

POLITEKNIK TUANKU SYED SIRAJUDDIN



**DEPARTMENT OF INFORMATION &
COMMUNICATION TECHNOLOGY**

DIPLOMA OF INFORMATION TECHNOLOGY (DIT) STUDENT HANDBOOK

**VOLUME 4TH
SESSION 1: 2025/2026**

PREPARE FOR YOUR ACADEMIC JOURNEY!

Contributors List

ACKNOWLEDGING OUR TALENTED TEAM MEMBERS



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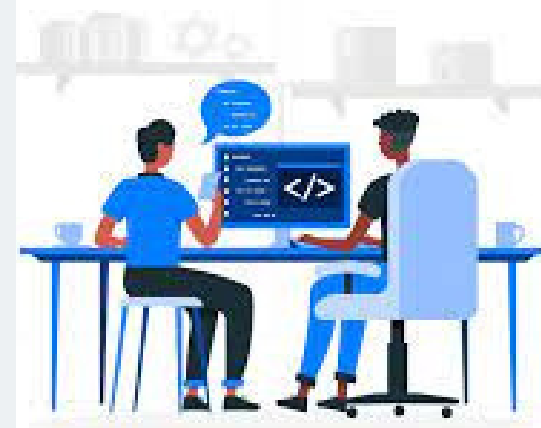


FIRDAUS BIN IDERUS

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INTRODUCING POLITEKNIK TUANKU SYED SIRAJUDDIN

Politeknik Tuanku Syed Sirajuddin (PTSS) is a government-funded polytechnic in Malaysia and part of the national network of polytechnics under the Ministry of Education. Located in Perlis, PTSS serves students from Perlis and nearby states, offering applied, industry-aligned diploma programs designed to prepare graduates for technical and service-sector careers. Named in honor of Tuanku Syed Sirajuddin, a prominent Perlis royal figure and former Yang di-Pertuan Agong, the institution emphasizes hands-on learning through modern laboratories and workshops, with industrial training or internships that connect students with employers. Its programs are designed to meet national standards and are accredited by the Malaysian Qualifications Agency (MQA); graduates can enter the workforce directly or pursue further study via credit-transfer or top-up degree pathways at partner universities. Beyond academics, PTSS provides student services, a library, and opportunities for clubs and activities to support a well-rounded experience.



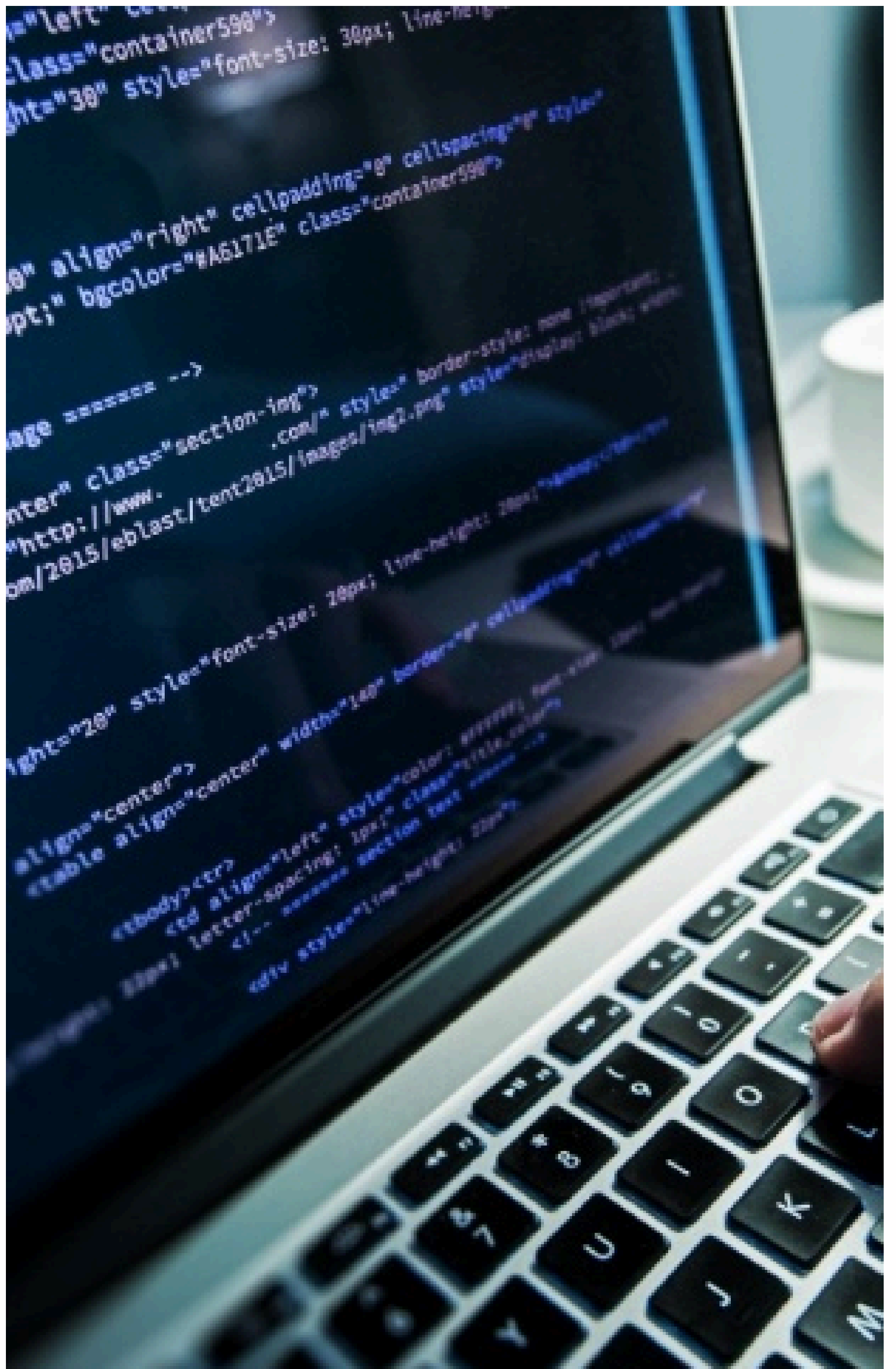
INTRODUCING DEPARTMENT OF INFORMATION & COMMUNICATION TECHNOLOGY

JTMK stands for Jabatan Teknologi Maklumat dan Komunikasi (Department of Information and Communication Technology), and it is one of the academic departments at Politeknik Tuanku Syed Sirajuddin (PTSS), located in Arau, Perlis, Malaysia. The department plays a key role in developing skilled professionals in the field of ICT by offering industry-relevant diploma program and hands-on technical training. JTMK is committed to providing quality education that aligns with current technological trends and meets the needs of both public and private sectors.

Handbook Aim

Essential Guide for DIT Students

Provide essential information for students enrolled in the DIT programme at Department of Information & Communication Technology at Politeknik Tuanku Syed Sirajuddin for the 2025/2026 academic session. This handbook is prepared to give students a comprehensive overview of department policies, procedures, academic guidelines, and available resources. It serves as a guide to help you navigate your academic journey successfully.





VISION

To become an
excellent TVET
institution

MISSION

To provide wide
access to quality and
recognised TVET
programmes

To empower
communities through
lifelong learning

To develop holistic,
entrepreneurial and
balanced graduates

To capitalise on smart
partnership with
stakeholders

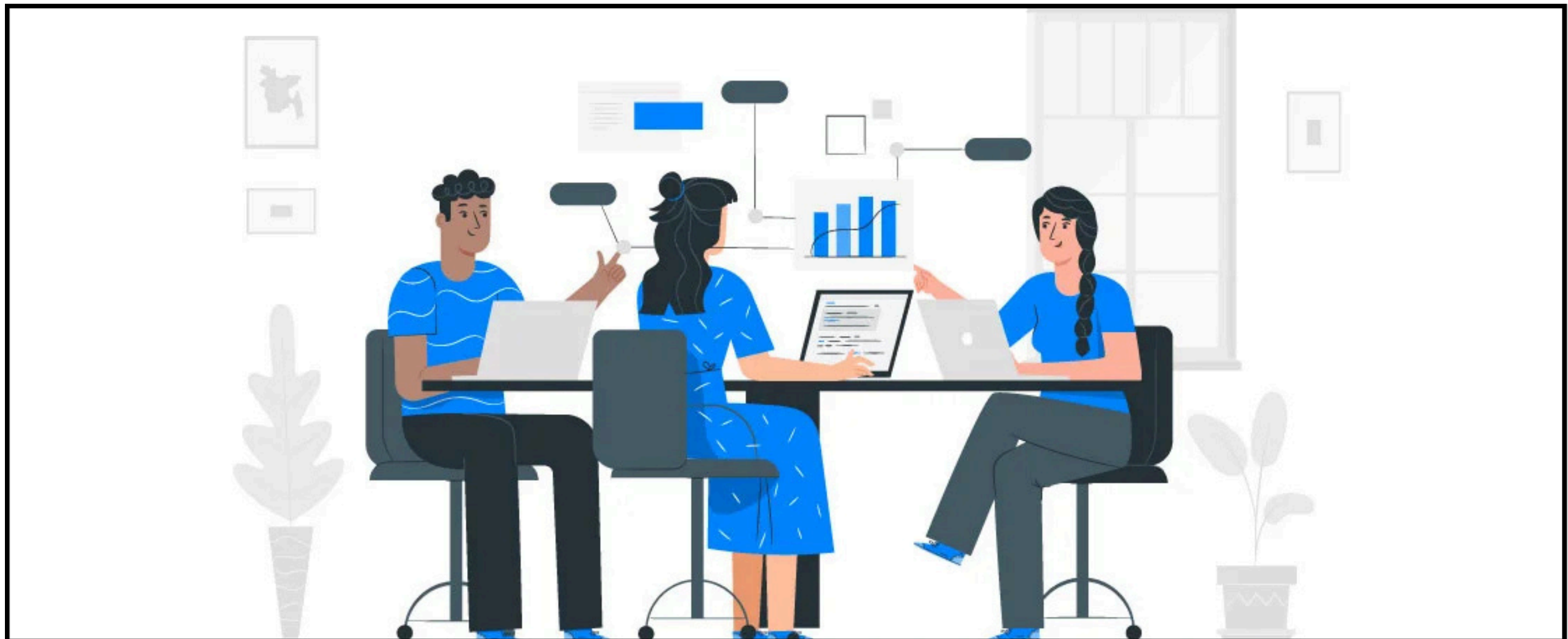
ORGANIZATION CHART

Department of Information & Communication Technology



List of JTMK lecturers

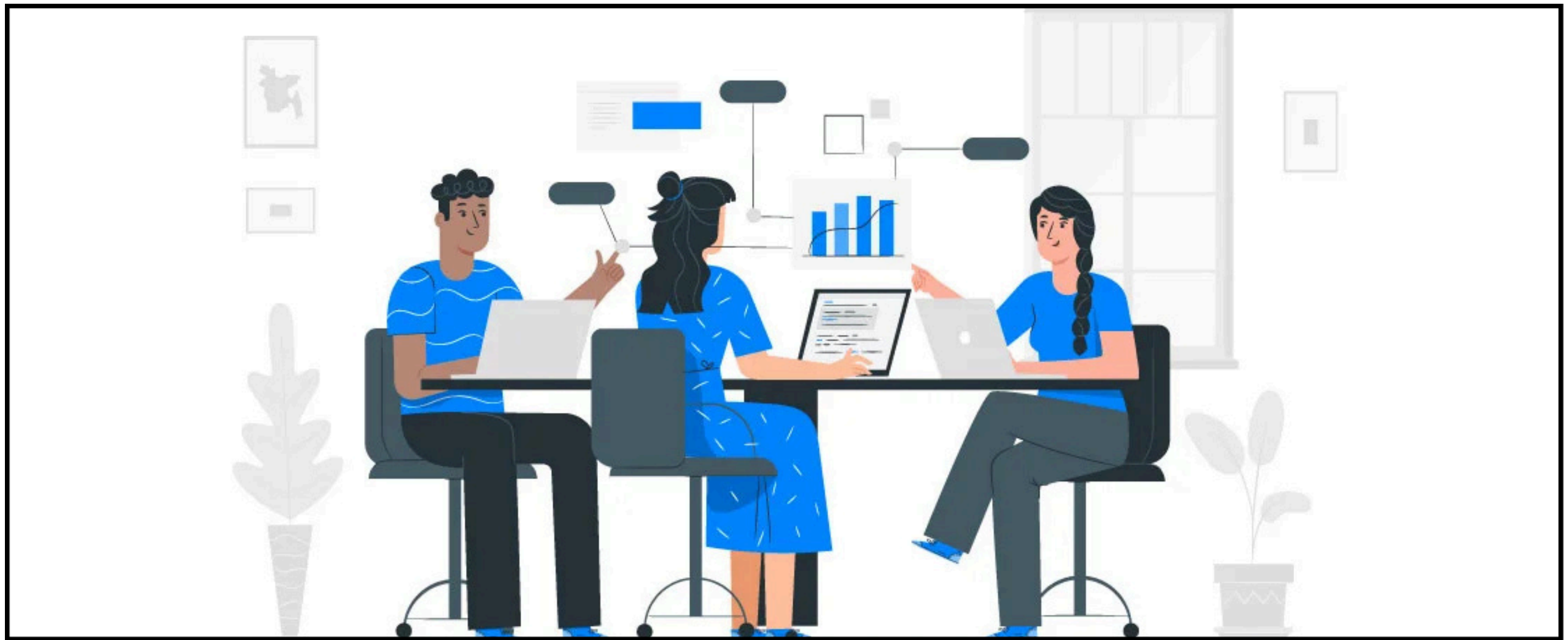
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DIPLOMA IN INFORMATION TECHNOLOGY (DIT)

PROGRAMME OVERVIEW

The curriculum is designed to align with professional certifications and industry-led standards such as CompTIA A+, Oracle Java Certification, Microsoft Certified Systems Administrator (MCSA), Microsoft Certified Desktop Support Technician (MCDST), Cisco Certified Network Associate (CCNA), EC-Council Network Security (ENSA), Certified Ethical Hacker (CEH), Amazon Web Services (AWS), Google Analytics, Data Science, Machine Learning with Python, Python programming, and Infosys Campus Connect program. These collaborations provide students with the opportunity to sit for professional certification exams by the end of the final semester, adding value to their qualifications and ensuring that the skills and knowledge gained are aligned with industry needs.

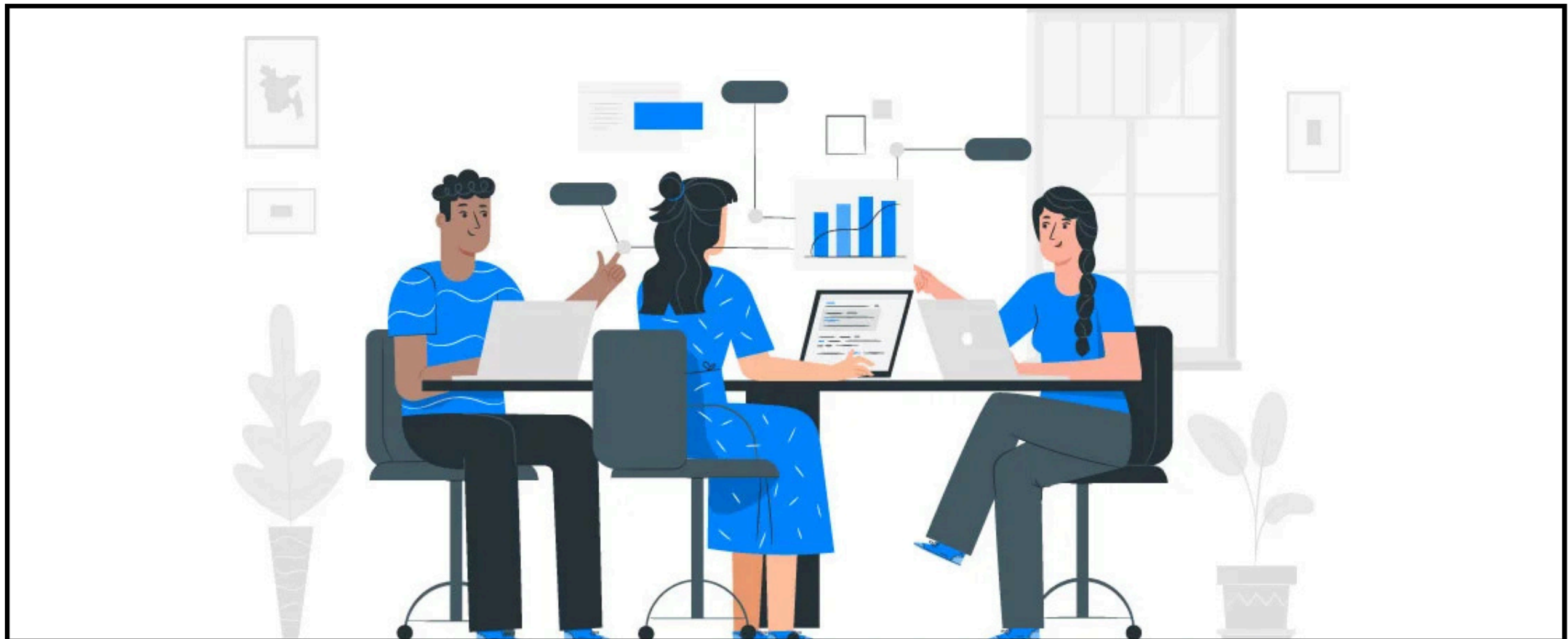


DIPLOMA IN INFORMATION TECHNOLOGY (DIT)

PROGRAMME OVERVIEW

Recognizing the rapid pace of technological advancement and the evolving needs of industries today, the Department of Polytechnic & College Community Education (POLYCC) has collaborated closely with major industry players in developing and continuously reviewing the curriculum for the ICT program. This partnership aims to ensure students acquire timely knowledge and relevant skills to tackle global challenges and meet industry demands. The Diploma in Information Technology (DIT) program consists of six semesters, including industrial training which students will undergo during semester six.

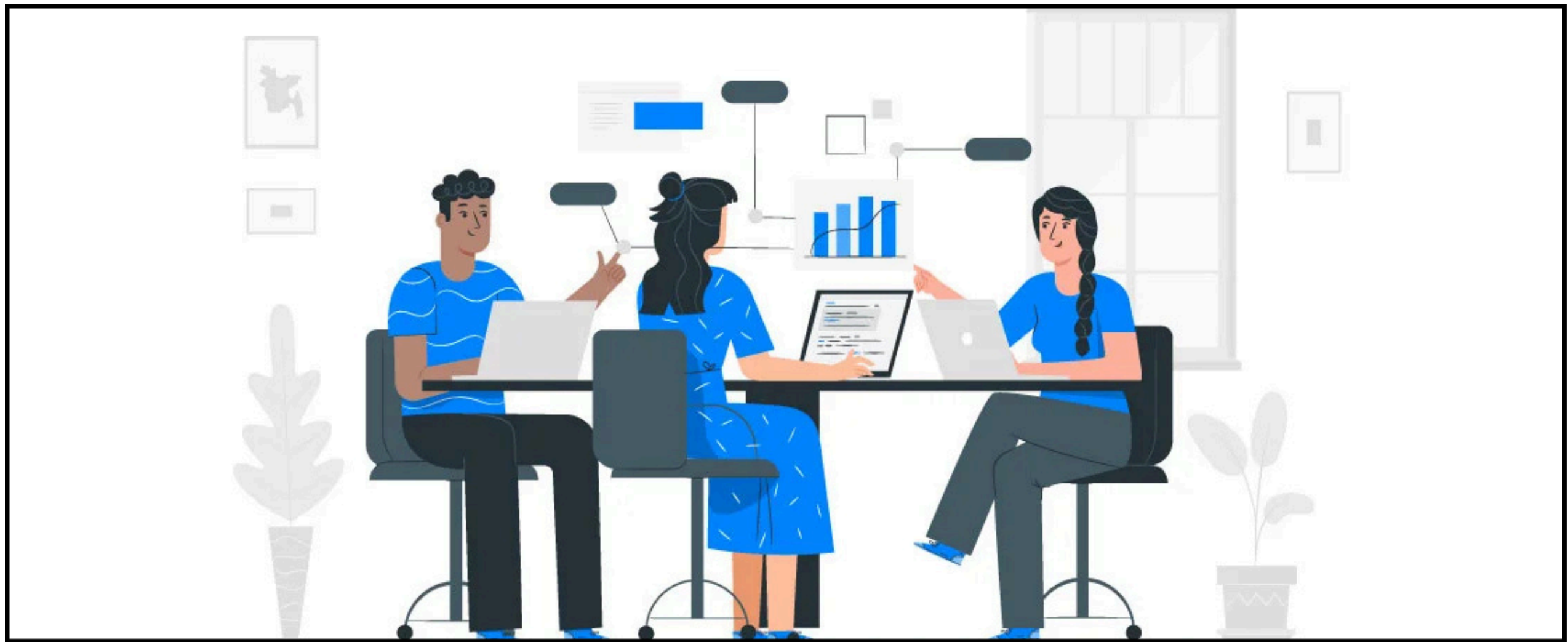
To achieve an integrated learning experience, the program employs pedagogical approaches that combine classroom instruction with structured, simulated real-life working environments. This approach prepares students to gain a competitive edge in today's dynamic workplace.



DIPLOMA IN INFORMATION TECHNOLOGY (DIT)

SYNOPSIS

This program offers education and training in the field of Computing, with a specific focus on Information Technology. The courses are designed to provide students with foundational knowledge and practical skills, opening up a wide range of career opportunities across various ICT sectors. Additionally, the program equips students with transferable skills and multi-skilling abilities, enabling them to adapt to emerging technologies and industry changes. Besides technical coursework, students also learn English for Digital Technology, Penghayatan Etika dan Peradaban, Pengajian Islam or Pendidikan Moral, and Co-Curriculum, to enhance their soft skills and holistic development. Emphasizing self-initiated learning and practical competencies, graduates of this program are well-prepared to meet the demands of the ever-evolving ICT industry.

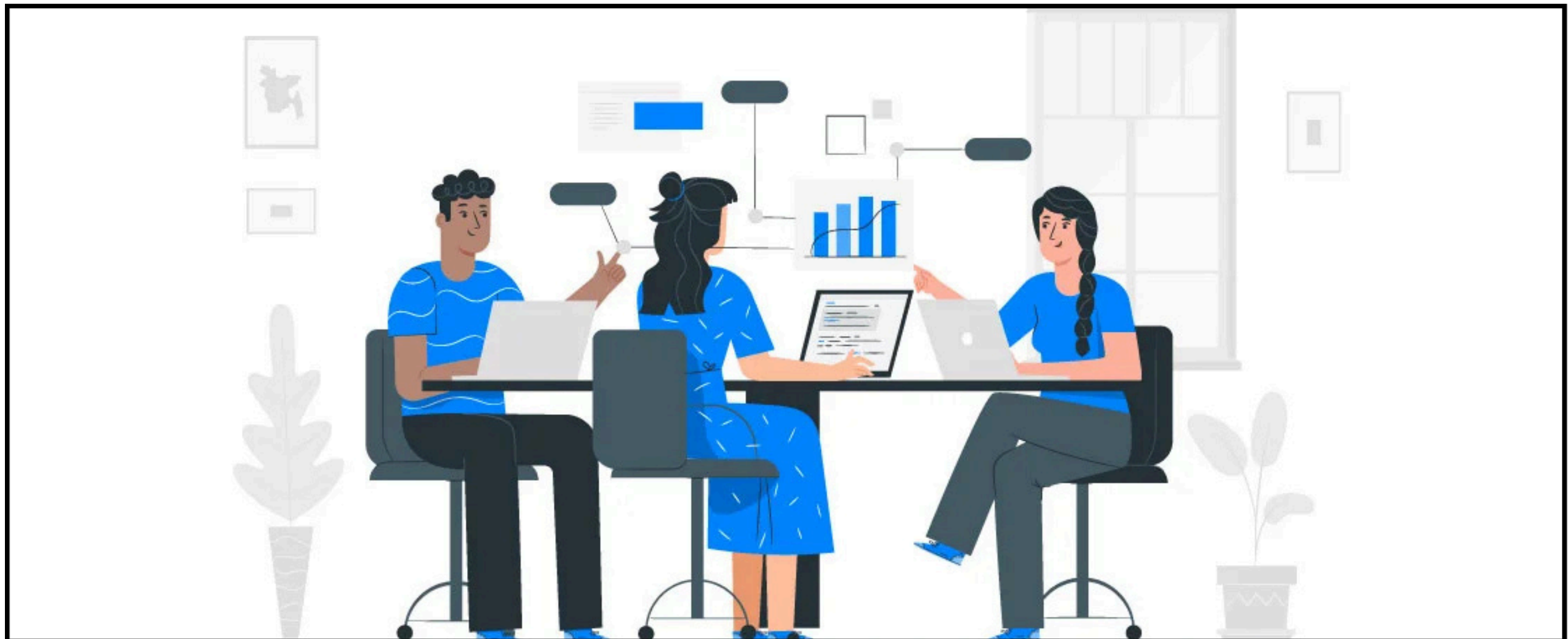


DIPLOMA IN INFORMATION TECHNOLOGY (DIT)

JOB PROSPECT

This programme provides knowledge and skills in the field of Information Technology which can be applied for careers in the related field. Thus, graduates from this programme are equipped with the knowledge, skills, attitude and abilities that can be applied to a broad range of careers in the ICT industrial worlds and businesses. The knowledge and skills that the students acquire from the programme will enable them to participate in the job market such as:

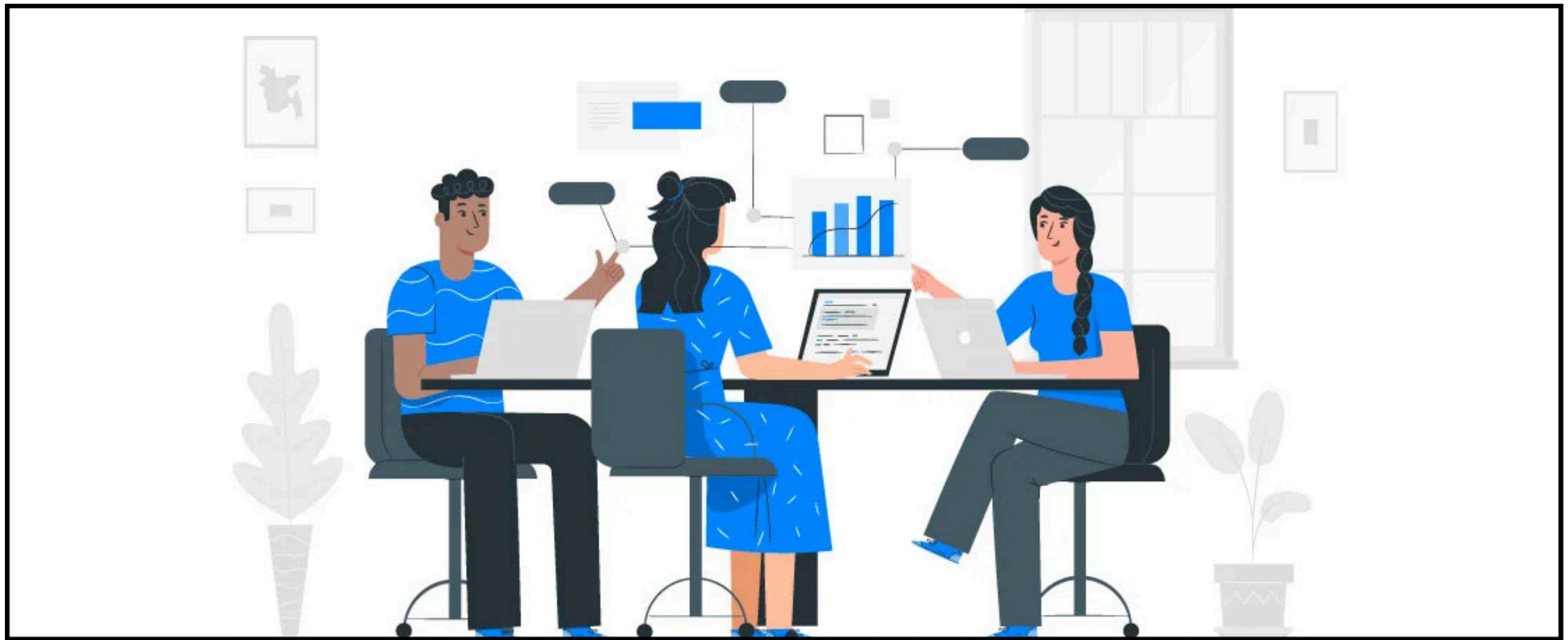
1. Computer Application Programmer
2. Internet Programmer
3. Web Programmer
4. Database Programmer
5. System Analysts Assistant
6. Software Developer
7. Database Administrator
8. Software Tester
9. System Support Personnel
10. Technical Helpdesk / Support



DIPLOMA IN INFORMATION TECHNOLOGY (DIT)

PROGRAMME AIM

The programme believes that every individual has potential to foster adaptable and responsible Information and Communication Technology (ICT) Assistant with new technological advancement in supporting the national digital initiative transformation agenda.

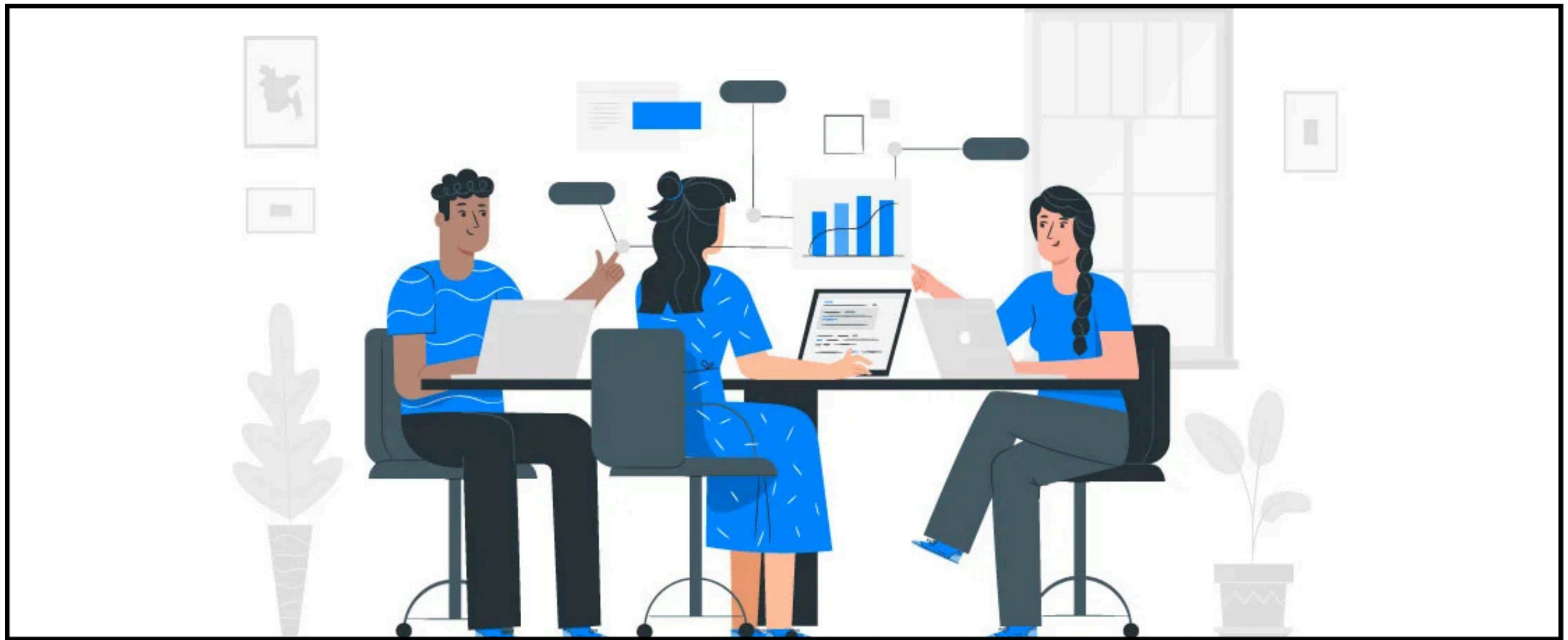


DIPLOMA IN INFORMATION TECHNOLOGY (DIT)

PROGRAMME EDUCATIONAL OBJECTIVE (PEO)

The Diploma in Information Technology programme shall produce semi-professionals ICT practitioners who are capable to be:

- PEO1: Computer technicians have basic knowledge with numeracy and technical skill to solve well-defined and routine problems in computing in line with the industry requirements.
- PEO2: Computer technicians have the supervisory ability and good interpersonal and communication skills to interact in various environments.
- PEO3: Computer technicians have a commitment to lifelong learning and an entrepreneurial mindset for self and career development.
- PEO4: Computer technicians who are committed to ethical conduct and professional practices in the organization and society.

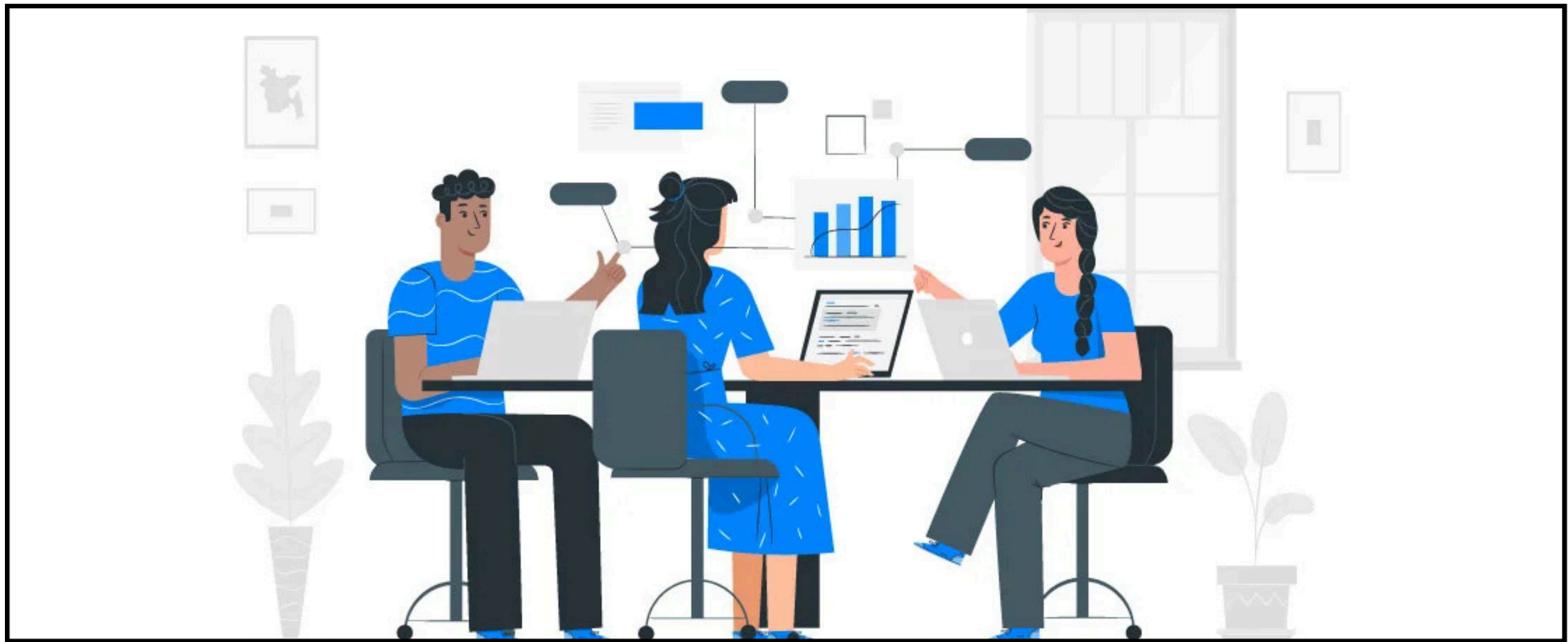


DIPLOMA IN INFORMATION TECHNOLOGY (DIT)

PROGRAMME LEARNING OUTCOME (PLO)

Upon completion of the programme, students should be able to:

- PLO1: Explain concepts, principles and theories relating to Information Technology.
- PLO2: Apply design and architecture to Information Technology solutions using appropriate tools and techniques.
- PLO3: Perform support and development tasks on Information Technology solutions related to job functions.
- PLO4: Demonstrate effective interaction with stakeholders and society in a work-related environment.
- PLO5: Exhibit effective communication with stakeholders and society in a work-related environment.



DIPLOMA IN INFORMATION TECHNOLOGY (DIT)

PROGRAMME LEARNING OUTCOME (PLO)

- PLO6: Use appropriate digital tools on computing related to job functions.
- PLO7: Apply appropriate numerical skills in computing related to job functions.
- PLO8: Demonstrate supervisory skills and responsibility in executing instructions related to job functions.
- PLO9: Commit to principles of lifelong learning in academic and career development.
- PLO10: Demonstrate an entrepreneurial mindset in performing tasks.
- PLO11: Commit to professional and ethical practices in executing instructions related to the job and organizational functions.

DIT PROGRAMME STRUCTURE

CLASSIFICATION	COURSE CODE	COURSE NAME	CONTACT HOURS				CREDIT VALUE
			L	P	T	O	
SEMESTER 1							
COMPULSORY	MPU24031	SUKAN 1	0	2	0	0	1
	MPU24041	KELAB/PERSATUAN 1					
	MPU22153	UNIT BERUNIFORM 1					
	MPU22153	ENGLISH FOR DIGITAL TECHNOLOGY	2	0	2	0	3
CORE COMPUTING	DBM10143	CALCULUS AND ALGEBRA	2	0	2	0	3
	DFC10263	COMPUTERE ARCHITECTURE	2	2	0	0	3
	DFC10273	OPERATING SYSTEMS	2	2	0	0	3
	DFC10353	PROGRAMMING FUNDAMENTALS	2	2	0	0	3
TOTAL							16
SEMESTER 2							
COMPULSORY	MPU23162	PENGAJIAN ISLAM*	1	0	2	0	2
	MPU23272	PENDIDIKAN MORAL*					
	MPU24051	SUKAN 2	0	2	0	0	1
	MPU24061	KELAB/PERSATUAN 2					
	MPU24XX1	UNIT BERUNIFORM 2					
CORE COMPUTING	DBM20153	DISCRETE MATHEMATICS	2	0	2	0	3
	DFC20283	DATABASE FUNDAMENTALS	2	2	0	0	3
	DFC20293	NETWORK AND DATA COMMUNICATION	2	3	0	0	3
	DFC20313	CYBERSECURITY FUNDAMENTALS	2	3	0	0	3
DISCIPLINE CORE	DFK20013	WEB DESIGN TECHNOLOGY	2	3	0	0	3
TOTAL							18
SEMESTER 3							
CORE COMPUTING	DBM30263	STATISTIC AND PROBALITY	2	2	0	0	3
	DFC30333	ETHICS IN COMPUTING	2	3	0	0	3
DISCIPLINE CORE	DFK30023	USER EXPERIENCE FUNDAMENTALS	2	3	0	0	3
	DFK30333	CYBERPRENEURSHIP	2	3	0	0	3
	DFK30053	OBJECT ORIENTED PROGRAMMING	2	3	0	0	3
STRUCTURE EFFECTIVE		SUBJECT 1					3
TOTAL							18
SEMESTER 4							
CORE COMPUTING	DFC40343	SYSTEM ANALYSIS AND DESIGN FUNDAMENTALS	2	2	0	0	3
DISCIPLINE CORE	DFK40063	SERVER ADMINISTRATION	2	3	0	0	3
	DFK40073	CLOUD COMPUTING	2	3	0	0	3
STRUCTURE ELECTIVE		SUBJECT 2					3
		SUBJECT 3					3
		SUBJECT 4					3
TOTAL							18
SEMESTER 5							
COMPULSORY	MPU22071	KURSUS INTEGRITI DAN ANTI RASUAH (KIAR)	0	0	2	0	1
	MPU21072	PENGHAYATAN ETIKA DAN PERADABAN	1	0	2	0	2
DISCIPLINE CORE	DFK50083	PHYTON PROGRAMMING	2	3	0	0	3
	DFK50093	COMPUTER NETWORK SECURITY	2	3	0	0	3
STRUCTURE ELECTIVE		SUBJECT 5					3
PROJECT		PROJECT					4
TOTAL							16
SEMESTER 6							
INDUSTRIAL TRAINING	DUT60089	INDUSTRIAL TRAINING	0	0	0	0	9
TOTAL							
TOTAL CREDIT VALUE							95

SOFTWARE & APPLICATION DEVELOPMENT TRACK

CLASSIFIC ATION	COURSE CODE	COURSE NAME	CONTACT HOURS				C R E D I T V A L U E	PRERE QUISIT E
			L	P	T	O		
STRUCTURE ELECTIVE OF SOFTWARE AND APPLICATION DEVELOPMENT TRACK								
SUBJECT 1	DFP30313	DIGITAL MULTIMEDEA	1	4	0	0	3	
SUBJECT 2	DFP40433	BUSINESS INTELLIGENCE	1	4	0	0	3	DFC20283
SUBJECT 3	DFP40443	FULL STACK WEB DEVELOPMENT	1	4	0	0	3	DFC20283 DFK20013
SUBJECT 4	DFP40453	MOBILE APPLICATION DEVELOPMENT	1	3	0	0	3	DFK30053
SUBJECT 5	DFP50463	JAVA-BASED APPLICATION DEVELOPMENT	2	3	0	0	3	DFC20283 DFK30053
PROJECT COURSE OF SOFTWARE AND APPLICATION DEVELOPMENT TRACK								
PROJECT	DFT50194	INTEGRATED PROJECT	2	3	0	0	4	ALL CORE COMPUTING COURSES
FREE ELECTIVE								
1	DUD10012	DESIGN THINKING	1	0	0	1	2	
2	DUG30032	GREEN TECHNOLOGY COMPLIANCE	1	2	0	0	2	

NETWORKING SYSTEM TRACK

CLASSIFIC ATION	COURSE CODE	COURSE NAME	CONTACT HOURS				C R E D I T V A L U E	PRERE QUISIT E
			L	P	T	O		
STRUCTURE ELECTIVE OF NETWORKING SYSTEM TRACK								
SUBJECT 1	DFN30533	SWITCHING AND ROUTING ESSENTIALS	1	4	0	0	3	DFC20293
SUBJECT 2	DFN40503	EMENDED INTERNET OF THINGS	2	3	0	0	3	
SUBJECT 3	DFN40543	ENTERPRISE NETWORK	1	4	0	0	3	
SUBJECT 4	DFN40553	STRUCTURED CABLING IN NETWORKING	1	4	0	0	3	
SUBJECT 5	DFN50563	ADVANCED SERVER ADMINISTRATION	1	4	0	0	3	
PROJECT COURSE OF NETWORKING SYSTEM TRACK								
PROJECT	DFT50194	INTEGRATED PROJECT	2	3	0	0	4	ALL CORE COMPUTING COURSES
FREE ELECTIVE								
1	DUD10012	DESIGN THINKING	1	0	0	1	2	
2	DUG30032	GREEN TECHNOLOGY COMPLIANCE	1	2	0	0	2	

LIST OF JTMK LABORATORY

NO	LABORATORY	SUPERVISOR
1	Network Laboratory (MRK)	HELMY BIN MAT LAZIM
2	Digital Laboratory (DIGIT)	DR JAILANI BIN ABDUL KADIR
3	Hypermedia 1 Laboratory (HPM1)	MUSHAHADAH BINTI MAGHRIBI
4	Hypermedia 2 Laboratory (HPM2)	MOHAMAD FARIF BIN JEMILI
5	Game Technology Laboratory (GTP)	DR WAN YUSOFF BIN WAN YAACOB
6	Project Laboratory (MPR)	NOOR HALAWATI BINTI CHE MEH
7	Computer Aided Design 2 Laboratory (CAD2)	HAZILA BINTI HASAN
8	Computer Aided Design 3 Laboratory (CAD3)	AZRAN BIN ABDUL RAZAK
9	Information Technology Laboratory (MTM)	TUNKU KHAIRIYAH BINTI TUNKU NORIZAN