

SPANISH IEP – A-Level – INDUSTRIAL ENGINEERING

Freshmen Entering Fall 2006 (Class of 2011)

The academic plan below is a sample to demonstrate one way the dual degree program may be completed in 10 semesters. It is not meant to be a replacement for academic advising. Be sure to touch base with both your language and engineering advisor regularly.

FALL SEMESTER		SPRING SEMESTER	
Year One	CHM 101 Gen. Chem. 3 CHM 102 Lab. For Chem. 1 MTH 141 Calculus I 4 PHY 203/273 Elem. Phys I & Lab. 4 SPA 205 Spanish Lang. & Style 3 EGR 105 Foundations of Engr. I 1 <p style="text-align: right;">16</p>	ECN 201 Microeconomics (S) 3 MTH 142 Calculus II 4 SPA 206 Spanish Lang. & Style 3 PHY 204/274 Elem. Phys. II & Lab. 4 EGR 106 Foundations of Engr. II 2 <p style="text-align: right;">16</p>	
Year Two	IME 240/241 Manuf. Processes & Lab 4 IME 325 Computer Solutions in IME 3 MCE 262 Statics 3 MTH 243 Calculus of Sev. Var. 3 SPA 312 Advanced Spanish 3 <p style="text-align: right;">16</p>	CVE 220 Mechanics of Materials 3 ELE 220 Electric Circuits 3 MCE 263 Dynamics 3 IME 220 Intro to Industrial Engineering 3 SPA 321 Pre-Internship Spanish 3 MTH 362 Advanced Engineering Math. 3 <p style="text-align: right;">18</p>	
Year Three	CHE 333 Engineering Materials 3 SPA 325 Intro. To Literary Genre 3 I ME 404 Engineering Economy 3 IME 432 Operations Res: Deterministic 3 MCE 341 Thermo. OR PHY 205/275 3/4 IME 411 Probability & Statistics 3 <p style="text-align: right;">18-19</p>	ECN 202 Macroeconomics (S) 3 SPA 3xx, 4xx or POR xxx 3 BUS 201 OR BUS 303 3 IME 412 Statistical Methods for Engin 3 IME 433 Operations Res: Stochastic 3 IME 392 Junior Project 3 <p style="text-align: right;">18</p>	
Suggested Semester Abroad		International Internship Semester	
Year Four	Professional Elective 3 Gen Ed. Requirement (or swap with a direct equivalent course from another semester) 3-6 EGR/SPA 412 (Professional Elective/Adv. Tech Spanish) 3 SPA 3xx, 4xx or POR xxx 3-6 <p style="text-align: right;">12-18</p>	Internship In Spanish-Speaking Country 3-6 SPA 316-317	
Year Five	IME 449 Product Design for Manuf. 3 IME 451 Industrial Eng. Design I 3 EGR 316 Engineering Ethics (L) 3 Gen Ed. Requirement 3 SPA 400-Level Lit. (A) 3 <p style="text-align: right;">15</p>	IME 452 Industrial Eng. Design II 3 Professional Elective 3 Gen Ed. Requirement 3 Gen Ed. Requirement 3 Basic Science Elective (see catalog) 3 <p style="text-align: right;">15</p>	

GEN ED TALLY (See special notes about General Education Requirements on the reverse and consult with the university catalog and your major advisors.)

EC: _____
 Ecw: _____
 L (use EGR 316): _____
 L: _____

S (use ECN 201): _____
 S (use ECN 202): _____
 A (400-level Spanish Lit.): _____
 A (fine art): _____

BASIC LIBERAL STUDIES (GEN ED) REQUIREMENTS (See course catalog for more detail.)

English Communications (EC): 6 credits, one of which must be a writing course (Ecw.)

Social Science (S): 6 credits, which are fulfilled by ECN 201 & 202, which are required for IME majors.

Letters (L): 6 credits. Consider taking a Latin American History class such as HIS 180, 381, 382 to fulfill one of your two general education Letters requirements.

Fine Arts and Literature (A):

1. **3 credits of literature:** As an IEP student a 400-level Spanish literature course fulfills the literature portion of the Fine Arts & Literature requirement. (NOTE: This is a special exemption. If you later drop the program but keep your language major you might need to take an additional literature course.)
2. **3 credits of fine arts:** You must choose from music, theater, arts selections as indicated in catalog, or seek prior-approval for a comparable course abroad.

Note: There are additional General Education Requirements in *Mathematical and Quantitative Reasoning*, *Natural Sciences*, and *Foreign Language/Cross-Cultural Competence*, which will be fulfilled automatically through your progress toward an engineering degree with a language minor.

REQUIREMENTS FOR INDUSTRIAL ENGINEERING MAJOR (See course catalog and department website for more detail.)

EGR 105, 106, 316; CHM 101, 102, and 333; MTH 141, 142, 243, 362; PHY 203, 204, 273, 274; ECN 201, 202; ELE 220; CVE 220; MCE 262, 263; MCE 341 OR PHY 205/275; IME 220, 240, 241, 325, 392, 404, 411, 412, 432, 433, 449, 451, 452; BUS 201 or 303; a basic science elective (any course for which CHM 101 is a prerequisite, incl. PHY 205, 223 and 275; any physics course at the 300-level or above or a course in astronomy, biochemistry, biology, botany, geology, microbiology or zoology. Any other courses must be approved by an advisor.); and three professional electives (one may be fulfilled by SPA/EGR 412 with prior approval)

REQUIREMENTS FOR IEP SPANISH MAJOR (See course catalog for more detail.)

30 credits in SPA at the 103-level and above, including 312, 316, 317, 321, 325, a 400-level engineering course taught in Spanish, and a 400-level literature course. IEP students beginning their study of Spanish at the 200-level or higher may opt to take up to six credits of Portuguese toward the completion of the major in Spanish. SPA 321 must be taken prior to the internship experience. SPA/EGR 412 is taken post-internship, or fulfilled by a course abroad by prior approval; this course may also satisfy an engineering professional elective.

SPECIAL NOTES FOR STUDENTS IN THE INTERNATIONAL ENGINEERING PROGRAM

- As a dual degree IEP student, **you are a student of both the College and Arts & Sciences and the College of Engineering**. Be sure to file for graduation (and any other paperwork such as a leave of absence, etc.) with the dean's office of each college.
- You have two academic advisors – one for your language major and one for your engineering major. The Spanish advisor for all IEP students is Dr. Robert Manteiga (roberto@uri.edu). You can check with your engineering department to find out who has been assigned as your engineering advisor.
- **Your general education requirements are determined by the College of Arts & Sciences Basic Liberal Studies Program for the Bachelor of Arts (not B.S.).** Consult the course catalog for details and verify any general education questions with your language advisor.
- As an IEP student, **you are exempt from the one-course-per-discipline rule** for the Letters, Natural Sciences, and Social Sciences Basic Liberal Studies Requirements of the College of Arts & Sciences. This is important to know in the event that you drop the program but still want to pursue your Spanish major as a non-IEP student.
- You are required to complete a six-month professional internship abroad to be considered an IEP student.
- **It is highly recommended that you precede your semester internship with a semester of study abroad through an IEP exchange.** General education requirements, language major courses, free electives and engineering professional electives tend to be the easiest courses to find equivalents for overseas, so you might want to “hold” them for a semester abroad. Consult with your advisors and plan your semesters accordingly.
- **It is *YOUR* responsibility to stay in contact with your engineering major advisor AND your language major advisor to make sure that you are fulfilling all requirements for both majors and your general education requirements!**