

UM STEM ACTIVITIES

UNIVERSITY STUDENTS

Kem Kepimpinan Program My STEM Ambassador 2020

6th - 9th February 2020 Universiti Malaysia Terengganu (UMT)

Organised by: UM STEM Centre and Holistic Student Division, Department of Higher Education, Ministry of Education Malaysia. Coordinator of My STEM Ambassador Program: Ir. Dr. Mas Sahidayana Mohktar, Head of UM STEM Centre

Objectives

My STEM Ambassador Club

- 1. To empower students holistically; in terms of innovation, technology skills; entrepreneurship, social skills and volunteerism; and
- 2. To establish effective relationships between universities and the local community especially schools to enhance STEM understanding and







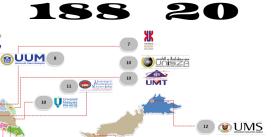
PUBLIC UNIVERSITIES

20

10 Harrison

10





4 UNMAS



5 **OUTM**

10 QUTHM



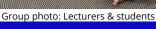




LECTURERS/OFFICERS









Team work: S.T.E.M Modules

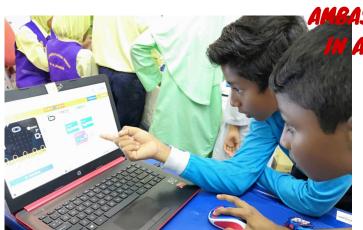


UM students and facilitators

STEM Day @ PNS

13th February 2020 Politeknik Nilai, Negeri Sembilan

Exhibition: Let's Go to Mummie's Lab and **UM STEM Centre**











Program Mini Teater STEM Selangor 30th January 2020 Pustaka Raja Tun Uda, Shah Alam



Trifecta Club

Centre for Foundation Studies in Science, UM

This club emphasized the learning of electronics and robotics, videography and 3D printing as we aimed for greater learning opportunities in the technological field which is crucial in conjunction with Industrial Revolution 4.0.





NEWSLETTER OF TRIFECTA CLUB

JANUARY

Trifecta Club's 2020 was kicked off with a couple of mini workshops held by its members for its members. On the 11th January, a workshop by Circuit Breakers members by the name "Byte to Terabyte" was launched. Club members were exposed to basic programming skills as well as how to use and utilise Arduino Kits. On the 13th and 16th January, Somnium Typographus held a workshop called "Think Your Design, Think TinkerCAD" where members learnt how to design 3D products using an application called TinkerCAD, where these designs can be sold online or transformed into reality using 3D printers. Though these workshops were held by our own members, a lot was learnt.

Aside from that, Trifecta Club's collaborative volunteering work Terra Saviour with UM Zero Waste Campaign was initiated with two questionnaire sessions at Taman Seri Sentosa, Kuala Lumpur. Other than as an exposure to the life of a researcher for the club members, the questionnaire serves as a gauge to the awareness of the citizens of Taman Seri Sentosa regarding the proper solid waste management. Much was to be gained and experienced by the club members, and we hope that we continue to learn more so long as this program still runs.



(O) trifecta1920 Trifecta Club Trifecta Club







Bengkel Penyediaan Laporan Program

My STEM Ambassador Fasa 1

17th - 18th January 2020 Sentral Riverview Hotel, Malacca

Organised by: UM STEM Centre and Holistic Student Division, Department of Higher Education, Ministry of Education Malaysia. Coordinator of My STEM Ambassador Program: Ir. Dr. Mas Sahidayana Mohktar, Head of UM STEM Centre

1st phase: UM, UTM, UMT, UTEM, UMS, UNISZA,

UNIMAP, UPSI, UUM & USIM











Bengkel Program My STEM Ambassador Fasa 2

18th - 19th January 2020 Sentral Riverview Hotel, Malacca

Organised by: UM STEM Centre and Holistic Student Division, Department of Higher Education, Ministry of Education Malaysia.

Coordinator of My STEM Ambassador Program:

Ir. Dr. Mas Sahidayana Mohktar,

Head of UM STEM Centre

2nd phase: UKM, UPM, UPNM, UMP, UNIMAS, UTHM, UIAM, UITM, USM & UMK





SAMSUNG COLLABORATES WITH UNIVERSITI MALAYA TO ENABLE THE FUTURE GENERATION OF MALAYSIA

Samsung's commitment to "Enabling People" is not just an ambition - it is a brand promise to continuously help people fulfil their true potential for a better future, and what better way to keep that promise than by empowering the next generation? At its core, Samsung is committed to building a world that provides greater access to education opportunities for youth.

Malaysia places great importance on education as a means of becoming a developed nation to meet the challenges and demands of a STEM-driven economy by 2020. By promoting Science, Technology, Engineering, and Mathematics (STEM) subjects among students, the government aims to prepare these students to fulfil the employment needs of the industries that fuel the Malaysian economy.

In line with the government's goal, Samsung Malaysia Electronics is teaming up with Universiti Malaya's (UM) STEM Centre to provide STEM students a wider variety of engaging learning opportunities through interactive devices that ignites creativity, curiosity and innovative thinking. Sharing the same objective to strengthen Malaysian students' interest in STEM education, Samsung is supporting UM by equipping its STEM Learning Space with Samsung Galaxy Tablets and a Smart TV to better facilitate STEM trainings and activities.



We are living in an age of ultra-connectivity emerging from the Fourth Industrial Revolution. Thus, it is critical to educate and nurture our youth with ample potential. At Samsung, we always strive to develop the capabilities of young generation, so I hope that through this initiative, Samsung's technology will empower the students to be innovative, intelligently connected and qualified to thrive in a technology-driven future," said Yoonsoo Kim, President of Samsung Malaysia Electronics.







The UM STEM Learning Space was not only designed to provide innovative and interactive learning in STEM activities, the space is also an initiative to inspire the involvement of educators, researchers, students, industries, and local communities to engage in STEM education. Working closely with the National STEM Movement, UM STEM Centre encourages the implementation of STEM programmes in Higher Education Institutions (HEIs) and schools to ensure that STEM education is well received by students.





"On behalf of everyone at UM STEM Centre, I would like to thank Samsung Malaysia Electronics for turning this space into a Smart STEM Learning Space. By leveraging on Samsung's technology, we are certain that it will further enhance the teaching and learning experience in STEM-related programmes to motivate and prepare the students for STEM careers"

Ir. Dr. Mas Sahidayana Mohktar Head of UM STEM Centre

STEM activities and meeting at STEM Learning Space

STEM Discovery Program 2019

2nd - 20th December 2019 (Week 1)







Dr. Sr Zafirah Al Sadat Zyed Built Environment

Dr. Wan Safwani Wan Kamarul Zaman Human Organ







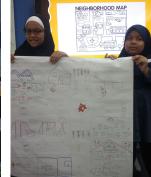


3RD DEC

Water Warriors UM

Dr. Yong Adilah Shamsul Harumain Junior City Planners









4TH DEC

Dr. Mahanom Jalil EZ-TC Kit: Plant Cloning

Dr. Mohd Arif Mohd Sarjidan Rocket Challenge









5TH DEC Dr. Nur Azah Hamzaid STEM Story Telling

Assoc. Prof. Dr.
Nahrizul Adib
Kadri
myImagineNATION
with Abang Bob
and Kak Mimiy









6TH DEC

Dr. Salmah Karman Trash to Ca\$h

Mr. Mohd Faiz Azmi UM Orchestra





STEM Discovery Program 2019

2nd - 20th December 2019 (Week 2)







How Do We Fly? Mr. Zharfan & Team









10TH DEC
You've Got To
Move It Move It!
Dr. Jadeera
Cheong Phaik
Geok Abdullah

Google Classroom
Ms. Saraswathy









11TH DEC

Story Jumper Ms. Saraswathy

Intelligent Robotics Dr. Zati Hakim Azizul Hasan









12TH DEC

STEM in Language Dr. Azlin Zaiti Zainal

Tower Challenge/ Paper House Sr Raha Sulaiman









13TH DEC

STEMBuild for Early Engineering Dr. Rose Amnah Abd. Rauf

Catapult to Space Ms. Nur Rasyidah





STEM Discovery Program 2019

2nd - 20th December 2019 (Week 3)







DIY Soap Let's Go To Mummie's Lab

Glitter-Slime Time! Assoc. Prof. Dr. Ninie Suhana Abdul Manan











17TH DEC

Rainbow STEM Challenge Dr. Hidayah Mohd Fadzil

Homopolar Motor Dr. Thamil Selvi Velayutham









18TH DEC

Bacteria Hunter Dr. G.Y. Annie Tan

3-D World Assoc. Prof. Dr. Vannajan S. Lee











19TH DEC

Training Your Deep CORE Muscle Dr. Victor Selvarajah Selvanayagam

A Tiny World Called NANO Assoc. Prof. Dr. Ong Boon Hoong









20TH DEC

Virtual Reality World Dr. Nasrul Anuar Abd Razak

How Fiber Optics Work: Getting Down to Fiber Basics Mr. Muhamad Zharif Samion





UM STEM Ambassador Corner!

STEM (1 pm - 2 pm) Tuesday

Kahoot! Malaya Science Trivial Competition

15th October 2019

Time : 1 pm - 2 pm

Venue: Microsoft-UM STEM Learning Space (UM STEM Centre)
This competition test your knowledge of science facts and applications of scientific principles. Science is the fundamental ingredients for a nation's success.





My STEM Ambassador Club conducting Kahoot! competition

MALAYA BUILDER CHALLENGE

22nd October 2019

Time: 1 pm - 2 pm

Venue: Microsoft-UM STEM Learning Space (UM

STEM Centre)

This competition tests your ability to build the tallest structure by using limited materials. You will need to apply the knowledge of stability and be creative.



Jelly-bean challenge. Tallest, stable and creative





Focus! Good job!



All participants from Kahoot Competition.



All participants from Malaya Builder Challenge

"Hidden Figures"

12th December 2019 Lecture Hall C, Faculty of Arts and Social Sciences, Universiti Malaya

Organised by: The U.S. Embassy in Malaysia and Universiti Malaya Gender Studies Programme in collaboration with UM STEM Centre.





Python for Kids

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12th, 14th, 15th, 21st & 22nd Dec 2019
Department of Chemistry, Faculty of
Science, Universiti Malaya
"Code, Learn and Grow Together"

It is about computer training with Basic Computer skills (Python, Scratch, Arduino, 3d printing) and Computational Aided Molecular Design courses (Molecular docking molecular dynamics (AMBER, GROMACS,), Quantum Calculation (Gaussian, DFT), Hyperchem, Virtual screening, and much more.

Code Club Malaysia. Free Class on "Scratch"

11th December 2019
Department of Chemistry,
Faculty of Science,
Universiti Malaya

Volunteers from UM Maker space, UMCIS, UM CompChem, and Autobotics









Southeast Asia Global Innovation Challenge 2019 "SEA-GIC2019"

7th December 2019 Department of Chemistry, Faculty of Science, Universiti Malaya





Hari Profesion Teknikal Negara 2019

3rd & 4th December 2019 TM Convention Centre.

STEM Coordinator: Ir. Dr. Mas Sahidayana Dept. of Biomedical Engineering Faculty of Engineering

Co-organiser:



























UM Chemistry Carnival

30th November 2019 Department of Chemistry, Faculty of Science, Universiti Malaya





Physics Open Day
Discover How Physics
& Materials Science Transform
Your Life

29th - 30th November 2019 Department of Physics, Faculty of Science, Universiti Malaya



PHYSICS OPEN DAY 2019

STEM FOR SHARED PROSPERITY

FORUM

29TH NOVEMBER 2019 02:45p.m. - 04:30p.m. PHYSICS DEPARTMENT, UM

In the fast changing world, science and technology are developing at an accelerated pace. New science and new technology are always invented by a group of very smart people such as recent demonstration of supremacy quantum computer and application of artificial intelligence. Malaysia is challenged by the dwindling number of STEM graduates compounded by widespread accusation of drop of quality of STEM graduates. How can Malaysia become more competitive with countries which are ahead of us and countries which are fast catching us from behind? How can parents, alumni, academia, parents, entrepreneurs, agencies and industries empower STEM for shared prosperity?



Minggu Sains Lembah Pantai

29th - 30th November 2019 KL Gateway Mall.

Organised by: Pejabat MP Lembah Pantai and various STEM

agencies, schools, NGOs.









International Youth Robot Competition (Malaysia) 2019 23rd - 24th Nov 2019 Dewan Tunku Canselor, UM

Organised by: MyRobot Sdn. Bhd. in collaboration with various agencies and UM STEM Centre



STEM APPRECIATION DAY CITRA

16th November 2019 UM & SMK SULTAN ABDUL SAMAD

STEM Coordinator: Dr. Wong Seng Yue & Dr. Rohana Mahmud

Centre for Internship Training and Academic enrichment (CITrA)

Organised by: CITrA, GIX1004: STEM APPRECIATION and UM STEM Centre







STEM in LIFE W

Objectives

1.to inculcate interest in STEM subjects 2.to create awareness of the importance of STEM subjects

3.to implement knowledge in daily life



DATE : 16.11.2019 (SATURDAY) ***)

TIME: 8.00 AM TO 12.30PM

VENUE: THE GYM OF SMK ABDUL SAMAD









Malaysia-China Technical & Vocational Education Forum

14th November 2019 Pullman Hotel KL Bangsar

Organised by: Kong Zi Institute UM &

Confucius Institute HQ China.

Co-organiser: ZTE Educational Management

Company & UM STEM Centre







BMEkeathon 2019

10th November 2019 Faculty of Engineering, UM

Dept. of Biomedical Engineering Faculty of Engineering Organised by: Dept. of Biomedical Engineering in collaboration with UM STEM Centre





FOR PARENTS & STUDENTS

AN INITIATIVE WITH VARIOUS PROGRAMMES AND ACTIVITIES THAT AIMS TO PROMOTE INTEREST IN SCIENCE, TECHNOLOGY. ENGINEERING AND MATHEMATICS (STEM) AMONG PRIMARY AND SECONDARY SCHOOL STUDENTS.

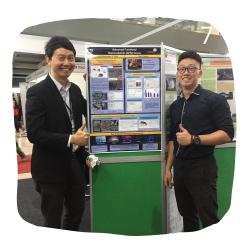
KL Engineering Science Fair 2019 1st- 3rd November 2019

MINES International Exhibition and Convention Centre (MIECC), Seri Kembangan, Selangor.

STEM Coordinator:

- 1. Prof. Dr. Sithi V. Muniandy Physics Department, Faculty of Science
- 2. Dr. Thamil Selvi A/P Velayutham Low Dimensional Material Research (LDMRC)
- 3. Prof. Ulung D.r Harith Ahmad Photonics Research Center (PRCUM)
- 4. Dr. Nurfikri Norjoharuddeen National Center for Particle Physics (NCPP)
- 5. Prof. Dr. Zurina Osman Center for Ionic UM (CIUM)
- 6. Dr. Vannajan S. Lee Chemistry Department, Faculty of Science
- 7. Assoc. Prof. Dr. Ong Boon Hoong Nanocat Research Centre
- 8. Sr. Raha Sulaiman Department of Building Surveying. Faculty of Built Environment
- 9. Ir. Dr. Mas Sahidayana Mohktar Let's Go To Mummies' Lab























Bengkel Penulisan Dewan Bahasa dan Pustaka (DBP) - Universiti Malaya (UM)

19th - 20th Oct 2019 (1) & 23rd - 24th Nov 2019 (2) Dewan Bahasa dan Pustaka (DBP)

STEM Coordinator: Dr. Hidayah Mohd Fadzil, Faculty of Education Organised by: DBP in collaboration UM STEM Centre











Selangor R&D and Innovation Expo

10th - 13th October 2019 MITEC, Kuala Lumpur

STEM Coordinator: Ir. Dr. Mas Sahidayana Dept. of Biomedical Engineering Faculty of Engineering. STEM Ambassador: Let's Go to Mummie's Lab team





HAGE SOME

STEM AMBASSADORS IN ACTION!







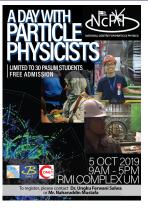
A Day with Particle Physicists

5th October 2019 The Cube, Level 4, RMIC, UM

STEM Coordinator: Dr. Nurfikri Norjoharuddeen

Organised by: National Centre for Particle Physics (NCPP)

Community involved: PASUM students











Projek STEM Bersama Sekolah Berintegrasi Gombak (INTEGOMB) 2017 -2020

STEM Coordinator: Prof. Dr. Yatimah Alias Organised by: Universiti Malaya Centre for Ionic Liquids (UMCiL)

Community involved: INTEGOMB students







STEM Mentor-Mentee 2020. 1) SK La Salle, PJ, 2) SK Bangsar, 3) SK (2) Petaling Jaya February - May 2020 4) SK Kg Tunku, 5) SK (6) Kota Damansara, 6) SK (9) Kota Damansara, 7) SK Kg. Selayang, Organised by: MESTECC, UMCares, UM STEM Centre, and National STEM Movement. Let's Go to Mummie's Lab. SK Kampung Luak, Miri, Sarawak. Project: Impact-24 - 28 February 2020 Oriented Interdisciplinary Research Grant (IIRG). Engineering, Mathematics, Science, Computer Exhibition & Innovation 27 February 2020 (EMSCEI) 2020. Dewan Al-Jazari, Politeknik, Shah Alam, Selangor. 16 - 20 March 2020 STEM Discovery Program. Microsoft - UM STEM Learning Space, HIR, UM. Organised by: UM STEM Centre. STEM Camp. SK La Salle, Sentul. Organised by: SK La Salle, Sentul in collaboration 1 April 2020 with UM STEM Centre. Evaluation, Training MyRobot. The Cube, Faculty of Engineering, UM. Organised by: 6 - 7 June 2020 MyRobot in collaboration with UM STEM Centre. 7 – 9 July 2020 Karnival STEM Peringkat Wilayah Persekutuan. Dewan Tunku Canselor, UM. International Youth Robot Competition (Malaysia) 2020. Dewan Tunku Canselor, 25 – 26 July 2020 UM. MyRobot in collaboration with UM STEM Centre. 27 – 29 July 2020 Young Explorer STEM Discoveries @ UM. Organised by: Yayasan TM, Let's Go to Mummie's Lab and UM STEM Centre. 27 - 31 July 2020 STEM Discovery Program. Microsoft - UM STEM Learning Space, HIR, UM. Organised by: UM STEM Centre. 11 - 14 August 2020 6th Kuala Lumpur International Conference on Biomedical Engineering 2020 (BioMed2020). Kuala Lumpur, Malaysia. Kindly visit https://umevent.um.edu.my/BioMed2020

Special events!

JOIN US!

Mid June (Regional Competition)
The British International Education
Association (BIEA) 2020
International STEM Youth Innovation
Competition: SOS STEM Plastic
Competition (Regional Competition).
Dewan Tunku Canselor, UM.



4 -5 July 2020
2nd International STEM Education
Conference 2020.
Istanbul, Turkey.
For more details, kindly visit
https://www.stempd.net/





PUBLICATIONS

BEST PRACTICES IN STEM MENTOR MENTEE

Price: RM 50

Excluding delivery/shipping

charges

Compilation of research paper presented at The 1st National STEM Seminar 2018.

Best Practices in STEM Mentor Mentee

STEM ACTIVITY BOOK

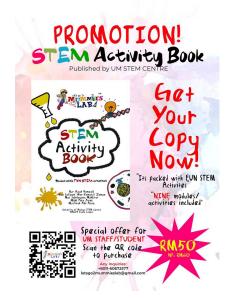
Price: RM 50

Excluding delivery/shipping

charges

Special offer: Purchase 500 or more STEM Activity books, get FREE half day STEM activities

for 100 students.



STEM APPRECIATION ACTIVITY BOOK

Price: RM 50

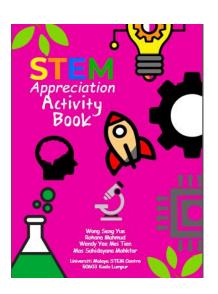
Excluding delivery/shipping

charges

This book is the output from

the GIX1004 STEM

Appreciation subject offered by CITrA Universiti Malaya.



More info, kindly contact us at 03-7967 3490 or stem@um.edu.my

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