

# COLLEGE OF COMPUTING AND INFORMATICS (CCI)

The College of Computing and Informatics (CCI) at UNITEN is dedicated to establishing itself as the premier institution for cutting-edge, dynamic, and market-driven education in computing and informatics. CCI offers a wide array of academic programmes aimed at cultivating graduates who not only possess comprehensive skills and expertise across all facets of computer science and information technology but also demonstrate robust personal attributes, and most importantly job-ready!

Recognised by:

- Ministry of Higher Education
- Self-accrediting Private University
- Malaysia Board of Technologists





## Programmes offered by CCI

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### Foundation in Computer Science

R3/0011/3/0012 (11/28) (MQA/A9112)

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### Foundation in Information Technology

R3/0011/3/0013 (11/28) (MQA/A9149)

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### Diploma in Computer Science

R2/0613/4/0005 (03/27) (MQA/FA0941)

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### Bachelor in Computer Science (Cyber Security) (Honours)

R/0613/6/0010 (09/27) (MQA/FA15826)

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### Bachelor in Computer Science (Systems and Networking) (Honours)

R3/0613/6/0012 (03/29) (MQA/A9889)

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### Bachelor in Software Engineering (Honours)

R2/0613/6/0011 (03/26) (MQA/A9890)

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### Bachelor in Information Systems (Business Analytics) (Honours)

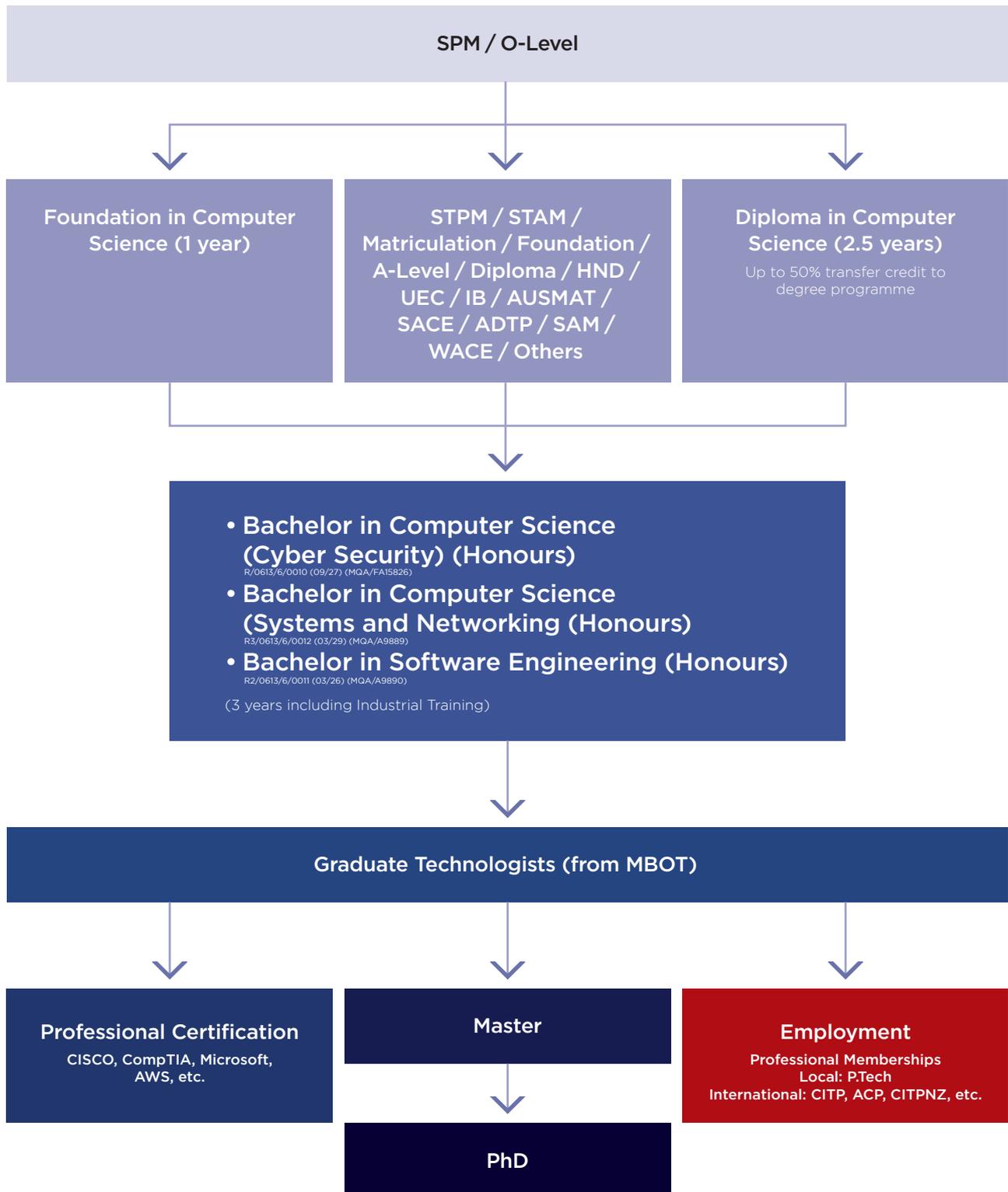
R2/0611/6/0005 (03/26) (MQA/A9887)

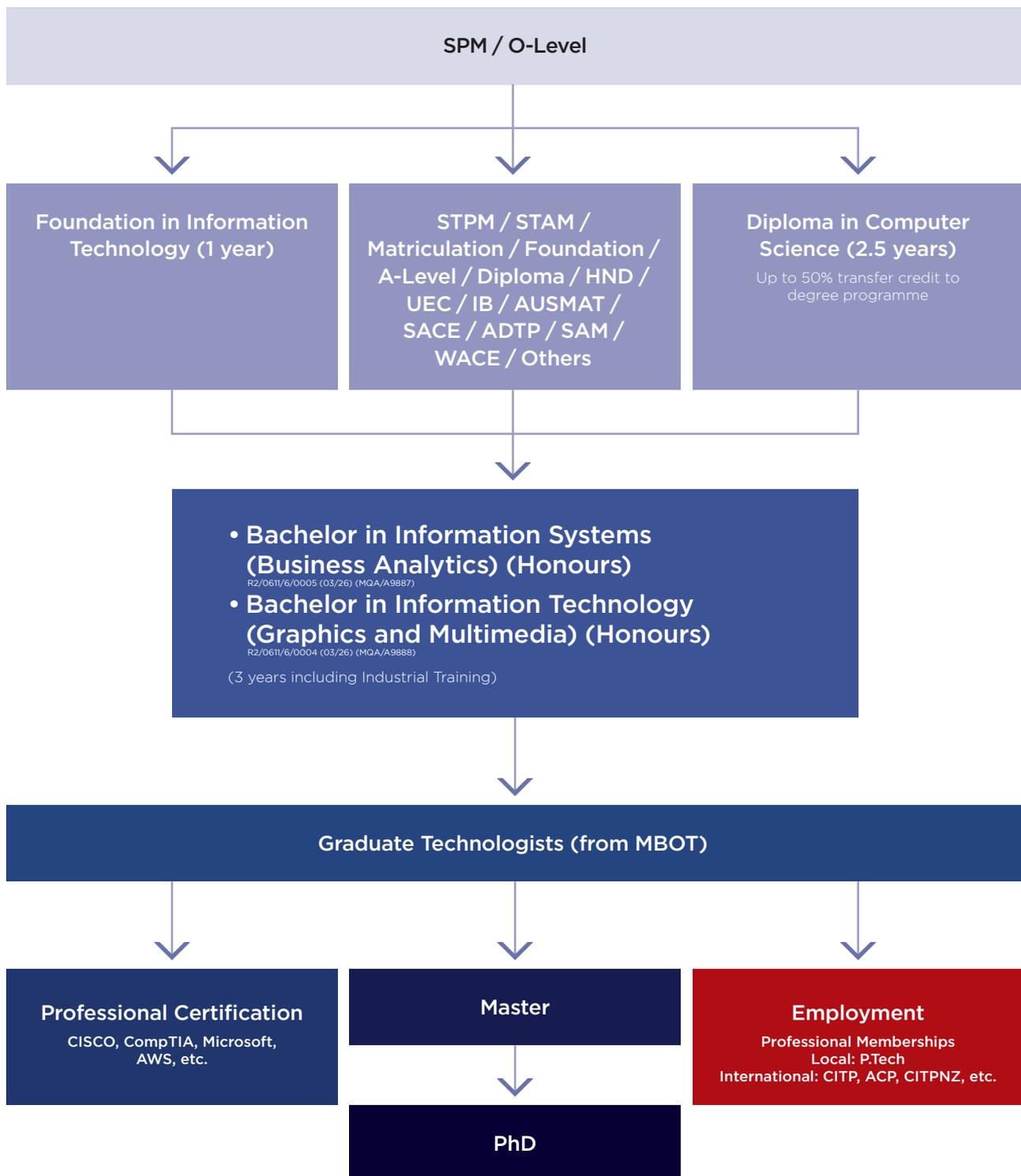
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### Bachelor in Information Technology (Graphics and Multimedia) (Honours)

R2/0611/6/0004 (03/26) (MQA/A9888)

# Pathways





# Foundation in Computer Science

R3/0011/3/0012 (11/28) (MQA/A9112)



🕒 1 year

📄 50 credit hours

📅 January, July,  
and September

## Prospect

This one-year programme serves as an introductory path for those aspiring to pursue degrees in Bachelor in Computer Science (Systems and Networking) (Honours), Bachelor in Software Engineering (Honours), and Bachelor in Computer Science (Cyber Security) (Honours).

The Foundation in Computer Science programme is meticulously crafted to unlock the potential of aspiring computer scientists. With a comprehensive syllabus covering essential subjects like Computing, Web Development, Data Fundamentals, and Computational Mathematics, students gain vital skills for their academic journey.

Beyond traditional lectures, our programme emphasizes hands-on learning through supervised labs and workshops. Here, students actively apply their knowledge in collaborative projects, becoming adept problem solvers and prepared for the dynamic world of technology

# Foundation in Information Technology

R3/0011/3/0013 (11/28) (MQA/A9149)

The Foundation in Information Technology programme is carefully designed to equip students for success in their future academic pursuits. The curriculum encompasses essential subjects like Computing, Web Development, Data Fundamentals, Algebra, Business Mathematics, and more.

Beyond traditional lectures, students participate in supervised labs and workshops, enhancing their learning through collaborative teamwork, case studies, and hands-on projects in real-world scenarios

🕒 1 year

📄 50 credit hours

📅 January, July, and September

## Prospect

This one-year programme offers a gateway for those keen on Bachelor in Information Systems (Business Analytics) (Honours) and Bachelor in Information Technology (Graphics and Multimedia) (Honours)



# Diploma in Computer Science

R2/0613/4/0005 (03/27) (MQA/FA0941)



Discover a dynamic learning experience with our Diploma in Computer Science. Our programme is designed to provide a comprehensive understanding of computer science fundamentals while delving into specialized areas like user experience (UX), cyber security, artificial intelligence, and web development.

Dive into a curriculum featuring Data Communication and Computer Networks, Fundamentals of Data Science, Programming, System Analysis, and more. With a focus on hands-on learning, our diploma places a premium on practical skills, ensuring you are equipped to excel through interactive labs, projects, and assessments

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🕒 2.5 years

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📄 90 credit hours

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📅 January, July, and September

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## Potential Career Paths

With such comprehensive coverage and combination of subjects, Diploma in Computer Science allows graduates to pursue Bachelor programme under Computer Science or Information Technology.

Popular roles and career pathways for graduates of Diploma in Computer Science include:

- Software developer
- Software tester
- Web developer
- AI engineer
- Backend developer
- Business analyst
- Quality assurance analyst
- Computer operator
- IT technical support engineer
- IT executive

# Bachelor in Computer Science (Cyber Security) (Honours)

R/0613/6/0010 (09/27) (MQA/FA15826)

This programme delves into computer science fundamentals while placing a profound emphasis on the theoretical and practical facets of cybersecurity. Encompassing subjects like cryptography, computer security, network security, information security assurance, and network penetration and countermeasures, this programme equips students with indispensable skills for the evolving digital landscape. Graduates emerge proficient in core computer science domains such as Programming, Software Development, Data Communication & Networks, Computer Organization, and Operating Systems.



Graduating from this programme also means that students will be equipped with the fundamental knowledge of computer science, including but not limited to Programming, Software Development, Data Communication & Network, Computer Organisation, and Operating Systems.

This Bachelor in Computer Science (Cyber Security) (Honours) programme is also designed to enable students to pursue higher qualifications, such as to obtain a higher-level specialised Master and Doctor of Philosophy from reputable institutions of higher learning.

🕒 3 years

📄 120 credit hours

📅 January, July, and September

## Potential Career Paths

With Bachelor in Computer Science (Cyber Security) (Honours), graduates can pursue a career as:

- Cryptographer
- Cryptologic Intelligence Analyst
- Cyber Operation Specialist
- Digital Forensics Investigator / Analyst
- Information Security Officer
- Penetration Tester / Vulnerability Assessor
- Secure Software Developer
- Security Administrator / Analyst
- Security Auditor / Consultant
- Security Engineer
- Security Incident Responder
- System Administrator

# Bachelor in Computer Science (Systems and Networking) (Honours)

R3/0613/6/0012 (03/29) (MQA/A9889)

Engineered to launch students into the professional arena, this programme furnishes them with essential proficiencies in communication, networking, operating systems, mobile and embedded technologies, computer security, artificial intelligence, and other critical domains vital for the impending fifth industrial revolution (IR5.0).

Notably, the programme integrates specialized syllabi from CCNA (Cisco Certified Network Associates) certification courses, offering students a distinct competitive edge. Furthermore, the curriculum positions students for advanced qualifications in systems and networking, paving the way for pursuits such as higher-level specialized networking certifications and advanced degrees

🕒 3 years

📄 120 credit hours

📅 January, July,  
and September

## Potential Career Paths

With Bachelor in Computer Science (Systems & Networking) (Honours), graduates can pursue a career as:

- Communication and Electronic Warfare
- Computer and Network Researcher
- Computer Programmer
- Embedded System Programmer
- Software Defined Network Developer
- System/Network Administrator
- System/Network Consultant
- System/Network Engineer
- System Integrator
- Telecommunication Analyst



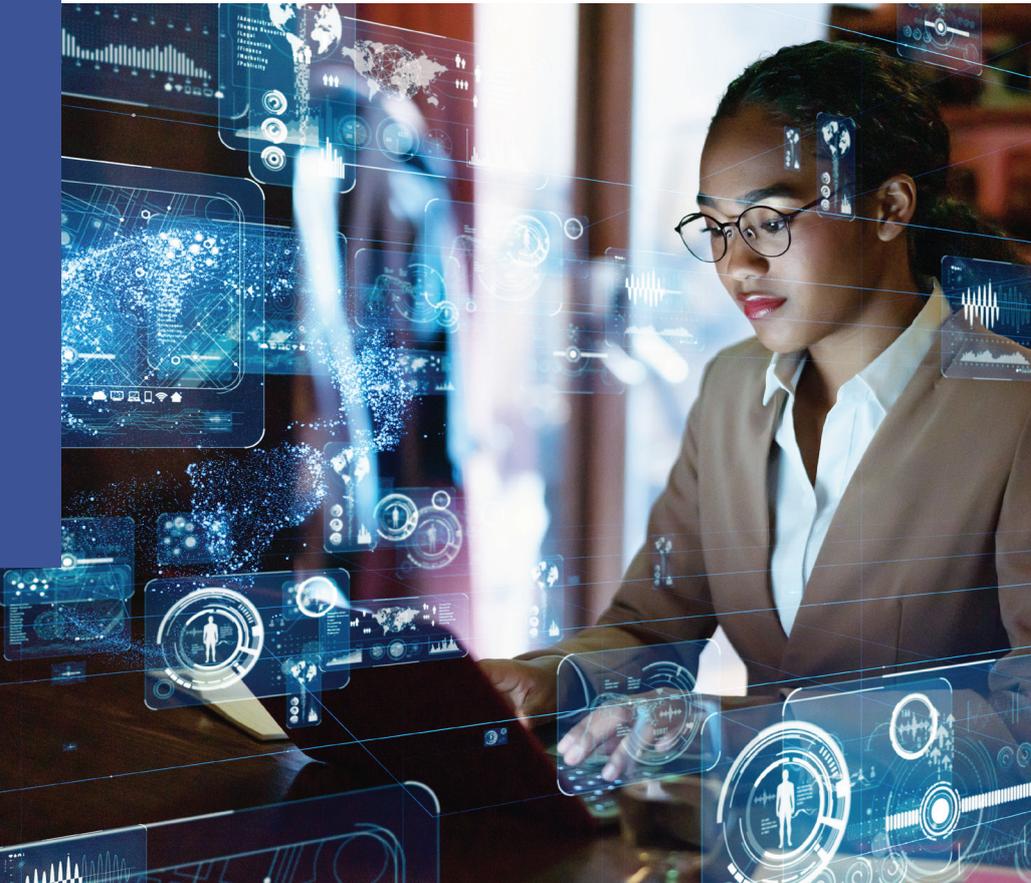


# Bachelor in Information Systems (Business Analytics) (Honours)

R2/0611/6/0005 (03/26) (MQA/A9887)

The Bachelor in Information Systems (Business Analytics) (Honours) programme equips students with essential skills and knowledge for success in business analytics by blending theoretical insights with practical experience. It provides comprehensive training in data analysis, business intelligence, and information systems, including proficiency in advanced analytical tools and data visualization techniques.

The curriculum covers information systems design, implementation, and management, fostering a data-driven decision-making mindset. This prepares graduates for thriving careers in today's data-centric landscape, making them valuable assets in industries like finance, healthcare, technology, and retail.



🕒 3 years

📄 120 credit hours

📅 January, July,  
and September

## Potential Career Paths

With Bachelor in Information Systems (Business Analytics) (Honours), graduates can explore opportunities as:

- Data Analyst
- Business Intelligence Analyst
- Data Scientist
- Business Analyst
- Database Administrator
- Data Engineer
- Digital Transformation Analyst
- Digital Marketing Analyst
- Project Manager
- Quality Assurance Analyst
- IT Consultant

# Bachelor in Information Technology (Graphics and Multimedia) (Honours)

R2/0611/6/0004 (03/26) (MQA/A9888)



Explore the dynamic fusion of computer graphics and multimedia technology systems in this captivating programme, where the emphasis is on blending IT proficiency, technical expertise, and strong interpersonal skills. Graduates emerge as versatile professionals, adept at navigating the intersections of multimedia applications and technology-driven industries. From Artificial Intelligence to System Analysis and Design, Multimedia Application and Authoring, Image Processing, and Game Design, the curriculum offers a rich array of subjects.

By programme's end, graduates possess a robust comprehension of hardware, software, and the technical intricacies of manipulating multimedia elements digitally, positioning them as invaluable assets in both IT industries and Graphics and Multimedia domains.

🕒 3 years

📄 120 credit hours

📅 January, July, and September

## Potential Career Paths

With Bachelor in Information Technology (Graphics and Multimedia) (Honours), graduates can explore opportunities as:

- Advertising Manager
- Animators
- Creative Designer
- Digital Marketer
- Game Programmer / Tester
- Installation Artist
- Instructional Designer
- IT Support/Helpdesk
- Media Analyst/Strategist
- Multimedia Artist/Designer
- On-Line Publishing Editor/Designer
- Product Development Manager
- UI/UX Designer
- Web Designer