

# ENGINEERING DESIGN PROCESS

## ASK/INQUIRE

- Define the authentic role and essential question
- Conduct preliminary research
- Identify criteria and constraints for the problem
- Refine the problem statement

## IMAGINE

- Create the project management plan
- Conduct research relating to the problem statement
- Brainstorm possible solutions
- Create a design brief

## PLAN

- Research the viability of possible solutions
- Design testing methods for critical assumptions
- Select a solution

## CREATE

- Develop, refine and document the selected solution
- Create a prototype

## EXPERIMENT/EVALUATE

- Test and acquire data
- Analyze test data

## IMPROVE

- Refine and iterate the design
- Finalize documentation of the design
- Analyze results, summarize knowledge gained and evaluate the proposed improvement

## COMMUNICATE

- Prepare a communication plan for an authentic audience
- Write an individual authentic report as defined in the project description
- Present / defend the project with an authentic audience for feedback



**SREB**

Advanced  
Career