

# BME 533/ME 5503 : Medical Device Innovation and Development

The goal of this course is to introduce medical device innovation strategies, design and development processes, and provide students with an understanding of how medical device innovations are brought from concept to clinical adoption. Students will have opportunities to practice medical device innovation through a team-based course project. Specific learning outcomes include describing and applying medical device design and development concepts such as value proposition, iterative design, concurrent design and manufacturing, intellectual property, and FDA regulation; demonstrating an understanding of emerging themes that are shaping medical device innovation; demonstrating familiarity with innovation and entrepreneurship skills, including customer discovery, market analysis, development planning, and communicating innovation; and gaining capability and confidence as innovators, problem solvers, and communicators, particularly in the medical device industry but transferable to any career path.

**Department**

Biomedical Engineering

Mechanical Engineering

**Credits** 2.0