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.

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<td>BME 507</td>
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<td>Biomedical Instrumentation</td>
<td>3</td>
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<td>Computer Based Medical Instrumentation</td>
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<tr>
<td>BME 507</td>
<td>Introduction to Biosignal Processing</td>
<td>3</td>
<td>BME 541</td>
<td>Medical Electronics Systems Laboratory</td>
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<tr>
<td>BME 507</td>
<td>LabView Applications for Biomedical Engineering</td>
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<td>BME 560</td>
<td>Biomedical Transport Phenomena</td>
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* 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.
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- The standard curriculum is used for the freshman and sophomore years and for the second semester of the senior year.
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<th>Junior Year:</th>
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<tr>
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<td>BME 587 Finite Element Analysis for Engineers</td>
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<td>Advanced PS/HA Elective</td>
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<td><strong>Total</strong></td>
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* 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.

| Sophomore Year: | | | | |
|-----------------|----------------|----------------|----------------|
| 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 |
| **Total** | **18** | **Total** | **18** |

| Junior Year: | | | | |
|--------------|----------------|----------------|----------------|
| 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 |
| **UM Equivalent Total** | **15** | **Total** | **16** |

| Senior Year: | | | | |
|--------------|----------------|----------------|----------------|
| 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 |
| **Total** | **18** | **Total** | **16** |

*To be selected from approved lists