Possible Emphases within the Master of Science

Assistive Technology Emphasis
Assistive Technology is designed to help people with disabilities function more effectively. Students choosing an emphasis in this area will focus on clinical studies research and/or development. They will enroll in elective coursework with a focus on Assistive Technology and Rehabilitation Engineering and will likely complete a project or thesis under the mentorship of the clinical and research faculty at Assistive Technology Partners.

Basic Research Emphasis
This area emphasizes traditional research opportunities with a focus on scientific discovery. Work will involve primarily lab-based bench-top research and/or computer simulations. The approach will be hypothesis-driven, with expectations for academic productivity similar to most PhD programs in basic sciences and engineering, i.e., dissemination of research work through peer-reviewed outlets, ability to formulate and defend research approaches, etc. This emphasis is most applicable to students interested in pursuing research careers in academia or industry.

Biomedical Device Design Emphasis
This area emphasizes highly nontraditional work in that its primary goal is the commercialization of a novel biomedical technology, device or application. Students pursuing a degree with this emphasis will select elective coursework with focus on product development and/or Biodesign and will likely work with both clinical and research faculty in the development of their culminating project or thesis.

Clinical Imaging Emphasis
This area emphasizes clinical applications of bioengineering research with focus on translating engineering concepts into clinically useful tools, diagnostics, treatments, devices, or research methods. Students pursuing a degree with this emphasis will likely have both bioengineering and clinician co-mentors, and will spend substantial research time collecting data in the clinic or engaged in analyzing clinical data or images.

Entrepreneurship Emphasis
This area emphasizes the skills and strategies necessary to launch start-up biomedical technology companies. Students will likely enroll in elective coursework at the CU Denver School of Business and, upon acceptance, concurrently earn a Master of Business (MBA) or a certificate program through the Jake Jabs Center for Entrepreneurship. Students will likely work with industry leaders in the development of their culminating project or thesis.

Regulatory Affairs Emphasis
Bioengineers must not only be well-versed in the Biodesign process, but must be familiar with compliance and regulation as it relates to this field. Students who graduate with an emphasis in regulatory affairs will enroll in elective coursework that introduces them to US and global regulation and will design a thesis or industry project with a focus on the regulatory oversight of new product development.