Northwestern University McCormick School of Engineering and Applied Science
Biomedical Engineering Area of Specialization Form to be used by students following the Catalog year 2006

DIRECTIONS FOR COMPLETING BME SPECIALIZATION FORM FOR CATALOGUE YEAR 2006

All Biomedical Engineering majors must complete this form by the end of their junior year of study. If you change your specialization, a new form must be submitted.

STEP 1 Confirm Catalogue year is 2006 (Look on Caesar at your catalogue year, if it is 2005 or before, complete a Change of Catalogue Year Form or use a specialization form for the correct year)

STEP 2 Choose Basic Engineering courses, make sure they conform with the requirements of your Specialization

STEP 3 Select your seven Specialization Courses according to the rules for your Specialization specified below

STEP 4 Select two Technical Electives

STEP 5 Petition to substitute courses for the original Specialization requirements if necessary
  ➢ Use the Petition Section of this form to substitute alternate courses for the seven main Specialization requirements
  ➢ Use a separate yellow Curriculum Petition to substitute alternate courses for the Basic Engineering requirements

Transport Processes & Tissue Engineering
Under Basic Engineering:
  Bmd_Eng 250 or Chem 342-1; Bmd_Eng 270 or Chem_Eng 321 or Mech_Eng 241
  Bmd_Eng 271, 346 or Bmd_Eng 349, 350, 377
  Three of Bmd_Eng 310, 315, 317, 343; 344; 371;
  Only 1 of Biol_Sci 315 or 390
Two Technical Electives

Electronic Instrumentation
Under Basic Engineering:
  EECS 202; EECS 203; Bmd_Eng 220 or EECS 302
  One of the following: Bmd_Eng 320 or EECS 222
  All of EECS 221, 223, 225, 230, 303; Bmd_Eng 383
Two Technical Electives

Computer Applications
Under Basic Engineering:
  EECS 202; ECE 203; Bmd 220 or EECS 302
  EECS 205, 230, 303, Bmd_Eng 320, 383
  Take one of the following pairs of classes
  EECS 346/347; 361/362; 391/392
Two Technical Electives

Biomechanics and Rehabilitation
Under Basic Engineering:
  Bmd_Eng 250 or Chem 342-1 and Bmd_Eng 271
  Bmd_Eng 270 or Mech_Eng 241
  Bmd_Eng 346 or Bmd_Eng 349
  Bmd_Eng 366 and 371
  Three of Bmd_Eng 344, 365, 377; Civ_Eng 327;
  Mech_Eng 315, 362, 389, 390, 391
Two Technical Electives

Biomedical Signals and Images
Under Basic Engineering: EECS 202
  Bmd_Eng 320, 325, 395
  One of EECS 360 or Mech_Eng 391
  Three of Bmd_Eng 323; 327; 333; 383; 384; 495; EECS 328, 359
Two Technical Elective

Biological Materials and Biotechnology
Under Basic Engineering:
  Bmd_Eng 250 or Chem 342-1; Bmd_Eng 270 or Mech_Eng 241; Mat_Sci 201
  Bmd_Eng 314; 317; 343; 350
  One of Bmd_Eng 344 or Mat_Sci 331
  Two of Bmd_Eng 310; 315; 333; 346 or 349, 377,
  One of Biol_Sci 301, 315, 390
Two Technical Electives

General
A different set of courses may be developed by student and advisor, and must be submitted to and approved by the BME Undergraduate Committee. Two Technical Electives also required.

See other side as well

Northwestern University McCormick School of Engineering and Applied Science

10/8/2008
Biomedical Engineering Area of Specialization Form to be used by students following the Catalog year 2006 degree requirements

Name _________________________________________ Student ID_____________ Year of Study________ Today’s Date ___________

SPECIALIZATION: _________________________________

BASIC ENGINEERING:
List all the Basic Engineering Courses you are using for your degree, including those required for your Specialization if applicable:

1) ______________________  2) ______________________  3) ______________________  4) ______________________  5) ______________________ (ONLY IF NON-EA TRACK)

CORE COURSES FOR SPECIALIZATION (IF APPLICABLE)

1) ______________________  2) ______________________

SPECIALIZATION COURSES:

1) SUBJECT          COURSE #              COURSE TITLE      QTR/YEAR  5) SUBJECT          COURSE #              COURSE TITLE      QTR/YEAR
2) SUBJECT          COURSE #              COURSE TITLE      QTR/YEAR  6) SUBJECT          COURSE #              COURSE TITLE      QTR/YEAR
3) SUBJECT          COURSE #              COURSE TITLE      QTR/YEAR  7) SUBJECT          COURSE #              COURSE TITLE      QTR/YEAR
4) SUBJECT          COURSE #              COURSE TITLE      QTR/YEAR

TECHNICAL ELECTIVES:

1) ______________________  2) ______________________

***PETITION SECTION***

FOR SEVEN MAJOR SPECIALIZATION COURSES ONLY

IT IS NOT NECESSARY TO FILE A CURRICULUM PETITION IN ADDITION TO THIS FORM

REQUESTED SUBSTITUTION QTR/YR REASON:

1) SUBJECT AND COURSE #                 QTR/YEAR
2) SUBJECT AND COURSE #                 QTR/YEAR
3) SUBJECT AND COURSE #                 QTR/YEAR
4) SUBJECT AND COURSE #                 QTR/YEAR
5) SUBJECT AND COURSE #                 QTR/YEAR

**Do Not use this form to petition Basic Engineering Requirements, use yellow Curriculum Petition instead

Student’s Signature _________________________________________ Date ___________

Adviser’s Name ________________________________________________

Adviser’s Signature _____________________________________________ Date ___________

Program Chair’s Signature ________________________________________ Date ___________

Students should obtain Adviser and Program Chair’s signatures, then return this form to L269 (see other side) 10/8/2008