



RIT

INSTITUTION

Rochester Institute of Technology (RIT)
Rochester, NY

KEY CHALLENGES

- RIT cyber security instructors were poised to launch a traditional, on campus, face to face, cyber security curriculum. Then COVID-19 struck. What to do?

SOLUTION

- The team immediately pivoted to create a virtual Cybersecurity Bootcamp. This is a creative, dynamic gamification platform teaching cyber security fundamentals in a virtual scenario.

PROFILES

Chris Butler, Director of Ops Cyber Security

Chad Weeden, Director Production Operations and CSR & Esports

LEARN MORE

Discover more about how VMware IT Academy students can align with the leader by visiting us at www.vmware.com/company/research/it-academy.html.

Rochester Institute of Technology and VMware Academic Program Teach Underemployed People Cyber Security

Who we are

Rochester Institute of Technology (RIT) is a private research university in the town of Henrietta in the Rochester, New York metropolitan area. The university offers undergraduate and graduate degrees, including doctoral and professional degrees and online masters as well. It is internationally known for its science, computer, engineering, design and art programs.

VMware is headquartered in Palo Alto, California, and their **Academic Software Licensing Program** supports the use of virtualization applications and software in teaching and research.

Through the Academic Software Licensing Program VMware is committed to strengthening our relationship with academia and research entities. We pride ourselves on extending VMware's long history of working with and supporting the academic community. Our roots lie in collaborative work and we continue to pursue exciting a groundbreaking research projects.

The Student Experience

Welcome to Cyber Security Bootcamp. Students join a virtual, simulated, fictitious company, "Brick Wall Cyber Security" and participate in an immersive, 15-week, hands-on training course. Students are assigned work roles and real-world tasks that will help them learn how to put classroom learning into practice. The experience is geared toward providing real life job skills with full life experiences.

This simulation, game-based learning approach leverages RIT's internationally-recognized expertise in our [School of Interactive Games and Media](#), the [Saunders College of Business](#), and the [Department of Computing Security](#).

At the end of the course, program graduates who pass a skills-based assessment will be issued RIT Global Cybersecurity Institute Cybersecurity Bootcamp Certificate.

The student starts in a help desk role and rises through the virtual organization as they learn and apply new skills for different roles addressing increasing security breaches. Fifteen different industry scenarios are provided such as healthcare, energy sector, airports and more.

At the end of the 15 weeks the students face off with a group of hackers with the goal of thwarting the cyber-attack.

The 15-week cohort is comprised of small groups from 10 >20 students from diverse backgrounds.

15 Weeks, 40 Hours a Week

The Bootcamp is targeted to unemployed individuals who had a career but are not currently employed, including minorities and veterans. With that in mind, financial aid and scholarships are available. A degree is helpful as well as a small familiarity with technology.

This curriculum prepares the student for well-recognized and very popular entry-level cybersecurity roles including cyber technician, investigator, incident responder and IT auditor.

The curriculum also prepares students for industry standard certifications including Security+ and Cybersecurity First Responder certificates. The tuition includes a voucher to take one of the certification exams. However, it is the student's responsibility to take and pass the exam.

With [VMware's Academic Software Licensing Program](#), RIT will set up 4,000 virtual machines enabling them to extend their reach and teach more students without having to purchase CPUs. The program provides software for personal use, whether as part of STEAM classes, in research projects, or for gaining hands-on experience with VMware products.

The software provides real life look and feel to actual real-life tasks. Navigating in a virtual environment gives hands on experience. Using hands on learning makes it more likely that you will retain what you've learned. To be effective, hands on labs are key.

Accredited, worldwide education institutions offering 2, 3- or 4-year programs (or equivalent) and technical schools offering accredited degrees are eligible to participate in the Academic Software Licensing Program. VMware works closely with partners to provide access to authorized users with the self-service capability to download software and license keys.

Using VMware Software Empowers Big Things

While still a brand-new teaching program, the ultimate goal is to connect students to jobs. Along with cyber security training soft skills are also included such as building a resume and participating in mock interviews.

The plan is to ramp up participation in the Bootcamp and re-align courses as we track shifts in trends.

Ultimately, when COVID-19 is over we envision on-campus interviews with top employers who will meet the top 60 students all in one building. Providing access to the top end of security students is priceless.

