Department of Biomedical Engineering
Curriculum Summary for the MS Degree

____ **Required Courses:** (5 credits) No Exemptions

Course Number	Course Title	Credits
BMME 400 [100]	Introduction to BME	1
BMME 900 [311], BME 693, BME 893, BMME 910L [300], BMME 920L [301], or BME 590R	Research Experience (must be in first three semesters)	1
BMME 993 [393] or BME 695	Master's Thesis	3

____ **Required Core Topic Courses:** (17 credits or more)

- Exemptions for the Life Science requirements are only permitted for students with at least 8 hours of equivalent graduate-level life science coursework.
- Refer to engineering core topics list for approved courses.
- There are no exemptions for engineering core topics courses.
- For exemptions, prior coursework must be documented on the student's transcript.
- Exempted courses are not applied to the total credit hours requirement.

Course Numbers	Requirement	Credits
BMME 589 [181], BMME 790 [281], BMME 570 [151], BMME 770 [251], PHY 503, PHY 504, and/or other courses from list of graduate-level life science courses approved by the department or by the academic advisor	Life Sciences Core	8 minimum
	Engineering Core	3
	Engineering Core	3
	Engineering Core	3

____ **Required Mathematics and Statistics:** (9 credits or more)

- Three hours of probability and statistics are required for all students. Students with at least three hours of prior coursework in advanced undergraduate or graduate probability and statistics may be exempted from this requirement at the recommendation of the advisor.
- Six hours of advanced engineering mathematics are required for all students. Students with equivalent prior coursework (as defined by the content of MATH 528 [128] and 529 [129] or MAT 501 and 502) may be exempted from this requirement at the recommendation of the advisor.
- For exemptions, prior coursework must be documented on the student's transcript.
- Exempted courses are not applied to the total credit hours requirement.

Course Numbers	Requirement	Credits
BIOS 550 [150] * or ST 515* or BIOS 600 [110] or ST 511 * preferred courses	Probability and Statistical Inference	3
MATH 528 [128] , 529 [129] or MAT 501,502	Advanced Engineering mathematics	6

____ **Approved Electives:** (3 credits or more)

- BMME or BME courses, courses in other departments listed in "BME Course Descriptions," or courses listed in recommended curricula for specific programs of study do not require prior approval of the academic advisor.
- All courses not meeting the above conditions are subject to approval of the academic advisor.
- At least one course must be at the Ph.D. level (700-800 [200] or 700 level). A 700-level course applied to the life science core topics requirement does not apply to this one-course requirement.

Elective	Course Number and Title	Credits
Ph.D.-level elective		

____ **Total credit hours requirement:** (31 credits or more)

- No more than six credits of BMME 993 [393] or BME 695 may apply.

____ **Required Course in Responsible Conduct of Research:** Date _____

- Students entering Fall, 2006 or after must take either the UNC course, "Responsible Conduct of Research", or the NC State course, PHI 816 "Introduction to Research Ethics."

____ **Comprehensive Examination:** Date _____

____ **Oral presentation of Master's Thesis:** Date _____

____ **Approved written Master's Thesis:** Date _____