## Analysis of Graduation Requirements <br> Biological Systems Engineering <br> University of Nebraska-Lincoln <br> 2015-2016 Bulletin

Name:
Emphasis Area:

Student ID:

| Course | $\begin{aligned} & \mathrm{Cr} \\ & \mathrm{Hrs} \end{aligned}$ | ACE <br> SLO | Semester/Year |  |  | Substitute or Transfer Course \& Institution | Cr <br> Hrs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Completed | In Progress | Still Need |  |  |
|  | MATHEMATICS \& STATISTICS (19 cr) |  |  |  |  |  |  |
| MATH 106 | 5 | 3 |  |  |  |  |  |
| MATH 107 | 4 | 3 |  |  |  |  |  |
| MATH 208 | 4 | 3 |  |  |  |  |  |
| MATH 221 | 3 | 3 |  |  |  |  |  |
| MECH 321 or MATH 380 | 3 |  |  |  |  |  |  |
|  | BASIC SCIENCES (31 cr) |  |  |  |  |  |  |
| LIFE 120 \& 120L | 4 | 4 |  |  |  |  |  |
| LIFE 121 \& 121L | 4 | 4 |  |  |  |  |  |
| BIOC 321 or BIOC 431 | 3 |  |  |  |  |  |  |
| BIOS elec* | 4 |  |  |  |  |  |  |
| BIOC or BIOS elec* | 1 |  |  |  |  |  |  |
| CHEM 109 or 113 | 4 | 4 |  |  |  |  |  |
| CHEM 110 or 114 | 3 |  |  |  |  |  |  |
| CHEM 251 or 255 or 261 | 3 |  |  |  |  |  |  |
| CHEM 253 or 257 or 263 | 1 |  |  |  |  |  |  |
| PHYS 211 | 4 | 4 |  |  |  |  |  |
|  | COMMUNICATION \& ORG. SKILLS (6*** ${ }^{*} \mathrm{cr}$ ) |  |  |  |  |  |  |
| JGEN 200 | 3 | 1 |  |  |  |  |  |
| Oral Skills** | 3 | 2 |  |  |  |  |  |
| Organizational Skills*** | 3 |  |  |  |  |  |  |
|  | GENERAL EDUCATION ( 15 cr ) |  |  |  |  |  |  |
| ACE elec: | 3 | 5 |  |  |  | History and the Humanities |  |
| ACE elec: | 3 | 6 |  |  |  | Social Sciences and Human Behavior |  |
| ACE elec: | 3 | 7 |  |  |  | The Arts |  |
| ACE elec ${ }^{* * * *}$ : | 3 | 8 |  |  |  | Ethics, Civics, Stewardship |  |
| ACE elec: | 3 | 9 |  |  |  | Global Awareness and Human Diversity |  |
| SUBTOTAL |  |  |  |  |  |  |  |

*A minimum of 2 laboratory courses or 2 courses with laboratories is required within the 16 hours of biological science and biochemistry courses. BIOS 203 is not acceptable.
**Course must be chosen from courses listed in online Bulletin.
${ }^{* * *}$ Courses must be chosen from courses on a list available from the adviser. Some of the Organizational Skills courses fulfill an ACE 2, 6, 8, or 9 requirement as well. If so, the 3 credits must be used for additional emphasis electives, and the Communications \& Organizational Skills requirement, in effect, becomes 6 credits.
**** If BSEN 206 is used to fill ACE 8 requirement the Emphasis Area subtotal becomes 24 or 27 credits.

UNL ACE Requirements Met? $\square$ Yes $\square$ No

## Signatures \& Dates

Student:
Dept. Head:
Advisor:

## Analysis of Graduation Requirements for Biological Systems Engineering (cont'd)

| Course | $\begin{aligned} & \mathrm{Cr} \\ & \mathrm{Hrs} \end{aligned}$ | Engr Hrs | ACE <br> SLO | Semester/Year |  |  | Substitute or Transfer <br> Course \& Institution | $\begin{aligned} & \mathrm{Cr} \\ & \mathrm{Hr} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Completed | In <br> Progress | $\begin{aligned} & \text { Still } \\ & \text { Need } \end{aligned}$ |  |  |
|  | ENGINEERING SCIENCE \& DESIGN (38 cr) |  |  |  |  |  |  |  |
| Biological Systems Engineering Core (22 cr) |  |  |  |  |  |  |  |  |
| BSEN 100 | 1 | 1 |  |  |  |  |  |  |
| BSEN 112 | 2 | 2 |  |  |  |  |  |  |
| BSEN 130 | 2 | 2 |  |  |  |  |  |  |
| BSEN 212a, b or e | 1 | 1 |  |  |  |  |  |  |
| BSEN 225 | 3 | 3 |  |  |  |  |  |  |
| BSEN 244 | 3 | 3 |  |  |  |  |  |  |
| BSEN 344 | 3 | 3 |  |  |  |  |  |  |
| BSEN 460 | 3 | 3 |  |  |  |  |  |  |
| BSEN 470 | 1 | 1 |  | - |  |  |  |  |
| BSEN 480 | 3 | 3 | 10 |  |  |  |  |  |
| Engineering Seminars (1 cr) |  |  |  |  |  |  |  |  |
| ENGR 010 (030) | 0 | 0 |  |  |  |  |  |  |
| ENGR 020 | 0 | 0 |  |  |  |  |  |  |
| ENGR 400 | 1 | 1 |  |  |  |  |  |  |
| Engineering Core (15 cr) |  |  |  |  |  |  |  |  |
| MECH 223 | 3 | 3 |  |  |  |  |  |  |
| MECH 373 | 3 | 3 |  |  |  |  |  |  |
| CIVE or MECH 310 or CHME 332 | 3 | 3 |  |  |  |  |  |  |
| ELEC 211 | 3 | 3 |  |  |  |  |  |  |
| BSEN 206 | 3 | 3 |  |  |  |  |  |  |
| SUBTOTAL | 38 |  |  |  |  |  |  |  |
|  | EMPHASIS AREA* (21-27**cr) |  |  |  |  |  |  |  |
| $1{ }^{\text {st }}$ BSEN course: | 3 | 3 |  |  |  |  |  |  |
| $2{ }^{\text {nd }}$ BSEN course: | 3 | 3 |  |  |  |  |  |  |
| $3{ }^{\text {rd }}$ BSEN course: | 3 | 3 |  |  |  |  |  |  |
| $4^{\text {th }}$ BSEN course: | 3 | 3 |  |  |  |  |  |  |
| $5{ }^{\text {th }}$ Engineering course: | 3 | 3 |  |  |  |  |  |  |
| Engr or Sci elec: | 3 |  |  |  |  |  |  |  |
| Engr or Sci elec: | 3 |  |  |  |  |  |  |  |
| Potential added elective ** |  |  |  |  |  |  |  |  |
| Potential added elective ** |  |  |  |  |  |  |  |  |
| SUBTOTAL |  |  |  |  |  |  |  |  |
| GRAND TOTAL |  |  |  |  |  |  |  |  |
| Total BSEN Requirements | 133 | $48^{\dagger}$ |  |  |  |  |  |  |

* A minimum of 15 hours of emphasis electives must be selected from courses offered by the College of Engineering. Within the 15 hours, a minimum of 12 hours must be BSEN or engineering courses crosslisted with BSEN. Of the BSEN or BSEN crosslisted courses, at least one must be a 300 -level course of a primary emphasis area, one must be a 300 -level course of a secondary emphasis area and one must be a 400 -level course of a primary emphasis area (see online Bulletin). Water and Environment Emphasis requires both BSEN 326 and BSEN 350 as primary emphasis courses, Food and Bioproducts Emphasis requires BSEN 303 and Biomedical Emphasis requires BSEN 317 as primary emphasis area courses.

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[^0]:    ** Some of the Communications and Organizational Skills courses fulfill an ACE 2, 6, 8, or 9 requirement as well. If one of those courses is chosen, 3 credits must be moved to a student's emphasis electives making the Emphasis Area subtotal equal 24-27 credits.

