

ASEAN University Network /
Southeast Asia Engineering Education Development Network

AUN/SEED-Net

Implementation Guidelines
and
Application Form
for
Intensive Course
On
Management of Technology (MOT)

For the Japanese Fiscal Year 2017

AUN/SEED-Net Project

As of April 2017

1. Project Background

Due to the need of human resource for sustainable development after a severe economic turndown in the ASEAN region in 1997, AUN/SEED-Net was established officially in 2001 from leaders' initiatives derived at the earlier ASEAN - Japan Summit and the ASEAN + 3 Summit. Full operation of the AUN/SEED-Net Project started in 2003 with main support from the Japanese Government through Japan International Cooperation Agency (JICA) and partially by ASEAN Foundation, member institutions and member countries. Activities of the Project shall be approved in principle by the AUN/SEED-Net Steering Committee and implemented by the member institutions and the AUN/SEED-Net Secretariat with support from the JICA Project for AUN/SEED-Net. The network of AUN/SEED-Net is composed of 26 member institutions from 10 ASEAN countries with academic support from 14 leading Japanese supporting universities.

Based on remarkable achievements in phase 1 and 2, the ASEAN Member Countries, Member Institutions (MIs), Government of Japan and JICA have a strong intention to continue AUN/SEED-Net aiming to bring about larger impacts not only to other universities in the region and Japan, but also to industry and society by making more direct contribution to the socio-economic development in the region and Japan. After continuous discussion, all parties agreed to implement the Phase 3 Project of AUN/SEED-Net with these following objectives:

- (1) Contribution to advancement and globalization of regional industry
- (2) Contribution to solution of regional common issues in Asia
- (3) Establishment of human resource development platform in science and technology in Asia

2. Program Concept

In Phase III, AUN/SEED-Net recognizes the growing importance of the industrial sector and technology in this region as seen in one of the project's targets, which is to support the engineering field to contribute to the advancement of industry. In order to promote advanced long-term collaboration between MIs and industry, it is essential to foster the young faculty staff at MIs to become highly-qualified researchers with the intention of contributing to industry. Faculty staff in the field of engineering should understand how engineering can contribute to the society, especially in the industrial sectors, and should conduct research activities from this viewpoint.

As one of the steps toward this goal, AUN/SEED-Net has been offering an Intensive Course on Management of Technology (MOT), to its member participants. For the year 2016, AUN/SEED-Net cooperates with Malaysia-Japan International Institute of Technology under Universiti Teknologi Malaysia (hereinafter referred to as "UTM/MJIIT"), Kuala Lumpur, Malaysia, to provide the fresh target group with an opportunity to basically learn about the importance of management of technology in order to be able to primarily have the recognition of how to utilize the university know-how to the public or industrial demand.

This fundamental course consists of lectures and practices relating to **Innovation and Technology Management, Value Configuration and Competitive Strategy, and Management of Intellectual Property**. Through interactions and discussions with the instructors as well as with classmates, the participants could gain the preliminary insight into the current MOT situation. In addition, participants and faculty staff can visit Malaysian and Japanese technology and innovation enterprises in Malaysia in the form of an observation tour or a short visit. The visits to these enterprises could help them visualize technology and innovation management in practice. Industrial forum is also organized for the participants to exchange views with MOT experienced invited speakers.

3. Objectives

- (1) To enhance knowledge and capacity of young faculty staff of MIs and/or SEED-Net Alumni members in initially making collaboration with the industrial sector through research activities.
- (2) To initiate awareness of the importance of MOT and how it could enhance academic curricular among members of the network.

4. Applicant Eligibility:

Applicants should have the three following qualifications:

1. Applicant must be or under 35 years of age.
2. Applicant must be a current faculty staff at MI in engineering fields, including future faculty staff at MI in engineering fields with justification and must have non-Japanese nationality. Current AUN/SEED-Net students or students are ineligible. ASEAN nationality is preferable.
3. Applicant shall not participate in the Intensive MOT course in Japan in Japanese Fiscal Year (JFY) 2013 and in Malaysia in JFY2014, in 1st and 2nd MOT in JFY2015, and in JFY2016.

* A list of MI.

AUN/SEED-Net Member Institutions (MIs)
Institute of Technology of Cambodia (ITC)
Institut Teknologi Bandung (ITB)
Institut Teknologi Sepuluh Nopember (ITS)
Universitas Gadjah Mada (UGM)
Universitas Indonesia (UI)
National University of Laos (NUOL)
Universiti Malaya (UM)
Universiti Putra Malaysia (UPM)
Universiti Sains Malaysia (USM)
Universiti Teknologi Malaysia (UTM)
University of Yangon (UY)
Yangon Technological University (YTU)
De La Salle University (DLSU)
Mindanao State University - Illigan Institute of Technology (MSU-IIT)
University of the Philippines – Diliman (UP)
Burapha University (BUU)
Chulalongkorn University (CU)
Kasetsart University (KU)
King Mongkut's Institute of Technology Ladkrabang (KMUTL)
Thammasat University (TU)
Hanoi University of Science and Technology (HUST)
Ho Chi Minh City University of Technology (HCMUT)

Note : MIs of Singapore and Brunei are excluded from this list because those countries are not eligible for Japanese ODA

5. Details of the Program

- (1) Place of Study: MOT-Executive Learning Suite (MOT-ELS), Malaysia-Japan International Institute of Technology (MJIT), Universiti Teknologi Malaysia (UTM), Kuala Lumpur, Malaysia
- (2) Total Number of Participants: 20 participants
- (3) Language to be used in this program: English. Good English proficiency is a must.
- (4) Schedule of program(Tentative):

Day / Date	Activity
Sun/ 30 July 2017	Arrival in Kuala Lumpur
Mon / 31 July 2017	Course Orientation, Explanation of MI Presentation about What Is Learnt and What Will Be Done after the Training, and Team Building Exercise on Campus
Tues / 1 Aug 2017	Lecture on Management of Technology and Innovation
Wed / 2 August 2017	Lecture on Management of Technology and Innovation
Thurs / 3 August 2017	Industry Visits (am and pm)
Fri / 4 August 2017	Lecture on Intellectual Property (IP) and Technology Management
Sat / 5 August 2017	Rest day
Sun / 6 August 2017	Rest day
Mon / 7 August 2017	Lecture on Value Configurations and Competitive Strategies [Marketing and Strategic planning]
Tues / 8 Aug 2017	Lecture on Value Configurations and Competitive Strategies [Finance and Corporate Value Creation]
Wed / 9 August 2017	Lecture on Value Configurations and Competitive Strategies [Integration of IP, Finance and formulating corporate strategy]
Thu / 10 August 2017	Industrial Visits (am) Industry Forum (pm)
Fri / 11 August 2017	MI Presentation about What Is Learnt and What Will Be Done after the Training (am and pm) Questionnaire Submission, Certificate Ceremony, and Closing (pm) on Campus
Sat 12 August 2017	Departure from Kuala Lumpur
Tue 12 September 2017	Deadline of report submission

*Above schedule is subject to minor change. All participants are **requested** to arrive and depart as scheduled.

(5) Course Program:

The program is designed to provide participants with basic understanding of three fundamental topics of MOT:

Management of Technology and Innovation

Innovation involves moving an idea from its inception to commercialization. It requires a systematic process of invention, development, production and commercialization. In addition, innovation is tightly related to the internal capabilities of organizations. This includes its ability to nurture learning and creativity as well developing the organization's absorptive capacity.

Management of Intellectual Properties

The creation of economic value requires that managers are able to price the value of products, technologies, businesses and intellectual property (IP). This is important in ensuring optimum return on investment and creating a balance technology portfolio. Likewise, an understanding of the value of products, technologies, businesses and intellectual property aids decisions on outsourcing, divestment and acquisitions. This module will focus on the basic concepts related to the IP and the way it can be used to avoid conflicts.

Value Configurations and Competitive Strategies

At the root of competitive success is the ability to create and deliver value to customers. All strategies involve assessing the opportunities available or that can be created in the market, scanning the competitive environment and developing the capabilities needed to support the chosen competitive approach. Finally, these decisions have to be executed effectively. This Module will be divided into 3-day sub-modules:

a. Marketing and Strategic planning:

Marketing is an integral part of the company's product development and placement. Without strategic marketing plan the company will fail in the market as a result of improper pricing and targeting the market.

b. Finance and corporate Value creation:

Finance is the most important factor that companies are focusing on. Finance is not only about the usage of the money. Rather the consideration of finance starts the moment an idea is generated. Needless to say that an idea without any sound financial planning will lead to a failed project.

c. Integration of IP, Finance and formulating corporate strategy:

Success of any company depends on the value that the company is creating for itself. With the current competitive world, the survival of any company depends largely on the technology that it possess and the way the company plans the uses its Patents and other IP rights to create value.

* Interactive sessions with lecturers, case studies and simulations of the actual cases are included. See Attachment I and II for more details.

(6) Industry Visit:

Participants are required to participate in short visits to industry in Malaysia. During this visits participants will be able to obtain first-hand knowledge and experience of MOT in practice. This will enhance the participants' future approach in research and technology development initiatives.

(7) Deliverable:

After their return to their host institutions, participants must submit a report to AUN/SEED-Net by **12 September 2017**. The report must include the following:

- MOT course summary
- Summary of visit to companies/universities in Kuala Lumpur
- Action plan regarding how the participants can make use of MOT knowledge in their future research career and future program development
- MI Presentation during MOT

Failure of submission of the report will affect the participants' future applications for AUN/SEED-Net programs.

6. Procedure for Application and Selection

(1) Selection Procedure

(1)AUN/SEED-Net screens applications, considering each applicant's proposal and involvement with AUN/SEED-Net activities.
(2)Applicants are selected and informed.
(3)AUN/SEED-Net instructs successful applicants about the procedure.
(4)AUN/SEED-Net arranges air tickets and daily allowance.

(2) Application and Required Documents

(1)Application form, completed with the photo & signatures of the applicant
(2)Photocopy of your current valid passport (the first page). *All applicants shall ensure the passport is valid to travel throughout the training. Please check with the Immigration or Embassy in your country beforehand whether your passport is valid through or not as in some cases, 6 months or more before the passport expiration date may not be valid enough to travel to Malaysia.
(3)Highest degree certificate
(4)Permission letter from the Dean or Head of Department of the MI where the applicant belongs to if an applicant is currently an MI faculty staff.
(5)For an applicant who is committed to being a MI faculty staff in the future, a letter from an MI stating the acceptance to be an MI staff in the future.

(3) Application Deadline

Applications, including all "Supporting Documents", in soft copies should be submitted to AUN/SEED-Net ([support@aun-seed.net](mailto:support@ aun-seed.net)) with subject line "**Application: MOT 2017**" by **15 May 2017**.

Remarks: This Implementation Guidelines and other information of AUN/SEED-Net are available on the website www.seed-net.org.

7. Administrative Arrangements

<p>(1) Travel to Kuala Lumpur, Malaysia:</p> <p>(a) Air Ticket: A round-trip ticket between an international airport designated by AUN/SEED-Net and Kuala Lumpur will be provided by AUN/SEED-Net.</p> <p>(b) Local transportation from and to Kuala Lumpur International Airport (KLIA) ↔ UTM/MJIIT Kuala Lumpur shall be managed by participants and by their own expenses with no reimbursement.</p> <p>* In principal, local participants who are based in Kuala Lumpur shall be responsible for the travelling expense from/to UTM/MJIIT by themselves.</p>
<p>(2) Accommodation in Kuala Lumpur:</p> <p>UTM/MJIIT will arrange the following accommodations for non-local participants in Kuala Lumpur. All non-local participants are asked to stay in accordance with the instructions by UTM/MJIIT</p> <p>UTM Scholars Inn Scholar's Inn@ Universiti Teknologi Malaysia Kuala Lumpur Jalan Sultan Yahya Petra, 54100 Kuala Lumpur, Malaysia. Tel: +603-21806000 Fax: +603-21806001 Email: reservation@scholarsinn.com.my Website: http://www.scholarsinn.com.my/</p> <p>* In principal, accommodation shall not be provided for local participants who are based in Kuala Lumpur.</p>
<p>(3) Daily allowance will be provided by AUN/SEED-Net.</p> <p>* In principal, daily allowance shall not be provided for local participants who are based in Kuala Lumpur.</p>
<p>(4) Other expenses for program implementation, including materials and study tour will be arranged by UTM/MJIIT.</p>
<p>(5) All participants shall be responsible for passport validity throughout the course, VISA process and all taxes by themselves to enter Malaysia, if any.</p> <p>*All applicants shall ensure the passport is valid to travel throughout the training. Please check with the Immigration or Embassy in your country beforehand whether your passport is valid through or not as in some cases, 6 months or more before the passport expiration date may not be valid enough to travel to Malaysia.</p>
<p>(6) No insurance is supported by AUN/SEED-Net</p>

8. Conditions for Attendance:

- (1) To follow the schedule of the program.
- (2) Not to change the program subjects or extend the period of stay in Malaysia.
- (3) Not to bring any members of their family.
- (4) To return to their home countries at the end of the program in accordance with the travel schedule designated by AUN/SEED-Net. In the case of those living in Malaysia, to return to their original program.
- (5) To refrain from engaging in political activities, or any form of employment for profit or gain.
- (6) To observe Malaysian laws and ordinances. If there is any violation of said laws and ordinances, participants may be required to return part or all of the training expenditure depending on the severity of said violation.
- (7) To observe the rules and regulations of their place of accommodation and not to change the accommodation designated by UTM/MJIIT.
- (8) In the event that, a participant cannot come due to his/her own fault such as passport invalidity, flight missing, etc., such participant may be required to compensate for his/her flight ticket and allowance.

COURSE PROGRAM (Tentative)

July 30, Sunday

Arrival at MJIT, UTM Scholars Inn

July 31, Monday

Course orientation, Briefing on MI Presentation, and Team Building Exercise on Campus

August 1 & 2, Tuesday & Wednesday

Management of Technology and Innovation

- Essence of technology management and innovation
- Types and policies of innovation and technology
- Role of customer and market research
- Forecasting and Organizing for innovation
- New product development, technology life cycle and the S-curve
- Managing new product development team
- Technology transfer and innovation
- Technology trajectory
- Managing of research and development
- Innovation and Technology Policies.

August 3, Thursday

Industry Visits

- SR Aviation / Malaysia Airline (MAS) Engineering * tentative

August 4, Friday

Intellectual Property (IP) and Technology Management

- Science, Technology and Intellectual Property
- Industrial technology and intellectual property
- Patent, Trademark and Design
- Survey of prior art
- Valuation and pricing.
- Valuing intellectual property.
- IP management process and turning IP and into assets
- Managing technology portfolio, technology acquisition and spin off.

August 5 & 6, Saturday and Sunday

Rest days

August 7, Monday

Value Configurations and Competitive Strategies [Marketing and Strategic planning]

- Value Definition & Ongoing Changes
- Problem Findings & Value Proposition
- Value & Decision Criteria
- Inventors vs. Innovators
- Value Definition & Calculation
- Value Chain Analysis
- Ongoing Changes & Sustainability
- 'Disrupt Yourself, Or Be Disrupted'
- Management, Strategy & Operation
- Business Model Canvas
- Strategy & Marketing
- Value of Marketing

Framework & Analytical Tools

August 8, Tuesday

Value Configurations and Competitive Strategies [Finance and Corporate Value Creation]

- What Finance is all About?
- Increasing Asset and Equity Value
- Increasing Firm Value
- Decision Making and Common Stock Value
- Financing and Investing
- The Investment Vehicle Model of the Firm
- Financial Planning Process
- Time Value of Money
- Capital Budgeting

August 9, Wednesday

Value Configurations and Competitive Strategies [Integration of IP, Finance and formulating corporate strategy]

- Competitive Advantages through IP and financial planning

August 10, Thursday

Industry Visits and Industry Forum

- AM, Industry Visit :
 - Perodua Automotive Assembly * tentative
- PM, Industry Forum:
 - Speakers : DreamEDGE, Malaysia Biotechnology Corporation TMO, eN-Coral Digital Solution, Malaysia Innovation Agency * tentative

August 11, Friday :

MIs Presentation about department, lesson learned, and future plan after MOT, **not more than 10 pages**– by Institution (am and pm)
Closing & Review Session on Campus (late pm)

August 12, Saturday:

- Depart to the original country

BRIEF DESCRIPTION OF THE INSTRUCTORS

Prof. Dr Ahmad Rahman Songip (Management of Technology and Innovation)

Prof Ahmad graduated from the US and then went on to earn his PhD in Chemical Engineering from Kyoto University, in Japan. He is an entrepreneur who practices creativity and innovation during his colourful career in public and private sectors. He helps to reengineer a number of business units in UTM to boost their performance. He shares his transformation experiences with more than 3000 industrial participants from more than 500 companies, including PETRONAS, Shell, and Oracle in their transformation journeys. He is also the Founding Director of UTM Transformation and Risk Management Division and a member of the UTM Central Executive Committee. Dr Ahmad's research interests include the management of creativity, innovation and technology, especially on the issue of Open Innovation.

Pn Azimah Abdul Kadir (Management of Intellectual Properties)

Azimah is recognised for her impactful intellectual property strategies. With 20 years' of experience in strategic IP management and enforcement, technology R&D, licensing & commercialisation and IP valuation. Worked at Proton Holdings Berhad as the IP Manager (1995-2008) and headed the IP Management & Strategy Dept of MIMOS (2008-2013). She has co-invented 7 patents of which 4 were granted patents and 3 patents pending in Malaysia and is credited for the designing of the e-IPMS (IP mgt system) for MIMOS resulted with the following achievements for MIMOS:

1. Top Malaysian Patent Applicant since 2009 – 2013
2. Ranked 6th in 2013 and ranked 7th in 2012 for Top PCT applicant (government and research institutions) in the PCT Yearly Review.
3. Awarded with the National Best Trademark Award from MyIPO in 2009

Dr Mohammad Ali Tareq

(Value Configurations and Competitive Strategies)

- A. Finance and corporate Value creation
- B. Integration of IP, Finance and formulating corporate strategy)

Before joining the UTM, Tareq taught at Independent University Bangladesh (IUB), BRAC University and American International University, Bangladesh (AIUB). He was a visiting faculty member of University of Development Alternative (UoDA) in Bangladesh. He is a Finance major, and used to teach different courses at the undergraduate and master levels. He happened to be the youngest person in some of the Executive-MBA courses that he taught. He did BBA and MBA in University of Dhaka, and earned his MPhil in Real Estate Finance from Cambridge University. He then went on to obtain his PhD from Shiga University, Japan. Tareq loves traveling and plays football, cricket and tennis. He was the fastest runner during his high-school and college days. However, he is often the last person to finish the long-distance tests. Currently he is the Head of the Department of Management of Technology in MJIIT as well as the head of the International Joint Intellectual property Laboratory (IJIPL).

Mr Hiroyuki Ishizaki

(Value Configurations and Competitive Strategies

A. Value definition and Calculation

B. Management, Strategy and Operation)

Ishizaki has been working for MJIT MOT department since September 2014 by leveraging his practical expertise acquired through his consulting service engagements and entrepreneurship experiences to establish his own company. In addition to the lectures about business planning and organizing, marketing, entrepreneurship and research project, he is actively contributing University-Industry collaborations. His research interests are international business development, cross-border technology transfer, entrepreneurship in ASEAN countries, social entrepreneurship management and U-I collaboration.

He obtained BA in Law at Hitotsubashi University (Japan) and MBA at University of Southern California.

APPLICATION FORM
Intensive Management of Technology Course (MOT)
2017
INSTRUCTION

To fill in the application form, it is advised to study the Program Guideline of Intensive Management of Technology Course (MOT) 2017

To fill in the application form, please print or type all entries. Handwritten application is prohibited.

The application form of "Intensive Management of Technology Course 2017" or "MOT 2017" is consisted of **TWO parts**.

Part 1, in Microsoft Word format, contains **1** section

- Once completed, **DO NOT** convert Part 1 into any other file type other than **Microsoft Word**

Part 2, in Microsoft Excel format, contains **1** section

- In each section, applicants must strictly follow the instructions
- Once completed, **DO NOT** convert Part 2 into any other file type other than **Microsoft Excel**

In addition to the two parts, following "Supporting Documents" are required.

1. Photocopy of your current passport (the first page)

*All applicants shall ensure the passport is valid to travel throughout the training. Please check with the Immigration or Embassy in your country beforehand whether your passport is valid through or not as in some cases, 6 months or more before the passport expiration date may not be valid enough to travel to Malaysia.

2. Highest degree certificate
3. Permission letter from the Dean or Head of Department of the MI where the applicant belongs to
4. For an applicant who will be a faculty staff at MI in the future, an endorsement letter from MI is required

Both parts, including "Supporting Documents" must be emailed to support@aun-seed.net with subject line "**Application: MOT 2017**" by **15 May 2017**