Bioengineering (BIOE)

Courses

BIOE 196. Field Studies: [Topic]. 1-12 Credits.
Repeatable.
Repeatable 99 times
BIOE 198. Laboratory Projects: [Topic]. 1-12 Credits.
Repeatable.
Repeatable 99 times
BIOE 199. Special Studies: [Topic]. 1-5 Credits.
Repeatable.
Repeatable 99 times

BIOE 251. Fundamentals of Bioengineering I. 4 Credits.
This course introduces students to foundational principles in bioengineering. Topics include units, dimensional analysis, energy balances, conservation of mass, energy, and momentum, and introductory biomechanics.
Requirements: Prereq: MATH 247 or MATH 252. Recommend co-req: PHYS 201 or PHYS 251.

BIOE 252. Fundamentals of Bioengineering II. 4 Credits.
This course introduces students to foundational principles in bioengineering. Topics include linear circuits, Fourier transforms, fluid pressure, the Bernoulli Equation, conservation principles in fluid control volumes, and laminar fluid flow.
Requirements: Prereq: MATH 247 or MATH 252; recommend co-req: PHYS 202 or PHYS 252.

BIOE 253. Fundamentals of Bioengineering III. 4 Credits.
This course introduces students to foundational principles in bioengineering. Students will learn basic concepts and experimental approaches across a variety of bioengineering topics and applications, including mass and energy balances, biomass conversion, fluid flow, spectrophotometry, and diffusion.
Requirements: Prereq: MATH 247 or MATH 252; PHYS 202 or PHYS 252 recommended.

BIOE 259. Special Studies: [Topic]. 1-5 Credits.
Repeatable.
Repeatable 99 times
BIOE 299. Special Studies: [Topic]. 1-5 Credits.
Repeatable.
Repeatable 99 times

BIOE 401. Research: [Topic]. 1-12 Credits.
Repeatable.
Repeatable 99 times
BIOE 402. Supervised College Teaching. 1-5 Credits.
Repeatable.
Repeatable 99 times
BIOE 403. Thesis. 1-12 Credits.
Repeatable.
Repeatable 99 times
BIOE 404. Internship: [Topic]. 1-12 Credits.
Repeatable.
Repeatable 99 times
BIOE 405. Reading and Conference: [Topic]. 1-5 Credits.
Repeatable.
Repeatable 99 times
BIOE 406. Field Studies: [Topic]. 1-12 Credits.
Repeatable.
Repeatable 99 times
BIOE 407. Seminar: [Topic]. 1-5 Credits.
Repeatable.
Repeatable 99 times
BIOE 408. Laboratory Projects: [Topic]. 1-12 Credits.
Repeatable.
Repeatable 99 times
BIOE 409. Terminal Project. 1-12 Credits.
Repeatable.
Repeatable 99 times
BIOE 410. Experimental Course: [Topic]. 1-5 Credits.
Repeatable.
Repeatable 99 times
BIOE 410L. Experimental Course: [Topic]. 4 Credits.
Repeatable.
Repeatable 99 times
BIOE 510. Experimental Course: [Topic]. 1-5 Credits.
Repeatable.
Repeatable 99 times
BIOE 510L. Experimental Course: [Topic]. 4 Credits.
Repeatable.
Repeatable 99 times
BIOE 601. Research: (Topic). 1-16 Credits.
Repeatable.
Repeatable 99 times
BIOE 603. Dissertation. 1-16 Credits.
Repeatable.
Repeatable 99 times
BIOE 607. Experimental Course: [Topic]. 1-5 Credits.
Repeatable.
Repeatable 99 times
BIOE 610. Experimental Course: [Topic]. 1-5 Credits.
Repeatable.
Repeatable 99 times
BIOE 610L. Experimental Course: [Topic]. 4 Credits.
Repeatable.
Repeatable 99 times