Biomedical Engineering Technology (BMET) Program (120 credits)

Freshman (32 credits)	0	<i>O</i> , ()		
MATH 138 (GER)	General Calculus I	3	MATH 238	General Calculus II	3
PHYS 102 (GER)	General Physics	3	Phys 103 (GER)	General Physics	3
PHYS 102A (GER)	General Physics Lab	1	Phys 103A (GER)	General Physics Lab	1
CHEM 121	Fund. of Chem. Principles I	3	CHEM 122	Fund. of Chem. Principles I	3
CHEM 125A	General Chemistry Lab I	1	CHEM 126A	General Chemistry Lab II	1
MET 103	Engr Graphics & Intro to CAD	2	MET 105	Applied CAD	2
ENGL 101 (GER)	English Comp: Writing, Thinking,	3	ENGL 102 (GER)	English Comp: Writing, Thinking,	3
	Speaking			Speaking II	
ET 101	Intro. to Engineering Tech.	0			
Freshman Seminar	Freshman Seminar	0			
	Total:	(16)		Total:	(16)
Sophomore (31 credit					
ECET 201	Circuits I	3	ECON 201 (GER) or	Economics or	3
			EPS 202 (GER)	Society, Technology and the Env.	
BME 111	Introduction to Physiology	3	BME 210 (GER)	Processing Fundamentals for Biological Signals	3
ENGR 211	Prof. Skills for Engineers I	1	MNET 215	Materials and Processes for Technology	3
Elective (GER)	Humanities and History GER (200 level)	3	Elective	Technical Elective 2	3
Elective	Technical Elective 1	3	Elective	Free Elective 2	3
Elective	Free Elective 1	3			
	Total:	(16)		Total:	(15)
Junior (30 credits)				•	• • •
Com 313 (GER)	Technical Writing	3	BMET 320	Biomedical Imaging, Sensors, and Systems	3
ECET 329	A-D Electronics	3	MET 304	Applied Fluid Mechanics	3
MET 303	Applied Thermo I	3	MNET 315 (GER)	Industrial Statistics	3
Elective	Technical Elective 3	3	Elective	Technical Elective 4	3
Elective	Free Elective 3	3	Elective (GER)	Lit/Hist/Phil/STS (300 Level or Above)	3
	Total:	(15)		Total:	(15)
Senior (27 credits)					
MNET 416	Production Scheduling	3	BMET 450	BME-Capstone Product, Process Design in a Regulated Environment	3
BMET 415	Biomedical Mechatronics	3	MNET 420	Quality Systems	3
BMET 440	Clinical Internship	3	Elective	(Capstone Seminar: GER)	3
MNET 414	Industrial Cost Analysis	3	Elective	Technical Elective 5	3
MET 403	Applied Thermodynamics II	3			
	Total:	(15)		Total:	(12)

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New Jersey Institute of Technology Approved Technical Electives:

BME 303	Biological and Chemical Foundations of Biomedical Engineering (3;0;0)		
BME 333	Biomedical Signals and Systems (3;0;0)		
BME 372	Electronics of Medical Devices (3;0;0)		
BME 386	Bioinstrumentation Laboratory (1;3;0)		
BME 471	Principles of Medical Imaging (3;0;0)		
BME 489	Medical Instrumentation (3;0;0)		
CPT 325	Medical Informatics Technology. 3 credits, 3 contact hours (3;0;0)		
CPT 330	Software Web Applications for Engineering Technology I (2-2-3)		
CPT 341	Visual Basic for Engineering Technology (2-2-3)		
CPT 373	Web App Development for Mobile. 3 credits, 4 contact hours (2;2;0)		
CPT 425	Medical Informatics Technology II. 3 credits, 4 contact hours (2;2;0).		
CPT 430	Software Web Applications II. 3 credits, 4 contact hours (2;2;0).		
ECET 210	Intro to Microprocessors (2-2-3)		
ECET 303	Circuit Measurements. 2 credits, 4 contact hours (1;3;0).		
IE 473	Safety Engineering (3-0-3)		
Math 309	Mathematical Analysis for Technology (3-0-3)		
MET 205	Advanced Computer Aided Design. 3 credits, 4 contact hours (2;2;0).		
MET 235	Statics for Technology (3-0-0).		
MET 237	Strength of Materials for Technology. 3 credits, 4 contact hours (2;2;0)		
MIT 326	Electronic Medical Record Design. 3 credits, 4 contact hours (2;2;0).		
MIT 360	Introduction to Gerontology. 3 credits, 4 contact hours (2;2;0).		
MIT 362	Geriatric Engineering I. 3 credits, 4 contact hours (2;2;0).		
MIT 460	Economics of Aging. 3 credits, 5 contact hours (2;2;1).		
MNET 300	Concepts In Machining. 3 credits, 4 contact hours (2;2;0).		

Additional courses from other departments may be substituted as Technical Electives after obtaining prior approval from the BMET Program Coordinator.

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