Southampton

UNDERGRADUATE COURSES 2018



FOUNDING MEMBER OF THE RUSSELL GROUP

The University of Southampton has a global reputation for academic excellence. We are one of the top ten universities in the UK for engineering, and have established a branch campus within the EduCity development in Iskandar Puteri, Johor to enable more students to experience our world-class education.

- → You will graduate with a masters degree from an internationally recognised University
- → Students at our Malaysia Campus are offered the same course content and teaching quality as students in the UK
- → You will enjoy a very high staff to student ratio at our Malaysia Campus
- → You will spend two years in Malaysia and two years in the UK as part of your degree programme
- → Your degree is around 65 per cent\* of the cost of the same degree in the UK
- \* This figure is based on international tuition fees, includes the 20% Transition Bursary and uses the exchange rate £1 = MYR 5.55 as of July 2017. The cost of studying the same degree in the UK (4 years in the UK) is £20,320 per annum.





**No.5 TOP 10** No.2 for Electrical and for Mechanical Engineering for Aeronautics and Astronautics Electronic Engineering Sunday Times Good University Guide, 2017 The Complete University The Guardian University Guide, 2018 Guide, 2018 2 years **TOP 1%** in Malaysia followed by of global universities 2 years QS World University Rankings, 2018 in the UK **APPLY NOW** Achieve your goals and challenge everything at the University of Southampton Find out more and apply at: www.southampton.ac.uk/my/apply

# CHOOSE SOUTHAMPTON: A GLOBAL UNIVERSITY

Experience a global engineering education in Malaysia and the UK

We have alumni branch networks in many countries including Malaysia, Singapore and China which can help you with networking, employability and mentoring



### STUDYING ABROAD:

we have over 400 links with 233 partners in 54 countries around the world

# 1 Robotics Challenge

A team of our students from Electronics and Computer Science organise the annual Student Robotics competition to encourage sixth-form and college students to design, build and test autonomous robots.



## 2 Global Competition

Engineering students are designing and building the Southampton Formula Student car, ready to race against other universities from around the world.



# y

### @Southampton\_MY

Follow us for the latest news, research and events at the University

Our Malaysia Campus in the EduCity development in Iskandar Puteri, Johor, enables students to experience the University of Southampton's world-class education at around 65 per cent\* of the cost of obtaining the same degree in the UK. Obtain a unique 'Southampton' education in Malaysia: two years of study in Malaysia followed by two years of study in the UK.

We have educated students from Malaysia for over 50 years and enjoy good links with South-East Asia which span many disciplines and levels of education and research. Our partnerships in the region include the University of Malaya, the Universiti Teknologi Malaysia, Universiti Teknologi Petronas, the National University of Singapore and Nanyang Technological University. Join us to be part of a forward-thinking institution that upholds innovation and exploration at the centre of its education; join us to forge a successful global future.

- → Our alumni community is a rich, diverse network of former students that covers the globe
- → Our world-class academics are at the cutting-edge of their disciplines, bringing a positive impact to every continent
- → Our business, government and non-government organisation partners span the globe
- → We are part of the Worldwide Universities Network, a collaboration of knowledge from around the world



# Building a Satellite

Students and researchers are working on a project to design and build a CubeSat. They aim to place it into orbit via the International Space Station.



# 4 Spacecraft Propulsion

Research students in Electronic Engineering are helping develop high powered hollow cathodes for spacecraft propulsion in collaboration with the Japanese Aerospace Exploration Agency.



### Scholarship Awards

Pang Aaron Ken Soon is a three times recipient of the prestigious Lloyd's Register Foundation scholarship. Aaron is a 4th year MEng Electrical and Electronic Engineering student who spent two years at our Malaysia Campus.



<sup>\*</sup>This figure is based on international tuition fees, includes the 20% Transition Bursary and uses the exchange rate £1 = MYR 5.55 as of July 2017. The cost of studying the same degree in the UK (4 years in the UK) is £20,320 per annum.

# WHAT HAS YOUR NEW BECOME?

# Leading the field in aero engine innovation

### **Jeremy Fong**

MEng Mechanical Engineering/Aerospace, 2016 graduate Graduate Engineer, Rolls-Royce, UK

"I secured a place on a graduate scheme with Rolls-Royce UK, where I have gained valuable experience of working in the civil aerospace industry and am able to apply the knowledge and skills I gained at university into real-world situations.

"One thing I learned from university is the importance of communication. At my company, I get to work with people from different disciplines – manufacturing, design and materials. Every day is different so I always get to learn new things, which is really great.

"The University of Southampton played an important role with my application - I found out about Rolls-Royce through the Engineering Fair held by the University's Career and Employability Services. I also had my CV examined by a practitioner at the University's drop-in service and attended a mock assessment centre to help me in my preparation for Rolls-Royce's assessment centre.

"My time in the UK has been one of the best experiences of my life. I have been able to experience different cultures and expand my world view – something which can't be taught in books."

### **Find out more:**

www.southampton.ac.uk/my/alumni/jf



# CHOOSE SOUTHAMPTON: SHAPE YOUR FUTURE

A degree from Southampton opens doors to career opportunities.

### Southampton fast-tracks your ambitions

- → We prepare you for future challenges not yet imagined and jobs not even thought of
- → We are top 150 in the world's best institutions for employability\*
- In the most recent Destinations of Leavers from Higher Education statistics 95 per cent of graduates whose destinations were known were in employment and/or further study

### Southampton gives you the opportunity to:

- → Take advantage of our commercial partnerships via internships
- → Join our annual Engineering and Technology careers fair in the UK, which attracted over 90 leading companies in 2017
- → Benefit from advice from graduates about future career possibilities in the UK, Malaysia and other countries
- → Specialise further with one of our postgraduate courses and gain a more in-depth knowledge of your subject to realise your ambitions
- → Build your entrepreneurial skills by engaging with Future Worlds, our on-campus startup incubator. Visit www.futureworlds.com

Southampton Aeronautics and Astronautics graduates are successfully employed at high-profile organisations such as:

AgustaWestland, Airbus Defence and Space, Aston Martin, BAE Systems, Boeing, British Airways, DSTL, Dyson, ESA, Jaguar Land Rover, Lockheed Martin, Mercedes-AMG Petronas Motorsport, QinetiQ, Red Bull Racing, Rolls-Royce, Siemens

Southampton Electrical and Electronic Engineering graduates are successfully employed at high-profile organisations such as:

Altera, Apple, ARM, Audi, BAE Systems, BBC, Bloomberg, Cisco, Facebook, Goldman Sachs, Google, IBM, Imagination Technologies, Intel, Jaguar Land Rover, J P Morgan, McLaren, Microsoft, Motorola, Samsung, Sony

Southampton Mechanical Engineering graduates are successfully employed at high-profile organisations such as:

Airbus UK, AWE, BAE Systems, BP, Dyson, GE Aviation, IAC Aviation, Jaguar Land Rover, Johnson Matthey, Lloyds, McLaren Automotive, Mercedes-Benz, MOD, QinetiQ, Rolls-Royce, Schlumberger

<sup>\*</sup> QS Graduate Employability Rankings 2017



7

### Find out more:

www.southampton.ac.uk/ug/careers

11

>60%

of our first cohort of graduates earn as much as RM4,000 a month in their first job >50%

of our first cohort of engineering graduates earned First Class Honours degrees 3 months

The average amount of time for our graduates to find employment after graduation

1:10

teacher-to-student ratio at our Malaysia Campus

Our lecturers provide close assistance and advice during your studies

300

employers

Four annual careers fairs offer the opportunity to network with employers, when studying in the UK

"An engineering degree in my opinion has the best outcome when entering the working environment as the market is in need of engineers. I would recommend the University of Southampton as it is one of the most reputable institutions for engineering degrees, with many esteemed alumni." Teo Chun Ming (Jeffrey) BEng Mechanical Engineering 2015 Malaysia Campus graduate

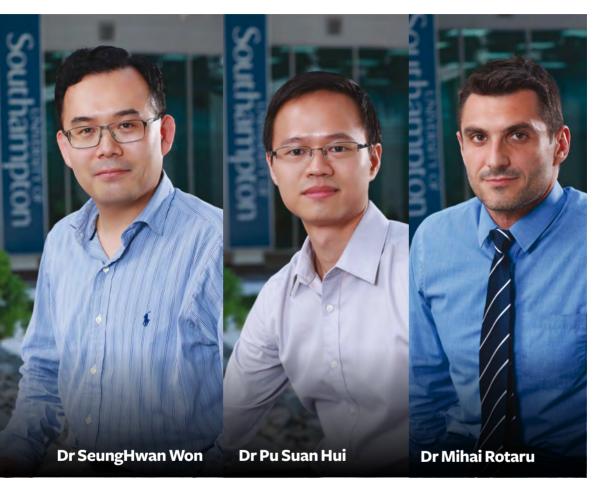
# **OUR PEOPLE**

Make Southampton the start of your new world; our community is full of passionate people with the drive to change the world through their research and collaborations with global partners. We can help you develop the skills you need for your future.

- → Our lecturers are highly qualified and push the boundaries of knowledge with their research
- → You are taught differently; our research informs your education
- → Studying with our world-leading academics gives you an edge
- → You are involved with important research as it unfolds
- → Join us and share our knowledge to gain your advantage
- → You'll enjoy a very high staff to student ratio at our Malaysia Campus
- → The University of Southampton is a founding signatory of the Athena Swan Charter. We hold a silver-level Athena SWAN in recognition of our commitment towards maximising the potential of all our students and staff and advancing gender equality in academia



Neil is Head of Academic Affairs at the University of Southampton Malaysia Campus, and teaches on the Mechanical Engineering, and the Aeronautics and Astronautics degree programmes. He has over 40 years of lecturing experience. Suhaila was awarded a Japan Fellowship for her PhD at the Nagoya Institute of Technology. She has been awarded several research grants to work on organic solar cells using carbon nanotubes and graphene.



Seung Hwan has broad industrial engineering experience, with employment at both LG Electronics R&D and Samsung Electronics, S. Korea. He has published 25 journal and conference papers and is associated with 21 US patents.

Using industry-standard fabrication techniques Suan Hui develops novel micro- and nano-systems that have applications in motion and pressure sensing, electrical switching and chemical detection.

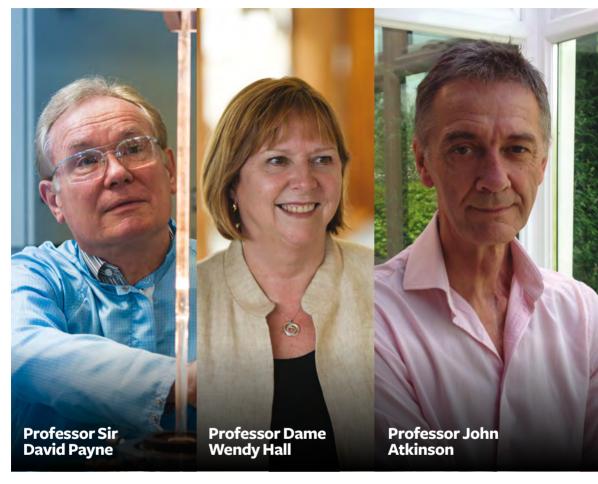
Mihai has substantial experience in designing, modelling, simulation and characterisation of electromagnetic and electromechanical systems and devices.



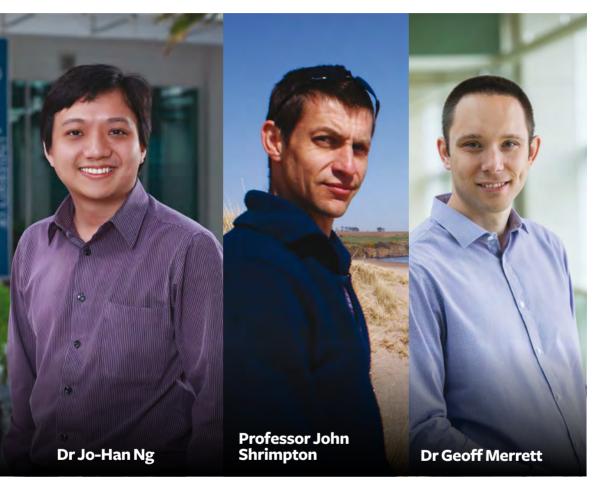
### Find out more:

www.southampton.ac.uk/my/people

# OUR PEOPLE (CONT.)



Professor and graduate from Southampton, David, and his team developed the optical fibres that formed the basis of the internet. Professor and graduate from Southampton, Wendy was one of the first scientists to carry out serious research in multimedia, hypermedia and the Web. Wendy has been appointed Regius Professor in Computer Science. John's printed sensors for environmental monitoring have helped to make Southampton world leaders in this important area of research.



Jo-Han's main research interests cover the area of renewable energy and combustion. He is now the principal investigator for a project funded by the Ministry of Higher Education to improve palm oil biodiesel production. John is a world-leading expert in charge injection technology, generating electrically charged sprays of dielectric liquids.

Geoff's research, on projects totalling over \$30M, is allowing mobile and embedded computing systems to run off their batteries for longer, potentially even forever.



# HOW WILL YOU LAUNCH YOUR NEW WORLD?

## By designing spacecraft

### **Ryan Fung**

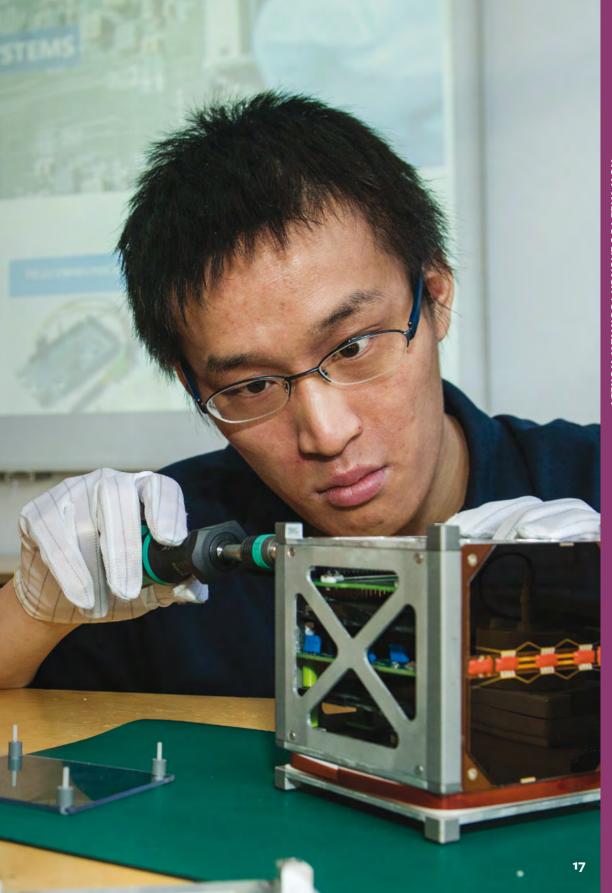
MEng Aeronautics and Astronautics/Spacecraft Engineering

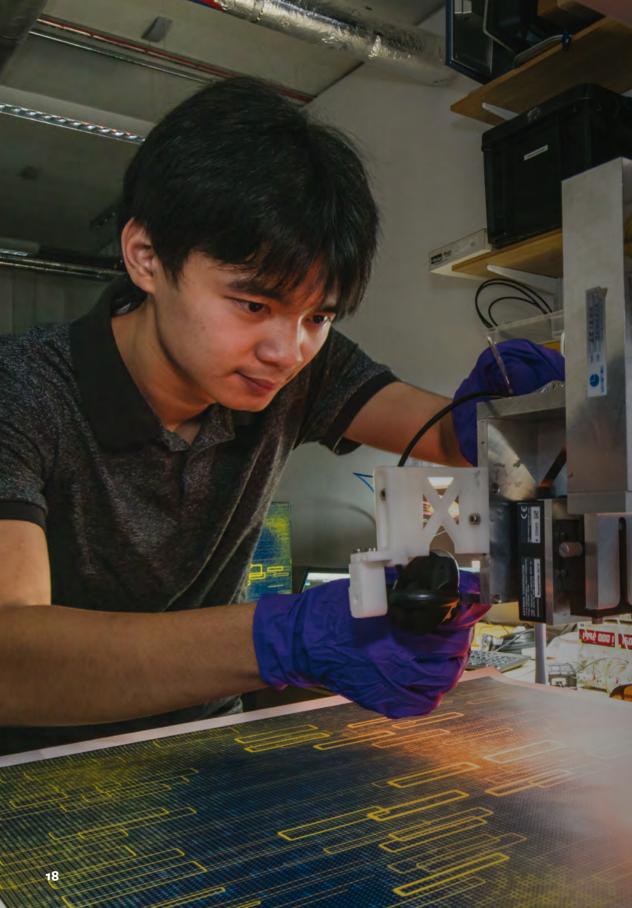
"My group design project involves the assembly, integration and testing of the University of Southampton CubeSat. The CubeSat is a small satellite designed in its entirety by University of Southampton students. The European Space Agency (ESA) Fly Your Satellite programme will provide a free opportunity for the CubeSat to be launched, as well as give my team a chance to test the CubeSat in ESA facilities. My group project has given me invaluable practical experience in designing and manufacturing spacecraft.

"I chose to study at the University of Southampton because of its specialisation in spacecraft engineering and Southampton's high rankings for engineering. One of my highlights at Southampton involved an academic trip to Airbus Defence and Space, where I saw spacecraft manufacturing, assembly and testing facilities, giving me greater insight into the spacecraft lifecycle processes. I have also really enjoyed the additional guest seminars which provided more insights into space science and spacecraft engineering."

### Find out more:

www.southampton.ac.uk/my/students/ryan





# WHAT WILL YOUR YOUR VEW YORLD

A range of IoT (internet of things) powered smart fabrics

**Shoon Kit Lim** 

MEng Electrical and Electronic Engineering

"For my individual project, I am working on the development of electroactive materials which are 3D printed onto fabrics, to become clothes or interior designs. Interactive displays on these smart fabrics connect using IoT technology so users can change the patterns on the fabrics wirelessly. It was quite a unique and challenging experience as most of the research conducted in this field is still in the preliminary stages.

"I chose Electronics and Computer Science (ECS) at the University of Southampton because of its reputation for high quality education and facilities, and I wasn't disappointed – it is cutting edge and there's really nothing more I could ask for. Additionally, ECS students have a great track record for employability with leading industrial developers in the science and technology field."

Find out more:

www.southampton.ac.uk/ecs/ourstudents



# WHEREIS YOUR NEWWORLD ANG YOU?

Advancing the treatment of bone disease

### **Elaine Ho**

BEng Mechanical Engineering

"During my degree, I have developed a fascination with biomedical engineering. My lecturers and tutors have inspired me with their enthusiasm and taught me to think independently and understand complex engineering concepts. The first two years of my degree provided a solid foundation in mechanical engineering, preparing me for my third-year individual project.

"Medical scientists need to look at osteocytes (bone cells) in both 3D and high resolution to fully understand and treat patients with bone disease, but it's challenging because of how small the cells are. My project investigated the optimum settings for a new technique of electron microscopy that is able to capture good images of the cells.

"After I graduate, I will be starting the MSc Biomedical Engineering at the UK campus, and I hope to have a career in biomedical engineering research, specialising in medical imaging."



### Find out more:

www.southampton.ac.uk/my/ourstudents

# YOUR STUDENT EXPERIENCE IN MALAYSIA

Years one and two (and Foundation Year) are spent at our Malaysia Campus, located at the world-class education hub of EduCity in Iskandar Puteri, Johor.

### **Campus**

Our Malaysia Campus is set within EduCity - one of the most important developments in Iskandar Malaysia. It is a pioneering concept of best-in-class education partners, including globally recognised universities such as Southampton, Newcastle and Reading, all sharing international-standard sporting and recreational facilities.

On campus, you will stay in modern living accommodation, which is equipped with a cafeteria, launderette, prayer room, indoor games room, outdoor badminton, basketball court as well as a picturesque roof terrace with views of the surrounding area.

### **Surrounding area**

In the heart of Malaysia's economic zone, EduCity is 8km from the Second Crossing Bridge to Singapore. It is easily accessible via the Coastal Highway that directly links Medini with Johor Bahru, and the Malaysia-Singapore Second-Link Expressway.

Singapore's regional aviation hub, Changi International Airport, is a 60-minute drive away and we are just 30 minutes from Senai International Airport.



### uni\_southampton\_malaysia

Follow us on Instagram to see more pictures of our campuses

### Student life in Malaysia

We offer a wide range of facilities and services so that you can make the most out of your student life.

- → Study in the study space and computing suites
- → Socialise in cafés and restaurants in the local area
- Enjoy a film, shopping or eating out at the wide range of shopping malls in close proximity to EduCity
- Relax on the beach at the nearby islands of Pulau Rawa, Pulau Sibu and Pulau Aur
- Visit local attractions including Singapore, which is only approximately a 40-minute drive away

# University of Southampton Student Association (USSA)

Supported by the Students' Union in the UK, the Student Association is designed to ensure that all students at our Malaysia Campus have their voice heard at every level and that your university experience is as fun as possible.

Run by students for students, USSA collects feedback and works with the University to improve the student experience on campus. To ensure fair and accurate representation, USSA holds elections each year to choose the students that will become the representatives.







- o1 EduCity's swimming pool
- o2 Lunch on campus
- o<sub>3</sub> Students shopping in the local area
- 04 Malaysia Campus
- o5 Inter-university football match



The Association oversees the sports clubs and societies, ensuring that they are run properly and supporting them with the funding provided by the Union, to buy equipment for activities and events.

USSA also organises events on campus to give you the opportunity to meet other students and engage with other Universities at the EduCity development.

### **Sport**

- → Students at our Malaysia Campus have access to the exceptional physical recreation and sports facilities at EduCity, which includes a 6,000 capacity sports stadium with a football/rugby pitch, and a 400 metre athletic track that complies with the Association of Athletics Federation standards. There is also an aquatic centre with an Olympic-size swimming pool, which meets International Swimming Federation standards for water polo and synchronised swimming.
- Join in and play a sport at the stadium which has pitches for ball sports and field events, or in the indoor arena with courts for basketball, badminton, squash, volleyball and futsal.
- Qualified coaches and staff are available to host training sessions



in a number of core sports and some extreme sports from Muay Thai to Bossaball. Regular fitness classes in pilates, yoga, combat fitness and coaching sessions in various sports from football, badminton and swimming are available for both students and the public too.

For more information about the EduCity Sports Complex, visit **www.educitysport.com** 



### Find out more:

www.southampton.ac.uk/ug/life

# Follow our student bloggers:

www.southampton.ac.uk/ my/blog

# YOUR STUDENT EXPERIENCE IN THE UK

Years three and four are spent at our campus in the UK, which offers a friendly, vibrant and diverse atmosphere for work and leisure.



Our academic engineering activity is based at the University's Highfield Campus and Boldrewood Innovation Campus. Boldrewood Innovation Campus is located a five-minute walk away from the main Highfield Campus. Both are set in green and pleasantly landscaped surroundings and are just a short bus ride from the centre of Southampton.

There are a range of facilities on campus including restaurants, banks and a Post Office, as well as a Faith and Reflection Centre, and a prayer room for Muslim students.

### **City of Southampton**

The city of Southampton is located just over one hour by train from central London, on the south coast of England. It is one hour by car from Stonehenge, and close to historic cities such as Winchester and Bath, as well as other top sights in the UK.

Southampton is ranked one of the best places to live and work in the UK\*. The city boasts:

- → a variety of leisure, dining, shopping and entertainment options
- → the south coast's premier shopping centre and leisure complex - WestQuay and WestQuay Watermark
- → the Mayflower Theatre the third largest theatre outside of London
- → a premier league football team
   Southampton Football Club
- music festivals such as Common People and Let's Rock Southampton

Southampton is a safe and pleasant place to live. Solent Owls provides information to help students stay safe and enjoy their time at university. The University of Southampton Security Service operates 24 hours a day, every day of the year. The Students' Union provides The Safety Bus which is a service that runs every night to take students home from campus. Our Halls of Residence have 24 hours a day, seven day a week support available.

Find out more about Southampton at www.southampton.ac.uk/uni-life/life-in-city









uni\_southampton\_malaysia

Follow us on Instagram to see more pictures of our campuses

\* Good Growth for Cities report, PricewaterhouseCoopers, 2015





- o1 Study around campus
- o2 Café on campus
- 03 Plenty of green spaces to relax in
- 04 Ocean Village Marina, Southampton
- os Southampton city



### The Students' Union

Run by students for students, the University of Southampton Students' Union ensures that you have your voice heard at every level on campus, locally and nationally and that you can get the best out of your course and student experience. The Union also offers a wide range of services and opportunities for you to get the most out of your free time:

- Experience Freshers' and Welcome Programme, designed to help you settle into life at the University
- Attend one of the many events organised throughout the year by the Malaysian Students
   Association (MSA) of Southampton, a Students'
   Union society
- Discover over 300 student clubs and societies ranging from sports to creative activities and everything in between
- Enjoy subsidised outlets to help you relax and unwind after a day of studying including The Stag's, The Bridge restaurant, The Café, a convenience store and a merchandise store
- → Catch a film in the Union's 256 seat cinema
- → Find out more about the Students' Union at www.susu.org

### Sport

- Swim in our six-lane, 25-metre pool or use the varied fitness equipment across our nine gyms: six on campus and three more in the city
- Play on over 20 grass and synthetic pitches for summer and winter sports
- → The Students' Union caters for more than 100 sports clubs – more than any other UK university. From beginners to national competitors, we provide members with excellent sporting activities at a subsidised cost

### **Find out more:**

www.southampton.ac.uk/ug/life

# Follow our student bloggers:

www.southampton.ac.uk/my/blog

# YOUR STUDENT SUPPORT

Students from more than 130 different nations currently study with us and our network of university partnerships spans the globe.

### SUPPORT IN MALAYSIA (Years one and two and Foundation Year)

### E-Learning

Students at our Malaysia campus will have access to the same online resources and guidance materials as those in the UK, including information on careers and employment. Our libraries hold some three million books and journals, many in electronic format so you can access them on the move.

### **Enabling Services**

The University of Southampton is committed to providing a range of quality services and support for students with disabilities, health conditions, and specific learning difficulties. These services are available in the UK via face-to-face appointments, on the phone or via Skype. They are also accessible from Malaysia, via Skype. It is important to get in touch with Enabling Services before you come to the UK for year three so any support you need is in place ready for your arrival.

### Meet Us

Visiting the University is a great opportunity to see the campus and find out what it's really like to live and study here. Find out about our Open Days by visiting www.southampton. ac.uk/my/visitus

### Pastoral Support

We recognise that university life is not just about your studies. You will be assigned a personal tutor, based at the Malaysia Campus, who can provide help and support on academic and personal issues.

### Transition to UK

We provide comprehensive guidance when you move from our Malaysia Campus to our Southampton Campus for your third year of study. These include a key activities timetable, a buddy scheme and advice on applying for visas and opening bank accounts. For more information, visit www.southampton.ac.uk/my/transition

### Welcome Programme

We provide support to all new students which includes information about studying and living in Malaysia.

# SUPPORT IN THE UK (Years three and four)

### Careers and Employability Service

Our support includes careers fairs, work-based learning opportunities and a range of workshops to develop your skills for graduate employment.

### Counselling Service

The Service offers a confidential short-term counselling service for students who would benefit from talking through difficulties impacting on their life or studies.

### Financial Information and Assistance

Should you find yourself in financial difficulty while studying at the University of Southampton, the Financial Information and Assistance team may be able to provide you with help and support.

### First Support

The team is the first point of call for students who are experiencing difficulty or are in crisis and is available when you transfer to Southampton.

### Pastoral Support

We recognise that university life is not just about your studies. You will be assigned a personal tutor, based at Southampton, providing you with help and support on academic and personal issues.

### Students' Union Advice Centre

Your health and wellbeing are important so the Union's Advice Centre offers free, confidential and impartial advice on matters including student finance, debt management, budgeting, academic issues and housing.

For more information, visit **www.susu.org/advicecentre** 

### University Residences

The Student Life Service is the first point of contact for residents out of hours. The team is available every day of the year, 24hrs.

### Welcome Programme

In September each year our Welcome Programme is designed to help students settle in to life at the University.



# OUR INTERNATIONAL STUDENT COMMUNITY

We want to ensure that the experience of all our international students at the University of Southampton is positive and rewarding. Before you arrive in Malaysia, on your arrival and throughout your studies, our network of professional services staff and academic advisors will help you to settle in and offer ongoing support.

### International visits

Staff from our Malaysia and UK campuses make numerous visits overseas each year, including delivering predeparture information briefings.

Face-to-face contact is the best way of getting to know the University if you can't actually visit us here. For a list of events we will be attending in the future, visit www.southampton. ac.uk/meetus and www. southampton.ac.uk/my/events

### **International Student Guide**

For information on customs regulations, immigration, medical insurance and the student pass, please see our International Student Guide www.southampton.ac.uk/my/international-guide

### **IN MALAYSIA**

### **Meet and Greet**

Our Meet and Greet Service from Kuala Lumpur International Airport and Senai International Airport is free of charge to students and will help make your journey to our Malaysia Campus as simple and stress-free as possible. To ensure you are met by a University staff member, inform our Malaysia Campus seven working days before you travel.

### Visa applications

The University requires all international students (except diplomatic pass holders and Malaysian permanent residents) to hold a student pass while studying at our Malaysia Campus. Students are advised to submit the visa application form and complete documentation no less than 2 months before the intake date. You are advised not to enter Malaysia until you have received the original copy of Visa Approval Letter (VAL) issued by the Malaysian Immigration

"I am from Egypt and I chose to study at the University of Southampton because its reputation in engineering is unmatched. Also, I chose Southampton because of the opportunity to study at the University's Malaysia Campus, which offers a very high staff to student ratio and a more personal experience, at a fraction of the cost."

### **Mahmoud Ashraf Hassan Wagih**

MEng Electrical and Electronic Engineering 2nd year Malaysia Campus student, 2017



### IN THE UK

### **Meet and Greet**

Our Meet and Greet Service from London Heathrow and London Gatwick airports is free of charge and is designed to get you to Southampton in time for the Welcome Programme. For more information, visit

www.southampton.ac.uk/ international-welcome

### **Visa applications**

The University has its own dedicated VISAS Team who can assist you with any questions you might have about applying to come to the UK as a student. For more information, visit www.southampton.ac.uk/visa

nformation about the application

process in your country and the documents you will require to support your application can be found on the UK Visa and Immigration website www.gov.uk/apply-uk-visa



### Find out more

www.southampton.ac.uk/ my/international

Or to have specific questions answered:

visausmc@soton.ac.uk

# ACCOMMODATION

We offer modern, spacious and safe living accommodation in close proximity to our campuses in Malaysia and the UK. There are a variety of options to suit your personal budget.

## Malaysia accommodation (Years one and two and Foundation Year)

Our Malaysia Campus offers self-catering accommodation in a variety of options, including ensuite single bedrooms, twin bedrooms with ensuite and four/five-bed accommodation with a shared bathroom, all within EduCity's Student Village (SV). Accommodation is split into male/female wings accordingly.

The SV is just a few minutes stroll from our campus and is in a safe and secure environment with CCTV surveillance and a security guard post. The SV comprises approximately 900 beds. You will have the opportunity to mix with students from other institutions that share the EduCity campus. All rooms have an internet connection and there are kitchen facilities on each floor comprising a fridge, microwave and water dispenser as well as a cafeteria on the ground floor.

The SV also offers impressive shared social spaces, including an outdoor sports area, general seating areas and TV room as well as the picture squero of terrace with views of the surrounding area. Other facilities include a launderette, cafeteria and prayer room for Muslim students.

Bedding packs consisting of a pillow, pillow case, bed sheet and blanket can be purchased on request, for approximately RM100.

Typical room fittings and furnishings include:

- → Air-conditioning
- → Ceiling fan(s) and light(s)
- Drying yard
- → Ensuite/shared bathroom
- Individual bed frame and mattress, wardrobe, study table and chair
- → Water heater
- → Window curtains

### How to apply for accommodation

Applications for accommodation will be possible once you have received your offer letter and accepted your offer. You will receive a University of Southampton student ID number along with your offer letter, which you will need in order to apply for accommodation.

The SV will confirm the deadline by which you must apply to ensure your guarantee of accommodation. The deadline will differ depending on which intake you are applying for - April/July (Foundation Year) or September (undergraduate).

### **Guaranteed accommodation**

You are guaranteed an offer of University accommodation for your Foundation Year, or first year (undergraduate) at our Malaysia Campus, which will help you settle into University life. You are welcome to apply to remain in University accommodation for your second year while you are studying in Malaysia but we cannot guarantee a place.

You are also guaranteed an offer of University accommodation for both years spent studying in Southampton. Please note you will need to fulfil the criteria of our guarantee, which includes applying as a continuing student, in January of your second year in Malaysia for your first year living in Southampton.

### Malaysia accommodation fees (2017/18 academic year)

Room type	Rental p/m (RM)	Limit of electricity usage p/pax (RM)	Rental deposit p/pax (RM)	Total initial fee payable (3 months + 1 month deposit) (RM)
Single ensuite	889	50	889	3,556
Twin sharing	681	50	681	2,724
4 sharing	474	50	474	1,896
5 sharing	589	50	589	2,356









 $Room\,layout\,, EduCity's\,Student\,Village, Malaysia$ 

## UK accommodation (Years three and four)

In the UK, the University of Southampton has over 20 halls of residence in safe, secure and professionally managed accommodation, including over 1,800 bedrooms in new buildings opened since 2014.

A unilink bus pass is included in your hall fees, connecting all Southampton hall sites with our Southampton campuses.

Accommodation fees for 2018/19 are not yet available. We have provided accommodation fees for 2017/18 to give you a guide.

- \* For standard contract length (40 weeks) unless otherwise stated
- \*\* Catered rooms of this room type will cost £46 extra per week

### UK accommodation fees (2017/18 academic year)

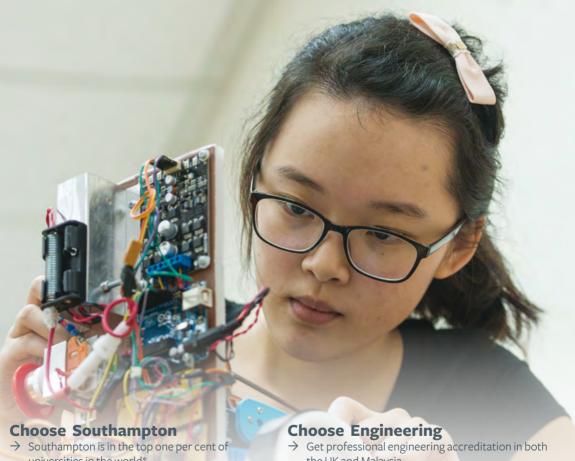
Doom turns	Wooldynnico	Total*	
Room type	Weekly price	iotai"	
Non-ensuite category 1 (catered only)	£104.93**	£4,212	
Non-ensuite category 2	£104.93-£126.21**	£4,212-£5,066**	
Non-ensuite category 3	£140.07	£5,623	
Ensuite category 1	£126.21-£150.36**	£5,066-£6,014**	
Ensuite category 2	£145.95-£164.01	£6,014-£6,584	
Studio category 1	£183.61	£6,977-£7,371	
Studio category 2	£192.78	£7,739	
One and two bedroom flats (couples and families)		Various locations prices range from £201.18-£299.09	



### **Find out more:**

www.southampton.ac.uk/ my/accommodation

# ENGINEERING AT SOUTHAMPTON: WORLD-CLASS FACILITIES



- universities in the world\*
- → We are a founding member of the Russell Group of research-intensive UK universities
- → Graduate with an internationally recognised UK masters degree
- → You can learn about the latest world-changing research from the people who are creating it
- \* QS World University Rankings 2018
- \*\* The Complete University Guide, 2018
- \*\*\* Sunday Times Good University Guide, 2017
- † The Guardian University Guide, 2018

- the UK and Malaysia
- → Our engineering programmes are highly ranked in every major league table in the UK and worldwide
- → Southampton is in the top five for Aeronautics and Astronautics\*\* and top ten for Mechanical Engineering\*\*\*
- → Southampton is number two in the UK for Electrical and Electronic Engineering†
- → You can expect to be taught and supervised by researchers who lead in their discipline





# During years three and four of your degree programme you will be based at our UK campus, where you will have access to our state-of-the-art facilities and cutting-edge technology.

For students studying MEng Aeronautics and Astronautics and MEng Mechanical Engineering:

- The Southampton wind tunnel complex is available for students' aerodynamics project work. The RJ Mitchell Wind Tunnel has been at the forefront of aerodynamics research for more than 35 years. It has been used for high-performance testing by Formula 1 teams and Olympic athletes
- We have design studios and student workshops available for independent and group work. These facilities include 3D printers, mills, power and hand tools, a lathe and soldering equipment, enabling students to design and make items in wood, metal and plastics
- The Engineering, Design and Manufacturing Centre (EDMC) is a professional engineering workshop, used by students and researchers. Its extensive facilities include 3D printers, CNC equipment, CAD/CAM software and a training workshop
- We have computer laboratories with fast computers where students can learn to use a range of software packages including CAD, FEA, CFD and a variety of modelling and simulation tools
- Our flight simulator allows students to test their aircraft design projects, playing an important role in the design, testing and manufacturing of air vehicles

For students studying MEng Electrical and Electronic Engineering:

- The Zepler Building contains the undergraduate teaching and project laboratory for electrical and electronic engineering together with extensive computing facilities.
   Purpose built in 2015, these £4 million laboratories will prepare students for industries of the future. Our state-of-the-art electrical and electronic teaching laboratories are equipped to a professional standard for all areas of digital and analogue electronics, photonics, power engineering and robotics
- The Mountbatten Building houses one of the world's leading cleanroom laboratory complexes for materials and device research in diverse fields ranging from electronics and Micro Electro Mechanical Systems (MEMS) through photonics to bionanotechnology
- The Tony Davies High Voltage Laboratory is one of only a handful of similar facilities in Europe. It contains a full range of equipment to support research and consultancy in high voltage engineering



### **Find out more:**

www.southampton.ac.uk/ my/facilities

### Take a virtual tour:

www.virtualopenday. southampton.ac.uk

You can watch our video 'Engineering excellence' at **bit.do/usmc** 

# COURSE OVERVIEW Aeronautics and Astronautics

### **Choose Southampton**

- → We are the only Russell Group university to offer degrees that
- → Design projects within each year of study develop engineering capabilities
- → MEng programmes offer a route to Chartered Engineer (CEng) status
- → Flying opportunities through the Students' Union in the UK
- → Students on the split-campus programme (2 years in Malaysia and 2 years in the UK) are offered the same course content and teaching quality as students in the UK for all four years



in professional jobs o further study six months after graduation DLHE, 2014/15

degrees: choose the right one for you

Test pilot your designs in our flight simulator

Our Aeronautics and Astronautics graduates are in great demand from some of the world's leading companies. These MEng degrees provide you with a professional grounding in aerospace engineering science from which you may continue at a more advanced level, or choose to develop a specialism.

### Accreditation

Our MEng is accredited by the Royal Aeronautical Society (RAeS) and the Institution of Mechanical Engineers (IMechE) on behalf of the UK's Engineering Council for the purposes of fully meeting the academic requirement for registration as a Chartered Engineer in the UK. This accreditation is recognised by engineering boards around the world, including the Board of Engineers Malaysia via the international agreement known as the Washington Accord. Our BEng is accredited for the purposes of fully meeting the academic requirement for registration as an Incorporated Engineer and partly meeting the academic requirement for registration as a Chartered Engineer.

### **Programme structure**

You will learn through a combination of lectures, tutorials, laboratory experiments, coursework and individual and group projects. Practical laboratory work enables you to gain hands-on experience and develop the critical skills and judgement needed for your future career. We also help develop your written and oral presentation skills.

Our teaching follows the semester pattern of our UK campuses. Two semesters begin at the end of September and January, with examinations in January and May.

Should you choose to exit this programme after successfully completing three years of study, you will be eligible for a BEng qualification. The BEng route develops the same core skills as the MEng, however by choosing the MEng you will study a more extensive range of subjects at an advanced level.

### Years one and two in Malaysia

The first two years are the same across all our Aeronautics and Astronautics degrees and focus on core engineering science, with an emphasis on aerospace engineering.

Year one helps develop your understanding of computational design tools and the economic, legal and environmental issues around aircraft operations and performance.

Year two focuses on aerospace engineering, aerodynamics, astronautics, propulsion and the mechanics of flight.

### Years three and four in the UK

In years three and four you can either choose a broad-based degree, or one of six specialist themed degrees.

In year three you will carry out an individual design or research project, which enables you to bring together the concepts and skills you have learned.

In year four you will take advanced modules and participate in a major group design project, applying your engineering knowledge to a design problem. Previous projects have included the design and manufacture of a hybrid sounding rocket for space research, and a UAV for search and rescue operations.

### **Mandatory modules**

### Year 1

Aircraft Operations and Flight Mechanics

Design and Computing

Electrical and Electronic Systems

Mathematics for Engineering and the Environment

Mechanics, Structures and Materials

Thermofluids

### Year 2

Aerodynamics

Astronautics

Engineering Management and Law

Materials and Structures

Mathematics for Engineering and the Environment Part II

Mechanics of Flight

Propulsion

Systems Design and Computing

### Yeara

Aerospace Control Systems

Aerothermodynamics

Introduction to Aircraft Design

Aircraft Structural Design

Individual Project

### Year 4

Group Design Project

# Further information

For information on modules available in years one and two, visit

www.southampton.ac.uk/my/aero

For information on modules available in years three and four, visit

www.southampton.ac.uk/ engineering/aero

# MEng AERONAUTICS AND ASTRONAUTICS MQA/FA 4644

### **Degree | Duration**

### **MEng Aeronautics and Astronautics** | 4 years

You will study aerodynamics, astronautics, and propulsion, in addition to the economic, legal and environmental issues associated with aircraft and spacecraft. In your final year, you will extend your knowledge through advanced aerospace modules, and carry out an individual research or design project.

### **MEng Aeronautics and Astronautics / Aerodynamics**

This programme will provide you with the knowledge and skills to analyse and control aerodynamic behaviour. Your third and fourth years will focus on aerodynamic theory and practice for the design of vehicles, wings and propulsion systems. This course provides excellent preparation for both the aerospace and Formula 1 industries.

### **MEng Aeronautics and Astronautics / Airvehicle Systems Design** | 4 years

This programme focuses on aeronautic topics, with an emphasis on helicopters and fixed-wing aircraft, engine design, and avionics. Using a complete vehicle systems approach, you will also learn about modern design, search and optimisation techniques.

### **MEng Aeronautics and Astronautics / Computational Engineering and Design** | 4 years

This programme will develop your knowledge of computational methods in aeronautics and astronautics. The third and fourth years will provide you with the skills to solve new and emerging aerospace design challenges using advanced computational methods.

### **MEng Aeronautics and Astronautics/Engineering** Management | 4 years

This programme will provide you with the technical skills to understand, design and manufacture innovative products, alongside the management expertise to take projects from initial concept to completion. In your third and fourth years, you will learn about business strategy, finance, and managing people and projects.

### **MEng Aeronautics and Astronautics/Materials and** Structures | 4 years

This programme focuses on building your knowledge of structural design and materials selection for aerospace applications. In your third and fourth years you will develop your understanding of how materials behave, and enhance your skills in the structural analysis of aircraft and spacecraft.

### **MEng Aeronautics and Astronautics/Spacecraft** Engineering | 4 years

This programme will develop your knowledge of overall spacecraft system design, including subsystems and their interfaces. You will learn to design, examine and test spacecraft systems, as well as understand their environmental impact. This programme provides excellent preparation for a career in the space industry.

### Career opportunities

Our graduates have entered a range of careers in some of the world's leading companies, including: Formula 1, BAE Systems, Siemens, NASA, Lockheed Martin, and Rolls-Royce. There are also exciting career opportunities in race car design, civil and military aerospace, systems engineering and research. Our degrees are also excellent preparation for careers in many non-aerospace industries, particularly the commercial sector.

Typical roles include Aerodynamicist, Spacecraft Systems Engineer, Design Technologist, Aerospace Engineer and Unmanned Systems Engineer.

"The projects taught me that I could work well independently and gave me confidence. My independent project was on space debris, it was the first time it had been done worldwide."

### **Hannah Fitzpatrick**

MEng Aeronautics and Astronautics, 2016 graduate



### **Key information**

Our standard offers are listed below but where we have places available, students may be admitted with slightly lower grades

A levels: A\*AA in Mathematics, Physics (A\* in either; with a pass in Physics Practical) and one other (except General Studies and Critical Thinking)

**IB: 38 points overall**, 18 at Higher Level including 6 in both Higher Mathematics and Higher Physics

and Higher Physics
Sijil Tinggi Persekolahan Malaysia
(STPM): AA in Mathematics and

Physics plus A in one other subject
Unified Examination Certificate
(UEC) – Senior Middle Level:

Students studying Science track in English with **minimum 5 As** including Mathematics I and II and Physics (not including Art, Chinese, Malay or Mathematics)

Diploma in Mechanical Engineering (Aeronautics), Universiti Teknologi Malaysia (UTM): First-year entry with minimum GPA of 3.4

Monash University Foundation
Year: Minimum of 310 overall with

80 per cent average in Mathematics and Physics, and subject to attending an extended technical induction programme

English language qualifications:

**IELTS 6.5 overall** with at least 5.5 in each competence. For other qualifications accepted, visit

www.southampton.ac.uk/admissions\_language

**Application process:** Apply directly via our website **www.southampton. ac.uk/my/apply** 

Our typical entry requirements may be subject to change.

**Before you apply,** please visit www.southampton.ac.uk/my/entry-requirements



### Find out more

For more details about your course such as module information and course structure, visit

www.southampton.edu.my

Or to have specific questions answered:

**T:**+607-560 2560 (Malaysia)

T:+44(0)2380599699(UK)

E: marketing.malaysia@southampton.ac.uk

# COURSE OVERVIEW Electrical and Electronic Engineering

### **Choose Southampton**

- → Southampton is ranked number two in the UK by *The Guardian* University Guide, 2018 for electrical and electronic engineering
- → £110m state-of-the-art interdisciplinary clean room, high-voltage laboratory, and outstanding undergraduate laboratory facilities in the UK
- → First in the UK for the volume and quality of our electrical and electronic engineering research (REF, 2014)
- → MEng Electrical and Electronic Engineering programme provides direct route to Chartered Engineer (CEng) status
- → Students on the split-campus programme (2 years in Malaysia and 2 years in the UK) are offered the same course content and teaching quality as students in the UK for all four years

# in UK for

graduate prospects The Guardian University Guide, 2018

Our students can expect the latest technology and state-of-the-art equipment to support their degree programmes; Southampton's multi-million pound undergraduate labs offer sector leading capabilities.

Electrical and Electronic Engineering influences many aspects of modern life ranging from energy, healthcare, entertainment and commerce, to communications, manufacturing and the environment. Electrical and Electronic Engineering is a challenging and evolving subject that is relevant to a wide range of industries, including the power sector and the electronics industry.

At Southampton, you will gain a broad spectrum of knowledge and skills required to work in the technology sector, but also the wider range of competencies needed by today's professional engineer. This breadth of knowledge is developed using a systematic approach to most subjects - blending the core technical syllabus with ongoing design exercises that run throughout the programme. In Electronics and Computer Science (ECS), you will use some of the most advanced teaching facilities in the world, you will put the theory you have learned in lectures into practice and deliver real results.

#### **Accreditation**

Our MEng is accredited by the Institution of Engineering and Technology (IET) on behalf of the UK's Engineering Council for the purposes of fully meeting the academic requirement for registration as a Chartered Engineer in the UK. This accreditation is recognised by engineering boards around the world, including the Board of Engineers Malaysia via the international agreement known as the Washington Accord. Our BEng is accredited for the purposes of partially meeting the academic requirement for registration as a Chartered Engineer.

#### **Programme structure**

We employ a combination of formal and special lectures, tutorials, classes, laboratory experiments, coursework and individual and group projects.

Practical laboratory work forms an essential part of our degree programmes, providing opportunities to get to grips with key equipment in our world-class facilities and improve critical skills and judgement. We will also help you to develop key skills including written and oral presentation skills.

The teaching is structured on a semester pattern. The academic calendar will follow that of our UK Campus and will comprise two semesters commencing at the end of September and January, with examinations at the end of January and May.

Should you choose to exit this programme after successfully completing three years of study, you will be eligible for a BEng qualification. The BEng route develops the same core skills as the MEng, however by choosing the MEng you will study a more extensive range of subjects at an advanced level.

#### Years one and two in Malaysia

During your first two years at our Malaysia Campus, you will concentrate on the fundamentals of electrical and electronic engineering with an increasing emphasis on design as the course progresses.

In your first year, you will study the core principles of electrical and electronic engineering. You will also spend about 50 per cent of your time in the laboratories learning and developing practical skills in designing, building, programming and testing electronic systems. In year two, you will put your learning into practice by designing and building a fully functional 'smart meter' as well as designing and testing a silicon chip. You will learn how to use professional software designing tools widely used in the electrical and electronic industry throughout your coursework and design exercises.

#### Years three and four in the UK

In your third year of study, you will have the opportunity to specialise or retain a broad-based study path through a wide selection of 60 subject modules. You will also undertake an individual design or research project based in a research group in ECS. Third-year projects from ECS have led to commercialisation and to publication in journals and conferences. In the fourth year, MEng students choose from a range of modules and work on a group design project, typically developed in conjunction with an industrial partner. The contribution of these projects is highly valued by the associated companies.

"The philosophy and focus of the EEE programme at Southampton is simply world class. The facilities are well-equipped with cutting-edge technologies which are essential to develop the skills I'll take with me to my future employment."

#### **Ng Chun Hean**

MEng Electrical and Electronic Engineering, 4th year Malaysia Campus

## Further information

For information on modules available in years one and two, visit

#### www.southampton.ac.uk/my/eee

For information on modules available in years three and four, visit

www.southampton.ac.uk/ecs/eee

# MEng ELECTRICAL AND ELECTRONIC ENGINEERING MQA/FA 3103

#### **Degree | Duration**

#### MEng Electrical and Electronic Engineering | 4 years

#### **Course Overview**

Electrical and electronic engineering drives the fundamental technologies of today's connected world. Every area of our lives, from energy supply and transmission, medicine and healthcare to industrial applications, global trade, transport, communications, entertainment and security, is dependent on electrical and electronic technology. As a result, electrical and electronic engineering is now one of the fastest growing job fields in the world and skilled electrical and electronic engineers are very much in demand.

#### **Course Content**

At Southampton, we will ensure that you have a thorough grounding in a wide range of technologies. Our project work will enable you to acquire valuable skills in teamwork, project planning, time-management and presentation, applying your learning to design and build problems, and working to a brief. All of these will stand you in good stead as you move into your career.

#### **Programme overview**

This degree develops the technical and project management skills needed to become a leader in the electrical and electronics industry. It covers topics ranging from the technologies of electrical power and control to analogue and digital electronics and computing. The first two years will cover the breadth of electrical and electronic engineering. In years three

and four, you can tailor your studies according to your interests through the wide range of option modules available, examples of which are listed below.

#### **Typical course content**

- Digital systems and microprocessors
- Electronic systems
- Solid state devices
- Electrical engineering design
- Digital systems
- Power electronics and drives

### MEng Electrical and Electronic Engineering pathways

All students on this programme gain a fundamental understanding across electrical and electronic engineering principles, however the various pathways (some of which are shown below) allow you to specialise further in particular areas by choosing optional modules.

#### Power Systems

On this pathway, you will learn the fundamental concepts relating to the principles and design of modern electrical power systems and their impact on society. You are able to learn about power transmission and distribution, develop electromechanical design skills, and understand the properties and applications of electrical materials. Southampton's renowned Tony Davies High Voltage Laboratory will be among the facilities available to you on this pathway.

#### Digital and Analogue Electronics

A thorough understanding of both digital and analogue electronics is

essential for today's EEE engineers, and this pathway allows students to supplement this with optional modules in VLSI design and systemon-chip, green electronics, analogue CMOS, and medical electronics. In the second year of your degree, you will design your own CMOS integrated circuit (IC); these are then fabricated into silicon, and you will get the opportunity to test your own real IC to see if it worked.

### Computer Science/Software Engineering

Through specialised modules, you will develop a sound understanding of using software to solve engineering design problems and prepare for work in rapidly expanding industries including artificial intelligence, cyber security, computer graphics, embedded systems, and computer vision.

#### Nanotechnology and Photonics

Many of the major developments in today's electronic and photonic technology were pioneered by researchers at Southampton. Through this pathway you will learn the fundamental concepts governing semiconductor devices, fibre optics and lasers, and cleanroom fabrication techniques. MEng students have the opportunity to fabricate and characterise their own microchips in Southampton's state-of-the-art £110M Cleanroom Complex.

#### Communications and Control

Covering techniques critical to the information and robotic age, this pathway covers communication technologies (networking, wireless communication, green communication, multimedia



In a second-year project, teams of six students were challenged to design, build, test and demonstrate a complete electronic system in just three weeks. In recent years, the industry-sponsored challenges have included a live audio performance system and a spherical semi-autonomous robot that can navigate a course.

communications, RF transceivers) and the control of robotics (digital control, biologically-inspired robotics).

#### **Mathematics**

As a student gifted in mathematics, you can continue to develop your ability in mathematics over and above the compulsory engineering mathematics that runs through the programme. Optional modules span a wide range of areas, including advanced partial differential equations, statistics for engineering systems, numerical methods and the use of MATLAB, optimisation and integral transform methods.

#### Projects and Management

All students undertake a range of individual and group design projects during their degree. You will develop the technical skills to understand, design and manufacture new products, and the expertise to manage the process, people and finances. Taking modules on engineering management, accounting and law can enable you to focus on progression into key management positions in the electrical and electronic engineering industries.

#### **Mandatory modules**

#### Year 1

Advanced Programming
Digital Systems and Microprocessors
Electrical Materials and Fields
Electronic Circuits
Electronic Systems
Mathematics 1
Programming
Solid State Devices

#### Year 2

Control and Communications
Devices
Digital Systems and Signal Processing
Electrical and Electronic Engineering
Design
Electromagnetism
Mathematics 2

Circuits and Transmission

#### Year 3

Engineering Management and Law Individual Project
Choose 4 from around 60 optional

Power Electronics and Drives

Choose 4 from around 60 optional modules

#### Year 4

Group Design Project
Choose 5 from around 40 optional modules

#### **Key information**

Our standard offers are listed below but where we have places available, students may be admitted with slightly lower grades

A levels: A\*AA to include Mathematics, Physics and one other (except General Studies and Critical Thinking). In some cases, Physics may be substituted by Further Mathematics or Electronics

**IB: 38 points overall**, 18 at Higher Level including 6 in both Higher Mathematics and Higher Physics

Sijil Tinggi Persekolahan Malaysia (STPM): AA in Mathematics and Physics plus A in one other subject Unified Examination Certificate

(UEC) – Senior Middle Level:
Minimum & As including Mathem

**Minimum 5 As** including Mathematics I and II and Physics (not including Art, Chinese or Malay)

Monash University Foundation Year: Minimum of 310 overall with 80 per cent average in Mathematics and Physics, and subject to attending an extended technical induction

English language qualifications: IELTS 6.5 overall with at least 5.5 in each competence. For other

qualifications accepted, visit www.southampton.ac.uk/admissions\_language

**Application process:** Apply directly via our website **www.southampton. ac.uk/my/apply** 

Our typical entry requirements may be subject to change.

Before you apply, please visit www.southampton.ac.uk/my/ entry-requirements



#### Find out more

For more details about your course such as module information and course structure, visit

#### www.southampton.edu.my

Or to have specific questions answered:

**T:** +607-560 2560 (Malaysia)

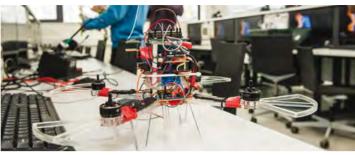
T:+44(0)2380599699(UK)

#### **Key information**

Employability is embedded in all stages of our degrees and we strive to ensure you get the career you deserve. A panel of representatives from major employers regularly meet to ensure our graduates have the required skills in this fast moving field. The technical skills you will obtain are in high demand, as are the skills of understanding and analysing problems, together with communicating the results. Our graduates have highly exciting career opportunities in some of the most advanced and leading companies in the world such as ARM, Samsung, Siemens, BAE Systems and Boeing.

Typical roles include Electronic Engineer, Electrical Engineer, Microelectronics Engineer, Embedded Systems Engineer, Instrumentation and Control Engineer, High Voltage Electrical Engineer.

### Career opportunities \_\_\_\_\_



MEng ELECTRICAL AND ELECTRONIC

**ENGINEERING (CONT.)** 

#### **Innovative teaching**

Our students enhance their practical skills in digital electronics by building and using our Micro Arcana family of processing boards: Il Matto (8-bit Atmel microcontroller), Il Bagatto (Altera CPLD), La Papessa (Xilinx FPGA) and L'Imperatrice (Freescale ARM9 applications processor). These boards have been designed in-house to enhance student learning and include similar capabilities to Arduino and Raspberry Pi. Once our students have built these boards, they are theirs to keep. They will use them as part of the taught programme and can use them in their personal projects.

#### **Engineering the future**

Studying Electrical and Electronic Engineering at the University of Southampton can provide an early boost to an exceptional career:

- 100 per cent of our BEng Electrical Engineering and BEng Electronic Engineering graduates go onto professional and managerial positions or further study. (Unistats, 2015)
- The average starting salary for our Electrical Engineering and Electronic Engineering graduates in the UK is £29,000 (RM171,000)
- Final-year student Tom Bell has used skills and knowledge learned on his MEng course in Electronic Engineering with Mobile and Secure Systems to write and publish the

book, Programming for Everyday Life – a beginners guide to the basics of programming in Python; programming for the Web; and using technology to create applications, services and tools that transform lives

Professor William Webb, Electronic
Engineering graduate and visiting
professor, has been appointed
President of the Institution of
Engineering and Technology (IET)
- the accrediting body for our EEE
degree and one of the world's
largest organisations for engineers
and technicians. He says the degree
was the perfect start for him on a
career in wireless communications,
and his entire career direction can
be traced back to his third-year
Communications module

#### **World-class facilities**

Our unrivalled world-class facilities are fitted with industry-standard equipment in superb laboratories.

The Mountbatten Building in Southampton is home to the £110m (RM650m) multidisciplinary cleanroom complex, one of the world's leading research facilities for nanotechnology and photonics.
Third- and fourth-year students may also use the Tony Davies High Voltage Laboratory – one of only a handful of similar facilities in Europe and an active centre for research into dielectric materials, insulation systems and high voltage related phenomena.



#### **Find out more**

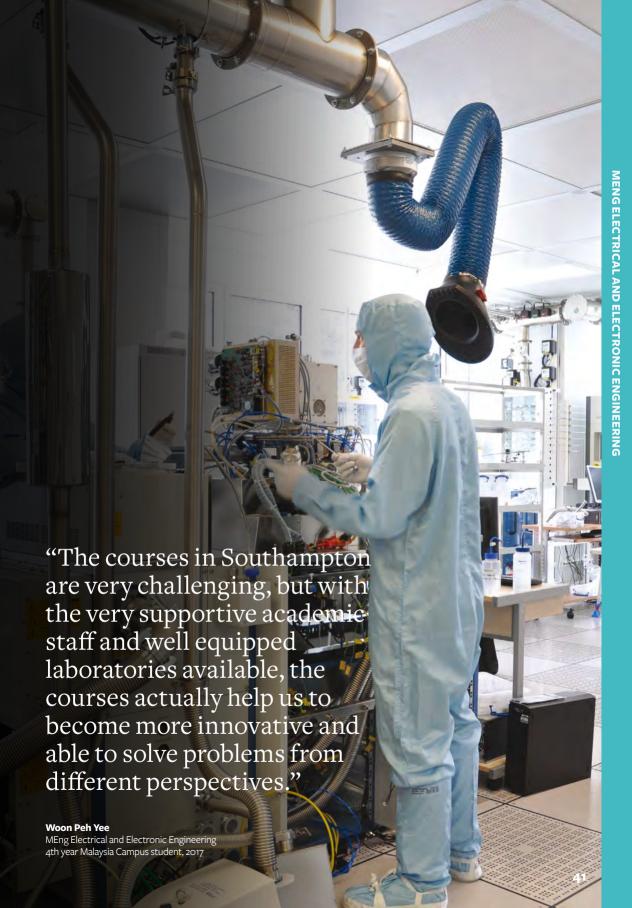
For more details about your course such as module information and course structure, visit

#### www.southampton.edu.my

Or to have specific questions answered:

T: +607-560 2560 (Malaysia)

T: +44(0)2380599699(UK)



### COURSE OVERVIEW

**Mechanical Engineering** 

#### **Choose Southampton**

- → One of the top ten UK universities for Mechanical Engineering (Sunday Times Good University Guide, 2017)
- → Degrees accredited by the Institution of Mechanical Engineers (IMechE) in the UK
- → Design projects in each year of study develop valuable engineering capabilities
- → MEng programmes offer a route to Chartered Engineer (CEng) status
- → Students on the split-campus programme (2 years in Malaysia and 2 years in the UK) are offered the same course content and teaching quality as students in the UK for all four years

WE HAVE

11

degrees: choose the right one for you

Fourth-year students investigating the aerodynamics, structural and economic performance of a joined blade rotor wind turbine system

Mechanical engineering is vital to every aspect of daily life from cars to medical devices. Our MEng degrees provide you with a professional grounding in mechanical engineering science combined with the knowledge to design and develop innovative structures and materials for a wide range of technologies.

#### Accreditation

Our MEng is accredited by the Institution of Mechanical Engineers (IMechE) on behalf of the UK's Engineering Council for the purposes of fully meeting the academic requirement for registration as a Chartered Engineer in the UK. This accreditation is recognised by engineering boards around the world, including the Board of Engineers Malaysia via the international agreement known as the Washington Accord. Our BEng is accredited for the purposes of fully meeting the academic requirement for registration as an Incorporated Engineer and partly meets the academic requirement for registration as a Chartered Engineer.

#### **Programme structure**

You will learn through a combination of lectures, tutorials, laboratory experiments, coursework, problemsolving exercises and individual and group projects. Practical laboratory work is an essential part of your course and enables you to develop the critical skills and judgement needed for your future career. We also help develop your written and oral presentation skills.

Our teaching follows the semester pattern of our UK campuses. Two semesters begin at the end of September and January, with examinations in January and May. Each module contributes to your final degree.

Should you choose to exit this programme after successfully completing three years of study, you will be eligible for a BEng qualification. The BEng route develops the same core skills as the MEng, however by choosing the MEng you will study a

more extensive range of subjects at an advanced level.

#### Years one and two in Malaysia

The first two years are the same across all our Mechanical Engineering degrees and focus on the essential principles of mechanical engineering, as well as law and management, systems design, and modelling and computing, in order to take a product from initial concept to the marketplace.

#### Years three and four in the UK

In years three and four in the UK, you can either choose a broad-based degree, or one of ten specialist themed degrees.

In year three you will carry out an individual design or research project, which enables you to bring together the concepts and skills you have learned.

In year four you will take advanced modules related to your chosen degree and participate in a major group design project, applying your engineering knowledge to a design problem. Previous projects have included the design and manufacture of a wall-climbing robot with surveillance capabilities, and a lower-limb exoskeleton for rehabilitation.

#### **Mandatory modules**

#### Year 1

Design and Computing

Electrical and Electronic Systems

Mathematics for Engineering and the Environment

Mechanics, Structures and Materials

Mechanical Systems Analysis

Thermofluids

#### Year 2

Electronics, Drives and Control

Engineering Management and Law

Fluid Mechanics

Materials and Structures

Mathematics for Engineering and the Environment Part II

Mechanics, Machines and Vibration

Systems Design and Computing

Thermodynamics

#### Year 3

Engineering Design with Management Individual Project

#### Year 4

Group Design Project

# Further information

For information on modules available in years one and two, visit

#### www.southampton.ac.uk/my/mech

For information on modules available in vears three and four, visit

www.southampton.ac.uk/ engineering/mech

#### **Key information**

Our standard offers are listed below but where we have places available, students may be admitted with slightly lower grades

A levels: A\*AA in Mathematics, Physics (A\*in either; with a pass in Physics Practical) and one other (except General Studies and Critical Thinking)

**IB: 38 points overall**, 18 at Higher Level including 6 in both Higher Mathematics and Higher Physics

Sijil Tinggi Persekolahan Malaysia (STPM): AA in Mathematics and Physics plus A in one other subject

Unified Examination Certificate

(UEC) – Senior Middle Level: Students studying Science track in English with minimum 5 As including Mathematics I and II and Physics (not including Art, Chinese, Malay or Mathematics)

Diploma in Mechanical Engineering (Aeronautics), Universiti Teknologi Malaysia (UTM): First-year entry with minimum GPA of 3.4

Monash University Foundation

Year: Minimum of 310 overall with 80 per cent average in Mathematics and Physics, and subject to attending an extended technical induction

programme

English language qualifications:

IELTS 6.5 overall with at least 5.5

in each competence. For other

qualifications accepted, visit www.southampton.ac.uk/admissions\_language

**Application process:** Apply directly via our website **www.southampton. ac.uk/my/apply** 

Our typical entry requirements may be subject to change.

Before you apply, please visit www.southampton.ac.uk/my/entry-requirements

# MENG MECHANICAL ENGINEERING MQA/FA 0811

#### **Degree | Duration**

### **MEng Mechanical Engineering** | 4 years

This programme covers the essential principles of mechanical engineering, such as mechanics, structures and materials, design and computing. You will extend your knowledge and skills in your third and fourth years, taking part in individual and group projects.

#### MEng Mechanical Engineering/ Acoustical Engineering | 4 years

This programme will provide you with the knowledge to focus on the analysis, control and design of sound and vibration, and provides you with wide ranging acoustical engineering skills, for instance to reduce jet engine noise, optimise the sound of automotive engines, or improve the accuracy of ultrasound scans.

### MEng Mechanical Engineering / Advanced Materials | 4 years

This programme will provide you with in-depth knowledge of the properties of both established and novel materials that are essential in modern engineered systems. You will study advanced topics such as the modelling of material behaviour, and develop the skills to design materials and surfaces from atoms to applications.

### MEng Mechanical Engineering / Aerospace | 4 years

This programme will develop your expertise in aerospace systems, whilst maintaining the broad-based background associated with mechanical engineering. During your third and fourth years, you will focus on aircraft aerodynamics, propulsion, avionics and structural design.

### MEng Mechanical Engineering / Automotive | 4 years

This programme focuses on a broad range of design and operational aspects related to automobile systems, from car structure and dynamics, to noise and vibration issues, and human factors. During your third and fourth years you will develop the specialist skills and knowledge required for a career in the automotive industry.

### MEng Mechanical Engineering / Biomedical Engineering | 4 years

This programme blends engineering with biological and medical aspects of healthcare technologies. During your third and fourth years, you will focus on the mechanics of the human body, medical technologies and human factors in engineering. You will develop expertise to enable you to solve challenges faced in the design, materials selection, development, and testing of medical implants and other devices.



#### **Find out more**

For more details about your course such as module information and course structure, visit

#### www.southampton.edu.my

Or to have specific questions answered:

T: +607-560 2560 (Malaysia)

T: +44(0)2380599699(UK)



Fourth-year students have designed and built a Mars rover, and have entered the international University Rover Challenge

#### **Key information**

#### **Career opportunities**

Our graduates have entered a range of careers in some of the world's leading companies, including: BAE Systems, Dyson, Jaguar Land Rover, McLaren Automotive, and Rolls-Royce. There are also exciting career opportunities in automotive and aerospace engineering, biomedical engineering, materials engineering, the marine and offshore industry, as well as IT and financial services.

Typical roles include Mechanical Engineer, Development Engineer, CAD Designer, Aerospace Design Engineer, Automotive Engineer, Thermal Systems Engineer.

# MEng MECHANICAL ENGINEERING (CONT.)

### MEng Mechanical Engineering / Computational Engineering and Design | 4 years

This programme focuses on developing the specialist skills you need to unlock the potential of today's immense computational power.
During your degree, you will learn how to leverage sophisticated software to design complex technologies and how to code and implement your own models and simulations.

### MEng Mechanical Engineering / Engineering Management

4 years

This programme will provide you with the technical skills to understand, design and manufacture innovative products, alongside the management expertise to take projects from initial concept to completion. In your third and fourth years, you will learn about business strategy, finance, and managing people and projects.

### MEng Mechanical Engineering / Mechatronics | 4 years

This programme will provide you with specialist expertise in the integration of electrical and mechanical systems. You will have the opportunity to study and practise mechanical, electrical, and control engineering to develop smarter machines ranging from autonomous robots to self-driving cars.

### MEng Mechanical Engineering / Naval Engineering | 4 years

This programme has been developed in conjunction with the Royal Navy. You will study marine engineering, ship science and marine craft concept design, alongside the key principles of mechanical engineering. You will develop the skills to apply your knowledge to cutting-edge ship and maritime craft design.

#### MEng Mechanical Engineering / Sustainable Energy Systems

4 years

This programme explores sustainable energy technologies such as wind turbines, solar cells, batteries and fuel cells, combined with a holistic view of societal aspects of energy, its distribution and use. In your third and fourth years, you will study the behaviour of fluids, and thermal and heat transfer phenomena at an advanced level.

"I enjoy the process of designing and manufacturing. Using engineering principles to shape an idea, then present it to the real world, is an amazing prospect, and this course helps me achieve that."

#### **Ryan Prasad**

MEng Mechanical Engineering 3rd year Malaysia Campus student

### Find out more

For more details about your course such as module information and course structure, visit

#### www.southampton.edu.my

Or to have specific questions answered:

T: +607-560 2560 (Malaysia)

T: +44(0)2380599699(UK)



# COURSE OVERVIEW Engineering Foundation Year

#### **Choose Southampton**

- → The Foundation Year is combined with a further four-year degree
- → Provides an introduction to the key concepts of engineering
- → You will receive a high level of support and feedback
- → Two intakes a year April and July

#### CHOOSE FROM

undergraduate degree subjects on completion

### on campus

by University ácademics

You will learn through a combination of lectures and tutorials, laboratory experiments, coursework, and individual and group projects.

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# ENGINEERING FOUNDATION YEAR

MQA/FA 5359

#### **Course | Duration**

### **Engineering Foundation Year** 1 year

This stimulating year of study will equip you with the knowledge, skills and attributes needed to successfully meet the challenges of our engineering degree programmes.

This one-year full-time course is integrated with a further four-year MEng degree, and will build your understanding of mathematics, mechanics, computer programming, electricity and electronics, and engineering principles.

Successful completion of this Foundation Year guarantees progression to one of our engineering degrees.

Through a high level of learning support and a wide range of teaching styles, you will be encouraged to develop the academic skills needed for efficient and independent learning, preparing you for the years of study ahead.

You will be assessed through a combination of examinations and coursework activities such as formal reports, research posters, laboratory reports, and reflective portfolios – all of which you will encounter during your degree.

"The Foundation Year has prepared me well for the future by offering an opportunity for both academic and personal development."

#### Lim Jia Jun

Engineering Foundation Year 2015-16

Students may choose degree programmes in the following subjects:

### At University of Southampton Malaysia Campus

- Aeronautics and Astronautics
- Electrical and Electronic Engineering
- Mechanical Engineering

#### At University of Southampton, UK

- Acoustical Engineering
- Aeronautics and Astronautics
- Aerospace Electronic Engineering
- Biomedical Electronic Engineering
- Civil Engineering
- Civil and Environmental Engineering
- Computer Science
- Electrical Engineering
- Electrical and Electronic Engineering
- Electronic Engineering
- Geophysics
- Mathematics
- Mechanical Engineering
- Mechatronic Engineering
- Physics
- Ship Science
- Software Engineering

#### Typical course content

- Academic Skills
- Communicating in English
- Computer Applications
- Electricity and Electronics
- Engineering Principles
- Fundamentals of Science and Engineering
- Mathematics for Science and Engineering
- Mechanical Science
- Routes to Success

#### **Key information**

Our standard offers are listed below but where we have places available, students may be admitted with slightly lower grades

#### Sijil Pelajaran Malaysia (SPM)/

O level or equivalent: 5 As in the science stream, including Mathematics and Physics. Minimum B+ in Additional Mathematics

**IB: 32 points overall**, and must not include Higher Level Mathematics and Physics

Sijil Tinggi Persekolahan Malaysia (STPM)/A level: ABB (cannot include subjects suitable for direct entry, normally Mathematics and Physics). However, students need to show an aptitude for Mathematics and may be asked to take a Foundation Mathematics test

#### **English language qualifications:**

Students who achieve **IELTS 5.5** with at least **5.5** in each competence will be required to follow the language pathway where students will take the module English for Engineers and Scientists in semester one and two, as well as Communicating in English in semester zero.

Students who achieve **IELTS 6.5** with at least **5.5** in each competence will only require English language classes in the first semester.

For other qualifications accepted visit www.southampton.ac.uk/admissions\_language

**Application process:** Apply directly via our website **www.southampton. ac.uk/my/foundation/apply** 

Our typical entry requirements may be subject to change. Before you apply, please visit www.southampton.ac.uk/my/foundation/about

Intakes: April and July

### 7

#### **Find out more**

For more details about your course such as module information and course structure, visit

#### www.southampton.edu.my

Or to have specific questions answered:

T: +607-560 2560 (Malaysia)

T:+44(0)2380599699(UK)

### HOW TO APPLY

#### Wherever you are in the world, you can apply directly via our website.

#### Step one

Download and complete the direct application form from the University of Southampton website, www. southampton.ac.uk/my/application

Partially completed forms cannot be processed and will lead to delays in the consideration of your application. In addition to the fully completed application form, we require the following documents to be submitted. Your application cannot be processed without these documents:

- One academic reference: this should be from your current or most recent place of study and should be on the institution's official letter head, signed by the referee and carry the institution's official stamp
- Transcripts showing previous academic awards: these must be certified as a true copy by the awarding institution or by a University of Southampton official agent
- Your current academic transcripts or forecast result: these must be certified by your institution

- Evidence of your English language qualifications
- A copy of your identity card or passport biographical data page

Your completed application and documents should be emailed to admissions.malaysia@soton.ac.uk

#### **Step two**

Once we have received your application, an acknowledgement email will be sent to you from the University Admissions office.

#### Step three

Your application will be considered by our Admissions team and you will be notified of their decision by email.

### Application deadlines for international students

- → Undergraduate programmes: (Sept intake): 13 July 2018
- → Engineering Foundation Year (April intake): 01 January 2018
- Engineering Foundation Year (July intake): 01 April 2018

#### Application deadlines for Malaysian students

- → Undergraduate programmes (Sept intake): 21 September 2018
- Engineering Foundation Year
   (April intake): 14 April 2018
- → Engineering Foundation Year (July intake): 15 June 2018

#### **Entry requirements**

We accept a wide variety of international qualifications for entry to our courses that must be accompanied by an English language qualification recognised by the University of Southampton. For the latest information about our academic entry requirements, visit:

- For undergraduate degrees: www.southampton.ac.uk/my/ entry-requirements
- For Engineering Foundation Year: www.southampton.ac.uk/my/ foundation/about





#### Find out more and apply at:

For the latest information about our English language entry requirements, visit www.southampton.ac.uk/admissionslanguage

Read our Admissions Policy at www.southampton.ac.uk/admissions-policy

Apply at www.southampton.ac.uk/my/apply

### ACCEPTING AN OFFER

We aim to make the application process as easy and quick for you as possible. Once you have received an offer of study from us, follow the instructions below to confirm your place.

#### Step one

To accept your offer to study with the University of Southampton, complete the Reply to Offer form sent to you with your offer letter and return it by email to the Admissions team at admissions.malaysia@soton.ac.uk

The form should be returned to this email address no more than 30 days after the date on your offer letter.

#### Step two

On receipt of your completed Reply to Offer form, an email will be sent to you from the Admissions team confirming your acceptance.

#### Step three

Once you have accepted your unconditional offer or have met the academic conditions set out in your conditional offer to study at the University of Southampton, an invoice for a non-refundable deposit of RM1,000 will be sent to you by email. The deposit amount will be deducted from your first semester tuition fees. An official receipt will be issued to you once payment has been received.

There are several ways to make your payment. Use only one of the following methods:

- → By credit card payment in person
- → By crossed cheque or bank draft made payable to USMC Sdn Bhd. This should be sent to the Admissions team, University of Southampton Malaysia Campus, No. 3, Persiaran Canselor 1, Kota Ilmu EduCity, 79200 Iskandar Puteri, Johor, Malaysia. An official receipt will be sent to you once funds have cleared
  - By telegraphic bank transfer or by over-the-counter payment direct to our HSBC account. A copy of your remittance advice or stamped over-the-counter paying in slip should be sent to the Admissions team at admissions. malaysia@soton.ac.uk. An official receipt will then be sent to you

Bank Name:

HSBC Bank Malaysia Bho

ACCOUNT NO

Branch

Swift No:

#### Step four

Once we have received your deposit we will send you the Accommodation Information and Applicant Pack. You will receive enrolment and induction information approximately one month prior to the start of your course.



### 

For more details about your course such as module information and course structure, visit

#### www.southampton.edu.my

Or to have specific questions answered:

1:+607-5602560 (Malaysia)

1**:**+44(0)2380599699(UK)

### **FEES**

#### **Undergraduate Programmes**

For undergraduate students the cost of obtaining an engineering degree at our University of Southampton Malaysia Campus (two years in Malaysia and two years in the UK) is around 65 per cent\* of the cost of obtaining the same degree in the UK only. You will also make additional savings on living expenses and accommodation by studying in Malaysia for the first two years rather than only in the UK.

	Fees 2018/19	
	Malaysian students	International students
Years 1 and 2 (in Malaysia)	RM48,700 per annum	RM54,400 per annum
Years 3 and 4 (in the UK)	£20,320 per annum†	£20,320 per annum†

† The fees listed for years 3 and 4 (in the UK) will be subject to a 20% Transition Bursary for all students who successfully progress from year two at our Malaysia Campus to years three and four at our Southampton Campus. The fee for studying in the UK for years 3 and 4 will be £16,256 each year.

Tuition fees for years 1 and 2 are payable in Malaysian Ringgits. Tuition fees for years 3 and 4 are payable in pounds sterling. Fees shown are fixed for the duration of the programme. For the latest information on fees, visit www.southampton.edu.my/fees

#### **Engineering Foundation Year**

The Engineering Foundation Year is a one-year preparatory course, which then leads to a four-year (MEng) degree programme.

	Fees 2018/19	
Malaysian students	RM28,400	
International students	RM32,100	

### \*This figure is based on international tuition fees, includes the 20% Transition Bursary and uses the exchange rate £1 = MYR 5.55 as of July 2017. The cost of studying the same degree in the UK (4 years in the UK) is £20,320 per annum.

#### **Cost of Living**

#### In Malaysia

If you are unaccompanied, the cost of living in Malaysia (in addition to tuition fees) is usually around RM1,200 – RM1,500 per month.

#### In the UK

If you are unaccompanied, the cost of living (in addition to tuition fees) is usually around £9,135 per academic year.

These figures should cover your accommodation, food, daily travel, books, stationery, dissertation preparation and other items.



#### Find out more:

www.southampton.ac.uk/my/fees **T:** +607-560 2560 (Malaysia)

T:+44(0)2380599699(UK)

### **SCHOLARSHIPS**

All applicants to the University of Southampton Malaysia Campus will be eligible for scholarships. These are based on academic excellence and achievement and are open to both Malaysian and international applicants. All scholarships are bond-free.

#### **Undergraduate Scholarships**

Top Achiever Scholarships: 100 per cent scholarships are awarded to our most academically outstanding students at entry. These are highly competitive and the number awarded varies each year. These scholarships do not include living expenses, and are applicable to year one entry students and for the first year of study only. Students must complete their degree at the University of Southampton. No separate application is needed,

**High Achiever Scholarships:** 25 per cent scholarships are awarded to all students achieving a minimum of AAA grades in A levels or equivalent. The scholarships are a reduction in tuition fees. They are applicable to year one entry students and for the first year of study only. No separate application is needed, students are automatically considered.

**Transition Bursaries:** 20 per cent scholarships are awarded to all students who successfully progress from year two at our Malaysia Campus to years three and four at our Southampton Campus. Students must study and complete both years one and two at our Malaysia Campus in order to receive this scholarship. The scholarship is a reduction in tuition fees. No separate application is needed, students are automatically considered.

#### **Foundation Year Scholarships**

The University offers a wide range of scholarships to Foundation Year applicants. These are based on academic excellence and achievement and are open to both Malaysian and international applicants. All scholarships are bond-free.

**Top Achiever Scholarships:** 100 per cent scholarships are awarded to all students achieving a minimum of 9A+ and above in SPM/9A\* and above

in O level (must include A in Physics and Mathematics and minimum B+ in Additional Mathematics). These scholarships do not include living expenses. The scholarships are non-transferable and only apply whilst the recipient remains a registered, full-time, active student for the duration of the programme. Recipients of the Top Achiever scholarships must pursue an undergraduate programme at the University of Southampton Malaysia Campus after completion of the Engineering Foundation Year. The recipient will need to refund the scholarship amount in full in the event of change of course or university. No separate application is needed, students are automatically considered.

#### **High Achiever Scholarships:**

scholarships are awarded to all students who receive the grades below

#### 5-6 As in SPM/O level:

15 per cent scholarships are awarded to all students achieving 5-6 As in SPM/O level†.

#### 7-8 As in SPM/O level:

25 per cent scholarships are awarded to all students achieving 7-8 As in SPM/O level†.

#### 9-10 As in SPM/O level:

30 per cent scholarships are awarded to all students achieving 9-10 As in SPM/O level†.

#### 11 As and above in SPM / O level.

35 per cent scholarships are awarded to all students achieving 11 As and above in SPM/O level†.

†Must include A in Physics and Mathematics, and minimum B+ in Additional Mathematics

The scholarships are a reduction in tuition fees. No separate application is needed, students are automatically considered.

#### Dean's Progression Scholarships:

scholarships are awarded to all students who successfully progress onto an undergraduate programme at the University of Southampton Malaysia Campus

10 per cent reduction of year one fees for all students who progress.

25 per cent reduction of year one fees for students with a minimum average of 75 per cent in Foundation Year

50 per cent reduction of year one fees for students with an average of 90 per cent and above in Foundation Year

#### **External sponsorship bodies:**

University of Southampton Malaysia Campus applicants are also eligible to apply for external scholarships from:

- Khazanah Watan
- Yayasan Telekom Malaysia
- Yayasan Tenaga Nasiona
- Kumpulan Yayasan Sabah
- MARA
- MAXIS



#### Find out more:

www.southampton.ac.uk/my, scholarships

**T:** +607-560 2560 (Malaysia)

**T:** +44 (0)23 8059 9699 (UK)



### **INTERNSHIPS**

We have excellent links with industry and encourage our students to start preparing for their future career by finding an internship. Our students have found their placements to be extremely valuable as they have learned new skills, gained more knowledge, built industrial contacts and improved their confidence.

#### **Wen Yee Tey**

MEng Electrical and Electronic Engineering Internship: +Solar Systems, Malaysia

"As an intern at +Solar Systems I was involved in engineering solar system designs, from residential and commercial, to large-scale solar systems.

"I developed a strong understanding of solar systems as well as basic lightning protection required for a solar plant. I also learnt that time management, communication and teamwork are essential for engineering design projects to run smoothly, especially in a fast-paced professional environment – skills that I have been able to apply throughout my studies and group project work.

"My internship has shown me the possibilities of where my degree could take me, and in my third year of studies I undertook a project to research and optimise solar cells for best efficiency. Both of these experiences have affirmed to me that working in the solar engineering industry is a career I'm keen to pursue."

#### **Fang Hwa Ting**

MEng Mechanical Engineering Internship: Dyson Manufacturing Sdn Bhd, Malaysia

"My summer internship at Dyson gave me the opportunity to obtain first-hand experience of working in an engineering company. I was assigned several projects to handle, which included design, experimentation and testing.

"It is not an easy task for an engineer to think of new technologies, ideas and designs, but the most important part of being an engineer is to persevere, to critically deal with problems encountered and resolve them effectively – something I learnt during my placement and time at university.

"After my internship experience, I realised that I made the right decision to study Mechanical Engineering since I am very keen to pursue an engineering career.

"I really enjoyed my internship and I believe that this experience will lead me to perform better in my degree and make me more employable in the future."



#### **Find out more:**

www.southampton.ac.uk/my/internships

# TERMS AND CONDITIONS

The University's Charter, statutes, regulations and policies are set out in the university Calendar and can be accessed online at www.calendar.soton.ac.uk

#### Terms of use

This prospectus does not constitute an offer or invitation by the University of Southampton and/or USMC 5dn Bhd (both referred to as the "University" or "We" herein) to study at its Southampton or Malaysia campuses. It provides an overview of the University and life at Southampton and Malaysia, along with information about relevant undergraduate programmes available at the time of publication. This is provided for information purposes only. Relevant weblinks are shown throughout. Please also consult the programme information online for further details or for any changes that have appeared since first publication of the prospectus.

The information contained in the prospectus, welcome guides or on our websites is subject to change and may be updated by the University from time to time to reflect intellectual advances in the subject, changing requirements of professional bodies and changes in academic staff members' interests and expertise. Changes may also occur as a result of monitoring and review by the University, external agencies or regulators.

#### **Programme Validation**

Validation is the process by which the University approves its programmes of study. Any taught undergraduate and postgraduate programme leading to a University award, including research degrees with a taught component are required to go through programme validation. The full validation process can be found in our Quality Handbook at www.southampton.ac.uk/quality.

#### 1. Change or discontinuance of programmes

As a research-led University we undertake a continuous review of our programmes, services and facilities to ensure quality enhancement and manage our resources. We are also largely funded through public and charitable means and are required to manage these funds in an efficient and cost-effective way for the benefit of the whole of the University community.

This means that your programme can change in the following ways:

- We can change the programme title, make reasonable changes to the timetable, location, number of classes, content or method of delivery of programmes of study and/or examination processes.
- We can make reasonable variations to the content and syllabus of programmes of study (including in relation to placements) for example to alter its aims and intended learning outcomes, credit architecture, programme structure, assessment strategy and progression requirements.
- We can suspend or discontinue programmes of study (for example, because a key member of staff is unwell or leaves the University).
- We can discontinue programmes of study or to combine or merge them with others (for example, because too few students apply to join the programme for it to be viable to run).

However, any revision will be balanced against the requirement that students should receive the educational service expected. The University's procedures for dealing with programme changes and closures can be found in our Quality Handbook at www.southampton.ac.uk/quality.

Applications made to the University should be made based on the latest programme information made available by the University. If you are in receipt of an offer to study at the University and if you have not already accepted our offer to study a programme with the University and this programme changes or closes as set out above, we will write to you to inform you that this offer has been withdrawn by the University.

If you have already accepted an offer to study a programme with the University and this programme changes or closes as set out above but you have not already registered and enrolled with the University, we will contact you to advise you of the change and where we are able to do so, we will make you a new offer to transfer to an equivalent programme for which you are qualified and where places are available within the University. You will be free to accept or reject this offer. If you have already registered and enrolled with the University and you reject the new offer, we will use our reasonable endeavours to teach out the programme on which you are enrolled but we cannot guarantee to do so and you may need to study elsewhere.

#### 2. Changes to services or facilities

The University will make available to students such learning support and other services and facilities as it considers appropriate, but may vary what it provides from time to time (for example, the University may consider it desirable to change the way it provides library or IT support).

#### 3. Financial or other losses

The University will not be held liable for any direct or indirect financial or other losses or damage arising from such closures, discontinuations, changes to or mergers of any programme of study, service or facility.

Upon acceptance by an applicant of an offer of a place at the University, the relationship between the applicant and the University becomes contractual. When the contract is formed between the student and the University it will last for the relevant academic year only unless the student withdraws from the programme or the programme is terminated.

Please note: the right of a student to withdraw from a programme of study under the provisions set out in paragraph 1 above following a change are in addition to any statutory rights of cancellation that may exist under the laws of Malaysia. In entering into that contract, the terms of the contract will not be enforceable by any person not a party to that contract.

#### Force majeure

The University will not be held liable for any loss, damage or expense resulting from any delay, variation or failure in the provision of programmes of study, services or facilities arising from circumstances beyond the University's reasonable control, including (but not limited to) war or threat of war, riot, civil strife, terrorist activity, industrial dispute, natural or nuclear disaster, adverse weather conditions, interruption in power supplies or other services for any reason, fire, boycott and telecommunications failure. In the event that such circumstances beyond the reasonable control of the University arise, it will use all reasonable endeavours to minimise disruption as far as it is practical to do so provided that such endeavours do not undermine the University's Quality assurance requirements.

#### **Admissions Policy and complaints**

The University will operate its admissions in accordance with its Regulations for Admission to Degree Programmes, which can be found in the Calendar at www.calendar.soton.ac.uk/sectionIV/admissions. html.

Applicants may raise complaints related to admissions under the University's regulations governing Complaints from Applicants, which can be found at www. calendar.soton.ac.uk/sectionIV/complaints-

applicants.html. In the first instance complaints will be handled by the Admissions team at University of Southampton Malaysia Campus. Email admissions. malaysia@soton.ac.uk

#### **Data protection**

During the application procedure, the University will be provided with personal information relating to the applicant. An applicant's personal data will be held and processed by the University of Southampton in accordance with the requirements of the Data Protection Act 1998 and by USMC 5dn Bhd in accordance with the requirements of the Personal Data Protection Act 2010.

#### © University of Southampton 2017

A copy of this prospectus and the University's current information for students with disabilities and specific learning difficulties can be made available, on request, in alternative formats, such as electronic, large print, Braille or audio, and, in some cases, other languages.

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Date of publication: September 2017

#### MoHE registration number DULNoo6(J)

### HOW TO FIND US

#### Malaysia

Our Malaysia Campus is located near the southwestern tip of Malaysia, about four-hours drive south of Malaysia's capital city, Kuala Lumpur.

The campus is located within the EduCity development in a regional city called Iskandar Puteri, Johor. A 305-acre site dedicated to education, EduCity is modelled on the Dubai Knowledge city.

Iskandar Puteri is accessible from the North-South Expressway, which links all major cities on the West Coast of Peninsular Malaysia between Thailand and Singapore. The North-South Expressway is also connected to other major expressways including the Malaysia-Singapore Second Crossing, also known as the Second Link.

EduCity lies within 60 minutes of Singapore Changi International Airport and 30 minutes of Senai International Airport. Central Singapore is approximately a 40-minute drive away.

University of Southampton Malaysia Campus (913717-X) No. 3, Persiaran Canselor 1, Kota Ilmu EduCity, 79200 Iskandar Puteri, Johor, Malaysia KPT/JPS/DFT/US/Jo4





#### **CAMPUS INFORMATION**



University buildings



Halls of residence

#### TRANSPORT INFORMATION



Airport



#### Find out more:

www.southampton.ac.uk/my/ campus

#### UK

Southampton is located just over one hour from central London, on the south coast of England. We are surrounded by areas of natural beauty including the New Forest and the Isle of Wight, and connected to the rest of the UK and Europe through superb road, rail, air and sea links.

Our Southampton campuses are well connected to the national road network. The M3 motorway links Southampton directly to London.

Southampton Airport is approximately 10 minutes from our Southampton campuses by bus or taxi. There is a full UK domestic service, as well as flights to mainland Europe,

including Schiphol Amsterdam, and the Channel Islands. If you are arriving in the UK via London Gatwick or London Heathrow airports, you can reach Southampton by road, bus, coach and rail.

We run the award-winning unilink bus service that connects our Southampton campuses with all the major transport links in the city. You can buy tickets at the unilink office or on

Southampton is the cultural and commercial capital of the south coast.







#### **CAMPUS INFORMATION**



University buildings

TRANSPORT INFORMATION

Airport

Ferry terminal

Railway station

Coach station



#### Find out more:

www.southampton.ac.uk/my/ campus

### UNIVERSITY OF SOUTHAMPTON FACTS AND FIGURES



We have over

24,800 students



Over

undergraduates



Students from over 130 countries



Over 7,500

EU and international students

### Over 150 years

of history

1862 2016

#### World-leading research **facilities**

in the UK include a wind tunnel complex and 138m towing tank



Part of the Worldwide Universities Network a collaboration of knowledge from around the world

Our business incubation partnership, SETsquared, is the most influential university business incubator globally\*





# Ranked

in the UK for research intensity\*\* \*University Business Incubator (UBI) Index, 2015

\*\*Times Higher Education (Research Excellence Framework, 2014)

\*\*\*The Latest Destinations of Leavers from Higher Education (DLHE) statistics, which is based on a survey of UK graduates

graduates









spanning 1

1 campus in Malaysia

### **6** UK Campuses

#### Over 150 volunteering

roles every year are offered in over **130 organisations** such as the British Red Cross and Save the Children

95% of our full-time graduates were in employment or progressed to further study within 6 months\*\*\*



3 internationally renowned arts venues



Access to virtual learning

24 hours a day



Over 2,200

networked computers for student use



6 on campus 3 in the city



undergraduate courses

1,000

At any one time we are working with over 1,000 external organisations

#### More than 300 clubs and societies



with over 12,000 members



5 libraries holding around 3 million books and journals



seat cinema



capacity venue



#### Find out more:

www.southampton.edu.my

marketing.malaysia@southampton.ac.uk +6075602560 (Malaysia) +44 (0)2380599699 (UK)



MalaysiaCampusSoton



Southampton\_MY



uni\_southampton\_malaysia



bit.do/usmc