

# Education Planning Meeting - Homepage

Submitted by [Katie Dey](#) on Thu, 10/11/2012 - 11:55am

This group is for **planning** the CPS Curriculum/Education *Workshop* sometime during the week of April 8-11, 2013 during [CPSWeek](#) in Philadelphia. This invitation-only **planning** meeting was held in Baltimore on Wednesday, October 24, 2012 (just before the [National Workshop on the New Clockwork for Time Critical Systems](#)) workshop. The outcome was the First Workshop on [Cyber-Physical Systems Education call for participation](#).

Attendees were encouraged (but not required) to give opening presentations and to participate actively in discussions. We are interested in new approaches to teaching cyber-physical systems. Opening presentations may fall into any of the following categories:

- Tutorial: Present a tutorial on an area in which you are familiar to an audience of those learning about cyber-physical systems. For example, how would you teach formal verification in the context of CPS? Control theory? Also helpful would be pointers to resources, basic ideas one wants to get across. The tutorial contributes to early curriculum development, and the diverse audience of the planning meeting can experience firsthand some of the challenges of teaching topics in CPS. Each tutorial helps us shape a better understanding of the criteria by which topics should be considered for inclusion in CPS curricula, and provides a forum for analysis of how a topic should be treated. The diversity of the audience allows for an experience between a classical lecture and an informal research group meeting, where the presenter may convey new ideas and interact directly with the audience.
- Curriculum: Present your position on how to build a cyber-physical systems curriculum, with respect to cross-disciplinary theory, laboratory content, or both. How do you build a CPS curriculum or laboratory from scratch?
- CPS Community Leadership: Present your position on how to lead the CPS community into thinking about education in a focused, meaningful, methodical way. The NSF CPS program aims to foster an engaged, multi-disciplinary research and education community, and seeks ideas for incorporating this new science into education that will prepare a CPS workforce for tomorrow. NSF program officers have advised that building a degree of consensus on CPS curriculum requires voluntary cooperation among members of the CPS educational community ? how can we best foster this cooperation?

Topics to avoid:

- Definitions (or redefinitions) of CPS beyond those offered by NSF.
- Simply describing how you have taught CPS topics before. We are looking for a systematic approach to CPS education. Instead, leverage your teaching experience to convey how you discarded comfort zones, how you crossed discipline boundaries, and how you were able to build bridges with others in the CPS community.

Following the presentations, we will collaborate to produce the following output of the planning meeting:

1. A call for participation for the CPS Education Workshop, including a statement of the expected outputs of that workshop. The call for participation should not emphasize topics in CPS, but rather how to communicate these topics to non-experts.
2. A draft agenda for the workshop.
3. A plan for populating any agenda slots for planned speakers, and inviting the speakers.
4. A plan for recruiting the rest of the participants for the workshop.
5. A plan for producing a report from the workshop.

For details about the planning meeting, please contact Christopher Brooks ([cxh@eecs.berkeley.edu](mailto:cxh@eecs.berkeley.edu))

[CPS Curriculum/Education Workshop Program Committee](#) (internal use)

This event is funded by the National Science Foundation (NSF) and the National Security Agency (NSA). Appropriate acknowledgement of this support should be included in reports or publications based on work performed under this award.



[2012 Curriculum/Education Workshop](#)

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