

Ts ELMA DEWIYANA ISMAIL

Lecturer

College of Built Environment (CBE)
Universiti Teknologi MARA,
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Areas of Expertise

Building Information Technology, BIM Adoption, Technology Adoption

Personal Information

Ts Elma Dewiyana Ismail
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Universiti Teknologi MARA,
40450 Shah Alam,
Selangor, Malaysia

Academic Qualifications

MSc in Heritage and Conservation , 2010, Universiti Teknologi MARA
BSc in Building Surveying (Hons), 2008, Universiti Teknologi MARA
Diploma in Building Surveying, 2006, Universiti Teknologi MARA

Professional Member

Malaysian Board of Technologist (MBOT), Professional Technologist, 2022 - to date

Teaching and Learning

1. BSR552 - CONSTRUCTION TECHNOLOGY I
2. BSR455 - BUILDING PATHOLOGY I
3. BSR453 - BUILDING DESIGN

4. BSR514 - INTRODUCTION TO BUILDING INFORMATION MODELLING
5. BSR402 - BUILDING CONSTRUCTION AND MATERIALS I
6. BSR555 - BUILDING PATHOLOGY III

Student Supervision

Postgraduate (Masters)

Nurul Shahida Binti Rosli

Assessing issues on facilities provided in heritage mosque.

Undergraduate

1. Nurul Syakilla Syuhada Binti Jamaludin
A study on the maintenance work in low-cost apartments at Section 7, Shah Alam
2. Muhamad Akif Aiman Bin Mohd Asri
Factors that contribute to poor structural analysis and design of prefabricated components in IBS industry in Kuala Lumpur, Malaysia
3. Muhammad Eilman Arief Bin Rosli
Fire safety equipment maintenance at budget hotel in Shah Alam, Selangor
4. Mohamad Syazwan Amirul Bin Yusdy
The marketability of building surveying graduates in construction industry
5. Awg Arrauf Bin Awang Yusop
Students perceptions on sustainable construction towards green building implementation
6. Sitti Asma Binti Mat Aziz
A study on common building defects due to vandalism in female student residential UITM Shah Alam
7. Afiq Effkar Bin Aziz
Facilities management at public parks in Shah Alam
8. Syaza Syahirah Binti Salleh
Causes of scaffolding accident in construction sites.
9. Sitti Zulaikha Binti Hamsah
Building survey on the building material is hazardous for health
10. Normahuza Binti Zul Hilmi
Benefits and challenges of BIM for AEC industries in Malaysia.
11. Nur Farhana Binti Muhammed Faris
Study of the implementation process of BIM in construction projects
12. Embun Aqila Binti Md Azam
Risk in implementing building information modelling in Malaysia construction industry
13. Muhammad Taqiyuddin Bin Mohd Iqbal
Management issue of maintenance on heritage building in Malaysia.
14. Haizad Hafiz Bin Hairudin
Challenges of implementing sustainable construction in Malaysia housing industry.
15. Ahmad Ismail Bin Rahim

- The causes and types of accidents among construction workers in Malaysia
16. Syaza Syahirah Binti Salleh
Causes of scaffolding accident in construction sites.
 17. Nur Afifah Humaira Binti Azrul Haizad
Conservation of historical buildings in Penang
 18. Nur Farhana Binti Muhammed Faris
Study of the implementation process of BIM in construction projects
 19. Willy Tony
Maintenance of water supply for high-rise residential buildings
 20. Mohammad Aliff Iqbal Bin Hashim
Awareness level of design team on implementing of Building Information Modelling (BIM)
 21. Sitti Nurmarnlina Binti Kamaruddin
The management and maintenance of sewage treatment plant (STP)
 22. Muhammad Aliff Haiqal Bin Kamarudin
The essential aspect of fire safety management in high-rise building
 23. Nor Niza Atikah Binti Mohd Nor
Fire protection system for heritage building in Malaysia
 24. Auni Shafiqah Binti Mohd Hanafi - The significant of implementing software technology system in facility management on commercial building

Publications

1. Mohd Khairul Anuar Jalil, Mohd Shahir Mohamad Yusof, **Elma Dewiyana Ismail**, 2024, Factors Influencing Energy Efficiency System Implementation and Maintenance In Residential Green Buildings, 4th International Conference On Built Environment and Engineering 2024
2. **Elma Dewiyana Ismail**, 2023, Maximizing Efficiency and Sustainability: The Role of AI in Facility Management, RISE Magazine is published by Office of the Deputy Vice-Chancellor (Research and Innovation)
3. **Elma Dewiyana Ismail**, Muhammad Azwan Sulaiman, Jamalunlaili Abdullah, 2021, FSPU E-NEWSLETTER Volume 5, Unit Komunikasi Korporat & Web Media FSPU
4. **Elma Dewiyana Ismail**, 2022, Kehidupan Lestari Bermula di Rumah, Sinar Harian
5. **Elma Dewiyana Ismail**, Hikmah Kamarudin, 2021, Building Surveying - Webinar on Educational Talk Series: Hands-on Approach on Introduction to SketchUp, Faculty of Architecture, Planning & Surveying e-Newsletter Volume V
6. Hikmah Kamarudin, **Elma Dewiyana Ismail**, 2020, Aksesibiliti vs Covid-19: Apa Harapan OKU?, UiTM News Hub
7. **Elma Dewiyana Ismail**, Hikmah Kamarudin, 2020, UiTM's FSPU Student Wins the Outstanding Undergraduate Award in BEURC 2020, QS Wow News Letter
8. **Elma Dewiyana Ismail**, Hikmah Kamarudin, 2020, UiTM Continues its Academic Cooperation with UBH, Indonesia, QS Wow News Letter
9. Hikmah Kamarudin, **Elma Dewiyana Ismail**, 2020, Kerjasama antara UiTM, Malaysia dengan Universitas Bung Hatta, Indonesia, UiTM News Hub

10. Hikmah Kamarudin, **Elma Dewiyana Ismail**, 2020, Pelajar Ukur Bangunan dari FSPU Rangkul Outstanding Undergraduate Award BEURC 2020, UiTM News Hub
11. **Elma Dewiyana Ismail**, Mohd Khairul Anuar Jalil, Shahrul Yani Said, Noor Akmal Adillah Ismail, 2019, Benefits and Challenges of Heritage Building Information Modelling Application in Malaysia, THE 6TH INTERNATIONAL CONFERENCE ON SCIENCE AND SOCIAL RESEARCH
12. **Elma Dewiyana Ismail**, Md Najib Ibrahim, Mohd Khairul Anuar Jalil, Shahrul Yani Said, 2019, Benefits and Challenges of BIM for Heritage Buildings (Students' Perspective), THE 6TH INTERNATIONAL CONFERENCE ON SCIENCE AND SOCIAL RESEARCH
13. Noor Akmal Adillah Ismail, **Elma Dewiyana Ismail**, Raja Rafidah Raja Muhammad Rooshdi, 2018, A Review on Green BIM Potentials in Enhancing the Construction Industry Practice, IConBEE2018 International Conference on Built Environment and Engineering
14. **Elma Dewiyana Ismail**, Md Naib Ibrahim, Hasnizan Aksah, Shahrul Yani Said, 2015, THE GREEN ASPECTS OF ADAPTIVE REUSE OF HOTEL PENAGA, ASEAN-Turkey ASLI Conference on Quality of Life 2015, AcE-Bs ver. 2: AicQoL2015Jakarta, AMER International Conference on Quality of Life
15. **Elma Dewiyana Ismail**, Md Najib Ibrahim, 2015, Daylight Factor on Natural Lighting Analysis Simulation of an Adaptive Reuse Buiding: Penaga Hotel, Penang, ASEAN-Turkey ASLI Conference on Quality of Life 2015, AcE-Bs ver. 2: AicQoL2015Jakarta, AMER International Conference on Quality of Life
16. Robiah Abdul Rashid, Shahrul Yani Said, Nor Rima Muhammad Ariff, **Elma Dewiyana Ismail**, 2013, A conservation of Masjid Lama Kampung Kuala Dal, Kuala Kangsar, Perak: methods and techniques, iideX se 2013 Fakulti Seni Bina Perancangan dan Ukur
17. Robiah Abdul Rashid, **Elma Dewiyana Ismail**, Shahrul Yani Said, Nor Rima Muhammad Ariff, 2013, A Conservation of heritage timber building in Malaysia - Masjid Lama Kampung Kuala Dal, Kuala Kangsar, Perak, The 3rd International Building Control Conference 2013
18. Robiah Abdul Rashid, **Elma Dewiyana Ismail**, Ahmad Sharim Abdullah, 2013, Adaptive re-use of heritage buildings in Malaysia - A case study of Penaga Hotel in Penang, COAST 2013 - Colloquium on Administrative Science & Technology
19. Robiah Abdul Rashid, Ahmad Sharim Abdullah, **Elma Dewiyana Ismail**, Mohamad Nidzam Rahmat, 2013, Transfer of Development Right (TDR) as a Tool in Heritage Building Conservation in Kuala Lumpur, COAST2013 - Colloquium on Administrative Science & Technology
20. Hikmah Kamarudin, Nor Rima Muhammad Ariff, Wan Zuriea Wan Ismail, **Elma Dewiyana Ismail**, 2013, Auditing Malaysian Standard Compliance for Access and Facilities for Persons with Disabilities in Local Authority Buildings and its Surrounding, 3rd International Conference on Universal Design in the Built Environment 2013
21. Shahrul Yani Said, Hasnizan Aksah, **Elma Dewiyana Ismail**, 2013, Heritage Conservation and Regeneration of Historic Areas in Malaysia, ASIA Pacific International Conference on Environment-Behaviour Studies

Papers Presented and to be Published

1. **Building Information Modelling Adoption in Small and Medium-Sized Enterprises: A Bibliometric Analysis Review**, 4th International Conference on Built Environment and Engineering 2024 (IConBEE2024)
2. **Building Information Modelling (Bim): What's Hinderling Smes From Adopting Bim**, 2nd International Conference on Green & Safe Cities 2024 (IeGRESAFE2024)
3. **Strengthening SMEs for Resilience: A Review of Building Information Modelling's Role in Digital Transformation**, 7th International Research Conference on Multidisciplinary in Social Sciences and Technology (7th IRCMST 2024)
4. **Mapping SMEs' Intention to Adopt Information System Technology: Theories, Determinants, and Integrated Frameworks**, International Postgraduate Conference on Social Science 2025 (IPCSS 2025)

Research Grants and Contracts

1. Shahrul Yani Binti Said, Nor Rima Bt Muhamad Ariff, Julaida Binti Kaliwon, Ahmad Sharim Bin Abdullah, Muhammad Naquiddin Bin Johari, Hasnizan Binti Aksah, Mohd Shahir Bin Mohamad Yusof, Rohaslinda Binti Ramele @ Ramli, **Elma Dewiyana Binti Ismail**, Nadia Binti Kamaruddin, 2023-2024, Kajian Dilapidasi Bangunan Warisan Di Malaysia Menara Chimney Labuan, RM75,000.
2. Hasnizan Binti Aksah, Wan Zuriea Binti Wan Ismail, Robiah Binti Abdul Rashid, **Elma Dewiyana Binti Ismail**, Nadia Binti Kamaruddin, 2022 – 2024, Model Of Building Performance Evaluation For Historic Museum Building, RM20,000.
3. **Elma Dewiyana Binti Ismail**, Mohamad Sufian B Hasim (Dr), Shahrul Yani Binti Said (Dr), Ghazali Bin Mohd Amin, Julaida Binti Kaliwon, 2017 - 2019, Application Of Building Information Modeling (Bim) For Sustainable Conservation In Malaysia, RM20,000
4. Lilis Shereena Binti Safiee, Md Najib Bin Ibrahim, Mohamad Sufian B Hasim (Dr), Rohaslinda Binti Ramele @ Raml (Dr.), **Elma Dewiyana Binti Ismail**, 2017 - 2019, Facilities Management Relevant Competencies Assessment For Malaysian Public Universities : A Case Study Of Universiti Teknologi Mara, RM20,000
5. Ahmad Asari Bin Sulaiman (Prof. Madya Ir. Dr.), Khamariah Binti Othman, Dyg Suzana Binti Awang, Rokiah Binti Mahmood, Mohamad Fahmi Bin Hussin @ Mohamad (Dr), **Elma Dewiyana Binti Ismail**, 2017 – 2018, Intelligent Holistic Success Module (IHSM), RM38,000.
6. **Elma Dewiyana Binti Ismail**, Amran Bin Abdul Rahman, Robiah Binti Abdul Rashid (Dr), Shahrul Yani Binti Said (Dr), 2013-2016, Green Heritage Building Model, RM50,000.
7. Shahrul Yani Binti Said (Dr), Mohamad Nidzam Bin Rahmat (Dr), Syed Sobri Bin Syed Zubir, **Elma Dewiyana Binti Ismail**, New Sustainable Heritage-Led Urban Regeneration Model, RM50,000.

8. Ahmad Sharim Bin Abdullah, Norsalisma Binti Ismail (Dr), Robiah Binti Abdul Rashid (Dr), **Elma Dewiyana Binti Ismail**, Residential Building Maintenance Manual Framework, RM50,000.
9. Hasnizan Binti Aksah, Abdul Hadi Bin Nawawi (Prof. Dr.), Shahrul Yani Binti Said (Dr), **Elma Dewiyana Binti Ismail**, Refurbished Historical Building Functional Evaluation Model, RM50,000.
10. **Elma Dewiyana Binti Ismail**, Hasnizan Binti Aksah, Shahrul Yani Binti Said (Dr), Climate Change In Historical Areas, RM12,000.

Collaboration Experience

1. AJK in JKR BIM Day 2023
2. AJK in Projek Kajian Dilapidasi Bangunan Warisan Malaysia: Chimney Labuan 2023
3. AJK Khas Memorandum of Understanding UITM – Brunei, 2022
4. AJK Khas Memorandum of Understanding UITM – PKNS, 2022
5. AJK Khas Memorandum of Understanding UITM-UBH, 2020
6. Moderator/Trainer Projek Pembangunan Pelajar (HSM), UTECHTIUM, 2017

Innovation, Commercialization & Entrepreneurial

1. Project Manager Pasar Rabu, FSPU, 2022
2. AJK Built Environment Roadshow, 2022
3. Penyelaras Keusahawanan, KAB, 2023-2024
4. Project Manager Built Environment Recording & Promotion, 2022
5. AJK Khas Social Entrepreneurship ONE, KAB, 2022
6. AJK Projek Buku 5 Dekad FSPU, 2021
7. AJK Editorial Dalam Penerbitan 'Coffee Table Book' 5 Dekad Fspu, 2021

Services (University)

1. Juri Majlis Sua Raya UITM 2023
2. Juri Majlis Sua Raya UITM 2022
3. Penulis Teks Konvokesyen 2022

Services & Administration

1. AJK Misi Akademik FSPU, 2010 – 2023
2. Ketua Unit Laman Web bagi Fakulti Senibina Perancangan dan Ukur 2021-2023
3. Resource Person BSR453 (Building Design 1), FSPU, 2020 -2023
4. AJK 6th International Conference On Research Methodology In Built Environment And Engineering 2023 (ICRMBEE 2023)
5. AJK Hubungan Korporat dan Pelaporan Aktiviti, BS, FSPU, 2020 – 2023
6. AJK Perancangan Strategik, FSPU, 2021-2023
7. AJK Green CBE, FSPU 2022-2023
8. Bendahari Kelestarian KAB, 2022-2024

9. Penulis eSRR, KAB, 2023
10. AJK Kumpulan Penyelidik, Entiti Kecemerlangan Tier 5 UiTM, 2020 – 2022
11. Penyelia Latihan Industri PPUB, 2021 – 2022
12. AJK BE Media Engagement & Visibility, 2022
13. AJK Pengendalian Operasi Peperiksaan (Jadual Waktu dan Keperluan), BS, 2010 – 2022
14. Penulis Laporan Penilaian Kendiri, FSPU, 2022
15. AJK Pengurusan Kualiti 2022-2024
16. Wakil RISM Junior Organization 2018-2021
17. Ketua Pembangun MOOC BSR402 Building Construction and Materials 1, 2021
18. Timbalan Pengerusi Jawatankuasa Khas Projek Buku Lima Dekad Fspu 1967-2020
Fakulti Senibina, Perancangan & Ukur, 2021
19. Penulis Laporan Anugerah Kualiti Naib Canselor (AKNC) bagi Tahun 2021
20. Ahli Jawatankuasa Misi Akademik Di Ekspo Maya Selangkah Ke Uitm, 2021
21. Penasihat Persatuan Pelajar Ukur Bangunan (BISA), BS, 2019 – 2020
22. AJK SoshCo FSPU, 2018-2020

Awards & Recognitions

1. **Anugerah Perkhidmatan Cemerlang** (APC), UiTM, 2017
2. **Anugerah Penasihat Persatuan Terbaik**, FSPU, 2016
3. **Gold Award** (Learning BIM Software Through Social Media – Youtube), International Teaching and Learning Invention, Innovation Competition (iTaliic 2023), Center of Flexibility Learning, UiTM Pulau Pinang Branch, Leader
4. **Silver Award** (Building Construction and Materials: Game On with KAHOOT!, EDGII: Educational Design, Games, Invention & Innovation Competition 2022, UiTM, Leader
5. **Silver Award**, MOOC, Building Construction and Materials, The Virtual International e-Content Development Competition 2021, UiTM, Leader
6. **Bronze Award**, The 8th International Built Environment Undergraduate Research Competition, Universiti Malaya (BEURC), 2023, Supervisor (student: Nor Niza Atikah Mohd Nor)
7. **Bronze Award**, Mass-Customize Personal Items, Entrepreneurship Acculturation Program & OCOSOP Workshop, 2020
8. **Silver Award**, 4th International Built Environment Undergraduate Research Competition (BEURC), Universiti Malaya 2019, Supervisor (student: Nur Farzana Ahmad Romzi)
9. **Silver Award**, 4th International Built Environment Undergraduate Research Competition (BEURC), Universiti Malaya 2019, Supervisor (student: Muhammad Farid Sahli)
10. **Silver Award**, 4th International Built Environment Undergraduate Research Competition (BEURC), Universiti Malaya 2019, Supervisor (student: Mohd Zamzir Ikhzal Zamri)
11. **Bronze Award** MOOC, Building Control, The Virtual International e-Content Development Competition 2017, UiTM, Team Member

Contribution to Society

1. CSR Program in Kampung Orang Asli Gerachi Jaya (2019)
2. Covid19 Donation Drive for Asrama Anak Yatim Sekendi (2020)
3. Buy and Donate Program for Building Concrete Bridge in Jambongan Island, Sabah (2020)
4. Projek 1000 Helai Sarung Bantal untuk Anak-anak di Hospital (2020)

Other Activities

1. Participant, Complete Research Methodology for Primary Quantitative Data Workshop, Btech Postgraduate Academy, 2025
2. Participant, 2-Day Intermediate Workshop on PLS-Sem Version 4.0, Power Action Resources, 2025
3. Participant, 2-Day Basic Workshop on PLS-Sem Version 4.0, Power Action Resources, 2024
4. Participant, Seminar Mantap Asas Sebutan Huruf (SMASH), Quran Pro Academy, 2024
5. Participant, 1st BIMRG Postgraduate Colloquium, Revolutionizing Construction Practice Through Innovation and Transformation, 2024
6. Participate, Preparing data for Analysis Workshop, Boffin Event Management, 2024
7. Participant, AI-Assisted Critical Review Paper Writing, Universiti Kebangsaan Malaysia, 2024
8. Participant, Strategies for Graduating on Time, Universiti Malaysia Terengganu, 2024
9. Participant, Webinar Kesembuhan dari Masalah Kesehatan Mental, Universiti Pendidikan Sultan Idris, 2023
10. Participant, Pertandingan Mencipta Logo Sambutan FSK UiTM 20 Tahun, 2024
11. Participant, Kategori Akademik & Antarabangsa: Anugerah Inovasi, Pengajaran & Pembelajaran, CBEEEx 2022