Program

Third Annual Summer Institute
Southeastern Consortium for Minorities in Engineering
Georgia Institute of Technology
Georgia State University
Atlanta, Georgia

June 13-23, 1979
Third Annual Summer Institute

Sponsored by

The Southeastern Consortium for Minorities in Engineering

F.W. Schutz, Jr., Codirector
Associate Dean of Engineering for Guidance
Georgia Institute of Technology

Hiram Johnston, Codirector
Chairman, Department of Curriculum and Instruction
Georgia State University
WEDNESDAY, JUNE 13, 1979

1:00 p.m. - 4 p.m.  Registration  Atlanta Townehouse

5:30 p.m. - 6:30 p.m.  Reception for SECME participants & staff
                       Home of Dr. and Mrs. Joseph M. Pettit
                       President, Georgia Institute of Technology

7:00 p.m. - 9:30 p.m.  Banquet  Atlanta Townehouse
                       Master of Ceremonies
                       F.W. Schutz, Jr.
                       SECME Board Member

Welcome
Vernon D. Crawford
Vice President for Academic Affairs
Georgia Institute of Technology

Introduction of Consortium Institution
Representatives and SECME staff
Z.W. Dybczak
Dean of Engineering, Tuskegee Institute
Chairman, SECME Board of Directors

Introduction of Guests
Hiram Johnston
Georgia State University

Introduction of Speaker
W.E. Lear
Dean of Engineering
University of Alabama

Keynote Address
David Ford, Manager
Industrial Control Development
Allen-Bradley Company

All daytime sessions are in the Space Science & Technology Building
on the Georgia Tech campus unless otherwise indicated.

All evening sessions are at the Atlanta Townehouse unless otherwise
indicated.
THURSDAY, JUNE 14, 1979

Theme: The Why & What of SECME

8:30 a.m. - 10:15 a.m.  Moderator: Z.W. Dybczak

"Minorities in Engineering - A Historical Overview"
W.E. Lear, Dean of Engineering
University of Alabama

"The Successful Pre-College Program"
Melvin Thompson, Executive Director
Committee on Minorities in Engineering
National Research Council

"SECME - Who Needs It?"
Carolyn C. Chesnutt, Executive Director
SECME

10:15 a.m. - 10:45 a.m.  Break

10:45 a.m. - 12 noon  "Encounters of an E-Kind"
JuniorEngineeringTechnicalSociety (JETS)
Douglass High School, Atlanta

11:00 a.m. - 12 noon  "Meeting Human Need - The Essence of Engineering"
George Sowers, Professor of Civil Engineering
Georgia Institute of Technology

12:15 p.m. - 1:15 p.m.  Lunch  Student Center Cafeteria

1:30 p.m. - 2:45 p.m.  Moderator: Hiram Johnston

"Curriculum Can Turn on Students"
E.J. Piel, Executive Director
National Coordinating Center for Curriculum Development

3:00 p.m. - 4:30 p.m.  Curriculum Work Groups

4:30 p.m.  Break

7:00 p.m. - 9:00 p.m.  Film Festival
Walter Robinson, Engineer
Southern Bell
FRIDAY, JUNE 15, 1979
Theme: Solving Problems

8:30 a.m. - 9:30 a.m.  Moderator: F.W. Schutz, Jr.
"MARTA - An Overview of the Largest Engineering Project in the Southeast"
Manuel Padron, Director of Planning & Marketing
Metropolitan Atlanta Rapid Transit Authority

9:30 a.m. - 10:30 a.m.  Moderator: Anne Rowe
Engineering Faculty Coordinator
Florida Institute of Technology
Panel Discussion:
"Becoming an Engineer - from a Minority Viewpoint"
Leonard Thompson
Buckeye Cellulose Corporation, Memphis
Susan Kane
Environmental Protection Division
State of Georgia, Atlanta
Ramona Jones
Southern Bell, Atlanta
B.W. Harrington, Jr.
Harrington, George & Dunn, Atlanta
Miguel Osores
Tennessee Valley Authority, Knoxville
Janet Harrison
DuPont, Savannah River Plant, Aiken, SC
Luisa Dennstedt
Union Carbide, Texas City, Texas

10:30 a.m. - 11:00 a.m.  Break

11:00 a.m. - 12 noon  "Just What Do Engineers Do?"
Small group discussions with engineers

12:15 p.m. - 1:00 p.m.  Lunch  Student Center Cafeteria

1:15 p.m. - 2:30 p.m.  Moderator: Ed Lucy, Science Education
Georgia State University
"Problem Solving is What Life is All About"
Project Development

2:30 p.m. - 4:30 p.m.  Special Interests  (Meeting Places to be announced)
I. Calculators in the Classroom
II. Clean Air Car,
Donald Covault, Professor CE
III. Solar Energy Slides & Tour,
J.R. Williams, Georgia Tech
IV. Energy Simulation,
Henry Hagedoorn, University of Central Florida
V. Toy Car Competition,
John Freeman, North Carolina State University

4:30 p.m.  Break
SATURDAY, JUNE 16, 1979

10:00 a.m. - 12 noon  MARTA Tour - Group I  Meet in Townehouse Lobby
2:00 p.m. - 4:00 p.m.  MARTA Tour - Group II  Meet in Townehouse Lobby

SUNDAY, JUNE 17, 1979

Tour of Atlanta
Six Flags

6:00 p.m. - 9:00 p.m.  Display of minicomputers  Saxony A
                      Atlanta Townehouse

MONDAY, JUNE 18, 1979

Theme: Teacher/Counselor Role in Career Decisions

8:30 a.m. - 10:30 a.m.  Curriculum Groups
                        Engineering Faculty Meeting  Conference Room
                        Aerospace Engineering

10:30 a.m. - 11:00 a.m.  Break

11:00 a.m. - 12 noon  Moderator: Roscoe McNealy
                      Engineering Faculty Coordinator
                      University of Florida

"How Teachers Can Help - A Personal Story"
Robert Holmes, Engineer
Alabama Power Company

12:15 p.m. - 1:00 p.m.  Lunch  Student Center Cafeteria

1:15 p.m. - 2:45 p.m.  Moderator: Carolyn Myers, Instructor
                      Mechanical Engineering, Georgia Tech

Panel Discussion
Georgia Tech Engineering Students
Jorge Ciappi, ME
Evangeline Brown, EE
Phillip Gee, ISyE
Isaac Champagne, EE
Margie A. Smith, NE

3:00 p.m. - 4:30 p.m.  Curriculum Enrichment
                        Math visits Science and Language Arts
                        Science visits Language Arts and Math
                        Language Arts visits Math and Science

4:30 p.m.  Break

7:00 p.m. - 9:00 p.m.  Film Festival
TUESDAY, JUNE 19, 1979

Theme: Academic Preparation - The Key to Success

8:30 a.m. - 10:00 a.m. Engineering Labs I (Groups & Locations to be announced)

10:00 a.m. - 10:30 a.m. Break

10:30 a.m. - 12 noon Curriculum Groups
Engineering Faculty Meeting
Conference Room - AE

12:15 p.m. - 1:00 p.m. Lunch
Student Center Cafeteria

1:15 p.m. - 2:30 p.m. Project Development

2:45 p.m. - 4:30 p.m. Curriculum Groups
Engineering Faculty Meeting
Conference Room - AE

4:30 p.m. Break

7:00 p.m. - 8:00 p.m. Moderator: Jake Halford
Engineering Faculty Coordinator
The Citadel

Enrichment through JETS
Howard Wakeland, Associate Dean of Engineering
Illinois Institute of Technology

8:00 p.m. - 9:00 p.m. Informal Discussion on Club Activities
WEDNESDAY, JUNE 20, 1979

Theme: Developing Community Support

8:30 a.m. - 10:00 a.m.  Engineering Labs II
10:00 a.m. - 10:30 a.m.  Break
10:30 a.m. - 12 noon  Moderator: John Freeman
                 Engineering Faculty Coordinator
                 North Carolina State University
                 "Can Industry & Schools Speak The Same Language?"
                 Brooks Whitehurst, Governor's Staff
                 State of North Carolina
                 "Working with Community Groups"
                 Ida Baker, Principal, Cape Coral High School
                 "Involving Parents"
                 Herbert Lavendar, Principal, Aliceville High School
12:15 p.m. - 1:00 p.m.  Lunch  Student Center Cafeteria
1:00 p.m. - 3:00 p.m.  Curriculum Groups
3:00 p.m. - 4:30 p.m.  Individual Project Development
4:30 p.m.  Break
7:00 p.m. - 9 p.m.  Film Festival
THURSDAY, JUNE 21

Theme: Developing Engineering Guidance

8:30 a.m. - 10:00 a.m. Engineering Labs III

10:00 a.m. - 10:30 a.m. Break
Registration - Project Directors

10:30 a.m. - 12 noon Panel Discussion of SECME Projects by Staff Members
Teacher In-Service Programs
Identifying Minority Students
Enriching Curriculum

12:15 - 1:00 p.m. Lunch Student Center Cafeteria

1:15 p.m. - 4:30 p.m. Project Directors' Meeting

1:15 p.m. - 2:00 p.m. Moderator: F.W. Schutz, Jr.

"The Importance of High School Guidance"
F.W. Schutz, Jr., Associate Dean of Engineering
Georgia Institute of Technology

"The Routes to Engineering"
Z. W. Dybczak, Dean of Engineering
Tuskegee Institute

Charles Meredith, Provost
Atlanta University Center

3:00 p.m. - 3:45 p.m. "Making It Financially in Engineering College"
Nydia Gouraige, Director
University Relations
National Fund for Minority Engineering Students

Bob James, Assistant Director
Cooperative Education,
Georgia Institute of Technology

3:45 p.m. - 4:30 p.m. "The Job Outlook"
Michael A. Donahue, Director of Placement
Georgia Institute of Technology

John Lucky
Proctor & Gamble

4:30 Break

6:00 p.m. - 7:00 p.m. Reception Atlanta Townehouse
Saxony A

7:15 p.m. Dinner Theatre Student Center Ballroom
Wits End Players
FRIDAY, JUNE 22, 1979

Theme: Getting the Most Out of An Engineering Faculty Coordinator

7:30 a.m. - 8:30 a.m.  Engineering Faculty Coordinators' Breakfast

8:30 a.m. - 9:30 a.m.  "An Engineer Goes to High School"
   Erwin A. Reinhard
   Engineering Faculty Coordinator
   The University of Alabama

9:45 a.m. - 12 noon  Planning Sessions with Engineering Faculty Coordinators
   Executive Committee Meeting  Conference Room, AE

12:15 p.m. - 1:00 p.m.  Lunch
   Participants  Student Center Cafeteria
   Project Directors  Student Center, Rm 301
   Executive Committee  Student Center, Rm 359

1:15 p.m. - 2:45 p.m.  Project Development

3:00 p.m. - 4:30 p.m.  Curriculum Groups  Student Center

4:30 p.m.  Break

7:00 p.m. - 9:00 p.m.  Student Rap Session

SATURDAY, JUNE 23, 1979

9:00 a.m. - 10:15 a.m.  Wrap-Up  Student Center Theatre
   Complete Post-Test and Evaluation
   Submit Plans for Utilization of Modules

10:30 a.m. - 12 noon  Brunch  Student Center Ballroom
   Fred E. Brown
   Minority Engineering Program
   University of Tennessee, Knoxville

   Awarding of Certificates

12 noon  Adjourn
Faculty and Staff

Edward Lucy, Associate Professor, Science Education, Georgia State University
Jack Downs, Professor, Mathematics Education, Georgia State University
Robert Probst, Associate Professor, English Education, Georgia State University
Willette Williams, Science Teacher, Denmark-Olar High School, Denmark, SC
Samuel Spearman, Science Teacher, Hillsborough Senior High School, Tampa, FL
Naomi Seifert, Science Teacher, Spartanburg High School, Spartanburg, SC
Jeff Given, Science Teacher, Glades Central High School, Belle Glades, FL
Peggy Martin, Mathematics Teacher, Gibbs High School, St. Petersburg, FL
Alice Doanes, Mathematics Teacher, C.L. Harper High School, Atlanta, GA
Rosemary Austin, English Teacher, B.C. Rain High School, Mobile, AL
Linnie McMillan, English Teacher, Fulton High School, Knoxville, TN
Katherine M. Hertzka, Program Specialist, Georgia Institute of Technology
Audie Jordan, Education Specialist, SECME
Brenda P. Witten, Summer Institute Coordinator, SECME
Carolyn C. Chesnutt, Executive Director, SECME

Engineering Faculty Coordinators Attending

John Kennedy, Auburn University, Auburn
Naim Kheir, The University of Alabama, Huntsville
Erwin A. Reinhard, The University of Alabama, Tuscaloosa
Shaik Jeelani, Tuskegee Institute, Tuskegee
Anne Rowe, Florida Institute of Technology, Melbourn
A. Henry Hagedoorn, University of Central Florida, Orlando
Roscoe J. McNealy, University of Florida, Gainesville
Henry Fraze, University of South Florida, Tampa
Jude T. Sommerfeld, Georgia Institute of Technology, Atlanta
William B. Hall, Mississippi State University, Starkville
John F. Freeman, Jr., North Carolina State University, Raleigh
Jake H. Halford, The Citadel, Charleston
Joseph Biedenbach, University of South Carolina, Columbia
John H. Forrester, University of Tennessee, Knoxville
Fred Terry, Christian Brothers College, Memphis
Roger Nolte, Memphis State University, Memphis