

# MASTER OF SCIENCE IN INFORMATION TECHNOLOGY







# **MScIT at Presidential**

The Presidential MScIT program conceived primarily to suit the needs of the working professionals is a 2 years, 60-credit program structured to allow enough flexibility for (working) students. Equally competitive with the existent full-time courses within the domestic curriculum from national universities, this Westcliff University degree offered by Presidential is an internationally-recognized degree, which is hybrid in nature.

While it adheres to a global standard of curriculum to garner international recognition, it also integrates local business/managerial values along with cutting edge IT skills to produce human resources that cater to the needs of the domestic as well as international market.



### **PHILOSOPHY**

Msc IT is a demanding and valuable global qualification in the growing IT industry. Msc.IT offers all aspects of designing, building and managing data, information and communication technologies with intellectual rigor required in the dynamic business world, ecommerce, health, education and others. In addition, the graduates are proficient problem solvers; and offer inputs to unravel the complexities in the IT domains. Eventually, the program produces executive team leaders who are capable of working effectively in the constantly changing IT world.

Over a million IT jobs are created every year and newer opportunities are opened with a good knowledge and understanding for what is essential. Having an advanced knowledge and understanding gives our students an upper hand in the competitive world of business and employment. Opportunities open up into technical, management and information systems as well as possible individual foundations. Graduates who are able to combine these aspects will have opened to them a wide variety of jobs having high demand. Not to mention how IT has now become a well respected profession among professionals.



#### Why MScIT at Presidential?

- 1. Cutting-Edge Curriculum: Access to the latest and most relevant curriculum, ensuring graduates are well-versed in current technologies and industry trends.
- 2. World-Class Faculty: Learn from experienced professors and industry experts, gaining insights from leaders in the field.
- 3. Research Opportunities: Engage in meaningful research projects, contributing to advancements in the IT field.
- 4. State-of-the-Art Facilities: Benefit from topnotch infrastructure and laboratories, libraries, e-libraries, and other academic resources to enhance the learning experience.
- 5. Industry Connections: Build a strong programs.

- 1. Placement Support: Benefit from strong connections with companies, facilitating job placements for practical experience.
- 7. Holistic Skill Development: Develop a wellrounded skill set, combining technical expertise with critical thinking, problem-solving, and communication skills.
- 8. Alumni Network: Join a powerful alumni network, connecting with successful professionals for mentorship and career quidance.



# Career prospects for MScIT graduates

- **1. Software Developer/Engineer:** Design and develop software applications, systems, and solutions.
- **2.** Data Scientist/Analyst: Analyze and interpret complex data sets to inform business decisions.
- **3. Cybersecurity Analyst:** Protect organizations from cyber threats and ensure the security of their IT infrastructure.
- **4. Network Architect/Engineer:** Design and implement computer networks to meet an organization's needs.
- **5. IT Project Manager:** Lead and manage IT projects, ensuring they are delivered on time and within budget.
- **6. Systems Analyst:** Evaluate and optimize IT systems to meet business requirements and improve efficiency.
- **7. Cloud Solutions Architect:** Design and implement cloud-based solutions for businesses.
- **8.** Business Intelligence (BI) Developer/Analyst: Transform data into actionable insights to support strategic business decisions.
- **9.** Artificial Intelligence/Machine Learning Engineer: Develop and implement AI and ML solutions to solve complex problems.



## CONCENTRATIONS



#### AI & MACHINE LEARNING

Al and Machine Learning concentration provides necessary skills to use scientific methods, processes, algorithms and system to extract ideas, knowledge and visualization through both structural and non-structural data. The aim of this concentration is to provide theoretical as well as practical knowledge on various tools, scientific methods, machine learning algorithms with the goal to discover meaningful information and their visualization from large and complex data. It helps to understand the data and extract meaningful patterns which have a wide range of applications in different fields such as financial services, government, healthcare, retail, insurance, agriculture, robotics, telecommunication etc.



#### **CYBERSECURITY**

Information Security Management at Presidential provide enough practical skills and knowledge to students in Information Security Management Area Network Architecture at Presidential provide enough architectural concepts and practice based on design framework in this specialization area. The aim of this concentration is to provide the knowledge of computer network security, cloud security, cybersecurity and information security. Students will learn about a set of best practices intended to keep data and network secure from unauthorized access or alteration. It also provides a broad look at the policies, principles and people used to protect data and networks.



# SOFTWARE ENGINEERING & SOFTWARE QUALITY ASSURANCE (SQA)

Software Quality Assurance at Presidential is to provide skills, knowledge to students to design quality software, development & implementation The aim of this concentration is to provide skills, knowledge for producing scalable, reliable and high quality software within the given time and budget constraints. Students learn different aspects of software development in detail such as software configuration management, software quality assurance, microservices architecture, agile methodologies etc.

# MScIT Curriculum

S.N.	COURSE CODE	COURSE NAME	CREDIT HOURS
1	MIS 500 Managing Information Systems & Technology		3
2	MIS 510 Information Technology Project Management		3
3	MIS 520	MIS 520 Leading Strategic Change with Technology	
4	MIS 540 Management of Information Security		3
5	MIS 545 Business Architecture and Organizational Transformation		3
6	MIS 550 Big Data Analytics and Visualization		3
7	CAP 690 Masters Applied Capstone		3
8	CLD 600	Virtualization and Storage	3
9	DATA 610	Advanced Database Design & Management	3
10	EMT 610	Metaverse	3
11	ITM 610	Networking Management	3
12	EMT 620	Blockchain	3
13	RES 620 Research Methodology		3
14	IOT 600 Internet of Things (IoT)		3
15	AIM 601 Data Science		3



## **CONCENTRATIONS**

#### **AI & MACHINE LEARNING**

COURSE CODE	OURSE CODE COURSE NAME	
MTH 605	Applied Algebra for Machine Learning	3
EMT 600 Artificial Intelligence and Machine Learning		3
AIM 602	Artificial Neural Network & Deep Learning	3
WEB 510	Semantic Technology	3
AIM 600	Information Retrieval	3

#### **CYBERSECURITY**

COURSE CODE	OURSE CODE COURSE NAME	
CYB 600	Threat and Vulnerability Management	3
CYB 601Software and Systems Security		3
CYB 602	Cyber Operations and Monitoring	3
CYB 603	Digital forensics and incident response	3
CYB 604	Compliance and Assessment	3

## **SOFTWARE ENGINEERING & SOFTWARE QUALITY ASSURANCE**

COURSE CODE	OURSE CODE COURSE NAME	
MSIT 639	Software Engineering	3
DAV 615	Advanced Web Programming	3
TBD	Software Quality Assurance	3
MSIT 639	Micro-services Architecture in Software Engineering	3
PRG 610	Agile Methodologies	3





# **FEE STRUCTURE**

S.N.	PROGRAM	SCHOOL	UNI FEE	COLLEGE FEE	INTAKE	SCHOLARSHIP
1	BBA	School of Business	USD 2100	Nrs. 8,67,000	Spring, Summer, Fall	Available
2	BSc.IT	School of Technology	USD 2310	Nrs. 11,67,000	Spring, Summer, Fall	Available
3	МВА	School of Business	USD 1995	Nrs. 557,000	Fall, Spring, Summer	Available
4	MBA Data Analytics	School of Business	USD 1995	Nrs. 557,000	Fall, Spring, Summer	Available
5	MBA Information Technology	School of Business	USD 1995	Nrs. 557,000	Fall, Spring, Summer	Available
6	MScIT	School of Technology	USD 1995	Nrs. 500,000	Fall, Spring, Summer	Available

<sup>\*</sup>Quoted fees are for the academic session – Spring, Summer and Fall 2024. Applicable government taxes will be charged in addition.



Programs We Offer: -

**BBA | MBA | MBA-IT | MBA-**Data Analytics **MBA-**Finance and Economics

**BScIT** | **MScIT** | **BScIT** in Cyber Security **BScIT** in Software & Web Development

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