DOCTOR OF ENGINEERING (ABE) PLAN OF STUDY

|  |  |
| --- | --- |
| Name:                                          | ID:                       |
| DATE:             | email:                 | SPECIALIZATION: ABE  |
| **REQUIRED: Minimum of 90 credits beyond the BS degree, including 40 credits of coursework.** |
| **A. Advanced engineering math – minimum 2 courses (6 credits)** *Allowable courses are listed on the DRE website. Please enter the course name in the provided box.* | **Semester** | **Grade** |
|  BME 770 Biomedical Signal Processing |       CR |       |       |
|                                                |       CR |       |       |
| **B. Graduate non-engineering courses — minimum 2 courses (6 credits)** *Courses must be taken outside the College of Engineering. These courses may be 500 level or above. They must be approved by your research advisor. The courses must be acceptable for credit towards the graduate degree of the offering department.* |
|  BIO 624/824 Foundations of Biomedical Physiology |       CR |       |       |
|                                                |       CR |       |       |
| **C. Research Communications -- minimum 2 courses (4 credits)**  |  |
| ESC 720 Research Communications, or  *approved alternate course (see DRE web page)*                                                    |       CR |       |       |
|  BME 850 Applied Biomedical Engineering Seminar  | 1 CR |       |       |
| **D. Specialization Requirements – minimum 12 credits**  |
|  BME 553/753 Cell and Tissue Biology |       CR |       |       |
|  BME 658/758 Medical Devices  |       CR |       |       |
|  BME 580 Biomedical Instrumentation |       CR |       |       |
|  BME 655/755, 659/759, or 651/751                 |       CR |       |       |
| **E. Specialization Electives – minimum 12 credits** *Any engineering course at the 600 or 700 level or higher approved by your advisor.* |
|                                                |      CR |       |       |
|                                                |      CR |       |       |
|                                                |      CR |       |       |
|                                                |      CR |       |       |
|                                                |      CR |       |       |

|  |
| --- |
| **F. Flexible credits – minimum of 20 credits.** *A combination of research and/or coursework at the 500 level or above.* |
|                                                |      CR |       |       |
|                                                |      CR |       |       |
|                                                |      CR |       |       |
|                                                |      CR |       |       |
|                                                |      CR |       |       |
|                                                |      CR |       |       |
|                                                |      CR |       |       |
|                                                |      CR |       |       |
| **G. Doctoral Research Credits – minimum 30 CREDITS of BME 895 and BME 899***A maximum of 10 credits of Doctoral Research may be applied towards the minimum 30 credit DISSERTATION RESEARCH requirement.**A minimum of 20 credits of Dissertation is necessary towards the minimum 30 credit DISSERTATION RESEARCH requirement.* |
| **BME 895 Doctoral Research - only maximum of 10 credits can count for DRE** |
|  CR       | SEM       | GRADE       | CR       | SEM       | GRADE       |
|  CR       | SEM       | GRADE       | CR       | SEM       | GRADE       |
|  CR       | SEM       | GRADE       | CR       | SEM       | GRADE       |
| **BME 899 Dissertation - minimum of 20 credits** |
|  CR       | SEM       | GRADE       | CR       | SEM       | GRADE       |
|  CR       | SEM       | GRADE       | CR       | SEM       | GRADE       |
|  CR       | SEM       | GRADE       | CR       | SEM       | GRADE       |
|  CR       | SEM       | GRADE       | CR       | SEM       | GRADE       |
| **H. Total course credits (non-research) taken at CSU (20 credits minimum):      CR** **Total credits (course and research combined) taken at CSU (60 credits minimum):      CR** **Total credits beyond the bachelor’s degree (90 credits minimum or 60 credits minimum after MS degree)**  **CR** |
| 1. **Date of satisfactory completion of the Qualifying Exam:** DATE:

*Qualifying examination must be completed before 24 credit hrs have been taken in the doctoral program.* |
| **Date of satisfactory completion of the Candidacy Exam:** DATE:           *After completion of the candidacy, the doctoral candidate must provide a progress report annually to the dissertation committee, in the form of an oral presentation (preferred) or a written report.* |

|  |  |
| --- | --- |
| **M. APPROVALS** |  |
|  o Student : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  | DATE \_\_\_\_\_\_\_\_ |
|  o Academic advisor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  | DATE \_\_\_\_\_\_\_\_ |
|  o Research advisor: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  | DATE \_\_\_\_\_\_\_\_ |
|  o DRE program director: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_  | DATE \_\_\_\_\_\_\_\_ |