Integrated Data Science Education Ecosystem Initiative  
Office of the Provost  
Spring 2018

Program Description

In the fall of 2017, faculty and staff across campus discussed, via four open campus forums, opportunities for Purdue to invest and engage in data science at the university level. Based on these conversations a faculty Data Science Working Group compiled a set of recommendations to the Provost and EVPR. These recommendations included “creating a data science education ecosystem”, “embedding data science into domain curricula”, and establishing an “ecosystem of data fluency throughout campus”.

The objective of this RFP is to facilitate the realization of these recommendations by supporting the work of cross-disciplinary teams of faculty to:

i. Plan, create, and/or implement new modules/courses/curricula/programs with data science content
ii. Redesign existing content/modules/courses/curricula/programs to integrate data science and/or
iii. Connect data science related content/modules/courses/curricula/programs to new sets of students

Proposed projects should work across departments and/or colleges to best leverage expertise and resources. The formation of new or expansion of existing partnerships is encouraged. The goal is to create an integrated ecosystem rather than silos with duplication of effort. Proposals may come from any college and any subject domain area. All areas of data science are of interest, including but not limited to data analytics, methods, applications, data visualization, data curation, big data, data literacy/fluency, informatics, data ethics, digital humanities, and data science policy. Efforts can but need not include experiential learning, research experiences or courses (e.g. course based undergraduate research experiences), online content, summer courses, and modular content. Focus areas may include data science related fundamentals, applications, and the infusion of data science into other disciplines, majors or subject matter domains.

Scope

- Budgets may request up to $50,000*
- Unexpended balances at the end of the one-year period will be returned to the Provost’s Office.

*Matching funds from the college and department are highly encouraged but not essential. Source of unit funding should be clearly stated in the proposal.

Funds can be used for:

- Faculty support (AY or Summer Salary)
- Student support, e.g. graduate teaching assistant support for teaching or developing content
- Staff time
- S&E** (e.g. computers, software, data collection equipment, etc.)

** For large computing infrastructure needs that are beyond the scope of the proposal, we encourage you to discuss with ITAP, Donna Cumberland, Executive Director of IT Academic Computing

Data Science Education Ecosystem Summit

- Applicants are encouraged to attend a Data Science Education Ecosystem Summit to be held on April 16th from 2:30 – 4:00pm in WALC 2127. The purpose will be to discuss and share the current and proposed data science related educational programs on campus as context for consideration in proposals as part of the campus data science ecosystem and the Integrated Data Science Initiative (IDSI).
Financial Resources
An itemized budget using the provided template (see Appendix A) should be included with the proposal. Grants will be effective for the period June 1, 2018 through August 31, 2019. At the end of the grant period, a final report must be submitted and unexpended balances will be returned to the Provost’s Office.

Program Timeline
The FY17-18 schedule for proposal submission, review and award processes is as follows:

<table>
<thead>
<tr>
<th>Proposal Due Date</th>
<th>April 30, 2018</th>
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<tbody>
<tr>
<td>Project Period</td>
<td>June 1, 2018 – August 31, 2019</td>
</tr>
</tbody>
</table>

Proposal Preparation and Submission

1. **Cover Sheet** (1 page)
   - Project Title
   - Project Abstract (50 words or less)
   - Amount of total request
   - PI and Team Information
     - Name, title, department, college, campus address, email, phone
   - Signature Endorsement of each PI’s Department Head and Dean

2. **Project Summary** (1-2 pages)
   - Objectives of your proposal
   - Proposed Plan: What will you create, redesign, extend or implement? Include how many and which students do you expect to be engaged? How will students access the educational components you are developing and will they fulfill any degree requirements?
   - Rationale and Justification: What is motivating the proposal? What is the expected impact?
   - How are you collaborating across departments/colleges to leverage resources?
   - How does your proposal fit into the campus educational and data science landscape?

3. **Budget and Budget Justification** (1 page)
   - Itemized budget using the provided template (see Appendix A)
   - Amount and source of matching funds
   - Budgets do not need to be prepared through the Unit’s Pre-Award Centers.
   - Large computing infrastructure. If the project has computing infrastructure needs that are beyond the scope of the budget and will require additional partners/investment, please indicate so in your proposal.

There are a number of campus units who might be good partners for your work.
If you are proposing: We encourage you to explore opportunities for collaboration with:

<table>
<thead>
<tr>
<th>Summer courses</th>
<th>Office of Summer Session, John Gipson, <a href="mailto:gipsonj@purdue.edu">gipsonj@purdue.edu</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Undergrad Research</td>
<td>Office of Undergraduate Research, Amy Childress, <a href="mailto:childres@purdue.edu">childres@purdue.edu</a></td>
</tr>
<tr>
<td>Online courses</td>
<td>Digital Education, Chris Martin, <a href="mailto:cjmartin@purdue.edu">cjmartin@purdue.edu</a></td>
</tr>
<tr>
<td>Course Design</td>
<td>Center for Instructional Excellence, Chantal Levesque-Bristol, <a href="mailto:clevesqu@purdue.edu">clevesqu@purdue.edu</a></td>
</tr>
<tr>
<td>Learning Technologies</td>
<td>ITAP, Teaching &amp; Learning Technologies, Jason Fish, <a href="mailto:jfish@purdue.edu">jfish@purdue.edu</a></td>
</tr>
<tr>
<td>Comp. Infrastructure</td>
<td>ITAP Academic Computing, Donna Cumberland, <a href="mailto:donnac@purdue.edu">donnac@purdue.edu</a></td>
</tr>
</tbody>
</table>

Questions
For programmatic questions, please contact Jenna Rickus (rickus@purdue.edu), Associate Vice Provost for Teaching and Learning. For questions on proposal budget and submission, please contact Cherise Hall (cherise@purdue.edu), Assistant Provost for Finance and Administration.

Proposals should be endorsed by the department head and dean of the PI and submitted electronically as a single PDF to Shelly Dunk at sdunk@purdue.edu.