Engineering Design Process

EXPLORE ASK Keep in Mind: What have others done? Address the problem What is the problem? **Explore options** Satisfy constraints What are the constraints? **Explore materials** Meet the criteria What are the criteria? Think Trade-offs Be creative Consider everyone's ideas **PLAN** Failure is an important part of the process **Brainstorm** Choose the best idea Engineering Design is an adaptable and open Make a plan process. **IMPROVE** Analyze your data How can you make it better? **CREATE** Follow your plan **TEST** and start **PRODUCTION** Try it out! building Design satisfies the goal Present your design Collect data Reflect Record observations Adapted from University of Arizona College of Engineering