



Presidential
GRADUATE SCHOOL

LEAD | INSPIRE | INNOVATE

MScIT

MASTER OF SCIENCE IN
INFORMATION TECHNOLOGY



Affiliated to
 **WESTCLIFF**
UNIVERSITY
California, USA | westcliff.edu

Accredited by
 **WASC**
Senior College and
University Commission



MScIT at Presidential

The Presidential MScIT program conceived primarily to suit the needs of the working professionals is a **2 years, 60-credit** program. 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.

A man in a dark suit and white shirt is wearing a VR headset. He is reaching out with his right hand towards a glowing, interconnected network of lines and dots that resembles a digital or neural network. The background is dark blue with some light flares.

“Future-Proof Solutions
for a Digital World”

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 top-notch infrastructure and laboratories, libraries, e-libraries, and other academic resources to enhance the learning experience.
- 5. Industry Connections:** Build a strong network with industry professionals through university partnerships and collaborative programs.
- 6. Global Recognition:** Enhance your credibility with a degree from a prestigious institution, opening doors to global career opportunities.
- 7. Placement Support:** Benefit from strong connections with companies, facilitating job placements for practical experience.
- 8. Holistic Skill Development:** Develop a well-rounded skill set, combining technical expertise with critical thinking, problem-solving, and communication skills.
- 9. Alumni Network:** Join a powerful alumni network, connecting with successful professionals for mentorship and career guidance.



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.



MScIT CONCENTRATIONS



AI & MACHINE LEARNING

AI 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

The MScIT program, with a concentration in Cybersecurity, is strategically designed to furnish students with advanced theoretical knowledge and practical skills in implementing security measures across diverse digital environments. This specialized program empowers students to protect against threats, secure software and systems, monitor cyber operations, conduct digital forensics, and ensure compliance. Through a comprehensive curriculum, students delve into best practices and principles to safeguard data and networks from unauthorized access or tampering, gaining valuable insights into policies and strategies for robust protection against cyber threats. It stands out as a rapidly growing field, that plays a pivotal role in safeguarding digital assets and sensitive information from evolving cyber threats and attacks. This interdisciplinary program combines elements of computer science, data science, and risk management to fortify digital defenses and equip individuals to respond effectively to the ever-changing landscape of security challenges.



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 | Leading Strategic Change with Technology | 3 |
| 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 |



MscIT CONCENTRATIONS

AI & MACHINE LEARNING

| COURSE CODE | COURSE NAME | CREDIT HOURS |
|----------------|--|--------------|
| 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 | COURSE NAME | CREDIT HOURS |
|----------------|---|--------------|
| CYB 600 | Threat and Vulnerability Management | 3 |
| CYB 601 | Software 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 | COURSE NAME | CREDIT HOURS |
|-----------------|---|--------------|
| 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. 9,03,000 | Spring Summer Fall | Available |
| 2 | BSc.IT | School of Technology | USD 2310 | Nrs. 11,67,000 | Spring Summer Fall | Available |
| 3 | MBA | School of Business | USD 1995 | Nrs. 557,000 | Spring Summer Fall | Available |
| 4 | MBA Data Analytics | School of Business | USD 1995 | Nrs. 557,000 | Spring Summer Fall | Available |
| 5 | MBA Information Technology | School of Business | USD 1995 | Nrs. 557,000 | Spring Summer Fall | Available |
| 6 | MScIT | School of Technology | USD 1995 | Nrs. 5,24,000 | Spring Summer Fall | Available |

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



Presidential

GRADUATE SCHOOL

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

a Partner School of **Westcliff University**, California, USA

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