Plans of Study for the M.S. – Requirements and Sample

SBES Requirements for the M.S. Degree:

All M.S. students must meet certain minimal requirements which must appear on the Plan of Study. These are:

► Minimum of 9 credits in Engineering courses: Can be BMES or from another engineering dept.
  Required Core Course: Quantitative Physiology – 3 credits (or old “Intro to Biomed Engr”)

► Minimum of 4 credits in Life Science courses
  Required Core Course: Mammalian Physiology – 4 credits

► Minimum of 3 credits in a Mathematics course
  See approved list of choices

All other credits toward the minimum of 30 are in electives (5-7 credits) and research (7-9 credits). All courses must be either 5000 or 6000-level (VT), or 600-700 (WFU). Beginning Fall 2009 at Virginia Tech, 4000-level courses are no longer allowed on any SBES graduate plan (if taken prior to F09, they will be ‘grandfathered’ in).

Students are advised to thoroughly READ the “Advisory Committees” and the “Plans of Study” sections (9.3 and 9.4) of the SBES Graduate Handbook before submitting a draft plan. They cover topics such as making changes to the plan, using older courses, transfer credits, off-site committee members, etc.

Sample M.S. Plan

Proposed Graduate Program of
Bilbo Baggins (904-11-1111)

Leading to the Degree of
Master of Science in Biomedical Engineering

Theme Area: Cell & Tissue Engineering

<table>
<thead>
<tr>
<th>Year</th>
<th>Sem.</th>
<th>Dept. and Course No.</th>
<th>Course Title</th>
<th>Credits</th>
<th>Subj. Area** Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>Spring</td>
<td>BMES 5994</td>
<td>Research and Thesis</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(Last yr/sem. attending)</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>(Total Research Credits)</td>
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</tbody>
</table>

Research / Thesis (7-9 credits)

4000 Level Courses (Applies to coursework taken prior to Fall 2009 at VT only – Max. 6 credits)

<table>
<thead>
<tr>
<th>Year</th>
<th>Sem.</th>
<th>Dept. and Course No.</th>
<th>Course Title</th>
<th>Credits</th>
<th>Subj. Area***</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>Fall</td>
<td>CHE 4984</td>
<td>SS: Skin, Prop., Func., Bioeng Apps</td>
<td>3</td>
<td>ENGR</td>
</tr>
<tr>
<td>2007</td>
<td>Fall</td>
<td>BMES 5004</td>
<td>Intro to Mammalian Physiology</td>
<td>4</td>
<td>LS</td>
</tr>
<tr>
<td>2007</td>
<td>Fall</td>
<td>BMES 5014</td>
<td>Quantitative Physiology</td>
<td>3</td>
<td>ENGR</td>
</tr>
<tr>
<td>2008</td>
<td>Spring</td>
<td>BMES 5334</td>
<td>Cell Adhesion</td>
<td>3</td>
<td>ENGR</td>
</tr>
</tbody>
</table>
600/4000/5000 Level Math Requirement (Min. 3 credits)

2008 Spring       ESM 5725      Math Methods in Engr I       3       MATH

Transfer Courses (Name university - type the grade earned after course title)
Normal Transfer: Transferring university is: University of Virginia

2005 Spring       CHE 647      Biochemical Engineering / B+  3

Total Course Credits Toward Degree 22
Total Credits Toward Degree (coursework + research – minimum = 30) 31

Other Credits (Supporting Courses) (not counting toward requirements)

2008 Fall       STAT 5204      Experimental Design & Analysis  3

Signatures of Advisory Committee: (above typed names)

(Type Committee Chair's Name here), Chairman

Bilbo Baggins (940-11-1111)
321 Sweet St.
Blacksburg, VA  24060

(Type Committee Member's Name here), Member

Date Submitted to Graduate Office:

(Type Committee Member's Name here), Member

(Type Extra Member's Name here if desired), Member

Dr. H. Clay Gabler, Ph.D., GPC Chair

** Subject area designations: Used to help visually track completion of minimal BMES program requirements:  LS = Life Sciences; ENGR = Engineering courses; MATH = Math
DO NOT LABEL ALL THE COURSES, only those designating the requirements.