

# GERMAN IEP – COMPUTER ENGINEERING

**For students entering Fall 2008 (IEP Class 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	EGR 106 Foundations of Engineering II	2	
	CHM 102 General Chemistry I Lab	1	ELE 208 Intro to Computer Systems	2	
	EGR 105 Foundations of Engineering I	1	ELE 209 Intro to Computer Systems Lab	1	
	GER 101 German for Engineers I	3	GER 102 German for Engineers II	3	
	MTH 141 Intro Calculus w/ Analytic Geometry	4	MTH 142 Intermed Calculus w/ Analytic Geometry	4	
	PHY 203 Elementary Physics I Lecture	3	PHY 204 Elementary Physics II	3	
	PHY 273 Elementary Physics I Lab	1	PHY 274 Elementary Physics II 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 211 Introductory Programming and Design	4	CSC 212 Data Structures and Abstractions	4	
	ELE 201 Digital Circuit Design	3	ELE 212 Linear Circuit Theory	3	
	ELE 202 Digital Circuit Design Lab	1	ELE 215 Linear Circuits Lab	2	
	General Education Requirement	3	General Education Requirement	3	
	GER 103 Intermediate German I	3	GER 104 Intermediate German II	3	
	MTH 362 Advanced Engineering Mathematics I	3	MTH 243 Calc for Functions of Several Variables	3	
	<b>Semester Credits</b>	<b>17</b>	<b>Semester Credits</b>	<b>18</b>	
		FALL		SPRING	
Year Three	✓ Course	Cr	✓ Course	Cr	
	ELE 305 Intro to Computer Architecture	3	ECN 201 Microeconomics (S)	3	
	ELE 313 Linear Systems	3	ELE 306 Electronic Design Automation	3	
	ELE 341 Electronics I	3	ELE 307 Electronic Design Automation Lab	1	
	ELE 342 Electronics I Lab	1	General Education Requirement	3	
	General Education Requirement	3	GER 206 Conversation & Composition II	3	
	GER 205 Conversation & Composition I	3	MTH 451 Intro to Probability and Statistics	3	
	<b>Semester Credits</b>	<b>16</b>	<b>Semester Credits</b>	<b>16</b>	
Suggested Semester Abroad		International Internship Semester			
Year Four	✓ Course	Cr	✓ Course	Cr	
	EGR/GER 411 (Computer Engineering Elective*)	3	Internship in German-Speaking Country		
	General Education Requirement (L)	3	GER 315-316	3 to 6	
	GER 3xx	4 to 7			
	MTH/CSC 447 Discrete Mathematical Structures	3			
	<b>Semester Credits</b>	<b>13 to 16</b>	<b>Semester Credits</b>	<b>3 to 6</b>	
		FALL		SPRING	
Year Five	✓ Course	Cr	✓ Course	Cr	
	Computer Engineering Elective*	3 to 4	CSC 412 Operating Systems and Networks	4	
	ELE 405 Digital Computer Design	3	General Education Requirement	3	
	ELE 406 Digital Computer Design Lab	1	ELE 408 Computer Organization	3	
	ELE 437 Computer Communications	3	ELE 409 Computer Organization Lab	1	
	ELE 480 Capstone Design I	3	ELE 481 Capstone Design II	3	
	ELE 400 Intro to Professional Practice	3	GER 4xx German Literature (A)	3	
	GER 4xx	3			
	<b>Semester Credits</b>	<b>17 to 18</b>	<b>Semester Credits</b>	<b>17</b>	

\* Two Computer Engineering Electives from: BME 464/465; any ELE 300 or 400-level course not otherwise required; any ELE 500-level course **with petition**; CSC 301, 305, 402, 406, 415, 436, 481, 485, or 486.

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

- |  |   |
|--|---|
| <input type="checkbox"/> EC: _____                       | <input type="checkbox"/> S: _____                         |
| <input type="checkbox"/> ECw: _____                      | <input type="checkbox"/> S (use ECN 201): _____           |
| <input type="checkbox"/> L (reserve one for TUBS): _____ | <input type="checkbox"/> A (400-level German Lit.): _____ |
| <input type="checkbox"/> L: _____                        | <input type="checkbox"/> 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 CMP majors. Consider opting for a second course with a global focus, or a focus on Germany or Europe.

**Letters (L):** 6 credits. Consider taking a German History class (HIS 327 at URI or in Braunschweig) to fulfill one of your two general education Letters requirements. Consider taking “Landeskunde” (LET 151) in Braunschweig to fulfill the other requirement.

### **Fine Arts and Literature (A):**

1. **3 credits of literature:** As an IEP student a 400-level German 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 COMPUTER ENGINEERING MAJOR** (See course catalog and department website for more detail.)

CHM 101, 102; CSC 211, 212, 412; ECN 201; EGR 105, 106; ELE 201, 202, 208, 209, 212, 215, 305, 306, 307, 313, 341, 342, 400, 405, 406, 408, 409, 437, 480, 481; MTH 141, 142, 243, 362, 451; MTH/CSC 447; PHY 203, 204, 273, 274; two computer engineering electives from approved list (one of which may be fulfilled by GER/EGR 411 at TUBS with prior approval).

## **REQUIREMENTS FOR IEP GERMAN MAJOR** (See course catalog for more detail.)

At least 30 credits in German, not including GER 101, 102, or 392. You must complete six credits in literature, at least three of which must be taken at the 400-level; and EGR/GER 411.

## **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 German advisor for all IEP students is Walter von Reinhart (waltaire@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 German 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!**