BIT@FK

Universiti Malaysia PAHANG
Engineering • Technology • Creativity

Bulletin

FACULTY OF COMPUTING

(Formerly known as Faculty of Computer Systems & Software Engineering)

ASSOC. PROF. TS. DR. ADZHAR KAMALUDDIN
Dean, Faculty of Computing

HIGHLIGHTS

| Moving to Pekan Campus

| FK in New Norm (COVID-19)

| MTE 2020, ITEX 2020, MTE Special Edition

December Edition - 2020

fskkp.ump.edu.my

Contents

Editor's Foreword

Assalamualaikum and warm greetings to all readers.

Alhamdulillah, we managed to publish the online issue for year 2020. This issue covered the relocation of faculty to a new builidng at UMP Pekan campus, the implementation of 100% online teaching and learning and the new norms of work environment in faculty building, especially during the COVID-19 pandemic.

Although there is uncertainty during the pandemic, we need to adapt our lives to the new norms of teaching & learning,faculty meetings and research using online methods. While there were challenges at the begining,we were able to overcome these obstacles.

The New Year is a chance to look back and look ahead. Some people make promises to change bad habits, to build new ones, or to maintain current ones. Bit@FK's editorial team also has a resolution that it plans to follow : we intend to keep our readers up-to-date on faculty activities and accomplishments in research & publication and teaching & learning.

On behalf of the entire Editorial Team, we wish all the best in 2021 and a positive start to the New Year!

Junaida Sulaiman

Bulletin Team

LOOKING FORWARD: AN INTERVIEW WITH THE DEAN

Associate Prof. Ts. Dr. Adzhar Kamaluddin
The Dean of Faculty of Computing (FK)

Six months into his Faculty of Computing deanship, Assoc. Prof. Ts. Dr. Adzhar sat down for an interview, answering questions and sharing insights. Last July, he began his tenure as the 7th Dean of Faculty of Computing, though at the same time the faculty is preparing to move to a new building in UMP Pekan.

What is your first step after becoming the Dean of the Faculty?
    I have several meetings with the administrative staff, the technical staff, and the management team to listen and get to know the faculty's operations in depth.

The challenges in managing a faculty?
    After not being in the faculty for six years which is two years at PIDA (formerly known as CAIC) and four years at CIREL, I was entrusted by the Vice Chancellor as a new Dean of Faculty of Computing. It is a big change of task for me because CAIC and CIREL are coordination centres where lies the university KPI and Vice Chancellor KPI which need to be reported to the Ministry of Higher Education.
    Responsibility as a Dean, on the other hand, is greater and focuses on the context of the faculty. The Dean shall be responsible for working with academic, technical, and administrative staff to achieve the goals and objectives of the university while at the same time assisting in the career development of the staff.
In addition, the faculty is the largest faculty at UMP in terms of number of students which is about 1600 undergraduate students and 80 postgraduate students including four undergraduate programs and five postgraduate programs.
    The faculty's main strength lies with the academic staff. In my observation, there are two groups of active academics in the faculty. The first group is those who have completed their PhDs and the faculty needs to help them develop their career path. For the second group that is still struggling to complete their PhDs, the faculty needs to support them with the appropriate means.
    In terms of research, I think the faculty's direction needs to be reviewed. This is because research is currently moving in an individual context that does not represent a faculty brand.

What is the faculty's strength?
    Academic excellence, especially the undergraduate program is one of the directions in the development of the strategic plan 2021-2025. This direction is in line with the review of the undergraduate program currently undergoing by the faculty. I think the faculty can improve academic programs with new ideas through this curriculum review.
    As a matter of fact, in the curriculum review, I have engaged as many academic staff as possible so that all staff have a sense of belonging and ownership.
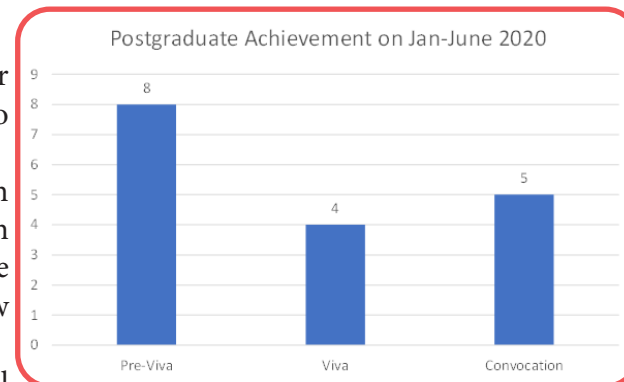   Besides that, I like to come up with new ideas to get views from everyone and we brainstorm those views. This is because, in the end, all staff are responsible for realizing the ideas.

STAFF ACTIVITIES (NEW NORM)

POSTGRADUATE ACHIEVEMENT JAN-JUNE 2020

During Covid19 attacked and the Movement Control Order (MCO), FK postgraduate students also face new challenges to finish and complete their studies. Basically the study still continue as usual but with new norms. Most of the supervision meeting, pre-viva and viva sessions during MCO have been done through online from different locations. Basically, all the process flows for pre-viva and viva still same as the existing flow process, except all have been done with digital and online journey continue with great successful. Overall, the students still take this MCO as their challenge of their study. There are eight (8) students have passed their pre-viva sessions start from 14/1/2020 until 19/6/2020, which are 3 from PhD and 5 from Master of Science programmes. Meanwhile, there are four (4) students have passed their PhD viva sessions, start from 7/2/2020 until 11/6/2020. Finally, there are five (5) PhD students will be graduated and having the convocation on 2020. Congratulations all students, may your journey continue with great successful.

Postgraduate Achievement on Jan-June 2020

CSR PROGRAM: LEGO ROBOTIC EV3 WORKSHOP

14-16 Jan 2020 - Faculty of Computing (FK) continue the initiative in organizing a CSR program entitled "Lego Robotic EV3 Workshop" at FK computer labs. This workshop was divided into two modules;
- *Module 1: 14-16 January 2020*
- *Module 2: 4, 6, 12, 19, 26 February & 4, 11 March 2020*

The targeted participants were primary school students around Pahang. For the first module, 37 schools were participating with total of 144 students. They then divided into 48 groups; 3 students per group. 38 schools involved in Module 2 with total of 300 students which grouped into 100 groups.

The objective of this event is to support the UMP strategic planning in terms of:
a)   Academic prominence – promote TVET enrolment for future education
b)   Financial sustainability – income generation for future projects
c)   Socioeconomic sustainability – corporate social innovation

During the program, the students learned about programming using the Lego Robotic EV3 software and robots. We could see they were excited when interacting with robots and completing some of the exercises provided by the facilitators. The program ended with a photograph session by all participants and a prize giving ceremony.
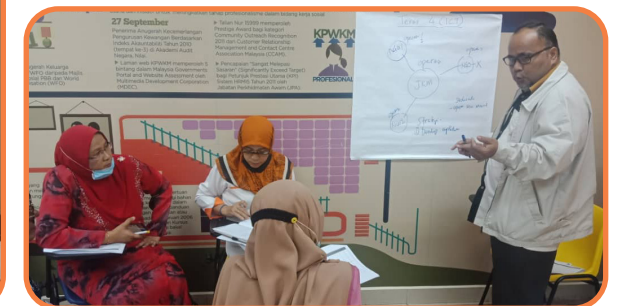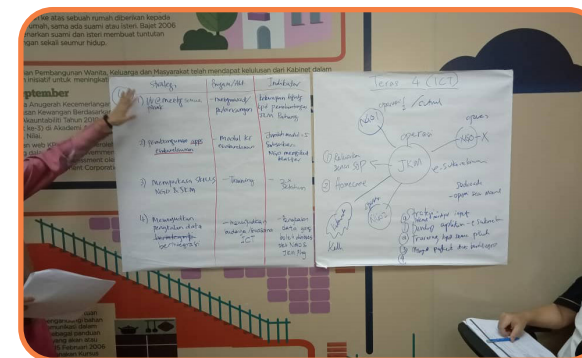

THE WAY FORWARD NGOS PAHANG

8 August 2020 - Jabatan Kebajikan Masyarakat (JKM) Pahang has organized a consolidation workshop entitled "The Way Forward" for NGOs Pahang in Kuantan, Pahang. This workshop was held in-line with the fourth core which is to strengthen operations with ICT technology. JKM and a few NGOs have joined this program to gain their knowledge.

The main objectives of this program are:
- To help JKM and NGO in using digital applications for daily works.
- To provide a planning in strengthening digital applications usage among NGOs.

Faculty of Computing has involved as moderator and program consultant. "Alhamdulillah, thank you for giving me a chance to share the knowledge in this workshop ", said Dr Jamaludin Sallim, the senior lecturer from Faculty of Computing.

I-HADIR SMK RASAU KERTEH B5

12 July 2020 - An i-Hadir system launch ceremony was held at Sekolah Menengah Kebangsaan (SMK) Rasau Kerteh B5 main hall. The ceremony was officiated by YH Ir. Saiful Azmi Suhaili, state legislative assembly member (ADUN) Kemasik and also participating by Kemaman education officer representative, Felda representative, local community leader, Faculty of Computing (FK) dean, FK consultants (Mrs Azma, Dr Zalili, Dr Rohani, Dr Noorlin), teachers and school staffs.

The objective of this event is to introduce a new system named i-Hadir of SMK Rasau Kerteh B5 to school staffs and local community. This system was developed in collaboration with FK staffs to record student's attendance effectively. The new way to record the attendance is by using online QR code scanning. Compared to previous way, instead of the teachers use manual logbook, they can save the record into system database in line with the current technology; online access and online storage.

Faculty of Computing successfully managed several short courses this year. The arrangement was quite challenging due to current COVID 19 situation which affect the previous short course plan. However, eight (8) short courses were conducted successfuly despite the COVID 19 pandemic.

No	Training / Workshop / Seminar	Date	Type of Training
1	*Bengkel Aplikasi untuk Robot Lego*	29 - 30 Jan 2020	Open
2	CCNA Cyber Operations Instructor Trainer	3 - 7 Feb 2020	Open
3	Data Science with Python	25 & 26 July 2020	Open
4	CCNA Cybersecurity Operations Instrctor Training (KOREA)	27-31 July, and 3-8 August 2020	Requested (Korea)
5	Asas Fiber Optik	11 August 2020	Requested (KK Maran)
6	Cisco Certified Associate (CCNA) Routing and Swithing	16 - 20 Nov 2020	Requested (TUDM)
7	Linux System and Open Source Network Configuration	16 - 20 Nov 2020	Requested (TUDM)
8	IT Essential	23 - 27 Nov 2020	Requested (TUDM)

Asas Fiber Optik, 11 August 2020

This short course has been participated by students from Kolej Komunit Maran which cinstructed by Mr Arifin Salleh and assisted by Mrs Rosmalissa Jusoh.

IT Essential, 23-27 November 2020

A 5-day short course was led by Mr Rahiwan Nazar Romli which participated by staff from TUDM.

Trainings @FK

A 2-day short course instructed by Dr. Mohd Zamri Osman. This short course introduces the fundamental of Python programming and the application of data science using common case study.

Data Science with Python, 25-26 July 2020

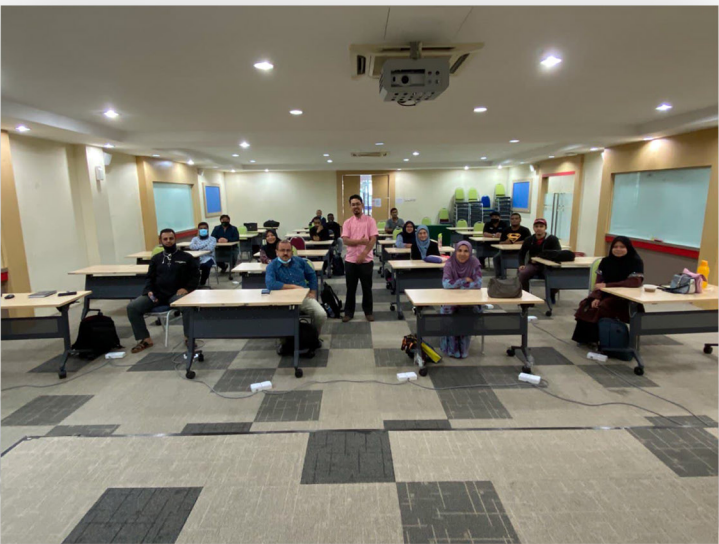### LINUX, 16-20 November 2020

Another short course participated by TUDM's staf in understanding in both theory and practical of LINUX system and open source network configuration. This training was led by Mr. Muhamaed Ramiza Ramli

AWARDS

Congratulations!

MTE 2020 Malaysia Technology Expo
The 19th International Expo on Inventions and Innovations

MALAYSIA TECHNOLOGY EXPO (MTE 2020)
20th - 22nd February 2020

GOLD | Hedoo Space, Teach & Learn - An Environment IoT Analysis Modules & Generic Circuit Board
Project Leader: Mr. Nor Azhar Ahmad

Efficient Distributed Database Replication Systems for Online Selling Website | SILVER
Project Leader: Associate Prof. Dr. Noraziah Ahmad

Rex-Chain: Root exploit detection and blockchain | SILVER
Project Leader: Dr. Ahmad Firdaus Zainal Abidin

Enhancement of Single-Path to Multi-Path Clustering in Wireless | SILVER Sensor Network for Energy Conservation
Project Leader: Dr. Wan Isni Sofiah Wan Din

MALAYSIA TECHNOLOGY EXPO (MTE 2020) SPECIAL EDITION
COVID-19 International Innovation Awards

MTE 2020 | Special Edition
Malaysia Technology Expo
COVID-19 International Innovation Awards

Best Innovation Award & Gold Medal
Daemon
Project Leader: Associate Prof. Dr. Md. Arafatur Rahman

Silver Medal
Integrating Cloud-Based Attendance Checker for Online Final Exam during Covid-19
Project Leader: Ts. Aziman Abdullah

Bronze Medal
Smart Mask Detection System During Covid-19
Project Leader; Associate Prof. Ts. Dr. Abdulrahman Ahmed Mohammed Al-Sewari

COVSIS: An Intelligent System for Identifying Spacio-Symptom Relationships of COVID-19
Project Leader; Dr. Md. Saiful Azad

ITEX

31st International Invention, Innovation & Technology Exhibition (ITEX 2020)
20th - 21st November 2020

GOLD | Robust Watermarking Software for Copyright Projection
Project Leader; Ts. Dr. Ferda Ernawan

OBeM: Obesity Monitoring Secured System | SILVER
Project Leader; Dr. Syifak Izhar Hashim

Affordable and Accurate Alzheimer's Diagnosis System | SILVER
Project Leader; Ts. Dr. Taha Hussein Alaaldeen Rassem

EduChain: A Scalable Hazard Free Platform for Educational Data Handling | SILVER Exploiting Blockhain Technology
Project Leader; Associate Prof. Dr. Md Arafatur Rahman

An Automated Requirements prioritization tol (SRP-Tool) for large-scale | SILVER software system
Project Leader: Associate Prof. Dr. Rohani Abu Bakar

Congratulations!

GRANTS

| Industry Matching Grant
Green Project on Waste Management
Project 3
Project Leader: Asociate Prof. Dr. Mazlina Abdul Majid
Amount Received: RM30,000.00

| University For Society (U4S) Grant
IoT: Teknologi Mudahalih Nelayan
Project Leader: Dr. Jamaludin Sallim
Amount Received: RM40,000.00

| Sustainable Research Collaboration Grant
Diabetic Retinopathy Detection Based on Deep Learning
UMP - IIUM - UiTM
Project Learder: Ts. Dr. Azlee Zabidi
Amount Received: RM 20,000.00

| Long Term Research Grant Scheme (LRGS)
e-Suripreneur: Business Readiness Modeling and Data Structuring of B40 Women Entrepreneur Ecnomic Wellbeing in Digital Economy Ecosystem
Project Leader: Associate Prof. Ir. Ts. Dr. Ahmad Ihsan Bin Mohd Yassin (UiTM)
Team Member:
Ts. Dr. Azlee Bin Zabidi (UMP)
Prof. Dr. Nooritawati Binti Md Tahir (UiTM)
Dr. Megat Syahirul Amin Bin Megat Ali (UiTM)
Amount Received: RM512,600.00

EXCELLENT STUDENT (QUANTITY OF PUBLICATION)

Name : Bokolo Anthony Junior
Student Id : PCC16002
Program : PhD (Intake: 15th Feb 2016)
Sem/Year : 2018/2019
Status : Ongoing / Graduated (11th Oct 2018)
Thesis Title : A Green IT/IS Assessment Model for Attaining Sustainability Collaborative Enterprise
Supervisor : PM Dr. Mazlina Abdul Majid
Co-Sv : Dr. Awanis Romli
Publication : Published 5 ISI and 17 Scopus articles
Please refer to Google scholar or Research gate link to view articles
- https://scholar.google.com/citations?user=hWqmHXsAAAAJ&hl=en
- https://www.researchgate.net/profile/Bokolo_Tonny2

BOKOLO ANTHONY JUNIOR

What motivate you in writing?

Whenever I read papers and discover new issues that has been solved or not solved, I try to be creative in developing new ideas, theories or approaches to solve the issues by deploying similar or new methods. Thus, in order not to forget my idea and also to confirm my idea I put it into writing and I submit to at least a free Scopus journal for review and possible publication. So, I would say safeguard and not forgetting my ideas motivates me to write.

How do you manage your time between research, writing and other commitments?

Every semester I do a to-do list that comprises of academic targets and personal goals to be achieved before the end of the semester. So, I just follow my to-do list as planned and it helps me to manage my time research, writing and other personal commitments.

Any tips in writing a good and worth article for publication?

Yes, the first tip I would recommend is for students to have a good title and abstract in writing any papers for ISI and Scopus Journals. This is because the title is what the editor and reviewers see when they assess the quality of the paper. Hence I would advise students to include the domain/area, problem/issue and technique or method they intend to apply when constructing the title. In regards to the abstract, the problem, aim/objective, methodology applied, results and contributions of the paper should be clearly and briefly stated.

How do you know about these journals?

I normally get the ISI and Scopus journals from papers I read, their references and lastly, from top leading researchers profile in research gate. Then I Google the Journal name and check if they are indexed in ISI and Scopus. If they are I save the journal names and send to them when I have a new paper.

Free Journal or Paid Journal? If free, are you using your own money or through SV grants?

Yes, the ISI and Scopus journal are mostly free. I do not publish as open access, so I don't have to pay.

Will you recommend your friends to further their PhD in FSKKP? And Why?

Definitely, I will recommend your friends to further their PhD in FSKKP because FSKKP provide support to students on completing their research project on time. Besides, FSKKP offers flexible study, where students can meet with their supervisors to discuss research progress anytime, even virtually. Additionally, financial supports such as DRS, MRS scholarships and PGRS grants are provided to students. Lastly, FSKKP provides postgraduate work stations, colloquiums to postgraduate students.

Could you please tell us briefly about your work history at UMP? (Such as the date you joined and left UMP, the service years, etc.)

I joined UMP since its first establisment as KUKTEM in 2002, which previously was UTM Pahang Branch, and retired on August 7, 2020 after 18 years of service with the institution.

I was the first Dean of the Faculty of Computer Systems & Software Engineering (FSKKP). After 5 years of Deanship I further my study for PhD. After my PhD, I have been asked to lead IBM Centre of Excellence (2012) as its 1st Director & MOHE's ICOE ICT Cluster Head until 2014.

In 2019, I hold a position of Senior Dean, College of Computing & Applied Sciences until my retirement.

As we know, currently Computing is the booming sector in the industry. What is your hope for the faculty to respond to this trend?

The computing areas will continue to be in demand, but the niche and focus areas that are needed will constantly change. Thus, we should always keep up with the trend, while not losing sight on the fundamental of computing & computer science.

Our academic associates should have a clear understanding & equip themselves with the state-of-art technologies by close relationship with the industry which in return will benefit our students.

At the same time, balancing our graduates' competencies with soft skill must always be the priority besides their technical know-how.
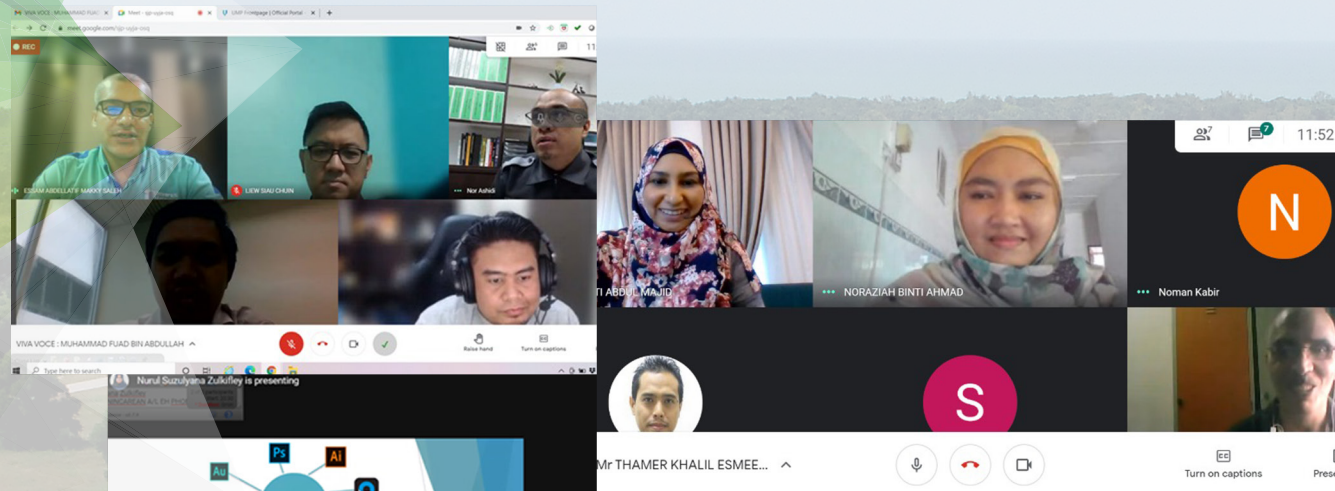
What is your advice to the faculty members, as well as students regarding our new environment at the new campus at Pekan?

The new environment in Pekan has to be utilised as our new ground to instil a caring & healthy environment that encourage its community to promote well-balance human being that thirst for excellence.
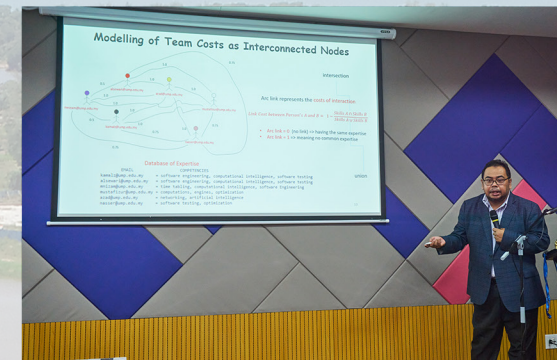
PROFESSOR TS. DR. RUZAINI ABDULLAH ARSHAH
Senior Dean, College of Computing & Applied Sciences
Visiting Professor, Faculty of Computing

ONLINE PRESENTATION

COLLOQUIUM
28 September 2020

MAJLIS DOA SELAMAT
18 September 2020

KESUKOMP HEALTH TALK
11 November 2020

MAJLIS PENYERAHAN KUNCI
FAKULTI KOMPUTERAN UMP

Universiti Malaysia PAHANG
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Lens @FK

The pandemic Covid-19 has changed the education style from face to face (F2F) to an online learning. To ensure the quality of learning in is line with the academic UMP quality, starting from April until now, the CIREL UMP had prepared a lot of online training and webinar for all UMP staffs for them to change the method from F2F teaching and learning activity to become online learning. The online learning starts from Jun in Sem 2 2019/2020 and continues to Sem 1 2020/2021.

All teaching and learning activity (PdP-DT) for the students in Faculty of Computing is done online including Final Examination, Final Year Project (PTA), Undergraduate Project (PSM) as well as an Internship Training presentation.

The PSM and PTA final presentation session had been conducted through Google Meet. The evaluators will be provided a presentation video from the student before the presentation day. On the presentation day, the student will be asked a question from the evaluator. For the internship training presentation, the Faculty's Supervisor contacted and discussed with the student and provide a suitable date and time for the online presentation. Lastly, The final examination phase 2 is conducted online by following the schedule announced by PPA and each course lecturer(s) will be invigilated the exam on their own. Table 1 shows the date of each online activity in FK.

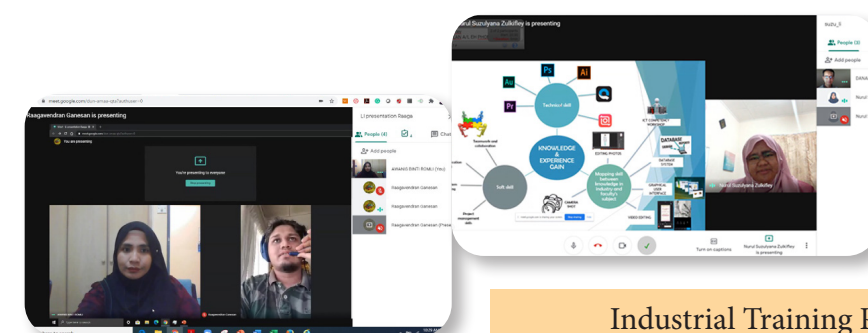| Sem 2 2019/2020	
Teaching and Learning	1 Jun 2020 – 29 July 2020
PTA & PSM Presentation	23 July 2020 – 27 July 2020
Industrial Training Presentation	13 July 2020 - 24 July 2020
Final Examination	7 October 2020 – 16 October 2020
Sem 1 2020/2021	
Teaching and Learning	19 October 2020 – December 2020

Table 1

Online Teaching and Learning

Final Year Project (PTA&PSM) Presentation

Industrial Training Presentation

Equipments and Digital Tools for Online Learning

by mohd zamri osman

Webcam

Price range
RM140-RM200

Price range
RM399-RM500

Webcam is an important tool for online learning for instructor to engage with the students. We can use built-in webcam in our mobile or laptop. However, the video quality from the built-in webcam might be low. Here is the suggested webcam by Logitech company which are C270i (720P) and C920 (1024P).
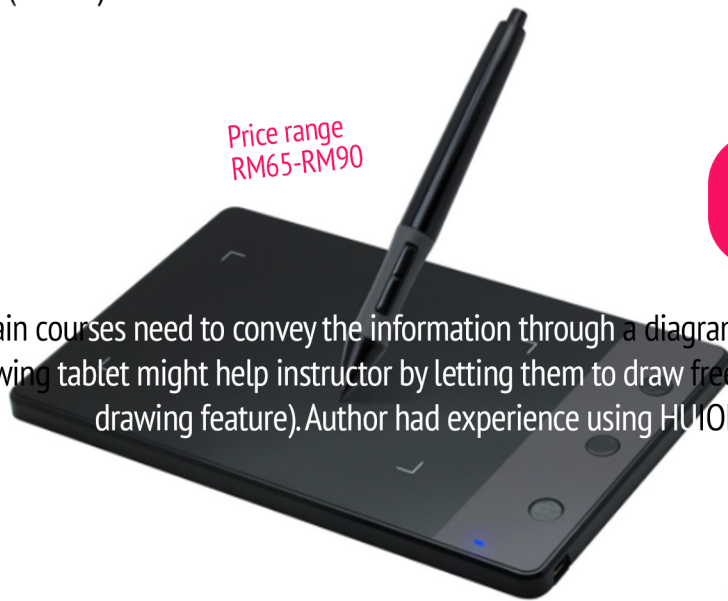
Drawing Tablet

Price range
RM65-RM90

Certain courses need to convey the information through a diagram or handwritten for better understanding. Here, the drawing tablet might help instructor by letting them to draw freely in the drawing software (or any software sup drawing feature). Author had experience using HUION H420, a small drawing tablet which is a palm size.

Laptop / Desktop

An instructor is recommended to have a laptop for mobility purpose. Online learning enforced the physical classes to be in an online form which leads to online distance. Nowadays the current laptop is price friendly and some of them even provided with the stylus.

Headphone / Microphone

Price range
RM40-RM90

Price range
RM500-RM600

Eventhough current laptop comes with bult-in microphone, sometime instructors need a microphone for a better audio. The audio received by the built-in laptop might not be captured well, which affect the sound. However, having additional microphone is an optional.

Online Conferencing

zoom

Google Meet

Online learning could be achieved without the conferencing tools. There are numbers of available tools for engaging the students in real-time. Google Meet and Zoom are the most popular nowadays. These tools provide different features. Google Meet is one of the most easy platform compared to other existing tools.

MOVING TO PEKAN CAMPUS

A VISIT FROM LPU MEMBERS TO THE NEW FACULTY OF COMPUTING CAMPUS AT PEKAN

14 July, Pekan – A visit to the new, gorgeous building of Faculty of Computing at Pekan had been organized for the LPU members of UMP to see the current condition of the faculty. The guests of the day included Tan Sri Ibrahim, CEO, UMP Deputy Vice Chancellors, and other members of the LPU. They were happy with the current condition of the campus.

The dean of the faculty, AP. Dr. Adzhar Kamaludin, Head of Technical, Mr. Syahrulanuar Ngah, and the team from the faculty accompanied the visit by showing around and introduced to the board members the facilities that have been equipped at the new building.

MOVEMENT BRIEFING TO ALL FACULTY MEMBERS
15 JULY 2020

BUILDING HANDOVER BRIEFING BY JKR PAHANG
1 SEPTEMBER 2020

FACULTY OF COMPUTING BUILDING HANDOVER CEREMONY
9 SEPTEMBER 2020

MOVING TO PEKAN CAMPUS
7 - 10 SEPTEMBER 2020

CALL FOR PAPERS

Dear Mr / Mrs / Drs / Assoc. Profs. /Profs,

We are proudly presenting **International Journal of Software Engineering and Computer Systems (IJSECS)**, ISSN: 2289-8522 (Print), eISSN: 2180-0650 (Online). IJSECS has been indexed in **DOAJ**, **ICI Journals Master List (ICI World of Journals)**, **MyJurnal**, **UDL Edge**, **MyCite** and **Google Scholar**.

Publication in IJSECS is *free of charge*. If you are interested, please submit your full paper to http://journal.ump.edu.my/ijsecs/about/submissions The submission is open for the whole year. However, please submit by **5th February 2021** for the upcoming issue, **Volume 7 Issue 1 2021**.

Topics of interest include, but are not limited to the following: Software Engineering, Computer Systems, Soft Computing and Intelligent System. For more details, please visit us at https://ijsecs.ump.edu.my.

Best regards,

A. Noraziah, PhD
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Tel: +6094244700

Call for submission in bit@FK

Are you an expert in your field? Do you like to express your view in writing?

The Bulletin team is inviting all readers to submit articles and news on the following topics to be featured in our incoming isssues. The topics are :

a. Technology in Trends - Green Computing, Big Data, IR 4.0, Blockchain
b. Perkongsian Rohani - Tazkirah
c. Food for thought - light reading and infotainment

Please send all submissions to buletinfskkp@ump.edu.my

Please include : Full name, pen name, copy of your article in Microsoft Word Format. You can also submit a photo if you like.
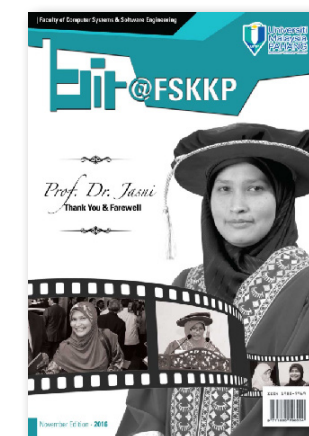
Rules:
+ Maximum - 1 page
+ Minimum - 1/2 Page
+ Font : Times New Roman
+ Size : 12
+ Normal Margin

OUR PREVIOUS BIT@FK

July 2016

Nov 2016

June 2017

Sept 2018

April 2019

Dec 2019

Scan me