



# The Executive Master in Cybersecurity

## Strategy is the Best Security

The Brown University Executive Master in Cybersecurity (EMCS) is an 18-month master's degree for professionals designed to cultivate high-demand, industry executives with the unique and critical ability to devise and execute integrated, comprehensive cybersecurity strategies for nations and industries across the globe.

Leveraging Brown's culture of interdisciplinary study and cybersecurity excellence, the program fosters industry leaders prepared to address cybersecurity's global, technical, human, and policy challenges. The program convenes world-class thought leaders from Brown's

top-ranked Department of Computer Science and Watson Institute for International and Public Affairs.

The program features hands-on assessments of cyber vulnerabilities, attacks, and defenses. Students devise actionable plans to address real-time cybersecurity challenges in their own organizations.

Students graduate armed with a powerful professional network and cross-industry expertise to meet the global demand for cybersecurity leadership.

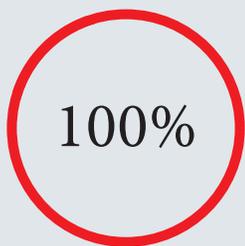
### Participant Profile

EMCS is an intensive masters program for mid-career cybersecurity professionals who seek a broader perspective to help position their organizations for optimal security.

Participants demonstrate a strong track record of achievement, have diverse backgrounds, and come from various cybersecurity related sectors.

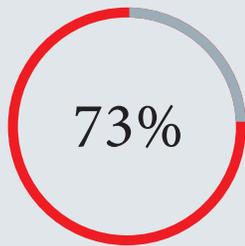
This 18-month program is delivered in a blended format, combining online learning with five face-to-face residential sessions.

Brown Executive Programs deliver real outcomes.



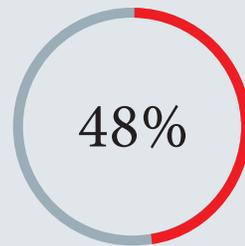
100%

ALUMNI WHO GRADUATED  
READY TO LEAD



73%

ALUMNI PROMOTED TO  
ADVANCED LEADERSHIP OR  
C-SUITE ROLES



48%

STUDENTS PROMOTED WHILE  
STILL IN THE PROGRAM

GAIN THE  
NETWORK AND  
KNOWLEDGE TO  
DRIVE FORWARD  
CHANGE IN YOUR  
CAREER AND  
ORGANIZATION



## Designed to deliver a transformational experience with courses in:

### **Introduction to Computer Security**

Engage with an array of privacy and security issues for computers, mobile devices, and networks. The course covers principles and skills useful for making informed security decisions and for understanding how security interacts with the world around us.

### **Global Cyber Challenges: Law, Policy, and Governance**

Examine a variety of cybersecurity law and policy issues which range from private sector information sharing and critical infrastructure protection to cyber crime, internet governance, and international law as it might apply in a cyber conflict

### **Privacy and Personal Data Protection**

Gain practical experience with the development of modern privacy law around the world, and the current US legal and regulatory framework— including protection of personal health, financial, educational, workplace, and other personal data.

### **Human Factors: People and Software**

Discover a richer understanding of the strengths and weaknesses of human agents and their interaction with software systems, and thus how they are central to cybersecurity problems. Projects include case studies on security as it relates to: business workflows, trade-offs with usability, system configuration, and the detection of insider threats.

### **Applied Cryptography and Data Privacy**

Explore the concepts of provable security and study basic cryptographic topics such as encryption, digital signature schemes, zero-knowledge proofs and differential privacy.

### **Effective Leadership**

Students will prepare to assume greater leadership roles in their organizations by developing and reinforcing critical skills such as persuasive communication, management of change, negotiation, conflict resolution, and ethics.

### **Management of IT Systems and Cybersecurity Risks**

Analyze the practical challenges facing executives of business organizations in managing information technology systems and cyber risks. This course focuses on the costs and tradeoffs that are involved in all security and privacy decisions.

### **Advanced Topics in Computer Security**

Advanced security topics are introduced through real-life examples that are relevant to today's organizations, from small business to global enterprises. Course topics include multifactor authentication frameworks and systems; mobile operating systems and application security; malware detection and intrusion detection; security and privacy in cloud computing and storage; security, privacy, and fairness in machine learning.

### **The Future of Cybersecurity: Technology and Policy**

Explore operational security, product development and acquisition, securing enterprise computing, and human factors. Students will also examine corporate issues that are likely to arise at the national and international levels.

### **The Critical Challenge: Capstone Project**

The Critical Challenge Project (CCP) is central to the Executive Master in Cybersecurity. Under the direction of a faculty member, the student identifies and analyzes a critical challenge respective to their organization from multiple perspectives and develops a comprehensive plan for addressing it.



EXECUTIVE MASTER IN  
**CYBERSECURITY**

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