BIME 5091. Independent Study. 0.5-3 Credit Hours.
This course will be arranged through BME faculty. Topic and mode of
study are agreed upon by student and instructor. Semester hours are
variable and credit hours will be determined by topic. The course is
offered all terms. The course may be repeated for credit when topics vary.
Prerequisites: Graduate student standing and consent of instructor.

BIME 6003. Introduction To Clinical Practices. 1 Credit Hour.
This course will provide an introduction to clinical medicine for the
graduate biomedical engineering students. It will provide the opportunity
for the student to gain a working knowledge of engineering aspects as
it relates to clinical practice. A variety of specialties will be presented.
The students will also have the opportunity to observe surgery to gain
additional insight. Integration with the medical industry will be made
at the end. Prerequisites: open to Biomedical Engineering graduate
students.

BIME 6004. Biology For Bioengineers. 3 Credit Hours.
This course provides a broad background in biological concepts
with specific attention given to biological processes important in
bioengineering. Topics will include biochemistry, genetics, molecular
biology, cell biology, and physiology. Applications will emphasize
understanding cellular processes important in bioengineering, such
as gene therapy and tissue repair and regeneration. Prerequisites:
permission of the instructor Open for Cross Enrollment on Space
Available Basis.

BIME 6006. Human Physiology for Bioengineers. 3 Credit Hours.
The objective of this course is to introduce students to human physiology
with emphasis on physical principles, guiding rules, and quantitative
approaches. The course will focus on cellular function and physiological
processes as applied to human systems including cardiovascular,
respiratory, musculoskeletal, nervous, digestive, renal, reproductive and
endocrine. An undergraduate biology course or an equivalent to it is
required prior to registering for this course. Open for Cross Enrollment on
Space Available Basis.

BIME 6071. Supervised Teaching. 1 Credit Hour.
Supervised teaching of undergraduate, graduate, medical/dental
students, or clinical residents will be required for at least one semester.
For example, students may be required to lecture at undergraduate
courses at UTSA, or lecture to orthopaedic/dental residents about
implants and materials at the HSC. The exact nature of the teaching will
be determined based on each student’s program of study. Prerequisites:
admitted to candidacy and consent of the supervising professor, program
director, and COGS chair.

BIME 6090. Seminar. 1 Credit Hour.
Students will have the opportunity to hear presentations from outside
speakers, BME faculty, and peers. Prerequisites: Graduate (Ph.D.) student
standing; required of all students during fall and spring semesters while
pursuing doctoral studies.

BIME 6097. Research. 1-12 Credit Hours.
This course consists of independent, original research under the direction
of a faculty advisor.

BIME 6098. Thesis. 1-12 Credit Hours.
Registration for at least one term is required of M.S. candidates.
Prerequisite: admission to candidacy for Master of Science degree.

BIME 7099. Dissertation. 1-12 Credit Hours.
Registration for at least two semesters (12 SCH) after they have
been admitted to candidacy for the doctoral degree is required for
Ph.D. candidates. Prerequisite: admission to candidacy for Doctor of
Philosophy degree in Biomedical Engineering, and consent of supervising
professor, program director, and COGS chair.