

1035-Z1-1973 **Ignatios E Vakalis*** (ivakalis@calpoly.edu), Department of Computer Science, CalPoly and State University, San Luis Obispo, CA 93407. *Models of Computational Science Curricula.*

Computational science and Engineering (CSE) is a rapidly growing interdisciplinary field that integrates computing, mathematical modeling, and visualization to solve complex problems in the physical, natural, behavioral and social sciences as well as engineering and finance. The SIAM Working Group on CSE Undergraduate was formed in February 2005 to report on the current status of CSE undergraduate education. The objectives of the comprehensive report are to present the scope of CSE as an undergraduate discipline, to examine some of different models for CSE undergraduate programs, to delineate the needs that undergraduate CSE preparation must address for a successful transition to industry or graduate programs and to profile some recent graduates of CSE undergraduate programs. The talk will present the major findings of the SIAM report along with exemplary undergraduate CSE curricula. In addition the presentation will include a summary of key components of an inter-institutional undergraduate program in computational science that implements a competency-based minor for majors in science, mathematics, and engineering. (Received September 21, 2007)