

**THE UNIVERSITY OF AKRON**  
**Department of Biomedical Engineering**  
**B.S. Biomedical Engineering/Instrumentation, Signals & Imaging Track**  
**Entering Fall 2006 or Later**

| FALL                            | SPRING   |                                 | SUMMER                      |
|---------------------------------|----------|---------------------------------|-----------------------------|
| <b>First Year</b>               |          |                                 |                             |
| 3300:111 English Comp. I        | 3        | 3300:112 English Comp II        | 3                           |
| 3450:221 Calculus I             | 4        | 3450:222 Calculus II            | 4                           |
| 3150:151 Chemistry I            | 3        | 3650:291 Physics I              | 4                           |
| 3150:152 Chemistry Lab          | 1        | 3150:153 Chemistry II           | 3                           |
| 4800:101 Tools for BME          | <u>3</u> | 4800:111 Intro BME Design       | <u>3</u>                    |
|                                 | 14       |                                 | 17                          |
| <b>Second Year</b>              |          |                                 |                             |
| 3450:223 Calculus III           | 4        | 3450:335 Differential Equations | 3                           |
| 3650:292 Physics II             | 4        | 4800:220 Biomed Computing       | 3                           |
| 4400:231 Circuits I             | 3        | 4400:332 Circuits II            | 3                           |
| 4400:230 Circuits I Lab         | 1        | 4400:330 Circuits II Lab        | 1                           |
| 3100:200 Anat & Phys I          | 3        | 4400:163 Digital Logic Design   | 4                           |
| 3100:201 Anat & Phys I Lab      | 1        | 3100:202 Anat & Phys II         | 3                           |
| 4800:201 BME Sophomore Sem      | <u>1</u> | 3100:203 Anat & Phys II Lab     | <u>1</u>                    |
|                                 | 17       |                                 | 18                          |
| <b>Third Year</b>               |          |                                 |                             |
| 4300:201 Statics                | 3        |                                 | 4600:305 Thermal Science    |
| 4400:343 Signals & Systems      | 3        |                                 | 3470:461 Applied Statistics |
| 4400:360 Physical Electronics   | 3        | 4100:301 Engineering            | 3400:210/221 Humanities     |
| 4800:305 Intro Biophysical Meas | 4        | Co-op I                         | <u>4</u>                    |
| 7600:105/6 Speech or Oral Com   | <u>3</u> |                                 | 11                          |
|                                 | 16       |                                 |                             |
| <b>Fourth Year</b>              |          |                                 |                             |
|                                 |          | 4600:203 Dynamics               | 3                           |
|                                 |          | 4800:310 Mod & Sim of BME Sys   | 3                           |
| 4100:302 Engineering            |          | BME Elective                    | 3                           |
| Co-op II                        |          | Area Studies                    | 2                           |
|                                 |          | Humanities Elective             | <u>3</u>                    |
|                                 |          |                                 | 14                          |
|                                 |          | 4100:403 Engineering            |                             |
|                                 |          | Co-op III                       |                             |
| <b>Fifth Year</b>               |          |                                 |                             |
| 4800:491 BME Design I           | 2        | 4800:492 BME Design II          | 2                           |
| 4800:420 BME Signal & Img Proc  | 3        | BME Elective                    | 3                           |
| 4800:430 Design Med Img Sys     | 3        | 4800:400 Biomaterials           | 3                           |
| 4800:325 Design Med Devices     | 3        | 3250:244 Intro to Econ Anal     | 3                           |
| 3600:120 Intro to Ethics (Hum)  | 3        | BME Elective                    | 3                           |
| Social Science Elective         | <u>3</u> | Physical Education              | <u>1</u>                    |
|                                 | 17       |                                 | 15                          |

BME Electives must include a minimum of 3 credits from Biomedical Engineering (4800). All other electives may be chosen from a list of approved electives.