



# CASE STUDY

**ManTech International Corp.**



# PROVIDING A TAILORED EDUCATION PROGRAM TO BRIDGE THE SKILLS GAP IN CYBERSECURITY AND IT

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## Summary

ManTech is a multibillion-dollar public company headquartered in Herndon, Virginia. It is a major contractor with the U.S. government, providing advanced technological services in the areas of defense, security, and intelligence. ManTech employs nearly 8,000 people worldwide, and its ability to meet the demand for skilled cybersecurity professionals is critical to its continued success.

# ManTech<sup>®</sup>

- **Industry: Government Contracting/Defense**
- **Publicly traded**
- **Founded in 1968**
- **Employees: nearly 8,000**

## AT A GLANCE:

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### Problem

ManTech needed an effective IT training solution to fill a skills gap and prepare employees to earn the Certified Information Systems Security Professional (CISSP) credential while allowing them to remain engaged with their positions and responsibilities at work.



### Solution

Purdue University Global (formerly Kaplan University) developed a customized, three-course training program to prepare ManTech employees for the CISSP certification exam.



### Results

As of late 2018, two cohorts have completed the training—24 students in cohort I and 37 in cohort II. There are currently four cohorts active. Eighty-six percent of active students have demonstrated success in the program.

CISSP is a registered certification mark of (ISC)<sup>2</sup>, Inc.



The CISSP is an independent information security certification governed by the International Information System Security Certification Consortium, also known as (ISC)<sup>2</sup>. ManTech employees need this certification to qualify to participate on cybersecurity-related work for federal government contracts.

ManTech had been working with a CISSP training “boot camp” to prepare their employees to take this certification exam, but this method of training pulled employees away from working on their current contracts, which was costly and wasteful. Additionally, the boot camp was limited to CISSP preparation and offered no further additional educational opportunities for employees.

## Challenges

- Develop CISSP workforce for federal government contracts.
- Maintain employee productivity levels during CISSP training.
- Improve employee engagement with CISSP training.
- Grow and retain talent pipeline.
- Offer clear career path for employees.

## Benefits

- Build a pool of CISSP-certified employees.
- Position ManTech to bid on critical government contracts.
- Maintain and preserve resources by keeping employees on the job.
- Increase return on educational investment, as CISSP credits transfer into Purdue Global information technology degree programs.
- Gain knowledge and grow skills.
- Increase job satisfaction.

ManTech partnered with Purdue Global to develop a three-course cybersecurity education program to train members of its current workforce. As a strategic partner to organizations and businesses nationwide and a leader in online education for working adults, the University was well experienced in this approach to collaborative innovation.

In fact, Purdue Global has created custom education programs aligned to multiple organizations’ unique challenges and opportunities across industries beyond cybersecurity, including health care and government training programs for the U.S. Army.

# CRITICAL CYBERSECURITY SKILLS GAP

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According to a 2018 research report from the Enterprise Strategy Group (ESG), 51% of IT and cybersecurity professionals say their organization is experiencing a problematic shortage of cybersecurity skills. This growing IT skills gap is a threat to businesses, governments, and organizations everywhere, clearly affecting national security and the economy and causing critical privacy issues.

Understanding how urgent it is to upskill the cybersecurity workforce, Purdue Global partnered with ManTech, a major government security contractor, to provide innovative solutions for national security programs for the intelligence community.

The University mapped out a customized solution that met ManTech's needs. Purdue Global bundled three 10-week courses (CISSP I, CISSP II, and CISSP III) from its online information technology degree program, a solution that gave employees the flexibility and convenience to learn and study on their own schedule. The three-course bundle also provided credit toward select Purdue Global bachelor's degree programs if students wished to continue their education.



“ManTech was unable to fill numerous positions because cybersecurity professionals were unable to pass the rigorous CISSP certification test. This put lucrative government contracts in jeopardy. We looked to university alliance programs, and Purdue Global was the only institution that offered robust content with practical connections and test-taking strategies.

—**Karen E. Gardner**, MEd, EdD, Executive Director, Training and Organizational Development, ManTech

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# CUSTOMIZED EDUCATION SOLUTION FOR CYBERSECURITY PROFESSIONALS

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Once ManTech's objectives were determined, the University's expert instructional design team built a solution to overcome the company's particular obstacles:

## Challenge 1:

**ManTech was experiencing a problematic shortage of cybersecurity skills, and the boot camp training solution resulted in lost revenue and reduced productivity.**

Recognized as a major government contractor with more than \$1 billion in contracts, ManTech experienced firsthand the labor shortage and skills gap within the cybersecurity community when the corporation was unable to fill 600 cybersecurity positions due to a rigorous but crucial certification, the CISSP.

ManTech had been working with a CISSP training boot camp to prepare their employees to take this certification exam, but this solution pulled them away from working on existing contracts, thereby costing the company valuable time and resources.

## Solution:

**Purdue Global designed an innovative training program: the online three-course, 10-week bundle cohort model.**

Purdue Global's education solution is an all-online format, which maximized ManTech's employee attendance and productivity.



"We immediately enrolled 99 people into six cohorts, and over the last 18 months the programs have evolved from certification training to undergraduate and graduate degrees. We offer tuition free of charge to our employees, and this has been an extremely powerful recruitment and retention tool."

—**Karen E. Gardner**, MEd, EdD, Executive Director, Training and Organizational Development, ManTech



The cohorts used the University's online platform and completed the courses on their own time, with additional support and assistance from Purdue Global instructors. Employees were in class together, allowing them to collaborate and work toward the same goals and outcomes.

When employees are trained to take the CISSP exam and subsequently pass it, the company and employees are well positioned to service the government contracts they have and bid on new ones.

## Challenge 2:

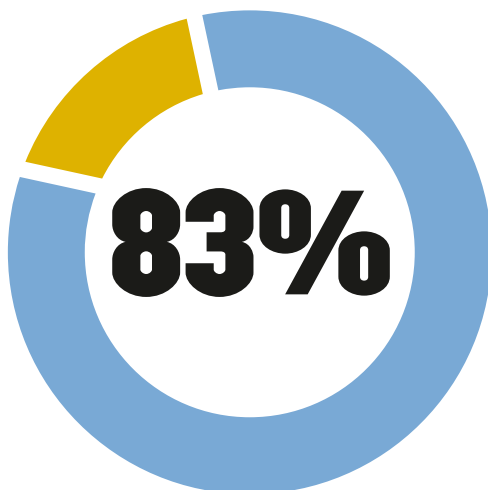
**There was a lack of employee participation and engagement with ManTech's boot camp training.**

Employees reported that the boot camp did not hold their interest or meet their needs. They said this method of learning was not at the quality level they needed to maintain engagement, nor did they feel adequately supported by the instructors.

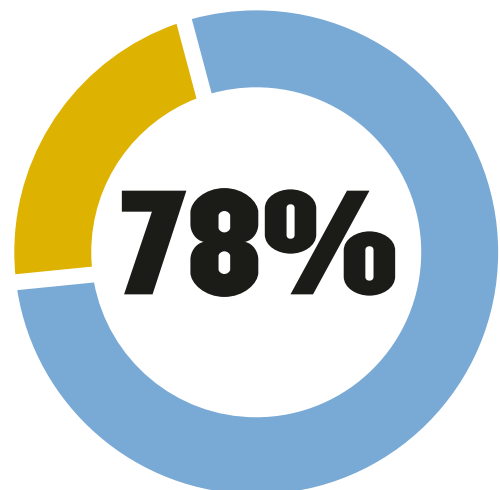
## Solution:

**Leverage the Purdue Global online learning platform, curriculum, and expert instructors.**

Cohorts I and II successfully completed the program in early 2018. Notably, in cohort 1:



(19 of 23) students met engagement activity requirements, meaning they utilized the online classroom, completed their reading and academic assignments, and followed the collaboration process.



(18 of 23) students met participation activity requirements, meaning they were actively involved in the learning process and engaged with the instructor, content, and classmates.

## Challenge 3:

### ManTech wants to be an employer of choice.

ManTech is committed to attracting and retaining top talent—especially former military servicemembers with security clearances—and developing its people and promoting from within. They needed an education partner with which they could put their employees on track to earning an advanced IT degree with no out-of-pocket tuition costs.

## Solution:

### Purdue Global put ManTech employees on the path toward an affordable IT degree.

Purdue Global developed the Advantage Tuition Grant to help employees of partner companies eliminate up-front fees, minimize their expenses, and earn their bachelor's or master's degree. Through partnership with Purdue Global, ManTech is able to offer eligible employees the ability to complete degrees in cybersecurity, cloud computing, or information technology online with 100% tuition covered.

The Advantage Tuition Grant, in combination with ManTech's employee tuition assistance benefit, is designed to cover the difference between eligible ManTech employee tuition assistance and the tuition cost of a Purdue Global online undergraduate or graduate degree. Once employees maximize their ManTech tuition assistance benefit, the Advantage Tuition Grant kicks in to cover any remaining costs.\*

## Success and Results

The partnership has seen major success, evolving from a cybersecurity certification training to include degree programs, which have become powerful recruitment and retention tools for the organization. This enables them to keep talent in mission-critical positions and train the next generation so that the nation's financial systems, power grids, intelligence files, defense/military superiority, and more are up and running smoothly.

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I found almost all of the material presented in the CISSP courses to be relevant. The seminars strengthened my knowledge in areas I was weaker in, and the assignments asked questions I did not see in the other tools I used to study. All in all, using multiple tools to study for the CISSP is very important, and I would recommend this be one of them.

—**Joshua Keough**, Cohort I Student and ManTech Employee

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“Our partnership with Purdue Global has been invaluable in upskilling our workforce to fill mission-critical cybersecurity positions.”

—**Karen E. Gardner**, MEd, EdD, Executive Director,  
Training and Organizational Development, ManTech

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## Increased Attendance and Productivity

This all-online training solution lets employees study and learn on their own time, which maximizes ManTech’s employee attendance and productivity.

Employees report high levels of satisfaction and engagement with the Purdue Global training solution.

## Credit Toward a Degree

The three-course bundle not only provides CISSP certification training but counts as college credits toward one of the following Purdue Global bachelor’s degree programs:

- Bachelor of Science in Cybersecurity
- Bachelor of Science in Information Technology
- Bachelor of Science in Cloud Computing and Solutions

This path to a degree is now a powerful recruitment and retention tool for ManTech.

The Purdue Global education solution not only helps keep ManTech talent in critical positions, but it’s training the next generation of cybersecurity workers. This is critical to national security, the economy, and in preserving individual privacy.

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I cannot see how this class or the professor could do any more to prepare the cohort for this certification.

—**Josh Mosley**, Cohort I Graduate and ManTech Employee

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# EVOLUTION OF THE PARTNERSHIP

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What started as a solution to better train ManTech employees and provide credit toward a bachelor's degree has evolved to include several additional training opportunities.

## Certified Ethical Hacking

Purdue Global created the certified ethical hacking (CEH) cohort, a two-course CEH exam prep bundle. CEH is another key area in which ManTech provides security solutions. Upon passing the CEH exam, these courses plus an additional articulated course can be transferred into select Purdue Global bachelor's degree programs.

## Cloud Computing and Solutions

Purdue Global introduced an innovative bachelor of science degree in cloud computing and partnered with ManTech to offer the program to its employees. This new cloud computing program helps ManTech employees master the foundational goals of cloud computing, another area in which ManTech aspires to develop its employees.

## "The Stack" and Advanced Cyber Training Program (ACTP)

Purdue Global is developing prerequisite courses for ManTech to prepare its employees to complete the Advanced Cyber Training Program (ACTP), ManTech's internal training program that helps programmers move to the next level in cybersecurity. The program will help assess current skill levels and readiness to train based on gaps identified through an initial assessment. This innovative program will migrate the ACTP training into an online environment, thus reducing resource strains at ManTech.

# ABOUT PURDUE GLOBAL

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Purdue Global strives to help adult students unlock their talent by providing a practical, student-centered, career-focused education. The University offers more than 175 online programs, and has regional locations in Iowa, Indiana, Nebraska, Maine, Missouri, and Wisconsin.

The Enterprise Learning Solutions division of Purdue Global forges strategic partnerships with companies and organizations to improve business outcomes through innovative learning solutions. For more information, visit **EducationPartnerships.PurdueGlobal.edu**.

## Purdue Global Is Accredited by The Higher Learning Commission

This accreditation covers all of our academic programs, all regional locations, and all programs provided via distance education. Contact HLC at [HLCommission.org](http://HLCommission.org) or call 800-621-7440.

- Total enrollment: approx. **28,000**
- Degrees awarded annually: **8,000**
- Academic headquarters: **Chicago, IL**
- Campuses: **7**
- Faculty with doctoral degrees: **45%**

Source: Statistics include all Purdue Global faculty members and are not school or program-specific calculations. Source: Purdue Global Office of Reporting and Analysis, August 2019. 2018–2019 academic year.

\*Enrollees are responsible for all other programmatic fees such as lab and portfolio fees. Graduate program enrollees are responsible for the cost of textbooks and instructional materials.



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