

At the end of the day, the goals are simple:  
safety and security

< unHACK >



# Be a Cyber Knight

## Cybersecurity for Schools

## Grade 6-8

### Executive Summary

The world we live is inundated with technology – innovations like the artificial intelligence, robotics, Internet of Things, 3-D printing, etc. are getting integrated into society and transforming the way we live. Today we can drive an automated car to our smart home and have a drone deliver a pizza. Wearables like Apple watch, Google glasses, Oculus Rift, etc. is what children want Santa to deliver this Christmas.

While the Internet and modern digital technologies are making the world a better place, it comes with concerns. We do not want a drone hovering outside our windows clicking pictures and capturing data to build our online profiles that can be used by hackers, predators and cybercriminals to attack us. These invasions erode the transformative benefits of modern technologies, and may even unleash major societal alarms.

Today we need to build an 'army of cyber warriors' to protect our cyber space. India needs 500,000 security professionals and projected global demand is 5.4 million by 2018. Recent studies have revealed that a miniscule of 0.6% of graduate students pursue careers in the field of cybersecurity – expert believe that the cause of skill gaps originates from schools.

Children are digital natives- they are Always Online. They spend most of their time online, juggling between their Work and their Social lives. Cybersecurity needs to get integrated into school's ICT curriculum to prepare students for a successful adulthood in a world increasingly saturated with digital technologies and driven by the Internet.

Cyber Knight curriculum for middle school educates and empowers children to harness the benefits of the emerging technologies and stay safe online

## **Session 1: Personal Security Hygiene**

**04 Hours**

Students take virtual tour of how their information travels in the cyber space; what is personal information and with whom should it be shared.

- Virtual tour of your cyber space
- Introduction to personal security
- Safe surfing
- Secure Passwords
- Importance of privacy
- Earn a Personal Security Badge

## **Session 2: The Dark Battle**

**04 Hours**

Students get equipped with cyber defense arms and do deep dive into the cyber world infested with malware. An exciting defense module about anti-malware programs protecting computer and networked system from threats, like viruses, worms, and Trojan horses.

- Types of malware and how it infects
- Types of attacks
  - Delivery mechanisms – Web, email, App stores
  - Social engineering and Phishing
  - Ransomware
  - Spoofing and spamming
- Know your enemy
- Whom to trust
- Earn a Cyber soldier badge

## **Session 3: Be a Cyber Knight**

**04 Hours**

Students know their enemy and learn how to fight and defend themselves. They appreciate the terminology and vocabulary used in the modern Information security realm and get exposed to the threats and vulnerabilities.

- Threat actors and Threat Vectors
- Spear phishing, whaling, watering holes
- Social networking and online privacy
- Apps and permissions
- Why companies want your data
- Be Cyber safe
- Win a cyber knight badge

**Students will take assessments and earn cyber safety badges after each session.**