Penn State's Degree in Enterprise Architecture Advances the EA Profession

Published: 18 April 2012

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Penn State's online masters degree in enterprise architecture is a milestone in the maturation of the EA profession and offers a practical alternative to certification programs for developing EA skills and credentials.

News Analysis

Event

On 11 April 2012, Penn State University's College of Information Sciences and Technology (IST) announced that its Center for Enterprise Architecture has developed and launched the first enterprise architecture (EA) degree program in North America and the first online EA master’s degree program worldwide. The program, which requires 34 credits for graduation, includes courses in:

- EA principles and practices
- EA leadership and governance
- Cost and value management
- Business and project strategy
- Project and portfolio management

The university said the program will take students two to three years to complete on average, and it targets working professionals with a minimum of two years’ relevant work experience. For more information, see http://www.worldcampus.psu.edu/degrees-and-certificates/enterprise-architecture-masters/overview.

Analysis

Gartner clients consistently report difficulty in recruiting qualified enterprise architects to guide business transformation. Penn State’s master of professional studies (MPS) EA program could help meet this demand. The program has started strongly, with students even enrolling from Europe and Asia/Pacific.
EA framework providers’ certification programs remain popular, tactical EA education alternatives. Although EA courses, concentrations and masters degrees are available (notably, through Griffith University and Royal Melborne Institute of Technology in Australia), Penn State’s first-mover step follows best practices in support of an EA degree:

- **Market-driven approach:** At the conceptual stage, the university sought input from analyst firms — including Gartner — and from more than 70 representatives of companies and government departments via an advisory program. This input shaped program design to produce graduates attractive to employers.

- **Interdisciplinary design:** EA has outgrown its original narrow focus on technical architecture, expanding into a holistic discipline, including business, information and solutions architectures. EA increasingly reports to a business leader, not just IT. While the Penn State program is anchored in the College of IST, the curriculum also includes courses from the business and engineering schools.

- **Vendor-neutral, framework-agnostic training:** Penn State will expose students to multiple perspectives on EA.

In the near term, particularly in Europe, Gartner expects employers will continue to find certification attractive. However, globally, Gartner believes this program will appeal to practitioners making a serious investment in their EA career.

**Recommendations**

- **Current and prospective enterprise architects:** Evaluate Penn State’s program if you are on an EA career path. Determine whether your employer will pay for tuition reimbursement. Consider using the degree to pursue opportunities in IT and business management roles.

- **Undergraduate students considering a career in EA:** Seek an entry-level position to begin your career. Find ways to work with enterprise architects to assess this career path for yourself. After gaining a few years of experience, consider pursuing a program like Penn State’s, with funding from your employer’s benefit program.

- **IT and business consultants:** If you work in a boutique consultancy, weigh the costs and benefits of EA certification against this education investment. If you work in a top-tier consulting firms with tuition reimbursement benefits, evaluate this option.

- **Higher education institutions:** If you already offer EA courses and concentrations, study the Penn State model and follow its best practices for EA degree programs.

**Recommended Reading**

Some documents may not be available as part of your current Gartner subscription.

- "Innovative, New Enterprise Architecture Degree Programs Are Under Development" — Higher education institutions around the world, especially in Australia, Europe and the U.S., are
assisting in the maturation of the EA discipline with the introduction of degree programs and other initiatives. **By R. Scott Bittler**

- "Leaders Are Readers: A Book List for Enterprise Architects" — Enterprise architects who seek to achieve or maintain a leadership role in their discipline and those who contemplate more formal EA education should focus on this list of publications compiled from Gartner’s EA research community. **By R. Scott Bittler, Philip Allega and Brian Burke**