

# ENTERPRISE INFORMATION AND SECURITY TECHNOLOGY ARCHITECTURE GRADUATE CREDIT CERTIFICATE PROGRAM

Person-in-Charge	Carleen Maitland
Program Code	ENTSEC
Campus(es)	World Campus

The goal of this advanced nine-credit graduate certificate in Enterprise Information and Security Technology Architecture (ENTSEC) is to provide information technology and business professionals with advanced knowledge of the enterprise information technology stack, enterprise architecture gap analysis, analytical risk management, migration planning, governance, and measurement, as well as security and network management strategy including: intrusion detection, encryption, authentication, and network management.

The certificate program is an attractive option for professionals who may also consider completing the M.P.S. in Enterprise Architecture. Up to 15 credits of Penn State course work taken in non-degree status may count towards a graduate degree in EA, but completion of the course work neither implies nor guarantees admission to a graduate degree program at Penn State. Courses taken in the certificate program may be applied toward a graduate degree in Enterprise Architecture, subject to restrictions outlined in GCAC-309 Transfer Credit (<http://gradschool.psu.edu/graduate-education-policies/gcac/gcac-300/transfer-credit/>). Certificate students who wish to have certificate courses applied towards a graduate degree in Enterprise Architecture must apply and be admitted to that degree program. Admission to the Enterprise Architecture graduate degree program is a separate step and is not guaranteed.

**Effective Semester:** Fall 2023

**Expiration Semester:** Fall 2028

## 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.

A bachelor's degree in a related area (e.g., information sciences, engineering, or computer science), while not necessary for admission, is helpful in the successful completion of the certificate. It is expected that students will have advanced knowledge in information technology and enterprise architecture with a minimum of five years of relevant professional work experience. Applicants with less than five years of 2 relevant professional work experience may be considered but will be required to take prerequisite courses. For admission to the certificate,

a 2.75 GPA, either overall or from the last 60 undergraduate credits, is needed. GRE scores are not required for non-degree graduate students.

## 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/>).

The certificate is highly flexible and is designed to meet the different needs of students and organizations. The courses are delivered online through the World Campus. With online delivery, the certificate can easily fit into the work schedule of professionals from around the globe.

To be awarded the certificate, students must successfully complete 9 credits of graduate course work with a grade point average of 3.0 or higher.

Code	Title	Credits
<b>Required Courses</b>		
EA 874	Enterprise Information Technology Architecture	3
EA 876	Architecting Enterprise Security and Risk Analysis	3
IST 554	Network Management and Security	3
<b>Total Credits</b>		<b>9</b>

## 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. **Know**—demonstrate appropriate breadth and depth of an enterprise technology stack and the comprehension of its application towards the strategic leverage in an organization.
2. **Apply/Create**—use architecture frameworks and assessment methodologies to apply knowledge, and create new, applicable knowledge supporting advanced, creative accomplishment.
3. **Think**—demonstrate analytical and critical thinking within the enterprise architecture discipline; and, in particular, the ability to improve thinking around the use of strategic use of technology from a business perspective.

## Contact

<b>Campus</b>	World Campus
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<b>Program Website</b>	View ( <a href="http://www.worldcampus.psu.edu/degrees-and-certificates/penn-state-online-enterprise-information-and-security-technology-architecture-certificate/overview/">http://www.worldcampus.psu.edu/degrees-and-certificates/penn-state-online-enterprise-information-and-security-technology-architecture-certificate/overview/</a> )