





## **Doctor of Philosophy**

The Doctor of Philosophy (Ph.D) at UTM Razak School of Engineering and Advanced Technology was introduced to complement existing school-based research master's program. This new Ph.D program is a multi-disciplinary research award degree for those who already hold a master's degree (in any ¬eld) and who would like to expand and upgrade their knowledge. This program produces human capital, which is not only intellectual and competent in modern and advanced technology but also versatile and capable of handling problems in real-life situations. Successful completion of the program will prove that candidates have successfully completed a course of research training. The Ph.D thesis is expected to make a major contribution to the discipline by way of new knowledge.

## How to Apply

Potential students are encouraged to seek further information about the research expertise of academics sta¬ff through the UTM Razak School's website, brochures or relevant departments.

- STEP 1 : Select a topic/ research area/ potential supervisor from UTM Razak School (razakschool.utm.my)
- STEP 2 : Prepare a brief research proposal and contact UTM Razak School potential supervisor
- **STEP 3** : Prepare application document
- STEP 4 : Lodge an online application to School of Postgraduate Studies (SPS) of UTM at www.sps.utm.my
- **STEP 5** : The successful applicant will be informed through email and post by SPS

## **Entry Requirements**

#### Ph.D

Candidates must have a Master's degree or equivalent from recognized / accredited universities in the relevant disciplines.

## English Language Requirement (for international student):

All international students applying to UTM must have a valid two-year old TOEFL or IELTS certificate. Students with a TOEFL score of 550 (or 79 IBT) or an IELTS Band 5.5 will be enrolled in a faculty program without undergoing UTM English Courses.

## **Fields of Research**

#### MECHANICAL AND MANUFACTURING ENGINEERING

Materials and Material Processing, Manufacturing Process and System, Quality and Robust Engineering, Operation Management and Industrial Engineering, Occupational Safety and Health, Ergonomics, Noise and Vibration, Ultrasonic Vibration, Finite Element Simulation and Modelling, Instrumentation and Control, Aeronautic Engineering and Fluid Mechanics, Maintenance Engineering and Condition Monitoring.

#### ELECTRICAL AND COMPUTER ENGINEERING

Biosignal and Image Processing, Telematics and Wireless Network, Computer Networking, Broadband Multimedia, Photonics and Fiber Optics System, Power and Control System, Artificial Intelligent and Pattern Recognition.

#### **CIVIL ENGINEERING**

Structural Mechanics and Analysis, Concrete and Precast, Construction Management, Project Management, Building Infrastructure, Procurement Management, Contract Management, Performance Benchmarking, Groundwater Engineering, Surface Water Hydrology, Fluid Mechanics, Hydraulics and Hydrology, Water Resources Engineering and Management, Water Quality, Offshore Structure and Analysis, Environmental Engineering, Water and Wastewater Treatment, Environmental Management, Solid Waste Management, ElA, LCA, Geospatial Intelligent, LIDAR, Remote Sensing, GIS, Geomorphology, Hydrographic Surveying, Marine Mapping

#### **SCIENCES**

Semiconductor Physics, Nanostructure, Thin Film, Superconductivity, Statistical Modelling in Hydrology, Extreme Rainfall Analysis and Modelling, Statistical Downscaling with respect to Climate change, Spatio-Temporal Modeling in Hydrology, Applied Statistics, Wave Mechanics, Graph Theory Application Model, Location System, Computational Maths, Mathematic Education, Mathematical Thinking, Education and Training at Workplace, Mathematic at the Workplace, Assessment of Learning, Curriculum Development, Adult Learning.

#### SOSIAL SCIENCES

Land Economics, Retail Marketing, Halal Trading, Foreign Language Education, Comprehension, Language Learning & Teaching, ESL, ELT, Educational Psychology, Human Resource Development, Information Technology Management, Management Information Systems, Ethics in Computing, Decision Support Systems, Organizational Behaviour, Training and Development, Workplace Learning, Organizational Development and Change, Career Development, Staffing and Recruitment, Performance Management, Organizational / Managerial Communication.

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## Courses

#### **1.CORE COURSES**

## A. University Courses (6 credit)

- Research Methodology (Compulsory)
   and choose **ONE** Only *from the list below*
- Environmental Ethics
- Information and Communication Technology Ethics and Society
- Dynamics of Leadership
- Malaysian Society and Culture (for international students only)
- Organizational Behavior and Development

### Fee

#### PhD

	Local	International
• Tuition fee (full time)	RM 15,570.00	RM 37,020.00
• Tuition fee (part time)	RM 14,010.00	-
<ul> <li>Processing fee</li> </ul>	RM 20.00	RM 114.00



#### razakschool.utm.my

For online application, please log on to www.sps.utm.my Program Code: PRSGA3AKA (Generic) / PRSGA3YKA (Industry)

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