

MATSE Biomaterials Concentration (approved at the 1/24/2001 faculty meeting)

Semesters 1-4 Same as current MATSE undergraduate curriculum (63 semester hours).

Semester 5 - Junior

Course No.	Course Title	Credits	Remarks
MATSE 301	Thermodynamics of Materials	4	
MATSE 207	MATSE Lab I	3	
CHEM 231	Elementary Organic Chemistry	3	
IE 230	Analysis of data	3	
	Elective in social sci./humanities	3	
	Semester total	16	

Semester 6 - Junior

Course No.	Course Title	Credits	Remarks
MATSE 302	Kinetic Processes in Materials	3	
MATSE 306	Thermal-Mechanical Behavior	3	
MATSE 208	MATSE Lab II	3	
MCB 150	Molecular & Cellular Basis of Life	3	
BIOCH 350	Introduction to Biochemistry	3	
	Free elective	3	
	Semester total	18	

Semester 7 – Senior

Course No.	Course Title	Credits	Remarks
MATSE 370	Design & Application of Biomat'ls	3	New course
MATSE 372	Biomaterials Lab	1	New course
MATSE xxx	Elective in MATSE	3	footnote #1
	Technical elective	3	footnote #2
	Elective in social sci./humanities	3	
	Free Elective	3	
	Semester total	16	

Semester 8 - Senior

Course No.	Course Title	Credits	Remarks
MATSE 373	Biomolecular Materials Science	3	New course
MCB 252	Cells, Tissue and Development	3	
MATSE xxx	Elective in MATSE	3	footnote #1
	Technical elective	3	footnote #2
	Elective in social sci./humanities	3	
	Semester total	15	

CURRICULUM TOTAL: 128

Footnotes:

1. Both electives in MATSE should be from one of the other MATSE concentrations specialty courses.
2. To be selected from the list of technical elective courses for the biomaterials concentration.

Technical Electives for the Biomaterials Concentration

Course No.	Course Title	Credits	Remarks
BIOPH 301	Introduction to Biophysics	3	
ECE 280	Biomedical Imaging	3	
ECE 314	Biomedical Instrumentation	3	
MCB 250	Molecular Genetics	3	
MATSE			footnote #1

Footnotes

1. New courses will be developed by new and present MATSE faculty members.