

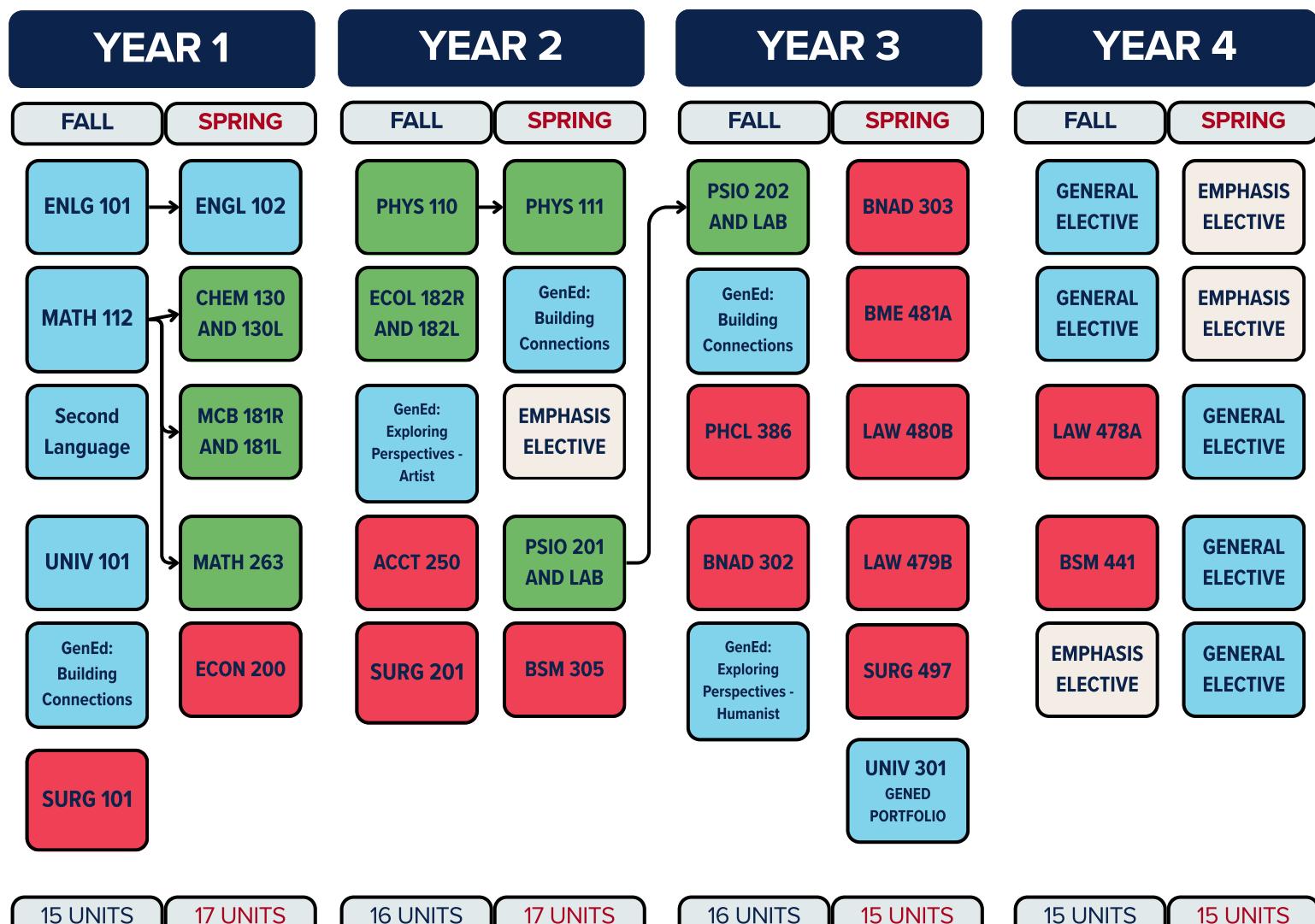
# MEDICAL DEVICE DEVELOPMENT AND APPLICATION

## Biotech & Pharma

The Biotechnology and Pharmaceutical emphasis focuses on the drug discovery and development process, providing students with a strong foundation in how new therapies are researched, designed, and brought to market. Students will explore the fundamentals of nanomedicine engineering, learning how nanoscale technologies are applied to advance targeted treatments and improve drug delivery systems. This emphasis also examines pharmaceutical market pathways, giving students insight into the regulatory, commercial, and strategic aspects that shape how innovations move from the lab to patient care.

## Sample 4-Year Plan

FLOWCHART BELOW IS SUBJECT TO CHANGE AND FOR SAMPLE PURPOSES ONLY. PLEASE CONSULT WITH YOUR ADVISOR TO EXPLORE YOUR PERSONAL ACADEMIC NEEDS/SITUATION.



## Emphasis Electives

Course	Units	Notes
<a href="#"><u>CHEE 489 Trends in Nanomedicine Engineering - Fundamentals of Therapeutics and Drug Delivery Systems</u></a>	3	
<a href="#"><u>MED 497 Research Development and Publishing</u></a>	3	
<a href="#"><u>PCOL 196D The Joy of Drugs: Introduction to Pharmaceutical Sciences Seminar</u></a>	1	
<a href="#"><u>PCOL 320 What's Your Poison? Toxicology of the Substances that Surround Us</u></a>	3	
<a href="#"><u>PCOL 427 Dermatological Toxicology.</u></a>	3	
<a href="#"><u>PCOL 429 Neuropsychopharmacology.</u></a>	3	
<a href="#"><u>PCOL 440 Science Fact or Science Fiction: How do you tell them apart?</u></a>	2	
<a href="#"><u>PHCL 412 Intro to Pharmacology.</u></a>	3	
<a href="#"><u>PHCL 460 Designing Drugs – from Chemistry to Cure</u></a>	3	
<a href="#"><u>PHCL 467 Medicines to Market: Drug Discovery and Development</u></a>	3	