

CYBER THREAT ANALYTICS AND PREVENTION GRADUATE CREDIT CERTIFICATE PROGRAM

Person-in-Charge	Raghu Sangwan
Program Code	CTAP
Campus(es)	Great Valley World Campus

The Cyber Threat Analytics and Prevention 12-credit graduate certificate at Penn State Great Valley prepares students to understand the diverse and global cyberattacks, cyber laws and regulations, vulnerabilities, threats, and surveillance systems, while gaining certain fundamental skills to plan, prevent, protect, detect, analyze, respond, mitigate, and recover from threats and attacks in a sophisticated and large-scale basis.

Effective Semester: Summer 2024

Expiration Semester: Summer 2029

Admission Requirements

Applicants apply for admission to the program via the Graduate School application for admission (<https://gradschool.psu.edu/graduate-admissions/how-to-apply/>). Requirements listed here are in addition to Graduate Council policies listed under GCAC-300 Admissions Policies (<https://gradschool.psu.edu/graduate-education-policies/>). International applicants may be required to satisfy an English proficiency requirement; see GCAC-305 Admission Requirements for International Students (<https://gradschool.psu.edu/graduate-education-policies/gcac/gcac-300/gcac-305-admission-requirements-international-students/>) for more information.

Certificate Requirements

Requirements listed here are in addition to requirements listed in Graduate Council policy GCAC-212 Postbaccalaureate Credit Certificate Programs (<https://gradschool.psu.edu/graduate-education-policies/gcac/gcac-200/gcac-212-postbaccalaureate-credit-certificate-programs/>).

Students must maintain a minimum grade point average of 3.0 (B) throughout the program.

Code	Title	Credits
Required Courses		
INSC 831	Contemporary Information Systems Architecture	3
INSC 561	Web Security and Privacy	3
Electives		
Select at least two of the following:		6
DAAN 545	Data Mining	
DAAN 871	Data Visualization	
INSC 846	Network and Predictive Analytics for Socio-Technical Systems	
IST 454	Computer and Cyber Forensics	
IST 554	Network Management and Security	

IST 820 Cybersecurity Analytics

Total Credits

12

Courses

Graduate courses carry numbers from 500 to 699 and 800 to 899. Advanced undergraduate courses numbered between 400 and 499 may be used to meet some graduate degree requirements when taken by graduate students. Courses below the 400 level may not. A graduate student may register for or audit these courses in order to make up deficiencies or to fill in gaps in previous education but not to meet requirements for an advanced degree.

Learning Outcomes

1. Effectively communicate cyber security knowledge, including vulnerability, threat, cyberattack analysis, and suspicious and attack findings in written formats in a manner appropriate to the audience.
2. Collect and Analyze data to uncover, detect, and analyse network suspicious activities and cyberattacks.
3. Demonstrate understandings and skills to plan, protect, respond, mitigate, and recover from cyber threats and attacks.

Contact

Campus	Great Valley
Graduate Program Head	Guanghua Qiu
Program Contact	Sharon V. Patterson svp40@psu.edu (610) 648-3318

Campus	World Campus
Graduate Program Head	Guanghua Qiu
Program Contact	Sharon V. Patterson Penn State Great Valley 30 East Swedesford Road Malvern PA 19355 svp40@psu.edu (610) 648-3318

Program Website	View (https://www.worldcampus.psu.edu/degrees-and-certificates/penn-state-online-cyber-threat-analytics-prevention-certificate/overview/)
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