



THE OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING

Translating Engineering Research to K-8 (TEK8)

ENGR 6850S

Credit Hours:

3.00 - 3.00

Course Levels:

Graduate

Course Components:

Lecture

Course Description:

Guides graduate students through the development of design challenges inspired by prior research experiences. Develops the skills to teach engineering in under-resourced schools & recognize how to relay engineering skills to diverse populations. Design challenges are created to be age-appropriate for middle school, low cost, & facilitated by someone with little technical background in <90 minutes.

Course Goals / Objectives:

- Articulate key components of research to others Describe ways in which research can impact society Explain underlying mathematics and science principles that guide their research List the engineering career pathways related to their research
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Course Topics:

- Implicit bias and empathy
 - Demographic Profiles and Social Justice
 - Working with minors training
 - Design Challenges
 - Learning theory & theoretical frameworks in middle school
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Designation:

Elective