








# University of Idaho Study Abroad Transformative Learning Map

## College of Engineering

### B.S. in Material Science and Engineering

#### Key

	= Could study abroad
	= Could do national student exchange
	= Course has international focus
	= Could do internships, cooperative education, or research projects
	= Occasionally offered as service-learning course
	= Could do practicums or clinical experiences
---	= Pending information from department
	= Year-long sequence that should not be broken up
( )	= May be approved on a case by case basis
■	= Cannot be done abroad or on national student exchange














#### Find UI Approved International Universities for Your Major

<http://www.webs.uidaho.edu/ipo/abroad/search/subjects.htm>

#### Find USAC Study Abroad Programs for Your Major

<http://usac.unr.edu/programs/search.aspx>

This Transformative Learning Map (TLM) is intended to be used as an advising tool only, not a contract between the student and the university, and is subject to verification by the student's academic advisor and/or department chair. The TLM is designed to help students plan for transformative learning experiences such as study abroad, national student exchange, service-learning and internships. While a good faith effort has been made to provide accurate and up-to-date information for the TLM, course and degree requirements may change and so it is imperative you meet with your academic advisor to determine what changes, if any, have taken place and plan your experiences accordingly. The TLM is designed under the University of Idaho General Catalog. Please refer to the Catalog for specific requirements and seek the advice of your advisor for questions.

Key	Course Information	Credit	Note	Key	Course Information	Credit	Note
<b>Freshman:</b>							
	<b>FALL</b>				<b>SPRING</b>		
	Chem 111- Principles of Chemistry I	4			Chem 112- Principles of Chemistry II	5	
■	Core Hum/Soc. Sci.	4		■	Core Hum/Soc. Sci.	3	
	Engl 102- Essay Writing	3			CS Elective	3	
	Math 170- Analytical Geom & Calculus I	4			Math 175- Analytical Geom & Calc II	4	
	MSE 101- Intro. to Met. and Mats. Sci.	2	Fall only	---	Phys 211- Engineering Physics I (no lab)	3	
	<b>Total</b>	<b>17</b>			<b>Total</b>	<b>18</b>	<b>TOTAL 35</b>
<b>Sophomore:</b>							
	<b>FALL</b>				<b>SPRING</b>		
(  )	Phil 103- Ethics (Humanities)	3			Core Econ Elective	3	
---	Engr 210- Engineering Statics	3		---	Engr 335- Fluid Mechanics	3	
	Math 275- Analytical Geom Cal III	3		---	Engr 240- Intro. to Electrical Circuits	3	
	MSE 201- Elements of Materials Science	3	Fall only		Math 310- Ordinary Differential Equations	3	
---	Phys 212- Engineering Physics II	4			Stat 301- Probability and Statistics	3	
	<b>Total</b>	<b>16</b>			<b>Total</b>	<b>15</b>	<b>TOTAL 31</b>
<b>Junior:</b>							

	FALL				SPRING		
→	Chem 305/307- Physical Chemistry (with lab)	4		→	Engl 317- Technical Writing	3	
→	MSE 313- Physical Metallurgy- Offered Even Years	4	Fall only	→	MSE 308- Thermodynamics of Materials	3	Spring only
---	Engr 350- Engr. Mechanics of Materials	3		→	MSE 412- Mechanical Behavior of Materials	3	Spring only
→	MSE 423- Corrosion	3	Fall only	→	MSE 413- Phase Equilibria in materials	3	Spring only
→	MSE 340.ChE 340- Transport Rate Process	4			Upper Division Humanities or Social Science	3	
	<b>Total</b>	<b>18</b>			<b>Total</b>	<b>15</b>	<b>TOTAL 33</b>

**Senior:**

	FALL				SPRING		
→	MSE 417- Instrumental Analysis	3	Fall only	→	MSE 432- Fundamentals of Thin Film Fab .- Offered Odd Years	3	
→	MSE 434- Fundamentals of Polymeric Mats.	3	Fall only	→	MSE 463- Materials Physics and Engineering	3	Spring only
→	MSE 453/ChE 453- Process Analysis and Design I	3	Fall only	→	MSE 454/ChE 454- Process Analysis and Design II	3	Spring only
→	MSE 427- Ceramic Materials	3	Fall only	→	MSE 456- Metallic Materials	3	
(→)	Technical Elective	3		(→)	Tech Elective	3	
	<b>Total</b>	<b>15</b>			<b>Total</b>	<b>15</b>	<b>TOTAL 30</b>

**TOTAL CREDITS**

**128**

The University of Idaho reserves the right to change, amend or discontinue any articulation agreement or curriculum plan at any time.