

Gettysburg College
University of Pittsburgh Dual-Degree Plan Curriculum Guide

Foundation Courses Required of All Majors

Mathematics:	Math111, Math112
Physics:	Phy111, 112, 211 sequece OR Phy109, 110 sequence (all include labs)
Chemistry:	Chem107, Chem108 (both include lab)
Computer Science:	CS 107 (Matlab or Python)

Liberal Arts Curriculum must include 5 courses (20 credits) from the Humanities, Social Science or Arts, three of which are from three different disciplines and 2 of which are from one discipline, the second of which is non-introductory.)

Student must have been enrolled at Gettysburg College for two years prior, have an overall GPA of 3.0 or higher (3.5 for Bioengineering) and a GPA of 3.0 or higher in pre-engineering courses with a grade of C or better in each pre-engineering course.

Additional Courses are required by the programs below.

Biomedical Engineering (All Tracks, 3-year program at Pitt)

Math:	Math 211, Math 212, Math 225, Math 353 or Econ241
Chemistry:	Chem 203, Chem 204 (both include lab)
Biology:	HS-209 (requires Bio110,111, or 113 AND Bio112 all with lab)
Science electives:	2 courses in advanced natural sciences, computer science, or math as approved by the Pitt liaison
Engineering:	Statics and Mechanics of Materials off campus or at Pitt

Chemical Engineering

Math:	Math 211, Math 225, Math 353
Chemistry:	Chem 203, Chem 204, Chem 305, Chem 333 (all include lab)
Science elective:	1 course from: Bio 212, Chem 317, Chem 353
Engineering elective:	Statics and Mechanics of Materials off campus or at Pitt
Professional elective:	2 courses in communication, advanced natural science, computer science, math, or co-op education.

Civil Engineering

Math:	Math 211, Math 225, Math 353
Economics:	Econ 103
Engineering:	Phys 319 (Dynamics), Statics off campus or at Pitt, Mechanics of Materials off campus or at Pitt, Computer Methods in Civil and Environmental Engineering off campus or at Pitt, Engineering Economics off campus or at Pitt
Science elective:	1 course from: Bio 110,111, or 113, Chem 317, Chem 353
Engineering elective:	1 course from Phy111+112, Phy240, Phy312, ES230

Computer Engineering

Math:	Math 212, Math 225
Computer Science:	CS111(Java) instead of CS107
Communications and Open electives:	Gettysburg Curricular requirements
Technical electives:	2 courses in advanced natural sciences, computer science, or math as approved by the Pitt liaison

Electrical Engineering

Math: Math 211, Math 212, Math 225, Math 353

Computer Science: CS111(Java) instead of CS107

Communications and Open electives: Gettysburg Curricular requirements

Technical electives: 3 courses in advanced natural sciences, computer science, or math as approved by the Pitt liaison

Engineering Science – *Engineering Physics Emphasis*

Math: Math 211, Math 212, Math 225, Math 353, Math 364

Physics: Phy111/112/211 (instead of Phy109/110), Phy319, Phy330, Phy352

Engineering: Phy240 recommended or COE/ECE 0031/0032 at Pitt

Engineering Science – *Nanotechnology: Chemistry/Bioengineering Emphasis*

Math: Math 211, Math 212, Math 225, Math 353, Math 364

Chemistry: 3 courses from: Chem 203, Chem 204, Chem 353, Chem 305, Chem 306, Chem 333

Engineering: Materials Structure and Properties off campus or at Pitt

Engineering Science – *Nanotechnology: Physics/Materials Emphasis*

Math: Math 211, Math 212, Math 225, Math 353, Math 364

Physics: Phy111/112/211 (instead of Phy109/110), Phy330 or Phy352

Engineering: Phy240 recommended or COE/ECE 0031/0032 at Pitt, Materials Structure and Properties off campus or at Pitt

Industrial Engineering

Math:	Math 211, Math 212, Math 225, Math 353
Physics:	Phy111/112/211 (instead of Phy109/110), Phy330 or Phy352
Engineering:	Phy240 recommended or COE/ECE 0031/0032 at Pitt, Materials Structure and Properties, Engineering Economic Analysis off campus or at Pitt, Probability and Statistics for Engineers II off campus or at Pitt
Engineering Electives:	3 courses from Phy240, Phy312, Materials Structure and Properties off campus or at Pitt, Statics and Mechanics of Materials off campus or at Pitt.
Technical Electives:	2 courses in advanced natural sciences, computer science, or math as approved by the Pitt liaison

Materials Science and Engineering

Math:	Math 211, Math 212, Math 225, Math 353
Engineering:	Phy240 recommended or MEMS 0031 at Pitt, Statics off campus or at Pitt, Mechanics of Materials off campus or at Pitt
Communications:	Gettysburg Curricular Requirements
Philosophy:	Phil 105 or Phil 107 (may be counted toward 5 humanities/social sciences courses)

Mechanical Engineering

Math:	Math 211, Math 212, Math 225, Math 353
Engineering:	Phy240, Phy319, Statics off campus or at Pitt, Mechanics of Materials off campus or at Pitt
Communications:	Gettysburg Curricular Requirements
Philosophy:	Phil 105 or Phil 107 (may be counted toward 5 humanities/social sciences courses)