2016

Centre of TECHNOLOGY

Bachelor of ENGINEERING

Bachelor of INFORMATION TECHNOLOGY

www.rmit.edu.vn

RMIT UNIVERSITY

CONTENTS

The information contained in this publication is subject to change without notice. For the most up-to-date program information, please refer to the RMIT Vietnam website. Visit www.rmit.edu.vn.

Cover image:
Bui Anh Quan
Bachelor of Information Technology student

WELCOME TO THE CENTRE OF TECHNOLOGY

At the RMIT Vietnam Centre of Technology, we are focused on innovation. Our globally-recognised programs in the fields of engineering and information technology are designed to build creative thinkers with the skill, knowledge and motivation to make a real difference in the world.

Vietnam is fast becoming an important technology hub within Southeast Asia, and a degree from RMIT Vietnam will place you front and centre during this time of growth.

In information technology, we are seeing huge developments in areas such as big data, mobile computing, multi-agent systems and data mining. In engineering, sustainable energy systems, climate change and advanced electronics are all areas that call for forward-thinkers who can solve problems and create solutions.

At the Centre of Technology, we are dedicated to expanding minds through project-based learning that blends theory and practice. The Centre is industry-connected, and you will benefit from strong relationships with local and international partners. Work placements take you from university to the real-world, and our graduates are often offered jobs after completing internships.

You will learn the importance of teamwork, communication and leadership and develop valuable skills that will benefit you throughout your professional career.

Our well-equipped labs house cutting-edge equipment and software, and you will be taught by distinguished academics with impressive backgrounds in industry and research. With a program from the RMIT Vietnam Centre of Technology, the future is in your hands.

PROFESSOR ALEX STOJCEVSKI

Head, Centre of Technology

AN AWARD-WINNING UNIVERSITY

Graduates of RMIT Vietnam earn a degree from RMIT University, Australia's largest tertiary institution. The degree meets the highest Australian education standards and is recognised by employers around the world.

RMIT has a

5-OUT-OF-5 QS STARS RANKING

FOR EXCELLENCE IN HIGHER EDUCATION*

QS STARS RATED FOR EXCELLENCE 2015

RMIT is one of AUSTRALIA'S **TOP 15** TERTIARY INSTITUTIONS

AND IS AMONG THE WORLD'S TOP **100 UNIVERSITIES** IN ENGINEERING (ELECTRICAL AND ELECTRONIC AND MECHANICAL, AERONAUTICAL AND MANUFACTURING)**

*2014 QS World University Rankings
** 2015 QS World University Rankings by Subject

RMIT ALUMNI

The moment you graduate, you will be part of RMIT's alumni network, a community of passionate people who have used their RMIT education to contribute to industries and societies all around the world.

As an RMIT graduate, you'll be in good company: 300,000 alumni are achieving success in 130 countries. In Vietnam you will join 8300 other alumni who are making a difference across the country.

Where are RMIT Vietnam alumni today?

- Australia
- Canada
- China
- Germany
- Hong Kong
- India
- Indonesia
- Japan
- Malaysia
- Pakistan
- Singapore
- South Africa
- Sri Lanka
- Thailand
- Turkey
- United Kingdom
- USA

GRADUATE STORY

Nguyen Vo Nam Long
RMIT alumnus
Software Engineer
Microsoft Corporation (USA)

"The quality of the software engineering program and learning environment at RMIT was awesome, and I was taught with up-to-date materials by excellent lecturers. The internship at the end of the program also helped me build up real experience, which was a great start for my career.

At RMIT, I participated in extracurricular activities that allowed me to give back to the community. I worked with disabled people and did other volunteering that helped me become a better citizen, responsible not only for the work I do, but also for the society that I am a part of.

After I graduated, I went to the US to study a Master of Computer Science, and was grateful for the knowledge I gained at RMIT, as almost all the courses were on par with what I had learned.

Without the knowledge I gained at RMIT, I don't think I would have landed a job at Microsoft Corporation. We're always looking for people who have both technical skills and a willingness to make a contribution to society.

If you're looking for a top-notch international program in Vietnam that's competitively priced, RMIT is the number one choice. You will not only become a successful engineer or entrepreneur in the future, but also a well-rounded member of society."

TEACHING REAL-WORLD SKILLS

RMIT prides itself on producing work-ready graduates. Our programs integrate academic learning with its application in the workplace to enable a smooth transition upon graduation.

In attending a global university, you will be exposed to an international way of thinking and gain skills and understanding that go far beyond the technical. RMIT graduates are known for having exceptional critical thinking, teamwork and communication skills.

FACULTY

The RMIT Vietnam Centre of Technology faculty comprises skilled educators with extensive professional and academic experience.

Our highly qualified lecturers bring perspectives from many countries including Canada, Germany, France, Malaysia, Philippines, Vietnam and the USA.

"Students in Vietnam have a great attitude to learning and value education as a pathway for their future. It's an exciting place to teach."

ANNA FELIPE
Lecturer, Centre of Technology
MSc Computer Science
Philippines

STATE-OF-THE-ART FACILITIES

RMIT Vietnam is renowned for its world-class facilities. You can expect impressive classrooms, cutting-edge learning equipment and state-of-the art recreational and residential facilities. Students in the Centre of Technology have access to professional standard laboratories, modern computer rooms and the latest software.

RMIT's libraries in Saigon South and Hanoi provide access to 300,000 books, periodicals, e-books and e-journals. Students also have online access to RMIT's huge library in Australia.

INDUSTRY CONNECTIONS & PLACEMENTS

RMIT Vietnam has strong relationships with industry, and works with key partners to ensure programs are relevant and up-to-date. You will have access to professional mentors, guest speakers and internship opportunities with our industry partners in Vietnam and abroad.

Industry placements are a key component of Centre of Technology programs, and give you the opportunity to get real-world experience. RMIT students are highly sought-after for these placements, and are often offered jobs when they graduate.

RMIT MELBOURNE

EXCHANGE AND TRANSFER OPPORTUNITIES TO RMIT MELBOURNE

RMIT Vietnam offers a wide range of options for students. You can choose to study your entire program in Vietnam, or you may wish to stay in Vietnam for one or two years and then complete your degree in Australia. Either way you receive the same RMIT qualification.

Another option is to study in Vietnam but spend a semester or two as an exchange student in Melbourne or at one of RMIT's 195 partner institutions around the world. During your time abroad you pay the more economical RMIT Vietnam fees.

To Bao Thien Quan
RMIT alumnus
Application developer
Zappasoft

"I gained much more than I expected through my exchange to Melbourne. Obviously my confidence in English grew dramatically, but the cultural experience was even more eye-opening.

I felt the warmth of the international student community, encountered the good and the bad sides of a highly developed culture and went on breathtaking trips. Above all though, I saw advances in infrastructure, banking and customer service that broadened my mind and helped me to see the world differently.

Following that great experience, I'm now working remotely for an Australian software company that creates applications focused on sport and education."

BACHELOR OF ENGINEERING
AT A GLANCE

As an engineer you will design and create innovative products, systems, structures and services that transform industry and improve lives in Vietnam and beyond.

DURATION: 4 years
MODE: Full-time
LOCATION: Saigon South

Program overview

At RMIT, you will learn to solve problems in modern labs with cutting-edge software and equipment. Along with technical skills and knowledge, you will develop abilities in management, creative thinking, problem solving and communication to prepare you for future leadership roles.

In this flexible program, you will study the foundations of engineering in your first year then choose a stream from year two.

Proposed programs for 2016/17

» Bachelor of Engineering (Manufacturing and Mechatronics Engineering) (Honours)
» Bachelor of Engineering (Mechanical Engineering) (Honours)
» Bachelor of Engineering (Biomedical Engineering) (Honours)

Work placements

To ensure you are work-ready when you graduate, you will have the opportunity to complete up to four semester-long industry placements.

These placements help you take your knowledge out of the classroom and apply it in the field while also building your networks and your CV. In spreading placements across the program, you will integrate theoretical learning with practical application almost immediately, and be ready to make a seamless transition into the workforce.

RMIT Vietnam has strong relationships with industry, and we will help you find work placements in Vietnam or abroad.

Our key partners:

» ABB
» Aricent
» Atlassian
» Bosch
» Cogini
» Datalogic
» East Agile
» eSilicon
» Harvey Nash
» IBM
» Intel
» KMS Technology

Manufacturing facilities at RMIT Melbourne

BACHELOR OF ENGINEERING
(ELECTRICAL AND ELECTRONICS) (HONOURS)

PROGRAM CODE: BH073
DURATION: 4 years
MODE: Full-time
LOCATION: Saigon South

Program overview

Our lives are filled with the products of skilled electrical and electronic engineering: mobile phones, tablets, flat-screen televisions, refrigerators, security devices and more.

The Bachelor of Engineering (Electrical and Electronics) (Honours) program teaches you how electricity and electronics work and how to build and maintain devices. You'll experiment in the laboratory and design and build projects that will prepare you for work in today's fast paced world of technology.

You'll learn the theory behind electrical and electronic engineering then put this knowledge into practice by prototyping electronic designs.

You have the opportunity to choose an area of specialisation from:

» Aviation systems
» Microelectronics
» Electronic product design
» Electrical power
» Telecommunications
» Network
» Renewable energy
» Advanced transport design

"The learning environment at RMIT is professional and inspiring, and self-study is encouraged. After a lecture in class, I can expand my research into other areas I'm interested in. This way, I am constantly learning."

NGUYEN PHUONG DUY
Bachelor of Engineering student
Scholarship recipient

WHAT YOU WILL STUDY

SEMESTER 1 + 2

8 Complete the following 8 courses:

» Mathematics 1
» Electrical Principles
» Engineering Materials
» Industrial Studies
» Engineering Science
» Computer Applications
» Mathematics 2
» Engineering Management

SEMESTER 3 + 4

8 Complete the following 8 courses:

» Engineering Project A
» Advanced Electrical Theory
» Electronics Applications
» Computing Engineering
» Engineering Project B
» Network Fundamentals
» Digital System Design
» Transmission Media

\+ **3** Industry placements (recommended)

SEMESTER 5 + 6

8 Complete the following 8 courses:

» Engineering Design 3A
» Mathematics for ECE
» Engineering Computing 2
» Electronic Circuits
» Engineering Design 3B
» Signals and Systems
» Research Methods for Engineers
» Digital Signal Processing 1

SEMESTER 7 + 8

7 Complete the following 7 courses:

» Engineering Design 4A
» Advanced Digital Design 1
» Electronic Engineering 3
» Embedded System Design and Implementation
» Engineering Design 4B
» Advanced Digital Design 2
» Electrical Plant

\+ **1** Professional Engineering Experience
Industry placement (compulsory)

CAREERS AND YOUR FUTURE

Entry level careers

» Product development engineer
» Application engineer
» IC design engineer
» Electrical engineer
» Automation engineer
» Telecommunication engineer

Long term career path

» Principal engineer
» Engineering manager
» Engineering director
» Chief technology officer
» Chief executive officer

BACHELOR OF ENGINEERING
(SOFTWARE ENGINEERING) (HONOURS)

PROGRAM CODE: BH120
DURATION: 4 years
MODE: Full-time
LOCATION: Saigon South

Program overview
Software engineers design, develop and maintain software and embedded systems.

As the technology sector continues to grow rapidly in Vietnam and around the world, there is a huge demand for professional software engineers with technical expertise and the business skills to match.

The Bachelor of Engineering (Software Engineering) (Honours) gives you the tools you need to become a leader in this field with courses focused on engineering, technology, leadership, management and communication.

You will also complete project-based courses that give you valuable practical experience, and undertake industry placements that allow you to not only apply your knowledge in the real-world, but also learn from it.

Careers and your future
As everyday life becomes more dependent on computers and computer systems, there are almost limitless opportunities for qualified software engineering graduates in Vietnam and around the world.

Entry level careers
- System analyst
- Programmer
- Software tester
- Web developer
- Android/iOS developer
- Software engineer
- System engineer

Long term career path
- Principal software engineer
- Project manager
- Product manager
- Software architect
- Director of engineering
- Chief technology officer
- Chief executive officer

WHAT YOU WILL STUDY

SEMESTER 1 + 2
8 Complete the following 8 courses:

- Mathematics 1
- Engineering Materials
- Industrial Studies
- Electrical Principles
- Mathematics 2
- Computer Applications
- Engineering Science
- Engineering Management

SEMESTER 3 + 4
8 Complete the following 8 courses:

- Engineering Project A
- Computing Engineering
- Digital System Design
- Network Fundamentals
- Engineering Project B
- Software Engineering Principles
- Object-Oriented Programming
- Data Structures & Algorithms

+ 1 Industry placement (recommended)

SEMESTER 5 + 6
8 Complete the following 8 courses:

- Engineering Project C
- Smart Embedded System
- Embedded System: Operating Systems & Interfacing
- Intercultural Management & Communication
- Engineering Project D
- Android Development
- iOS Development
- Technology Leadership

+ 2 Industry placements (recommended)

SEMESTER 7 + 8
4 Complete the following 4 courses:

- Capstone Project A – Planning & Design
- Capstone Project B – Development & Implementation
- Technology Entrepreneurship
- Technology Consultancy

+ 2 Electives

+ 1 Industry placement (compulsory)

BACHELOR OF INFORMATION TECHNOLOGY

PROGRAM CODE: BP162
DURATION: 3 years
MODE: Full-time
LOCATION: Saigon South

Program overview

Build the knowledge and skills you need to become a highly employable and competent software developer with the Bachelor of Information Technology.

IT experts with English language skills are in high demand in Vietnam as many international companies look to outsource software development. You will study software design, development and testing systems and learn to problem solve, support, troubleshoot and design IT for organisations across a wide range of sectors.

You will also develop skills in project management, research and communication that will set you apart from other graduates, and help you become a leader in the information technology industry.

Accredited Program
acs AUSTRALIAN COMPUTER SOCIETY

"The courses here are really practical and up-to-date. I am equipped with a broad knowledge that spans web and mobile applications, security, databases and more."

LE CHINH NHAN
Bachelor of Information Technology student

WHAT YOU WILL STUDY

SEMESTER 1 + 2

8 Complete the following 8 core IT courses:

- Introduction to Programming
- Introduction to Information Technology
- Building IT Systems
- User-centred Design
- Programming 1
- Datacommunication & Net-Centric Computing
- Introduction to Computer Systems & Platform Technology
- Web Programming

SEMESTER 3 + 4

4 Complete the following 4 specialised IT courses:

- Security Computing and Information Technology
- Database Concepts
- Software Engineering Fundamentals
- Professional Computing Practice

+ **4** Electives

SEMESTER 5 + 6

1 Complete 1 course:

- Software Engineering: Project Management

+ **5** Electives

+ **1** Industry placement

"The IT market in Vietnam is booming. We work closely with industry leaders to ensure our students have the latest technical skills."

Edouard Amouroux
Program Manager and Senior Lecturer
Centre of Technology
MSc, PhD
France

80% of our Bachelor of IT graduates were in full-time employment within 3 months of graduating*

*Source: RMIT Vietnam Graduate Survey 2014

CAREERS AND YOUR FUTURE

IT specialists select the right hardware and software products for an organisation. They also install, customise and provide ongoing maintenance for these applications.

Combining your knowledge of IT theory and practice with hands-on expertise, you will be able to develop an organisation's technology infrastructure and support the people who use it. You will also be able to create and manage business applications, websites, systems and environments.

Entry level careers

- Application developer
- Game or animation developer
- Security analyst
- Software engineer
- User-interface designer and programmer
- Web developer
- System administrator
- Mobile developer

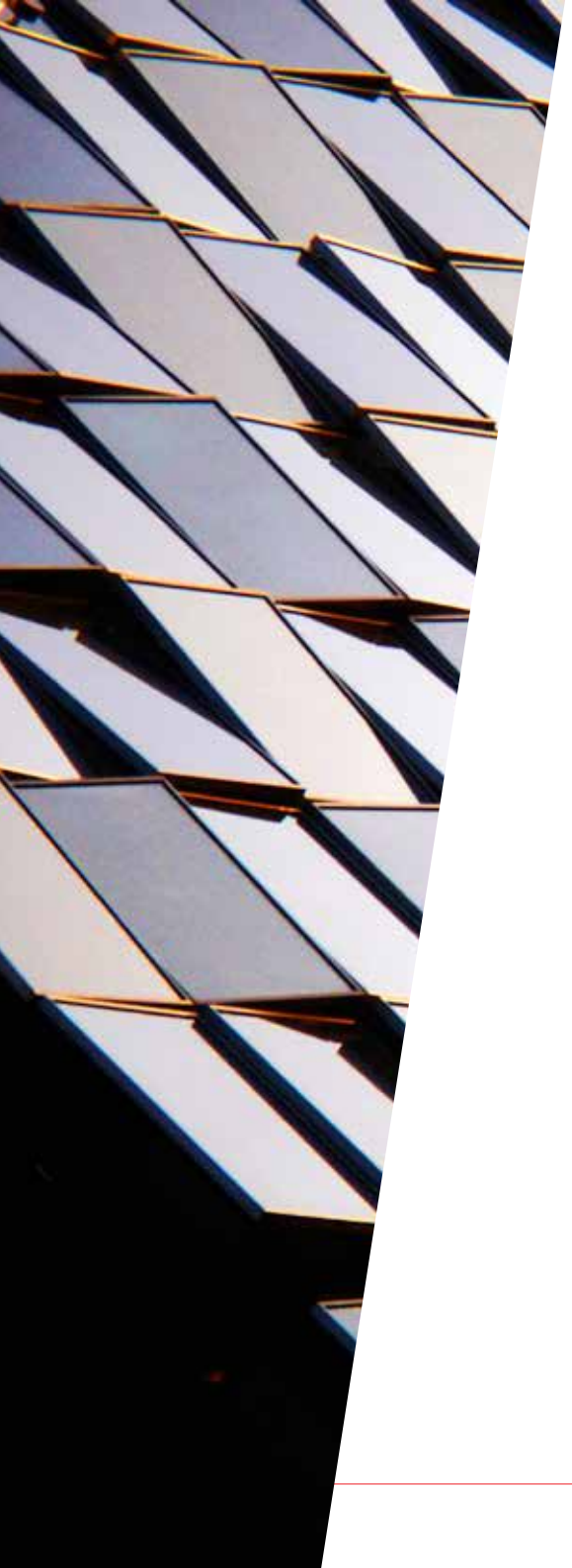
Long term career path

- Senior developer
- Project manager
- Technical manager
- IT manager
- Chief technology officer
- Chief executive officer

Employers of Bachelor of IT graduates include:

- Advance Vision Technology
- Amaris
- Cogini
- East Agile
- ELCA
- Evil Genius Technologies
- Harvey Nash
- New Wave Solution
- Silicon Straits Saigon
- Solis Lab Solution
- TMA Solutions
- Vinamation

RMIT Vietnam Bachelor of Information Technology graduates have also gone on to pursue postgraduate studies in IT or computer science in Australia, Europe and USA.



PATHWAY PROGRAMS

UniSTART

Program overview

The UniSTART program is a pathway into the Bachelor of Engineering and Bachelor of Information Technology programs. It is ideal for students who want to build their English competency and academic skills while taking first year undergraduate courses.

You will take English courses that combine language and study skills along with core engineering or IT courses. UniSTART transitions you into your degree program at a manageable pace and allows you to build your confidence. You will be supported at every stage and given the tools you need to be a successful student within an international environment.

When you enter into the Bachelor of Engineering or the Bachelor of Information Technology, you will receive full credit for the undergraduate courses you have completed.

PROGRAM STRUCTURE

UniSTART Engineering 1

SEMESTER	ENGLISH COURSES	PROGRAM COURSES
Semester 1	English Modules 1, 2, 3	- Mathematics 1
Semester 2	English Modules 4, 5	- Computer Applications
Semester 3	English Modules 6, 7, 8 (Module 8 is delivered intensively over 3 weeks during the semester break)	- Engineering Management - Industrial Studies

UniSTART Engineering 2

SEMESTER	ENGLISH COURSES	PROGRAM COURSES
Semester 1	English Modules 4, 5	- Mathematics 1
Semester 2	English Modules 6, 7, 8 (Module 8 is delivered intensively over 3 weeks during the semester break)	- Computer Applications - Engineering Management

UniSTART Information Technology 1

SEMESTER	ENGLISH COURSES	PROGRAM COURSES
Semester 1	English Modules 1, 2, 3	- Mathematics for Computing
Semester 2	English Modules 4, 5	- Introduction to Programming
Semester 3	English Modules 6, 7, 8 (Module 8 is delivered intensively over 3 weeks during the semester break)	- Introduction to Information Technology - Building IT Systems

UniSTART Information Technology 2

SEMESTER	ENGLISH COURSES	PROGRAM COURSES
Semester 1	English Modules 4, 5	- Introduction to Programming
Semester 2	English Modules 6, 7, 8 (Module 8 is delivered intensively over 3 weeks during the semester break)	- Mathematics for Computing - Building IT Systems

ENTRY REQUIREMENTS

PROGRAM	ACADEMIC REQUIREMENTS	ENGLISH REQUIREMENTS
HIGHER EDUCATION		
Bachelor of **Information Technology**	ONE OF THE FOLLOWING: » Successful completion of Grade 12 (or equivalent) in Vietnam with an average grade of 7.00/10.00, or above » Completion of International Baccalaureate (IB) diploma with 25 points minimum » Completion of Cambridge GCE 'A' Levels minimum 7 points for 3 A level subjects	ONE OF THE FOLLOWING: » Complete Level 7 of the English for University course at RMIT Vietnam » IELTS score of 6.5 or above (no band under 6.0) » TOEFL iBT score of 92 or above (no band under 20)
Bachelor of Engineering **(Software Engineering)** (Honours)	The above AND score of 60% or equivalent in Vietnamese mathematics	
Bachelor of Engineering **(Electrical and Electronics)** (Honours)		
PATHWAY PROGRAMS		
UniSTART **Engineering 1**	ONE OF THE FOLLOWING: » Successful completion of Grade 12 (or equivalent) in Vietnam with an average grade of 6.00/10.00 or above » Completion of International Baccalaureate (IB) diploma with 24 points minimum » Completion of Cambridge GCE 'A' Levels minimum 4 points for 2 A level subjects and 1 AS level	ONE OF THE FOLLOWING: » Complete Level 5 of the English for University course at RMIT Vietnam » IELTS score of 5.5 or above (no band under 5.0) » TOEFL iBT score of 71 or above (no band under 17)
UniSTART **Information Technology 1**		
UniSTART **Engineering 2**	ONE OF THE FOLLOWING: » Successful completion of Grade 12 (or equivalent) in Vietnam with an average grade of 6.00/10.00 or above » Completion of International Baccalaureate (IB) diploma with 24 points minimum » Completion of Cambridge GCE 'A' Levels minimum 4 points for 2 A level subjects and 1 AS level	ONE OF THE FOLLOWING: » Complete Level 6 of the English for University course at RMIT Vietnam » IELTS score of 6.0 or above (no band under 5.5) » TOEFL iBT score of 79 or above (no band under 19)
UniSTART **Information Technology 2**		

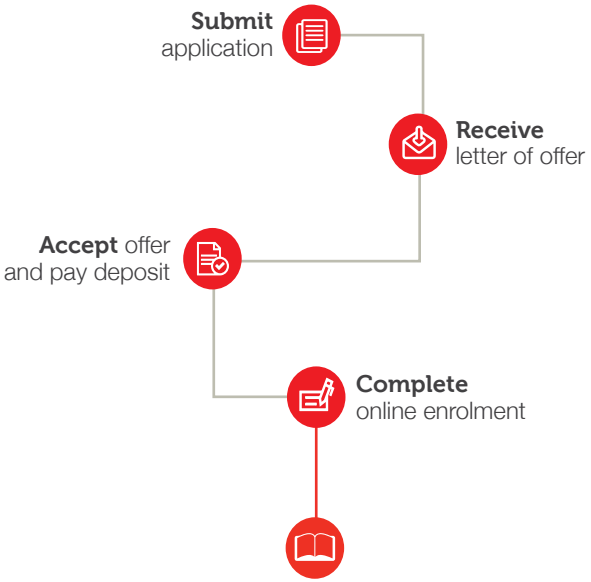
Students who have graduated from schools outside of Vietnam can find information about studying at RMIT on our website: www.rmit.edu.vn/overseas-students-study-vietnam.

HOW TO APPLY

At RMIT Vietnam, there are three semester intakes each year:

FEBRUARY **JUNE** **OCTOBER**

APPLICATION PROCESS



Start your program at RMIT Vietnam!