Tuesday, August 9 (Day 1)

Tuesday, August 9, 09:00 - 10:30

**D1S1A: Special Track Service Learning (Dewan Utama)- August 9, 09:00 - 10:30**

Discussion leader: Dr. Aznah Nor Anuar, Universiti Teknologi Malaysia

- Integrating Service Learning in a Community-Based Participatory Research: A Case Study of Centre for Advancement in Rural Education Informatics
  Assoc. Prof. Dr. Shahida Sulaiman, Universiti Teknologi Malaysia
- Engineering Mapping system for Service Learning Project
  Prof. Dr. O Kaung Lim, Pusan National University, Korea
- Instilling Global Attributes Among Engineering Undergraduates Through A Community-Based Service Learning
  Dr. Aznah Nor Anuar, Universiti Teknologi Malaysia
- Cultivating Communication and Team-Working Skills to Undergraduates in Co-Curricular Service Learning
  Assoc. Prof. Dr. Dayang Norhayati Abang Jawawi, Universiti Teknologi Malaysia

**D1S1B: Parallel Sessions 1 (Dewan Seminar) - August 9, 09:00 - 10:30**

Chair: Dr. Zulfaa Mohamed-Kassim

9.00 am  The Development and Analysis of Concept Inventory for Electrical and Electronics Engineering Undergraduate Courses
  Nurul Hazlina Noordin

9.20 am  Investigation on the impact of laboratories subjects on BEEE and BEPE students in Universiti Tenaga Nasional
  Fazrena Hamid, Farah Hani Nordin, Ungku Anisa Ungku Amirulddin and Miszaina Osman

9.40 am  A Methodology on Assessing Program Educational Objectives for Undergraduate Engineering Programs
  Alvin Chua, Andres Winston Oreta and Rosemary Seva

10.00 am Application of Mathematical Competencies among Engineering Students through Service Learning Program
  Abdul Halim Abdullah, Aznah Nor Anuar, Mahani Mokhtar, Johari Surif, Nor Hasniza Ibrahim and Noor Dayana Abd Halim

10.20 am Outreaching and engaging students with STEM through AEROFAIR
  Zulfaa Mohamed-Kassim and Noorfazreena Kamaruddin
### D1S1C: Parallel Sessions 1 (Bilik Ilmuan 1) - August 9, 09:00 - 10:30

**Chair:** Dr. Mohd Fadzil Daud

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<th>Time</th>
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| 9.00 am | The Use of Augmented Reality Learning Environment to Enhance Students' Mental Cutting Skills and 3-Dimensional Development Skills  
Marlissa Omar, Dayana Farzeeha Ali and Mahani Mokhtar |
| 9.20 am | Engineering Student Motivation and Learning in Indonesia  
Lisa Benson and Cheryl Allendoerfer |
| 9.40 am | Readiness of Civil Engineering Faculty Members in Implementing MOOC  
Shahrin Mohammad, Yeong Huei Lee, Cher Siang Tan, Chang Sa'ar Chai, Mahmood Md. Tahir, Mohd Hanim Osman, Sariffuddin Saad, Yusof Ahmad, Baderul Hisham Ahmad, Mohd Yunus Ishak, Hidayah Abd Hassan, Che Ros Ismail and Mohd Nur Asmawisham Alel |
| 10.00 am | Emotional Intelligence of Engineering Undergraduate in a Service Learning Programme  
Mohamad Norhakim Sahroni, Sharifah Kamilah Syed Yusof, Zaleha Binti Ismail and Yudariah Mohammad Yusof |
| 10.20 am | Contextual Knowledge Elements Utilization In 3D CAD Model Visualization From Practicing Engineers Perspective  
Mohd Fahmi Adnan, Mohd Fadzil Daud and Muhammad Sukri Saud |

### D1S1D: Parallel Sessions 1 (Bilik Ilmuan 2) - August 9, 09:00 - 10:30

**Chair:** Dr. Kamilah Radin Salim

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<th>Time</th>
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| 9.00 am | Evaluation of Laboratory Facilities for Engineering Technology Programs in Malaysian Technical Universities  
Kamilah Radin Salim, Kamsiah Ismail, Habibah Norehan Haron, Rozita Juliana, Rosmah Ali, Noor Hamizah Hussain, Morina Abdullah, Norhayati Mohamed Nor, Normah Mulop and Zainai Mohamed |
| 9.20 am | Engineering Undergraduates’ Motivation in Learning Computer Programming  
Nor Azlinda Azmi, Khairiyah Mohd-Yusof, Fatin Phang, Saharudin Haron, Nor Alafiza Yunus, Zarina Abdul Muis and Syed Ahmad Helmi |
| 9.40 am | Evaluating Knowledge Transfer Success in Personal Learning Environments in Higher Learning Institution  
Nur Syafiqah Mohamad Sani and Noreen Arshad |
| 10.00 am | UTM Sustainable Living Laboratory Campus; Are the Implementations Effective?  
Rozana Zakaria, Gamal Al Qaifi, Nur IzieAdiana Abidin, Mohamad Sukeri Khalid, Abdul Rahim Abdul Hamid, Shaiful Amri, Eeydah Aminudin, Irina Safitri Zen and Masilah Bandi |
| 10.20 am | The Impact of Instructional Scaffolding in Social Collaborative Learning Environment on Engineering Students’ Knowledge Construction  
Tan May Ling and Jamalludin Harun |
**Tuesday, August 9, 11:00 – 13:00**

**Plenary Forum 1 (Dewan Utama)- August 9, 11:00 – 13:00**

Moderator: *Professor Dr. Wan Mansor Wan Mohammad, Universiti Kuala Lumpur*

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<tr>
<th>Time</th>
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</table>
| 11.00 am | Current Status and Future Direction in Engineering Education: Overcoming the Challenges | **Prof. Dr. Manuel Bellino** (Philippines)  
**Dr. Qaiser Hameed Malik** (Pakistan)  
**Prof. Dr. Ray Yueh-Min Huang** (Taiwan)  
**Dr. Eddie Ng** (Hong Kong)  
**Prof. Dr. Sung-Jin Song** (Korea)  
**Prof. Dr. Robin Clark** (UK)  
**Dr. Yogesh Velankar** (India) |

**Tuesday, August 9, 14:00 – 15:30**

**Plenary Forum 2: Industry Forum (Dewan Utama) - August 9, 14:00 – 15:30**

Moderator: *Associate Professor Dr. Naziha Ahmad Azli, Universiti Teknologi Malaysia*

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<tr>
<th>Time</th>
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| 14.00 pm | Engineering Education in Global Digital Economy and Its Impact on Developing Countries | **Dato’ Ir Dr. Lee Yee Cheon**  
*Malaysian Chairman, Governing Council, International Science Technology and Innovation Centre for South-South Cooperation under the auspices of UNESCO (ISTIC), Malaysia* |
| 14.30 pm | Future Direction and Challenges in Engineering Education in the 21st Century from Engineering Accreditation Viewpoint | **Prof. Dato’ Ir. Dr. Wan Hamidon Wan Badaruzzaman,**  
*Director of Engineering Accreditation Department (EAD), Board of Engineers Malaysia* |
Tuesday, August 9, 15:30 - 17:30

D1S2A: Special Track on Chemical Engineering Education (Dewan Utama)- August 9, 15:30 - 17:30

Discussion leader: Dr. Mohammad Tazli Azizan, Universiti Teknologi PETRONAS

- Improving Students’ Understanding Of Reaction Engineering Course Via Flipped-Coop Learning
  Dr. Raihan Mahirah Ramli, Universiti Teknologi PETRONAS, Malaysia
- Implementing Authentic Learning in a Green Boiler Technology Chemical Engineering Elective Course: Experiences at the University of Santo Tomas, Manila, Philippines
  Prof. Alberto A. Laurito, University of Santo Tomas, Philippines
- Using Problems In Teaching Difficult Chemical Engineering Content: An Example In Process Control
  Dr. Mohd Kamaruddin Abd Hamid, Universiti Teknologi Malaysia
- 1st Year Orientation Programme: Sustaining Attendance And Interest Of The New Generation
  Dr. Nurulidza Mansor, Universiti Teknologi PETRONAS, Malaysia
- Motivating Students Interest To Learn Using Active Learning Strategies For Separation Process II
  Dr. Nurhayati Mellon, Universiti Teknologi PETRONAS, Malaysia
- Integrated Course Design of the Introduction to Engineering Course
  Dr. Aziatul Niza Sadikin, Universiti Teknologi Malaysia

D1S2B: Parallel Sessions 2 (Dewan Seminar) - August 9, 15:30 - 17:30

Chair : Assoc. Prof. Dr. Fatin Aliah Phang

- 3.30 pm Enhancing Student's Problem Solving Skills in Technical and Vocational Education and Training
  Sharifah Zainaf, Roselainy Abdul Rahman and Robiah Ahmad
- 3.50 pm Use Cooperative Group Learning in Improving the Problem Solving Performance in a Surveying Course of Civil Engineering Students
  Maria Cecilia Paringit
- 4.10 pm A Framework for Learning Analytics Intervention in e-learning
  Si Na Kew and Zaidatun Tasir
- 4.30 pm Authentic Learning Environment for the Implementation of Data Structure Subject through MOOC: A pilot study
  Nor Bahiah Ahmad
- 4.50 pm What are Complex Engineering Problems in the Eyes of Engineering Lecturers?
  Fatin Phang, Syed Ahmad Helmi, Khairiyah Mohd-Yusof, Aznah Nor Anuar, Azmahani Abdul Aziz, Yusof Ahmad, Noorzana Khamis, Mohd Fadzil Daud and Yudariah Mohammad Yusof
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<th>Time</th>
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<tbody>
<tr>
<td>3.30</td>
<td>Adopting and Implementing Active Learning and Cooperative Learning Approaches in Lecture Based Engineering Class</td>
<td>Dereje Engida Woldemichael and Azman Zainuddin</td>
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<td>3.50</td>
<td>Engineering Students' Pattern of Metacognition during Complex Problem Solving at Digital Signal Processing Laboratory</td>
<td>Narina A. Samah, Hadjah Jaffri, Ahmad Zuri Sha'ameri, Usman Ullah Sheikh, Naziha Ahmad Azli and Lokman Tahir</td>
</tr>
<tr>
<td>4.10</td>
<td>Assessing Students' Practical Intelligence in Hands-On Electrical Laboratory via Psychomotor Domain by using Engineers Automated Testing Kit</td>
<td>Mohd Hisam Daud, Zal Bahri Hj. Razali and Maizam Alias</td>
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<tr>
<td>4.30</td>
<td>Outcomes Assessment and Analysis using iOBE</td>
<td>Zulfaa Mohamed-Kassim and Noorfazreena Kamaruddin</td>
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<tr>
<td>4.50</td>
<td>Impact of an Introduction to Engineering Course on First year students' view on engineering</td>
<td>Nur Fazirah Jumari, Khairiyah Mohd-Yusof and Fatin Phang</td>
</tr>
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<td>5.10</td>
<td>A Conceptual Framework for Assessing Mathematical Competencies of Engineering Students</td>
<td>Nur Izrah Mohd Puzi, Yudariah Mohammad Yusof and Naziha Ahmad Azli</td>
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<tbody>
<tr>
<td>3.30</td>
<td>Cognitive Conflict Strategies in Video-Based Learning Enhance Students' Conceptual Change</td>
<td>Radhiah Ab Rahim, Norah Md Noor and Norasykin Zaid</td>
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<td>3.50</td>
<td>Awareness and Procedural Knowledge as Predictors of Students' Intention to Use BookMyne: An Exploratory Study</td>
<td>Mohd Nihra Haruzuan Bin Mohamad Said and Zaleha Binti Ismail</td>
</tr>
<tr>
<td>4.10</td>
<td>Meta-analysis on Interaction in Online Learning</td>
<td>Noor Dayana Abd Halim and Masarah Abdul Mutalib</td>
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<tr>
<td>4.30</td>
<td>Towards Integrating GIS to the University's Educational Programme</td>
<td>Stephanie Mae Salcedo and Rejen L Albores</td>
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<tr>
<td>4.50</td>
<td>Open-Ended Malik &amp; Naveed Interventions (OMNI) Techniques for Engineering Freshmen</td>
<td>Qaiser Malik and Naveed Zafar</td>
</tr>
<tr>
<td>5.10</td>
<td>MOOCs in Engineering Education - a literature review</td>
<td>Azhar Rauf, Mohd Fadzil Daud and Mohd Nihra Haruzuan Bin Mohamad Said</td>
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TECHNICAL PROGRAM

Wednesday, August 10 (Day 2)

Wednesday, August 10, 09:00 - 10:15

**D1S3A: Special Track on Grand Challenges (Dewan Utama) - 09:00 - 10:15**

Discussion leader: Professor. Dr. Sung-Jin Song, Sungkyunkwan University

- Facilitating Learning and Teaching in a Common Core Course on Grand Challenges: A Blended Learning Approach  
  *Dr. Eddie Ng, Hong Kong University of Science & Technology*
- Grand Challenge Tech+ Innovator Program of Sungkyunkwan University Hub Center  
  *Prof. Dr. Sung-Jin Song, Sungkyunkwan University, Korea*
- Engineering a Holistic Education  
  *Prof. Dr. Mushtak Al-Atabi, Taylor’s University, Malaysia*

**D1S3B: Parallel Sessions 3 (Dewan Seminar) - 09:00 - 10:15**

Chair: Dr. Roselainy Abdul Rahman

- 9.00 am  
  Student perception of use and level of implementation of logbooks in individual final year projects  
  Sarah Junaid, Paul Gorman, Laura Leslie and Mark Prince
- 9.20 am  
  Teaching and Learning Intervention Strategy to Increase Students’ Use of Deep Learning Approach  
  Norsyarizan Shahri, Roselainy Abdul Rahman, Noor Hamizah Hussain and Yudariah Mohammad Yusof
- 9.40 am  
  An Innovative Approach to Develop Global Engineers by Supporting the Students via Diversity in Engineering Education  
  Rutika Ghariya, Kalp Bhatt, Tosh Shukla and Juned Shaikh
- 10.00 am  
  Importance of Oral Communication Strategies to Engineering Students  
  Hairuzila Idrus
### D1S3C: Parallel Sessions 3 (Bilik Ilmuan 1) - 09:00 - 10:15

Chair: Mdm. Nur Ayuni Shamsul Bahri

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<tr>
<td>9.00 am</td>
<td>Development of Problem-solving Process Rubrics (PPR) in Assessing Problem Solving Skills</td>
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<td>Nur Ayuni Shamsul Bahri, Naziha Ahmad Azli and Narina A. Samah</td>
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<tr>
<td>9.20 am</td>
<td>Perception of Lecturers on Problem Based Learning in Civil and Environmental Engineering Courses</td>
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<td>Filzah Amani</td>
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<td>9.40 am</td>
<td>Activity Theory: Inculcating Fundamental Engineering skills and Attributes Through Mini-Project Laboratory Activity</td>
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<td>Md. Shahar Aftanasar, Norizah Mohamad and Ahmad Nazri Ali</td>
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<tr>
<td>10.00 am</td>
<td>Impact of Faculty Satisfaction and Student Feedback on Students' Performance- A Case Study of FAST-National University</td>
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<td>Farrukh Idrees, Waseem Ikram and Azhar Rauf</td>
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### D1S3D: Parallel Sessions 3 (Bilik Ilmuan 2) - 09:00 - 10:15

Chair: Mdm. Azmahani Abd Aziz

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<tr>
<td>9.00 am</td>
<td>Promoting ethical skills in first year engineering students through socially relevant experiments</td>
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<td>Yogesh Velankar, Gopalkrishna Joshi and Preethi Baligar</td>
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<tr>
<td>9.20 am</td>
<td>Evidence-Based Personas of First Year Engineering Students as Potential Pedagogical Tool</td>
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<td>Aisha Mahmood, Yudariah Mohammad Yusof and Mohd Fauzi Othman</td>
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<tr>
<td>9.40 am</td>
<td>Skills development among first year engineering students through &quot;Introduction to Engineering&quot; course</td>
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<td>Nur Shahira Samsuri, Khairiyah Mohd-Yusof and Azmahani Aziz</td>
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<tr>
<td>10.00 am</td>
<td>A response to the twenty-first century challenges to philippine engineering education: innovative and revitalized</td>
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<td>graduate programs in engineering education</td>
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<td>Manuel Belino</td>
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### Wednesday, August 10, 10:15 - 11:00

**Keynote: Transformation in Engineering Education (Dewan Utama) - 10:15 - 11:00**

Chair: Prof. Dr. Khairiyah Mohd Yusof

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<tr>
<td>10.15 am</td>
<td>Engineering Education Practice: What Needs to Change?</td>
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<td>Professor Dr. Jeffrey E. Froyd, Texas A&amp;M University</td>
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### D2S1A: Special Track on Student Centred Learning (Dewan Utama) - 11:15 - 13:00

Discussion leader: Assoc. Prof. Dr. Yudariah Mohamad Yusof, Universiti Teknologi Malaysia

- Student Centred Active Learning: Why and How  
  Assoc. Prof. Dr. Lisa Benson, Clemson University, USA
- Students' Participation in Student-Centred Learning: What are the most encouraging elements?  
  Dr. Alias Masek, Universiti Tun Hussein Onn Malaysia
- Transformation from Teacher Centred Learning: The UTP Experience  
  Dr. Mohammad Tazli Azizan, Universiti Teknologi PETRONAS, Malaysia
- Transitions of Teaching Conceptions from Teacher Centred to Student Centred  
  Prof. Dr. Khairiyah Mohd-Yusof, Universiti Teknologi Malaysia

### D2S1B: Parallel Sessions 4 (Dewan Seminar) - 11:15 - 13:00

**Chair:** Assoc. Prof. Dr. Naziha Ahmad Azli

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| 11.15 am | Collaboration between University and Local Government Units on a National Flood Hazard Mapping Project  
Sim Joseph Fernandez, Alan Milano, Dave Charity Gambuta and Elizabeth Edan Albiento |
| 11.30 am | Preliminary Study on the Prominent Skills in the Entrepreneurial Skill Set in the Context of Civil Engineering Practice  
Christie Entika, Shahrin Mohammad and Mohd Khata Jabor |
| 11.45 am | Using an analytic hierarchy process to develop Innovation DNA for Industry-oriented applications in mechanical design of vocational college students  
Dyi-Cheng Chen |
| 12.00 pm | Civil Engineering Exit Test  
Yusof Ahmad |
| 12.15 pm | Engineering Education at Kanazawa Institute of Technology: To Foster Engineers Who can Make Ethically and Professionally Appropriate Decisions  
Fumihiko Tochinai |
| 12.30 pm | Collaboration between University and Local Government Units on a National Flood Hazard Mapping Project  
Sim Joseph Fernandez, Alan Milano, Dave Charity Gambuta and Elizabeth Edan Albiento |
**D2S1C: Parallel Sessions 4 (Bilik Ilmuan 1) - 11:15 - 13:00**

Chair: Assoc. Prof. Dr. Zaleha Ismail

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<tr>
<td>11.15 am</td>
<td>Harnessing Mathematical Thinking Powers of Engineering Students' in a Computer Support Learning Environment (CSLE)</td>
<td>Fereshteh Zeynivandnezhad, Zaleha Binti Ismail and Yudariah Mohammad Yusof</td>
</tr>
<tr>
<td>11.30 am</td>
<td>Lessons in the implementation of Continuous Quality Improvement in the Civil Engineering program of De La Salle University</td>
<td>Mario De Leon, Lessandro Estelito Garciano and Andres Winston Oreta</td>
</tr>
<tr>
<td>11.45 am</td>
<td>Enhancing the Employability of Engineering Graduates by Developing and Empowering the Faculties</td>
<td>Prafulla Hatte and Yogesh Bhalera</td>
</tr>
<tr>
<td>12.00 pm</td>
<td>Laboratory Practices for Formative Assessment in Undergraduate Microwave Engineering Education</td>
<td>Kok Yeow You</td>
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<tr>
<td>12.15 pm</td>
<td>Desired Mathematical Competencies in Outcome Based Engineering Curriculum</td>
<td>Soheila Firouzian, Zaleha Binti Ismail, Roselainy Abdul Rahman and Yudariah Mohammad Yusof</td>
</tr>
<tr>
<td>12.30 pm</td>
<td>Mathematical competencies among postgraduate students</td>
<td>Nur Athirah Aziz, Yudariah Mohammad Yusof and Zaleha Binti Ismail</td>
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**D2S1D: Parallel Sessions 4 (Bilik Ilmuan 2) - 11:15 - 13:00**

Chair: Dr. Nurul Farhana Jumaat

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<tr>
<td>11.15 am</td>
<td>Predicting Students' Performance based on Instructors' Pattern of Metacognitive Scaffolding</td>
<td>Nurul Farhana Jumaat and Zaidatun Tasir</td>
</tr>
<tr>
<td>11.30 am</td>
<td>Impact of Affirmative Action in Engineering Education: Case study of an affiliated private engineering college in India</td>
<td>Suhasini Desai</td>
</tr>
<tr>
<td>11.45 am</td>
<td>Decision Support System for Awarding Scholarship Using SAW and TOPSIS</td>
<td>Ni Gusti Ayu Putu Harry Saptarini and Putu Indah Ciptayani</td>
</tr>
<tr>
<td>12.00 pm</td>
<td>Effectiveness of Using BizzApss in Enhancing Students' Achievement With Different Learning Styles</td>
<td>Noor Dayana Abd Halim, Mahani Mokhtar and Abdul Halim Abdullah</td>
</tr>
<tr>
<td>12.15 pm</td>
<td>Measuring Critical Thinking In Online Discussion: Analysis Model</td>
<td>Nurul Nadwa Zulkifli, Noor Dayana Abd Halim and Noraffandy Yahaya</td>
</tr>
<tr>
<td>12.30 pm</td>
<td>The Impact of Feedback Phase to the Development of ICT Product: Case Study Software Project Course</td>
<td>Harry B. Santoso, Fauzan H. Sudaryanto and Wade Goodridge</td>
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<tr>
<td>12.45 pm</td>
<td>Video Learning Practices Enhancing Students Critical Thinking Skills</td>
<td>Nurul ‘Izzati Hamizan, Norasykin Zaid, Norah Md Noor and Mahani Mokhtar</td>
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Wednesday, August 10, 14:00 - 16:30

**D2S2B: Special Track on STEM Education (Dewan Seminar) - 14:00 - 16:30**

Discussion leader: Assoc. Prof. Dr. Fatin Aliah Phang, Universiti Teknologi Malaysia

- Strengthening STEM Education for Industry 4.0  
  Dr. Raslan Ahmad, Malaysian Industry-Government Group for High Technology (MIGHT), Malaysia
- Cultivate Living Skills through Young Innovate Program  
  Dr. Chew Yen Seng, Social Enterprise of Dream Catcher Sdn Bhd, Malaysia
- Education for Hire: Multi-Faceted Industry and Academia Collaborative Education Program in Building Sustainable Dynamic Workforce  
  Dr. NorAzmi Alias, Collaborative Research in Engineering Science & Technology Center, Malaysia
- Strengthening Sustainability of STEM Education through Smart Partnerships  
  Assoc. Prof. Dr. Zaleha Ismail, Persatuan Pendidikan Sains dan Matematik Johor (PPSMJ) Malaysia
- STEM Learning Activities at Centre for Engineering Education  
  Assoc. Prof. Dr. Fatin Aliah Phang, Universiti Teknologi Malaysia
- Cross-Border Learning for Developing International Perspectives on STEM Education  
  Dr. Suhaidah Tahir, Institut Pendidikan Guru Kampus Ipoh Malaysia
- STEM Education Experiences from Singapore: Harnessing the Formal and Informal Education Sectors for Synergy  
  Assoc. Prof. Dr. R. Subramaniam, Nanyang Technological University, Singapore.

**D2S2C: Parallel Sessions 5 (Bilik Ilmuan 1) - 14:00 - 16:30**

Chair: Dr. Muhammad Khair Noordin

2.00 pm  
Level of Non-Technical Skills Among Electrical Engineers in Malaysia: Perceptions from Fresh Engineers and Senior Engineers  
Muhammad Khair Noordin and Mohd Safarin Nordin

2.20 pm  
Multimedia Instruction Applications for Engineering Education  
Ataollah Zarei, Khairiyah Mohd-Yusof and Mohd Fadzil bin Daud

2.40 pm  
Enhancing Sustainability Knowledge using Problem among Engineering Students  
Azmahani Aziz, Khairiyah Mohd-Yusof and Amirmudin Udin

3.00 pm  
From Classroom To Commercialisation of Interactive Pressure Vessel Design, iPVD  
Nur Kamarudin

3.20 pm  
Measurement of Spiritual Quotient in the Student Holistic Development Programme  
Mohd Hanim Osman, Norazmalla Marni, Ajmain Saffar, Sarifuddin Saad, Shahrin Mohamad

3.40 pm  
Enhancing High Order Thinking Skills (HOTS) and Improving Teamwork Skills among Chemical Engineering Students through the Development of Board Game Activity via Cooperative Learning  
Mohammad Tazli Azizan, Hairuzila Idrus, Nurhayati Mellon, Suzana Yusup, Raihan Mahirah Ramli, Haslinda Zabiri and Dzulkarnain Zaini
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<tr>
<td>2.00 pm</td>
<td>A Design Framework of Teachers' Professional Development in Indonesia</td>
<td>Anton Subarno, Mei-Ying Chien and Wen-Fu Pan</td>
</tr>
<tr>
<td>2.20 pm</td>
<td>Developing Critical Thinking Skill Through The Use of Collaborative Asynchronous Online Discussion Based on Spod Model</td>
<td>Mohd Fadzli Ali</td>
</tr>
<tr>
<td>2.40 pm</td>
<td>Reinforcing Teacher’s Role in Retaining Students' Interests Discussing Online in their Learning Process at Malaysian Tertiary Institution</td>
<td>Mohd Fadzli Ali</td>
</tr>
<tr>
<td>3.00 pm</td>
<td>Implementation of Group endeavours in Service Learning among teachers in Singapore</td>
<td>Fatimah Zahra Abdul Mutalib, Mahani Mokhtar, Noor Dayana Abd Halim, Dayana Farzeha Ali and Abdul Rahim Hamdan</td>
</tr>
<tr>
<td>3.20 pm</td>
<td>Conceptual Framework of Innovative Product Development through Problem Oriented Project Based Learning</td>
<td>Sarimah Ismail, Nornazira Suhairom, Dayana Farzeha Ali, Rohana Hamzah</td>
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