

# FRENCH IEP – ELECTRICAL ENGINEERING

For students entering Fall 2008 (Class of 2013)

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		
Year One	✓	Course	Cr	✓	Course	Cr
		CHM 101 General Chemistry I Lecture	3		ECN 201 Principles of Microeconomics (S)	3
		CHM 102 General Chemistry I Lab	1		EGR 106 Foundations of Engineering II	2
		EGR 105 Foundations of Engineering I	1		FRN*	3
		FRN*	3		MTH 142 Intermed Calculus w/ Analytic Geo	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			
		<b>Semester Credits</b>	<b>16</b>		<b>Semester Credits</b>	<b>16</b>
		FALL		SPRING		
Year Two	✓	Course	Cr	✓	Course	Cr
		CSC 200 Computer Problem Solving	4		ELE 205 Microprocessors	2
		ELE 201 Digital Circuit Design	3		ELE 206 Microprocessor Lab	1
		ELE 202 Digital Circuit Design Lab	1		ELE 212 Linear Circuit Theory	3
		FRN*	3		ELE 215 Linear Circuits Lab	2
		MTH 362 Advanced Engineering Mathematics I	3		FRN*	3
		PHY 205 Elementary Physics III Lecture	3		MTH 243 Multivariable Calculus	3
		PHY 275 Elementary Physics III Lab	1		PHY 306 Elementary Modern Physics	3
		<b>Semester Credits</b>	<b>18</b>		<b>Semester Credits</b>	<b>17</b>
		FALL		SPRING		
Year Three	✓	Course	Cr	✓	Course	Cr
		ELE 313 Linear Systems	3		ELE 306 Electronic Design Automation	3
		ELE 331 Intro to Solid State Devices	4		ELE 307 Electronic Design Automation Lab	1
		ELE 341 Electronics I	3		ELE 314 Linear Systems and Signals	3
		ELE 342 Electronics I Lab	1		ELE 322 Electromagnetic Fields I	4
		FRN 309 French Culture & Lit to 1789 (A)	3		ELE 343 Electronics II	3
		General Education Requirement	3		ELE 344 Electronics II Lab	1
		General Education Requirement	3		FRN*	3
		<b>Semester Credits</b>	<b>20</b>		<b>Semester Credits</b>	<b>18</b>
		Suggested Semester Abroad		International Internship Semester		
Year Four	✓	Course	Cr	✓	Course	Cr
		FRN*	3			
		FRN*	3		Internship in French-Speaking Country	
		General Education Requirement	3		FRN 315-316	3 to 6
		General Education Requirement	3			
		MTH 451 or ISE 411 Probability and Statistics	3			
		<b>Semester Credits</b>	<b>15</b>		<b>Semester Credits</b>	<b>3 to 6</b>
		FALL		SPRING		
Year Five	✓	Course	Cr	✓	Course	Cr
		ELE 400 Intro to Professional Practice	1		ELE 481 Capstone Design II	3
		ELE 480 Capstone Design I	3		Electrical Engineering Design Elective**	3 to 4
		Electrical Engineering Design Elective**	4		FRN 4xx (422 if available)	3
		Electrical Engineering Design Elective**	3 to 4		General Education Requirement	3
		FRN 4xx (412, 473, or 474) (A)	3		Technical Elective***	3 to 4
		General Education Requirement	3			
		<b>Semester Credits</b>	<b>17 to 18</b>		<b>Semester Credits</b>	<b>15 to 17</b>

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

\*\* Electrical Engineering Design Electives are any **three** of the following courses (**plus labs**): BME 464/465, ELE 401-402, 405/406, 408/409, 423, 427/428, 432, 435/436, 444/445, 447/448, 457, 458/459, or 489. However, **one** of the courses must come from the following: ELE 408/409, 427, 435/436, 444/445, 447/448, 458/459, or 489.

\*\*\* A Technical Elective is **one** of the following courses: ELE 305, 325; ISE 404, 412; MTH 215, 244, or any 300-500 level MTH course **EXCEPT MTH 381**, or an additional Electrical Engineering Design Elective, **or EGR/FRN 422** with prior approval if available.

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

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|--|---|
| <input type="checkbox"/> EC: _____<br><input type="checkbox"/> ECw: _____<br><input type="checkbox"/> L : _____<br><input type="checkbox"/> L: _____ | <input type="checkbox"/> S: _____<br><input type="checkbox"/> S (use ECN 201): _____<br><input type="checkbox"/> A (400-level French Lit.): _____<br><input type="checkbox"/> A (fine art): _____ |
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## **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 ELE 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 ELECTRICAL ENGINEERING MAJOR** (See course catalog and department website for more detail.)

CHM 101, 102; CSC 200; ECN 201; EGR 105, 106; ELE 201, 202, 205, 206, 212, 215, 306, 307, 313, 314, 322, 331, 341, 342, 343, 344, 400, 480, 481; MTH 141, 142, 243, 362, 451 (or ISE 411); PHY 203, 204, 205, 273, 274, 275, 306; one technical elective (may be fulfilled by EGR/FRN 422 with prior approval when available); three electrical engineering design electives from approved list.

## **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!**