### **B. INDUSTRIAL SYSTEM**

• Ergonomic and Human Factor Engineering	3
Lean Operations	3
<ul> <li>Supply Chain Management</li> </ul>	3
<ul> <li>Maintenance Management</li> </ul>	3
<ul> <li>Project Management</li> </ul>	3
Decision Modelling	3

### C. ELECTRONIC SYSTEM

<ul> <li>Nanoelectronics Devices</li> </ul>	3
• IC Testing	3
<ul> <li>Advanced Digital Systems Design</li> </ul>	3
Random Process	3
<ul> <li>Image Processing</li> </ul>	3
<ul> <li>Software Engineering</li> </ul>	3

### D. INTELLIGENT SYSTEM

<ul> <li>Intelligent Systems</li> </ul>	3
<ul> <li>Human-Computer Interaction Design</li> </ul>	3
• Biometrics	3
<ul> <li>Advanced Sensor Systems</li> </ul>	3
<ul> <li>Ubiquitous Computing</li> </ul>	3
<ul> <li>Intelligent Data Analysis</li> </ul>	3

### **E. COMMUNICATION SYSTEM**

<ul> <li>Communication and Computer Network</li> </ul>	3
<ul> <li>Broadband Multimedia Network</li> </ul>	3
<ul> <li>Optical Communications</li> </ul>	3
<ul> <li>Wireless Communications Systems</li> </ul>	3
• Special Topic in Telecommunication Engineering	3
Advanced Communications Electronics	3

## Fee

	Local	International
<ul> <li>Tuition fee (Package 1)</li> </ul>	RM16,500.00	RM 30,000.00
• Tuition fee (Package 2)	RM16,500.00	RM 30,000.00
<ul> <li>Registration fee</li> </ul>	RM 350.00	RM 350.00
<ul> <li>Processing fee</li> </ul>	RM 60.00	RM 217.00



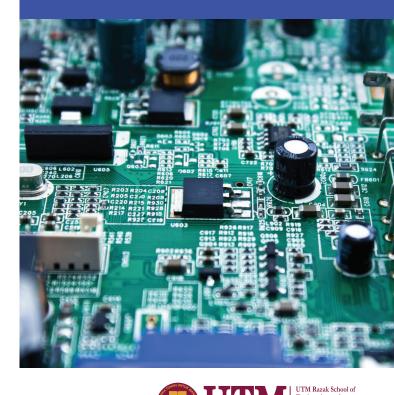
#### razakschool.utm.my

For online application, please log on to www.sps.utm.my Program Code: MRSLA1CKA

Program Coordinator: Dr. Siti Zura binti A. Jalil @ Zainuddin Tel: +603 2203 1440 Fax: +603-2180 5380 Mobile: +6017-332 9239 Email: sitizura.kl@utm.my / razakschool@utm.my

# MASTER OF SCIENCE

## (SYSTEMS ENGINEERING)



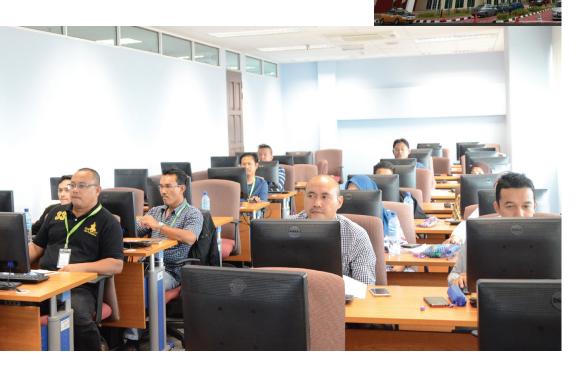


TOTAL CREDIT

46



UTM Razak School of Engineering and Advanced Technology



### Master of Science (Systems Engineering)

UTM Razak School of Engineering and Advanced Technology offers outstanding master of science program for working adults or fresh degree students who want to enhance their engineering system knowledge and to gain additional skills in career towards the challenging world. Our program is one of the leading engineering system programs in the country, and our students pursue exciting learning and sharing knowledge in a vibrant campus. Our program is designed to combine rigorous and in-depth fundamental of engineering system with flexibility to select specialisation from five main engineering fields: communication system, electronic system, industrial system, intelligent system and power system. Be part of our forefront master of science program in the engineering system that fulfills the industrial demands.

## Entry Requirements

A Bachelor's degree in Engineering or Technology with minimum CGPA 3.0 of Electrical, Electronics, Mechanical, Manufacturing, Computer or any other relevant disciplines that are recognised by the UTM Senate.

For those having below CGPA 3.0, a minimum of 2 years working experience is required.

### English Requirements (International Students Only)

All International students applying to UTM must have a valid two-year old TOEFL or IELTS certificate. Students with 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.

## Courses

### **1.CORE COURSES** A. University Courses (6 credit) Research Methodology (Compulsory) 3 and Choose ONE Only from the list below Environmental Ethics 3 Information and Communication Technology 3 Ethics and Society 3 Dynamics of Leadership Malaysian Society and Culture (Int. Students only) 3 Organizational Behavior and Development 3 B. Program Courses (28 credit - Compulsory ALL) • System Engineering and Analysis 3 Engineering Management, Safety and Economy 3 • Systems Optimization and Analysis for Operations 3 3 Data Analysis for Systems Engineering 3 Entrepreneurship for Scientists and Engineers Scientific Computing for System Engineer 3 Masters Project I 4 Masters Project II 6 2. ELECTIVE COURSES (12 credit - choose 4 ONLY)

### A. POWER SYSTEM

<ul> <li>Power Electronics System</li> </ul>	3
<ul> <li>Power Quality</li> </ul>	3
<ul> <li>Power System Analysis</li> </ul>	3
<ul> <li>Power System Apparatuses and Devices</li> </ul>	3
<ul> <li>Integrated Resources Planning in Energy Sector</li> </ul>	3
<ul> <li>Alternative Energy Technology Systems</li> </ul>	3