

FRENCH IEP – CHEMICAL ENGINEERING

For students entering Fall 2011 (Class of 2016)

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		SPRING	
		✓ Course	Cr	✓ Course	Cr
Year One		CHM 101 General Chemistry I Lecture	3	CHM 112 General Chemistry II Lecture	3
		CHM 102 General Chemistry I Lab	1	CHM 114 General Chemistry II Lab	1
		EGR 105 Foundations of Engineering I	1	EGR 106 Foundations of Engineering II	2
		FRN*	3	MTH 142 Intermediate Calculus w/ Analytic Geometry	4
		MTH 141 Intro Calculus w/ Analytic Geometry	4	PHY 204 Elementary Physics II	3
		PHY 203 Elementary Physics I Lecture	3	PHY 274 Elementary Physics II Lab	1
		PHY 273 Elementary Physics I Lab	1	FRN*	3
		Semester Credits	16	Semester Credits	17
		FALL		SPRING	
		✓ Course	Cr	✓ Course	Cr
Year Two		CHE 212 Chemical Process Calculations	3	CHE 272 Intro to CHE Calculations	3
		CHM 227 Organic Chemistry I	3	CHE 313 CHE Thermodynamics I	3
		ECN 201 Principles of Microeconomics (S)	3	CHE 332 Physical Metallurgy	3
		FRN*	3	CHM 228 Organic Chem II**	3
		General Education Requirement (ECw)	3	FRN*	3
		MTH 243 Calculus for Functions of Several Variables	3	MTH 244 Differential Eqns or MTH 362 Adv EGR Math I	3
		Semester Credits	18	Semester Credits	18
			FALL		SPRING
		✓ Course	Cr	✓ Course	Cr
Year Three		CHE 314 CHE Thermodynamics II	3	CHE 348 Transfer Operations II	3
		CHE 347 Transfer Operations I	3	CHE 464 Industrial Reaction Kinetics	3
		CHM 335 Physical Chemistry I Lab	2	CHM 432 Physical Chemistry II***	3
		CHM 431 Physical Chemistry I	3	FRN*	3
		FRN 309 French Culture & Literature to 1789	3	General Education Requirement	3
		General Education Requirement	3	General Education Requirement	3
		Semester Credits	17	Semester Credits	18
			Suggested Semester Abroad		International Internship Semester
		✓ Course	Cr	✓ Course	Cr
Year Four		Approved Math Elective****	3		
		Approved Professional Elective	3	Internship in French-Speaking Country	
		FRN*	3 to 6	FRN 315-316	3 to 6
		General Education Requirement (S)	3 to 6		
	Semester Credits	15 to 18	Semester Credits	3 to 6	
		FALL		SPRING	
		✓ Course	Cr	✓ Course	Cr
Year Five		Approved Professional Elective	3	Approved Professional Elective	3
		CHE 328 Industrial Plants	1	Approved Professional Elective	3
		CHE 345 Chemical Engineering Lab I	2	CHE 346 Chemical Engineering Lab II	2
		CHE 349 Transfer Operations III	2	CHE 352 Plant Design and Economics II	3
		CHE 351 Plant Design and Economics I	3	FRN 4xx (422 if available)	3
		CHE 425 Process Dynamics and Control	3	General Education Requirement (if needed)	3
		FRN 4xx (412, 473, or 474) (A)	3		
		Semester Credits	17	Semester Credits	14 to 17

* French course varies depending upon student's background. Consult with Dr. Lars Erickson.

** Or approved advanced CHM course

*** Or approved Department Elective

**** Mathematics Elective is MTH 215 or any 300-500 level MTH course EXCEPT MTH 381

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: _____
 L: _____

S: _____
 S (use ECN 201): _____
 A (400-level French 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, one of which is fulfilled by ECN 201, which is already required for CHE majors. Consider opting for a second course with a global focus, or a focus on France or Europe.

Letters (L): 6 credits. Consider taking a French or European History class to fulfill one of your two general education Letters requirements.

Fine Arts and Literature (A):

1. **3 credits of literature:** As an IEP student the 400-level French 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 are fulfilled automatically through your progress toward your two degrees (B.S. in Engineering and B.A. in a Language).

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

CHE 212, 272, 313, 332, 314, 347, 348, 464, 328, 345, 349, 351, 425, 346, 352; CHM 101, 102, 112, 114, 227, 228 or approved advanced chemistry course, 335, 431, 432 or approved advanced chemistry course; EGR 105, 106; MTH 141, 142, 243, 244 or 362, and an approved math elective; PHY 203, 204, 273, 274; ECN 201; 4 approved professional electives (one of which may be fulfilled with prior approval by FRN/EGR 422 when available)

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

At least 30 credits in French, not including FRN 101, 102, 391, 392, 393. You must complete at least six credits at the 400-level, three credits of which must come from FRN 412, 473, or 474.

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 French advisor for all IEP students is Dr. Lars Erickson (lars@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 French 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!