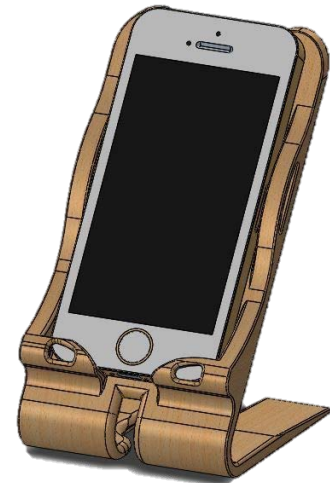


# ENGINEERING BY DESIGN

## ADVANCED DESIGN APPLICATIONS

### DUAL CREDIT



## Eastern Kentucky University

High School Juniors/Seniors – 3 College Credits  
TEC 102 – Technology & Society  
Online via Blackboard

Course focuses on how engineers and technicians apply their creativity, resourcefulness, mathematical, technical and scientific knowledge to solve authentic design problems. While primarily focusing on the manufacturing and construction fields of engineering, students will solve a variety of real world engineering problems to successfully complete the course requirements.

More Information: Mark Harrell [Mark.Harrell@eku.edu](mailto:Mark.Harrell@eku.edu)

## Course Modules

- Engineering Design Process
- Construction Scaling & Introduction to Autodesk Revit 2019
- Lake Cabin Floor Plan
- Lake Cabin Expansion Project
- Infrastructure & Neighborhood Improvement
- Green Building Design
- STEM Lab of the Future Midterm Project
- Exploring EKUs Applied Engineering and Technology Program
- Smart Phone Accessory Project
- Navigating Onshape
- Introduction to Onshape Sketching
- Part Design Using Onshape Part Studios
- Detailed Drawings in Onshape
- Smart Phone Accessory Onshape Version Final Project