# **ABDUL RAZAK BIN SAPIAN**



- KULLIYYAH OF ARCHITECTURE AND **ENVIRONMENTAL DESIGN**
- IIUM Gombak Campus
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المؤهل العلمي

- Ph.D in Architecture
- Bachelor in Hons.
- · Bachelor in Architecture
- Matriculation

#### مسؤوليات التدريس

ARCHITECTURAL DESIGN VI (STUDIO) 2006/2007

**BUILDING CONSTRUCTION & MATERIALS 3** 2012/2013 2013/2014 2014/2015

BUILDING CONTRACT AND CONTRACT 2006/2007 2007/2008 2008/2009 **ADMINISTRATION** 

**BUILDING CONTRACT OR CONTRACT DOCUMENTATION** 

CONSTRUCTION LAW AND PRACTICE 2008/2009 2009/2010 2010/2011 2011/2012

**DESIGN THESIS** 2003/2004 2004/2005

**DESIGN THESIS 1** 2009/2010 2010/2011 2011/2012

**DESIGN THESIS 2** 2008/2009 2009/2010 2010/2011 2011/2012

**DESIGN WORKSHOP** 2018/2019

2003/2004 2006/2007 2007/2008 2010/2011 **ENVIRONMENTAL CONSCIOUS DESIGN** 2012/2013 2013/2014 2014/2015 2016/2017

2005/2006 2006/2007 2007/2008

HERITAGE STUDIES 2006/2007 2009/2010 2010/2011

INTEGRATED/MULTI-DISCIPLINARY PROJECT 1 2003/2004

LAW AND CONTRACT IN CONSTRUCTION 2017/2018

PRE-DESIGN THESIS 2004/2005

PROFESSIONAL OFFICE PRACTICE &

2005/2006 MANAGEMENT

PROFESSIONAL PRACTICE & MANAGEMENT 2 2012/2013 2013/2014 2014/2015 2015/2016

PROFESSIONAL PRACTICE AND OFFICE MANAGEMENT	2006/2007 2007/2008 2008/2009
RESEARCH METHODOLOGY IN ARCHITECTURE	2016/2017 2017/2018 2018/2019 2019/2020 2020/2021
RESEARCH METHODS FOR THE BUILT ENVIRONMENT	2011/2012
RESEARCH METHODS IN ARCHITECTURE	2013/2014

## المشاريع البحثية

### **In Progress**

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2019 - Present	A Novel Method in Nurturing Students? Motivation and Resilience Through a Validated Embedded Multi-Dimensional Student Engagement Framework (Use of Gamification) for Higher Learning Institution	
2019 - Present	Perunding bidang Rekabentuk Bandar bagi Pelan Pengurusan Pembangunan Persisir Pantai Pekan Kuah-Klebang, Langkawi Kedah	
2019 - Present	Air Flow Characteristics and Behaviour Around Openings with Various Types of Shading Elements	
2019 - Present	A Green Operation Practices Framework for Small and Medium Chalet Operators at East Peninsular Malaysia Marine Park Islands	
2019 - Present	Perunding bidang Rekabentuk Bandar bagi Pelan Pengurusan Pembangunan Persisir Pantai Pekan Kua-Klebang, Langkawi Kedah	
2019 - Present	Smart Interior Design (SID) Framework as an Integrated Energy Efficiency Approach for Smart Building and IoT-Driven Future.	
2019 - Present	Seamless contracting and contractual provisions framework to reinforce BIM collaborative and integrative environment in the Malaysian construction industry	
2018 - Present	Kajian Garis Panduan Pembangunan STRATUM dan Kajian Kes	
2018 - Present	Kajian dan Pembangunan Standard Industri Pembinaan Perumahan Kebangsaan	
2016 - Present	Enhancing the Green Building Index (GBI) Malaysia with Biomimicry Life's Principles (BLP) in Alleviating the Urban Heat Island (UHI) Effect for the Built Environment	
2013 - Present	Regenerative Islamic Heritage Research Unit(RIHRU)	
2013 - Present	ISLAMIC ARCHITECTURAL HERITAGE RESEARCH UNIT(ISArcH)	

2012 - Present	IIUM Master Plan (Planning Soft and Hard Scape)			
Unknown - Present	Assessment of Digitization and Digital Archiving of Islamic Applied Arts and Design Artworks using Available Digital Technologies, Cloud Storage and Cloud Computing			
	Completed			
2018 - 2018	Kajian dan Pembangunan Standard Industri Pembinaan Perumahan Kebangsaan			
2015 - 2018	Identifying the Minimum Invasive Active Fire Protection Measures for Malaysian Heritage Buildings Towards Better Preservation of the Built Heritage			
2014 - 2018	Development of Cost Modelling Prediction Tool for Green Home			
2013 - 2017	Development of Ecological Indicators for Islamic Eco-Campus Environment			
2013 - 2016	The Provision of Research Consultancy for Bako Master Plan Study			
2013 - 2015	The Provision of Research Consultancy for Bako Master Plan Study			
2013 - 2016	Empirical Evaluation of Aesthetics Preferences and Environmental Performance of Sun Shading Devices Using Carving of Malay Traditional Houses			
2010 - 2012	CFD Investigations on the Potential of Solar Induced Ventilation in Enhancing the Stack Ventilation Performance for Hot and Humid Climate.			
2010 - 2012	CFD Investigations on the Potential of Solar Induced Ventilation in Enhancing the Stack Ventilation Performance for Hot and Humid Climate.			
2007 - 2011	Crime Prevention Through Housing Design and Planning: A Study on Terrace Housing Areas in Kuala Lumpur and Selangor			
2007 - 2011	Emulating the Practice of "Buying Off the Plan" in the Housing Industry in Australia: A Feasibility Study for Malaysia			
2004 - 2010	The Effect of Wider Frontage of The Terrace House (TH) to Natural Ventilation			

## المنشورات

### Article

2020	Baitul Rahmah: a final evolution of the Malay classical style amidst change. Cultural syndrome , 2 (1) pp.78-99
2020	Women in Construction Boots: The Enabling Factors from the Perspective of Female Adolescents. International Journal of Psychosocial Rehabilitation , 24 pp.1-8
2019	Natural ventilation for energy efficient office buildings: a comparative analysis on three buildings in Kuala Lumpur. International Journal of Integrated Engineering , 11 (4) pp.252-259

2019	Reviewing and identifying the green criteria in relation to the building cost: project management. Journal of Advanced Research in Engineering Knowledge , 6 (1) pp.30-34
2019	A review of sustainable design in the automotive industry. Journal of Architecture, Planning and Construction Management , 9 (2) pp.57-68
2018	Mosque: A statement of citizenship. Planning Malaysia, 16 (1) pp.96-104
2018	Women as skilled labour: A review of issues, challenges and prospects. International Journal of Engineering & Technology , 7 (3.25) pp.441-445
2017	<u>Translation of social citizenship to architecture &amp; built environment: A methodological review.</u> Planning Malaysia: Journal of the Malaysian Institute of Planners , 15 (1) pp.235-244
2017	Potential of voids to enhance natural ventilation in Medium Cost Multi-Storey Housing (MCMSH) for hot and humid climate. Potential of Voids to Enhance Natural Ventilation in Medium Cost Multi-Storey Housing (MCMSH) For Hot and Humid Climate , 12 (10) pp.3137-3144
2017	CFD modeling of natural ventilation in a void connected to the living units of multi-storey housing for thermal comfort. Energy and Buildings , 144 (1) pp.1-16
2016	The effects of void on natural ventilation performance in multi-storey housing. Buildings , 6 (3) pp.1-19
2016	A comparative analysis on materials and resources in green assessment tools for various countries. Key Engineering Materials , 700 pp.256-265
2016	Site planning and orientation for energy efficiency: a comparative analysis on three office buildings in Kuala Lumpur to determine a location for building shading device. Key Engineering Materials , 700 pp.247-255
2015	Application of solar-induced ventilation prototype in Small and Medium Enterprise building. Indoor and Built Environment , 24 (3) pp.384-400
2014	The journey of murabbis in architecture pedagogy: the case of studio teaching as laboratory of passion and duty to future khalifas of the built environment. World Applied Sciences Journal (30) pp.148-166
2014	Using computational fluid dynamics in the determination of solar collector orientation and stack height of a solar induced ventilation prototype. Pertanika Journal of Social Science & Humanities , 22 (1) pp.273-288
2014	Mass flow rate induced by combined roof solar roof collector and vertical stack in hot humid climate. Journal of Green Building , 9 (1) pp.166-177
2013	Thermal comfort investigation in traditional and modern urban canyons in Bandar Abbas, Iran. Pertanika Journal of Social Science & Humanities , 21 (4) pp.1491-1515
2011	A new concept design of a motorbike with 3D model for the Malaysian market. Journal of Design Research , 9 (1) pp.16-43
2011	Microclimate and thermal comfort of urban forms and canyons in traditional and modern residential fabrics in Bandar Abbas, Iran. Modern Applied Science, 5 (2) pp.43-56

2010	Enhancement of stack ventilation in hot and humid climate using a combination of roof solar collector and vertical stack. Building and Environment , 45 (10) pp.2296-2308
2009	Validation of the computational fluid dynamics (CFD) method for predicting wind flow around a high-rise building (HRB) in an urban boundary layer condition.  Journal of Construction in Developing Countries , 14 (2) pp.1-20
2008	Evaluation of residential satisfaction of low-cost housing in Kano state. Al-Risala (8) pp.79-94
	Conference or Workshop Item
2019	A review of sustainable design in the automotive industry. In: National landscape Architectural Seminar
2019	Preserving built heritage through education & research for sustainability: IIUM perspective & experiences. In: Simposium Kerajaan Tempatan Peringkat Kebangsaan 2019
2018	Past, current and future perspectives of housing development and policy in Malaysia. In: 7th International Conference on Law And Society (ICLAS 7)
2017	Retrospect hospital project development from briefing to completion: Case study of IIUM Teaching Hospital experiences. In: Seminar 'Lessons Learnt': Projek Fasiliti Kesihatan & Hospital
2017	Evolution of infectious disease ward design in Malaysia: Case study. In: International Union of Architects' Public Health Group (UIA-PHG) Annual Meeting
2014	Extracting the principles of sustainability from the architecture of colonial hospitals in Malaysia: appreciating the past wisdoms as best practices. In: XXVth International Union of Architects World Congress
2013	The journey of murabbis in architecture pedagogy: The case of studio teaching as laboratory of passion and duty to future khalifas of the built environment. In: International Conference on Innovation Challenges in Multidisciplinary Research & Practice (ICMRP) 2013
2013	Hospital design in tropical Malaysia - towards a green agenda. In: 33rd UIA/PHG International Seminar on Public Healthcare Facilities
2013	Hospital designs in tropical Malaysia: towards a green agenda. In: UIA-PHG Annual Healthcare Forum + GUPHA Meeting at IIDEX Canada
2012	The shaping of an ibadah friendly hospital: learnings from the bimaristan of the evergreen past and the practicality of today's demands. In: 8th World Congress and Exhibition on Design and Health 2012
2012	Natural ventilation around open round floors with pilotis in high-rise residential buildings in tropical areas: harmonization of modern and traditional housing in tropical areas. In: 2nd International Conference on Archi-Cultural Translations through the Silk Road (iaSU2012 JAPAN)
2012	Development & application of solar induced ventilation prototype for Small and Medium Enterprise (SME) building. In: Seoul International Invention Fair 2012 (SIIF 2012). COEX. Seoul. South Korea

2012	climate . In: ITEX 2012
2012	Application of solar induced ventilation prototype in Small and Medium Enterprise (SME) building . In: ITEX 2012
2012	Reliving the traditional masjid architecture in contemporary world : the case of Masjid Al Falah - KAED Community Project. In: IRIIE 2012
2012	Natural ventilation around open ground floor or pilotis of high rise residential building: harmonization of modern with traditional housing in tropical areas. In: Archi-Cultural Translations through the Silk Road 2nd International Conference
2012	An evaluation of government low cost housing layout plans and facilities in Kuala Lumpur . In: International Conference on Innovation and Technology for Sustainable Built Environment (ICITSBE 2012)
2010	Configuring the nature of colonial hospital architecture in peninsular Malaysia- serie 1- Special studies on the tuberculosis ward and hospital administration building typologies of Kota Bharu Hospital. In: IIUM Research, Innovation & Invention Exhibition (IRIIE 2010)
2009	Property crime prevention in Malaysian housing: Issues and challenges . In: UMRAN 2009: Healing The World
2009	An invention of "build-then-sell" in Malaysia via the housing law. In: CIBW 107 Symposium on Construction in Developing Economies: Commonalities Among Diversities
2008	Evaluation of residential satisfaction of low-cost housing in Kano state. In: 7th Annual Conference Management in Construction Researchers' Associations MICRA 2008
2007	Effect of staggered housing layout on internal airflow of houses in Malaysia. In: 24th International Conference on Passive and Low Energy Architecture (PLEA 2007)
2005	Open space for people: an overview of open space typologies and utilization in Kuala Lumpur. In: The 6th International Seminar on Sustainable Environment and Architecture (SENVAR)
2004	The association between landscape design elements and human activities in hot humid outdoor urban spaces - case studies in Kuala Lumpur city. In: JSPS-VCC Seminar on Passive Design Considerations in Built Environment
2003	Air velocity behavior at courtyards in the tropical climate: case studies of courtyards at IIUM Campus. In: Seminar on Advances in Malaysia Energy Research
2002	Towards a sustainable environment: an analysis on courtyards microclimate in the tropical region. In: Building Research and the Sustainability of the Built Environment in the Tropics
2000	Air velocity behaviour at tropical urban plazas adjacent to tall buildings: a case study of Kuala Lumpur. In: Sustainable Environment Architecture (SENVAR)

- 2013 <u>Istana Kuala Cegar: nostalgic splendour behind a humble facade.</u> IIUM Press . ISBN 978-967-418-272-4
- 2013 Rumah Tok Menteri II: a continuation of generations. IIUM Press . ISBN 978-967-418-255-7
- Tracer study 2011 First Degree and Post Graduates: International Islamic
  University Malaysia. Alumni and Career Services Division, International Islamic
  University Malaysia . ISBN 798-967-10826-1-4

#### **Book Section**

- 2016 Reminiscing traditional masjid architecture in a contemporary world: The making of Masjid Al-Falah. In: Dimensions of Masjid Architecture-Perspectives and Writings in Theory and Design Kulliyyah of Architecture and Environmental Design, IIUM . ISBN 978-983-3142-33-0 , pp.199-206
- 2016
  Reminiscing traditional masjid architecture in a contemporary world: The making of Masjid Al-Falah. In: Dimensions of Masjid Architecture-Perspectives and Writings in Theory and Design Kulliyyah of Architecture and Environmental Design, IIUM . ISBN 978-983-3142-33-0 , pp.199-206