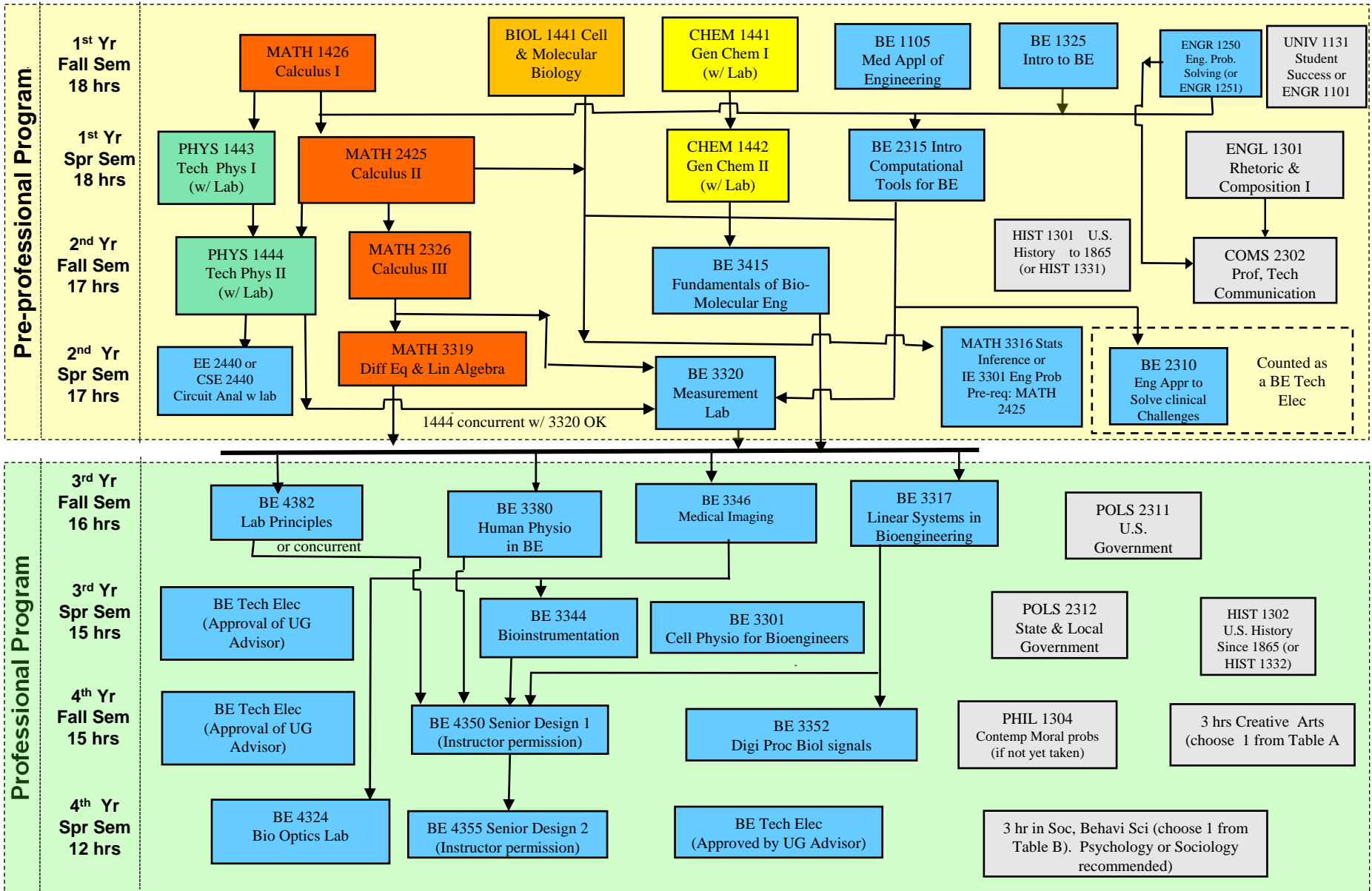# Flow chart - Bachelor of Science Degree in Biomedical Engineering (2020-21)

Medical Imaging Concentration

→ Prerequisite

Pre-professional Program

1st Yr Fall Sem 18 hrs

- MATH 1426 Calculus I
- BIOL 1441 Cell & Molecular Biology
- CHEM 1441 Gen Chem I (w/ Lab)
- BE 1105 Med Appl of Engineering
- BE 1325 Intro to BE
- ENGR 1250 Eng. Prob. Solving (or ENGR 1251)
- UNIV 1131 Student Success or ENGR 1101

1st Yr Spr Sem 18 hrs

- PHYS 1443 Tech Phys I (w/ Lab)
- MATH 2425 Calculus II
- CHEM 1442 Gen Chem II (w/ Lab)
- BE 2315 Intro Computational Tools for BE
- ENGL 1301 Rhetoric & Composition I

2nd Yr Fall Sem 17 hrs

- PHYS 1444 Tech Phys II (w/ Lab)
- MATH 2326 Calculus III
- BE 3415 Fundamentals of Bio-Molecular Eng
- HIST 1301 U.S. History to 1865 (or HIST 1331)
- COMS 2302 Prof, Tech Communication

2nd Yr Spr Sem 17 hrs

- EE 2440 or CSE 2440 Circuit Anal w lab
- MATH 3319 Diff Eq & Lin Algebra
- BE 3320 Measurement Lab
- MATH 3316 Stats Inference or IE 3301 Eng Prob Pre-req: MATH 2425
- BE 2310 Eng Appr to Solve clinical Challenges — Counted as a BE Tech Elec

1444 concurrent w/ 3320 OK

Professional Program

3rd Yr Fall Sem 16 hrs

- BE 4382 Lab Principles (or concurrent)
- BE 3380 Human Physio in BE
- BE 3346 Medical Imaging
- BE 3317 Linear Systems in Bioengineering
- POLS 2311 U.S. Government

3rd Yr Spr Sem 15 hrs

- BE Tech Elec (Approval of UG Advisor)
- BE 3344 Bioinstrumentation
- BE 3301 Cell Physio for Bioengineers
- POLS 2312 State & Local Government
- HIST 1302 U.S. History Since 1865 (or HIST 1332)

4th Yr Fall Sem 15 hrs

- BE Tech Elec (Approval of UG Advisor)
- BE 4350 Senior Design 1 (Instructor permission)
- BE 3352 Digi Proc Biol signals
- PHIL 1304 Contemp Moral probs (if not yet taken)
- 3 hrs Creative Arts (choose 1 from Table A

4th Yr Spr Sem 12 hrs

- BE 4324 Bio Optics Lab
- BE 4355 Senior Design 2 (Instructor permission)
- BE Tech Elec (Approved by UG Advisor)
- 3 hr in Soc, Behavi Sci (choose 1 from Table B). Psychology or Sociology recommended)

Students in Pre-Professional Program must complete all Sci/Eng/Math courses (not including statistics), BE 3415, 3320, ENGL1301 and COMS2302 prior to taking any Professional Program courses. Admission to Professional Program is required to take any Professional Program courses.

This document is subject to revision.
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