

Curriculum

Category	Topics	Example Activities
Online behavior and Ethics of Cybersecurity	<p>1. Correct and safe online behavior By acting responsibly and respectfully, the kids will enjoy their time online and get the best of the Internet while mostly avoiding things such as cyberbullying and inappropriate content. Here are some basics that will be covered:</p> <ul style="list-style-type: none"> • Communicate appropriately. • Keep private things private. • Respect others. • Don't lie, steal, or cheat. • Be an "upstander." • Report misbehavior. • Follow your family's rules. • Think before you post, text, or share. 	<ul style="list-style-type: none"> • Invited talks • Videos • Case studies • Student presentations
Security	<p>2. Overview of Cybersecurity</p> <ul style="list-style-type: none"> • What is security? • Why is it important? • What is the national response? • What are the basic components of security? • What are the attack models and countermeasures? 	<ul style="list-style-type: none"> • Attack and defense demonstrations • Case studies • Hands-on experiments • Invited talks • Student presentations
	<p>3. Principles of Cryptography This module will introduce cryptography and its applications. The following questions will be answered:</p> <ul style="list-style-type: none"> • What is cryptography? • What are the key technologies? • What problems can it solve? 	<ul style="list-style-type: none"> • Attack and defense demonstrations • Case studies • Hands-on experiments • Student presentations
	<p>4. Online Social Networks: Threats and Solutions</p> <ul style="list-style-type: none"> • What are the threats? • What are the privacy issues? • How to defend? • How to perform forensic investigation? 	<ul style="list-style-type: none"> • Attack and defense demonstrations • Case studies • Student presentations
Cybercrimes and cyber laws	<p>5. Cyber Bullying and Other High Tech Crimes Involving Michigan Kids</p> <ul style="list-style-type: none"> • Cyber Bullying • Cyber Harassment and Text Messaging • Child Pornography • Computer Hacking • Identity Theft 	<ul style="list-style-type: none"> • Invited talks • Videos • Case studies • Student presentations