

## COMPUTING

### **KNOW COMPUTING**

### **Computing**

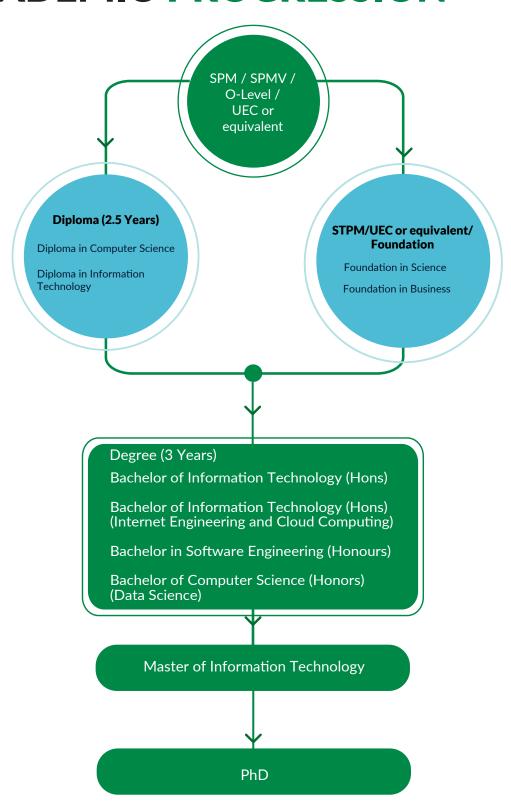
Computers are the centre behind almost all our technological advancements of this century. We would be hard-pressed to find areas of life and work that computers can't enhance. Nilai University's computing programmers are designed to give you skills and experience that will position you to excel in the computing world. Through the programme, students will learn how computers communicate with each others, how task are performed, how information is stored and retrieved and how computers behave intelligently. Technical skills taught include C, C++, Java, VB.net, PHP, Javascript, Matlab, Prolog, Object Oriented, Design Pattern, HTML, UML and much more.

Computing programmes offered at Nilai University are as follows:

- Diploma in Information Technology JPT/BPP(R3/482/4/0208)06/28, (MQA/A3230)
- Diploma in Computer Science JPT/BPP(R3/481/4/0250)06/28, (MQA/A3229)
- Bachelor of Information Technology (Hons) JPT/BPP(R2/482/6/0206)08/23, (MQA/A9104)
- Bachelor of Information Technology (Hons) (Internet Engineering and Cloud Computing) JPT/BPP(R/482/6/0086)07/28, (MQA/FA5716)
- Bachelor in Software Engineering (Honours) JPT/BPP(R2/481/6/0673)07/27, (MQA/FA5717)
- Bachelor of Computer Science (Honors) (Data Science)
   JPT/BPP(R2/481/6/0253) 08/23, (MQA/A9105)
- Master of Information Technology JPT/BPP (N/482/7/0173), 10/26, (MQA/PA15051)



### **ACADEMIC PROGRESSION**



### **POPULAR CAREERS**



- Software and Application Developer
- Software Analyst
- Software Developers
- Application Programmers
- Web Developer
- Information Systems Manager
- Information Technology Consultant
- Multimedia Programmer
- Software Engineer
- Application Analyst
- Database Administrator
- IT Technical Support Officer
- Software Tester
- Computer and Information Systems Manager
- Computer Network Architects
- Network Administrator
- System Administrator
- Data Analyst
- Data Centre Technician
- Data Scientist
- Data Engineer
- Data Architect
- Database Analyst
- Hardware Engineer
- Network Engineer
- Business Analyst

- Data Analytics Manager
- Hardware Engineer
- Network Engineer
- Business Analyst
- Data Analytics Manager
- Machine earning Engineer
- Cloud Architect
- Cloud Data Scientist
- Cloud Consultant
- Cloud Engineer
- Cloud Automation Engineer
- Cloud Software Engineer
- Cloud Security Analyst
- Cloud Support Engineer
- Cloud Administrator
- Cybersecurity Specialist
- Cybersecurity Manager
- Security Consultants
- Ethical Hackers
- Penetration Tester
- Cybersecurity Analyst
- Digital Forensic Examiner
- IT security Administrator
- Security Engineer
- Security Architect

### **Diploma in Information Technology** JPT/BPP(R3/482/4/0208)06/28, (MQA/A3230)

SPM/SPMV/O-Level	3Cs including Maths
UEC	3Bs including Maths
SKM/SKK Certificate (MQF Level 3) in related field	A Pass and a credit in SPM Maths
STPM or equivalent	A Pass with a minimum of grade C (GP 2.0) in any subject and a credit in SPM Maths
STAM or equivalent	A Pass with a minimum grade of Maqbul(pass) and a credit in SPM Maths
A-Level	A Pass with a minimum grade D in any subjects and grade C in SPM/O-Level Maths

### English Requirements\* (For International Students)

MUET	2
IELTS	4.0
TOEFL	397 (PBT) / 30 (iBT)
Pearson	36

<sup>\*</sup>International students with qualifications from educational systems where the English language is the primary medium of instruction are exempted from this requirement.

International students who do not fulfil the English Language Requirements may join the Intensive English Programme at Nilai University which builds their skills in the language and prepares them for the IELTS examination.

### **Programme Module**

Foundational
Understanding Computing
Core
Computer Organisation
Structured Programming
Web Development
Calculus and Algebra
Systems Analysis and Design
Introduction to Public Speaking
Database Development
Operating Systems
Data Communication and Networking
Introduction to Artificial Intelligence
Basic Business Administration
Principles of Microeconomics
Fundamentals of Marketing
Principles of Macroeconomics
Discrete Mathematics
Object Oriented Programming
Information Systems
Human Computer Interaction
Introduction to Computer Security

### **Diploma in Computer Science**

JPT/BPP(R3/481/4/0250)06/28, (MQA/A3229)

SPM/SPMV/O-Level	3Cs including Maths
UEC	3Bs including Maths
SKM/SKK Certificate (MQF Level 3) in related field	A Pass and a credit in SPM Maths
STPM or equivalent	A Pass with a minimum of grade C (GP 2.0) in any subject and a credit in SPM Maths
STAM or equivalent	A Pass with a minimum grade of Maqbul(pass) and a credit in SPM Maths
A-Level	A Pass with a minimum grade D in any subjects and grade C in SPM/O-Level Maths

### English Requirements\* (For International Students)

MUET	2
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### **Programme Module**

Foundational
Understanding Computing
Core
Computer Organisation
Structured Programming
Web Development
Calculus and Algebra
Basic Business Administration
Introduction to Public Speaking
Database Development
Operating Systems
Data Communication and Networking
Introduction to Artificial Intelligence
Statistics
Software Engineering
Data Structure
Discrete Mathematics
Object Oriented Programming
Systems Analysis and Design
Human Computer Interaction
Introduction to Computer Security
Visual Programming

Summative (Computing Project)
Industrial Training
Internship
Mata Pelajaran Pengajian Umum
Malay Language
(only for Malaysian students
without a credit in SPM BM)
Electives
Information Systems
Internet Programming
Principles of Entrepreneurship
Introduction of Cloud Computing
Introduction to IoT

Final Year Project

### **Bachelor of Information Technology (Hons)**

JPT/BPP(R2/482/6/0206)08/23, (MQA/A9104)

STPM	A pass with a minimum Gred C in any two (2) subjects and a credit in Maths at the SPM Level
A-Level	A pass with a minimum Gred D in any two (2) subjects and pass in Maths and English at SPM level.
UEC	5B's including Maths
Foundation/ Matriculation	A pass with a minimum CGPA 2.0 and credit in SPM Maths
Diploma in Computer Science/ Software Engineering/ Information Technology/Information System	A Pass with a minimum CGPA 2.5 and credit in SPM Maths
Diploma in Science Technology/Business Studies	A pass with a minimum CGPA of 2.50, which include a rigorous internal assessment prosess and credit in SPM Maths

### English Requirements\* (For International Students)

MUET	3
IELTS	5.0
TOEFL	410 (PBT) / 42 (iBT)
Pearson	47

<sup>\*</sup>International students with qualifications from educational systems where the English language is the primary medium of instruction are exempted from this requirement.

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### **Programme Module**

Foundational
Understanding Computing
Common Core and Discipline Core
Statistics
C Programming
Software Modeling and Analysis
Software Security
Database Systems
Computer Architecture and Organisation
Introduction to Object Oriented Programming
Web Development
Operating Systems Principles
Object Oriented Software Development
Systems Programming
Software Design and Architecture
Data Communication and Networking
Human Computer Interaction
Artificial Intelligence
Discrete Mathematics
Routing and Switching
Internet of Things
Wireless and Mobile Technology
Network Construction and Administration
Software Project Management
Information Assurance Security
Blockchain Technology
Enterprise Resource Planning
Dynamic Web Programming
IoT Smart Application Development
Big Data Analytics

Capstone
Final Year Project I
Final Year Project II
Industrial Training
Internship
Mata Pelajaran Pengajian Umum
/University Courses
Malay Languago (only for Malaysian

Malay Language (only for Malaysian students without a credit in SPM BM)

### 

STPM	A pass with a minimum Gred C in any two (2) subjects and a credit in Maths at the SPM Level
A-Level	A pass with a minimum Gred D in any two (2) subjects and pass in Maths and English at SPM level.
UEC	5B's including Maths
Foundation/ Matriculation	A pass with a minimum CGPA 2.0 and credit in SPM Maths
Diploma in Computer Science/ Software Engineering/ Information Technology/Information System	A Pass with a minimum CGPA 2.5 and credit in SPM Maths
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IELTS	5.0
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International students who do not fulfil the English Language Requirements may join the Intensive English Programme at Nilai University which builds their skills in the language and prepares them for the IELTS examination.

### **Programme Module**

Foundational	
Understanding Computing	
Common Core and Discipline Core	
Statistics	
C Programming	
Software Modeling and Analysis	
Software Security	
Database Systems	
Computer Architecture and Organisation	
Introduction to Object Oriented Programming	
Web Development	
Operating Systems Principles	
Object Oriented Software Development	
Software Design and Architecture	
Data Communications and Networking	
Human Computer Interaction	
Artificial Intelligence	
Discrete Mathematics	
Systems Programming	
Cloud Architecture	
Internet and Cloud Principles	
Routing and Switching	
Network Construction and Administration	
Software Project Management	
Blockchain Technology	
Internet and Cloud Security	
Service Oriented Architecture	
Advanced Web Technologies	
Cloud Storage Infrastructure	
Dynamic Web Programming	

Capstone
IECC Project I
IECC Project II
Industrial Training
Internship
Mata Pelajaran Pengajian Umum/University Courses
Malay Language (only for Malaysian students without
a credit in SPM BM)

### **Bachelor in Software Engineering (Honours)** JPT/BPP(R/481/6/0673)07/27, (MQA/FA5717)

	A pass with min Grade C in any two (2) subjects and a credit in SPM Additional Maths
STPM (Non-Science stream)	Or
(Non Science stream)	A pass with min Grade C in any two (2) subjects and a credit in SPM Maths and one (1) Science, technology or Engineering subjects
STPM Science stream	A pass with a min Grade C in Maths and one (1) Science, technology or Engineering subjects
	Science Stream A pass with Grade D in Maths and one (1) Science/ ICT subject
Alouel	Or
A-Level	Non-Science Stream A pass with Grade D in any two (2) subjects and a Grade C in SPM/O-Level Maths and Science, Technology or Engineering subjects
	A pass with min CGPA 2.0 and credit in SPM Additional Maths
Foundation/ Matriculation	Or
Wati lealation	Pass with min CGPA 2.0 and credit in SPM Maths and one (1) Science, technology or Engineering subjects
UEC	A pass with 5B's including Maths and one (1) Science, technology or Engineering subjects
Diploma in Computer/ Software Engineering/ Information Technology/ Information System	A pass with min CGPA 2.5
Diploma in Science & Technology	A pass with a CGPA 2.5 and includes a rigorous internal assessment

### **Programme Module**

Foundational	
Understanding Computing	
Common Core and Discipline Core	
Programming Fundamentals	
Introduction to Information Systems	
C Programming	
Software Modeling and Analysis	
Software Security	
Database Systems	
Computer Architecture and Organisation	
Introduction to Object Oriented Programming	
Web Development	
Data Structure and Algorithms	
Operating Systems Principles	
Object Oriented Software Development	
Software Design and Architecture	
Data Communication and Networking	
Human Computer Interaction	
Artificial Intelligence	
Discrete Mathematics	
Research Methodology	
Software Process	
Theory of Computation	
Software Project Management	
Object and Component Technology	
Machine Learning	
Software Evolution	
Software Verification and Validation	
Computer Vision and Image Processing	
Dynamic Web Programming	
Capstone	
SE Project I	
SE Project II	
Industrial Training	
Internship	
Mata Pelajaran Pengajian Umum	
/University Courses	
Malay Language (only for Malaysian students	
without a credit in SPM BM)	

### English Requirements\* (For International Students)

MUET	3
IELTS	5.0
TOEFL	410 (PBT) / 42 (iBT)
Pearson	47

#### **Bachelor of Computer Science (Honors) (Data Science)**

JPT/BPP(R2/481/6/0253) 08/23, (MQA/A9105)

#### A pass with min. grade C in any two(2) subjects and a credit in SPM Additional Maths **STPM** A pass with min. grade C in any two (2) (Non-Science stream) subjects and a credit in SPM Maths and one (I) Science, technology or **Engineering subject** A pass with a min. grade C in Maths **STPM** and one (I) Science, technology or Engineering Science stream subject Science Stream A pass with grade D in Maths and one (I) Science/ ICT subject Or A-Level **Non-Science Stream** A pass with grade D in any two (2) subjects and a Grade C in SPM/0-Level Maths and Science, Technology or Engineering subjects A pass with min CGPA 2.0 and credit in SPM Additional Maths Or Pass with Foundation/ CGPA 2.0 and credit in SPM Maths and Matriculation one (I) Science, technology or Engineering subjects A pass with 5B's including Maths and **UEC** one (1) Science, technology or **Engineering subjects** A pass with min CGPA 2.5 Diploma in Computer/ Software Engineering/ Information Technology/ **Information System** A pass with a CGPA 2.5 and includes **Diploma in Science** a rigorous internal assessment & Technology

#### **Programme Module**

Foundational	
Understanding Computing	
Common Core and Discipline Core	
Programming Fundamentals	
Introduction to Information Systems	
C Programming	
Software Modelling and Analysis	
Software Security	
Database Systems	
Computer Architecture and Organisation	
Introduction to Object Oriented Programming	
Web Development	
Data Structure and Algorithms	
Operating Systems Principles	
Object Oriented Software Development	
Information Systems Design	
Data Communication and Networking	
Human Computer Interaction	
Artificial Intelligence	
Discrete Mathematics	
Software Project Management	
Specialisation Courses	
Data Science	
Computer Graphics	
Statistical Methods for Data Science	
Software Project Management	
Object and Component Technology	
Theory of Computation	
Data Mining and Predictive Analytics	
Big Data Analytics	
Computer Vision and Image Processing	
Machine Learning	
Capstone	
Final Year Project I	
Final Year Project I I	
Industrial Training	
Internship	
Mata Pelajaran Pengajian Umum/University	
Courses Malay Language (only for Malaysian	
students without a credit in SPM BM)	
Standing Without a dicale III of IVI DIVI	

#### English Requirements\* (For International Students)

MUET	3
IELTS	5.0
TOEFL	410 (PBT) / 42 (iBT)
Pearson	47

<sup>\*</sup>International students with qualifications from educational systems where the English language is the primary medium of instruction are exempted from this requirement.

### Master of Information Technology

JPT/BPP (N/482/7/0173), 10/26, (MQA/PA15051)

- A Bachelor's Degree of Computing or in the area of Science and Technology or related to Computing, with a minimum Cumulative Grade Point Average (CGPA) of 3.00; OR
- A Bachelor's Degree of Computing or in the area of Science and Technology or related to Computing, with CGPA below 3.00 but above 2.50, can be accepted subject to rigorous internal assessment process; OR
- A Bachelor's Degree of Computing or in the area of Science and Technology or related to Computing, with CGPA less than 2.50, with a minimum of five years working experience in a relevant field may be accepted.

#### English Requirements\* (For International Students)

MUET	3
IELTS	5.0
TOEFL	410 (PBT) / 42 (iBT)
Pearson	47

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#### **Duration**

Part Time: 3 Years Full Time: 2 Years

### **Programme Module**

### Phase I – Pre-requisite Core\*\* Course (3 credit hours) Research Methodology and Statistics (Compulsory)

#### Phase II - Preliminary Research

This represents the forst part of the master's research project and forms the basis on which students build their proposal and eventually their project.

#### Phase III - Proposal Defence

Each student must publicly present and defend his/her research proposals. The student is only allowed to continue with his/her research to Phase IV on passing of the defence of his/her proposal.

#### **Phase IV - Thesis Preparation**

The student proceeds to his/her data collection, data analysis and report writing.

#### Phase V - Viva Voce

After completion and submission of the thesis, the student is required to attend a Viva Voce to orally defend his/her thesis.

### **Research Topics**

The research topics may include but are not limited to the following topics:

- Advanced Database
- Advanced Computer Networks
- Programming Language
- Knowledge Management
- IT Governance
- Business Intelligence
- Computer Security
- Advanced Project Management
- Project, Advanced Multimedia Applications
- Research Methodology in Information Technology
- Interactive Systems Design
- Intelligent Systems
- Strategic Information System Planning
- Computer Forensics
- Internet of Things



### **GAIN QUALITY EDUCATION AT NILAI UNIVERSITY**

All programmes offered at Nilai University observe the strict guidelines of the Malaysian Qualifications Agency (MQA) and Ministry of Higher Education (MOHE). The university, established in 1997 emphasises excellence and thus strives to provide quality education.

### **Quality Education**

Programmes are affordable for students from all walks of life. Lectures are conducted in small groups so that each student can have personalised attention.

### **Exposure to Diverse Cultures**

International students from different countries across the world choose to study at Nilai University. With a student community of diverse backgrounds, the interaction between international and local students encourages sharing, understanding, and acceptance of various cultures.

### **Co-curricular Activities for Personal Development**

Nilai University provides a 'Total Student Experience' with engaging clubs to encourage creativity, networking and active participation in various events. The experience gained can be included in students' portfolio to increase employment opportunities. There are initiatives such as the Mentor-Mentee programme to help new students feel at home and blend in.

### Master the English Language

As the university has a multicultural community, students and staff are encouraged to communicate in English with intensive English classes available for those who need it.

### **SETARA Ranking**

2017 SETARA the survey conducted by the Malaysian Ministry of Higher Education, University obtained a score of 89% under the Teaching criterion. and Learning

This excellent score demonstrates commitment to providing students with quality teaching and learning experiences.

### **Professional Recognition/Industry & Academic Partners**





























### **NILAI UNIVERSITY**

### **Enrichment For Life**



### **Lush Campus**

Nilai University has a charming campus with lush greenery surrounding the hostels and lecture halls for an open and relaxed learning environment. Away from the bustling city, you will enjoy a refreshed outlook studying here with your peers.



#### **Peaceful Environment**

As a university town, Nilai University knows the importance of a peaceful atmosphere for students to be able to focus on their studies. The university has a spacious layout ideal for students to have an individual study session.



### **Strategic Location**

Nilai University is located in the township of Putra Nilai. Nilai town has all the necessary amenities such as banks, hospitals, malls, eateries and more. The university is easily accessible via the national highway. We are only a 35-minute drive away from the city centre of Kuala Lumpur and 20 minutes drive away from the Kuala Lumpur International Airports. (KLIA 1 & KLIA 2).

### **Full Campus Facilities**

We have facilities catering to recreation and hands-on training to ensure students are well-rounded individuals prepared to enter the professional workforce.

### Recreation



Football/Rugby Field



Golf Course\*



Swimming Pools\*



Gymnasium



Basketball Courts



Sports Focus Centre For Fencing



**Indoor Badminton Court** 



**Indoor Sports Centre** 



Lakeside Recreation Park & Jogging Track



Table Tennis



Tennis Courts



**Volleyball Courts** 

### **Amenities**



International Student Visa Application



Accommodation



Canteen



Shuttle Bus Service



WiFi-enabled campus



Laundrette



Minimart



**Muslim Prayer Rooms** 



**ATM** 



Bookshop



International Student Airport Pick-Up

### Learning



Aircraft Hangar



Demonstration Kitchen



Formal Dining Restaurant



**Hospitality Training Facilities** 



Laboratories

- Avionics
  - nics Biology
- Fluid Mechanics
- Chemistry
- Materials and Mechanics
- AnalyticalBiotechnology
- CAD and Simulation
- Physics
- Electrical and Electronics



Engineering and Aircraft
Maintenance Engineering
Workshop



Nursing Skill & Simulation Laboratories



Learning Resource Centre

\*At the nearby Nilai Springs Golf and Country Club.

# OUR STUDENTS SAY

"I am really enjoying the lessons, especially the module on web design. It is not just solely about coding and programming, creativity is a big part of it. We are encouraged to use our imaginations."

Tommy Lee Yan Shan
Bachelor of Computer Science (Hons)

"It indeed is a great pleasure for me to be a part of this university for almost 2 years. Each and every person involved in my academic career has played a vital role in the successful completion of my degrees. From the bottom of my heart, I would like to thank Nilai University and all the course instructors, lecturers, campus staff, management from the core of my heart for the wonderful and knowledgeable time I spent here. I would like to say thank you and it would be a great pleasure if I could help better the university in any way."

Ong Zheng Young
Bachelor in Software Engineering (Honours)

"I have noticed that Nilai U computing students are very good at programming. This is because the lecturers here ensure we are given a solid foundation in this area. We are drilled in the programming languages of C++ and Java, allowing us to be very confident with our programming skills,"

Ng Kang Wei Bachelor of Computer Science (Hons)

"My studies here at Nilai U were indeed an adventurous life as I always keep myself busy with club activities as I hold few positions. However, no matter how busy I was, studies were always my first priority. With the help from lecturers who have vast experience in their field, they will make time for students who are unclear about the courses and willingly to go one step further to ensure he/she could grasp the courses fully. I am thankful to my lecturers for helping me out especially with my final year project (FYP). Without their help, I could not have been where I am today. I would like to thank all the lecturers at Nilai U, especially the lecturers from the School of Computing Nilai U for their commitment and perseverance in educating their students, thank you".

Ken Uchiyama
Valedictorian Class of 2022
Rachalor in Software Engineering (Honours)



### **HOW TO APPLY?**

- Choose your programme
- Fill in the online application form ONLY if you want to apply for admission into a programme offered at Nilai University. Confirm your accommodation type in the application (if needed).
- Once we receive your online application form, our educational counsellor will contact you to assess your eligibility and subsequently, arrange for payment of the first semester's fees and confirm your accommodation booking (if necessary).
- You may pay for Application Fee, Accommodation Fee and the first semester's fees via our fee payment channels as listed.

### Payment method:

Payment at the counter, Ground Floor, Resource Centre, Nilai University Campus

#### **Operating hours:**

Monday to Friday from 9:00 am to 4:00 pm

#### Mode of payment:

- Cash
- Credit Card: Visa, Mastercard and Union Pay only
- Debit Card: MyDebit, Visa/ Mastercard Debit
  Cards
- Cheque-Payable to "NILAI EDUCATION SDN RHD"
- Online Banking

#### Payee Name:

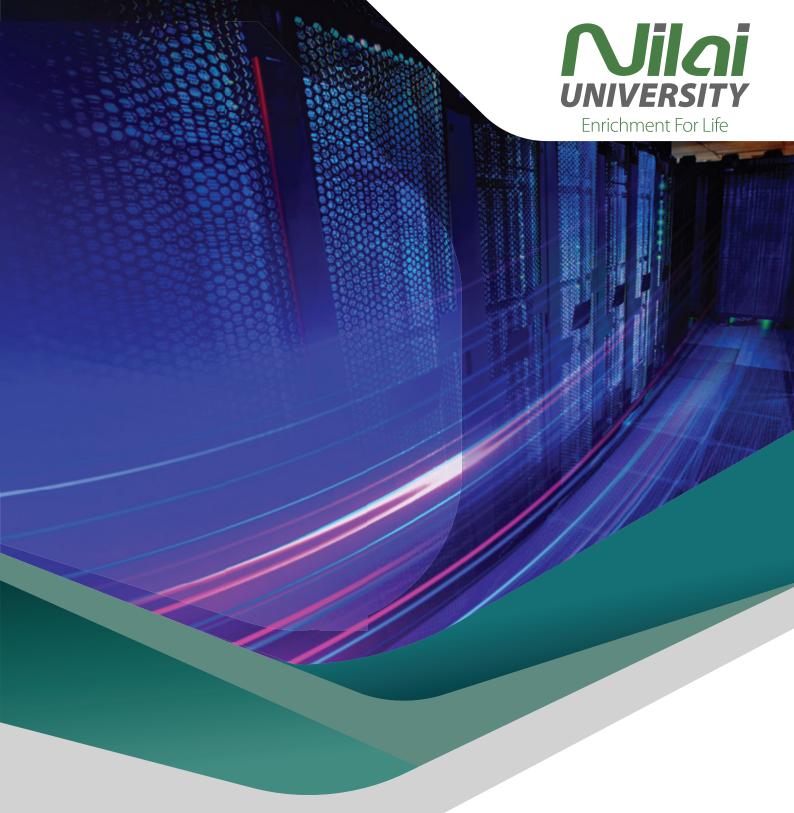
Nilai Education Sdn Bhd

#### **Bank Details:**

Account No: 2050-5110-000-979 | RHB Bank Berhad







### FIND US ON:





We are open daily (9:00 am - 5:00 pm) Closed on Public Holidays

www.nilai.edu.my

Nilai University DU032(N) No 1, Persiaran Universiti, Putra Nilai, Bandar Baru Nilai, 71800 Nilai, Negeri Sembilan, Malaysia.

Tel: +606-850 2308 | Email: marketing@nilai.edu.my

Nilai Education Sdn Bhd

Registration No: 199401021536 (307215-P)

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GREEN CAMPUS AT NILAI UNIVERSITY