

B.Sc. Biomedical Engineering - Study Plan

| Year One | Semester 1 | | | Semester 2 | | | |
|----------|-------------------|------------------|----------|-------------------------------------|-----------------------|--------|----|
| | Course No. | Course Title | Credit | Course No. | Course Title | Credit | |
| | ENGL 100 | Academic English | 3 | ENGG 100 | Intro. to Engineering | 3 | |
| ARAB 101 | Arabic Language 1 | 3 | GEN ED | Social and Behavioral Sciences Area | 3 | | |
| PHYS 101 | Physics 1 + Lab | 4 | ENGL 110 | English Composition | 3 | | |
| BIOE 120 | Bio for Biomed | 3 | CHEM 131 | General Chemistry 1 + Lab | 4 | | |
| MATH 110 | College Algebra | 3 | MATH 131 | Calculus I | 3 | | |
| Total | | | 16 | Total | | | 16 |

| Year Two | Semester 1 | | | Semester 2 | | | |
|----------|--|------------------|----------|-------------------------------------|----------------------|--------|----|
| | Course No. | Course Title | Credit | Course No. | Course Title | Credit | |
| | ENGL 120 | Research Writing | 3 | ENGG 150 | Engineering Graphics | 3 | |
| BIOE 200 | Introduction to Biomedical Engineering | 3 | ELEC 200 | Circuits Analysis + lab | 4 | | |
| PHYS 102 | Physics II + Lab | 4 | MATH 231 | Linear algebra | 3 | | |
| MATH 132 | Calculus II | 3 | BIOE 260 | Biomaterials | 3 | | |
| CHEM 132 | Chemistry II | 4 | GEN ED | Social and Behavioral Sciences Area | 3 | | |
| Total | | | 17 | Total | | | 16 |

| Year Three | Semester 1 | | | Semester 2 | | | |
|------------|--------------------------|---------------------------|----------|----------------------------------|---------------------------------|--------|----|
| | Course No. | Course Title | Credit | Course No. | Course Title | Credit | |
| | GEN ED | State of Kuwait Knowledge | 3 | MATH 331 | Ordinary Differential Equations | 3 | |
| MATH 233 | Calculus III | 3 | BIOE 335 | Strength of material | 3 | | |
| BIOE 330 | Intro to Mechanics | 3 | BIOE 334 | Biofluids and Bio thermodynamics | 3 | | |
| BIOE 340 | Physiology & Anatomy | 3 | BIOE 360 | Biomechanics | 3 | | |
| BIOE 345 | Medical Electronic + Lab | 4 | BIOE 350 | Biosensors and transducers + Lab | 4 | | |
| Total | | | 16 | Total | | | 16 |

| Year Four | Semester 1 | | | Semester 2 | | | |
|-----------|--|--------------------------|----------|--------------------------------|----------------------|--------|----|
| | Course No. | Course Title | Credit | Course No. | Course Title | Credit | |
| | BIOE 415 | Bioinstrumentation + Lab | 4 | CONC | Concentration Course | 3 | |
| GEN ED | Critical Thinking & Info. | 3 | BIOE 440 | Medical Imaging systems | 3 | | |
| MATH 364 | Numerical Analysis in Engineering | 3 | CONC | Concentration Course | 3 | | |
| MATH 290 | Probability and Statistics for Engineers | 3 | GEN ED | Humanities, Arts & Culture | 3 | | |
| BIOE 231 | Biomedical Signal and Image processing | 3 | GEN ED | Islamic Civilization & History | 3 | | |
| Total | | | 16 | Total | | | 15 |

| Year Five | Semester 1 | | | Semester 2 | | | |
|-----------|----------------------------|----------------------|--------|------------|--------------|--------|---|
| | Course No. | Course Title | Credit | Course No. | Course Title | Credit | |
| | ENGG 490 | Engineering Capstone | 4 | | | | |
| CONC | Concentration Course | 3 | | | | | |
| ENGG 301 | Engineering Economy | 3 | | | | | |
| CONC | Concentration Course | 3 | | | | | |
| GEN ED | Humanities, Arts & Culture | 3 | | | | | |
| Total | | | 16 | Total | | | 0 |

■ General Education ■ College of Engineering ■ Major

Total: 144 Credit Hours