***Students must complete a total of 6 credit hours of additional electives outside of the RGME core and science electives.***

**EPOM 400** ***(3 credit hours)***: *Leadership and Interpersonal Skills*

This course is designed as an experience based process to increase understanding of Communication, Emotional Intelligence and behavioral based communication needs in the work environment. To increase understanding, students will learn to recognize, manage and leverage these in business relationships as well as in team and group processes to develop effective Leadership style. Students will work in teams to examine the topics from the perspective of team members and leaders and will formulate strategies to reach desired goals or outcomes.

**EPOM 403** ***(3 credit hours)***: *Product and Process Design and Implementation*

The course is taught through a series of lectures, class discussions, group projects and case studies. The course aim is to provide a solid understanding of the many aspects of the engineering design process and the management of technology. The course focuses on the engineering and management activities used to develop and bring to market new products and processes. The first part of the course focuses on the techniques used to develop new ideas, the second part focuses on the management of technology and innovation. Recommended preparation: EPOM 401.

**EPOM 410** ***(3 credit hours)***: *Intellectual Property Management and Opportunity Assessment*

The goal of this course is to address issues relating to the commercialization of scientific inventions by exposing graduate students to the challenges and opportunities encountered when attempting to develop meaningful intellectual property from the point of early discovery to the clinic and market. Specifically, this course seeks to provide students with the ability to value a given technological advance or invention holistically, focusing on issues that extend beyond scientific efficacy and include patient and practitioner value propositions, legal and intellectual property protection, business modeling, potential market impacts, market competition, and ethical, social, and healthcare practitioner acceptance. These issues transcend disciplinary boundaries, requiring the integration of

expertise in the fields of law, business, and biomedical research disciplines. For instance, comprehending the intricacies involved in the evolution of an upstream product from the lab to the marketplace requires an understanding of intellectual property management, namely the identification of optimal appropriability mechanisms, constructing an intellectual property portfolio (e.g., patents, trademarks, and trade secrets), and leveraging this portfolio in a competitive fashion. An emphasis of this course is to help students understand that intellectual property strategy is business strategy, and that IP is a strategic business asset that can be leveraged to create value and intellectual asset formation in the marketplace.

**EPOM 412** ***(3 credit hours)***: *Technology Transfer and Collaboration*

The overall goal of this course is to address the process of technology transfer. The course will build on an understanding of IP Management and Commercialization activities that follow a new discovery, and examine specific approaches to commercializing technology through the process of technology transfer both in the context of academic research and industry research and development. An overview of the drivers governing relevant industry standards will be discussed, along with specific tools that include sponsored research, licensing, and startup formation. The course will include hands-on assessments of two case studies that present applications of law and policy in the context of collaborative technology development, where each student team will provide a critique and overview of how they would handle the circumstances of the given case.

**RGME 529** ***(1 - 3 credit hours)***: *FDA Regulation in Entrepreneurship and Clinical Research*

The FDA Regulation in Entrepreneurship and Clinical Research course is designed to provide foundational knowledge in the FDA approval and regulatory process while highlighting scientific, clinical, ethical, and other related emergent factors for consideration. The course includes a series of lecture-based classes delivered by content experts and interdisciplinary team-based learning discussions of case studies designed for the application of lecture content. Students who elect to take the course for three credits as opposed to one credit will go through the process of reviewing an example Investigational New Drug (IND) or Investigational Drug

Exemption (IDE) Application (midterm project) and preparing an IND or IDE for submission (final project) with the guidance of nationally renowned experts in FDA regulation and law. The primary goal of this course is that upon completion, students will be able to take the knowledge gained from content experts and apply it to facilitate the movement of their current or future technologies through the FDA approval process. Offered as CRSP 529 and MGRD 529 and PHRM 529 and RGME 529.

**Review all course descriptions via the CWRU General Bulletin**