CES History

The Computational Engineering and Science (CES) Program at the University of Utah has a long and distinguished history. Unlike many computational science programs initiated since the turn of the century, the Utah CES program was not merely reactionary to current scientific and market trends, but rather has led the way in demonstrating the efficacy of interdisciplinary educational and research programs. In the early 1990s, members of the Computer Science and Mathematics departments envisaged the future need for CES-trained students.

In 1994, the CES Program was initiated jointly by Professors Peter Alfeld (Mathematics) and Chris Johnson (Computer Science). This new interdisciplinary program, co-directed by Alfeld and Johnson and advised by a board populated by members of the two initiating departments, strove to build educational bridges between the two departments in a way that exposed CES participants to the new fertile ground of computational science. The CES Program was created in response to the tremendous growth in computer technology and application of computer simulation to a wide variety of problems in science, engineering, mines and medicine. Students who completed the requirements of the CES program were awarded a CES certificate in addition to their graduate degree in Computer Science or Mathematics. Foreseeing the virtues of graduate training in CES, the Computer Science and Mathematics Departments began planning for a degree program which reflected the mission and vision statements of CES. Seeing the need for a strong application domain participant, the Physics Department was asked to become increasing involved in CES.

In 2001, the Utah Board of Regents approved the Master of Science Degree Program in Computational Engineering and Science. The “new” reorganized CES Program (now offering both a certificate and an MS degree in CES) was restructured to accommodate participation from a large collection of departments across the College of Science, the College of Engineering, and the College of Social and Behavioral Science. The program is currently administered by a Steering Committee consisting of two members from each of the three founding departments (Mathematics, Physics and Computer Science) and individual members from a large representation of the other participating departments. At present, there are eleven participating departments in the CES program represented by nine members on the Steering Committee.
From 2001-2005, Professor Kris Sikorski from the School of Computing was the first Director of the CES Program and Chairperson of the Steering Committee. Under his leadership, the purpose, goals and administration of the program were solidified. In 2005, Professor Mike Kirby from the School of Computing was elected by the Steering Committee to serve as Director of the CES Program and Chairperson of the Steering Committee and served as Director from 2005 to 2008. In 2008, Dr. Kirby stepped down from Directorship to take his seventh-year academic sabbatical, at which time Dr. Sikorski was elected by the Steering Committee to serve as Director of the CES Program and Chairperson of the Steering Committee. Professor Sikorski served as Director from 2008 to 2011, at which time he stepped down on medical leave. Professor Adam Bargteil from the School of Computing served as the interim Director until 2012. In 2012, the Steering Committee was updated by each of the founding departments (SoC, Mathematics and Physics). At that time, Professor Martin Berzins of the School of Computing was elected by the Steering Committee to serve as the Director of the CES Program and Chairperson of the Steering Committee.