**University of North Texas**

**Master of Science in Biomedical Engineering**

**Degree Plan: Thesis – 30 hours**

|  |  |  |
| --- | --- | --- |
| Student Name | UNT ID | Signature: |
|  |  |  |
| Local Telephone | Email | Date |
|  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
| Major Professor: |  | Signature/Date |  |
| Committee Member\* |  | Signature/Date |  |
| Committee Member\* |  | Signature/Date |  |

\*Faculty members from BMEN; Student can add extra members from other departments as necessary

|  |  |
| --- | --- |
| Graduate Program Coordinator: Signature/Date |  |
| Department Chair: Vijay Vaidyanathan Signature/Date |  |

|  |  |  |
| --- | --- | --- |
| **Other Requirements** | **Expect to Complete Semester/Yr.** | **Notes** |
| English Proficiency |  |  |
| Leveling Course(s) |  |  |
| Thesis Proposal Presentation |  |  |

* The Thesis Option requires strong academic standing, and 6 credits of BMEN 5950 with a Major Professor. Typically, a student will enroll in BMEN 5950 in two consecutive semesters (3 credits each) in the second year of the program. During the first 3 credits of BMEN 5950, the student and Major Professor define a Thesis Proposal, and the student presents the Proposal to a faculty Thesis Committee for approval.
* Course offerings vary from year to year and are based on enrollment and resources. The Major Professor and the student are advised to tailor the degree plan based on course availability.
* Courses registered without Advisor’s approval or any unapproved deviations from the degree plan may result in no credit toward degree requirements. **Student initials:** \_\_\_\_\_\_\_\_\_\_
* The Thesis Proposal must be presented during the first semester the student is registered in BMEN 5950. Consult with Major Professor. **Student initials:** \_\_\_\_\_\_\_\_\_\_
* The responsibility for adhering to Graduate School, College and Departmental requirements rests entirely with the student. Application for graduation must be filed in the Graduate School Office before the deadline in force during the final semester. Consult the Toulouse Graduate School and the Graduate Catalog for further information <http://tsgs.unt.edu>

**Biomedical Engineering Thesis Degree Plan (30 Hours)**

|  |  |
| --- | --- |
| **Block A – BMEN Core, 6 Hours** | **Expect to Complete Semester/Yr** |
| BMEN 5210 – Biomedical Engineering Laboratory |  |
| BMEN 5315 – Computational Methods in Biomedical Engineering |  |
| BMEN 5940 – Biomedical Engineering Seminar |  |
| **Block B – BMEN Courses, 9 Hours** |  |
| BMEN 5005 – Neuroengineering |  |
| BMEN 5007 – Research Methods in Biomedical Engineering |  |
| BMEN 5280 – AI for wearables and healthcare |  |
| BMEN 5310 – Clinical Instrumentation |  |
| BMEN 5311 – Rehabilitation Engineering |  |
| BMEN 5312 – Advanced Signal Processing in Biomedical Engineering |  |
| BMEN 5313 – Bioengineering of Cellular Systems |  |
| BMEN 5314 – Advanced Tissue Engineering and Regenerative medicine |  |
| BMEN 5316 – Biopolymers and Flexible bio-electronics |  |
| BMEN 5317 – Advanced Biotechnology |  |
| BMEN 5318 – Biomedical Implants |  |
| BMEN 5319 – Cardiovascular fluid dynamics |  |
| BMEN 5320 – Advanced Biomechanics |  |
| BMEN 5321 – Biomaterials Compatibility |  |
| BMEN 5322 – Medical Imaging |  |
| BMEN 5323 – Advanced Biomedical Optics |  |
| BMEN 5324 – Biomedical MEMS |  |
| BMEN 5325 – Bio-nanotechnology |  |
| BMEN 5326 – Biomolecular Engineering |  |
| BMEN 5700 – Statistical Genetics |  |
| BMEN 5800 – Topics in Biomedical Engineering |  |
| BMEN 5810 – Topics in Biomedical Engineering |  |
| BMEN 5890 – Directed Study in Biomedical Engineering |  |
| BMEN 5900 – Special Problems in Biomedical Engineering |  |
| BMEN 5910 - Special Problems in Biomedical Engineering |  |
| BMEN 5920 – Cooperative Education in Biomedical Engineering |  |
| **Block C – Thesis, 6 Hours** |  |
| BMEN 5950 – Master’s Thesis |  |
| **Block D – Electives, 9 Hours**  |  |
| 5000 or 6000 level courses from any of BMEN, EENG, MEEN, MTSE CSCE, BIOL |  |
| 5000 level or above MGMT/LSCM/MKTG courses from the College of Business |  |
| 5000 level or above HLSV courses from the College of Health and Public Service |  |
| 5000 level or above MUPH courses in Performance Arts Health from the College of Music |  |
| 6000 level or above ASLP courses in Audiology from the College of Health and Public Service |  |

|  |  |
| --- | --- |
| Graduate Elective, notes, or additional comments | Date |
|  |  |
|  |  |
|  |  |

|  |
| --- |
| **The student is admitted to candidacy/approved by:** |
| **Toulouse Graduate School** |  |
| Name: | Date: |