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Session S1D - Multimedia 1
Chair: Donna J. Brown, University of Illinois at Urbana-Champaign
Interactive Learning Modules for Electrical, Computer and Systems Engineering
Multimedia Courseware to Enhance the Classroom Experience
Michelle Griffith, John S. Lamancusa, Jens E. Jorgensen and Jorge I. Velez-Arocho
Multimedia Assisted Instruction in Upper Level Engineering Courses
Raj Mutharasan, Wayne Magee, Margaret Wheatley and Young Lee
Developing An Active Learning Environment With Courseware Approach
Session S1E - ABET 2000 Outcomes Assessment
Chair: Virgil Cox, Gaston College
ABET Criteria 2000: Institutional Preparation and Experience
John Orr
Preparing for an Accreditation Visit Using ABET Engineering Criteria 2000
James R. Rowland
Competency Matrix Assessment for First-Year Curricula in Science, Engineering, and  Mathematica and ARET Criteria 2000
Mathematics and ABET Criteria 2000
The Manufacturing Engineering Education Partnership Program Outcomes Assessment Results
Lueny Morell de Ramirez, Jose L. Zayas-Castro, John S. Lamancusa and Jens E. Jorgensen

Chair: Susan Lord, University of San Diego
A Hands-on Approach to Green Design in an Introductory Engineering Class
Introductory Engineering Courses
Using Stiquito in an Introduction to Engineering Skills and Design Course
Eleg 1003 - Introduction To Electrical Engineering: An Approach To Motivate And Teach EE Freshmen
Session S1G - Teacher Development Chair: Nassir H. Sabah, American University of Beirut
They Already Do It: Common Practices In Primary Education That Engineering Education Should Use
Preparation for Teaching Assistants at the University of Wisconsin, College of Engineering
Mentored Teaching Assistants
Reflective Teaching Practice by University Faculty: Rationale and Case Study in Computer Science
Session S1H - New Criteria for Accreditation of Computer Science Programs Chair: Lawrence Jones, Software Engineering Institute, Carnegie Mellon University
Panel Discussion: Computer Science Accreditation - Past, Present and Future
Plenary 3 - Does the Campus Have a Future: Looking Backwards, Stephen C. Ehrmann, American Association for Higher Education, sponsored by the Intel Corporation  Chair: Burks Oakley II, University of Illinois at Urbana-Champaign
Does the Campus Have a Future: Looking Backwards
Session S2A - Deans Session - Limited Resources and the Delivery of Engineering Education: Alternatives and Suggestions Chair: Umid R. Nejib, Wilkes University
Deans Session: Resource, Priorities, Decisions and the Delivery of Engineering Education
Session S2B - Computer Engineering 2 Chair: Pat Teller, University of Texas at El Paso
Design and Construction of a PC-Based Stack Machine Simulator for Undergraduate Computer Science and Engineering Courses
Fitratullah Khan and Sohail Anwar
Leveraging Student Experience with an Integrated Instructional Laboratory

**Session S1F - First-Year Engineering Courses 2: Motivating Students** 

An Educational Environment for Program Behaviour Analysis and Cache Memory Design
Session S2C - Four Innovations in Computer Science Curricula  Chair: Jane C. Prey, University of Virginia
Four Innovations to Undergraduate Computer Science Curricula (Panel)
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Session S2E - New Paradigms in Engineering Education 1: Partnerships Chair: Ronald L. Miller, Colorado School of Mines
The BETA Coalition: Regional Collaboration between 2-year and 4-year Engineering Colleges Richard Culver and Joe Biegen  Leadership and Organizational Transformation: Punishment Days or Academic Days Barbara A. Karanian  The Partnership Between the Science and Technology Wing and the School of Engineering and Applied Science: An Experiment in Living and Learning Jorge J. Santiago-Aviles, Krimo Bokreta and John C. Parker  Education Experiments in Thermodynamics 1282 Thomas A. Litzinger
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### Robin Murphy and Julian Martinez Silvije Jovalekic, Martin Rieger and Ralph Runge Erika Rogers Mentoring Graduate and Undergraduate Students in Microelectronic Systems Architecture Barbara G. Summers, Edna Gentry and Barb Helland Session S3E - Multimedia 3 Chair: Bruce C. Wheeler, University of Illinois at Urbana-Champaign John Hawley and Billy L. Crynes Curtis Carver, George Stone and Charles Powell David Meyer, Chris Niessen and Albert Reuther Albert Reuther and David Meyer Fitratullah Khan Session S3F - New Paradigms in Engineering Education 2: Philosopies and Formats Chair: Jeffrey E. Froyd, Rose-Hulman Institute of Technology Karl Smith and Alisha A. Waller Guillermo Leon de la Barra, Mario Leon de la Barra and Ana M. Urbina Edward W. Maby, A. Bruce Carlson, Kenneth A. Connor, William C. Jennings and Paul M. Schoch Pedagogy versus Reality: How Past Experiences Can Be an Effective Modeling Tool to P.K. Imbrie, Cesar Malave and Karan Watson James P. Avery, Melinda Piket-May, Jackie Sullivan and Lawrence Carlson **Session S3G - Exploring the Education Frontiers** Chair: Michael Pavelich, Colorado School of Mines Michael Pavelich, Alisha A. Waller and Nigel Middleton Session S3H - Development and Evaluation of Integrated Curricula

Session S3D - Computer Science and Engineering Undergraduate Research

Chair: Ann Gates, University of Texas at El Paso

Chair: John C. Chen. North Carolina A&T

Follow-Up on a Freshman Engineering Course Experiment
Evaluation of a First-Year Integrated Engineering Curriculum
Scaling Up Arizona State University's First-Year Integrated Program in Engineering: Problems and Solutions
Development and Implementation of an Integrated Engineering Curriculum for the Sophomore Year
Development of a Sophomore Year Engineering Program at Texas A&M University
Session S4A - Sloan New Faculty Fellows: Views of the Frontier, Sponsored by the Alfred P.
Sloan Foundation Chair: Burks Oakley II, University of Illinois at Urbana-Champaign
Introducing Reality when Educating Engineers - How much is too much?
F. Michael Bartlett Challenges and Strategies for Electrical Engineering Education
Jennifer T. Bernhard  Increasing Participation of Women in the Engineering Curriculum
Uma Jayaram  Bridging the Gap Between Education and Practice in the Design and Development of Engineering Systems
Kemper Lewis Good Morning Cedar Rapids. Do You Have Audio? Reflections on Teaching a
University Distance Education Course
Russel D. Meier
A Plan to Use Cooperative Learning Lectures to Prepare Undergraduates for Research
Teaching Design Through Design Competition
Wayne T. Padgett  Facilitating Learning: Believe in Your Students
On Making Engineering Sexy
Teaching Engineers How To Analyze Problems
Technology Provides Opportunities for Smaller Universities to Improve Computer Science Curriculum
Reflections on Cooperative Learning: Look Before You Leap
Laboratory Development in Collaboration with Industry
Session S4C - Computer Science and Engineering at Minority Institutions of Excellence Chair: Ramon Vasquez-Espinosa, University of Puerto Rico
Computer Science and Engineering at Minority Institutions of Excellence
Session S4D - World Wide Web Applications 3 Chair: William E. Sayle, Georgia Institute of Technology

Engineering for Middle School: A Web-based Module for Learning and Designing with Simple Machines
Writing Web-Based Quizzes with Mallard(TM)
Donna Brown  CHARLIE: A Computer-Managed Homework, Assignment and Response, Learning and Instruction Environment
D. Steven Barker
Carnegie Mellon Online: Web-Mediated Education
An interactive JAVA applet for teaching discrete-time system theory
Session S4E - Models and Methods to Increase Student Participation  Chair: Joan Burtner, Mercer University
Formulation And Development Of Mathematical Models For Engineering Problems:
An Experience On The Integration Of Theory And The Laboratory
Marcius F. Giorgetti
Active Participation by Sophomore Students in the Design of Experiments
PVC Experiments - First Rate Lab Apparatus from Plastic Plumbing, Adhesive, and Imagination
Stuart Wilkinson, Stanley C. Kranc and C.J. Biver
Engineering Outreach Web Page
Daniel Hess
Science and Technology in the Workplace A Decade of Experimentation with Post-Calculus H.S. Math
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Training TAs to Help Students Learn Engineering Discourse
Trendy Technology or a Learning Tool?: Using Electronic Journaling on Webnotes for Curriculum
Integration in the Freshman Program in Engineering at ASU
Evans and Pete Williams
Teaching Freshmen to Write Technical Reports and to Navigate the Library: A Win-Win Situation
Experiments with Writing in the Engineering Classroom
Larry Banta and Sati Maharaj-Boggs
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An Educational Program in Product Realization
Jens E. Jorgensen, Joseph L. Garbini, William R. Murray, Paul J. Cohen, John S. Lamancusa and Jose
L. Zayas-Castro  Teaching New Product Development through a Product Engineering Approach
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