

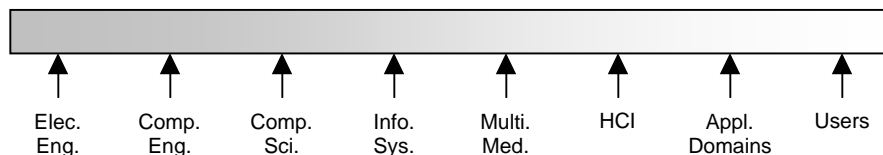
**"Integrative Computing Education & Research (ICER):  
Preparing IT Graduates for 2010 and Beyond"  
Guidelines for Preparing ICER Workshop White Papers**

### Introduction

This information is meant to serve as a guideline for ICER Workshop participants when preparing their "White Papers" prior to the ICER meetings.

In taking a ten-year view of computing education, CISE asks that ICER Workshop participants put aside traditional notions of curricula, academic institution organizational structures, and other similar constraints to change. Participants are asked to assume a viewpoint that reflects the field's broadening-scope, the increasing size, complexity and multi-disciplinary nature of computing applications, preparation of graduates who will need to be competitive in a global workforce, the ubiquitous role of security in the practice of computing, and the increasingly integrative nature of the field.

It is important that ICER participants not dwell on trying to precisely define what "computing" means. For the purposes of the workshop, consider computing as a continuum of disciplines that may include the following (as well as others that the group may identify):



With White Papers serving as catalysts, ICER Workshop discussions should articulate long-term, high impact, and potentially high-risk, strategies to catalyze the transformation of university computing education throughout the nation.

### White Paper Guidelines

ICER Participants are asked to prepare a maximum of two pages that address the following issues as well as any that are not covered by the questions that authors deem as important. The White Papers will be shared among workshop attendees.

1. *Preparing undergraduates for computing careers:* What are the biggest challenges that you face in your role (i.e., as an educator, employer, administrator, leader, other)?
2. *Transforming the educational experience:* What might the community do to address the challenges you identified above?
3. *Models for transforming computing education:* What might an ideal undergraduate model for computing education look like in five years?
4. *Inhibitors and strategies:* Can you identify inhibitors that might prevent the nation from achieving goals it sets for computing education? Can you identify strategies that may enable the transformation of undergraduate computing education in the USA?
5. *Who might participate:* What stakeholders should be involved in designing strategies to catalyze the transformation of university computing education throughout the nation?

What is the role of government in this process? Professional societies? Universities and faculty? Others?