

**Karlsruhe Institute of Technology (KIT)
Karlsruhe, Germany**

The **Karlsruhe Institute of Technology (KIT)** is one of the largest and most prestigious research and education institutions in Germany and one of the leading universities in engineering and science in Europe. For more information, go to their website at www.kit.edu/english.

Duration of Study: October thru February and April thru July.

Language Requirement: Courses are conducted in German. Completion of GER 2106 at VT or equivalent before departure. Students arrive approximately one month before the start of the semester and will spend that time studying German and acclimating to the university and local community.

Program Cost: Virginia Tech tuition, travel, housing and food. Students are encouraged to apply for scholarships.

Transfer Credit: Academic credit toward an ISE degree for pre-approved engineering courses. ISE courses that have been approved to transfer to Virginia Tech from KIT include:

- ISE 2204 Manufacturing Processes
- ISE 3414 Probabilistic Operations Research
- ISE 3424 Discrete-Event Computer Simulation
- ISE 3624 Industrial Ergonomics
- ISE 3xxx/4xxx Technical Elective (variety of classes offered)
- ECE 3054 Electrical Theory

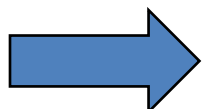
Business courses may be applied toward the Business minor for ISE majors. Students can identify other courses of interest and request approval before departure from VT.

German Language Requirement

Good German language skills are necessary. Ideally students have completed 3000-level German, or equivalent, before beginning the 1st semester at KIT. In addition to VT courses, students can learn German using VT Library resources, including the on-line MANGO program. Affordable, private tutoring to accommodate students' schedules and learning needs can also be arranged.

For more information, contact Paula Van Curen, ISE Academic & Program Advisor at pcuren@vt.edu or Dr. Christian Wernz, ISE Assistant Professor, at cwernz@vt.edu.

Turn over for an example plan of study for a student studying at KIT.



EXAMPLE GRADUATION CHECKSHEET FOR ISE STUDENTS STUDYING AT KARLSRUHE INSTITUTE TECHNOLOGY IN GERMANY

	Cr	Hr		Cr	Hs
FALL SEMESTER FRESHMAN			SPRING SEMESTER FRESHMAN		
<input type="checkbox"/> ENGL 1105 First-Year Writing	3		<input type="checkbox"/> ENGL 1106 First-Year Writing	3	
<input type="checkbox"/> CHEM 1035 General Chemistry	3		<input type="checkbox"/> PHYS 2305 Found of Physics I w/lab	4	
<input type="checkbox"/> CHEM 1045 General Chemistry Lab	1		<input type="checkbox"/> MATH 1206 Calculus II	3	
<input type="checkbox"/> MATH 1114 Linear Algebra	2		<input type="checkbox"/> MATH 1224 Vector Geometry	2	
<input type="checkbox"/> MATH 1205 Calculus I	3		<input type="checkbox"/> ENGE 1104 Exploration Digital Future OR ENGE 1114 Exploration Engr Design	2	
<input type="checkbox"/> ENGE 1024 Engineering Exploration ¹	2		<input type="checkbox"/> Elective*	3	
<input type="checkbox"/> Elective*	3				
TOTAL	17		TOTAL	17	
FALL SEMESTER SOPHOMORE			SPRING SEMESTER SOPHOMORE		
<input type="checkbox"/> PHYS 2306 Foundations of Physics II w/lab	4		<input type="checkbox"/> MATH 2214 Differential Equations	3	
<input type="checkbox"/> MATH 2224 Multivariable Calculus	3		<input type="checkbox"/> STAT 4105 Theoretical Statistics	3	
<input type="checkbox"/> CS 1044 Introduction to Programming in C	3		<input type="checkbox"/> ISE 2204 Manufacturing Processes	3	
<input type="checkbox"/> ESM 2104 Statics	3		<input type="checkbox"/> ISE 2404 Deterministic Oper Research I	3	
<input type="checkbox"/> ISE 2014 Engineering Economy	2		<input type="checkbox"/> GER 1114 Accelerated Elementary German	6	
<input type="checkbox"/> ISE 2214 Manufacturing Processes Lab	1				
<input type="checkbox"/> ISE 2004 Intro to ISE	2				
TOTAL	18		TOTAL	18	
SUMMER I SEMESTER					
<input type="checkbox"/> GER 2114 Accelerated Intermediate German	6				
TOTAL	6				
KIT WINTER OCT-FEB			KIT SUMMER APRIL-JULY		
<input type="checkbox"/> Stochastic Decision Modeling <i>Sub for ISE 3414 POR</i>	3		<input type="checkbox"/> Simulation I <i>Sub for ISE 3424 Discrete-Event Simulation</i>	3	
<input type="checkbox"/> German Language	3		<input type="checkbox"/> Ergonomics <i>Sub for ISE 3624 Industrial Ergonomics</i>	3	
			<input type="checkbox"/> Elective*	3	
TOTAL	6		TOTAL	9	
FALL SEMESTER JUNIOR			SPRING SEMESTER JUNIOR		
<input type="checkbox"/> ECE 3054 Electrical Theory	3		<input type="checkbox"/> ISE 3214 Facilities Plan & Matl Handling	3	
<input type="checkbox"/> STAT 4706 Statistics for Engineers	3		<input type="checkbox"/> ISE 4404 Statistical Quality Control	3	
<input type="checkbox"/> ESM 2304 Dynamics	3		<input type="checkbox"/> ISE 2034 Data Management for ISEs	3	
<input type="checkbox"/> ISE 3434 Deterministic Oper Research II	3		<input type="checkbox"/> Electives*	6	
<input type="checkbox"/> ISE 3614 Intro to Hum Factors Engr & Ergo	3				
TOTAL	15		TOTAL	15	
FALL SEMESTER SENIOR			SPRING SEMESTER SENIOR		
<input type="checkbox"/> ISE 4005 Proj Mgmt & System Design	3		<input type="checkbox"/> ISE 4006 Proj Mgmt & System Design	2	
<input type="checkbox"/> ISE 4204 Production Planning and Inv Ctrl	3		<input type="checkbox"/> ISE 4214 Lean Manufacturing	3	
<input type="checkbox"/> Electives*	7		<input type="checkbox"/> Electives*	6	
TOTAL	13		TOTAL	11	

***ELECTIVES: 16c Curriculum for Liberal Education courses; 6c ISE Technical Electives; 6c Technical Electives; 3c Free Electives.**

Disclaimer: Courses you take at KIT will depend on what is offered during the semesters you are enrolled and may be different from the courses included in this example checksheet. Courses that fulfill requirements for a Business minor or the Curriculum for Liberal Education may be taken. See Ms. Van Curen for information on your particular plan of study.