## 2300 Biodesign

Introduction to medical devices. Medical Devices (MDs) and In vitro Diagnostic Products (IVDs). Micro/Nano technologies for MDs and IVDs. Biosensors. Single & Multiplex measurements for DNA, RNA, and proteins. Regulatory Framework. Quality Management Systems (QMS) for MDs and IVDs. ISO13485. The course is project- based and include the research and development of an IVD or MD starting from the idea, brainstorming, concept, market analysis, need identification, intellectual property (IP) search, product design, and business plan.