Goal
To accelerate the collaborative spread of current best practices for teaching in the College of Engineering.

Synopsis
The SIIP Adaptation track will support new communities of practice in replicating the innovations (teaching methodologies and technologies) of selected current and past Strategic Instructional Innovations Program (SIIP) projects. The College of Engineering will support these communities of practice by providing a structure for collaboration and a small amount of funding for student hourly workers to help implement the initiatives.

Timeline
• Funding is for up to one year.
• SIIP informational meeting: Thursday February 2, 10:30am – noon, 1005 Beckman
• Proposals will be accepted on a rolling basis throughout the academic year, beginning February 21, 2017.

Description
The SIIP Adaptation track is focused on increasing college-wide interconnectedness and collaboration in instructional excellence. It offers a way for faculty to reproduce and/or adapt best practices from SIIP teams whose innovations are applicable to other instructional contexts. PIs (principal investigators) will work closely with a member of a current or past SIIP team to learn about the innovation. Undergraduate or graduate hourly workers will be available to help with implementation.

SIIP Adaptation PIs will meet regularly with a member of a current SIIP team, who will provide advice and help connect teams to relevant resources.

Developing the proposal
PIs for all proposals must be College of Engineering faculty members (tenure-track or specialized). The PI may assemble a small team, but a team is not required. Any team members may be faculty, academic staff, and/or students from any department on campus. Preference will be given to teams with faculty participants previously not involved in a SIIP project.
The PI must secure a commitment of collaboration from an eligible SIIP team:

<table>
<thead>
<tr>
<th>SIIP Project</th>
<th>Expertise</th>
<th>Contact</th>
</tr>
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<tbody>
<tr>
<td>A Project-based Introduction to Aerospace Engineering</td>
<td>Project-based learning; freshman communication skills</td>
<td>Brian Woodard</td>
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<tr>
<td>Optimizing Collaborative Team Formation and Learning of Team Skills in Project-Based Engineering Courses</td>
<td>Student team formation and assessment practicalities, CATME</td>
<td>Brian Bailey</td>
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<tr>
<td>Adaptive Learning (PrairieLearn) and the Computer-based Testing Facility</td>
<td>Mastery-based online problem solving with adaptive scoring and recommendations driven by machine learning</td>
<td>Matt West</td>
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<tr>
<td>Improving Students’ Learning in ECE 110</td>
<td>Re-designing methods and materials for teaching large classes using research-based instructional strategies; coordinating large classes</td>
<td>Chris Schmitz</td>
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<tr>
<td>TAM Course Reform</td>
<td>Re-designing methods and materials for teaching large classes using research-based instructional strategies; coordinating large classes</td>
<td>Matt West</td>
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<tr>
<td>MatSE Curriculum Reform</td>
<td>Integrating computational modeling materials into the curriculum</td>
<td>Dallas Trinkle</td>
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<tr>
<td>Improving Student Learning in Physics</td>
<td>Mastery learning; using i&gt;clickers; just-in-time teaching</td>
<td>Tim Stelzer</td>
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<tr>
<td>Challenge-inspired Learning: An Apprenticeship Model for Engineering Education</td>
<td>Cohort-based program where students address a real-world challenge (e.g., cancer) with research-based experiences beginning year one.</td>
<td>Rohit Bhargava</td>
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</tbody>
</table>

AE3 staff and Education Innovation Fellows are available to help make contacts and connections:

Laura Hahn (AE3)     lhahn@illinois.edu
Jenny Amos (BioE)    jamos@illinois.edu
Brian Bailey (CS)    bpbailey@illinois.edu
Tim Bretl (AeroE)    tbretl@illinois.edu
Scott Carney (ECE)   carney@illinois.edu
Cinda Heeren (CS)    c-heeren@illinois.edu
Geoffrey Herman (CS & AE3)    glherman@illinois.edu
Chris Migotsky (AE3) migotsky@illinois.edu
Luke Olson (CS)      lukeo@illinois.edu
Dallas Trinkle (MatSE) dtrinkle@illinois.edu
Proposal submission and award process

1. Proposals should include:
   a. A statement of the purpose of the project (the problem, the rationale for the SIIP team collaboration, and the intended outcomes).
   b. A timeline and description of the work to be accomplished, the plan for interacting with the “source” SIIP team, and the need for student workers. PIs may recruit their own student workers or request them from a pool in AE3.
   c. An indication of any financial and in-kind support the department will provide for the proposed project. Such support is not required, but may strengthen the proposal. Examples of previous support include faculty teaching release time, additional TA support, and equipment and space resources.
   d. A list of the team members (if any).

2. Proposal evaluation: Proposals will be evaluated based on their strategic value, as well as evidence of a demonstrated commitment to implementing and sustaining efforts.

3. Awardees receiving SIIP Adaptation funding will submit a final report on their projects, and share their results at a poster session at AE3’s Celebration of Teaching in April.

4. Please address questions and proposal submissions to Laura Hahn, Director, AE3 (Lhahn@illinois.edu).