



## GS. DR. MOHD AMIRUL BIN MAHAMUD

Geography Section  
School of Humanities

✉ [mohd.amirul@usm.my](mailto:mohd.amirul@usm.my)

☎ 04-6536040

## BIOGRAPHY

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Mohd Amirul Mahamud is a senior lecturer at the School of Humanities, Universiti Sains Malaysia. He is also a research fellow at the Centre for Global Sustainability Studies (CGSS-USM) and River Engineering and Urban Drainage Research Centre (REDAC-USM). His research interest is Geographical Information Systems (GIS) and its application in urban and land use, social and sustainability studies. Currently, he is a professional member of the Institute of Geospatial and Remote Sensing Malaysia (IGRSM). Dr. Amirul served as an editorial board member to Journal of Asian Geography (JAG) and Intelligent Control and System Engineering (ICSE).

## AREAS OF EXPERTISE

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- GEOGRAPHICAL INFORMATION SYSTEM (GIS)
- URBAN AND LAND USE MODELLING
- SPATIAL DATA MODELLING AND DATABASING

## ACADEMIC QUALIFICATION

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- **PHD (2021), (Geographic Information System)**  
Universiti Sains Malaysia (USM)
- **MSc. (2010), (Mathematics)**  
Universiti Sains Malaysia (USM)
- **BSc. (Hons.) (2009), (Mathematics)**  
Universiti Sains Malaysia (USM)

## ADMINISTRATIVE DUTIES

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- **PROGRAM CHAIRPERSON (MALAYSIAN CIVIL DEFENCE FOR UNIVERSITY STUDENTS)**  
01 Sep 2023 - present (Centre for Co-curricular Programme)
- **RESEARCH FELLOW**  
18 Nov 2023 - present (River Engineering and Urban Drainage Research Centre (REDAC))
- **RESEARCH FELLOW**  
15 March 2023 - present (Centre for Global Sustainability Studies (CGSS))

## MEMBERSHIPS

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- Professional Member, Institution of Geospatial and Remote Sensing Malaysia (IGRSM). Professional Member ID: ML988.
- Ordinary Member. Water Watch Penang (WWP). Ordinary Member ID: OM027.

## AWARDS AND STEWARDSHIP

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- Anugerah Geran Penyelidikan Antarabangsa, Anugerah Kecemerlangan Pusat Pengajian Ilmu Kemanusiaan, 2023.
- Penerbitan Jurnal Berindeks, Anugerah Kecemerlangan Pusat Pengajian Ilmu Kemanusiaan, 2022.
- Penyeliaan Cemerlang (MA Mode Campuran & Pelajar Tahun Akhir) (Geografi), Anugerah Kecemerlangan Pusat Pengajian Ilmu Kemanusiaan, 2022.
- Hadiah Sanjungan (Kategori Penerbitan Jurnal 2021), Anugerah Sanggar Sanjung, Universiti Sains Malaysia, 2022.
- Excellence in Innovation Award (Special Award) – SPT-Sim, 7th International Invention Innovation Competition in Canada (iCAN), 2022
- Gold Medal - Framework for Connecting 17 Sustainable Development Goals (SDGs), 7th International Invention Innovation Competition in Canada (iCAN), 2022
- Gold Medal – SPT-Sim, 7th International Invention Innovation Competition in Canada (iCAN), 2022

## PUBLICATIONS

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### Article in Journal

#### WoS

1. Mahamud, M.A., Saad, N.A.\*, Zainal Abidin, R., Yusof, M.F., Zakaria, N.A., Mohd Amiruddin Arumugam, M.A.R., Mat Desa, S., and Md. Noh, M.N. (2022). Determination of Cover and Land Management Factors for Soil Loss Prediction in Cameron Highlands, Malaysia. *Agriculture*, 12/16, 1-11.
2. Tew, Y.L., Tan, M.L., Samat, N.\*, Chan, N.W., Mahamud, M.A., Sabjan, M.A., Lee, L.K., See, K.F., and Seow, T.W. (2022). Comparison of Three Water Indices for Tropical Aquaculture Ponds Extraction using Google Earth Engine. *Sains Malaysiana*, 51/2, 369-378.
3. Tew, Y.L., Tan, M.L.\*, Kwok, P.C., Samat, N., and Mahamud, M.A. (2022). Analysis of the Relationship between Climate Change and Land Use Change using the ESA CCI Land Cover Maps in Sungai Kelantan Basin, Malaysia. *Sains Malaysiana*, 51/2, 437-449.
4. Bandira, P.A., Tan, M.L.\*, The, S.Y., Samat, N., Shaharudin, S.M., Mahamud, M.A., Tangang, F., Liew, J., Chung, J.X., and Samsudin, M.S. (2022). Optimal Solar Farm Site Selection in the George Town Conurbation Using GIS-Based Multi-Criteria Decision Making (MCDM) and NASA POWER Data. *Atmosphere*, 13, 2105.
5. Bandira, P.A., Mahamud, M.A., Samat, N.\*, Tan, M.L., and Weng, C.N. (2021). GIS-Based Multi-Criteria Evaluation for Potential Inland Aquaculture Site Selection in the George Town Conurbation, Malaysia. *Land*, 10, 1174.
6. Zainal Abidin, R., Mahamud, M.A.\*, Yusof, M.F., Zakaria, N.A., and Mohd Amiruddin Arumugam, M.A.R. (2021). Determination of Cover Management and Soil Loss Risk Mapping by Sub-Districts and River Catchments of Cameron Highlands Malaysia. *Land*, 10/11, 1181.

7. Tan, M.L.\*, Tew, Y.L., Chun, K.P., Samat, N., Shaharudin, S.M., Mahamud, M.A., and Tangang, F. (2021). Improvement of the ESA CCI Land cover maps for water balance analysis in tropical regions: A case study in the Muda River Basin, Malaysia. *Journal of Hydrology: Regional Studies*. 36, 100837.
8. Zhang, D., Tan, M.L.\*, Dawood, S.R.S., Samat, N., Chang, C.K., Roy, R., Tew, Y.L., and Mahamud, M.A. (2020). Comparison of NCEP-CFSR and CMADS for Hydrological Modelling Using SWAT in the Muda River Basin, Malaysia. *Water*, 12(11), 3288.
9. Samat, N.\*, Mahamud, M.A., Tan, M.L., Maghsoodi Tilaki, M.J., and Tew, Y.L. (2020). Modelling Land Cover Changes in Peri-urban Areas: A Case Study of George Town Conurbation, Malaysia. *Land*, 9(10), 373.
10. Mahamud, M.A.\*, Hidefumi, I., Akio, O., Chan, N.W., and Samat, N. (2018). A Strategic Partnership in Implementing Waste- to-Energy (WtE) Technology in Penang, Malaysia. *Academy of Strategic Management Journal*. 17(6), 1-8.
11. Mahamud, M.A.\*, Samat, N., and Mohd Noor, N. (2016). Identifying Factors Influencing Urban Spatial Growth for the George Town Conurbation. *Planning Malaysia*. 14(5), 95-106.

#### ESCI

1. Mahamud, M.A., Abdul Rashid, S.M.R.\*, and Heng, W.Z. (2022). Exploring the Historical and Geographical Perspectives on the Development of Malaysian Higher Education Institutions. *International Journal of Special Education*, 37, 475-483.
2. Tan, M.L., Shaharudin, S.M.\*, Samat, N., Tew, Y.L. and Mahamud, M.A. (2021). Discovering Dependence of Covid-19 on Weather Variables in Malaysia. *Turkish Journal of Physiotherapy and Rehabilitation Journal*. 32(2), 2828-2835.

#### Scopus

1. Mohamad, N.I., Abdullah\*, S., Sahad, M.N., and Mahamud, M.A. (2024). Implementing a Digital Profiling System for Enhanced Support and Integration of Muslim Converts in Malaysia. *International Journal of Religion and Spirituality in Society*, 5/1, 592-605.
2. Zainal Abidin, R., Mahamud, M.A.\*, Saad, N.A., Zakaria, N.A., and Md. Noh, M.N. (2023). Erosion Risk Level at Cameron Highlands with Regards to Soil Erosion Loss. *ASM Science Journal*, 18/1, 1-11.
3. Samat, N.\*, Mahamud, M.A., Maghsoodi Tilaki, M.J., Abu Bakar, M.A., Tan, M.L., and Mohd Noor, N. (2021). Investigating Urban Growth Boundary as Mechanism to Plan for Sustainable Urban Development. *Planning Malaysia*, 19/4, 257-268.
4. Abdul Rashid, S.M.R.\*, Hassan, F., Md. Sharif, N., Abd Rahman, A., and Mahamud, M.A. (2021). The Role of Digital Marketing in Assisting Small Rural Entrepreneurs Amidst Covid-19 Movement Control Order (MCO): A Case Study in Peninsular Malaysia. *Academic Journal of Interdisciplinary Studies*, 10(4), 70-80.
5. Asni, F.\*, Mahamud, M.A., and Sulong, J. (2020) Socio-economics and Management of Muslim Cemetery Waqf using Istibdal and GIS Method in Penang State. *Journal of Islamic Accounting and Business Research*. 11(7), 1343-1362.
6. Samat, N.\*, Mahamud, M.A., Abdul Rashid, S.M.R., Elhadary, Y., and Mohd Noor, N. (2019). Urbanisation Beyond Its Core Boundary and Its Impact on the Communities in George Town Conurbation, Malaysia. *Planning Malaysia*. 17(2), 38-49.

## Others

1. Mah Hassan, M.A., Mahamud, M.A., Abu Bakar, M.A.\*, Mohd Arif Zainol, M.R.R. and Larasati, D.A. (2023). Awareness of Climate Change and Environmental Issues among Farmers in Kelantan, Malaysia. *Journal of Asian Geography*, 2/2, 40- 44.
2. Roslan, A.Z., Mahamud, M.A.\*, Abu Bakar, M.A., Abdullah, A., and Zain, I.M. (2023). Awareness and Adaptation Responses on Climate Change in Malaysia. *Journal of Asian Geography*, 2/2, 23-26.
3. Zainal Abidin, R., Mahamud, M.A. \*, Mohd Kasim, M.Z., Abdullah, J., Yusof, M.F., Mohd Arif Zainol, M.R.R., and Zakaria, N.A. (2022). Forecasting Erosion Induced Landslide Risk Level in Cameron Highlands Towards Environmental Sustainability. *Engineering, Agriculture, Science, and Technology Journal*, 1/1, 75-82.
4. Abdullah, A. \*, Wahid, J., Khairuddin, M.R., Ismail, A.I., and Mahamud, M.A. (2022). The Poetry of Natural Calamities: Revisited the Great Flood 2014 on Malay Community in Kota Bharu, Kelantan. *Journal of Asian Geography*, 1/1, 59-65.
5. Nganro, S. \*, Trisutomo, S., Barkey, R., Ali, M., Hidefumi, I., Akio, O., Tsai, P., and Mahamud, M.A. (2021). Prediction of Future Land Use and Land Cover (LULC) in Makassar City. *TATALOKA*. 23(2), 183-189.
6. Asni, F. \*, Mahamud, M.A., and Sulong, J. (2021). Management of Community Perception Issues to Ceiling and Floating Rates on Islamic Home Financing Based on Maqasid Shariah Concept. *International Journal of Academic Research in Business and Social Sciences*. 11(7), 100–109.
7. Samat, N. \*, and Mahamud, M.A. (2018). Urbanisation in the George Town Conurbation and Its Impact to the Environment. *International Journal of Environmental Engineering*. 9(3-4), 240-253.
8. Samat, N., and Mahamud, M.A.\* (2017). Simulating Urban Growth in the George Town Conurbation. *Journal of Fundamental and Applied Sciences*. 9(7S), 144-156.
9. Mahamud, M.A., and Ramasamy, R.\* (2013). Measuring a Level of Water Pollution in Sungai Pinang using a Mathematical Model. *Proceedings of The Annual International Conference, Syiah Kuala University-Life Sciences & Engineering Chapter*. 3(2), 120-124.

## Books

1. Md. Ahood, A.L., and Mahamud, M.A. (2018). *All About Derivatives – Mathematical Differentiation for College Students*. Sunway University Press, Bandar Sunway, Selangor, Malaysia.
2. Md. Ahood, A.L., and Mahamud, M.A. (2016). *Let's Talk Mathematics*. UTeM Press, Durian Tunggal, Melaka, Malaysia.

### Article in Proceeding

1. Zainal Abidin, R., Mahamud, M.A.\*, Abdullah, J., Mohd Kasim, M.Z., Yusof, M.F., and Mohd Arif Zainol, M.R.R. (2023). Mapping landslide events at Cameron Highlands, Malaysia in relation to land use, rainfall and elevation using Geographical Information System. IOP Conf. Ser.: Earth Environ. Sci., 1249, 012005. (CPCI)
2. Bandira, P.N.A., Tan, M.L.\*, Teh, S.Y., Shaharudin, S.M., Samat, N., and Mahamud, M.A. (2023). Assessment of NASA POWER for Climate Change Analysis using the De Martonne Climate Index in Northern Peninsular Malaysia. IOP Conf. Ser.: Earth Environ. Sci., 1238, 012029. (CPCI)
3. Zainal Abidin, R., Mahamud, M.A.\*, Yusof, M.F., and Zakaria, N.A. (2022). Environmental Degradation on Soil Erosion Loss in Cameron Highlands, University of Nottingham Malaysia, Kuala Lumpur Convention Centre, Kuala Lumpur, Malaysia.
4. Mahamud, M.A.\*, Samat, N., Tan, M.L., Chan, N.W., and Tew, T.L. (2019). Prediction of Future Land Use Land Cover Changes of Kelantan, Malaysia. International Archives of the Photogrammetry, Remote Sensing & Spatial Information Sciences. XLII-4/W16, 379-384. (CPCI)
5. Maprasulle, S.A., Mahamud, M.A.\*, Samat, N., and Mohd Noor, N. (2019). Mapping Rice Growing Area in Northern Region of Peninsular Malaysia using GIS-RS. The European Proceedings of Social & Behavioural Sciences. 46-54.
6. Samat, N.\*, Mahamud, M.A., and Mohd Noor, N. (2018). Urban Spatial Growth Model as a Tool to Plan for Sustainable Urban Future. IOP Conference Series: Earth and Environmental Science. 169(1), 012041. (CPCI)
7. Jasmy, M.A., Mahamud, M.A.\*, Samat, N., and Mohd Noor, N. (2017). Monitoring and Quantifying Landscape Changes using Geoinformation Technology. Buletin Geospasial Sektor Awam. 14-21.
8. Mahamud, M.A.\*, and Samat, N. (2016). Driving Forces in Modelling Dynamic Urban Spatial Growth for the George Town Conurbation (GTC). Proceedings of International Conference on Development and Socio Spatial Inequalities. 158-164.

## RESEARCH PROJECT

### International

1. **2023 - 2024, Kurita Water and Environment Foundation (KWEF)**  
Impact of Land Use Change on Water Quality in the Muda River Basin, Malaysia (Principal Investigator)
2. **2021 - 2024, ERASMUS+ K2A**  
Capacity Building for Higher Education: Geomatics for Disaster Risk Reduction Recovery (Co-researcher)

### National

1. **2023 - 2025, Fundamental Research Grant Scheme (FRGS)**  
Development of Integrated Geographic Information System and Agent-Based Model for Forecasting A Sustainable Urban Future (Principal Investigator)

2. **2023 - 2025, Fundamental Research Grant Scheme (FRGS)**

Pembentukan Kerangka Pengukuran Kemiskinan Berasaskan Penggunaan Alam Sekitar dalam Mempengaruhi Dinamika Kemiskinan Luar Bandar (Co-researcher)

3. **2022 - 2024, Fundamental Research Grant Scheme (FRGS)**

Pembinaan Kerangka Sistem e-Profiling Mualaf (Co-researcher)

4. **2022 - 2024, Fundamental Research Grant Scheme (FRGS)**

Pembinaan Kerangka Sistem e-Profiling Mualaf (Co-researcher)

5. **2022 - 2025, Fundamental Research Grant Scheme (FRGS)**

ACCESS - Equitable Accessibility Framework for Transport and Landuse Planning in Pulau Pinang (Co-researcher)

6. **2020 - 2023, Fundamental Research Grant Scheme (FRGS)**

Penilaian Semula Impak Skim Perumahan Mampu Milik ke atas tingkat Kemudahterancaman Isirumah Bandar (Co-researcher)

**University**

1. **2023 - 2024, Short-term Grant Khas (STG-Khas)**

Integrating GIS Spatial Dimension into Sustainability Initiatives Inclusivity Assessment at the University Level (Principal Investigator)

2. **2023 - 2025, Short-term Grant (STG)**

Menkaji Impak Penambakan Pinggir Laut Terhadap Sosioekonomi dan Adaptasi Pendudukan Nelayan di Pulau Pinang (Co- researcher)

3. **2023 - 2025, Research University Team (RUTEAM)**

Potential Impact of Global Warming 1.5°C and 2°C on Solar Radiation and Other Climate Variables in Penang, Malaysia (Co- researcher)

## CONSULTANCY PROJECT

- **Produk dan Konsep Bank Koperasi Patuh Syariah: Kajian ke Atas Co-opBank Pertama (CBP) Berdasarkan Persepsi dan Penerimaan Masyarakat Pulau Pinang, CoopBank Pertama (CBP) - National**  
18 Aug 2023 – 18 Feb 2024 [Team Member]
- **Eco-Wudhu': Green Action of Islamic Ablution and GIS River Management, Water Watch Penang (WWP) – National**  
01 June 2023 – 31 May 2024 [Project Leader]
- **Tik Tok Competition 3: Together Saving Our Water and Drone River Care Programme, Water Watch Penang (WWP) – National**  
01 June 2023 – 31 May 2024 [Team Member]
- **Program Latihan Kepakaran Dron, Ministry of Higher Education Malaysia (MoHE) – National**  
01 March 2022 – 30 Apr 2023 [Team Member]
- **Pelan Pengurusan Lembangan Sungai Bersepadu (IRBM) Lembangan Sungai Klang (2022-2030) dan Laporan State of River Report (SOR) Lembangan Sungai Klang 2020, Lembaga Urus Air Selangor (LUAS) – National**  
1 Apr 2022 – 10 May 2023 [GIS Team Member]
- **To Conduct A Review on Impact of Covid-19 On NCER's Key Sectors & Stakeholders and Propose Mitigation Strategies, Projects & Programmes, Implementation Plan, Pricewaterhouse Coopers Advisory Services Sdn. Bhd. (PWC) – National**  
22 Nov 2021 – 16 May 2022 [Team Member]

- **Baseline Study of Vulnerable Families and Individuals in Pulau Pinang, Bahagian Pembangunan Ekonomi (BPEN) Pulau Pinang – National**  
1 June 2021 – 30 Apr 2022 [Team Member]
- **Analisis Taburan Endapan di Empangan Muda dan Pedu, Institut Penyediliran Air Kebangsaan Malaysia (NAHRIM) – National**  
21 Sep 2021 – 30 Nov 2021 [Team Member]
- **Rekabentuk Terperinci Rancangan Tebatan Banjir Teluk Bahang Daerah Barat Daya, Pulau Pinang for MESSRS. Jabatan Pengairan dan Saliran Malaysia, JPS. M.E.I Consultants Sdn. Bhd. – National**  
13 May 2021 – 13 Feb 2022 [GIS Team Member]
- **Pemetaan Lokasi Kelestarian USM. Centre for Global Sustainability Studies (CGSS) - University**  
6 Sep 2021 – 31 Dec 2021 [Project Leader]
- **Perlaksanaan Kajian Kebolehlaksanaan Pembinaan Wetland sebagai Alternatif Kepada Sistem Pembedungan di Luar Bandar- Skop Teknikal, Operasi dan Kos. National Hydraulic Research Institute of Malaysia (NAHRIM) – National**  
1 Jan 2021 – 31 Dec 2021 [GIS Expert]
- **Situation Analysis: Child Wellbeing for the Child-Friendly Cities Initiative (CFCI) in Petaling Jaya City. Development Pathways UNICEF – National**  
31 May 2021 – 12 Nov 2021 [Team Member]
- **Perlaksanaan Kajian Kebolehlaksanaan Pembinaan Wetland sebagai Alternatif kepada Sistem Pembedungan di Pulau, National Hydraulic Research Institute of Malaysia (NAHRIM) – National**  
1 Jan 2021 – 30 Sep 2021 [GIS Expert]
- **Establishing a Connectivity Network of 17 SDGs that will Identify, Monitor, Quantify, and Report on its Progress within the City. SSR City Solution – National**  
13 Jan 2021 – 12 March 2021 [Team Member]
- **The Impact of Covid-19 Towards Households and Businesses in NCER (Pulau Pinang and Perak), Northern Corridor Implementation Authority (NCIA) - National**  
19 Oct 2020 – 30 Apr 2021 [Team Member]
- **Penyelidikan Penyediaan Garis Panduan Pelan Kawalan Hakisan dan Kelodak (ESCP) untuk Aktiviti Logging dan Ladang Pertanian di Malaysia, National Hydraulic Research Institute of Malaysia (NAHRIM) – National**  
1 Aug 2020 – 30 Nov 2020 [GIS Team Member]
- **Pelan Pengurusan Lembangan Sungai Bersepadu (IRBM) Sungai Perai, Jabatan Pengairan dan Saliran Malaysia (JPS) – National**  
3 Jan 2018 – 30 Apr 2019 [GIS Team Member]

## PAPER PRESENTED

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Event Organiser

1. Treasurer, International Conference on Society, Space and Environment (ICSSE) 2022, 16/11/2022-16/11/2022.
2. Secretary, 13<sup>th</sup> International Academic Consortium for Sustainable Cities (IACSC) 2022, 12/09/2022-13/09/2022.

## ACADEMIC/ PROFESSIONAL SERVICES

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### Evaluation

1. (2024) Dissertation, Yang Yadou, The impact of resident's cognitive behavior on the Jinghe River resources in Jingdang County, Shaanxi Province, MSc. (Sustainable Cities and Communities), Universiti Sains Malaysia, (Internal Examiner)
2. (2023) Dissertation, Su Jinxia, Assessing the Impact of Sino-Arab Hub Development on the Attitudes, Perceptions and Behaviors of Local Communities Affected by COVID-19: Application of Social Exchange Theory in Yinchuan City, China, MSc. (Sustainable Cities and Communities), Universiti Sains Malaysia, (Internal Examiner)
3. (2023) Dissertation, Shi Jiaoyang, Evaluating the Impact of Community Grids Management on Disaster Resilience in the Luoyang Smart City: A Case Study of the COVID-19 Pandemic, MSc. (Sustainable Cities and Communities), Universiti Sains Malaysia, (Internal Examiner)
4. (2022) Dissertation, Cai Pingping, University Students' Awareness and Their Perceptions of Climate Change in Fuzhou University, China, MSc. (Sustainable Cities and Communities), Universiti Sains Malaysia, (Internal Examiner)

### Contribution to External Organisation

1. (2023) External Examiner, Mathematics Related Modules (Diploma, Undergraduate & Postgraduate Programme), School of Mathematics, Actuarial and Quantitative Studies, Asia Pacific University (APU) 2023-2025, International.
2. (2023) Editorial Board Member, Intelligent Control and System Engineering 2023-2024, International.
3. (2023) Guest Editor, Pertanika Journal (Special Issues), Universiti Putra Malaysia (UPM) 2023-2024, International.
4. (2022) Associate Researcher Fellow, School of Water and Environment, Chang'an University, China 2022-2025, International.
5. (2022) Visiting Lecturer, Faculty of Marine Technology, Institut Teknologi Sepuluh Nopember (ITS), Indonesia 2022-2022, International.
6. (2022) Editorial Board Member, Journal of Asian Geography (JAG), Universiti Sains Malaysia (USM) 2022-2025, International.

## SUPERVISION

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### PhD

1. (2023) Feng Zeqian, Research - Full Time, Will be determined later, Co-supervisor (Active)
2. (2022) Chen Zhenyu, Research - Full Time, Will be determined later, Co-supervisor (Active)
3. (2021) Ramli Bin Mohd Razak, Research - Part Time, Urban Teleconnections dan Pengaruhnya Terhadap Ekonomi Setempat: Kajian Kes di Seberang Perai, Pulau Pinang, Co-supervisor (Active)



### Master

1. (2023) Eryanna Agie Anak Patrick, Research - Full Time, Will be determined later, Main Supervisor (Active)
2. (2023) Mohd. Shaflik Bin Rozali, Research - Full Time, Will be determined later, Main Supervisor (Active)
3. (2023) Li Wenhao, Research - Full Time, Will be determined later, Co-supervisor (Active)
4. (2023) Jin Chunyan, Dissertation - Mixed Mode, Utilizing Kitchen Garden as a Sustainable Initiative in Shanghai, China, Main Supervisor (Graduated)
5. (2022) Zhang Yining, Dissertation - Mixed Mode, Impact of High-Speed Rails in Xiamen City on Land Use: Land Use Trends and Citizen Perspective, Main Supervisor (Graduated)

## TEACHING

### Master

1. HGP591/28 - Dissertation

### Bachelor

1. WPA303/2 - Malaysian Civil Defense For University Students 3
2. WPA203/2 - Malaysian Civil Defense For University Students 2
3. WPA103/2 - Malaysian Civil Defense For University Students 1
4. HGT342/4 - Research Methodologi And Field Work
5. HGP309/6 - Geography Project
6. HGT331/3 - GIS In Sustainable Development
7. HGT101/3 - Techniques In Geography
8. HGG251/3 - Spatial Demography
9. HGT321/3 - Geographic Information Technology
10. HGT219/3 - Quantitative Method And Spatial Analysis
11. HGG355/3 - Regional And Local Analysis
12. HGT219/3 - Quantitative Method And Spatial Analysis
13. HGT222/4 - Techniques In Geography
14. HPA103/3 - Basic Statistics
15. JMG413E/4 - Quantitative Geography
16. JMG401/4 - GIS In Sustainable Development
17. JMG213E/4 - Techniques In Geography

## SOCIAL RESPONSIBILITY ACTIVITIES

- (2023) Associate Officer (Major), Malaysian Civil Defence.
- (2023) Adjutant, Malaysian Civil Defence.