

POSTGRADUATE PROGRAMME

# Master by RESEARCH & PHD

## ADVANTAGES OF OUR PROGRAMME



REAL WORLD PROBLEM  
INDUSTRIAL  
RELATED PROJECT ✓



MQA ACCREDITED ✓  
INDUSTRIAL  
ADVISORY PANEL ✓



PASSIONATE, DEDICATED,  
MOTIVATED LECTURERS ✓



ONLINE INTERACTION ✓  
ANY LOCATION AT MALAYSIA ✓  
FLEXIBLE CLASS SCHEDULE ✓

## ADMISSION REQUIREMENT

### Master of Science

Recognized degree with CPA 3.00/4.00 and above or; Meet minimum numbers of working experience in related fields

### Doctor of Philosophy

Recognized Degree with CGPA  $\geq$  3.67/4.00 or; Master Degree

- English Qualification

### International Student

IELTS Band 6.0 or; TOEFL Paper Based = 800 points,  
TOEFL Internet Based- Test (IBT) = 80  
TOEFL Computer Based-Test (CBT) = 173  
Otherwise must attend Pre-sessional English Course (PES)

International students with Bachelor & Master degree from Malaysia Universities do not need to provide English Test.

The certification SHOULD NOT be more than 2 years.

## DURATION OF STUDIES

Full Research	Doctor of Philosophy	Master of Science
Full-Time	3 Years	2 Years
Part-Time	4 Years	3 Years



### HOW & WHEN TO APPLY?

<https://ips.umpsa.edu.my>  
(Click Online Application & Available Throughout the Year)



### PROCESSING FEES & INTAKE PERIODS

Local Candidate - RM50  
International Candidate - USD 30  
Intake Periods : September & February

SCAN & JOIN NOW!



# SUMMARY OF TUITION FEES FOR GRADUATE STUDENTS - RESEARCH

FIELD	PROGRAMME	METHOD	LOCAL STUDENT		INTERNATIONAL STUDENT
			Full-Time	Part-Time	Full-Time
Related Field	PhD	Conventional	RM14,600	RM13,350	RM33,575
		Remote Supervision	RM17,165	RM15,915	RM36,140
		Fast Track	RM17,165	-	RM36,140
	Master	Conventional	RM8,900	RM9,300	RM22,360
		Remote Supervision	RM10,610	RM11,010	RM24,070
Unrelated Field	PhD	Conventional	RM14,600	RM13,350	RM33,575
		Remote Supervision	RM17,405	RM16,155	RM36,380
		Fast Track	RM17,405	-	RM36,380
	Master	Conventional	RM8,900	RM9,300	RM22,360
		Remote Supervision	RM10,850	RM11,250	RM24,310

The above fees are only minimum fees per programme (Master on a full-time basis = 2 years; Master on a part-time basis = 3 years; Doctor of Philosophy on a full-time basis = 3 years; Doctor of Philosophy on a part-time basis = 4 years)

## FACULTY OF COMPUTING RESEARCH GROUP

### COMPUTER SYSTEM



**CSRG**  
COMPUTER SYSTEMS RESEARCH GROUP

"To provide expertise in analyzing, designing and implementing systems."

Head of Research Group

**DR. ZAFRIL RIZAL**

Expertise :  
Cloud Computing, Grid Computing,  
Mobile Computing

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**ASSOC. PROF. DR. MOHAMED ARIFF**

Expertise :  
Blockchain, Solution Architecture,  
Artificial Intelligence

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**TS. DR. SYAHRUL ANUAR**

Expertise :  
Networking, Wireless

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### VIRTUAL SIMULATION & COMPUTING

**ViSiC**  
RESEARCH GROUP

"We strive to bridge the knowledge barrier within computer graphics, multimedia, artificial intelligence, machine learning, computational linguistics, games, modeling & simulation, geospatial intelligence, AR/VR, and immersive computing. Using AR/VR, computer games, and simulation as a tool, we believe that this barrier can be bridged to make way for new knowledge and methods which can be implemented in both entertainment and solving a real-life situation"

Head of Research Group

**TS. DR. TUTY ASMAWATY**

Expertise :  
Games, VR/AR, Modelling  
Simulation, Optimization

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**TS. DR. BARIAH**

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Games, Artificial Intelligence

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**SR. TS. DR. NGAHZAIFA**

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**TS. DR. SARADATUL**

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VR Training

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**TS. SITI NORMAZIAH**

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and Mobile

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**ABBAS SALIMI**

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Machine Learning, Natural Language  
Processing

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**NORANIZA**

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Multimedia, AR/VR

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### SOFT COMPUTING & OPTIMIZATION



Soft Computing RG

"Focuses to serve as a platform for collaboration between researcher, industry and community, our mission is to foster collaboration by providing intelligence application solution and solve optimization problem"

Head of Research Group

**TS. DR. ZALILI**

Expertise :  
Soft Computing & Optimization,  
Object Tracking, Image Analysis,  
Prediction

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**ASSOC. PROF. DR. MOHD NIZAM**

Expertise :  
Intelligence Decision Support  
System for Real World Scheduling &  
Optimization, Meta-heuristics  
Approaches (Trajectory-based &  
Population Based

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**ASSOC. PROF. TS. DR. ROHANI**

Expertise :  
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Software Engineering Search Based,  
Software Development,  
Requirement Engineering.

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**DR. JAMALUDIN**

Expertise :  
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Software Project Management,  
Intelligent Process Automation,  
Requirement Engineering

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**DR. MUHAMMAD ARIF**

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Machine Learning, Mobile  
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**MOHD HAFIZ**

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Artificial Intelligence

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"We focus on developing applications and software improvement by utilizing cutting edge machine learning applications in solving various industrial and real-world problems. We employ and enhance machine learning algorithms to improve condition, performance and reliability in existing automation systems"

## VIRTUAL SIMULATION & COMPUTING

Head of Research Group

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<b>TS. DR. SYAFIQ FAUZI</b> <b>Expertise :</b> Machine Learning, Computational Intelligence, Embedded System <b>Email :</b> syafiq29@umpsa.edu.my	<b>ASSOC. PROF. TS. DR. SURYANTI</b> <b>Expertise :</b> Machine Learning, Computational Intelligence, Pattern Recognition <b>Email :</b> suryanti@umpsa.edu.my	<b>TS. DR. JUNAIDA</b> <b>Expertise :</b> Machine Learning, Time Series Prediction, Artificial Neural Network <b>Email :</b> junaida@umpsa.edu.my	

## SOFTWARE ENGINEERING

Head of Research Group

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<b>DR. MUHAMAD IDAHAM</b> <b>Expertise :</b> Analysing Completeness of Requirements Specification based on Meta-requirements, User-requirements Validation, Crisis and Risk Management for Business Continuity Management in IT Perspective. <b>Email :</b> idaham@umpsa.edu.my	<b>TS. AZLINA</b> <b>Expertise :</b> Analysis & Design The Business Process & System, Organizing Software Quality Activities, Empirical Evaluation of The Effectiveness of Software Requirements Prioritization Methods <b>Email :</b> azlinaz@umpsa.edu.my	<b>TS. KU SAIMAH</b> <b>Expertise :</b> Weighted Scoring Method (WSM), Agile Maintenance, Software Engineering <b>Email :</b> saimah@umpsa.edu.my	<b>ROSLINA</b> <b>Expertise :</b> Human Computer Interaction, Software Quality Assurance, Software Testing <b>Email :</b> roslna@umpsa.edu.my



"Developing new paradigms on software engineering for developing applications and software improvement by utilizing cutting edge intelligence applications in solving various industrial and environmental problems. We employ and enhance intelligence algorithms in the broad range to improve condition, performance, and reliability in the existing automation systems"

## KNOWLEDGE ENGINEERING & COMPUTATIONAL LINGUISTIC

Head of Research Group

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<b>DR. SHAZWANI</b> <b>Expertise :</b> Text Analysis, Sentiment Analysis, Machine Learning, Social Media Mining <b>Email :</b> nshazwani@umpsa.edu.my	<b>TS. DR. FAUZIAH</b> <b>Expertise :</b> Requirement Engineering, Expert System, Information Retrieval, Database Management System <b>Email :</b> fauziahz@umpsa.edu.my	<b>TS. DR. RAHMAM</b> <b>Expertise :</b> Adaptive System, Expert System, Information Retrieval, Data Kining and Analytic, HCI <b>Email :</b> drahmah@umpsa.edu.my	

"To bring a human-level understanding of knowledge into computational models and systems. This includes contributions to the natural language processing (NLP) field as well as the implementation of various machine learning and expert systems. In KECL, researchers from AI and NLP backgrounds are working together towards improving methods and techniques for bridging the gap between knowledge data and computational systems"

## DATA SCIENCE & SIMULATION MODELLING

Head of Research Group

<b>PROF. TS. DR. MAZLINA</b> <b>Expertise :</b> Green Screen Technology Operation, Simulation Modelling and Analysis, Software Engineering <b>Email :</b> mazlina@umpsa.edu.my	<b>DR. NOORLIN</b> <b>Expertise :</b> Artificial Intelligence, Soft Computing, Data Analytics <b>Email :</b> noorlin@umpsa.edu.my	<b>TS. DR. AHMAD FAKHRI</b> <b>Expertise :</b> Artificial Intelligence, Machine Learning, Pattern Recognition <b>Email :</b> afakhri@umpsa.edu.my	<b>TS. DR. KOHBALAN</b> <b>Expertise :</b> Bioinformatics, Healthcare, Artificial Intelligence, Machine Learning <b>Email :</b> kohbalan@umpsa.edu.my
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"Education, Research and Innovation on data analytics technology and building data scientist for providing state of art solutions"

## DATABASE TECHNOLOGY & INFORMATION SYSTEM

Head of Research Group

<b>ASSOC. PROF. TS. DR. NORAZIAH</b> <b>Expertise :</b> Distributed Database System, Data Grid, Data Mining <b>Email :</b> noraziah@umpsa.edu.my	<b>TS. DR. NABILAH FILZAH</b> <b>Expertise :</b> Data Mining & Optimization, Mobile Technology, Team Formation <b>Email :</b> nabilahfilzah@umpsa.edu.my	<b>TS. DR. NURZETY AQTAR</b> <b>Expertise :</b> Data Integration, Quality & Management <b>Email :</b> aqtar@umpsa.edu.my	<b>TS. DR. MOHD IZHAM</b> <b>Expertise :</b> Data Quality, Machine Learning <b>Email :</b> izhamjaya@umpsa.edu.my	<b>ZARINA</b> <b>Expertise :</b> Query Processing & Data Streaming <b>Email :</b> dzarina@umpsa.edu.my
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"Using systematic computational approaches, we envision outcome that are not limited to computer science area but involves interdisciplinary area of the transformational effects of information systems on individuals, groups, and organizations"

## EDUCATIONAL TECHNOLOGY

Head of Research Group

<p><b>TS. DR. SITI SUHAILA</b></p> <p><b>Expertise :</b> Human-Computer Interaction, Child-based Education Intervention, Machine Learning</p> <p><b>Email :</b> sitisuhaila@umpsa.edu.my</p>	<p><b>ASSOC. PROF. TS. DR. ADZHAR</b></p> <p><b>Expertise :</b> e-Learning, Information System</p> <p><b>Email :</b> adzhar@umpsa.edu.my</p>	<p><b>ASSOC. PROF. TS. DR. AWANIS</b></p> <p><b>Expertise :</b> Decision Support System, Expert System, E-Learning</p> <p><b>Email :</b> awanis@umpsa.edu.my</p>	<p><b>TS. AZIMAN</b></p> <p><b>Expertise :</b> Curriculum Analytics, Web Analytic, Data Visualization</p> <p><b>Email :</b> aziman@umpsa.edu.my</p>
<p><b>TS. DR. NOOR AZIDA</b></p> <p><b>Expertise :</b> Educational Technology, E-Learning, Personalized Learnin</p> <p><b>Email :</b> azida@umpsa.edu.my</p>	<p><b>TS. DR. NUR SHAMSHIAH</b></p> <p><b>Expertise :</b> Information System, E-Learning, Educational Technology</p> <p><b>Email :</b> shamsiah@umpsa.edu.my</p>	<p><b>TS. DR. DANAKORN</b></p> <p><b>Expertise :</b> Augmented Reality, Virtual Reality, Educational Technology</p> <p><b>Email :</b> danakorn@umpsa.edu.my</p>	<p><b>TS. DR. YUSNITA</b></p> <p><b>Expertise :</b> Computational Linguistic, E-Learning, Information System, Computer and Communication Technology</p> <p><b>Email :</b> junaida@umpsa.edu.my</p>



"Mainly focuses on the area of digital, creative and innovative technology aims to create more engaging, inclusivity and personalized digital learning experiences. Examples include, but not limited to E-Learning, technology-based learning trends, learning analytics, artificial intelligence, IoT, machine learning, flipped classrooms, collaborative learning environment, augmented reality and virtual reality, gamification, and also multimedia technologies"

## IMAGE SIGNAL PROCESSING

Head of Research Group

<p><b>TS. DR. LIEW SIAU CHUIN</b></p> <p><b>Expertise :</b> Image Watermarking, Steganography, Image Processing, Signal Processing</p> <p><b>Email :</b> liewsc@umpsa.edu.my</p>	<p><b>TS. DR. SYIFAK</b></p> <p><b>Expertise :</b> Image Watermarking, Data Forensics, Image Processing, Data Security</p> <p><b>Email :</b> syifakizhar@umpsa.edu.my</p>	<p><b>TS. DR. ANIS FARIHAN</b></p> <p><b>Expertise :</b> Biometric System, Image Processing, Computer Vision, Pattern Recognition, Machine Learning</p> <p><b>Email :</b> anisfarihan@umpsa.edu.my</p>
<p><b>ASSOC. PROF. TS. DR. FERDA ERNAWAN</b></p> <p><b>Expertise :</b> Image Watermarking, Image Processing, Data Security, Machine Learning</p> <p><b>Email :</b> ferda@umpsa.edu.my</p>	<p><b>TS. DR. SURAYA</b></p> <p><b>Expertise :</b> Image Processing, Pattern Recognition, Computer Vision, Embedded System, FPGA Design, IoT</p> <p><b>Email :</b> surayaab@umpsa.edu.my</p>	<p><b>WAN MUHAMMAD SYAHRIR</b></p> <p><b>Expertise :</b> Image Processing, Image Enhancement</p> <p><b>Email :</b> wmsyahrir@umpsa.edu.my</p>



"We aim to produce high-quality fundamental and applied research in a broad range of image processing, security-based digital image processing applications, Computer-Aided Diagnosis applications, and related areas"

## COMPUTER NETWORK RESEARCH GROUP

Head of Research Group

<p><b>TS. DR. WAN ISNI SOFIAH</b></p> <p><b>Expertise :</b> Wireless Sensor Network, Clustering, Fuzzy Logic, IoT</p> <p><b>Email :</b> sofiah@umpsa.edu.my</p>	<p><b>TS. DR. NOR SYAHIDATUL NADIAH</b></p> <p><b>Expertise :</b> Communication Network and Services, Wireless Sensor Network, Communication Protocol</p> <p><b>Email :</b> nadiahismail@umpsa.edu.my</p>	<p><b>DR. AZAMUDDIN</b></p> <p><b>Expertise :</b> Wireless Sensor Network, Fuzzy Logic, IoT</p> <p><b>Email :</b> azamuddinrahman@umpsa.edu.my</p>	<p><b>TS. DR. HOH WEI SIANG</b></p> <p><b>Expertise :</b> Fixed Network, Wireless Network, Routers and Technology</p> <p><b>Email :</b> weisiang@umpsa.edu.my</p>	<p><b>ABDULLAH</b></p> <p><b>Expertise :</b> Computer Security, Network Security, Network Management</p> <p><b>Email :</b> abdullah@umpsa.edu.my</p>
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"We are multidisciplinary team of researchers specializing in various aspects of computer networking. The group's expertise spans several areas, including wireless sensor networks, Fuzzy Logic, Computer Security, Software Defined Networking (SDN), the Internet of Things (IoT) and mobility management. By leveraging their collective expertise, the group aims to advance the field of computer network"

## CYBER SECURITY

Head of Research Group

<p><b>TS. DR. AHMAD FIRDAUS</b></p> <p><b>Expertise :</b> Cyber Security, AI, Intrusion Detection System, Data Visualizations, Mobile Security</p> <p><b>Email :</b> firdausza@umpsa.edu.my</p>	<p><b>TS. DR. MOHD FAIZAL</b></p> <p><b>Expertise :</b> Cyber security, Intrusion Detection System, AI, Risk Assessment</p> <p><b>Email :</b> faizalrazak@umpsa.edu.my</p>	<p><b>DR. AMEERAH</b></p> <p><b>Expertise :</b> Software Security, Threat Modeling, Cyber Security</p> <p><b>Email :</b> ameerahmuhsinah@umpsa.edu.my</p>	<p><b>WAN NURULSAFAWATI</b></p> <p><b>Expertise :</b> Information Security Forensic, Computer Networks</p> <p><b>Email :</b> safawati@umpsa.edu.my</p>	<p><b>DR. AL-FAHIM</b></p> <p><b>Expertise :</b> Software Security, Software Clone</p> <p><b>Email :</b> fahim@umpsa.edu.my</p>
<p><b>DR. ZAHIAN</b></p> <p><b>Expertise :</b> Intrusion Detection System, Malware Analysis, MANET</p> <p><b>Email :</b> zahian@umpsa.edu.my</p>	<p><b>DR. SYAHRIZAL</b></p> <p><b>Expertise :</b> Cyber security, Computer Network, Risk Assessment</p> <p><b>Email :</b> syazmir@umpsa.edu.my</p>	<p><b>RAHIWAN</b></p> <p><b>Expertise :</b> Cyber Security, Computer Network, Information Security</p> <p><b>Email :</b> rahiwan@umpsa.edu.my</p>	<p><b>RAMIZA</b></p> <p><b>Expertise :</b> Computer Network, Information Security, Cyber Security</p> <p><b>Email :</b> ramiza@umpsa.edu.my</p>	



**Cy-SIG**  
CYBER SECURITY INTEREST GROUP

"Proactively use threat insights to build secure-by-design architecture that meet research needs and solve security challenges in fundamental and applied research"

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