

## **NAME OF PROGRAMME**

Bachelor Business Engineering Technology (Hons) in Networking System (BNS)

## **SHORT DESCRIPTION**

With embedded curriculum of professional bodies such Microsoft, COMPTIA to equip students with relevant skills of information technology and management by offering entry, associate and professional certification

## **DESCRIPTION**

The Networking Systems graduate is prepared to take leadership roles in the application, development, and management of advancements in digital technologies such as computers, network communications, high-speed control, smart devices and software (also known as **far-reaching applications**) as there is a constant demand for skilled professionals. Exceptional technical understanding provided by this programme enables graduates to meet the challenges of an ever-evolving digital world. Its strong technical emphasis meets employers' needs and allows the graduates an excellent foundation to enter multiple high-paying career paths. In addition to that, this unique curriculum balances theory with extensive hands-on experience.

## **CAREER OPPORTUNITIES FOR STUDENTS**

- Network administrator
- Network engineer
- Network support specialist
- Entry network technician
- Network specialists
- Network administrator
- Network installer
- Network support engineer
- Network engineer
- System engineer
- Network support specialists
- Network administrators
- Network consultant
- System integrators

## **OBJECTIVES**

This programme is designed to produce:

- Coverage of the academic and vocational aspects equipped with CCNA and CCNP certifications from CISCO, as added value for them to compete in the job market

- Courses focusing on the advancements in digital technologies to create a constant demand for skilled professionals and exciting digital careers
- Students with academic and professional skills to develop solutions in Networking and Engineering Technology context in facilitating the future changes.
- Students with high order skills, such as critical thinkers, independent, cooperative learning, intellectual, communication ability, teamwork capabilities that provide opportunities for job placement or advanced study programmes in relevant area.

## MODULES

| SEMESTER  | SUBJECTS  |
|---|---|
| <p><b>Semester 1</b></p> <p>In this semester, students will be equipped with mathematical and language modules as well as IT and engineering technology (ET) skills. At the end of the semester, students will have the opportunity to expose themselves to various terminologies and basic concepts on each module. These skills are imperative in ensuring the students conception of computer systems and communication to equip them for a smooth transition to the subsequent modules.</p> | <ul style="list-style-type: none"> <li>• Mathematics for Technologies 1 (Mathematic Module)</li> <li>• Fundamental English (Language Module)</li> <li>• Principles of Computer Programming (Programming module)</li> <li>• Introduction to Computing and Information System</li> <li>• Data Communications</li> <li>• Digital Principles (ET module)</li> </ul> |
| <p><b>Semester 2</b></p> <p>Business, programming and ETs module help to develop the students' knowledge and skills, as well as the ability to engage in independent and lifelong learning. The CCNA module provides students with details for more advanced study in subsequent semesters. The knowledge gained through this semester will provide them with a better understanding of the components involved in the networking systems.</p>  | <ul style="list-style-type: none"> <li>• Mathematics for Technologist 2 (Mathematic Module)</li> <li>• Professional English 1(Language Module)</li> <li>• Technopreneurship (Business module)</li> <li>• Object Oriented Programming (Programming module)</li> <li>• Digital System (ET module)</li> <li>• Network Fundamentals (CCNA module)</li> </ul>        |

|   |   |
|---|---|
| <p><b>Semester 3</b></p> <p>The CCNA modules enables students to move towards the advanced modules which expand students' knowledge and efficiency in the pursued of understanding the networking system.</p>   | <ul style="list-style-type: none"> <li>• Engineering Mathematics 1 (Mathematic Module)</li> <li>• Professional English 2 (Language Module)</li> <li>• Data Structures and Algorithms (Programming module)</li> <li>• Microprocessor (ET module)</li> <li>• Routing Protocols and Concepts (CCNA module)</li> <li>• LAN Switching (CCNA module)</li> </ul> |
| <p><b>Semester 4</b></p> <p>More skills and different environment will be equipped in OS module also Wireless network and Database Management Systems subjects.</p>   | <ul style="list-style-type: none"> <li>• System Tools and Administration (OS module)</li> <li>• Wireless Network</li> <li>• Database Management Systems</li> <li>• WAN Technology (CCNA module)</li> <li>• Innovation Management (Business module)</li> </ul>   |
| <p><b>Semester 5</b></p> <p>The CCNP modules exposed students to more advanced concepts, skills and issues in the related areas and also as additional Network Security and Telecommunications courses.</p>   | <ul style="list-style-type: none"> <li>• Advanced Routing (CCNP module)</li> <li>• Multilayer Switching(CCNP module)</li> <li>• System and Network Programming (OS module)</li> <li>• Network Security</li> <li>• Telecommunications</li> <li>• Mandarin 1 (Language Module)</li> </ul>   |
| <p><b>Semester 6</b></p> <p>The CCNP modules develop skills and capabilities in solving problems and exposing students to the idea of multi solution to solve a problem. Students also are presented with electives. Besides that, this semester will help students to develop their research skills through the Research Methodology module. As an addition, students will be exposed to important management skills such as coordinating and integrating flows within and among companies. They will also be exposed to the skill needed in managing a project as</p> | <ul style="list-style-type: none"> <li>• Elective BNS 1**</li> <li>• Networks Troubleshooting (CCNP module)</li> <li>• Project Management</li> <li>• Research Methodology</li> <li>• Mandarin 2</li> </ul>  |

|  |   |
|--|---|
| they start to identify their own project.  |   |
| <p><b>Semester 7</b></p> <p>The semester culminates in the Networking System Project which integrates skills, knowledge and understanding from the full programme. Students will also conclude their project through the Final Year Project 2 course.</p>  | <ul style="list-style-type: none"> <li>• Elective BNS 2**</li> <li>• Elective BNS 3**</li> <li>• Network Management</li> <li>• Cyber Law</li> <li>• Final Year Project</li> </ul> |
| <p><b>Semester 8</b></p> <p>This semester is an industrial exposure through the Industrial Training / Internship programme as part of the curriculum to increase employability amongst BNS students. The industrial training will provide them with invaluable insights of the networking system industry. In many occasions, the placements will offer opportunities for full time employment later on.</p> | <ul style="list-style-type: none"> <li>• Industrial Training</li> </ul>   |

## PROFESSIONAL CERTIFICATES

We provide opportunities for the students to take Cisco certification, an industry recognized credential that can be used to effectively validate one's skills in Networking. The Cisco certification are offered in the following certification types:-

- CCENT certification
- CCNA Routing & Switching certification
- CCNP Routing & Switching certification

## COLLABORATION

Strong relationship with Alumni with many workshops, professional talks, competitions and sharing session conducted.



Collaboration with well-known certification bodies and industries such Cisco System and Cisco Networking Academy

## **INDUSTRY COLLABORATION**

Cisco System and Cisco Networking Academy