

# MASTER OF CYBER FORENSICS AND SECURITY

At the conclusion of their studies, graduates of the Master of Cyber Forensics and Security degree should be able to:

- Design and implement a comprehensive enterprise security program using both policy and technology to implement technical, operational, and managerial controls
- 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
- Technically secure enterprise information assets and resources to deter, detect, and prevent the success of attacks and intrusions

Illinois Institute of Technology has been designated as a National Center of Academic Excellence in Cyber Defense Education by the National Security Agency and the Cybersecurity and Infrastructure Security Agency. This designation results from meeting stringent Center of Academic Excellence criteria and mapping of information technology and management curricula to a core set of cyber defense knowledge units. Students attending Center of Academic Excellence in Cyber Defense Education institutions are eligible to apply for scholarships and grants through the Department of Defense Cyber Scholarship Program and the Federal Cyber Service Scholarship for Service Program. This designation reflects Illinois Institute of Technology's commitment to producing professionals with cyber defense expertise for the nation.

## Master of Cyber Forensics and Security (Coursework Only Option)

Code	Title	Credit Hours
<b>Required Core Courses</b>		<b>(18)<sup>1</sup></b>
ITMS 538	Cyber Forensics	3
ITMS 543	Vulnerability Analysis and Control	3
ITMS 548	Cyber Security Technologies	3
ITMS 578	Cyber Security Management	3
ITMS 583	Digital Evidence	3
ITMM 585	Legal and Ethical Issues in Information Technology	3
<b>Elective Courses</b>		<b>(12)</b>
Select a minimum of 12 credit hours from the following:		12
Any 500-level ITMS course not listed in required courses above. <sup>2,3</sup>		
ITMM 537	Vendor Management and Service Level Agreements	3
ITMM 586	Information Technology Auditing	3
ITMO 517	Shell Scripting for System Administration	3
ITMO 540	Introduction to Data Networks and the Internet	3
ITMO 556	Introduction to Open Source Software	3
ITMT 597	Special Problems in Information Technology <sup>4</sup>	3
<b>Total Credit Hours</b>		<b>30</b>

<sup>1</sup> Substitutions for core course requirements may be made upon presentation of evidence of equivalent coursework, certification, or experience. Approval of course substitutions will be made by the student's adviser or an ITM associate chair.

<sup>2</sup> Students pursuing the coursework only option may not choose ITMS 549 as an elective course.

<sup>3</sup> ITMS 579 may be taken more than once.

<sup>4</sup> A maximum of six credit hours of ITMT 597 may be used toward degree requirements.

## Master of Cyber Forensics and Security (Master's Project Option)

Code	Title	Credit Hours
<b>Required Core Courses</b>		<b>(18)<sup>1</sup></b>
ITMS 538	Cyber Forensics	3
ITMS 543	Vulnerability Analysis and Control	3
ITMS 548	Cyber Security Technologies	3
ITMS 578	Cyber Security Management	3
ITMS 583	Digital Evidence	3
ITMM 585	Legal and Ethical Issues in Information Technology	3
<b>Research Courses</b>		<b>(6)</b>
Select a minimum of six credit hours from the following:		6

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ITMT 594	Special Projects in Information Technology	3
or		
ITMS 549	Cyber Security Technologies: Projects & Advanced Methods	3
or		
ITMT 597	Special Problems in Information Technology	1-6
<b>Elective Courses</b>		<b>(6)</b>
Select a minimum of six credit hours from the following:		6
Any 500-level ITMS course not listed in required courses above. <sup>2</sup>		
ITMT 537	Instructional Technologies	3
ITMM 586	Information Technology Auditing	3
ITMO 517	Shell Scripting for System Administration	3
ITMO 540	Introduction to Data Networks and the Internet	3
ITMO 556	Introduction to Open Source Software	3
ITMT 597	Special Problems in Information Technology <sup>3</sup>	3
<b>Total Credit Hours</b>		<b>30</b>

<sup>1</sup> Substitutions for core course requirements may be made upon presentation of evidence of equivalent coursework, certification, or experience. Approval of course substitutions will be made by the student's adviser or an ITM associate chair.

<sup>2</sup> ITMS 579 may be taken more than once.

<sup>3</sup> A maximum of six credit hours of ITMT 597 may be used toward degree requirements.