



CENTRE FOR GRADUATE STUDIES

UNIVERSITI TUN HUSSEIN ONN MALAYSIA With Wisdom We Explore

cgs.uthm.edu.my

CENTRE FOR GRADUATE STUDIES

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

FIRST EDITION : 2016

SECOND EDITION: 2018

THIRD EDITION : 2019

For Copyright Control. This UTHM Postgraduate Prospectus belongs to UTHM and it is prohibited for any individuals / parties to publish for reproduce any part of the graphics or texts without the consent of the editor or the university for any purposes.



Disclaimer: Whilst every care has been taken in preparing the information published in this UTHM Postgraduate Prospectus, The Centre for Graduate Studies (CGS) does not guarantee the accuracy the content. CGS cannot be held responsible for any errors or omissons and accepts no liability whatsoever for any loss or damage however arising.

UTHM

UNIVERSITI TUN HUSSEIN ONN MALAYSIA

Universiti Tun Hussein Onn Malaysia (UTHM), named after the third Prime Minister of Malaysia, is a Malaysian Technical University Network (MTUN) of public university primarily focusing on Engineering and Technology. UTHM is strategically located in the green suburb of Batu Pahat, Johor which is about 1.5 hours drive to Singapore and 3 hours to Kuala Lumpur.

Currently, the University has more than 17,000 students, including over 780 international students from 28 countries all over the world.



UTHM has been rated overall 4-star by QS StarsUniversity Rating in 2018 with 5-star rating in Teaching, Inclusiveness, Employability, Facilities and Social Responsibility. Furthurmore, The University was ranked top 300 in QS World University Rankings in Mechanical, Aeronautical and Manufacturing Engineering Subject in 2015, 2017, and 2018.

At present, more than 70% of the academic staff from eight faculties are PhD holders with qualifications in various disciplines to teach and guide post graduate students.



All UTHM graduate programmers are designed according to Malaysian Qualifications Framework (MQF) and accredited by Malaysian Qualifications Agency (MQA). These programmes are recognised internationally and conducted in compliance with ISO 9001:2015.

PROGRAMMERS OFFERED

Doctor of Philosophy by Research

This programme is a research degree by thesis under the supervison of experienced members of academic staff or a supervisory panel. Minimum duration of study is 2 years for full time and 3 years for part time. Student's progress is monitored and assessed by the supervisor at the end of semester. Final assessment is made on the thesis via an oral examination. A student who has satisfied the Examination Committee in all aspects of his/her work is eligible for the award of the degree of Doctor of Philosophy.

Doctor of Education by Coursework

This programme is to design to enhance professional skills in the students through new approaches or teaching methodology so they can be competitive professional practitioners and leaders in educational sectors. Minimum duration of study is 3 years for full time and 4 years for part time. The programme involves lecturers. seminars and project work. A minimum of 82 credits of study and a final Cumulative Point Average (CPA) of at least 3.0 is required for the award of the Doctor of Education degree. The Programme comprises of a combination of compulsary courses, electives and dissertation. Assessments are made through assignments. test. Doctoral dissertation and final examinations. Doctoral dissertation is assessed through an oral presentation and a written report.

Master's Degree by Research

This programme is a research degree by thesis under the supervison of experienced members of academic staff or a supervisory panel. Minimum duration of study is 1 year for full time and 2 years for part time. Student's progress is monitored and assessed by the supervisor at the end of each semester. Final assessment is made on the thesis via oral examination. A student who has satisfied the Examination Committee in all aspects of their work is eligible for the award of the Master's degree.

Master's Degree by Coursework

This programme is designed to extend the knowledge and skills gained from the first degree and to developk new profession! skills in the students. Minimum duration of study is 1 year for full time and 2 years for part time. The programme involves lectures, seminars and project work. A minimum of 40 credits of study and a final Cumulative Point Average (CPA) of at least 3.0 is required for the award of the Master's degree. The Programme comprises of a combination of compulsary courses, electives and a Master's dissertation. Assessments are made through assignments tests, master's dissertation and final examinations. Master's dissertation is assessed through an oral presentation and a written report.

Master's Degree by Mixed-mode

This programme is a combination of course-work and research activities. Minimum duration of study is 1 year for full time and 2 years for part time. Assessment depends on the coursework and dissertation (research work). The component of the coursework is not more than 50% and the dissertation contributes the other 50%. This programme develops research skill of the students on top of enhancing the theoretical knowledge of the subject area.

ADMISSION REQUIREMENTS

Doctor of Philosophy

- Master's Degree from UTHM or any other Higher Learning Institutions recognised by UTHM Senate:
- Other equivalent qualification with related experience accepted by UTHM Senate;

Doctor of Education

- Bachelor's Degree and Master's Degree from UTHM or any other Higher Learning Institutions recognised by UTHM Senate AND
- Qualified as an educator at certificate, diploma, bachelor or masters level; or
- At least ONE (1) year teaching experience in any institution recognised by Malaysian Government.

Master's Degree

- Bachelor's Degree with honours from UTHM or any other Higher Learning Institutions recognised by UTHM Senate;
 - minimum CPA with cumulative grade point average (CPA) of 2.50 out of a possible 4.0 for Master's Degree by Cousework while Master's Degree by Research and Mixed Mode requires a minimum CPA 2.75. Master in Business Administration (MBA) also requires a CPA of 2.75.
- Other equivalent qualifications with related experience endorsed by UTHM Senate.



ENGLISH REQUIREMENTS FOR INTERNATIONAL APPLICANT

- International students are required to meet a minimum score of TOEFL 500¹, IELTS 5², MUET Band 3 or any English requirment that is equivalent to CEFR B1³ and recognized by UTHM Senate;
- Students who graduate from Malaysian universities recognized by the Senate;
- Students who graduate (Master's Degree for PhD application; Bachelor's Degree for Master application) from English Speaking Countries as listed*.

Certificate must be issued by Educational Testing Service (ETS).

Certificate must be issued by IDP:IELTS Australia, British Council or Cambridge English Language Assessment.

Common European Framework of Reference for Language (CEFR)

*English Speaking Countries: Anguilla, Antigua, and Barbuda, Australia, Bangladesh, Bermuda, British Virgin Island, Bahamas, Barbados, Canada, Cayman Island, Christmas Island, Cook Island, Falkland Islands, Fijl, Guernsey, Guam, Gibraltar, Grenadar, Guyana, Ghana, Hong Kong, India, Isle of Man, Ireland, Liberia, Jersey, Jamaica, Kiribati, Kenya, Montserrat, Malawi, Malta, Marshall Islands, Mauritius, Niue, Microneia, Namibia, Nauru, New Zealand, Philippines, Nigeria, Norfolk Island, Papua New Guinea, Pakistsan, Saint Kitts and Nevs, Puerto Rico, Palau, Rwanda, Singapore, Seychelles, Saint Lucia, Saint Vincent and the Grenadines, St Helena, Samoa, Swaziland, Sierra Leone, Solomon Island, South Africa, Sudan, Uganda, Tanzania, Tonga, Trinided & Tobago, Turks and Caicos Island, United Kingdom, USVirgin Islands, United States of America, Zambie and Zimbabwe.



APPLICATION FOR ADMISSION

Application for graduate programmes is open throughout the year. For coursework and mixed-mode programmes, admission is held twice a year, in February and September.

All application MUST be made via online system. For more information please refer to our website:



RESEARCH CENTRE



UTHM has a multitude of expertise on various disciplines with latest state-of-the-art equipment and facilities at these research centres:

Centre of Excellence (CoE)

- 1. Microelectronics and Nanotechnology Shamsuddin Research Centre (MiNT-SRC)
- 2. Advanced Manufacturing and Materials Centre (AMMC)
- 3. Research Centre for Applied Electromagnetic (EMCentre)
- 4. Research Centre for Soft Soil (RESESS)
- 5. Technical and Vocational Education Training (TVET)
- 6. Industry Centre of Excellence for Railway (ICOE-REL)

Centre of Research (CoR)

- 1. Advanced Technology Centre (ATC)
- 2. Cente for Facilities Management (CEFM)
- 3. Centre of Business Development (CBD)
- 4. Wireless and Radio Science Centre (WARAS)
- Software and Multimedia Centre (SMC)
- 6. Centre for Energy and Industrial Environment Studies (CEIES)
- 7. Centre of Research in Computational Mathematics (CERCOM)
- 8. Centre of Research in Sustainable Uses of Natural Resourses (SUNR)
- 9. Smart Driving Research Centre (SDRC)
- 10. Jamilus Research Centre (JRC) Sustainable Construction (material, integrated design and construction management)
- 11. Micro-pollution Research Centre (MPRC)
- 12. Precision Machining Research Centre (PREMACH)
- 13. Centre of Research for Mechanical Failure Prevention and Reliability (MPROVE)



ACCOMMODATION



The University provides a limited number of hostel accommodations for graduate students. However, private accommodation is easily available around the campus, with rental that fit a student's budget. Monthly rental could range between approximately RM200 for a room and RM500 for a house.



OTHER FACILITIES

The University facilities are rated with a 5-star rating by QS Stars University Rating:



Among the facilities provided by the University are as below:

- Free internet access
- Transportation
- Cafeterias
- Residential Colleges
- Medical and Health Services
- Mini Post Office
- Olympic-sized swimming pool
- Golf driving range
- Sport & Recreational Facilities
- Banking Services & ATM
- Student Service Kiosk and Cooperative Shop
- Career and Counselling Services
- Mosque

FUNDING

A number of funding opportunities are available (subject to availability and application):

- UTHM Graduate Research Grant
- Malaysian International Scholarship (for international only)
- Commonwealth Scholarship and Fellowship Plan
- MARA (for local only)
- Yayasan Negeri (for local only)
- National Higher Education Fund Corporation, PTPTN (for local only)
- Finance Institutions, Government
- Agencies or others.

ENQUIRIES

All enquires are to be addressed to:

Dean

Centre for Graduate Studies Universiti Tun Hussein Onn Malaysia 86400 Parit Raja, Batu Pahat, Johor, MALAYSIA

Phone: +607-453 7757 / 7509 / 7906 / 7905

Fax : +607-453 6111 E-mail : ps@uthm.edu.my Web : cgs.uthm.edu.my



CIVIL AND ENVIRONMENTAL ENGINEERING PROGRAMMES OFFERED



- Doctor of Philosophy in Civil Engineering (Research) MQA/FA5872
- Master of Civil Engineering (Research) MQA/FA5871
- Master of Civil Engineering (Coursework) MQA/FA5870

RESEARCH PROGRAMMES

Areas of Research:

- Geotechnical Engineering
- Construction Engineering
- Structural Engineering
- Construction Material
- Environmental Engineering
- Water Resources Engineering
- Highway Engineering
- Transportation Engineering
- Traffic Engineering
- Building Engineering
- Construction Management
- Concrete Technology

COURSEWORK PROGRAMMES

- Geotechnical Engineering
- Structural Engineering
- Highway & Transportation Engineering
- Environmental Engineering
- Water Resources Engineering



PROGRAMMES OFFERED

- Doctor of Philosophy in Electrical Engineering (Research) MQA/FA5860
- Master of Electrical Engineering (Research) MQA/FA5859
- Master of Electrical Engineering (Coursework) MOA/FA5858

RESEARCH PROGRAMMES

Areas of Research:

COMMUNICATION ENGINEERING

- Geotechnical Engineering
- Mobile Ad Hoc and Sensor Network
- Wireless and Optical Communications
- Electromagnetic Compatibility
- Ionosphere and Aerospace Sciences
- Radio Science and Satellite Communications
- Antenna and Wave Propagation
- Microwave and RF Engineering
- Digital Signal Processing

ELECTRONIC ENGINEERING

- Medical Electronics
- Microelectronics
- Nanotechnology
- Biomedical Engineering
- Medical Image Processing
- Medical Instrumentation
- Biosensors
- Telemedicine

- Thin Film
- Biomedical Modelling & Simulation
- VLSI Design
- MEMS Design
- Realiability & Failure Analysis
- Rehabilitation Engineering

MECHATRONIC AND ROBOT ENGINEERING

- Industrial Automation
- Mechatronic and Robotic Systems
- Medical Robotic and Teleoperation
- Autonomous System
- Advanced Computer Vision
- Advanced Machine Learning/Neural Networks & Statistical Models
- Rehabilitation Engineering
- Sensing Technologies
- Process Tomography
- Soft Robotics
- Advance Control System

POWER ENGINEERING

- Renewable Energy
- Power Quality
- Power Electronics
- Power System Protection
- High Voltage Engineering
- Power System Stability
- Electric Machine & Drive

COMPUTER ENGINEERING

- High-Performance Computing
- -Embedded System Computng
- Image and Vision System
- -Internet of Things

UTHMPOSTGRADUATEPROSPECTUS

COURSEWORK PROGRAMMES

- Power Engineering
- Communication Engineering
- Mechatronic Engineering
- Medical Electronic



MECHANICAL AND MANUFACTURING ENGINEERING PROGRAMMES OFFERED



- Doctor of Philosophy in Mechanical Engineering (Research) MQA/FA5863
- Master of Mechanical Engineering (Research) MQA/FA5862
- Master of Mechanical Engineering (Coursework) MQA/FA5861
- Master of Science in Manufacturing Engineering (Mixed Mode) MQA/FA3097
- Master of Science in Material Engineering (Mixed Mode) MQA/FA3025

RESEARCH PROGRAMMES

Areas of Research:

MECHANICS:

- · Noise and Vibration Fatigue and Fracture Mechanics
- Finite Element Methods Computational Fracture Mechanics • Impactand Crashworthiness Mechanics • Strength of Solids and Structures • Control Engineering
 Intelligent Control System Design • Structural Health Monitoring

MANUFACTURING:

*Advanced Manufacturing Process * Advanced Machining Processes *Computer Aided Design*Rapid Prototyping * Quality Engineering* Computer Aided Manufacturing * Industrial Engineering*Industrial Automation * Modeling and Optimisations * Scheduling and Optimisations * OptimisationMethod in Metal Casting * Metal Fabrication * Recycling Technology * Quality and Productivity Improvement * Production and Operations Management * Human Factors and Ergonomics * Sustainable Manufacturing * Additive Manufacturing * Intelligent System for Manufacturing * Manufacturing System for Optimisation * Micromachining Process * Micromanufacturing * NewFabric Technology * Industrial Textile Application * Metrology and Measurement

MATERIAL:

- Composite Biomaterials Polymer Powder Metallurgy
- Membrane PorousMaterials Computer Aided
 Engineering Engineering
 Ceramics/Electro-ceramics Electroplating Thin Film and
 Coating Lighweight Alloy Product Lifecycle Management
- Railway Engineering Engineering Education Nanomaterials Natural Fibre Based Composite

THERMOFLUIDS:

•Thermodynamics • Heat Transfer • Computational Fluid Dynamics • Indoor Air Quality and Thermal Comfort • Combustion and Pollution Control • GreenTechnology • Burner System • Vehicles Performance and Emissions • Alternative and Renewable Fuel • Spray and Atomisation • Wind Turbine

AERONAUTICS:

•Aircraft Propulsion • Aircraft Turbomachinery • Aircraft Material and Structure • Aircraft design • Aerodynamics • Aircraft Control & Dynamics • Unmanned Aerial Vehicle • AviationManagement

COURSEWORK PROGRAMMES

Electives:

- Manufacturing
- Thermofluids
- Materials
- Mechanics

MIX-MODE PROGRAMMES

Electives (Manufacturing):

- · Additive Manufacturing
- Machining and Machine Tools
- Advanced Metal Casting Process
- Advanced Manufacturing Process
- Product Design Development
- Intelligent Design and Manufacturing
- Industrial Robotics
- Industrial Automation
- · Human Factor Engineering
- Quality Management System

Electives (Materials):

- · Materials Characterization and Testing
- Engineering Composite
- Biomaterials
- Engineering Polymers
- Metallurgy
- · Engineering Ceramics
- · Thin Film & Coating
- · Corrosion and Prevention
- Porous Materials



APPLIED SCIENCES AND TECHNOLOGY

PROGRAMMES OFFERED

- Doctor of Philosophy in Science(Research)MQA/FA0080
- Master of Science (Research) MQA/FA0084
- Master of Science (Applied Mathematics) (Coursework) MQA/FA1349
- Master of Science (Biodiversity Conservation) (Mixed Mode) MQA/PA3485
- Master of Science (Material Chemistry) (Mixed Mode) MQA/PA3691

Research (R), Coursework (C), Mix Mode (M)

RESEARCH PROGRAMMES

Areas of Research:

APPLIED SCIENCES AND TECHNOLOGY

• FoodTechnology • Food Science • Functional Food & Nutraceutical . Nutrition . Food Safety & Quality •Food Innovation and Product Development •Food Processing • Food Engineering • Food Chemistry • Food Biochemistry · Food Biotechnology · Food Microbiology •Natural Product Chemistry • Traditional Knowledge • Ethnobotany • EthicsandIntegrity • Social Transformation and Leadership • Islamic Civilization • Islamic Thought and Philosophy • English and Communication • Islamic Science and Technology • Multimedia Technology and Da'wah • Social Development • E-Management • English for Technology and Communication • Technical Communication • English for Academic and Research Purposes

MATHEMATICS

Fuzzy Mathematics • FluidDynamic • FluidMechanics • Numerical Methods • Computational Mathematics • Mathematics Modelling • Biomechanics • Optimization • Engineering Mathematics • Applied Mathematics • Topology

STATISTICS

- Statistical Modelling
 Time Series Analysis
 Biostatistics
 Statistical Mathematics
 Probability and Statistics
- Fuzzy Statistics Stochastic Modelling Medical Statistics Quality Control Nonparametric Method Robust
 Statistics Design of Experiment Multivariate Analysis Statistical Machine Learning and Data Mining Networkanalysis Big Data Operational Research and Optimization

PHYSICS

MaterialScience • Surface Science • Nanotechnology • Health Physics • Energy • Biophysics • Computational Physics • Nuclear Physics • Environmental Physics • Optoelectronics • Instrumentation Physics • Semiconductor-Physics • Radiation Technology

BIOLOGY

• Botany • Zoology • Nature Tourism • Entomology • Herbal Science • Genetic (Animal & Plant) • Ecophysiology of Plants • Conservation of Natural Resources • Protected Area Management • Environmental Management • Animal Ecology • Conservation Biology • Marine Biology • Terrestrial Ecology • Ecological Dynamics

CHEMISTRY

• Organic Chemistry • Inorganic Chemistry • Material Chemistry • Advanced Material • Biopolymer • Polymer Technology • Surface Chemistry and Catalysis • Membrane Technology • Environmental / Green Technology

TECHNOLOGY MANAGEMENT AND BUSINESS PROGRAMMES OFFERED





- Doctor of Philosophy in Technology Management (Research) MQA/FA5869
- Doctor of Philosophy in Real Estate and Facilities Management MQA/FA5868
- Master of Science in Technology Management (Research) MQA/FA5867
- Master of Science in Real Estate and Facilities Management
- (Research) MQA/FA5866
- Master of Science in Construction Technology Management
- (Coursework) MQA/FA0087
 Master of Business Administration (Coursework) MQA/FA10711

RESEARCH PROGRAMMES

Area Research:

TECHNOLOGYMANAGEMENT

Operation Management & Strategy • Manufacturing Process • Total Quality Management • Industrial Forecasting • Supply Chain Management • ICT in Manufacturing and Management • Technology Assessment • Knowledge Management • Performance Evaluation • Construction Quality • Concrete Technology in Construction • ICT in Construction • Project Management • Environmental Management • Social Impact Assessment • Sustainable Development in Construction • Innovation & Commercialization • Technology Transfer • Technology Adoption • Technology Foresight • Service Management • Product Development • Technology Acquisition

REAL ESTATE AND FACILITIES MANAGEMENT

- Technology and Practice in Real Estate and Facilities Management Real Estate Finance and Investment
- Real Estate Development and Marketing
 Asset Management
 Business Strategies and Support
 Services in Real Estate and Facilities Management
 Real Estate Valuation
 Real Estate Agency and
 Marketing
 Benchmarking of Real Estate and Facilities Management Best Practice
 Environmental Management in Real Estate and Facilities Management
 Sustainable Development in Construction
 Housing Design
 Rural Planning and Development

PROGRAMMES OFFERED

- Doctor of Education (Coursework) MQA/PA10826
- Doctor of Philosophy in Technical and Vocational Education (Research) MQA/FA585
- Doctor of Philosophy in Education (Research) MOA/PA1539
- Master of Technical and Vocational Education (Research) MQA/FA5856
- Master of Technical and Vocational Education (Coursework) MQA/FA5855
- Master of Technical Education (CivilEngineering) (Coursework) MQA/FA5852
- Master of Technical Education (Electrical Engineering) (Coursework) MQA/FA5851
- Master of Technical Education (Mechanical Engineering) (Coursework) MQA/FA5853
- Master of Technical Education (Instructional Design and Technology) (Coursework) MQA/FAS854

RESEARCH PROGRAMMES

Areas of Research:

•Curriculum and instruction •Information and communication technology (ICT) • Assessment and evaluation •Product Development and Design • Management and leadership • Job and career development •Educational sustainable development (ESD) • Teachertraining •Transferableskills • Quality assurance • Policy and governance • Special need education • Lifelong learning • Tourism and Hospitality • Entrepreneurship • Gender issues • Employability • Workethics • Safety and health • Internationalization • Vocationaltraining • Accreditationon Prior Experiential Learning (APEL) • 21st century skills • Apprenticeship • Life Long Learning • Dual System •Leadership • Web-mediatedlearning / training

COURSEWORK PROGRAMMES

Core Education:

- · Research Methods
- · Curriculum Development
- · Life Long Learning
- · Pedagogical Practices
- Assessment
- · Information Technology
- Psychology
- · Educational Philosophy
- Sociology
- · Curriculum Development
- Development of Technology and Pedagogical Practices
- Assessment
- · InformationTechnology
- Psychology
- EducationalPhilosophy
- Development of Technical and Vocational

Education and Training

Master Project

- Civil Engineering
- · Electrical Engineering
- · Mechanical Engineering
- · Instructional Design and Technology

COMPUTER SCIENCE AND INFORMATION TECHNOLOGY PROGRAMMES OFFERED

- Doctor of Philosophy in Information Technology (Research) MQA/FA5865
- Master of Information Technology (Research) MQA/FA5864
- Master of Computer Science (Information Security) MQA/FA0832
- Master of Computer Science (Software Engineering) MQA/FA0830

RESEARCH PROGRAMMES

Areas of Research:

SOFT COMPUTING

- •Data Mining
- Neural Network
- Swarm Intelligence
- DecisionTree
- Data Clustering
- •Data Classification
- •Rough Set
- •Soft Set
- Pattern Recognition
- •Image Processing

SOFTWARE ENGINEERING

- •Software Requirement and Specification
- •Software Design
- •Software Management
- Software Testing
- Formal Method
- Distributed Database
- Information System

GRID AND CLOUD

- Data Management
- Data Replication
- Securit in Cloud
- •Grid Computing
- ·Big Data

SECURITY

- •Digital Forensic
- Cryptography
- Steganography
- •Trusted Computing
- Gridand Cloud Security
- Computer and NetworkSecurity
- Security and Privacy
- InformationSecurity

INTERACTIVE MEDIA:

- VideoVisualization
- •Human Computer-
- Interaction
- Content Adaption
- Mobile Content

Development

WEB TECHNOLOGY

- •Web Semantic
- Web BigData
- PervasiveComputing
- Web Services
- Ontology
- Query Processing and Optimization
- IOT

PROGRAMMES OFFERED

- Doctor of Philosophy in Engineering Technology (Research) MQA/FA3734
- Master of Engineering Technology (Research) MQA/FA3733
- Master of Science in Railway Engineering MQA/FA1538

RESEARCH PROGRAMMES

Areas of Research:

- •Civil Engineering Technology
- •Electrical Engineering Technology
- •Chemical Engineering Technology
- •Mechanical Engineering Technology
- •Occupational Safety and Health
- •Transportation Engineering Technology

RAILWAY ENGINEERING

- •Railway Electrification System
- •Railway Operation and Maintenance
- •Railway Track Engineering Design
- •Signalling and Communication
- •Project Management
- •Rolling Stocks Technologies and Maintenance



GENERAL STUDIESPROGRAMMES OFFERED

- Doctor of Philosophy (Research) MQA/PAI1854
- Master of Philosophy (Research) MQA/PA11853

RESEARCH PROGRAMMES



Areas of Research:

RELIGIOUS STUDIES

- Contemporary Islamic Studies
- •Islamic Thought and Comparative Religion
- •Figh, Usul Figh and Muamalat

LANGUAGE

- •Language Studies and Linguistic
- ·Language and Virtual Technology
- •Communication and New Technology

HISTORY, PHILOSOPHY AND ETHICS

- Philosophy and Civilization
- Science, Civilization and Technology
- •Ethics, Communities and Engineers
- •Industrial Technology and Human Security
- Sustainable Technology and Society
- Industrial Society
- SoftSkills and Human Capital
- Professional Practice in Society
- *Historical Studies of Malaysia and South East Asia
- ·History of Leadership and Statesman
- Unity and Nation Building
- ·Heritage, Technology, Culture and Society
- Social Changes and Impact
- •Gender and Family Issues

