

Doctor of Philosophy (Engineering) at Lee Kong Chian Faculty of Engineering & Science

Programme Structure

By Research: 2 Compulsory modules (6 credit hours) + Thesis

Details of Units:

No.	Unit Code	Unit Title	Type	Credit Hours
1	DEGD10100	Thesis	Core	0
2	DEGG10203	Directed Readings in Science and Engineering	Core	3
3	DEGG10303	Research Methods in Science and Engineering	Core	3

Intakes: Open throughout the year

Duration:

Full-time:

Normal 3 years; Maximum 6 years

Part-time:

Normal 4 years; Maximum 8 years

Indicative Fee (RM)

Malaysian

Full-time: RM 10,700.00

Part-time: RM 9,300.00

International

Full-time: RM17, 800.00

Mode of Study: By Research

Head of Programme

Dr Ezra Morris Abraham

ezram@utar.edu.my

LIST OF QUALIFIED TEACHING LECTURERS/SUPERVISOR

(applicant is advised to discuss with potential supervisor before preparing the research proposal)

<p>PROF DR CHONG KOK KEONG</p> <p>Email me at: chongkk@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=chewkw&reqPageId=aboutMe</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none">• Energy• Renewable energy• Solar energy• Concentrating solar power• Solar cell technology• Solar thermal process
<p>PROF. DR EWE HONG TAT</p> <p>Email me at: eweht@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=eweht&reqPageId=aboutMe</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none">• Microwave Remote Sensing• Satellite Image Processing• Intelligent Computing• Network Technology
<p>PROF. IR. DR. GOI BOK MIN</p> <p>Email me at: goibm@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=goibm&reqPageId=aboutMe</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none">• Communication and Embedded System Designs.• Information Security and Cryptology
<p>PROF. IR. DR. YOW HO KWANG</p> <p>Email me at: yowhk@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=yowhk&reqPageId=aboutMe</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none">• III-V Semiconductors, Devices and Processing• Polymer-based LEDs/solar cells• Silicon defects detection

<p>Prof. Ir. Dr. Lee Sze Wei</p> <p>Email me at: leeszewei@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=lswei&reqPageId=aboutMe</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Telecommunication Network
<p>Prof. Dr Faidz bin Abd Rahman</p> <p>Email me at: faidzar@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=faidzar&reqPageId=aboutMe</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Acousto-optics tunable filter • Fiber laser and amplifier • Fiber microlenses • Optical Fiber Sensor
<p>PROF. IR. CHUNG BOON KUAN</p> <p>Email me at: chungbk@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=chungbk&reqPageId=aboutMe</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Anechoic Chamber • Electromagnetic Theory • Microwave Techniques • Electromagnetic Compatibility • Antenna • Radar Systems • Communication Theory and Techniques • Remote Sensing • High-speed Electronics •
<p>Prof Dr Yasuo Tanaka</p> <p>Email me at: yasuo@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=yasuo&reqPageId=aboutMe</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Geotechnical Engineering, Geotechnical Earthquake Engineering, Disaster Risk Reduction

<p>Prof Dr Rajkumar a/l Durairaj</p> <p>Email me at: rajkumar@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=rajkumar&reqPageId=aboutMe</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Conductive Adhesives • Electronics Manufacturing • Electronics Material • Nano-materials • Rheology
<p>Dr Lo Fook Loong</p> <p>Email me at: lofl@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=lofl&reqPageId=aboutMe</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Digital Signal Processing • Digital Communication System • Verilog • Matlab
<p>Prof. Dato' Ir Dr Goh Sing Yau</p> <p>Email me at: gohsy@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=gohsy&reqPageId=aboutMe</p>	<p>RESEARCH AREA / EXPERTISE</p>
<p>Prof. Ir. Dr. Lim Yun Seng</p> <p>Email me at: ySlim@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=ySlim&reqPageId=aboutMe</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Electrical Engineering • Power Engineering • Renewable Energy • Smart grid
<p>Dr Yong Thian Khok</p> <p>Email me at: yongtk@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=yongtk</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Digital Holography • Optical and Holographic Sensors • Organic LED • Thin Film Coating (e.g. pulsed laser deposition, sputtering,

<p>Dr Tay Yong Hau</p> <p>Email me at: tayyh@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=tayyh</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Artificial Intelligence • C/C++ • Computer Programming • Computer Vision • Deep Learning • Handwriting Recognition • Image Processing • Intelligent Transport Systems • Low-level computer programming • Machine Learning • Neural Networks • Pattern Recognition
<p>Ir Dr Lee Tin Sin</p> <p>Email me at: leets@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=leets</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Biodegradable polymers • Injection moulding simulation • Polymer characterizations • Polymer nanocomposites
<p>Dr Khaw Chwin Chieh</p> <p>Email me at: khawcc@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=khawcc</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • electroceramics • solar cell
<p>DR LEONG LOONG KONG</p> <p>Email me at: leonglk@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=leonglk&reqPageId=aboutMe</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Advanced Materials • Heterogeneous Catalysis • Petrochemical Processes • Selective Oxidation • Surface Science

<p>DR. CHEW KUEW WAI</p> <p>Email me at: chewkw@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=chewkw&reqPageId=aboutMe</p>	<p>RESEARCH AREA / EXPERTISE</p> <p>Electric Vehicle Related Research:</p> <ul style="list-style-type: none"> • EV as distributed energy storage device that flatten the peak demand curve. • V2G and G2V communication protocol design and implementation for smart grid and EV. • Distance Estimation System for an EV. • Cell balancing and fault detection for EV's battery system. • Integration of SC into EV battery system to enhance the energy usage efficiency. • EV as center micro-grid for energy harvesting system and distribution. <p>Materials related research:</p> <ul style="list-style-type: none"> • Polymer electrolyte for lithium based polymer electrolyte • Novel biodegradable polymer system for lithium batteries.
<p>DR. LIM BOON HAN</p> <p>Email me at: limbhan@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=limbhan&reqPageId=aboutMe</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Solar Energy – Photovoltaic System • Solar Energy – Smart PV Module • Concentrated Solar Thermal Energy • Energy Efficiency • Daylighting
<p>Dr. Chen Kah Pin</p> <p>Email me at: chenkp@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=chenkp&reqPageId=aboutMe</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Polymer solar cell fabrication • Nanoscale materials fabrication
<p>Dr. Huang Yuk Feng</p> <p>Email me at: huangyf@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=huangyf</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Water resources / Hydrology • Hydraulics

<p>DR. LAI AN CHOW</p> <p>Email me at laiac@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=laiac&reqPageId=aboutMe</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • High Performance Computer Architecture • Embedded System and Control • Sensor Networks and Applications
<p>Ir. DR. LEE MIN LEE</p> <p>Email me at: mllee@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=mllee</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Microbial soil improvement • Rainfall-induced landslide • Soil seepage analysis • Unsaturated soil mechanics
<p>DR. LEE KHIA MIN</p> <p>Email me at: leekm@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=leekm</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Biological waste water treatment • Management of agriculture waste • Membrane technology • Water quality assessment
<p>Dr. Morris Ezra</p> <p>Email me at: ezram@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=ezram</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Digital Signal Processing • Data Communication • Power Line Communication • Smart grid
<p>Ir Dr Ng See Seng</p> <p>Email me at: ngss@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=ngss</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Sustainable Development in the Construction Industry • Outcome-based Education in Engineering Programs

<p>Ir. Dr. Ng Soon Ching</p> <p>Email me at: ngsc@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=ngsc</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Lightweight concrete and concrete technology • Energy efficient construction • Soft ground engineering • Green and sustainable construction • Industrialised building system
<p>Dr. Sim Jia Huey</p> <p>Email me at: simjh@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=simjh</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Renewable Energy: Biofuels • Chemical and Enzymatic Catalysis • Fermentation Technology • Membrane Separation Technology
<p>DR. STELLA MORRIS</p> <p>Email me at: stellam@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=stellam</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Power system stability • FACTS devices and their control • Renewable /green energies • Smart grid
<p>DR TAN ENG KIANG</p> <p>Email me at: tanek@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=tanek</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Foundations of Quantum Mechanics • Quantum Optics • Quantum Measurement • Condensed Matter Physics: Ferroelectrics
<p>DR. VICTOR TAN</p> <p>Email me at: hktan@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=hktan</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Cloud and Distributed Computing • Network Security Infrastructure

<p>DR. YEO HENG GIAP IVAN</p> <p>Email me at: yeohg@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=yeohg</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Operations Research • Deterministic Inventory Models
<p>Dr. CHONG POH KIT</p> <p>Email me at: pkchong@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=pkchong&reqPageId=aboutMe</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Embedded Systems • Massively Parallel Processing • TCP/IP • Wireless Pathloss Modelling • Wireless Sensor Networks
<p>Dr LEE KIM YEE</p> <p>Email me at: kylee@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=kylee&reqPageId=aboutMe</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Dielectric Measurement • Microwave Instrumentation • Microwave Sensor
<p>Dr. LIM SOO KING</p> <p>Email me at: limsk@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=limsk</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • ESD and EOS • Process capability indices • Semiconductor Fabrication/Assembly/Test Processes • SPC (statistical process control) • Uncertainty measurement • VLSI Design
<p>Ir DR LEE WAH PENG</p> <p>Email me at: leewp@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=leewp</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Project Management

<p>DR KONG SIN GUAN</p> <p>Email me at: kongsg@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=kongsg</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Bioinformatics • Biostatistics • Computational Biology • Laser Optical Tweezer • Phylogeny Analysis • Systems biology
<p>DR YOGESWARAN A/L MOHAN</p> <p>Email me at: yogeswaran@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=yogeswaran</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Artificial Intelligence • C/C++ • Image Processing • PHP, MySQL • Reinforcement Learning • Swarm Robotics • Ultrasonic Cleaning
<p>DR LEE JER VUI</p> <p>Email me at: leejv@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=leejv</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • AI and Robotics • Computer Assisted Learning and E-Learning • Engineering Education, Learning Environment, Constructivist Learning and Game-based Learning • Manufacturing Automation and Laser Material Processing • Modeling, Simulation and Visualization
<p>DR LEE POH FOONG</p> <p>Email me at: leepf@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=leepf&reqPageId=aboutMe</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Brainwaves with EEG analysis on depression • Lab on chip on biomedical area • Microfluidic • Plasma technology • Surface Charge Unicellular Cell, Nanogold cancer treatment

<p>Dr Gulnaziya Issabayeva</p> <p>Email me at: gulnaziya@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=gulnaziya&reqPageId=aboutMe</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Adsorption of heavy metals • Adsorption properties of palm shell activated carbon • Electrodeposition of heavy metals • Removal of heavy metals by Electrosorption onto palm shell activated carbon • Wastewater treatment: removal of heavy metals
<p>Dr Low Kaw Sai</p> <p>Email me at: lowks@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=lowks&reqPageId=aboutMe</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Softground Engg, Coastal Engg, Soil Stabilisation, Bamboo RC Structure, Highway Engg
<p>Dr Loo Joo Ling</p> <p>Email me at: loojl@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=loojl&reqPageId=aboutMe</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Aquaculture Engineering • Aquaculture Feed and Nutrition • Biosensors • Enzyme and Food Biotechnology • Food Processing • Natural Products
<p>DR NG OON-EE</p> <p>Email me at: ngoe@utar.edu.my</p> <p>View my CV at: http://www.utar.edu.my/cv/index.jsp?cv=ngoe</p>	<p>RESEARCH AREA / EXPERTISE</p> <ul style="list-style-type: none"> • Artificial Intelligence • Computer Vision • Image Processing • Optimization • Robotic Kinematics • Statistics • Stereo Vision