# FACULTY OF
# ENGINEERING & INFORMATION TECHNOLOGY
# 工程与资讯科技学院

SOUTHERN
UNIVERSITY COLLEGE
南方大學學院

2019 SETARA COMPETITIVE UNIVERSITY COLLEGE

SETARA

# Faculty of **Engineering & Information Technology**

# 工程与资讯科技学院

Welcome to the Faculty of Engineering and Information Technology (FEIT) ! The faculty is dedicated to being a leader in higher education, fostering innovation, and upholding excellence in engineering and information technology. At FEIT, we nurture our graduates to become passionate engineers and IT experts who are committed to enhancing the quality of life through the innovation of technology.

FEIT offers a comprehensive and transformative educational journey with two home-grown bachelor's programmes and three diploma programmes. All programmes offered have been approved by the Malaysia Qualifications Agency (MQA), and the professional engineering programmes are accredited and recognized by the Board of Engineers Malaysia (BEM).

Join us at FEIT and embark on a journey that goes beyond traditional education norms. Together, we are shaping the future and redefining the landscape of engineering and information technology, while nurturing the minds that will lead the way.

欢迎来到工程与资讯科技学院（FEIT）！本学院致力于成为高等教育的领导者，推动创新，并在工程与资讯科技领域保持卓越表现。在工程与资讯科技学院，我们激励毕业生成为充满热情的工程师和资讯科技专业人才，致力于通过技术创新提升生活品质。

本学院提供两个学士学位课程和三项文凭课程。所有课程均已获得马来西亚资格认证机构（MQA）的认证，其中的工程相关课程也通过了马来西亚工程师局（BEM）的认可与认证。

加入FEIT，踏上超越传统教育的旅程。让我们携手共创未来，重新定义工程与资讯科技领域的格局，培养引领潮流的卓越人才。


## Programmes 课程

Diploma in **Information Technology 资讯科技**专业文凭
Diploma in **Computer Science 电脑科学**专业文凭
Diploma in **Electrical & Electronic Engineering 电机与电子工程**专业文凭
Bachelor of **Software Engineering (Honours) 软件工程**（荣誉）学士学位
Bachelor of **Electronic Engineering with Honours 电子工程**（荣誉）学士学位

# Faculty of
# **Engineering & Information Technology**

One of the compelling reasons to choose our esteemed faculty is that all our diploma and degree programmes have gained accreditation from the Malaysian Qualifications Agency (MQA). whereas, our Diploma in Electrical and Electronic Engineering programme has been accredited by the Engineering Technology Accreditation Council (ETAC) Malaysia.

Meanwhile, our Bachelor of Electronic Engineering with Honours proudly carries the accreditation from the Engineering Accreditation Council (EAC) Malaysia. These accreditations from EAC and ETAC ensure that all our graduates meet the minimum academic requirements to register with the Board of Engineers Malaysia (BEM) to practice engineering and engineering technician roles in Malaysia as graduate engineers and inspectors of works (IOW). It is also a part of the admission requirement to be in the Institute of Engineers Malaysia (IEM) as a graduate member. Being recognised as a graduate engineer by both BEM and IEM paves a clear pathway for aspiring professionals to attain the coveted title of Professional Engineer (Ir.) in the future. Moreover, the EAC and ETAC accreditations extend across international borders, enabling us connects to prestigious networks in Europe and Asia, apart from Washington Accord and Dublin Accord.

Our faculty is led by a remarkable team of educators, with over 40% of them being PhD holders and expert in their respective fields. Additionally, more than 40% of the teaching staff have extensive industry working experience, which is a treasure trove of practical insights that beautifully enrich the tapestry of student learning.

In choosing our faculty, you're not just selecting an educational institution; you're embracing an unmatched opportunity to thrive in an environment underpinned by excellence, recognition, and industry wisdom. Join us in the pursuit of knowledge, innovation, and a future illuminated by the brilliance of electrical engineering!

选择我们院系的一个重要原因是，我们所有的文凭和学位课程均已获得马来西亚资格认证机构（MQA）的认证。其中，电机与电子工程专业文凭课程通过了马来西亚工程技术认证委员会（ETAC）的认证，而电子工程（荣誉）学士学位课程则获得了马来西亚工程认证委员会（EAC）的认可。EAC和ETAC的认证确保所有毕业生符合最低学术要求，并有资格在马来西亚工程师局（BEM）注册，成为工程师或工程监督员（IOW），从事工程师或工程技术人员的相关工作。此外，这些认证也是成为马来西亚工程师学会（IEM）会员的重要条件。通过获得BEM和IEM的认证资格，毕业生将迈向成为专业工程师（Ir.）的重要一步。此外，EAC和ETAC的认证具有国际认可度，涵盖华盛顿协议和都柏林协议的签署国，并与欧洲和亚洲的知名机构建立联系，为毕业生提供更多国际化发展机会。

我们的院系由一支杰出的教学团队领衔，其中超过40%的教职人员拥有博士学位，并在各自的专业领域拥有丰富的研究经验。同时，超过40%的师资具有深厚的工业工作背景及经验，这为学生的学习增添了宝贵的实践见解。

选择我们的院系，您不仅是在选择一所教育机构，更是拥抱一个充满卓越、认可和行业经验的学习环境的机会。加入我们，共同追求知识与创新，开创电子工程的光辉未来！

Students have the opportunity to participate in international competitions and interact with participants from various countries around the world. It offers a chance to showcase skills, interact with global peers, and gain valuable cross-cultural experiences. Students also have the opportunity to meet up with well-known scientists in the competition.
From the Left: Tung Khai Yen, Academician Tan Sri Emeritus Professor Datuk Dr. Augustine Ong, Chan Bun Seng, Siew Zi Yang

学生有机会参与国际比赛，并与来自世界各地的参赛者交流。这不仅为学生提供了宝贵的跨文化体验，还为他们提供了在国际舞台上展示技能的机会，与全球同行互动，拓展视野。此外，学生还有机会在比赛中与知名科学家面对面交流。
左起：陈楷元同学、荣誉教授丹斯里拿督Augustine Ong Soon Hock、陈百胜讲师、萧子洋同学。



Under the attentive guidance of the lecturers, students from the engineering department are honored to achieve impressive results consecutively in the international engineering innovation competition.

在讲师们的悉心指导下，工程系学生连续在国际工程创新比赛中取得了令人瞩目的成绩。

# Diploma in
# **Computer Science**
# **电脑科学**专业文凭

R3/481/4/0270(A8297)10/27
Programme Duration: 2 Years 3 Months

## Programme Introduction 课程介绍

The programme offers foundational knowledge and practical skills in various aspects of computing. It provides a broad understanding of computer system analysis, programming and development. It covers both theoretical concepts and practical applications for a career in technology and further academic and professional development in the field.

本课程为学生提供电脑领域各方面的基础知识和实践技能。课程内容涵盖了电脑系统分析、程序设计与开发等领域的广泛理解，同时结合技术职业的理论概念与实际应用，为学生从事技术相关职业或继续在该领域深造和发展提供坚实基础。

## Courses 课程

### Compulsory 必修课程

- Introduction to Programming 程式设计导论
- Discrete Mathematics 离散数学
- System Analysis and Design 系统分析与设计
- Database System Design 资料库系统设计
- Computer Organization and Architecture 电脑组织与架构
- Operating System 作业系统
- Networking and Distributed System 网络与分布式系统
- Project 专题
- Ethics in Computing 计算机伦理
- System Security and Control 系统安全与控制
- Calculus 微积分
- Statistic and Probability 统计和概率

### Elective (Core) 必选选修课程

- Communicative English 交际英语
- Basic Chinese / Chinese / 基础中文 / 中文

### Major Core 专科主修课程

- Computer System 电脑系统
- Java Programming JAVA程式设计
- Advanced Java Programming 高级JAVA程式设计
- Data Structure and Algorithm 资料结构与演算法
- Human Computer Interaction 人机互动
- Web-based Systems 网页系统
- Fundamental of Artificial Intelligence 人工智能基础
- Distributed Datebase System 分布式数据库系统

### Elective (Open) 公开选修课程

- Introduction to Multimedia 多媒体导论
- Project management 专案管理
- Introduction to Cloud Computing 云计算导论
- Mobile Application Development 移动应用程序开发

### Industrial Training 工业实习

## Entry Requirements 入学资格

- **SPM/O-Level 马来西亚教育文凭(SPM)/中学普通水平考试(O-Level):** Pass with minimum 3 credits including Mathematics 至少3科获得C等，包括普通数学。
- **UEC 马来西亚统考文凭(UEC):** Pass with minimum grade B in 3 subjects including Mathematics 至少3科获得B等，包括普通数学。
- **STPM/A-Level 马来西亚高等教育文凭(STPM)/ 中学高级水平考试(A-Level):** Pass with minimum a grade C (CGPA 2.00) and a credit in Mathematics at SPM 至少获得C等（CGPA 2.00），并在SPM数学中获得优等成绩。
- **STAM 马来西亚高等宗教证书（STAM）:** A pass in Sijil Tinggi Agama Malaysia (STAM) with a minimum grade of Maqbul (Pass) and a credit in Mathematics at SPM 至少取得Maqbul（及格）等级，并在SPM数学中获得优等成绩。
- **SKM Level 3 in related field 马来西亚相关领域技能证书 (SKM) 3级:** Possess SKM Level 3 in a related field and a minimum credit in Mathematics at SPM 拥有相关领域的SKM三级资格，并在SPM数学科目中获得优等成绩。
- **Certificate Level 3 in related field 马来西亚相关领域证书 3级:** Pass with minimum CGPA 2.00 and a credit in Mathematics at SPM 至少CGPA2.00，且在SPM数学中获得优等成绩。
- **Others 其它:** Other recognized equivalent qualifications 其他受认证的同等资格。
- **English Competency Requirement for International Student 国际生英语能力要求:** IELTS 4.5 or MUET Band 3 or its equivalent 雅思考试得分4.5，或马来西亚统一英语测试(MUET) 至少3级，或其他同等英文水平资格。

## Career Opportunities 就业机会

- Programmer 程序设计师
- Web Designer 网站设计者
- Software Developer 软件开发人员
- System Support 系统支持工程师
- Cryptographer 密码学家
- Software Tester 软件测试员
- Technical Consultant 技术顾问
- Mobile Application Developer 移动应用开发员
- Secure Software Developer 安全软件开发员

# Diploma in
# **Information Technology**
# 资讯科技专业文凭

R3/0611/4/0081(A10844)10/29
Programme Duration: 2 Years 3 Months

## Programme Introduction 课程介绍

This is a comprehensive programme that equips students with technical skills and business insights through meticulous designed curriculum which discovers the synergy between technology, business and industry demands. This programme offers students cutting-edge skills, IT related applications and prepares them with a strategic mindset primed for business landscape. Our students will be well-equipped with theoretical knowledge and hands-on experience, while confidently entering the job market and excelling in the digital age.

这是一个综合性课程，通过精心设计的课程体系，帮助学生掌握技术技能和商业洞察力，探索技术、商业与行业需求之间的协同效应。课程为学生提供尖端技能和与资讯技术相关的应用能力，同时培养适应商业环境的战略思维。我们的学生不仅拥有扎实的理论知识，还具备丰富的实践经验，能够自信地步入职场，并在数字时代脱颖而出。

## Courses 课程

### Compulsory 必修课程

- Fundamentals of Software Design and Development 软件设计与开发原理
- System Analysis and Design 系统分析与设计
- Database System Design 资料库系统设计
- Networking and Distributed System 网络与分布式系统
- Computer Organization and Architecture 电脑组织与架构
- Operating System 作业系统
- System Security and Control 系统安全与控制
- Project I 专题 I
- Project II 专题 II
- Ethics in Computing 计算机伦理
- Discrete Mathematics 离散数学
- Statistics and Probability 统计和概率
- Calculus and Algebra 微积分和代数

### Elective (Core) 必选选修课程

- Communicative English 交际英语
- Basic Chinese / Chinese / 基础中文 / 中文

### Major Core 专科主修课程

- Internet Application 互联网络应用
- Software Development 软件开发
- Object-oriented Programming 物件导向程式设计
- Data Structure and Algorithm 资料结构与演算法
- Project Management 专案管理
- Web-based Systems 网页系统
- Human Computer Interation 人机互动
- Introduction to Cloud Computing 云计算导论
- Mobile Application Development 移动应用程序开发

### Elective (Open) 公开选修课程

- Software Engineering 软件工程
- Fundamental of Artificial Intelligence 人工智能基础
- Distributed Database System 分布式数据库系统

### Industrial Training 工业实习

## Entry Requirements 入学资格

- **SPM/O-Level 马来西亚教育文凭(SPM)/中学普通水平考试(O-Level):** Pass with minimum 3 credits including Mathematics 至少3科获得C等，包括普通数学。
- **UEC 马来西亚统考文凭(UEC):** Pass with minimum grade B in 3 subjects including Mathematics 至少3科获得B等，包括普通数学。
- **STPM/A-Level 马来西亚高等教育文凭(STPM)/ 中学高级水平考试(A-Level):** Pass with minimum grade C (CGPA 2.00) and a credit in Mathematics at SPM 至少获得C等（CGPA 2.00），并在SPM数学中获得优等成绩。
- **STAM 马来西亚高等宗教证书（STAM）:** A pass in Sijil Tinggi Agama Malaysia (STAM) with a minimum grade of Maqbul (Pass) and a credit in Mathematics at SPM 至少取得 Maqbul（及格）等级，并在SPM数学中获得优等成绩。
- **SKM Level 3 in related field 马来西亚相关领域技能证书 (SKM) 3级:** Possess SKM Level 3 in a related field and a minimum credit in Mathematics at SPM 有相关领域的SKM三级资格，并在SPM数学科目中获得优等成绩。
- **Certificate Level 3 in related field 马来西亚相关领域证书 3级:** Pass with minimum CGPA 2.00 and a credit in Mathematics at SPM 至少CGPA2.00，且在SPM数学中获得优等成绩。
- **Others 其它:** Other recognized equivalent qualifications 其他受认证的同等资格。
- **English Competency Requirement for International Student 国际生英语能力要求:** IELTS 4.5 / its equivalent 雅思考试至少得分4.5，或其他同等英文水平资格。

## Career Opportunities 就业机会

- Programmer 程序设计师
- Frontend Developer 前端开发工程师
- Software Developer 软件开发人员
- IT Administrator 资讯科技管理员
- Database Administrator 资料库管理员
- Network Support 网络支持工程师
- DevOps 系统支持工程师

# Diploma in
# Electrical & Electronic Engineering
# 电机与电子工程专业文凭

R3/0712/4/0011(MQA/FA13364)04/29
Programme Duration: 2 Years 6 Months

## Programme Introduction 课程介绍

This programme offers numerous opportunities in both academic and industry. It typically covers a broad range of subjects to prepare students for various roles in industries and provide a balanced education. The combination of theoretical knowledge and practical skills ensures that students are well-prepared to meet the demands of the evolving electronic engineering disciplines. Our graduates are tailored through meticulously designed and periodically refined course curriculum to meet the demands of rations, while also consistently adhering to the exact standards set forth by ETAC and MQA.

本课程为学术领域和工业界提供了丰富的机会，涵盖广泛的科目，旨在为学生在行业中担任多种角色做好准备，并提供均衡的教育体验。通过结合理论知识与实践技能，学生将能够应对快速发展的电子工程领域的需求。本课程通过精心设计并定期更新的课程内容，不仅满足行业需求，还严格遵循马来西亚工程技术认证委员会（ETAC）和马来西亚学术鉴定局（MQA）设定的标准，获得了相关认证。

## Courses 课程

### Core Modules 主修科目

- C++ Programming C++程序语言
- Technical Mathematics 技术数学
- Calculus I 微积分 I
- Calculus II 微积分 II
- Engineer and Society 工程师与社会

### Concentration Modules 专科科目

- Digital Techniques I 数码电子I
- Digital Techniques II 数码电子II
- Microprocessors 微处理器
- Physics I 物理 I
- Physics II 物理II
- Electric Circuits I 电路学I
- Electric Circuits II 电路学II
- Electronics I 电子学I
- Electronics II 电子学II
- Project & Practice I 毕业专题制作 I
- Project & Practice II 毕业专题制作 II
- Software application & Simulations 软件应用与模拟
- PLCs 可编程逻辑控制器
- Power Electronics and Electric Machines 电力电子和电机

### University College Elective 大学选修科

- General English 通用英语
- Fundamentals of Management 管理基础
- Communicative English 交际英语
- Basic Power System 基本电力系统
- Basic Chinese / Chinese / 基础中文 / 中文

### Industrial Training 工业实习

## Entry Requirements 入学资格

- **SPM/O-Level 马来西亚教育文凭(SPM)/ 中学普通水平考试(O-Level):** Pass with a minimum of 3 credits including Mathematics and General Science/ Physics / Chemistry / Engineering related subject and pass in English at SPM 至少获得3科C等，包括数学及普通科学/物理/化学/工程相关科目，并在SPM英文考试中及格。
- **UEC 马来西亚统考文凭(UEC):** Grade B in 3 subjects including Mathematics and General Science / Physics / Chemistry / Engineering related subject and a pass in English 至少3科B等，包括数学及普通科学/物理/化学/工程相关科目，并在英文科目考试中及格。
- **Others 其它:** Other recognized equivalent qualifications 其他受认证的同等资格。
- **English Competency requirement for International Student 国际生英语能力要求:** IELTS 5.0 / its equivalent 雅思考试至少得分5.0，或其他同等英文水平资格。

## Career Opportunities 就业机会

### Technician/ Assist. Engineer/ Supervisor/ Inspector of Work 技术员 / 助理工程师 / 主管 / 工程项目监察

- Maintenance 维修
- Service 服务
- Sales Technician 销售技术支持人员
- Product Technician 产品技术支持人员
- Computer 电脑领域
- Medical 医药领域
- Site/ Field 现场或工地相关工作

### In any related field, including 在任何相关领域，包括:

- Electrical Engineering 电机工程
- Electronic Engineering 电子工程
- Automation Engineering 自动化工程
- PLCs 可编程逻辑控制器
- Robotics 机器人技术
- Biomedical Engineering 生物医学工程
- Oil & Gas 石油与天然气工程
- Industrial Engineering 工业工程

# Bachelor of
# Software Engineering (Honours)
# 软件工程（荣誉）学士学位

R2/0612/6/0275(MQA/FA2810)04/30
Programme Duration: 3 Years 3 Months

## Programme Introduction 课程介绍

Unlock the realm of software engineering through a meticulously crafted educational experience that seamlessly fuses foundational concepts, cutting-edge insights, practical methodologies, and scientific rigor. Students will grasp the core principles of software engineering, which encompass programming languages, systematic analysis, software design, and the art of quality management. This pedagogical approach offers a holistic learning journey via hands-on projects, ensuring that essential theories are reinforced through immersive industrial training experiences. This dynamic fusion of theoretical knowledge and real-world application propels students towards achieving the status of true software prodigies.

通过精心设计的教育体验，本课程无缝融合基础概念、前沿知识、实用方法与科学严谨性，为学生开启软件工程领域的大门。学生将深入掌握软件工程的核心原理，包括程序语言、系统分析、软件设计及质量管理等内容。课程采用理论与实践相结合的教学方法，通过实践项目和深入的工业培训强化基本理论，让学生在理论知识与实际应用的动态融合中成长为真正的软件工程精英。

## Courses 课程

### Compulsory 必修课程
- Java Programming I / Java 程序设计 I
- Java Programming II / Java 程序设计 II
- Database Systems 数据库系统
- Introduction to Networks and Communication Systems 网络和通信系统概论
- Computer Organization and Architecture 电脑组织与架构
- Operating System 作业系统
- Object-Oriented System Modeling and Analysis 物件导向的系统建模与分析

### Major Core 专科主修课程
- Mobile Application Development 移动应用程序开发
- Object-Oriented Programming 物件导向程序设计
- Software Testing 软件测试
- Software Design 软件设计
- Software Evolution and Maintenance 软件演进与维护
- Software Process 软件流程
- Social and Professional Issues 社会与专业议题
- Project Management 专案管理
- Software Quality 软件质量
- Web Development 网络开发
- Python for Data Science 数据科学中的Python应用
- Information Security and Assurance 信息安全与保障
- Software Engineering 软件工程
- Software  Requirements 软件需求

### Elective (Open) 公开选修
- Introduction to Information Technology 信息技术概论
- Internet Applications 互联网应用
- Data Structure and Algorithm 数据结构与演算法
- Human Computer Interaction 人机互动
- Research Methodology 研究方法
- Digital Media Marketing 数码媒体营销
- Cloud Computing 云计算
- Multimedia Design 多媒体设计
- Artificial Intelligence 人工智能

### Elective Core Modules 必选修课
- Basic Chinese / Chinese / 基础中文 / 中文

### Final Year Project 毕业论文
- Final Year Project I 毕业论文I
- Final Year Project II 毕业论文II

### Industrial Training 工业实习

## Entry Requirements 入学资格

- **STPM/A-Level 马来西亚高等教育文凭(STPM)/ 中学高级水平考试(A-Level):** Pass with a minimum grade C (CGPA 2.00) in any 2 subjects and a credit in Additional Mathematics at SPM 任意2门科目成绩达到最低 C 等（CGPA 2.00），并在马来西亚教育文凭（SPM）中取得高级数学优等。
- **UEC 马来西亚统考文凭(UEC):** Pass with a minimum Grade B in any 5 subjects including Advanced Mathematics 至少5门科目成绩达到B等，包括高级数学。
- **Foundation/Matriculation 大学基础课程文凭(Foundation) /大学预科课程:** Pass with minimum CGPA of 2.00 and a credit in Additional Mathematics at SPM 至少 CGPA 2.00，并在SPM中取得高级数学优等。
- **STAM 马来西亚高等宗教证书（STAM）:** Pass with a minimum grade of Jayyid in two subjects and a credit in Additional Mathematics at SPM 至少2门科目达到Jayyid等级，并在SPM中取得高级数学优等。
- **STPM (Science Stream) 马来西亚高等教育文凭(STPM)（理科）:** Pass with a minimum CGPA2.00 in Mathematics and any one Science/ICT subject 数学CGPA不低于2.00，并通过任一理科/信息与通信技术科目考试。
- **Diploma in S&T 科技文凭:** Pass with a minimum CGPA 2.75 and credit in Additional Mathematics at SPM level 至少CGPA2.75，并在SPM中取得高级数学优等。
- **Diploma in Computing 电脑专业文凭:** Minimum CGPA 2.50 至少CGPA2.50。
- **Diploma in DKM/DVM/DLKM in Computing 马来西亚电脑技能文凭/马来西亚电脑职业文凭/马来西亚电脑高级技能文凭:** Minimum CGPA of 2.50 subjected to HEP Senate / Academic Board's approval 至少 CGPA 2.50，并须获得高等教育机构理事会或学术委员会的批准。
- **Others 其它:** Other recognized equivalent qualifications and Mathematics subjects equivalent to Additional Mathematics at SPM level 其他受认证的同等入学资格，并在数学科目中达到 SPM 高级数学的同等成绩。
- **English Competency requirement for International Student 国际生英语能力要求:** IELTS 5.0 / its equivalent 雅思考试至少得分5.0，或其他同等英文水平资格。

## Career Opportunities 就业机会

- Programmer 程序设计师
- Software Engineer 软件工程师
- Software Developer 软件开发人员
- Project Manager 项目专案经理
- System Analyst 系统分析师
- Software Quality Executive 软件质量执行员
- IT Consultant 资讯科技顾问
- System Support and Maintenance 系统支援与维护人员
- Full Stack Developer 全栈开发工程师
- Network Engineer 网络工程师
- System Engineer 系统工程师
- Database Engineer 数据库工程师
- DevOps 系统支持工程师

# Bachelor of
# Electronic Engineering with Honours
# 电子工程（荣誉）学士学位

R2/0713/6/0038(MQA/FA4009)11/31
Programme Duration: 4 Years

## Programme Introduction 课程介绍

If you aspire to expand your horizons in the realm of electronics engineering and envision a future as a capable engineer. This program is tailored for you! Our primary objective is to equip students with the necessary essential tools to analyze, design, handle practical projects, and master problem-solving abilities. Our graduates emerge with a comprehensive understanding and the ability to seamlessly transition into the workforce, confidently tackling the evolving engineering challenges of today.

We foster intimate student-teacher interaction that nurture a deeper understanding, by embracing a small-class teaching approach. Our commitment is to provide a conducive teaching and learning environment ensures that students receive an education that is beyond the ordinary.

如果您希望拓展电子工程领域的视野，并立志成为一名出色的工程师，那么这项课程将是您的理想选择！本课程旨在为学生提供分析、设计、实践项目管理以及解决实际问题所需的核心技能。通过这一学习旅程，我们的毕业生不仅能够全面掌握电子工程的理论与实践，还能无缝融入职场，游刃有余地应对当前快速变化的工程挑战。

我们采用小班制教学，促进师生间的深入互动，从而帮助学生更全面、更深刻地理解知识点。同时，我们致力于提供优质的教学与学习环境，确保学生获得高质量的教育体验。

## Courses 课程

### Common Core 共同主修课程

- Engineering Mathematics I 工程数学 I
- Engineering Mathematics II 工程数学 II
- Engineering Mathematics III 工程数学 III
- Physics for Engineering Students 工程物理学

### Discipline Core 专业主科课程

- Basic Control Theory 基本控制理论
- C Programming C程序语言
- Digital Electronics 数码电子学
- Engineer and Society 工程师与社会
- Digital Signal Processing 数码信号处理
- Electric Circuit 电路学
- Electronic Circuit 电子电路学
- Electronic Instrumentation and Measurements 电子仪器与测量学
- Engineering Economics & Finance 工程经济与金融
- Engineering Electromagnetic 工程电磁学
- Engineering Statistics 工程统计学
- Fundamentals of Telecommunication 电讯基础学
- Logic System Design 逻辑系统设计
- Microcontrollers & Microprocessor Systems 微控制器与微处理器系统学
- Microelectronics 微电子学
- Basic Power System & Electric Machines 基本电力系统与电机
- Power Electronics 电力电子学
- PLCs 可编程逻辑控制器
- Project & Practice I 毕业专题制作 I
- Project & Practice II 毕业专题制作 II
- VLSI System Design 超大规模集成电路系统设计
- Capstone Project I 顶点项目I
- Capstone Project II 顶点项目II

### Elective Modules 选修科目

- Artificial Intelligence 人工智能
- Embedded System Design 嵌入式系统设计
- Digital Image Processing 数码影像处理
- Power System Analysis 电力系统分析
- Power Transmission & Distribution 电力传输与分配
- Modern Control System 现代控制系统
- Computer Architecture and IOT 电脑结构和物联网
- Machine Learning with Python Python机器学习应用
- Computer Aided Drawing 电脑辅助绘图
- Internet Application 互联网应用

### Elective Core Modules 必选修课

- Basic Chinese / Chinese / 基础中文 / 中文

### Industrial Training 工业实习

## Entry Requirements 入学资格

- **STPM/A-Level 马来西亚高等教育文凭(STPM)/ 中学高级水平考试(A-Level):** Pass with a minimum CGPA 2.00 with 2 principal passes and including Mathematics and Physics / Chemistry subjects and a pass in English at SPM CGPA最低2.00，至少2门主要科目及格，包括数学及物理或化学科目，同时在SPM英文科目中取得及格。
- **UEC 马来西亚统考文凭(UEC):** Pass with a minimum Grade B in 5 subjects, including Mathematics and Physics / Chemistry / Engineering related subject and a pass in English 至少5门科目达到B等或以上，包括数学及物理/化学/相关工程科目，同时英文科目取得及格。
- **Foundation 大学基础课程文凭(Foundation):** Pass with a minimum CGPA of 2.0 in related field 相关领域CGPA最低2.00或以上。
- **Diploma 相关工程领域文凭(Diploma):** Pass with a minimum CGPA of 2.0 in related field 相关领域CGPA最低2.00或以上。
- **ATAR 澳大利亚高等教育入学排名 (ATAR):** 65 with minimum of scaled score 50 for Mathematics and one natural science and a pass in English at SPM 总分最低65分，其中数学和一门自然科学的标准分不得低于50分，同时SPM英文科目取得及格。
- **Others 其它:** Other recognized equivalent qualifications 其他受认证的同等入学资格。
- **English Competency requirement for International Student 国际生英语能力要求:** IELTS 5.0 / its equivalent 雅思考试至少得分 5.0，或其他同等英文水平资格。

## Career Opportunities 就业机会

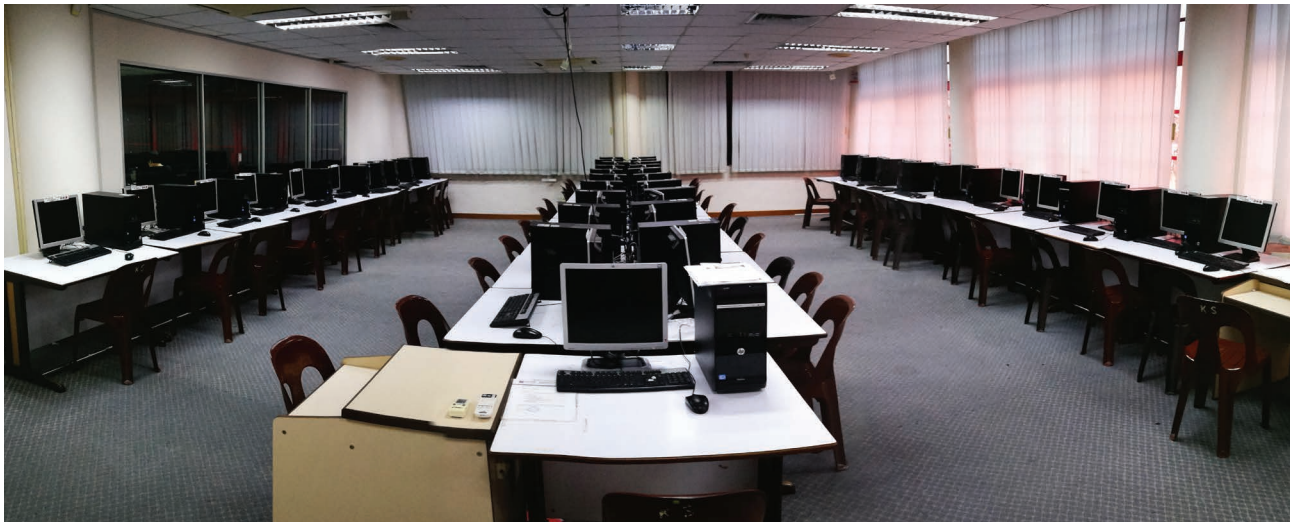
Engineer/ Junior Engineer/ Senior Engineer/ Executive 工程师/初级工程师/高级工程师/执行员

- Maintenance/ Service/ Test 维护/服务/测试人员
- Technical Sales Engineer 技术销售工程师
- Project Engineer 项目工程师
- Product Specialist 产品专员
- Computer Engineer 电脑工程师
- Research and Development (R&D) 研究与开发人员
- Planner 规划师
- Medical Engineering 医学工程师
- Manufacturing 制造业工程师
- Design 设计工程师
- IC Design IC设计师
- Programmer / Software Engineer 程序 / 软件开发工程师

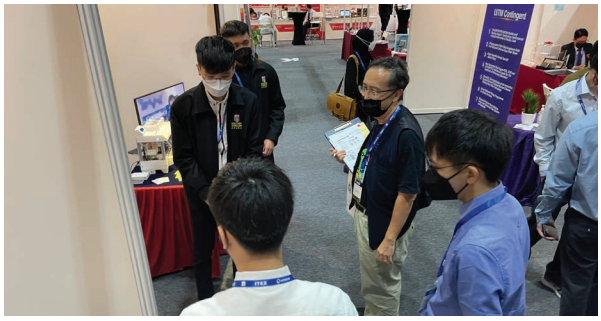
In any related field, including 相关领域包括但不限于:

- Electrical Engineering 电机工程
- Electronic Engineering 电子工程
- Micro/ Nano Electronic Engineering 微/纳米电子工程
- Automation Engineering 自动化工程
- PLCs 可编程逻辑控制器
- Robotics 机器人技术
- Telecommunication 电信工程
- Biomedical Engineering 生物医学工程
- Oil & Gas 石油与天然气工程
- Industrial Engineering 工业工程
- Software Engineering 软件工程

# **Facilities** of Faculty
# 学院**设施**



# **Activities** of Faculty
# 学院活动


SOUTHERN
UNIVERSITY COLLEGE
南方大學學院

No Perakuan Pendaftaran: DKU 019(J)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