ASSESSMENT SHOWCASE October 24, 2008

Best of Assessment Showcase Breakout Session Integrating Multiple Sources of Data

Raphael A (Ray) Yunk, PE, LEED AP

Dept of Architectural Engineering & Construction Science Program Coordinator, Architectural Engineering



ACCREDITATION REQUIREMENTS

Accreditation Board for Engineering and Technology (ABET)

North Central Association - Commission on Accreditation and School Improvement (NCA)



Leadership and Quality Assurance in Applied Science, Computing, Engineering, and Technology Education



ABET ASSESSMENT PROCESS

Each accredited program must have assessment process which documents that graduates have achieved the educational objectives and program student learning outcomes

PROGRAM EDUCATIONAL OBJECTIVE

"Within the first few years following graduation from the five year Architectural Engineering program at Kansas State University, graduates are expected to be working as a professional in an area closely related to architectural engineering, pursuing licensure, and advancing professionally with confidence and experience in one or more of the architectural engineering disciplines of structural, mechanical, electrical, or construction."

PROGRAM STUDENT LEARNING OUTCOMES

1-a) An ability to apply the fundamentals of engineering, science and mathematics.2-b) An understanding of statistics and experimental design in the context of building performance.

3-c) An ability to design a system to meet program criteria.

4-c) An ability to understand the cost and engineering economic fundamentals as applied to building system engineering.

5-d) An ability to work on multi-disciplinary teams.

6-e) An ability to identify, research and solve engineering problems.

7-f) An understanding of ethical and professional behavior in preparation for effective industry careers.

8-g) An ability to communicate effectively with oral presentations.

9-g) An ability to communicate effectively with written documentation.

10-g) An ability to communicate effectively with graphic depiction.

11-h, j) An ability to place building engineering problems in a contemporary, social and global context.

12-i) Self-directed inquiry as a basis for life-long learning.

13-k) An ability to use the computer as a tool for analysis and communication.

SURVEY/DATA SOURCES

Senior Surveys FE & PE Exam Results 2-Yr Alumni Surveys 5-Yr Alumni Surveys Employer Surveys Instructor Surveys & Course Outcomes

COMPILNG SURVEYS/DATA

Surveys Administered, Collected, and Input on Semester or Annual Basis

Compare Student Learning Outcomes & Program Educational Objective to Performance Criteria

Create Executive Summary for each SLO and the PEO

REVIEWING, EVALUATING, & REPORTING

ABET Assessment Team

ARE Advisory Council

Department Head &/or Faculty Teams

ACTING ON RESULTS (Closing the Loop)

Instructional Programs Team – Initiates Potential Changes to Courses or Curriculum

Department Head &/or Faculty Teams – Initiate Responses to Other Issues