# Center for Multimedia Education and Technology (CMET) at University of Utah

## Mission

To stimulate and accelerate the use of computers and software tools in engineering, science and mathematics education and to provide avenues and opportunities for the effective integration of multimedia lessons in teaching.

## The Center

In addition to the financial support from the Utah Centers of Excellence Program, the Center for Multimedia Education and Technology (CMET) is funded by the National Science Foundation (NSF). CMET is managed through a Policy Board by the Executive Office of the Institute of Electrical and Electronics Engineers, the largest professional organization in the world. In accomplishing its objectives, CMET is engaged in a number of different projects including:

- Publishing annual books of tested and approved software packages that contain diskettes of selected software and multimedia (interactive video) lessons.
- Training workshops.
- Funding software development projects at universities across the United States and Europe.

14 universities in the United States participated in the development of CMET's first software book which is in the area of electromagnetic education, an abstract and highly mathematical course in electrical engineering. This book contains 15 diskettes and 2 videos. This educational package has been distributed to hundreds of universities in 28 countries. In addition, CMET, in collaboration with John Wiley & Sons, publishes a quarterly archival journal titled, *Computer Applications in Engineering Education.*

*Hands-on multimedia education.*

CMET has recently been appointed manager of the COLOS USA (Conceptual Learning of Science) project funded by Hewlett–Packard, COLOS is based on the realization that nature does not solve mathematical equations and that teaching and learning may be based on intuitive concepts. 10 universities from across the U.S. were selected to participate in COLOS, while the University of Utah has been given the leadership role.

The State of Utah support for CMET is mainly focused on the development of multimedia lessons for precollege physics and calculus education. R&D activities are focused on the use of CD ROM to distribute CMET products to high schools and universities and on investigating the use of the Virtual Reality technology to mimic laboratories.

## Center Products

- Educational software and videos (highly visual, interactive packets containing tutorials and exercises).
- Multimedia (interactive video) lessons on topical subjects in engineering, science, and mathematics.
- Workshops and training institutes.
- Catalogs of available software for science and engineering education.
- Software and multimedia for industrial training.


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