15 Required Foundational Credits - *All foundational credit courses are 3 credit hours*

RGME 535: *Foundations in Regenerative Medicine*

A team-taught course using multiple faculty content experts. The objective of this course is for each student to develop a general understanding of the foundations and concepts related to Regenerative Medicine and Stem Cell research.

**Offered Fall Semester only*

RGME 545: *Stem Cell Product Biology, Bench to Bedside Development and Therapeutic Translation*

A team-taught course using multiple faculty content experts. In this course, each student will learn to understand the concept of stem cell biology from procurement to therapeutic development. This course will provide techniques to support cell and regenerative medicine product manufacturing.

**Offered Spring Semester only*

BIOL 491: *Contemporary Biology and Biotechnology for Innovation*

This is the first half of a two-semester sequence providing an understanding of biology as a basis for successfully launching new high-tech ventures. The course will examine physical limitations to present technologies and the use of biology to identify potential opportunities for new venture creation. Additionally, students will experience using biology in both identification of incremental improvements and as the basis for alternative technologies.

BIOL 492: *Contemporary Biology and Biotechnology for Innovation*

A continuation of BIOL 491-- with an emphasis on current and prospective opportunities for Biotechnology Entrepreneurship. The course covers emerging areas including (but not limited to) applications of DNA sequence information in medicine and agriculture; energy and the environment; biologically-inspired robots. *Recommended preparation: BIOL 491 or consent of department.*

RGME 467: *Commercialization and Intellectual Property Management*

An interdisciplinary course covers a variety of topics, including principles of intellectual property and intellectual property management, business strategies and modeling relevant to the creation of start-up companies and exploitation of IP rights as they relate to biomedical-related inventions. The course addresses issues relating to the commercialization of biomedical-related inventions by exposing students to the challenges and opportunities encountered when attempting to develop biomedical intellectual property; from the point of early discovery to the clinic and market.

Review all course descriptions via the CWRU General Bulletin