulting in the outcome of the emergence of the new economy where knowledge has become a predominant resource in almost all economic activities. The dynamic of the new economy creates enormous business opportunities so that entrepreneurship can be important subject and should be encouraged engineering student through entrepreneurship education. Realising the importance of entrepreneurs in the development of a knowledge-based economy, efforts are taken to

nurture entrepreneurship in all ways (Ramlee & Abu 2004). Nowadays, conferences, seminars, short courses and training on entrepreneurship are common activities offered by various organisations, along with the formal entrepreneurship education offered at higher education institutions.

Furthermore, an individual with knowledge, skills, initiative, drive and spirit of innovation who aims at achieving goals is called an entrepreneur. The entrepreneur commonly seen as a business leader and innovator of new ideas, business processes and also give benefits and opportunities to economy. These are the people who have the skills and initiative necessary to take good news ideas to market and to make the right decision that lead to profitability. The reward for taking the risk is the potential economic profits the entrepreneur could earn. To be a successful entrepreneur, they must have a vision, risk tolerance, confidence in believing their own ability, be a creativity person and be an integrity. This is because the entrepreneur have to deal with problems and find solutions and sometimes new ideas come from the need to solve a problem.

In addition, an engineering student have their own personality traits such as critical thinking because engineers are problem solvers where they are the people who figure out how to make your smartphone smaller, laptop faster and a car more fuelefficient. Then, engineers must be resourceful and need to be effective at working together with his colleagues. In Malaysia, the importance of entrepreneurship education has increased due to the need to prepare students for coping in the contemporary work and living environment. Entrepreneurship education has been defined in narrow and broader terms. It can be seen as "opportunity recognition, marshalling of resources in the presence of risk and building a business venture" (Küttim, Kallaste, Venesaar, & Kiis, 2014) and as "a collection of formalised teachings that informs, trains and educates anyone interested in business creation, or small business development" (Küttim et al., 2014). In addition, entrepreneurial intention have been used in previous studies as a reference to owning a business or becoming self-employed (either by setting up an own firm or taking over an existing one), as a set of broader personal orientations, dispositions, desires or interest that might lead to venture creation, and also as nascent entrepreneurship including those who have only thought about establishing an own business and those who have taken more specific steps towards that (Liñán, Rodríguez-cohard, & Rueda-cantuche, 2011). According to (Izquierdo, n.d.), a model of entrepreneurial intention are:

- To get useful knowledge of entrepreneurship
- To acquire skills in the use of technique, in the analysis of business atmosphere, and in the synthesis of action plans
- To identify and stimulate entrepreneurial drive, talent and skills
- To develop empathy and support for all unique aspects of entrepreneurship
- To develop attitudes towards change
- To encourage new start-ups and other entrepreneurial ventures

In conclusion, the effect of entrepreneurial education on entrepreneurial intention towards student in Malaysian Engineering University are sense of independence, autonomy and self-confidence, alternative choice of career, expands people's horizons and knowledge to develop new business opportunities.

#### 1.2 Research Problem

Now days, entrepreneurship education is mostly important in university student because it can trigger their entrepreneurial intention so can start up their own business. Not only for social science students, is this entrepreneurship education also important for engineering students in Malaysia. As they have capability in engineering matters, there are some opportunities for them to develop their own business based on this competency.

How to increase the entrepreneurial intention of these engineering student become a focus to this research? Therefore to understand this, survey will be done in some engineering university in Malaysia such as University Teknikal Malaysia Melaka (UTeM), University Malaysia Pahang (UMP), University Tun Hussein Onn Malaysia (UTHM), University Malaysia Perlis (UniMAP) and University Teknologi Malaysia (UTM).

#### 1.3 Research Question

The purpose of this study is to explore the impact of entrepreneurial intention among student in Malaysian Engineering University. In order to reach the purpose the following research questions are stated:

- i. What is the impact of syllabus of entrepreneurship education to entrepreneurial intention?
- ii. What is the impact of pedagogy of entrepreneurship education to entrepreneurial intention?
- iii. What is the impact of co-curriculum of entrepreneurship education to entrepreneurial intention?

## 1.4 Research Objective

The research objective are stated as following:

- i. To identify the impact of syllabus of entrepreneurship education to entrepreneurial intention
- ii. To identify the impact of pedagogy of entrepreneurship education to entrepreneurial intention
- iii. To identify the impact of co-curriculum of entrepreneurship education to entrepreneurial intention

## 1.5 Research Hypothesis

This research need to investigate the relationship between syllabus, pedagogy and co-curriculum of the entrepreneurial education and entrepreneurial intention student in Malaysian engineering university. Hypotheses can be defined as a logically conjectured relationship between two or more variables expressed in the form of testable statement (Sekaran, 2003). The hypothesis's studies are:

#### Hypothesis 1

H<sub>0</sub> : Syllabus does not have positive relationship to entrepreneurial intention

H<sub>1</sub> : Syllabus has positive relationship to entrepreneurial intention

## Hypothesis 2

H<sub>0</sub> : Pedagogy does not have positive relationship to entrepreneurial intention

H<sub>2</sub> : Pedagogy has positive relationship to entrepreneurial intention

## Hypothesis 3

H<sub>0</sub> : Co-curriculum does not have positive relationship to entrepreneurial intention

H<sub>3</sub> : Co-curriculum has positive relationship to entrepreneurial intention

#### 1.6 Research Scope

The scope of this research is to identify the impact of entrepreneur education on entrepreneurial intention among student in Malaysian Engineering University. In order to demonstrate that the entrepreneurial education has played a significant role in developing engineering student to be an entrepreneur, the relationship between entrepreneurial education (EE) and entrepreneurial intention (EI) through the three educational support of EE which including syllabus, pedagogy and co-curriculum. Lastly the impact of EI towards engineering student are also examined too in research.

#### 1.7 Research Limitation

The research has presented three principal of limitations. Firstly, the research is conducted in Melaka, Kelantan, Perlis, Pahang and Johor. Secondly, the sample size of research has limited the number of students to be conducted. Lastly, the sample is biased towards students that has paid attention to entrepreneurial educations that effecting entrepreneurial intention. The low quality of data will be collected if the

researcher assumed that respondents have the interest of knowledge on entrepreneurial education.

### 1.8 Research Significance

In this research, some indication are suitable in develop entrepreneurial intention such as courses, programs and training that can promote the engineering students that interest to start up their own business. The researcher also can use this information to make some improvement on the syllabus, pedagogy and co-curriculum activities to be more appropriate and enhance in increasing entrepreneurial intention among students in Malaysian engineering university.

## 1.9 Summary

In this chapter, the researcher has identified out the factors of EE which are perceived desirability, perceived feasibility and propensity to act. To answer the research questions, the relationship between the factor of EE and EI towards Malaysian engineering university student is analysed. The important knowledge of EE is greatly emphasized in order to develop student engineering to has own business.

#### **CHAPTER 2**

#### LITERATURE REVIEW

# 2.1 Entrepreneurial Intention (EI)

The intention is defined by (Paço & Ferreira, 2013) as a conscious state of mind that directs attentions towards a specific goal. Individuals with the intention to start a business not only have a propensity to start but to adopt a rational behaviour to reach their goal. Thus, intentionality is grounded in cognitive psychology that attempts to explain or predict human behaviour. In addition, entrepreneurial intention also stated of mind that initiates people to opt in favour of self-employment rather than choosing traditional salary based employment and intention of an individual to start a new business. According to (Authors, 2012), entrepreneurial intention is the commitment to performing behaviour that is necessary to physically start the business. Theory in the Entrepreneurial event Model (SEE) by (Zhang, Duysters, & Cloodt, 2014) assume that people are held on a given path by a sum of vectors in their life such as family, job and social status. The Shapero's model is a new-venture initiation that the decision to initiative a new venture requires two things where to start a new venture must be a believable opportunity and requires some kind of precipitating displacing event in new-venture initiation. SEE also suggest that entrepreneurial intention are depends on perceived desirability and perceived feasibility as the prospect to started a business along with the propensity to act.

Entrepreneurship can be viewed as a process that occurs over time. Based on, (Mokhtar & Zainuddin, 2009), Galloway and Keogh (2006), and (Zhang et al., 2014) revealed that there is a disparity in entrepreneurial intention among students of different disciplines. Furthermore, to start a firm is longer for those studying engineering and/ or technical because need the time anticipated and discipline than humanities. (Abbas, 2013) found that students with an engineering background are less likely to set up a firm compared to the students with a management and social science background because students engineering have a higher prospective to be involved in venture activity. It is an important factor in facilitating towards new venture establishment and has significant impact on the firms" venture success, survival and growth. Thus, intentional process often begins based on an entrepreneur's personal needs, values, wants, habits and beliefs. Scholars empirically evidenced that entrepreneurial intention is a valid predictor for entrepreneurial behaviour as entrepreneurial actions always fall into the category of intentional behaviour

According to (Rashid, Kamariah, Mat, Adawiyah, & Nasuredin, 2012) intention serves as mediating factor between entrepreneurial action and potential exogenous influence (traits, demographics, skills, social, cultural and financial support). The entrepreneurial intention helps in explaining the reasons on why certain individuals tend to start own business before opportunity scan or deciding type of business to involve in. it also stated that entrepreneurs themselves should benefit from a better understanding of their own motives, intention affords them a chance to understand what factors drive them to make their decisions to pursue entrepreneurial career and how the venture becomes reality. Other than that, the universities should proposed that entrepreneurship education including in entrepreneurial intention model. This is because the individual attitude towards entrepreneurship such as self-efficacy level will increase the control beliefs while it can be capable in managing entrepreneurial career and also change their perceptions towards entrepreneurship. Thus, the training programs will effect on entrepreneurial intention.

# 2.2 Entrepreneurial Education (EE)

Entrepreneurial education (EE) from an economic point of view is the creation of something new is normally not a result of pure fantasy or coincidental discovery. By creating something new, entrepreneur recognise such opportunities and incentive to achieve a better position. In general, entrepreneurship education is defined as the process of providing individuals with the concepts and skills to recognize opportunities that others have overlooked and to have the insight and self-esteem to act where other have hesitated (Zhang et al., 2014).

Entrepreneurship education is the instruction in opportunity recognition, taking resources to face the risk and initiating a business venture. Business management such as business planning, capital development, marketing and cash flow analysis are included in EE. Thus, a person who organizes and manages a business taking, assuming the risk for the sake of profit that focuses on entrepreneurship. Engineering student also can starting a business when they closely related to managing growth, start a business has family and estate implication which are creating a new business that can be connected to the issue business entry. According (Paço & Ferreira, 2013), education seems to be an important way of stimulating entrepreneurship for various reasons. Firstly, educations provides individuals with a sense of independence, autonomy and self-confidence. Next, education also makes people aware of alternative choice of career and it will expands people's horizon, making them more able to perceive opportunities. Finally, education provides knowledge that can be used by individuals to develop new business opportunities.

As mentioned by (Zhang et al., 2014): "The effect of general education has been explored but only a few studies have looked at entrepreneurial education, particularly at university and tertiary institution level." According (Do, 2015), the effect of entrepreneurship education on entrepreneurial intention is limited and still undergoing empirical testing. In addition, perceive entrepreneurship education from a broader perspective and contribute towards stimulating abilities such as flexibility, creativity, a predisposition to think conceptually and to see change as an opportunity. Besides, the knowledge and skills is necessary for employability in the labour market and also help to boost personal development among students. The communication

skills, teamwork and learning to learn shows that most higher education students agreed to that program. From these program, it has showed that EE is effectively becoming an advantage for student in Malaysian engineering university that will effected on entrepreneurial intention. Therefore, the creating of EE activities are mainly focus on building an entrepreneur among engineering student through their intention on EI.

#### 2.3 Factors of EE

According (Ngugi & Gakure, n.d.), defined to link entrepreneurial intention to venture creation. Generally, the model of entrepreneurial intentions by Shapero, focusing on the students in engineering course that aim to elucidate on the specific circumstances in the student environment such as personal disposition which may have significant influence on their choice to create a new venture.

In addition, based on (Begam & Abdul, n.d.), explaining significance of entrepreneurial behaviour amongst student in Malaysian engineering university. In short, the three educational support in EE that will impact towards entrepreneurial intention (e.g. syllabus, pedagogy and co-curriculum) are applied in this study in order to analyse the impact towards EI among engineering student in Malaysia.

#### 2.3.1 Syllabus

Approaching the task of evaluating a syllabus it is necessary to consider possible definitions of the term to provide a basic framework for evaluation. According to the ("Longman Dictionary of Language Teaching and Applied Linguistics," n.d.) a syllabus can be defined as a description of the contents of a course of instruction and the order in which they are to be taught (Suter, 2001). The researchers thought syllabus is the content of knowledge that made available to students during the learning period to facilitate students to study each the topic to be discussing.