

## **STUDY ABROAD AT NATIONAL UNIVERSITY OF SINGAPORE ELECTRICAL CONCENTRATION**

- The table below shows the modified curriculum for the junior and senior years. Shaded cells show the changes in the course sequence.
- In this recommended course of study, the study abroad semester is the first semester of the junior year.
- The standard curriculum is used for the freshman and sophomore years and for the second semester of the senior year.
- Equivalents of EEN305, BME335, and BME375, and two PS/HA electives, are taken at National University of Singapore. All other courses remain the same, but are taken in a slightly different sequence.

<b>Junior Year:</b>					
EE2005	Electronics (Equivalent of EEN 305)	4	IEN 311	Applied Probability & Statistics	3
BN3201	Introduction to Biomechanics (Equivalent of BME375)	4	EEN 304	Logic Design	3
BN3301	Introduction to Biomaterials (Equivalent of BME335)	4	EEN 307	Linear Circuits & Signals	3
	People and Society Elective*	4	BME 330	Foundations of Medical Imaging	3
	Humanities and Arts Elective*	4	BME 440	Biomedical Measurements	4
			BME 401	Senior Project I	1
			BME 311	Matlab for Biomedical Engineers	1
<b>UM Equivalent Total</b>			<b>15</b>	<b>Total</b>	
				<b>18</b>	

<b>Senior Year:</b>					
BME402	Senior Project II	2	BME403	Senior Project III	3
BME 480	Biomedical Instrumentation	3	BME 540	Computer Based Medical Instrumentation	3
BME 570	Introduction to Biosignal Processing	3	BME 541	Medical Electronics Systems Laboratory	2
BME 507	LabView Applications for Biomedical Engineering	1	BME 560	Biomedical Transport Phenomena	3
	Technical Elective**	3		Technical Elective**	3
	Advanced PS/HA Elective*	3		Advanced PS/HA Elective*	3
EEN 315	Digital Design Laboratory	1			
<b>Total</b>			<b>16</b>	<b>Total</b>	
				<b>17</b>	

\* To be selected from approved lists

## **STUDY ABROAD AT NATIONAL UNIVERSITY OF SINGAPORE MECHANICAL CONCENTRATION**

- The table below shows the modified curriculum for the junior and senior years. Shaded cells show the changes in the course sequence.
- In this recommended course of study, the study abroad semester is the first semester of the junior year.
- The standard curriculum is used for the freshman and sophomore years and for the second semester of the senior year.
- Equivalents of EEN307, BME335, and BME375, and two PS/HA electives, are taken at National University of Singapore. All other courses remain the same, but are taken in a slightly different sequence.

<b>Junior Year:</b>					
EE2010	Systems and Controls (Equivalent of EEN 307)	4	MAE 207	Mechanics of Solids II	3
BN3201	Introduction to Biomechanics (Equivalent of BME375)	4	IEN311	Applied Probability & Statistics	3
BN3301	Introduction to Biomaterials (Equivalent of BME335)	4	BME 330	Foundations of Medical Imaging	3
	People and Society Elective*	4	BME 440	Biomedical measurements	4
	Humanities and Arts Elective*	4	BME 460	Physiologic Fluid Mechanics	3
			BME 311	Matlab for Biomedical Engineers	1
			BME 401	Senior Project I	1
<b>UM Equivalent Total</b>			<b>15</b>	<b>Total</b>	
					<b>18</b>

<b>Senior Year:</b>					
BME 402	Senior Project II	2	BME 403	Senior Project III	3
BME480	Biomedical Instrumentation	3	BME 560	Biomedical Transport Phenomena	3
BME 570	Intro. to Biosignal Processing	3	BME 575	Biomechanics II	3
	Technical Elective**	3	BME 587	Finite Element Analysis for Engineers	3
	Advanced PS/HA Elective	3		Technical Elective**	3
BME 506	ProEngineer Applications for BME	1		Advanced PS/HA Elective	3
<b>Total</b>			<b>15</b>	<b>Total</b>	
					<b>18</b>

\* To be selected from approved lists

## **STUDY ABROAD AT NATIONAL UNIVERSITY OF SINGAPORE PREMED CONCENTRATION**

- The table below shows the modified curriculum for the sophomore, junior, and senior years. Shaded cells show the changes in the course sequence.
- In this recommended course of study, the study abroad semester is the first semester of the junior year.
- The standard curriculum is used for the freshman year, the first semester of the sophomore year, and the second semester of the senior year.
- Equivalents of EEN307, BME335 and BME375, and two PS/HA electives, are taken at National University of Singapore. All other courses remain the same, but are taken in a slightly different sequence.

<b>Sophomore Year:</b>					
MTH 311	Ordinary Differential Equations	3	BIL 215	Systemic Human Physiology	3
CHM 112	Principles of Chemistry II	3	BIL 216	Physiology Lab	1
CHM 114	Chemistry Laboratory II	1	PHY 209	University Physics Lab III	1
PHY 207	University Physics III	3	EEN 118	Introduction to Programming	3
BIL 150	General Biology	4	CAE 210	Mechanics of Solids	3
BIL 151	General Biology Lab	1	BME 310	Mathematical Analysis in BME	3
EEN 201	Electrical Circuit Theory	3	CHM 201	Organic Chemistry I (Lecture)	3
			CHM 205	Organic Chemistry Laboratory I	1
<b>Total</b>			<b>Total</b>		
<b>18</b>			<b>18</b>		

<b>Junior Year:</b>					
EE2010	Systems and Controls (Equivalent of EEN 307)	4	BMB 258	Introduction to Biochemistry & Molecular Biology	3
BN3201	Introduction to Biomechanics (Equivalent of BME375)	4	CHM 202	Organic Chemistry II (Lecture)	3
BN3301	Introduction to Biomaterials (Equivalent of BME335)	4	CHM 206	Organic Chemistry Laboratory II	1
	People and Society Elective*	4	IEN 311	Applied Probability & Statistics	3
	Humanities and Arts Elective*	4	BME 401	Senior Project I	1
			EEN 204	Electrical Circuits Lab	1
			BME 311	Matlab for Biomedical Engineers	1
				Humanities and Arts Elective	3
<b>UM Equivalent Total</b>			<b>Total</b>		
<b>15</b>			<b>16</b>		

<b>Senior Year:</b>					
BME 402	Senior Project II	2	BME 403	Senior Project III	3
BME 440	Biomedical Measurements	4	BME 480	Biomedical Instrumentation	3
BME 570	Intro. to Biosignal Processing	3	BME 560	Biomedical Transport Phenomena	3
	Technical Elective	3		Technical Elective	3
	Advanced PS/HA Elective	3		Technical Elective	1
BME 330	Foundations of Medical Imaging	3		Advanced PS/HA Elective	3
<b>Total</b>			<b>Total</b>		
<b>18</b>			<b>16</b>		

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