ENTERPRISE ARCHITECTURE, CERTIFICATE

Requirements for an undergraduate certificate may be completed at any campus location offering the specified courses for the certificate.

Program Description
This 12 credit certificate applies architecture principles related to the orderly arrangement of parts to analyze the components, structure and connectivity of business, data, application, technology and security architecture and identify their relationships to each other and to the strategy of the organization. The primary purpose of describing the architecture of an enterprise is to improve the effectiveness, efficiency, and agility of the organization. This includes innovating the structure of an organization, centralizing business processes, assuring quality and timeliness of information and ensuring that money spent on information technology can be justified.

What is Enterprise Architecture?
Enterprise Architecture deals with how organizations can be best structured and operated to effectively achieve its goals. The field applies principles related to order and arrangement to analyze how various business operations – data, technology, security, operations, etc. – can be structured to improve the effectiveness, efficiency, and agility of an organization. This is often achieved through innovations in the organization's structure, processes, quality control initiatives, and return on investment.

You Might Like This Program If...
- You want to help organizations operate more efficiently and effectively.
- You want to help business and technology operations align more closely.
- You enjoy exploring details to help build a big picture view of a project.

Program Requirements
To earn an undergraduate certificate in Enterprise Architecture, a minimum of 12 credits is required.

A grade of C or higher is required in all courses for the certificate; no course substitutions are permitted. Courses taken more than 10 years ago will not apply automatically towards completion of the certificate but instead will require review by the academic unit.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>IST 422</td>
<td>Enterprise Architecture Foundations</td>
<td>3</td>
</tr>
<tr>
<td>IST 423</td>
<td>Enterprise Information Management and Storage Architecture</td>
<td>3</td>
</tr>
<tr>
<td>IST 424</td>
<td>Architectural Modeling of Organizations</td>
<td>3</td>
</tr>
</tbody>
</table>

Additional Courses
Select one of the following:  

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>IST 412</td>
<td>The Engineering of Complex Software Systems</td>
</tr>
</tbody>
</table>

Certificate Learning Objectives
1. KNOW: Demonstrate foundational knowledge of effective Enterprise Architecture, technology stack, modeling, and leadership concepts that align with business strategy.
2. ANALYZE: Think analytically about the application of concepts and methods in enterprise architecture.

Academic Advising
The objectives of the university’s academic advising program are to help advisees identify and achieve their academic goals, to promote their intellectual discovery, and to encourage students to take advantage of both in and out of class educational opportunities in order that they become self-directed learners and decision makers.

Both advisers and advisees share responsibility for making the advising relationship succeed. By encouraging their advisees to become engaged in their education, to meet their educational goals, and to develop the habit of learning, advisers assume a significant educational role. The advisee’s unit of enrollment will provide each advisee with a primary academic adviser, the information needed to plan the chosen program of study, and referrals to other specialized resources.

READ SENATE POLICY 32-00: ADVISING POLICY (https://senate.psu.edu/policies-and-rules-for-undergraduate-students/32-00-advising-policy/)

University Park
Undergraduate Academic Advising Center
E103 Westgate Building
University Park, PA 16802
814-865-8947
advising@ist.psu.edu

Career Paths
Enterprise architects are in high demand across. They serve a critical function in helping organization effectively and efficiently align business, technology, and other resources to achieve strategic goals. IST’s Office of Career Solutions helps students navigate their internship and career development in the field through coaching, workshops, interview preparation, resume reviews, career fairs, job postings, and networking opportunities.

Careers
Enterprise architects are prepared to play a vital role in organizations across a number of industries, as they work to understand the business strategy and both envision and employ technological solutions to help achieve those goals.

MORE INFORMATION ABOUT POTENTIAL CAREER OPTIONS FOR GRADUATES WITH A CERTIFICATE IN ENTERPRISE ARCHITECTURE (https://ist.psu.edu/current/careers/development/process/path/)
Contact

University Park
COLLEGE OF INFORMATION SCIENCES AND TECHNOLOGY
E397 Westgate Building
University Park, PA 16802
814-865-8947

https://ist.psu.edu/about/contact (https://ist.psu.edu/about/contact/)