Engineering

Dual-degree Program

Summary of Requirements at FSU for Dual Degree in Engineering

1. Chemistry: (8-16 hours)
   CHEM 201 & 202 General Chemistry I & II (CHEM 201 - GEP Group C)
   *CHEM 31 & 312 Organic Chemistry I & II
   *Organic chemistry courses required for students in chemical engineering.

2. Computer Science: (4 hours)
   COSC 240 Computer Science I
   or ENEE 114 Programming Concepts for Engineers

3. Mathematics: (18 hours)
   MATH 236, 237, 238 Calculus I, II & III (MATH 236 - Core Skill 3)
   MATH 420 Advanced Calculus, or MATH 436 Mathematical Physics
   MATH 432 Differential Equations

4. Engineering: (3 hours)
   ENES 100 Intro to Engineering Design

5. Physics: (39 hours)
   PHYS 261 Principles of Physics I (GEP Group C)
   PHYS 262 Principles of Physics II
   PHYS 263 Principles of Physics III
   PHYS 264 Principles of Physics IV
   PHYS 310 Classical Mechanics
   PHYS 312 Electricity & Magnetism
   PHYS 320 Experimental Physics
   PHYS 491 Seminar
   PHYS 492 Senior Research & Seminar (Capstone)

   Choose one track: (9 hours)
   a. Traditional Physics
      PHYS 311 Thermodynamics
      PHYS 417 Quantum Physics
      plus one 300-400 level physics elective
   b. Engineering Physics
      With permission of the Department Chair, as many as 6 credits of mechanical or electrical engineering courses at the 200 level or above may be applied.

Courses listed in the study program not to be applied toward the student’s major field of study may be applied toward satisfaction of the General Education Program requirements where appropriate.

Dual Degree Requirements at FSU

1. Completion of required courses in the dual degree study program (listed above), 72-80 semester hours depending on field of engineering.
2. Completion of a minimum of 90 semester hours.
3. Completion of FSU’s Core Skill Requirements and Modes of Inquiry in the General Education Program (a waiver of Group E courses, requiring a total of at least 26 credit hours in Modes of Inquiry). Students must complete at least six of the additional nine credits of General Education course work required by the University of Maryland, College Park (Advance Studies CORE requirement) to satisfy the General Education requirements at Frostburg State University.
4. Completion of a major program as approved by the respective Frostburg State Department Chair.
5. Recommendation from the designated official at Frostburg State University (Coordinator of the Dual Degree Program in Engineering).

Requirements for Admission to University of Maryland, College Park

To become a Dual Degree candidate at the University of Maryland, College Park, a student must have satisfied all specified requirements at Frostburg State University. Additionally, the student must have the following:

1. A minimum cumulative 3.0 grade point average at Frostburg;
2. Recommendation from the designated official at Frostburg (Coordinator of the Dual Degree Program in Engineering).

Admission to the College of Engineering of the University of Maryland, College Park is guaranteed to the Frostburg State University Dual Degree student provided the above stated requirements have been satisfied.