## BMEG Advising Worksheet

**Student Name:** ________________________________  **ID:** __________________________

<table>
<thead>
<tr>
<th>Courses I have taken (Term/Year)</th>
<th>Courses I will be taking (Term/Year)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>GNEG 1111</strong> University Engineering I (Fa)</td>
<td></td>
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<tr>
<td><strong>MATH 2554</strong> Calculus I (Sp, Su, Fa)</td>
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<tr>
<td><strong>CHEM 1103</strong> University Chemistry I (Su, Fa)</td>
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| **PHYS 2054** University Physics I (Sp, Su, Fa)  
Pre- or Corequisite: MATH 2554  
Corequisite: Lab component |  |
| **ENGL 1013** Composition I (Sp, Su, Fa) |  |
| **GENG 1121 or 1103** Introduction to Engineering II (Sp)  
Prerequisite: GNEG 1111 |  |
| **MATH 2564** Calculus II (Sp, Su, Fa)  
Prerequisite: MATH 2554 with a grade of C or better |  |
| **CHEM 1123/21L** University Chemistry II (Sp, Su, Fa) |  |
| **ENGL 1023** Technical Composition II (Sp, Su, Fa) |  |
| **BMEG 2613** Introduction to BMEG (Fa):  
Prerequisite: GNEG 1121 or 1103, C or better in CHEM 1103, MATH 2554, and PHYS 2054 |  |
| **PHYS 2074** University Physics II (Sp, Su, Fa)  
Pre- or Corequisite: MATH 2564  
Corequisite: Lab component; Prerequisite: PHYS 2054 |  |
| **MATH 2574** Calculus III (Sp, Su, Fa)  
Prerequisite: MATH 2564 with a grade of C or better |  |
| **CHEM 3603/01L** Organic Chemistry I (Su, Fa)  
Prerequisite: CHEM 1123/21L |  |
| **BMEG 2813** Biomechanical Engineering (Sp)  
Prerequisite: BMEG 2613, CHEM 1123, MATH 2564, PHYS 2074 |  |
| **BMEG 2904** Biomedical Instrumentation (Sp)  
Prerequisite: BMEG 2613, MATH 2564, PHYS 2074 |  |
| **MATH 2584** Differential Equations (Sp, Su, Fa)  
Prerequisite: MATH 2564 with a grade of C or better |  |
| **CHEM 3613/11L** Organic Chemistry II (Sp, Su)  
Prerequisite: CHEM 3603 and CHEM 3601L |  |
| **BMEG 3634** Biomaterials (Fa)  
Prerequisite: BMEG 2813, CHEM 1123, BIOL 1543/41L |  |
<table>
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<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Prerequisites/Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>BMEG 3124</td>
<td>Biomedical Signals &amp; Systems (Fa)</td>
<td>Prerequisite: BMEG 2904</td>
</tr>
</tbody>
</table>
| CHEG 2313 or MEEG 2403 | Thermodynamics (Sp, Su, Fa)  | (CHEG 2313) Pre- or Corequisite: MATH 2574  
(MEEG 2403) Prerequisite: PHYS 2054 and MATH 2564 |
| BIOL 2213/11L | Human Physiology (Sp, Fa)                | Prerequisite: CHEM 1123/21L                                 |
| CHEG 2133 or MEEG 3503 | Fluid Mechanics (Sp, Su, Fa)  | (CHEG 2133) Pre- or Corequisite: MATH 2574  
(MEEG 3503) Pre- or Coreq: MATH 2584; Prerequisite: MEEG 2403 |
| BMEG 3653/H | Biomed. Model. & Num. Methods (Sp)        | Pre-requisite: BMEG 2613, MATH 2574, MATH 2584               |
| BMEG 3824/H | Biomolecular Engineering (Sp)             | Prerequisite: BMEG 2613, MATH 2574, MATH 2584               |
| BMEG 4623/H | Biomedical Transport Phenomena (Fa)       | Pre-requisite: BMEG 3653, MATH 2574, MATH 2584, Fluids, Thermo |
| BMEG 4813   | Biomedical Engineering Design I (Fa)      | Corequisite: BMEG 4623                                      |
| BMEG 4823   | Biomed Engineering Design II (Sp)         | Prerequisite: BMEG 4813                                     |
| Science Elective\(^1\) (3 hrs) | Course                                             |
| BMEG Elective\(^2\) (3 hrs) | Course                                             |
| BMEG Elective\(^2\) (3 hrs) | Course                                             |
| BMEG Elective\(^2\) (3 hrs) | Course                                             |
| US History Requirement\(^3\) | Circle one   HIST 2003   HIST 2013   PLSC 2003   |
| Humanities\(^4\) | Course                                             |
| Fine Art\(^4\) | Course                                             |
| Social Science\(^4\) | Course                                             |
| Social Science\(^4\) | Course                                             |
| Social Science\(^4\) | Course                                             |

Have you filled out the online advising survey for the current semester?  Yes ☐  No ☐  
*Completion of survey is required for removal of advising hold.*

Student Signature: ________________________________  Date: ___________________

Advisor Signature: ________________________________  Date: ___________________
Students can select from the following or others approved by department:

- BIOL 2323 General Genetics
- BIOL 2443 Human Anatomy
- BIOL 2013 General Microbiology
- BIOL 4263 Cell Physiology
- BIOL 4313 Molecular Cell Biology
- BIOL 4653 Cancer Biology
- BIOL 4713 Basic Immunology
- CHEM 2263 Analytical Chemistry
- CHEM 2613 Organic Physiological Chemistry
- CHEM 3203 Forensic Chemistry
- CHEM 3453 Elements of Physical Chemistry
- CHEM 3504 Physical Chemistry I
- CHEM 3514 Physical Chemistry II
- CHEM 3813 Introduction to Biochemistry
- CHEM 4813H Honors Biochemistry I
- CHEM 4843H Honors Biochemistry II

Students should select from the following list based on their field of interest. Check with department regarding updated list every semester:

- BIOL 4167 Dynamic Models in Biology
- BIOL 4233 Genomics and Bioinformatics
- BMEG 4504 Biomedical Microscopy (Irr)
- BMEG 4243 Advanced Biomaterials and Biocompatibility (Irr)
- BMEG 4103L/M Nanotechnology Laboratory (Fa)
- BMEG 4213 Cell and Tissue Mechanics (Irr)
- BMEG 4413 Tissue Engineering (Irr)
- BMEG 470V Special Topics in Biomedical Engineering (Irr): Varies by semester
- BMEG 460V Individual Study *
- BMEG 460VH Honors Individual Study *
- BMEG 450VH Honors Thesis*
- Biomedical engineering-related courses in College of Engineering (4000 or above) approved by department
* Between BMEG 460V, 460VH and 450VH, up to 3 hours total may be counted towards a BMEG elective requirement.

Students should select:
- HIST 2003 History of the American People to 1877 or HIST 2013 History of the American People 1877 to Present or PLSC 2003 American National Government

Students should consult the Catalog of Studies for a listing of approved Fine Arts, Humanities, and Social Science courses.