Information Technology and Management Assessment Plan Fall 2020

Undergraduate Assessment, Fall 2020:

Program Educational Objectives Assessed: 3, 4

Student Outcomes Assessed: (b), (c), (g), (h)

Student Artifacts: Survey / November 2020 / Evaluation by ITM Curriculum Committee Assignments / December 2020 / Evaluator(s) Trygstad/Yong/Hajek

Courses assessed:

<table>
<thead>
<tr>
<th>Curricular Area</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Admin and Maintenance</td>
<td>ITM 301 Operating Systems &amp; Hardware I</td>
</tr>
<tr>
<td>Software Development</td>
<td>ITM 311 Introduction to Software Development</td>
</tr>
<tr>
<td>IT Management</td>
<td>ITMM 471 Project Management for ITM</td>
</tr>
<tr>
<td>Human, Organizational and Societal Security</td>
<td>ITMS 478 Cybersecurity Management (BSACIT only)</td>
</tr>
</tbody>
</table>

The following program education objective will be evaluated:

3. Apply current technical and mathematical concepts and practices in the core information technologies and recognize the need to engage in continuing professional development.

The following BSACIT program education elective will be evaluated in ITMS courses:

4. Design and implement an enterprise security program using both policy and technology to implement technical, operational, and managerial controls, which will technically secure enterprise information assets and resources to deter, detect, and prevent the success of attacks and intrusions.

The following Student Outcomes will be evaluated in ITM 301:

ITM graduates should be able to:

(b) Design, implement, and evaluate a computer-based solution to meet a given set of computing requirements [ABET Computing 2]

The following Student Outcomes will be evaluated in ITM 311:

ITM graduates should be able to:

(b) Design, implement, and evaluate a computer-based solution to meet a given set of computing requirements [ABET Computing 2]

The following Student Outcomes will be evaluated in ITMM 471:

ITM graduates should be able to:

(c) Communicate effectively in a variety of professional contexts [ABET Computing 3.3]

(g) Assist in the creation of an effective project plan [ITM only]

The following Student Outcomes will be evaluated in ITMS 478:

BSACIT graduates should be able to:

(h) Apply security principles and practices to maintain operations in the presence of risks and threats [ABET CY 3.6]

In addition to the above, course objectives for each course will be assessed.

Student artifacts for assessment will be collected by a member of the Assessment Evaluation team and will be assessed by a range of faculty against a published rubric.
Graduate Assessment, Fall 2020:

Master of Information Technology and Management (MITM) and Master of Science in Information Technology and Management (MSITM) Program Educational Objectives Assessed: 1

Master of Cyber Forensics and Security (MCYF) and M.S. in Applied Cybersecurity and Digital Forensics (MSACDF) Program Educational Objectives Assessed: 1

M.S. in Applied Cybersecurity and Digital Forensics (MSACDF) and Master of Science in Information Technology and Management (MSITM) Program Educational Objectives Assessed: 4

Student Artifacts: Survey / November 2020 / Evaluation by ITM Curriculum Committee
Assignments / December 2020 / Evaluator(s) TBD

Courses assessed:

<table>
<thead>
<tr>
<th>Curricular Area</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data Management (MITM)</td>
<td>ITMD 527 Data Analytics</td>
</tr>
<tr>
<td>Security Management (MCYF and MSACDF)</td>
<td>ITMS 578 Cyber Security Management</td>
</tr>
<tr>
<td>Thesis Research (MSACDF and MSITM)</td>
<td>ITMT 591 Independent Study and Research</td>
</tr>
</tbody>
</table>

The following program education objective will be evaluated in ITMO 527:

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.

The following program education objective will be evaluated in ITMS 578:

At the conclusion of their studies, graduates of the Master of Cyber Forensics and Security and the Master of Science in Applied Cybersecurity and Digital Forensics degrees 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.

The following program education objective will be evaluated in ITMT 591:

At the conclusion of their studies, graduates of the Master of Science in Applied Cybersecurity and Digital Forensics degree should be able to:

4. Conduct and report on significant research in the areas of cybersecurity and/or digital forensics.

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

4. Apply mathematics and technical skills to research and innovation in the field.

In addition to the above, course objectives for each course will be assessed.

Survey drafting and data collection staff:

Kayla Botica, ITM Department Manager
Ryan Nelson, ITM Director of Student Services

Assessment Evaluators:

ITM Curriculum Committee

The Curriculum Committee evaluates Survey Artifacts and makes 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
          Louis F. McHugh IV, OTS Manager of Technical Services and Adjunct Industry Professor
          Thomas “T.J.” Johnson, Adjunct Industry Professor
          Phillip Matuszak, Adjunct Industry Associate Professor
Faculty: C. Robert Carlson, ITM Chair and Professor
          Karl Stolley, Associate Professor (joint appointment)
          Adarsh Arora, Coleman Entrepreneur-in-Residence and Industry Professor
          James Pappademas, Industry Professor
          Yong Zheng, Assistant Professor

All faculty members may be appointed as assessment evaluators for Assignment Artifacts.