CALIFORNIA STATE UNIVERSITY, LONG BEACH

POLICY STATEMENT

NUMBER: 74-20

UNIFORM FILE

REFERENCE: Degrees:

Options

SUBJECT: Biomedical Engineering Option

The Electrical Engineering Department offers an option in biomedical engineering that has curriculum similar to the electrical engineering option but allows the student to acquire substantive competence in biomedical engineering and biology. The program builds upon a strong base of biology, mathematics, physics, chemistry and engineering science to develop a clinically oriented biomedical engineer to serve in community medicine. It includes a core of standard electrical engineering courses as well as courses and laboratories in biomedical engineering, anatomy, physiology and biology. Elective units are available in the senior year to explore individual areas of interest.

Laboratory facilities in the field of biomedical engineering are available in engineering and laboratory facilities for anatomy and physiology are available in biology. The campus computer center plus laboratory computer systems are available to simulate biological systems and to collect, process and display physiological data.

No biomedical engineering student may enroll in an electrical engineering course unless he has received a minimum grade of C in each of the prerequisites. In addition to any other all-college requirements regarding grade point averages for graduation, a biomedical engineering student must achieve a minimum 2.0 average in all electrical engineering and biology courses attempted.

Lower Division: M.E. 172, 273; Physics 110, 230, 240; Mathematics 122, 123, 224; Chemistry IIIA, (377 or 381); E.E. 101, 140, 210, 210L.

Upper Division: Economics 300; Mathematics 370A; C.E. 301, 406; M.E. 330, E.E. 310, 320, 330, 330L, 340, 370, 370L, 406, 406L, 407, 433, 433L, 462, 490; Biology 208A, B, 441, 446, 494; approved electives to total 132 units.

Effective Fall, 1974. Will be published in 1975-76 General Bulletin.

DEG:sn

September 19, 1974