Nilai
UNIVERSITY
Enrichment For Life

QS STARS
RATING SYSTEM

SETARA
Category Achieved:
Competitive

COMPUTING

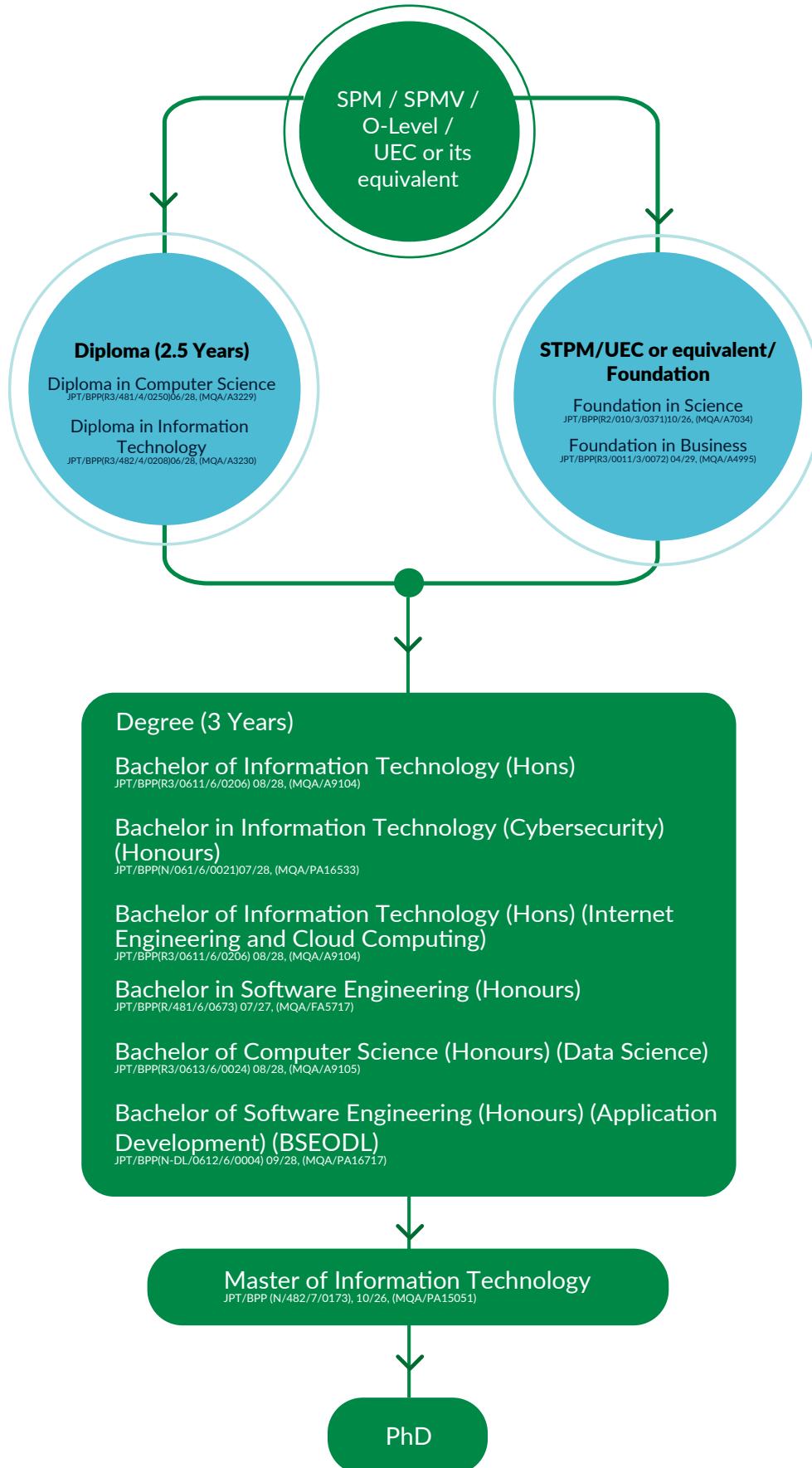New horizons in tech education

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 programmes 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, Python, 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(R3/0611/6/0206) 08/28, (MQA/A9104)

- Bachelor of Information Technology (Hons)
  (Internet Engineering and Cloud Computing)
  JPT/BPP(R3/0611/6/0206) 08/28, (MQA/A9104)

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

- Bachelor of Computer Science (Honours) (Data Science)
  JPT/BPP(R3/0613/6/0024) 08/28, (MQA/A9105)

- Bachelor in Information Technology (Cybersecurity) (Honours)
  JPT/BPP(N/061/6/0021)07/28, (MQA/PA16533)

- Bachelor of Software Engineering (Honours) (Application Development) Open and Distance Learning (ODL)
  JPT/BPP(N-DL/0612/6/0004) 09/28, (MQA/PA16717)

- Master of Information Technology
  JPT/BPP (N/482/7/0173), 10/26, (MQA/PA15051)

ACADEMIC PROGRESSION

SPM / SPMV / O-Level / UEC or its equivalent

Diploma (2.5 Years)

Diploma in Computer Science
JPT/BPP(R3/481/4/0250)06/28, (MQA/A3229)

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

STPM/UEC or equivalent/ Foundation

Foundation in Science
JPT/BPP(R2/010/3/0371)10/26, (MQA/A7034)

Foundation in Business
JPT/BPP(R3/0011/3/0072) 04/29, (MQA/A4995)

Degree (3 Years)

Bachelor of Information Technology (Hons)
JPT/BPP(R3/0611/6/0206) 08/28, (MQA/A9104)

Bachelor in Information Technology (Cybersecurity) (Honours)
JPT/BPP(N/061/6/0021)07/28, (MQA/PA16533)

Bachelor of Information Technology (Hons) (Internet Engineering and Cloud Computing)
JPT/BPP(R3/0611/6/0206) 08/28, (MQA/A9104)

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

Bachelor of Computer Science (Honours) (Data Science)
JPT/BPP(R3/0613/6/0024) 08/28, (MQA/A9105)

Bachelor of Software Engineering (Honours) (Application Development) (BSEODL)
JPT/BPP(N-DL/0612/6/0004) 09/28, (MQA/PA16717)

Master of Information Technology
JPT/BPP (N/482/7/0173), 10/26, (MQA/PA15051)

PhD

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

- 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

PROGRAMME MODULE

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

This programme aims to equip students with the knowledge and skills needed to succeed in various roles within the IT industry. The curriculum of the Diploma in Information Technology programme covers a broad range of topics, including computer systems and architecture, programming languages, software development, database management, networking fundamentals, cybersecurity, web development, and IT project management. Throughout the programme, students engage in both theoretical learning and hands-on practical experiences to develop their technical skills and problem-solving abilities.

Duration:

Full Time: 2.5 years

Key Courses

Year 1:

- Principles of Entrepreneurship
- Introduction to Public Speaking
- Statistics
- Understanding Computing
- Computer Organisation
- Structured Programming
- Web Development
- Calculus and Algebra
- Introduction to Computer Network
- Cybersecurity Fundamentals

Year 2:

- Discrete Mathematics
- Object Oriented Programming
- Internet Programming
- Systems Analysis and Design
- Database Development
- Operating Systems
- Information Systems
- Human-Computer Interaction
- Summative (Computing Project)
- Introduction to Artificial Intelligence
- Introduction to Cloud Computing
- Data Communications and Networking
- Introduction to IoT
- Programming with Python
- IT Project Management
- Internship

*Periodic changes are made as part of continuous improvements.

PROGRAMME MODULE

Diploma in Computer Science
JPT/BPP(R3/481/4/0250)06/28, (MQA/A3229)

This program is designed to provide students with a comprehensive understanding of key concepts, principles, and practical skills in computer science. The curriculum of the Diploma in Computer Science programme covers a range of topics, including computer programming, software development, algorithms and complexity, parallel and distributed computing, database management, computer networks, cybersecurity, and computer systems architecture. Throughout the diploma program, students often engage in hands-on learning experiences, such as coding projects, software development exercises, and laboratory work, to gain practical skills and real-world experience in the field.

Duration:

Full Time: 2.5 years

Key Courses

Year 1:

- Principles of Entrepreneurship
- Introduction to Public Speaking
- Statistics
- Understanding Computing
- Computer Organisation
- Structured Programming
- Web Development
- Calculus and Algebra
- Introduction to Computer Network
- Cybersecurity Fundamentals

Year 2:

- Software Engineering
- Discrete Mathematics
- Object Oriented Programming
- Internet Programming
- Systems Analysis and Design
- Database Development
- Operating Systems
- Human Computer Interaction
- Platform Based Development
- Introduction to Artificial Intelligence
- Algorithms and Complexity
- Programming with Python
- Systems Fundamentals
- Parallel and Distributed Computing
- Summative (Computing Project)
- Internship

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PROGRAMME MODULE

Bachelor of Information Technology (Hons)
JPT/BPP(R3/0611/6/0206) 08/28, (MQA/A9104)

This programme offers in-depth knowledge, skills, and expertise required to excel in the rapidly evolving field of IT. The curriculum of a Bachelor of Information Technology (Hons) programme covers a wide range of topics, including computer programming, database management, network administration, Cloud Architecture, cybersecurity, data analytics, web development, blockchain, Internet of Things (IoT) and IT project management. Throughout the program, students engage in a combination of theoretical learning, practical exercises, and hands-on projects to develop their technical skills and problem-solving abilities. They may work on individual assignments, group projects, coding challenges, and real-world IT projects to gain practical experience and apply their knowledge in practical settings. During the final year project, students have the opportunity to delve into a specific area of IT in-depth, conduct original research, and present their findings. This project allows students to demonstrate their analytical, critical thinking, and research skills, as well as showcase their expertise in a particular area of IT.

Duration:

Full Time: 3 years

Key Courses

Year 1:

- C Programming
- Introduction to Information Systems
- Software Modeling and Analysis
- Database Systems
- Computer Architecture and Organisation
- Introduction to Object Oriented Programming
- Web Development
- Operating Systems Principles
- Information Technology Fundamentals
- Introduction to Data Communications and Networking

Year 2:

- Object Oriented Software Development
- Cloud Architecture
- Software Design and Architecture
- Data Communications and Networking
- Human Computer Interaction
- Artificial Intelligence
- Routing and Switching
- Internet of Things
- Cybersecurity
- Discrete Structure

Year 3:

- Network Construction and Administration
- Software Project Management
- Information Assurance Security
- Final Year Project I
- Final Year Project II
- Enterprise Resource Planning
- Dynamic Web Programming
- IoT Smart Application Development
- Big Data Analytics
- Blockchain Technology
- Internship

*Periodic changes are made as part of continuous improvement.

PROGRAMME MODULE

Bachelor of Information Technology (Hons) (Internet Engineering and Cloud Computing)
JPT/BPP(R3/0611/6/0206) 08/28, (MQA/A9104)

This programme is designed to equip students with the knowledge, skills, and expertise required to thrive in roles that involve designing, implementing, and managing internet-based systems and cloud computing environments. The curriculum of the Bachelor of Information Technology (Hons) program with a focus on Internet Engineering and Cloud Computing covers a range of topics including internet protocols, network and cloud architecture, web development, cloud computing technologies, virtualization, distributed systems, cybersecurity, and data management in cloud environments. Throughout the program, students engage in a combination of theoretical learning, practical exercises, and hands-on projects to develop their technical skills and problem-solving abilities. They may work on individual assignments, group projects, coding challenges, and real-world related to internet engineering and cloud computing to gain practical experience and apply their knowledge in practical settings. During the final year project, students have the opportunity to delve into a specific area related to internet engineering and cloud computing in-depth, conduct original research, and present their findings. This project allows students to demonstrate their analytical, critical thinking, and research skills, as well as showcase their expertise in a particular area of internet engineering and cloud computing.

Duration:

Full Time: 3 years

Key Courses

Year 1:

- C Programming
- Introduction to Information Systems
- Software Modeling and Analysis
- Database Systems
- Computer Architecture and Organisation
- Introduction to Object Oriented Programming
- Web Development
- Operating Systems Principles
- Information Technology Fundamentals
- Introduction to Data Communications and Networking

Year 2:

- Object Oriented Software Development
- Cloud Architecture
- Internet and Cloud Principles
- Software Design and Architecture
- Data Communications and Networking
- Human Computer Interaction
- Artificial Intelligence
- Routing and Switching
- Cybersecurity
- Discrete Structure

Year 3:

- Network Construction and Administration
- Software Project Management
- Internet and Cloud Security
- Service Oriented Architecture
- IECC Project I
- IECC Project II
- Advanced Web Technologies
- Cloud Storage Infrastructure
- Dynamic Web Programming
- Blockchain Technology
- Internship

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PROGRAMME MODULE

Bachelor in Software Engineering (Honours)

JPT/BPP(R/481/6/0673)07/27, (MQA/FA5717)

This programme equips students with the knowledge, skills, and expertise required to develop high-quality software solutions that meet the needs of modern organisations and industries on time and within budget. The curriculum of a Bachelor in Software Engineering (Honours) program covers a wide range of topics relevant to software engineering including programming languages, software development methodologies, software design principles, software testing and quality assurance, database management, algorithms and data structures, back end web development and project management. Students may also learn about emerging technologies and trends in software engineering, such as agile development, DevOps, cloud computing, and mobile app development. Throughout the program, students engage in theoretical learning, practical exercises, and hands-on projects to develop their technical skills and problem-solving abilities. They may work on individual and group assignments, coding projects, software development projects, and real-world software engineering projects. During the final year project, students have the opportunity to delve into a specific area related to software engineering in-depth, conduct original research, and present their findings. This project allows students to demonstrate their analytical, critical thinking, and research skills, as well as showcase their expertise in a particular area of software engineering

Duration:

Full Time: 3 years

Key Courses

Year 1:

- C Programming
- Software Modeling and Analysis
- Database Systems
- Computer Architecture and Organisation
- Introduction to Object Oriented Programming
- Operating Systems Principles
- Understanding Computing
- Introduction to Data Communications and Networking
- Python Programming
- Software Systems Engineering

Year 2:

- Data Structure and Algorithms
- Object Oriented Software Development
- Software Design and Architecture
- Human Computer Interaction
- Artificial Intelligence
- Software Process
- Software Security and Safety
- Software Requirements Engineering
- Mobile Application Development
- Cloud Computing Application

Year 3:

- Software Project Management
- Software Quality and Measurement
- Software Evolution
- Software Verification and Validation
- SE Project I
- SE Project II
- Big Data Analytics
- Machine Learning
- Back End Web Development
- Software Design Pattern and Technology
- Internship

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PROGRAMME MODULE

Bachelor of Computer Science (Honours) (Data Science)
JPT/BPP(R3/0613/6/0024) 08/28, (MQA/A9105)

This specialised program focuses on equipping students with the knowledge, skills, and expertise required to analyse, interpret, and derive insights from large and complex datasets to inform decision-making and solve real-world problems. The curriculum of a Bachelor of Computer Science (Honours) program with a focus on Data Science covers a range of topics relevant to this field. Students may study statistics, machine learning, data mining, data visualisation, database management, big data technologies, data ethics, and data-driven decision-making. They may also learn programming languages such as Python and R, which are commonly used in data science. Throughout the program, students engage in theoretical learning, practical exercises, and hands-on projects to develop their technical skills and problem-solving abilities in data science. They may work on individual and group assignments, data analysis projects, machine learning projects, and real-world data science projects. During the final year project, students have the opportunity to delve into a specific area related to software engineering in-depth, conduct original research, and present their findings. This project allows students to demonstrate their analytical, critical thinking, and research skills, as well as showcase their expertise in a particular area of data science.

Duration:

Full Time: 3 years

Key Courses

Year 1:

- C Programming
- Software Modeling and Analysis
- Database Systems
- Computer Architecture and Organisation
- Introduction to Object Oriented Programming
- Web Development
- Operating Systems Principles
- Understanding Computing
- Introduction to Data Communications and Networking
- Python Programming

Year 2:

- Data Structure and Algorithms
- Computer Graphics
- Object Oriented Software Development
- Software Design and Architecture
- Human Computer Interaction
- Artificial Intelligence
- Statistical Methods for Data Science
- Data Science
- Discrete Structures
- Information Assurance Security

Year 3:

- Theory of Computation
- Software Project Management
- Big Data Analytics
- Machine Learning
- Data Mining and Predictive Analytics
- Platform Based Development
- Parallel and Distributed Computing
- Data Science Project I
- Data Science Project II
- Data Visualisation
- Internship

*Periodic changes are made as part of continuous improvement.

PROGRAMME MODULE

Bachelor in Information Technology (Cybersecurity) (Honours)
JPT/BPP(N/061/6/0021)07/28, (MQA/PA16533)

This specialised program is designed to equip students with the knowledge, skills, and expertise required to protect digital assets, networks, and systems from cyber threats and attacks. The curriculum of a Bachelor in Information Technology (Cybersecurity) (Honours) program covers a wide range of topics relevant to cybersecurity including cybersecurity fundamentals, network security, cryptography, ethical hacking, secure coding practices, penetration testing, digital forensics, risk management, and regulatory compliance. Throughout the program, students engage in theoretical learning, practical exercises, and hands-on projects to develop their technical skills and problem-solving abilities in cybersecurity. They may work on individual and group assignments, cybersecurity projects, ethical hacking exercises, and real-world cybersecurity scenarios. These practical experiences allow students to apply their knowledge in practical settings, gain valuable experience, and develop relevant skills sought after by employers in the cybersecurity field. During the final year project, students have the opportunity to delve into a specific area related to cybersecurity in-depth, conduct original research, and present their findings. This project allows students to demonstrate their analytical, critical thinking, and research skills, as well as showcase their expertise in a particular area of cybersecurity.

Duration:

Full Time: 3 years

Key Courses

Year 1:

- C Programming
- Introduction to Information Systems
- Software Modeling and Analysis
- Database Systems
- Computer Architecture and Organisation
- Introduction to Object Oriented Programming
- Web Development
- Operating Systems Principles
- Information Technology Fundamentals
- Introduction to Data Communications and Networking

Year 2:

- Object Oriented Software Development
- Cloud Architecture
- Software Design and Architecture
- Data Communications and Networking
- Human Computer Interaction
- Artificial Intelligence
- Routing and Switching
- Data Security
- Cybersecurity
- Discrete Structure

Year 3:

- Network Construction and Administration
- Software Project Management
- Information Assurance Security
- Network Security
- Dynamic Web Programming
- Ethical Hacking
- Cyberlaw
- Vulnerability Assessment and Penetration Testing
- Cybersecurity Project I
- Cybersecurity Project II
- Internship

*Periodic changes are made as part of continuous improvement.

PROGRAMME MODULE

Bachelor of Software Engineering (Honours) (Application Development) (Open and Distance Learning) ODL
JPT/BPP(N-DL/0612/6/0004) 09/28, (MQA/PA16717

Open and Distance Learning programme provides flexible access to general higher education, professional and vocational. The mode of ODL is also called "Independent Learning", "Flexible Learning" as well as "Self-Learning". It can help to empower the learners by enabling them to take charge of their learning and enabling them to have greater control and ownership of their learning at a minimal cost. ODL provides a great opportunity to those learners who are denied access to education in conventional mode delivery of institutions due to various factors such as working adults or students who are still working and wanting to further their studies, overseas students who are not able to travel to Malaysia, disabled students who are not able to follow the conventional way of learning and would like to pursue their higher degree, and to those who require updating their knowledge and skills through education. The curriculum of a Bachelor of Software Engineering (Honours) program with a concentration in Application Development covers a broad spectrum of topics relevant to software engineering and application development including programming languages, software development methodologies, software design patterns, mobile app development, UI/UX design, web development, database management, software testing, back end web development and project management. During the final year project, students have the opportunity to delve into a specific area related to software engineering in-depth, conduct original research, and present their findings. This project allows students to demonstrate their analytical, critical thinking, and research skills, as well as showcase their expertise in a particular area of software engineering.

Duration:

Full Time: 3 years

Key Courses

Year 1:

- Programming Fundamentals
- C Programming
- Software Modeling and Analysis
- Software Security
- Database Systems
- Computer Architecture and Organisation
- Introduction to Object Oriented Programming
- Fundamental of Web Development
- Understanding Computing
- Introduction to Software Engineering

Year 2:

- Data Structure and Algorithms
- Operating Systems Principles
- Research Methodology
- Software Design and Architecture
- Data Communications and Networking
- Artificial Intelligence
- Discrete Mathematics
- Software Process
- Mobile Application Development
- Designing UI/UX

Year 3:

- Software Project Management
- Software Design Pattern and Technology
- Software Quality
- Software Evolution
- Software Verification and Validation
- SE Project I
- SE Project II
- Computer Vision and Image Processing
- Back-End Web development
- Machine Learning
- Internship

*Periodic changes are made as part of continuous improvement.

PROGRAMME MODULE

Master of Information Technology
JPT/BPP (N/482/7/0173), 10/26, (MQA/PA15051)

The Master of Information Technology (by research) at Nilai University is designed to prepare graduates with advanced knowledge and the skills to deal with organisations' computing needs. This programme will enable students to expand their knowledge of concepts and techniques used in the information technology industry. It provides an opportunity for students to extend and enhance their development beyond scholarly understanding and to conduct systematic research within an area of interest in the field of computing. The research topics may include, but are not limited to, the following: Advanced Database, Advanced Computer Networks, Programming Language, Knowledge Management, and more.

Duration:

Full-time - Min: 2 years Max: 4 years
Part-time - Min: 3 years Max: 5 years

Phase I – Pre-requisite Core Course (3 credit hours)** Research Methodology and Statistics (Compulsory)
Phase II – Preliminary Research This represents the first 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
- Advanced Multimedia Applications Project
- Research Methodology in Information Technology
- Interactive Systems Design
- Intelligent Systems
- Strategic Information System Planning
- Computer Forensics
- Internet of Things

ENTRY REQUIREMENTS

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)

SPM	Pass with credit in at least three (3) subjects (inclusive of Mathematics or equivalent): or
O-Level	Pass with at least Grade C in any three (3) subjects, including Mathematics: or
UEC	Pass with at least Grade C in any three (3) subjects, including Mathemathics: or
STPM	Pass with a minimum Grade C (GP 2.00) in a subject and credit in Mathematics at SPM Level or its equivalent; or
A-Level	Pass with a minimum grade D in any subjects and grade C in SPM/O-Level Mathematics: or
STAM	Pass with a minimum grade of Maqbul and credit in Mathematics at SPM Level, or its equivalent; or
SKM (Level 3) in related field	Pass. Internal assessment on Mathematics competency may be carried out: or
Certificate (MQF Level 3) in related field	Pass with at least CGPA 2.00.

Note: Candidates with a pass in Mathematics at SPM level may be admitted if their admission qualification contains Mathematic subjects equivalent to SPM level. Otherwise, they need to take a reinforcement Mathematic subject in the first semester.

Bachelor of Information Technology (Hons)
JPT/BPP(R3/0611/6/0206) 08/28, (MQA/A9104)

Bachelor in Information Technology (Cybersecurity) (Honours)
JPT/BPP(N/061/6/0021)07/28, (MQA/PA16533)

Bachelor of Information Technology (Hons) (Internet Engineering and Cloud Computing)
JPT/BPP(R3/0611/6/0206) 08/28, (MQA/A9104)

STPM	Pass with a minimum Grade C (GP 2.00) in any two (2) subjects and a credit in Mathematics at SPM Level or its equivalent; or
A-Level	Pass with a minimum Grade D in any two (2) subjects and a credit in Mathematics at SPM Level or its equivalent; or
UEC	Pass with at least Grade B in any five (5) subjects and a credit in Mathematics at SPM Level or its equivalent; or
Foundation/ Matriculation	Pass with a minimum CGPA 2.00 and a credit in Mathematics at SPM Level or its equivalent; or
Diploma in Computer Fields (Level 4, MQF) or equivalent	Pass with a minimum CGPA 2.50; Candidates with CGPA below 2.50 may need to undergo an internal evaluation; or
Diploma in Non-Computing Fields field (Level 4, MQF)	Pass with a minimum CGPA 2.75 and a credit in Mathematics at SPM Level or its equivalent; Candidates with CGPA below 2.75 but more than 2.50 may need to undergo an internal evaluation; or
Diploma Kemahiran Malaysia (DKM) / Diploma Vokasional Malaysia (DVM)/ Diploma Lanjutan Kemahiran Malaysia (DLKM) in Computing fields	Pass with a minimum CGPA of 2.50; or
STAM	Pass with minimum grade of Jayyid in any two (2) subjects and credit in Mathematics at SPM level.

Note: Candiates with a pass in Mathematics at SPM level need to take and pass a reinforcement Mathematics subject in the first semester. This requirement is waived for Foundation/Matriculation students with Mathematic higher than SPM level in their programme

ENTRY REQUIREMENTS

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

Bachelor of Computer Science (Honours) (Data Science)
JPT/BPP(R3/0613/6/0024) 08/28, (MQA/A9105)

Bachelor of Software Engineering (Honours) (Application Development) (BSEODL)
JPT/BPP(N-DL/0612/6/0004) 09/28, (MQA/PA16717)

STPM (Arts Stream)	Pass with a minimum Grade of C (GP 2.00) in any two (2) subjects and credit in Additional Mathematics at SPM level or its equivalent; or
STPM (Science Stream) or its equivalent	Pass in STPM (Science Stream) with minimum Grade of C (GP 2.00) in Mathematics and one (1) Science/ICT subject; or
A-Level	Pass with a minimum of Grade D in any two (2) subjects and credit in Additional Mathematics at O-level or its equivalent; or
UEC	Pass with at least Grade B in any five (5) subjects and credit in Additional Mathematics; or
STAM	Pass with a minimum Grade of Jayyid in any two (2) subjects and credit in Additional Mathematics at SPM level or its equivalent; or
Foundation / Matriculation	Pass with a minimum CGPA of 2.00 and credit in Additional Mathematics at SPM level or its equivalent; or
Diploma in Science and Technology (Level 4, MQF)	Pass with a minimum CGPA of 2.75 and credit in Additional Mathematics at SPM level or its equivalent. Candidates with a CGPA below 2.75 but more than 2.50 may need to undergo an internal evaluation; or
Diploma in Computing fields (Level 4, MQF) or its equivalent	Pass with a minimum CGPA of 2.50 Candidates with a CGPA below 2.50 but more than 2.00 may need an internal evaluation; or
Diploma Kemahiran Malaysia (DKM) / Diploma Vokasional Malaysia (DVM)/ Diploma Lanjutan Kemahiran Malaysia (DLKM) in Computing fields	Pass with a minimum CGPA of 2.50.

Note:

* Candidates without credit in Additional Mathematics can be admitted with credit in Mathematics and any one of the Science, Technology or Engineering subjects at SPM level or its equivalent. Candidates may need to take and pass the reinforcement Mathematics subject in first semester. For candidates with Matriculation/Foundation, the reinforcement mathematics is waived if the Mathematics at that level is equivalent/more than the Additional Mathematics offered at SPM.

ENTRY REQUIREMENTS

Master of Information Technology (By Research)
JPT/BPP (N/482/7/0173), 10/26, (MQA/PA15051)

Bachelor's degree (Level 6, MQF) in Computing or related fields	Pass with a minimum CGPA of 3.00 OR Pass with a minimum CGPA 2.00, with internal evaluation.
Bachelor's degree (Level 6, MQF) in Non-Computing field	Pass with a minimum CGPA of 2.50 and working experience in Computing or related fields, with internal evaluation OR Pass with a minimum CGPA of 2.50, need to take prerequisite courses within the first year.

ENTRY REQUIREMENTS

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)

English Requirements* (For International Students)

Linguaskill	140
MUET	3.0
IELTS	4.0
TOEFL	5 (Ess OL) / 30-31 (iBT)
Pearson	36
ELS	106

*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 Linguaskill examination.

Bachelor of Information Technology (Hons)
JPT/BPP(R3/0611/6/0206) 08/28, (MQA/A9104)

Bachelor of Information Technology (Hons) (Internet Engineering and Cloud Computing)
JPT/BPP(R3/0611/6/0206) 08/28, (MQA/A9104)

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

Bachelor of Computer Science (Honours) (Data Science)
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Bachelor of Software Engineering (Honours) (Application Development) (BSEODL)
JPT/BPP(N-DL/0612/6/0004) 09/28, (MQA/PA16717

Linguaskill OL	154
MUET	3.5
IELTS	5.0
TOEFL	7.5 (Ess OL) / 40 (iBT)
Pearson	47
ELS	107

*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 Linguaskill examination.

Master of Information Technology (by research)
JPT/BPP (N/482/7/0173), 10/26, (MQA/PA15051)

English Requirements* (For International Students)

MUET	4.0	TOEFL Essential (Online)	8.5	English as a medium of instruction letter from the previous university
IELTS	6.0	Linguaskill	169	
TOEFL	60 (iBT)	OET	250	
Pearson	59	ELS	109	

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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 Linguaskill examination.

Nilai UNIVERSITY
Enrichment For Life

Bachelor in Computer Science (Honours) (Artificial Intelligence)

JPT/BPP(N/0613/6/0090) 07/29, (MQA/PA17457)

DESCRIPTION OF PROGRAMME

Artificial Intelligence (AI) has experienced substantial growth and adoption across various industries, including healthcare, finance, manufacturing, and technology. The demand for professionals capable of designing, implementing, and managing AI systems is increasing. This specialised Bachelor of Computer Science (Honours) programme focuses on equipping students with the knowledge, skills, and expertise required to understand, develop, and apply AI technologies. Throughout the programme, students will engage in theoretical learning, practical exercises, and hands-on projects whether in individual or group assignments to develop their technical skills and problem-solving abilities. In their final year, students have the opportunity to conduct original research in a specific area of computer science, culminating in a project that allows them to demonstrate their analytical, critical thinking, and research skills while showcasing their expertise in a particular aspect of artificial intelligence.

PROGRAMME HIGHLIGHTS

Hands-on projects to develop technical and problem-solving abilities in these essential AI technologies:
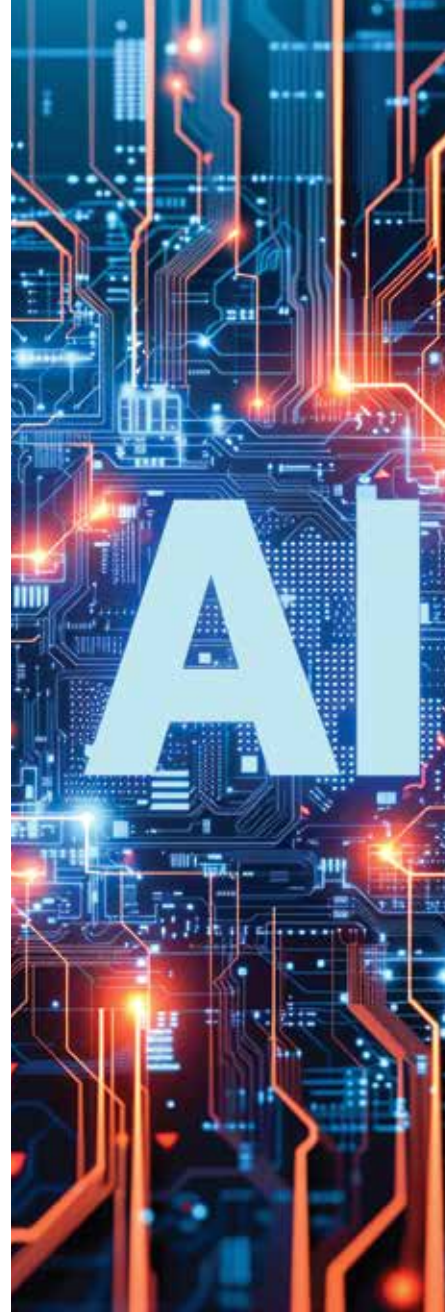
- Machine learning
- Deep learning
- Artificial intelligence in robotics
- Fuzzy logic-based expert systems
- Big data analytics
- Computer vision
- Image processing
- Natural language processing
- Programming languages
  - Python
  - R
  - Java
  - C++
  - Matlab

INTAKE
January/June/September

UP TO 100%
SCHOLARSHIPS & FINANCIAL AIDS AVAILABLE!

CAREER PROSPECTS

- Artificial Intelligence (AI) Specialist
- Algorithm Specialist
- AI Platform Architect
- AI Analyst
- AI Engineer
- Natural Language Processing (NLP) Engineer
- Robotics R&D Engineer
- Machine Learning Engineer
- Computer Vision Engineer
- Deep Learning Scientist
- Software Engineer
- Python Programmer
- Data Scientist
- Big Data Analyst
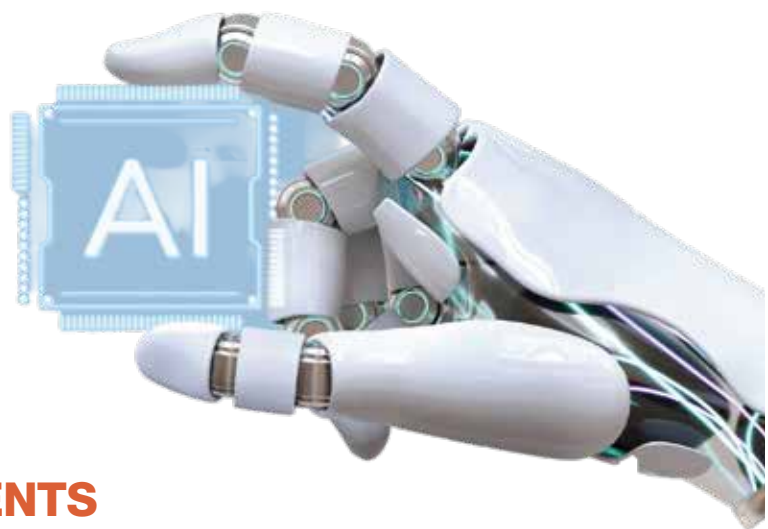- Big Data Engineer/Architect

PROGRAMME MODULE

YEAR 1

· C Programming
· Software Modelling and Analysis
· Database Systems
· Computer Architecture and Organisation
· Introduction to Object Oriented Programming
· Web Development
· Operating Systems Principles
· Understanding Computing
· Introduction to Data Communications and Networking
· Python Programming

YEAR 2

· Data Structure and Algorithms
· Computer Graphics
· Object Oriented Software Development
· Software Design and Architecture
· Human Computer Interaction
· Artificial Intelligence
· Discrete Structures
· Fuzzy Logic-based Expert System
· Information Assurance Security
· Machine Learning

YEAR 3

· Theory of Computation
· Software Project Management
· Computer Vision and Image Processing
· Big Data Analytics
· Platform Based Development
· Parallel and Distributed Computing
· Artificial Intelligence in Robotics
· Deep Learning
· AI Project I
· AI Project II

SUMMARY OF ENTRY REQUIREMENTS

DURATION (YEARS)	QUALIFICATION	COURSE ADMISSION CRITERIA
Full time: 3 years 2.5 years and 3 months of internship	STPM (Arts stream)	Pass with a minimum Grade of C (GP 2.00) in any (2) subjects and a credit in Additional Mathematics at the SPM Level or its equivalent OR Pass with a minimum Grade of C (GP 2.00) in any (2) subjects AND a credit in SPM Mathematics and any one of the Science, Technology or Engineering subjects or its equivalent
	STPM (Science stream)	Pass with a minimum Grade of C (GP 2.00) in Mathematics subject and ONE (1) Science / ICT subject; or
	A-Level	Pass with Grade D in any two (2) subjects and a credit in Additional Mathematics at the SPM Level or its equivalent; OR Pass with a minimum of Grade D in any two (2) subjects and a credit in Mathematics and any one of the Science Technology or Engineering Subjects at SPM Level or its equivalent; or any other qualification recognised by the Malaysian Government acceptable to the university

For a full breakdown of the entry requirements, please refer to our website at www.nilai.edu.my

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 1998 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.

QS STARS RATING SYSTEM
★ ★ ★ ★ ★

Our drive for excellence is globally endorsed by **QS Rating with 5 Stars** in the following categories

- **TEACHING**
- **ACADEMIC DEVELOPMENT**
- **FACILITIES**
- **EMPLOYABILITY**
- **SPECIAL CRITERIA:** Masters of Business Administration
- **INCLUSIVENESS**

SETARA Ranking

Nilai University has been awarded the prestigious "Competitive" rating from the Malaysian Integrated Rating of Higher Education Institutions (SETARA) 2022.

This recognition is a result of outstanding performance in various evaluation areas, particularly in General and Teaching and Learning.

This achievement highlights our ability to compete at a higher level and demonstrates our commitment to providing education beyond borders.

Professional Recognition/Industry & Academic Partners

ICAEW · CIMA · MIHRM · MFPC Malaysian Financial Planning Council · MIZUNO GOLF SCHOOL · FPAM

Kingston University London · AEROTECH SIMULATIONS · DELTA AEROSPACE · Beyond Horizon · ROYAL AERONAUTICAL SOCIETY · ADE

ANSYS · ACCA ACCREDITED PROGRAMME · autocount · KLM UK Engineering · AIRFRANCE INDUSTRIES / KLM Engineering & Maintenance

QS STARS RATING SYSTEM · SETARA · MONIN ULTIMATE CREATIVITY · Business is Marketing · NilaiSprings resort hotel · NilaiSprings golf and country club

WHAT OUR STUDENTS SAY

"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)

"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)

"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
Bachelor in Software Engineering (Honours)

"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)

Nilai
UNIVERSITY
Enrichment For Life

FIND US ON:

We are open daily
(9:00 am - 5:00 pm)
www.nilai.edu.my **Closed on Public Holidays**

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Nilai Education Sdn Bhd
Registration No: 199401021536 (307215-P)

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Watch the video
Nilai University

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