



CURRICULUM VITAE



I. PERSONAL PARTICULARS			
Name	NORZAURA BINTI ABD RAHMAN		
Current Position Faculty / Department	SENIOR LECTURER (DS 52) PUSAT ASASI PERTAHANAN JABATAN MATEMATIK		
II. ACADEMIC AND PROFESSIONAL QUALIFICATIONS (Please list all academic qualifications, from your first degree, in chronological order)			
Year	Degree	Discipline	University
2017 – 2021	PhD Engineering	Civil Engineering (Water)	UKM
2010 - 2012	Master of Science in Mathematics	Management Mathematics	UKM
2005 - 2008	Bachelor Degree of Mathematics	Mathematics	UiTM
III. TITLES OF POSTGRADUATE THESES WRITTEN (At MSc/PhD Level)			
No.	TITLES OF POSTGRADUATE THESES		
1.	Pembangunan Pakej Pengoptimuman GA-EPANET untuk Permodelan Sistem Pengagihan Air yang Berusia (2021, PhD)		
2.	Application of Goal Programming in Examination Timetabling Problem: Case Study in NDUM (2012, Msc)		

IV. WORK EXPERIENCE (Please list your relevant experience in chronological order)

Year	Position	Organisation	Start and End Date
2023 - 2025	Deputy Director	Bahagian Jaminan Kualiti & Pengurusan Data, UPNM	15 March 2023 - 14 March 2025
2022 - Present	Senior Lecturer	Pusat Asasi Pertahanan, UPNM	2 Sept 2022 - Present
2013 - 2022	Lecturer	Pusat Asasi Pertahanan, UPNM	1 May 2013 - 1 Sept 2022
2009 - 2013	Tutor	Pusat Asasi Pertahanan, UPNM	1 July 2009 – 30 April 2013
2008 - 2009	Customer Service Officer	Shell Trading Berhad	Oct 2008 – May 2009
2007	Assistant Lecturer under Student Service Scheme (part-time)	UiTM Shah Alam	Feb – April 2007

1.0 TEACHING AND SUPERVISION

1.1 Postgraduate Courses

(Please list in chronological order and state: course title, semester and year)

No.	Course Title	Semester	Year
1.	Research Methodology Course Cluster Computer Science, Pure and Applied Science & Engineering Topic : Research Proposal Writing	Sept Jun Oktober	2022 2023 2023

1.2 First Degree Courses

(Please list in chronological order and state: course title, semester and year)

No.	Course Title	Semester	Year
1.	EFA 2203 Operations Research and Computer Information System	SEM 1	2015/2016

1.3 Diploma Courses

(Please list in chronological order and state: course title, semester and year)

No.	Course Title	Semester	Year

1.4 Pre-Degree Courses

(Please list in chronological order and state: course title, semester and year)

No.	Course Title	Semester	Year
1.	FMA 0146 Basic Mathematics	SEM 1	2009/2010, 2013/2014, 2014/2015, 2016/2017, 2017/2018, 2022/2023
2.	FMA0166 Business Mathematics	SEM 1	2015/2016
3.	FMA 0233 Introduction to Statistics	SEM 2	2009/2010
4.	FMA 0126 Mathematics II	SEM 2	2012/2013, 2013/2014, 2014/2015, 2020/2021, 2022/2023, 2023/2024
5.	FMA 0116 Mathematics I	SEM 1	2023/2024

1.5 PhD Supervision

(Please list in chronological order)

No.	Name of Student	Project Title	Date of Registration	Role (Main / Co-Supervision)	Status <ul style="list-style-type: none">• Completed• Submitted• In Progress	University

1.6 PhD External/Internal Examination

(Please list in chronological order)

No.	Name of Student	Project Title	External / Internal	Date of Viva	University

1.7 MSc (by Research)

(Please list in chronological order)

No.	Name of Student	Project Title	Date of Registration	Role (Main / Co-Supervision)	Status <ul style="list-style-type: none">• Completed• Submitted• In Progress	University
1.	Mej. Hasmady bin Alim	Keberkesanan Kerjasama Pertahanan dan Keselamatan ATM Bersama Agensi Penguatkuasaan Bagi Menangani Ancaman Keselamatan di ESSCOM	2013 - 2016	Co-Supervision	Completed	UPNM
2.	Mej. Muhammad Khidir bin Daud	Optimising Army Equipment Readiness under Budget Constraint.	2013-2016	Co-Supervision	Completed	UPNM

1.8 MSc External/Internal Examination

(Please list in chronological order)

No.	Name of Student	Project Title	External / Internal	Date of Viva	University

1.9 Supervision (Postgraduate Research Project or Final Year Research Project)

(Please list in chronological order)

No.	Name of Student	Project Title	Date of Registration	Role (Main/Co-Supervision)	Status <ul style="list-style-type: none">• Completed• Submitted• In Progress
1.	Nurul Azreen binti Sahat	Hubungan di antara Ganjaran dan Motivasi	2014-2015	Main	Completed

	(FPPP)	Terhadap Kepuasan Kerja Kakitangan Sokongan Syarikat Honda Melaka			
2.	Nur Fadziilah binti Mohd Noor (FPPP)	Gaya Pembelajaran dan Faktor Akademia Mempengaruhi Prestasi Akademik Pelajar	2014-2015	Main	Completed
3.	Muhammad Aiman Irfan bin Hanafi (FSTP)	Exam-Invigilator Assignment problem : A Case Study	2022 - 2023	Co-supervisor	Completed

2.0 RESEARCH, PUBLICATION AND PRESENTATION

2.1 Research Projects

(Please list in chronological order and state: title, list of researchers, grant/year, source/amount and status)

No.	Title	List of Researchers • Principal • Members	Grant Year	Source Amount	Status • Completed • In Progress
1.	Measuring the Effectiveness of Military Joint Exercise by Using DEA Analysis	1) Norzaura Binti Abd Rahman (PI) 2) Kol. Prof. Ir. Dr. Norazman b. Mohamad Nor 3) Dr. Wan Rosmanira binti Ismail 4) Fazilatulaili binti Ali 5) Ruzannna bt Mat Jusoh	2013-2016	RM50,000	Completed
2.	Optimization of Infantry Fighting Vehicle (IFV) Adnan Readiness for Military Operation Under Financial Constraint	1) Norzaura Binti Abd Rahman (PI) 2) Kol. Prof. Ir. Dr. Norazman b. Mohamad Nor 3) Mohd Faisal b. Saari	15/8/16 – 14/8/18	RM20,000	Completed

2.2 Publications

2.2.1 Academic Journal

(Please list in chronological order and state: authors, year, title, publisher/journal, volume and number of pages (Please bold your name))

No.	Authors, year, title, publisher/journal, volume and number of pages	Type of Journal
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	(Please bold your name)	<ul style="list-style-type: none"> • ISI • SCOPUS • Peer-Reviewed
1.	Hasan Al-Banna Mohamed, Ummul Fahri Abdul Rauf, Wan Yusmawati Wan Yusoff & Norzaura Abd Rahman . 2024. Cabaran Kelestarian Dalam Pelaksanaan Piawaian Sistem Pengurusan Kualiti: Satu Pengalaman Di Sebuah Universiti Berfokus. <i>Journal of Business and Social Development</i> Volume 12 Number 1, March 2024: 18-31. Penerbit UMT.	MyJurnal
2.	Muhammad, N. S., Abdullah, J., Abd Rahman, N. , & Razali, N. A. (2021). Development of a self-rating system for domestic water consumption in Malaysia. In <i>IOP Conference Series: Earth and Environmental Science</i> (Vol. 646, No. 1, p. 012018). IOP Publishing.	SCOPUS
3.	Muhammad, N. S., Abdullah, J., Abd Rahman, N. , & Razali, N. A. (2021). Water usage behaviour: Case study in a southern state in Peninsular Malaysia. In <i>IOP Conference Series: Earth and Environmental Science</i> (Vol. 646, No. 1, p. 012017). IOP Publishing.	SCOPUS
4.	Norzaura Abd Rahman , Nur Shazwani Muhammad, Jazuri Abdullah, Wan Hanna Melini Wan Mohtar. 2019. Model Performance Indicator of Aging Pipes in a Domestic Water Supply Distribution Network. <i>Water</i> 11(11): 2378.	SCOPUS
5.	Norzaura Abd Rahman , Nur Shazwani Muhammad & Wan Hanna Melini Wan Mohtar. 2018. Evolution of research on water leakage control strategies: where are we now?. <i>Urban Water Journal</i> 15(8): 812-826.	ISI

2.2.2 Book/Chapter in Book:

(Please list in chronological order and state: authors, year, title, publisher, volume and number of pages
(Please bold your name)

No.	Authors, year, title, publisher, volume and number of pages (Please bold your name)	Level <ul style="list-style-type: none"> • International • National • University
1.	Mathematics Department , 2010, Module Basic Mathematics (FMA0143), UPNM	University
2.	Mathematics Department , 2016, Module Basic Mathematics (FMA0146), UPNM	University
3.	Norzaura Abd Rahman , Nur Shazwani Muhammad & Talhah Mohamad Shirajuddin, 2022, Pengesanan Kebocoran Paip : Teknologi Bersepadu Berasaskan Algoritma Genetik, UKM.	National
4.	Mathematics Department , 2023, Module Basic Mathematics (FMA0146), UPNM (Chapter 3 : Linear Programming)	University

2.2.3 Proceeding Articles :

(Please list in chronological order and state: authors, year, title, publisher/conference, volume and number of pages (Please bold your name)

No.	Authors, year, title, publisher/conference, volume and number of pages (Please bold your name)	Level <ul style="list-style-type: none"> • International • National • University
1.	Norzaura Abd Rahman , Nur Shazwani Muhammad & Wan Hanna Melini Wan Mohtar. 2018. Strategies to reduce non-revenue water. <i>IPI Research Colloquium 2018 Proceeding</i> , 11 – 13 August, Melaka.	University (UKM)

2.3 Presentation:

(Please list in chronological order)

No.	Event	Title of Paper Presented	Role (Keynote Speaker / Invited Speaker / Presenter)	Date	Organizer
1.	IPI Research Colloquium 2018 Proceeding	Strategies to reduce non-revenue water	Presenter	12 August 2018	UKM
2.	Webinar Permodelan NRW untuk Sistem Pengagihan Air Berusia	Pakej Pengoptimuman GA-Epanet untuk Ermodelan Sistem Paip Air Berusia	Keynote Speaker	6 July 2021	UKM

3.0 ACADEMIC RECOGNITION AND LEADERSHIP, CONSULTANCY, SERVICE TO THE UNIVERSITY AND SERVICE TO THE COMMUNITY

3.1 Academic Recognition and Leadership

Academic recognition and leadership such as Academic Award, Academic Assessor/ /Promotion Assessor (External), Visiting Professor/Fellowship, Editorial Board and other academic recognition.

No.	Academic Recognition	Year	Level	Awarding Body / Name of Institution
1.	Defence, Security and Sustainability Exhibition 2024 - 1 Gold	2024	National	UPNM
2.	Deputy Director, Bahagian Jaminan Kualiti dan Pengurusan Data UPNM	2023 - 2025	University	UPNM
3.	Reviewer for Special Issue Uzbekistan-Malaysia International Conference On Computational Models And Technology 2022	2023	International	Computational Models And Technology 2022 (CMT 2022)
4.	Penolong Penyelaras KTP/TTP/STEM PAP	2022 - 2024	University	PAP UPNM

5.	PAP Innovation Competition 2022 (PAPIC 2022) - 1 Gold - 1 Bronze	2022	University	UPNM
6.	Reviewer for Article in Urban Water Journal	2021	International	Urban Water Journal

3.2 Consultancy work that benefited to the University.

(Please list in chronological order and state: title, year, sponsor, value and duration of consultancy)

No.	Title	Year	Sponsor	Value	Duration
1.	Penilai <i>Proposal Defence</i> dan Kolokium Pascasiswazah Sesi 2/2024	2024	PAP/FSTP/PPS UPNM	Academic Reviewer	21 May 2024
2.	Penilai <i>Proposal Defence</i> dan Kolokium Pascasiswazah Sesi 1/2023	2023	PAP/FSTP/PPS UPNM	Academic Reviewer	15 May 2023
3.	Penilai Geran Penyelidikan Jangka Pendek (GPJP)	2023	PAP UPNM	Academic Reviewer	
4.	Jury panel for posters in Pusat Asasi Pertahanan Innovation Competition (PAPIC)	2023	PAP UPNM	Jury Profesional	18 Oct 2023
5.	Pensyarah bantuan Merangka Kurikulum Program Sarjana Pengurusan Pertahanan UPNM	2014	FPPP UPNM	Academic Consultant	
6.	Ahli Jawatankuasa Pembangunan Program (JPP) : NiEED-TLDM	2013	FPPP UPNM	Academic Consultant	
7.	Pemeriksa Luar Matrikulasi	2013	Kementerian Pendidikan Malaysia	RM6/script	
8.	Pemeriksa Luar Matrikulasi	2012	Kementerian Pendidikan Malaysia	RM6/script	

3.3 Service to the University

Service to the university such as Vice Chancellor/Deputy Vice Chancellor/Dean/Director, Deputy Dean/Deputy Director/Unit Coordinator/Hostel Warden, Programme Chairperson/ Assistant Warden/Fellow. Representing University in Sports and Other Non-Academic Activities. Professional/Academic Association (Committee Member).

(Please list in chronological order and state: position/membership and duration)

No.	Position/Membership	Duration
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1.	Peserta Sukan Badminton mewakili UPNM, Sukan Antara Staf IPTA (SUKUM) , UUM	2012
2.	Pengerusi Jawatankuasa Penyiasat Aset Alih UPNM	Julai – September 2014
3.	Ahli Jawatankuasa Penyelidikan Pusat Asasi Pertahanan, UPNM	2014-2015
4.	Penolong Pegawai Rekod Pusat Jaminan Kualiti UPNM	2014 - 2015
5.	Ahli Jawatankuasa Pusat Jaminan Kualiti UPNM	2016 - 2018
6.	Penyelaras Maklumat, Sidang Redaksi Buletin Majlis Dekan/Pengarah Pusat Asasi Universiti Awam Malaysia	1 May – 31 August 2021
7.	Ahli Jawatankuasa Pelaksana Program Olimpiad Matematik Kebangsaan 2021	26 March – 31 July 2021
8.	Ahli Jawatankuasa Istiadat Konvokesyen UPNM 2021	2021
9.	Penolong Penyelaras Program STEM/KTP/TTP	Jun 2022 - Jun 2024
10.	Bendahari Kelab Kebajikan dan Rekreasi Pusat Asasi Pertahanan (KRRPAP)	Julai 2022 - Julai 2024
11.	Ahli Jawatankuasa International Conference on Aadvanced Materials and Applied Sciences 2024 (IConMAS 2024)	2023 - 2024
12.	Timbalan Pengarah, Bahagian Jaminan Kualiti dan Pengurusan Data	15 Mac 2023 - 14 Mac 2025
13.	Ahli Jawatankuasa Majlis Perasmian Bangunan Jauhari UPNM	Mei 2023
14.	Ahli Jawatankuasa Istiadat Pemasyhuran Pro-Canselor UPNM	April - Disember 2023
15.	Urus Setia Ahli Jawatankuasa Pelaksana Penarafan Bintang Pengurusan Kualiti (QMSR) UPNM	5 Feb 2024 - 31 Dis 2025
16.	Ahli Jawatankuasa Induk (Pengurus Pentas) Hari Inovasi dan Majlis Anugerah (HIMA) UPNM Tahun 2024	13 Mac - 14 Mei 2024
17.	Ahli Jawatankuasa Kerja Pembangunan Sistem Pengurusan Strategik dan Pengurusan Data Universiti	5 April 2024 - 31 Dis 2025

3.4 Service to the community

(Please list in chronological order)

No.	Organization	Role	Start Date	End Date	Level
1.	Management Science and Operation Research Society of Malaysia (MSORSM)	Member	2013	Present	National
2.	Management Science and Operation Research Society of Malaysia (MSORSM)	Auditor	2014	2015	National

3.	Toastmaster Perwira Club	Member	2013	2015	National
4.	Badan Kebajikan Keluarga Angkatan Tentera (BAKAT)	Member	2012	Present	National