

Information Technology and Management Assessment Plan for Graduate Degrees, 2022-2024 (Revision 1)

Assessment plans for 2022-2024 will adhere to the rubric as defined by the IIT Assessment Report Evaluation Rubric. One Program Educational Objective (PEO) in each degree program will be assessed each term, and all objectives will be assessed twice in each three-year cycle. The full list of Program Educational Objectives to be assessed follows beginning on page 3 below. In addition to the Program Educational Objective, course objectives for each course will be assessed. Separate plans will be used for the undergraduate and graduate programs. This document addresses the courses in the Graduate Program.

Spring 2022:

Master of Information Technology and Management (MITM) and Master of Science in Information Technology and Management PEO Assessed: 3

Master of Cyber Forensics and Security (MCYF) and M.S. in Applied Cybersecurity and Digital Forensics (MSACDF) PEO Assessed: 2

M.S. in Applied Cybersecurity and Digital Forensics (MSACDF) PEO Assessed: 4

Student Artifacts: Survey / April 2022 / Evaluation by ITM Curriculum Committee members
Assignments / May 2022/ Evaluator(s) TBD

Courses assessed:

<i>Curricular Area</i>	<i>Course</i>
Software Development (MITM and MSITM)	ITMD 510 Object-Oriented Application Development
Security & Forensics (MCYF and MSACDF)	ITMS 538 Cyber Forensics

Fall 2022:

Master of Information Technology and Management PEO Assessed: 1

Master of Cyber Forensics and Security and M.S. in Applied Cybersecurity and Digital Forensics PEO Assessed: 3

Student Artifacts: Survey / November 2022 / Evaluation by ITM Curriculum Committee
Assignments / December 2022 / Evaluators: Evaluator(s) TBD

Courses assessed:

<i>Curricular Area</i>	<i>Course</i>
System Technologies (MITM)	ITMO 540 Introduction to Data Networks & the Internet
Security Technologies (MCYF and MSACDF)	ITMS 548 Cyber Security Technologies

Spring 2023:

Master of Information Technology and Management and Master of Science in Information Technology and Management PEO Assessed: 2

Master of Cyber Forensics and Security PEO Assessed: 2

Student Artifacts: Survey / April 2023 / Evaluation by ITM Curriculum Committee
Assignments / May 2023 / Evaluator(s) TBD

Spring 2023 (continued):

Courses assessed:

Curricular Area

I.T. Infrastructures (MITM and MSITM)
 Security Technologies (MCYF)

Course

ITMO 554 Operating Systems Virtualization
 ITMS 583 Digital Evidence

Fall 2023:

Master of Information Technology and Management PEO Assessed: 1

Master of Cyber Forensics and Security and M.S. in Applied Cybersecurity and Digital Forensics PEO: 1

M.S. in Applied Cybersecurity and Digital Forensics and Master of Science in Information Technology and Management PEO Assessed: 4

Student Artifacts: Survey / November 2023 / Evaluation by ITM Curriculum Committee
 Assignments / December 2023 / Evaluator(s) TBD

Courses assessed:

Curricular Area

Data Management (MITM and MSITM)
 Security Management (MCYF and MSACDF)
 Thesis Research (MSACDF and MSITM)

Course

ITMD 522 Data Mining and Machine Learning
 ITMS 578 Cyber Security Management
 ITMT 591 Independent Study and Research

Spring 2024:

Master of Information Technology and Management and Master of Science in Information Technology and Management PEO Assessed: 3

Master of Cyber Forensics and Security and M.S. in Applied Cybersecurity and Digital Forensics PEO Assessed: 1

Student Artifacts: Survey / April 2024 / Evaluation by ITM Curriculum Committee
 Assignments / May 2024 / Evaluator(s) TBD

Courses assessed:

Curricular Area

Web Design/Development (MITM & MSITM)
 Societal Security (MCYF)

Course

ITMD 541 Web Application Foundations
 ITMM 585 Legal and Ethical Issues in Information
 Technology

Fall 2024:

Master of Information Technology and Management and Master of Science in Information Technology and Management PEO Assessed: 2

Master of Cyber Forensics and Security (MCYF) and M.S. in Applied Cybersecurity and Digital Forensics PEO Assessed: 3

Student Artifacts: Survey / November 2024 / Evaluation by ITM Curriculum Committee
 Assignments / December 2024 / Evaluator(s) TBD

Courses assessed:

Curricular Area

I.T. Management (MITM and MSITM)
 Security Technologies (MCYF and MSACDF)

Course

ITMM 571 Project Management for ITM
 ITMS 543 Vulnerability Analysis and Control

Program Education Objectives

The following program education objectives will be assessed for HLC accreditation purposes:

Master of Information Technology and Management (MITM) Program Educational Objectives
At the conclusion of their studies, graduates of the Master of Information Technology and Management should be able to:
1. Deliver optimal technical and policy technology solutions for the problems of business, industry, government, non-profit organizations, and individuals in each student's particular area of focus.
2. Work with, lead, and manage teams in an enterprise environment to collaboratively arrive at optimal technology solutions.
3. Manage and deploy information resources applicable to each student's particular area of focus in an enterprise setting.

Master of Cyber Forensics and Security (MCYF) Program Educational Objectives
At the conclusion of their studies, graduates of the Master of Cyber Forensics and Security degree should be able to:
1. Design and implement a comprehensive enterprise security program using both policy and technology to implement technical, operational, and managerial controls.
2. Comprehensively investigate information security incidents and violation of law using computer resources in a manner such that all evidence is admissible in a court of law.
3. Technically secure enterprise information assets and resources to deter, detect, and prevent the success of attacks and intrusions.

Master of Science in Applied Cybersecurity and Digital Forensics (MSACDF) Program Educational Objectives
At the conclusion of their studies, graduates of the Master of Science in Applied Cybersecurity and Digital Forensics degree should be able to:
1. Design and implement a comprehensive enterprise security program using both policy and technology to implement technical, operational, and managerial controls.
2. Comprehensively investigate information security incidents and violation of law using computer resources in a manner such that all evidence is admissible in a court of law.
3. Technically secure enterprise information assets and resources to deter, detect, and prevent the success of attacks and intrusions.
4. Conduct and report on significant research in the areas of cybersecurity and/or digital forensics.

Master of Science in Information Technology and Management (MITM) Program Educational Objectives

At the conclusion of their studies, graduates of the Master of Science in Information Technology and Management should be able to:

1. Deliver optimal technical and policy technology solutions for the problems of business, industry, government, non-profit organizations, and individuals in each student's particular area of focus.
2. Work with, lead, and manage teams in an enterprise environment to collaboratively arrive at optimal technology solutions.
3. Manage and deploy information resources applicable to each student's particular area of focus in an enterprise setting.
4. Apply mathematics and technical skills to research and innovation in the field.

Survey drafting and data collection staff:

Kayla Botica, ITM Department Manager

James Papademas, Industry Associate Professor

Assessment Evaluators:

ITM Curriculum Committee

Faculty members of the Curriculum Committee evaluate Survey Artifacts and make recommendations based on evaluations of all assessment artifacts. All full-time faculty members are voting members of the committee should they elect to participate.

Chair: Ray Trygstad, ITM Associate Chair and Industry Professor

Members: Jeremy Hajek, Industry Associate Professor

Maurice E. Dawson, Director of the Center for Cyber Security and Forensics
Education and Assistant Professor

Vasilios "Billy" Pappademetriou, Industry Associate Professor

Thomas "T.J." Johnson, Adjunct Industry Professor

Phillip Matuszak, Adjunct Industry Associate Professor

Faculty: Calvin Nobles, ITM Chair and Associate Professor

Gopal Gurram, ITM Associate Chair and Industry Professor

Marwan Omar, Associate Professor

James Papademas, Industry Associate Professor

Yong Zheng, Assistant Professor

All full-time faculty members may be appointed as assessment evaluators for Assignment Artifacts. Appointments will be made at the beginning of each term in which assignments will be assessed, and will assigned in the Assessment Plan for that semester.