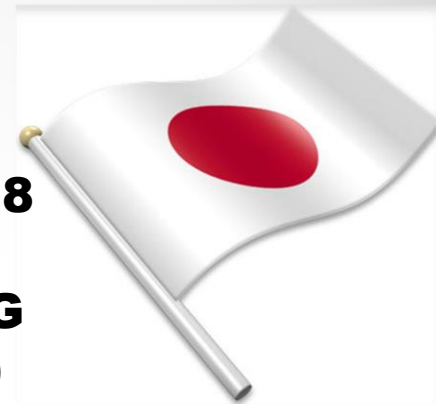




**IP COMMUNITY  
ANNUAL MEETING & SEMINAR 2018**

**JAPAN INSTITUTE FOR PROMOTING  
INVENTION & INNOVATION (JIPII)**



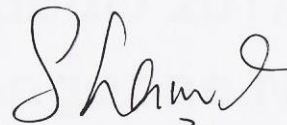
# Human Resource Development for IP Expert in Malaysia

**Speaker : Mr. Mohd Ismi Aswaly Bin Hanimi**  
**5<sup>th</sup> March 2018 (Monday)**  
**MyIPO Headquarters**  
**Kuala Lumpur, Malaysia**



# ENDORSEMENT

**This work has been presented with extensive discussions in the IP Community KL Meeting 2018. I hereby acknowledge and support on the initiatives stated for a mutual benefit between the Polytechnic and MyIPO, consequently help to improve the Global Innovation Index for the years to come.**



**Dato' Shamsiah Binti Kamaruddin  
Director General**

**Malaysia Intellectual Property Corporation (MyIPO)**

**Date: 6 March 2018**

# Presentation Outline

1. Overview of MoHE, Polytechnic & Community College
2. Malaysia Education Blueprint 2015-2025  
(Higher Education): The 10 Shifts
3. Research, Innovation & Commercialization Unit (UPIK)
4. Previous Initiatives:  
Fundamental Course on Intellectual Property in Malaysia  
& Politeknik Kota Kinabalu 2017
5. Publication: ENISHI Magazine No.17, Japan Patent Office
6. Challenges & Issues
7. Conclusion & Resolution
8. References

# Overview



MINISTRY OF HIGHER EDUCATION MALAYSIA

- **Ministry of Higher Education (MoHE) – established on 28<sup>th</sup> July 2015 (Tuesday) in accordance to the provisions of the Act relating to higher education.**
- **MoHE's integral role is to create a higher education ecosystem including public universities, private higher educational institutions, polytechnics and community colleges. These institutions are the main components in the national education ecosystem and training to generate first-level thinkers, scholars, masters, skilled and semi-skilled human capital in respective roles.**
- **MoHE has three (3) departments that manages the institutions of higher learning:**
  - **Department of Higher Education – 20 institutions**
  - **Department of Polytechnic Education – 35 institutions**
  - **Department of Community College Education – 92 institutions**
- **Supported agencies:**
  - **Malaysian Qualifications Agency (MQA) – supervising and coordinating quality assurance as well as accreditation of national higher education.**
  - **National Higher Education Fund Corporation (PTPTN) – coordinating for student's financing of higher education.**

\* the tagline is used to portray Malaysia's higher education landscape that is **progressively improving**, while at the same time, acknowledges **continuous efforts that are needed** to propel the nation's higher education to the next level.



# Malaysia Education Blueprint 2015-2025 (Higher Education)

## The 10 Shifts:

1. Holistic, Entrepreneurial and Balanced Graduates.
2. Talent Excellence.
3. Nation of Lifelong Learners.
4. Quality TVET Graduates.
5. Financial Sustainability.
6. Empowered Governance.
7. Innovation Ecosystem.
8. Global Prominence.
9. Globalized Online Learning.
10. Transformed Higher Education Delivery.



# 7<sup>th</sup>: Innovation Ecosystem

Malaysia aspires to make innovation a prime driver of national economic growth.

While research output is improving – Malaysia is ranked 23<sup>rd</sup> for number of publications in 2013, up 11 places from 34<sup>th</sup> in 2009. [4]

Additionally, Malaysia is also ranked 43<sup>rd</sup> out of 110 countries on number of patents [4], however, engagement levels with industry and community are still not as intensive or widespread as desired.

Malaysia needs to move from academia operating in isolation towards a strategic partnership including academia, industry, government and local communities.

As a result, this partnership would incubate new technopreneurs through development and commercialization of ideas holistically and efficiently.



## Global Innovation Index 2017 - Global Ranking



## What about Malaysia ?

in 2016, we ranked 35th out of 128 countries

|                               |          |                                  | 2009-2010 | 2014-2015 |
|-------------------------------|----------|----------------------------------|-----------|-----------|
| Global Innovation Index (GII) | Overall  |                                  | 28/132    | 33/143    |
|                               | Strength | Market sophistication            | 5         | 17        |
|                               |          | Business sophistication          | 26        | 29        |
|                               | Weakness | Institution                      | 42        | 50        |
|                               |          | Knowledge and technology outputs | 23        | 39        |
|                               |          | Creative outputs                 | 52        | 39        |

Source: World Intellectual Property Organisation and World Bank



## Global Innovation Index 2017, Asia 128 countries

|    |  |
|----|--|
| 1  | Singapore (7th worldwide)                                      |
| 2  | Korea (11th worldwide)   |
| 3  | Japan (14th)   |
| 4  | Hong Kong (China) (16th)                                       |
| 5  | New Zealand (21st)   |
| 6  | China (22nd)   |
| 7  | Australia (23rd)   |
| 8  | Malaysia (37th)  |
| 9  | Vietnam (gains 12 positions this year, ranking 47th worldwide) |
| 10 | Thailand (51st)  |

Source: Business Insider Portal

# **Research, Innovation & Commercialization Unit (UPIK)**

**All polytechnics around Malaysia have founded UPIK to sync KPI-related activities at the Department of Polytechnic Education (DoPE), such as:**

- organizing research conferences at national/international level.**
- conducting analysis on various programmes offered.**
- conducting study on graduate employability.**
- promoting innovation via competition.**
- establishing innovative and creative group (KIK) among staff.**
- searching business potentials for commercialization.**
- raising awareness on intellectual property.**
- filing of intellectual property.**



# Previous Initiatives



MINISTRY OF HIGHER EDUCATION MALAYSIA

**SOARING  
UPWARDS**  
MALAYSIAN HIGHER EDUCATION



**FUNDAMENTAL COURSE  
ON INTELLECTUAL PROPERTY  
(PATENT, TRADEMARK, COPYRIGHT, INDUSTRIAL DESIGN)  
COMMUNITY COLLEGES OF THE SELANGOR STATE, MALAYSIA  
26 – 28 APRIL 2017**



**PROGRAM TENTATIVE**  
**FUNDAMENTAL COURSE ON INTELLECTUAL PROPERTY**  
**(PATENT, TRADEMARK, INDUSTRIAL DESIGN, COPYRIGHT)**

**Day 1 (26 April 2017)**

| Time              | Agenda   |
|-------------------|--|
| 7.30 AM – 8.00 AM | • Registration & Breakfast   |
| 8.00 AM – 1.00 PM | • Introduction to Intellectual Property  |
| 1.00 PM – 2.00 PM | • Lunch  |
| 2.00 PM – 5.00 PM | • Introduction to Patent & Utility Innovation<br>• International Patent Classification (IPC)<br>• Online Patent Searching<br>• Project Evaluation & Innovation Ideas<br>• Group Work 1 |

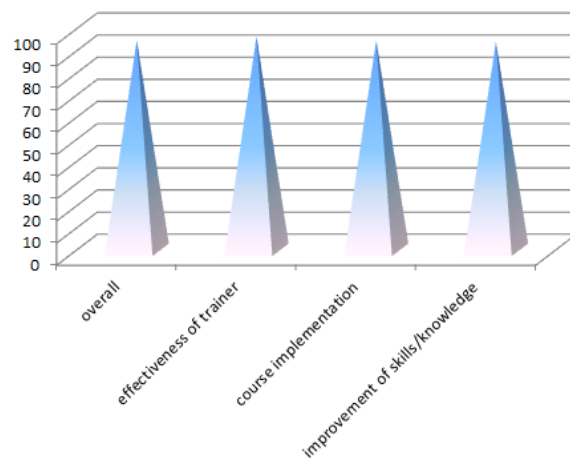
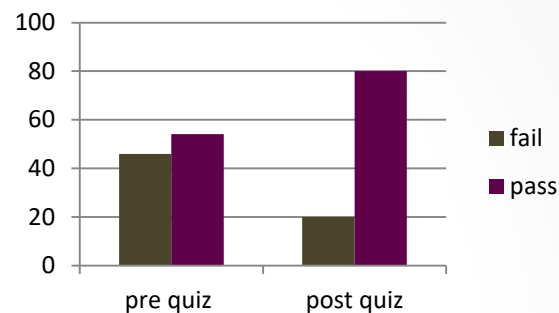
**Day 2 (27 April 2017)**

| Time              | Agenda  |
|-------------------|---|
| 7.30 AM – 8.00 AM | • Breakfast   |
| 8.00 AM – 1.00 PM | • Patent Drafting Exercise & Sample Draft<br>• Group Work 2 |
| 1.00 PM – 2.00 PM | • Lunch   |
| 2.00 PM – 5.00 PM | • Group Presentation  |

**Day 3 (28 April 2017)**

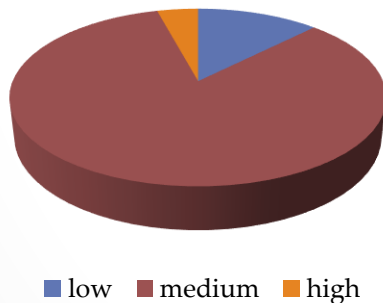
| Time              | Agenda   |
|-------------------|--|
| 7.30 AM – 8.00 AM | • Breakfast  |
| 8.00 AM – 1.00 PM | • Introduction to Intellectual Property (Trademark, Industrial Design & Copyright)   |
| 1.00 PM – 2.00 PM | • Lunch  |
| 2.00 PM – 5.00 PM | • Specific Protection Scope (Trademark, Industrial Design & Copyright)<br>• Legal Approach & Implication<br>• Case Study<br>• Application Procedure (Trademark, Industrial Design & Copyright)<br>• Closing & Certificate Ceremony |

|                          |                 |            |
|--------------------------|-----------------|------------|
| Classification of Gender | Female          | 38 persons |
|                          | Male            | 4 persons  |
| Classification on Rank   | Executive Level | 29 persons |
|                          | Support Level   | 13 persons |



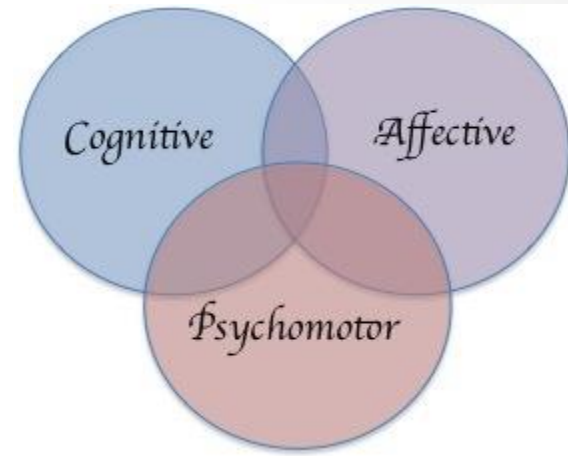
In comparison to pre-quiz & post-quiz, the latter was a bit trickier than the other. It involved questions up to the fourth-level cognitive learning domain [5], including knowledge, comprehension, application and analysis on the case studies found in the questions related to IP types.

Therefore, this course has been proven to have an impact in terms of increased knowledge and understanding of intellectual property among participants.



### Innovator Personality Test\*

\*an important instrument for assessing participants' true identity in regards to being an innovator.



#### Cognitive Domain

C1 Knowledge  
C2 Comprehension  
C3 Application  
C4 Analysis  
C5 Synthesis  
C6 Evaluation



depth  
of  
knowledge

## Fundamental Course on Intellectual Property Politeknik Kota Kinabalu 2017



**Date** : 20<sup>th</sup> September 2017 (Wednesday)  
**Time** : 8:00 AM until 1:00 PM  
**Venue** : ULPL Auditorium, Politeknik Kota Kinabalu  
**Trainer** : 1) Mr. Jasius Gaisah @ Blasius Gaisah  
2) Mdm. Asmah Binti Khalid  
(Officers at MyIPO Sabah State Branch)





# Course Evaluation Analysis by 65 Participating Lecturers & Students

RK-PK-11-03(04-04-14)

**POLITEKNIK**  
MALAYSIA  
KOTA KINABALU

**BORANG PENILAIAN KEBERKESANAN LATIHAN**

TAJUK LATIHAN : KURSUS ASAS KEFAHAMAN HARTA INTELEK PKK TAHUN 2017  
 PENGANJUR : UNIT PENYELIDIKAN, INOVASI & KOMERSIALAN (UPIK)  
 TARIKH : 20 SEPTEMBER 2017 (RABU)  
 TEMPAT : AUDITORIUM ULPL, PKK  
 PENERAMAH : EN. JASJUS GAISAH @ BLASJUS GAISAH

(Catatan: ... Sila buatkan nombor pernyataan yang mengurangkan respon yang paling tepat kepada pernyataan tersebut mengikut skala di bawah)

Skala : 1 2 3 4 5  
 Sangat Tidak Setuju Tidak Setuju Kurang Setuju Setuju Sangat Setuju

| A. KEBERKESANAN PENERAMAH |  |         |   |   |   |   |
|---------------------------|--|---------|---|---|---|---|
| 1                         | Objektif latihan tercapai                        | 1       | 2 | 3 | 4 | 5 |
| 2                         | Kandungan latihan sesuai                         | 1       | 2 | 3 | 4 | 5 |
| 3                         | Penyampaian yang baik dan berkesan               | 1       | 2 | 3 | 4 | 5 |
| 4                         | Penggunaan alat bantuan mengajar dengan berkesan | 1       | 2 | 3 | 4 | 5 |
| Jumlah Kecil              |  | 71 / 20 |   |   |   |   |

| B. PELAKSANAAN LATIHAN |  |         |   |   |   |   |
|------------------------|--|---------|---|---|---|---|
| 5                      | Suasana tempat latihan yang kondusif                           | 1       | 2 | 3 | 4 | 5 |
| 6                      | Perancangan dan pelaksanaan program telah dibuat dengan lancar | 1       | 2 | 3 | 4 | 5 |
| 7                      | Masa yang diperuntukkan bagi setiap modul adalah sesuai        | 1       | 2 | 3 | 4 | 5 |
| Jumlah Kecil           |  | 14 / 15 |   |   |   |   |

| C. PENINGKATAN PENGETAHUAN / KEMAHIRAN |  |         |   |   |   |   |
|--|--|---------|---|---|---|---|
| 8                                      | Peningkatan pengetahuan/pemahaman berbanding sebelum ini   | 1       | 2 | 3 | 4 | 5 |
| 9                                      | Berkeyakinan menjalankan tugas berkaitan/mengaplikasi apa yang dipelajari berbanding sebelum ini | 1       | 2 | 3 | 4 | 5 |
| 10                                     | Pada keseluruhannya latihan/latihan ini adalah berjaya dan bermanfaat                            | 1       | 2 | 3 | 4 | 5 |
| Jumlah Kecil                           |  | 15 / 15 |   |   |   |   |

| RUMUSAN DAN CADANGAN               |  | JUMLAH BESAR |
|------------------------------------|--|--------------|
| Kursus yang diadakan: Tahunan UPIK |  | 41 / 50      |

Score for Section A : Effectiveness of Trainer = 88.9%

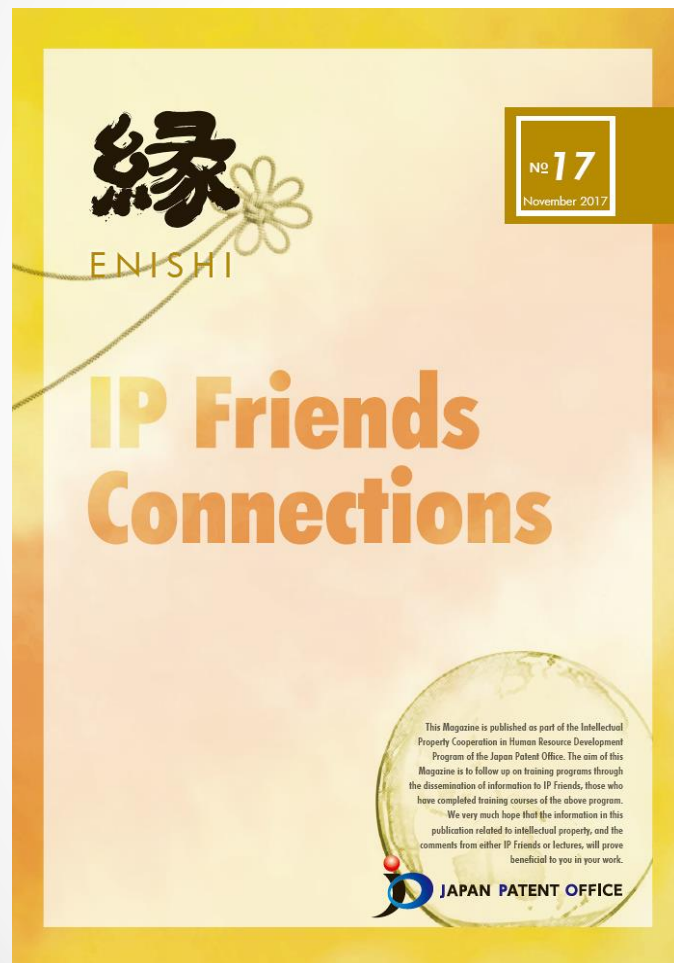
Score for Section B : Course Implementation = 91.3%

Score for Section C : Improvement of Skills/Knowledge = 90.4%

Overall Score = 90.2% (A+ Grade)



# Publication



[The meaning of 縁 (Enishi)]

"Enishi" refers to the bond created between people when encountering someone they were destined to meet. We have chosen this term as the title for our publication because we are all members of the Intellectual Property community, and the bonds created between us extend beyond national borders. We hope that you will use this informative publication to deepen the "Enishi" you have created with your IP Friends.

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1. FY 2017 Follow-up Seminars
2. FY 2017 Report of IP Trainers Course from coordinator
3. Training course experience in Japan
  - 1) "Wareware wa IP Friends (We are IP Friends)"  
Ms. Ma. Winelma Menesea Garcia (the Philippines)
  - 2) "Sripatum University and the Opportunity for IP Education in Thailand"  
Ms. Chongnang Wiputhanupong (Thailand)
  - 3) "Policy Developer at National Science Technology and Innovation Policy Office, Ministry of Science and Technology, Thailand"  
Ms. Panisa Hampathananun (Thailand)
4. Introduction of FY 2017 Long Term Fellowship Researchers
  - Mr. C.N. Shashidhara (India)
  - Mr. Rico Collado (the Philippines)
5. Contributions from FY 2013 Long Term Fellowship Researcher  
"My Life in Japan as a Long-Term Researcher"  
Dr. Moe Moe Thwe (Myanmar)
6. Articles from the former trainees
  - 1) "Japan-Colombia, 11 Reasons in Augmented Reality – My experience in Tokyo during the "The JPO/IPR Training Course on Substantive Examination of Design"  
Mr. Freddy Alexander Saavedra Siabatto (Colombia)
  - 2) "Fundamental Course on Intellectual Property in Malaysia"  
Mr. Mohd Ismi Aswaly Bin Hanimi (Malaysia)
  - 3) "Intellectual Property Infringement Situation in Thailand and the Role of the Royal Thai Police"  
Dr. Chavalit Chavalitphongpun (Thailand)
  - 4) "The Situation of Well-Known Trademark Protection in Thailand"  
Mr. Sutee Angsuehaikit (Thailand)
7. Messages from Committee of Human Resource Development  
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8. Column: "Time"  
Mr. Takao OGIYA, Director General of APIC
9. Selection from TOP 100 Japanese Innovations of "Quartz Wrist Watches"
10. Happenings in Japan (Four-Flame Cartoon)
11. Editor's Notes

# EJISHI No.17 [6: 41-48]

## Fundamental Course on Intellectual Property in Malaysia

Mr. Mohd Izan Awadi Bin Haniff (Malaysia)



IPTRISA JPO-IPF IP Training Course for IP Trainers, June 15 – June 20, 2010

An intensive short course on intellectual property was successfully completed on April 26, 2017. Promptly invited by the Community College of Hala Lingsat, the course involved all 30 colleges around the state of Selangor, including the Community Colleges of Subang Bharu, Tanjong Karang, Hala Selangor, Selatengah, Kuala Lumpur, Klang, Kelana Jaya, Ampang, Shah Alam and Hala Lingsat. With the main aim of disseminating knowledge on intellectual property, this course invited senior lecturers and support staff who are involved with innovation-related initiatives in their workplaces.

On July 16, 2006, the Cabinet of the Malaysian Government considered Memorandum No. 386/2255/04, a general overview of community colleges, which was submitted by the Minister of Education on the concept of establishing and implementing community colleges in each parliamentary constituency. The Community College of the Ministry of Education Malaysia will be an institution that provides training and skills at all levels, and also provides educational opportunities to high school graduates before entering the job market or going for further higher education.

To date, all community colleges are administered by the Department of Community College Education (CPCE), which is placed under the Ministry of Higher Education Malaysia. Its vision statement is to be a pioneer of education in technical and vocational training, as well as a hub of lifelong learning by the year 2025.



Official website of CPCE: <http://www.cpcce.gov.my>

© IPTRISA Connections November 2017 No. 17

This course was held in line with the Malaysia Education Blueprint<sup>1</sup> which took effect in the year 2015 to 2025 and was specially focused on the higher education sector. There are 10 skills outlined by the government to further push the higher education sector forward, and one such skill that is closely related to this course is the 7th, known as an innovative ecosystem. By exposing these participants to fundamental knowledge on intellectual property (IP), they will be more aware of the importance of IP-based innovation, which will in turn facilitate create a better ecosystem of innovation in their institutions.

The course has successfully gathered around 42 participants from various grades of rank. The involvement of various grades and level of gender is important. Innovation must certainly involves everyone in the workplace, and the creation of intellectual property community needs to be protected in order to help maintain a sustainable ecosystem of innovation. Basic demographic details of participants are tabulated as shown in Table 1 below.

Table 1: Participant Details in terms of Gender and Rank

| Classification of Gender | Female          | 30 persons |
|--------------------------|-----------------|------------|
| Male                     | 4 persons       |            |
| Classification of Rank   | Executive Level | 20 persons |
| Support Level            | 13 persons      |            |

Figure 1 shows a brief explanation of the course, which focused on the dissemination of basic knowledge regarding different types of intellectual property namely, patents, trademarks, copyrights and industrial designs. This three-day long course covered the following topics: an introduction to intellectual property; a brief discussion on patents, trademarks, copyrights and industrial designs in group practice exercises; group presentations and assessments of participants' previous innovation projects; business writing (IP exercises); a brief overview of international patent classifications; patent drafting exercises; a few case studies and their legal implications; and, last but not least, procedures on applying for four different types of intellectual property.



Figure 1: Course introduction at the first day

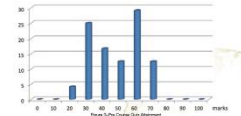
Malaysia Education Blueprint: <https://www.moe.gov.my/en/development/policies/education/blueprint/2015-2025>

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Figure 2: Pre-course Quiz & Personality Test Conducted for the Participants

Figure 2 below shows the attainment of the pre-course quiz for all participants. There were 10 multiple-choice questions asked encompassing a basic understanding of various intellectual property types. This quiz took about 15 minutes to be completed before moving on to the personality test. According to the data below, there are almost equal numbers of participants who scored above and below 50 marks. This indicates that prior knowledge of half the participants was good at the beginning of the course.



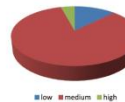
The personality test is another important instrument for assessing participants' true identity as required to being an innovator. The test instrument used in the course was both copyright and owned by David Bray & Jason Goldsberg (David Bray is a former global leader in creativity and innovation for global businesses such as Johnson & Johnson, as well as governments, while Jason Goldsberg is a marketing professor at the Interdisciplinary Center in Herzliya and a visiting professor at Columbia University in New York, USA).

Authors & owner of the personality test instrument: <https://www.davidbray.com/>

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The test consists of 15 objective questions, with each having either A or B as a preferred answer.

According to the pie chart shown in Figure 4 below, 63.2% of participants were assessed as medium-level innovators, whereas 4.2% and 12.5%, respectively, were said to have high and low innovative traits.



To make the course more holistic, activities were carried out to connect participants' work nature, technical knowledge, and specific innovators so that the course learning would become more meaningful. Figure 5 shows the activity of presenting topics on past innovation projects that participants have already completed. There were 25 innovation projects that were previously developed as final year projects undertaken by the students. Interestingly, these projects covered various disciplines such as automotive studies, information technology, electrical engineering, and tourism hospitality. A detailed discussion relating to common issues on their projects, such as the types of intellectual property they can apply, the component projects they can protect, and the level of project investments, took place among all participants, who also served as developers & supervisors of these projects. This session was met with an overwhelming response, thus creating a positive two-way environment of holistic learning.



Figure 5: Presentation by the Participants

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Once a discussion of IP candidates over the projects are completed, a practical value IP search was practiced as shown in Figure 6 below. A step-by-step navigation on the official web portal of MYIPO Intellectual Property Corporation of Malaysia<sup>2</sup> was performed most intensely among all participants, since the web page is fully informative and comprehensive, a descriptive explanation was done in detail including registration forms and prescribed fees, along with a process flow chart for each type of IP and the terms of protection.



Figure 6: Practical search of IP search on MYIPO Web Portal

After completing the three-day course, a post quiz was conducted as shown in Figure 7 below to re-evaluate the overall understanding among participants with respect to the course content. There were 20 multiple-choice questions this time, which was twice the number of questions from the previous pre-quiz.



Figure 7: Post-course Quiz Conducted among Participants

Figure 8 below shows the post-quiz attainment, where only 20% of participants scored below 50 marks, while the remaining 80% scored in scores of 50 marks.

Figure 9 shows a comparison on the attainment of the pre and post quiz. It is clear to see that before starting the course, only 14% of all participants had a good understanding of intellectual property. After implementing various teaching and learning methods, however, it was found at the end of the course that 80% of all participants had attained a passing score on the

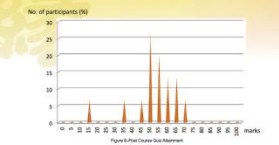


Figure 8: Post-quiz Attainment for all Participants

post-quiz, which was a bit trickier than the pre-quiz because it involved questions up to the fourth-level cognitive domain, including knowledge, understanding, application and analysis. As a result, this course has been proven to have an impact in terms of increased knowledge and understanding of intellectual property among participants.

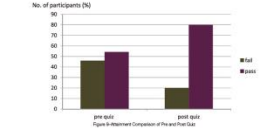


Figure 9: Comparison of Pre and Post-quiz Attainment

Upon completion of the course, all participants were asked to fill out a form to evaluate course delivery by the trainer. Figure 10 shows the completed forms collected from all participants. Ten questions were asked, which were divided into three sections: the effectiveness of the trainer, course implementation, and improvement of skills/knowledge. Each question was answered by choosing a Likert scale of 1 (strongly disagree) to 5 (strongly agree). An excellent overall score of 96.9% was recorded on the outcome, where the breakdown of scores for the three sections was 96.9%, 94.7% and 94.2% respectively.

Throughout the course, as shown in Figure 11 below, some of the materials used were the

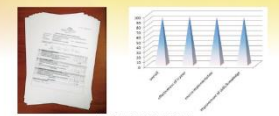


Figure 10: Course Evaluation Form and outcome



Figure 11: One of the handouts published by the Japan Patent Office (JPO) in cooperation with the Asia-Pacific Intellectual Property Center (APIC) and the Japan Institute for Promoting Invention & Innovation (JPII)

handbook that was previously published by the Japan Patent Office (JPO) in cooperation with the Asia-Pacific Intellectual Property Center (APIC) and the Japan Institute for Promoting Invention & Innovation (JPII), which was successfully written and compiled during the last year's IP Trainer Course PTIRISA held in Tokyo, Japan from June 16th-20th, 2016, alongside 11 other countries. On behalf of all 26 IP participants, we would like to express our grateful highest appreciation to the Government of Japan for this fully-funded executive invitation.



Figure 12: Japan Patent Office (JPO) Training Center

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Acknowledgement and special thanks shall also be given to Community College of Hala Lingsat Director, Mr. Zaidi Bin Zakaria, and the Head of Staff Training Unit, Ms. Wan Nurul Hidayati Binti Wan Mohd Ali, for organizing the course, which was fully funded by a special fund allocation through a Survey No. WJ3010 and a Special Object No. 20090, dated April 30th, 2017 from the Department of Community College Education, Ministry of Higher Education, Malaysia.



Figure 13: Mr. Zaidi Bin Zakaria, Director of Community College of Hala Lingsat, and Ms. Wan Nurul Hidayati Binti Wan Mohd Ali, Head of Staff Training Unit, Community College of Hala Lingsat



Figure 14: Mr. Zaidi Bin Zakaria, Director of Community College of Hala Lingsat, and Ms. Wan Nurul Hidayati Binti Wan Mohd Ali, Head of Staff Training Unit, Community College of Hala Lingsat

FUNDAMENTAL COURSE ON INTELLECTUAL PROPERTY (PATENT, TRADEMARK, COPYRIGHT, INDUSTRIAL DESIGN) COMMUNITY COLLEGES OF THE SELANGOR STATE, MALAYSIA 26 – 28 APRIL 2017



Figure 15: Group photo of the participants and trainers

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# Challenges & Issues

***“The traditional method of teaching IP was in-person interaction in the classroom....the biggest challenge this posed was the availability of trained IP staff.” [8]***

***- S.E. Lakhan & M. K. Khurana, Global Neuroscience Initiative Foundation***

***“An entrepreneurial approach would include a greater role for industry and public-private partnerships, drawing on the greater dynamism and innovation in the private sector. This is particularly so in relation to the adoption of digital technologies.” [9]***

***- H.R.H. Sultan Nazrin Muizzuddin Shah, The Ruler of Perak State***

***“Lack of coordination in research, development, commercialization and innovation initiatives.” [11]***

***- Strategy Paper 21, The 11<sup>th</sup> Malaysia Plan 2016-2020***

***“Introduce the subject of IP in the formal education system in primary & secondary schools as well as institutions of higher learning.” [12]***

***- Strategy 5.7, Malaysia National Intellectual Property Policy***

**At polytechnics:**

- 1) Awareness of IP knowledge among students and staff is still low.**
- 2) Quality of project developed in terms of methodological uniqueness makes patent granting is still hard to be obtained.**
- 3) Tendency to lose unprotected ideas exposed in the exhibitions is alarming.**

# Student's Final Year Diploma Project – The Syllabuses

| RESTRICTED  |   | DPM6033 Marketing Plan |
|---|---|------------------------|
| POLYTECHNICS<br>MINISTRY OF EDUCATION MALAYSIA<br>DEPARTMENT OF COMMERCE  |   |                        |
| COURSE  | : | DPM6033 MARKETING PLAN |
| CREDIT  | : | 3                      |
| PRE-REQUISITE(S)  | : | NONE                   |
| SYNOPSIS  |   |                        |
| <p>MARKETING PLAN is a course that provides students with an opportunity to gain knowledge on how to market a new product or services. Students will be able to integrate all of marketing concepts and strategies acquired. At the end of this course, students will be able to write and develop an effective marketing plan of marketing strategies.</p>   |   |                        |
| COURSE LEARNING OUTCOMES (CLO)  |   |                        |
| Upon completion of this course, students should be able to:   |   |                        |
| <ol style="list-style-type: none"><li>1. construct a marketing proposal and marketing plan document on marketing effort to introduce a new product or service to market. (P4,PLO2)</li><li>2. construct a basic product prototype and develop an effective marketing plan with a given standard format. (P5,PLO6)</li><li>3. practice leadership capabilities, team communication and business decision making while completing the marketing plan and presenting the report. (C3,PLO1), (A5, PLO9)</li></ol> |   |                        |
| Version: 090514_1.0 Effective: June 2014  |   | 1/19 RESTRICTED        |

| RESTRICTED   |   | DTH6034 Project |
|--|---|-----------------|
| POLYTECHNICS<br>MINISTRY OF EDUCATION MALAYSIA<br>DEPARTMENT OF TOURISM AND HOSPITALITY  |   |                 |
| COURSE   | : | DTH6034 PROJECT |
| CREDIT(S)  | : | 4               |
| PRE REQUISITE(S)   | : | NONE            |
| SYNOPSIS   |   |                 |
| <p>PROJECT is catered for the final semester students of diploma programme. It can be implemented individually or in groups. Project coordinator chosen among the lecturers will set the format of the project at the beginning of the semester. The project consists of case studies, scientific research, activities or production-related. Students may be required to make presentations or reports. Each student will be supervised by a lecturer who acts as their project supervisor.</p>                         |   |                 |
| COURSE LEARNING OUTCOMES (CLO)   |   |                 |
| Upon completion of this course, students should be able to:  |   |                 |
| <ol style="list-style-type: none"><li>1. carry out project chosen that can consist of case studies, scientific research, services or products align with project procedures and guidelines accurately. (C3, PLO1)</li><li>2. produce a complete report based on the project conducted that consists of results, analysis, discussion and recommendations in a correct format. (C5, PLO1)</li><li>3. perform specific project that will benefit to the tourism and hospitality industry confidently. (P4, PLO2)</li></ol> |   |                 |
| Version: 090514_1.0 Effective: June 2014   |   | 1/9 RESTRICTED  |

Note: Approval Requisition Letter for Public Display to Department of Polytechnic Education Malaysia dated on 14 February 2018 with Reference No. PKK/UIPIK/INOVASI/2018 JLD (1)



# Student's Final Year Diploma Project – The Syllabuses

|  |   |                                       |
|--|---|---------------------------------------|
| RESTRICTED   |   | DCW6124 Wood Based Technology Project |
| <b>POLYTECHNICS</b><br><b>MINISTRY OF HIGHER EDUCATION</b><br><b>DEPARTMENT OF CIVIL ENGINEERING</b>   |   |                                       |
| <b>COURSE</b>  | : | DCW6124 WOOD BASED TECHNOLOGY PROJECT |
| <b>CREDIT(S)</b>   | : | 4                                     |
| <b>PREREQUISITE(S)</b>   | : | DCW 5022 RESEARCH METHODOLOGY         |
| <b>SYNOPSIS</b>  |   |                                       |
| WOOD BASED TECHNOLOGY PROJECT provides fundamental knowledge in developing, organizing and completing the final project. This course exposed the students on the report writing techniques which covering the introduction, literature review, methodology, project's findings or outcomes' analysis, discussion and conclusion. At the end of the course, a final year project report which implementing the knowledge in wood based technology will be produced.                 |   |                                       |
| <b>COURSE LEARNING OUTCOMES (CLO)</b>  |   |                                       |
| Upon completion of this course, students should be able to:  |   |                                       |
| <ol style="list-style-type: none"> <li>1. Produce a final year project report which consisting all the fundamental elements according to the required writing format. (C5, PLO1)</li> <li>2. Propose critical and creative solutions to solve problem regarding final year project related in wood based technology. (A3, PLO4)</li> <li>3. Demonstrate professionalism and ethics in applying wood based technology knowledge to produce a quality project. (A3, PLO8)</li> </ol> |   |                                       |
| Version: 090514_1.1 Effective: June 2014   |   | 1/9                                   |
| RESTRICTED   |   |                                       |

|  |   |                                    |
|--|---|------------------------------------|
| RESTRICTED   |   | DCQ6253 Quantity Surveying Project |
| <b>POLYTECHNICS</b><br><b>MINISTRY OF HIGHER EDUCATION</b><br><b>DEPARTMENT OF CIVIL ENGINEERING</b>   |   |                                    |
| <b>COURSE</b>  | : | DCQ6253 QUANTITY SURVEYING PROJECT |
| <b>CREDIT(S)</b>   | : | 3                                  |
| <b>PRE REQUISITE(S)</b>  | : | NONE                               |
| <b>SYNOPSIS</b>  |   |                                    |
| QUANTITY SURVEYING PROJECT course enables students to apply knowledge and technical expertise gained throughout the semester. It requires the students to prepare Bills of Quantities by using computer. This course also offers experience in communication skills, group work, work planning, decision making and also critical and creative thinking.   |   |                                    |
| <b>COURSE LEARNING OUTCOMES (CLO)</b>  |   |                                    |
| Upon completion of this course, the students should be able to:  |   |                                    |
| <ol style="list-style-type: none"> <li>1. organize a work programme to prepare bills of quantities accurately. (C5, PLO1)</li> <li>2. measure the quantities for construction works according to Standard Method of Measurement. (P5, PLO2)</li> <li>3. demonstrate continuous learning and information management skill while engaging in independent acquisition of new knowledge and skill to develop a project. (A3, PLO6)</li> <li>4. demonstrate ability to lead a team to complete assigned project within a stipulated time frame. (A3, PLO9)</li> </ol> |   |                                    |
| Version : 090514_1.0 Effective: June 2014  |   | 1/7                                |
| RESTRICTED   |   |                                    |

|  |   |                                     |
|--|---|-------------------------------------|
| RESTRICTED   |   | DCC5191 Civil Engineering Project 1 |
| <b>POLYTECHNICS</b><br><b>MINISTRY OF HIGHER EDUCATION MALAYSIA</b><br><b>DEPARTMENT OF CIVIL ENGINEERING</b>  |   |                                     |
| <b>COURSE</b>  | : | DCC5191 CIVIL ENGINEERING PROJECT 1 |
| <b>CREDIT(S)</b>   | : | 1                                   |
| <b>PRE REQUISITE(S)</b>  | : | NONE                                |
| <b>SYNOPSIS</b>  |   |                                     |
| CIVIL ENGINEERING PROJECT 1 covers knowledge and display practice skills in civil engineering. The student also exposed in communication skills, group works, work planning, decision making, recommendation and creativity using available facilities.  |   |                                     |
| <b>COURSE LEARNING OUTCOMES (CLO)</b>  |   |                                     |
| Upon completion of this course, students should be able to:  |   |                                     |
| <ol style="list-style-type: none"> <li>1. produce preliminary project report based on knowledge and information in civil engineering study according to format given. (C3,PLO1)</li> <li>2. demonstrate competency in written and oral communication skills in group.(A3,PLO6)</li> <li>3. adopt values of learning and continuing professional development related to technology advancement in civil engineering based on research topic. (A3,PLO8)</li> </ol> |   |                                     |
| Version:090514_1.0 Effective:December2015  |   | 1/10                                |
| RESTRICTED   |   |                                     |

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# Student's Final Year Diploma Project – The Syllabuses

| RESTRICTED  |   | DEE5081 Project 1 |
|---|---|-------------------|
| <b>POLYTECHNICS</b><br><b>MINISTRY OF EDUCATION MALAYSIA</b><br><b>DEPARTMENT OF ELECTRICAL ENGINEERING</b>   |   |                   |
| COURSE  | : | DEE5081 PROJECT 1 |
| CREDIT(S)   | : | 1                 |
| PREREQUISITE(S)   | : | NONE              |
| <b>SYNOPSIS</b>   |   |                   |
| <p>PROJECT 1 provides knowledge regarding the implementation and development methods of a project based on hardware or software or a combination of tools and software. This course provides exposure to the selection and early planning of a project, techniques to develop project, application of computer aided design as well as methods of preparing and presenting project.</p>   |   |                   |
| <b>COURSE LEARNING OUTCOMES (CLO)</b>   |   |                   |
| <p>Upon completion of this course, students should be able to:</p>  |   |                   |
| <ol style="list-style-type: none"> <li>1. conduct research in order to make improvements on a chosen project whether the project is on the hardware, the software or hardware-software interface and submit a proposal. (C3, PLO1)</li> <li>2. plan project for the chosen category in a Gantt Chart form and deliver a presentation with a written final proposal within a given time frame. (C5, PLO4)</li> <li>3. carry out project construction procedures (hardware project) or produce flow-chart and draft algorithm for system programme (software project) systematically. (P4, PLO5)</li> <li>4. demonstrate continuous learning and information management skill while engaging in independent acquisition of new knowledge and skill to develop the chosen project. (A3, PLO8)</li> </ol> |   |                   |
| Version : 090514_1.0_Effective: June 2014   |   | 1/10 RESTRICTED   |

| RESTRICTED   |   | DJJ5141 Project 1 |
|--|---|-------------------|
| <b>POLYTECHNICS</b><br><b>MINISTRY OF HIGHER EDUCATION</b><br><b>DEPARTMENT OF MECHANICAL ENGINEERING</b>  |   |                   |
| COURSE   | : | DJJ5141 PROJECT 1 |
| CREDIT(S)  | : | 1                 |
| PRE REQUISITE(S)   | : | NONE              |
| <b>SYNOPSIS</b>  |   |                   |
| <p>PROJECT 1 provides students with solid foundation on knowledge and skills in preparing project proposal, writing and presentation of proposal.</p>  |   |                   |
| <b>COURSE LEARNING OUTCOMES (CLO)</b>  |   |                   |
| <p>Upon completion of this course, students should be able to:</p>   |   |                   |
| <ol style="list-style-type: none"> <li>1. organize research or project systematically. (C4, PLO3)</li> <li>2. demonstrate good communication skill of oral presentation in group. (A3, PLO6)</li> <li>3. demonstrate continuous learning and information management skills while engaging in independent acquisition of new knowledge and skill to develop a project. (A3, PLO11)</li> </ol> |   |                   |
| Version: 090514_1.1_Effective: June 2014   |   | 1/8 RESTRICTED    |

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# Conclusion & Resolution

- Undeniably, Malaysia is developing innovation agendas quite rapidly [11] in a world of finite resources but infinite passion and creativity. Transformation is a constantly changing journey and is vital in the direction of being better tomorrow.
- Industry Visiting Lecturer (PPI) program, for example, can be expanded by engaging Attorneys and IP Examiners working in a private sector [8] which is currently running in Thailand, to further helps in advising certain aspects with respect to the technical and law. Provided that there is a basic chapter about IP in the existing syllabus, this initiative is possible considering the online content provided on the MyIPO & WIPO portals.
- Overall, a holistic resolution should consider IP education at Malaysian Polytechnics similar to the USA [13], particularly on its basics. Thus, an inclusion of IP chapter in the existing syllabus, through a collaboration between DoPE & MyIPO, for instance, will definitely help in realizing Malaysia's TN50 aspiration to become a top 20 nation in economic development, social advancement and innovation.[14]

Thank you.

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