DIRECTIONS FOR COMPLETING BME SPECIALIZATION FORM FOR CATALOGUE YEAR 2004

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 2004 or thereafter (Look on Caesar at your catalogue year, if it is 2003 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

Under BME Core: Both Bmd_Eng 302 and 303

Specialization Courses:
- Bmd_Eng 346; 350; 379 BME 371
- One of Bmd_Eng 377 or Chem_Eng 371
- Three of Biol_Sci 315; 390; Bmd_Eng 310; 315; 317; 343; 344; 371; 372; 377; Chem_Eng 371

Two Technical Electives

Electronic Instrumentation

Under Basic Engineering:
- Bmd_Eng 221 or ECE 202; ECE 203; Bmd_Eng 220 or ECE 302

Specialization Courses:
- Bmd_Eng 383; ECE 221; 223; 225; 230; 303
- One of the following: Bmd_Eng 320 or ECE 222

Two Technical Electives

Computer Applications

Under Basic Engineering:
- Bmd_Eng 221 or ECE 202; ECE 203; Bmd_Eng 220 or ECE 302

Specialization Courses:
- Bmd_Eng 320; 383; ECE 205; 230; 303
- Take one of the following pairs of classes
  - ECE 346/347; 361/362; 391/392

Two Technical Electives

Biomechanics and Rehabilitation

Under Basic Engineering:
- Bmd_Eng 250 or Chem 342-1; Bmd_Eng 271

Specialization Courses:
- Bmd_Eng 270; 346; 366; 371
- Three of Bmd_Eng 321; 344; 365; 372; 377; Civ_Eng 327; Mech_Eng 315; 362; 389; 390; 391

Two Technical Electives

Biomedical Signals and Images

Under Basic Engineering: Bmd_Eng 221
Under Core: Bmd_Eng 301 and 302

Specialization Courses:
- Bmd_Eng 320; 325
- One of Bmd_Eng 321; ECE 360; Mech_Eng 391
- Four of Bmd_Eng 323; 327; 333; 338; 383; 384; 495; ECE 328, 359

Two Technical Electives

Biological Materials and Biotechnology

Under Basic Engineering:
- Bmd_Eng 250 or Chem 342-1; Bmd_Eng 270; Mat_Sci 201

Specialization Courses:
- Bmd_Eng 314; 317; 343; 350
- One of Bmd_Eng 344 or Mat_Sci 331
- Two of Biol_Sci 301; 315; 390; Bmd_Eng 310; 315; 333; 346 or Chem_Eng 371

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
Biomedical Engineering Area of Specialization Form to be used by students following the Catalog year 2004 & thereafter
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)

SPECIALIZATION COURSES:

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

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

REQUIREMENT  REQUESTED SUBSTITUTION QTR/YR  REASON:

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)