Digital Education @PU Status and Directions

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What is Digital Education (DE)

Learning facilitated by digital technology

including tools in traditional courses (e.g., Blackboard, clickers, Gradient, Hotseat)

.... as well as flipped classrooms, hybrid, and online courses, MOOCs

includes educational analytics and spans credit and non-credit experiences

.... impacts students, staff, faculty, alumni, professionals, and lifelong learners on a local to global scale

DE includes many different things!

What is "Digital Education" (the administrative unit)

Administration for:

- Self-supporting professional and online programs
 - Masters programs (residential, hybrid, and online)
 - Non credit and CEU courses and programs
- Conversion of undergrad <u>courses</u> to online to increase access for campus-based students (funding and instructional design).
- External Partner and MOOC contracts and relationships

DE strategy development for the university



Where are we in DE?

DE@PU has been successful in many ways

<u>Undergraduate</u>:

- IMPACT (240 faculty and instructors) includes DE approaches; 12% of SCH are now IMPACT. (3 CS courses redesigned by McFall and Crum).
- Increasing online courses for campus-based students (~100 online courses Spr16); we have no online BA/BS degrees.
- Online courses responsible for much of the increase in summer enrollment
- Recognized nationally for innovative DE tools (Gradient, Passport, Signals)





Where are we in DE?

DE@PU has been successful in many ways

Graduate

- Online (16) and hybrid (8) Masters degrees plus non-credit programs total ~\$20m/yr.
- Highly ranked online graduate degrees in engineering
- Rapid growth of online graduate degrees in Communication and Education with external partner support

College	Program(s)	Launch date	Enrollment/ Term 15-16	Total Graduates in 15-16	Use External Service Delivery Partner
Agriculture	1 MS	1999	45	31	No
Engineering (EPE)	6 MS	Pre-2006	576	148	No
PPI (Prostar)	8 MS	2006-13	113	68	No
Education	2 MS	2011-14	267	84	Yes
Science	1 MS	2013	9	1	No
Krannert	5 MS	2013	254	89	No
Liberal Arts	1 MS	2014	378	147	Yes
Total	24 MS		1,642	568	

PU total graduate enrollment (on-campus, online and hybrid) is 8,500





> Programs > Master's degrees > Computer Science

COMPUTER SCIENCE

Our Program

Purdue's College of Science offers online master's computer science courses, providing working professionals an opportunity to earn non-thesis online Master of Computer Science via distance learning. This Master's program is for individuals with a Bachelor's degree in Computer Science or Engineering.

Courses offered in the following topic areas:

Bioinformatics and Computational Biology Computational Science and Engineering

Databases Data Mining

Distributed Systems Graphics and Visualization

Information Retrieval Information Security and Assurance

Machine Learning Networking and Operating Systems

Programming Languages and Compilers Software Engineering

Theory of Computing and Algorithms

Degree Options

The 30-credit curriculum has been carefully designed to offer you the choice to earn a Master of Science in Computer Science (MS in CS) or an Interdisciplinary Master of Science in Engineering (MSE/MS) with a concentration in Computer Science. We offer both thesis and non-thesis degree options.

Launched 2013 First graduate Spring 2016 **Current Enrollment 13 students** Tuition (30 credits) \$36k (non-res.)



Where are we in DE?

DE@PU is well short of its potential

- External partners identified over 40 potential new online graduate programs
- Current programs mostly small, except those with external partner support
- Highly varied and limited support / resources / design quality; Sparse resources for innovation and startup
- Rankings indicate need to improve student engagement in some programs
- Still searching for a successful online modular non-credit education model
- Leaders in this field are doing an order of magnitude more



AP4DE: Moving Forward

AP4DE Coordinating Committee

Faculty, Staff, Students, Colleges, Libraries, ITaP, CIE, DE, Alumni Assn.

Input sessions – flipped classroom model; in-person and online

Open Sessions: define key issues

Focus Sessions: in-depth discussion

Survey input: open and targeted

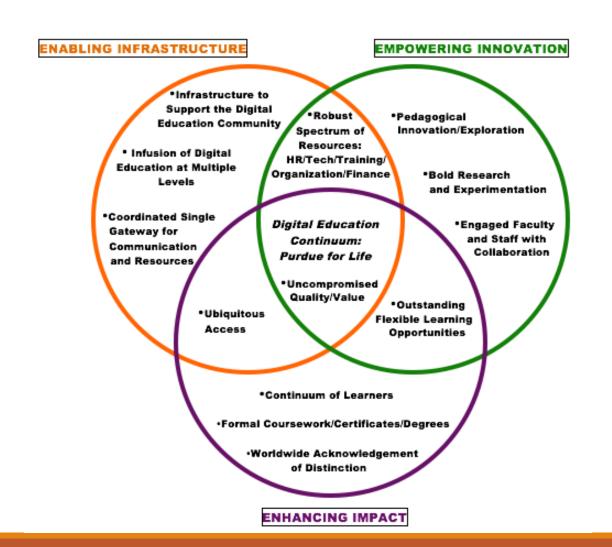


Sessions

Focus Session Themes

- Support for Digital Education Teaching and Learning
- 2. Quality, Effectiveness, and Affordability of Online Instruction
- 3. Broadening Access through Digital Education





Six Actions

Enabling Infrastructure

- Develop a stronger integrated support model
- Create a central online portal for DE

Six Actions

Empowering Innovation

- Support the growth of an empowered university-wide DE community.
- Provide university and college level awards and recognition for DE endeavors
- Create college-level DE teams

Six Actions

Enhancing Impact

- ☐ Move towards a "Purdue for Life" approach as an overarching DE strategy.
 - □ Pre-College, College, Graduate/Professional, Leadership, Personal Growth

Areas of Emphasis

- Online and hybrid <u>graduate</u> degree and certificate programs that respond to market needs.
- <u>Undergraduate</u> online courses for campus-based students that support and enhance quality, flexibility, and accessibility.
- non-credit, <u>professional</u> development programs that meet lifelong learning needs.

Corporate Partner Opportunities

Employee professional development

- Online graduate degrees (technical, communication, management)
- Online modules, certificates, badges
- Some programs are customizable, we will work closely with you and your employees to define your needs and create educational experiences that will meet those needs
- Let us know what Purdue educational opportunities you'd like to provide to your employees