**Project 1: Instructional Change and Curriculum Development**

**Graduate Student Instruction**
1. Grading
2. Design of Incubator

**Graduate Student Research**
1. Development of assessment and outcomes of student learning
2. Research on instructional change
3. Research on development of shared BME identity amongst student/faculty/staff
4. Research on education best practices
5. Research on interdisciplinary

**Goal:** To develop a more cohesive and high quality BME program for undergraduates

**Goal:** To understand effective BME education practices to implement in BME curriculum

**IBME will create a departmental culture in which interdisciplinary faculty are empowered to work together to create a high quality and cohesive biomedical engineering (BME) program built on student learning theory and responsive to the rapidly changing environment of biomedical practice.**

**Figure 2: How the BME Instructional Incubator fits into the cohesive BME program**

**Figure 3: Schematic of how the BME Instructional Incubator supports Hub Classes.**

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**Project 2: BME Identity & Interdisciplinarity**

**Goal:** Explore how undergraduate BME students conceptualize themselves as a function of values, motives, and experiences

**Research Questions:**
1. How do incoming students perceive BME Professional Identity?
2. How do student perceptions of BME Professional Identity change over time?
3. What are BME faculty perceptions of BME Professional Identity?
4. How do student and faculty perceptions of BME Professional Identity align?

**Graduate Student Research**

**Interdisciplinarity**

**Goal:** Explore how to analyze, synthesize and harmonize links between disciplines into a coordinated and coherent whole

**Research Questions:**
1. What pedagogical practices support student learning in interdisciplinary environments?
2. How can faculty from different disciplines co-create interdisciplinary exercises that teach novices to not just identify content from different fields, but understand and integrate new values through experimentation?

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