

**DELHI TECHNOLOGICAL UNIVERSITY**  
**SCHEME OF TEACHING AND EVALUATION**  
**MASTER OF TECHNOLOGY IN BIOMEDICAL ENGINEERING ( BME)**

The following alphanumeric coding scheme has been adopted

Core Courses XXXYMN

Elective Courses XXXYCMN

XXX abbreviates a particular M. Tech. program, Y – (5 for M. Tech. 1 st year, 6 for M. Tech. 2 nd year),

C – credit of the course (4/3/2),

MN – Subject code (Odd number for odd semester and even number for even semester courses)

<b>Semester-I</b>														
	S. No.	Course Code	Course Name	Type/ Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE	Total Credits
<b>Group A</b>	1	BME501	Human Anatomy and Physiology	Core	4	3	0	2	15	25	20	40	-	<b>17</b>
	2	BME503	Biomaterials and Clinical Devices	Core	4	3	0	2	15	25	20	40	-	
<b>Group B</b>	3	BME5401/5403/..... ...	Elective 1	Elective	4	3/4	0	2/0	15/ 20	25 /-	20/30	40/50	-	
	4	BME5301/5303/..... ...	Elective 2	Elective	3	3	0	0	20	0	30	50	-	
	5	BME5201/5203/..... ... /UEC5201/5203/..... ...	Elective 3/ University Elective I	Elective	2	2	0	0	20	-	30	50	-	
<b>Semester-II</b>														
	S. No.	Course Code	Course Name	Type/ Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE	Total Credits

<b>Group C</b>	1	BME502	Tissue Engineering and Artificial Organs	Core	4	3	0	2	15	25	20	40	-	<b>17</b>
	2	BME504	Immuno-diagnostics and Therapeutics	Core	4	3	0	2	15	25	20	40	-	
<b>Group D</b>	3	BME5402/5404/..... ...	Elective 4	Elective	4	3/4	0	2/0	15/ 20	25 /-	20/30	40/50	-	
	4	BME5302/5304/..... ...	Elective 5	Elective	3	3	0	0	20	-	30	50	-	
	5	BME5202/5204/..... .../ UEC5202/5204/..... ...	Elective 6/ University Elective II	Elective	2	2	0	0	20	-	30	50	-	

### Semester-III

	S.No.	Course Code	Course Name	Type/ Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE	Total Credits
	<b>Track 1</b>													<b>12</b>
<b>Group E</b>	1	BME651	Research Project	Core	12	0	0	$\frac{1}{2}$	0	-	0	100	0	<b>12</b>
	<b>Track 2</b>													
	1	BME601	Major Project I	Core	3						40	60		
	2	BME6401/6403/..... ...	Elective 7	Elective	4	3/4	0	2/0	15/ 20	25 /0	20/30	40/50	-	
	3	BME6301/6303/..... ...	Elective 8	Elective	3	3	0/1	2/0	15/ 20	25 /-	20/30	40/50	-	
4	BME6201/6203/..... ...	Elective 9	Elective	2	2	0	0	20	-	30	50	-		

### Semester-IV

	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE	Total Credits
<b>Group F</b>	<b>Track 1</b>													
	1	BME652	Research Project	Core	12	0	0	2 <sup>1</sup>	0	-	0	100	0	<b>12</b>
	<b>Track 2</b>													
	1	BME602	Major Project II	Core	12	0	0	2 <sup>1</sup>	0	-	0	100	0	<b>12</b>

<b>LIST OF ELECTIVES :</b>														
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE	
<b>Elective 1</b>	1	BME5401	Medical Physics and Biochemistry	Elective	4	3	0	2	15	25	20	40	-	
	2	BME5403	Instrumentation in Biomedical Engineering		4	4	0	0	20	-	30	50	-	
	3	BME5405	Rehabilitation Engineering		4	4	0	0	20	-	30	50	-	
	4	BME5407	Biopolymer Technology		4	4	0	0	20	-	30	50	-	
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE	
<b>Elective 2</b>	1	BME5301	Nanobiotechnology & Nanomedicine	Elective	3	3	0	0	20	-	30	50	-	
	2	BME5303	Infection and Disease		3	3	0	0	20	-	30	50	-	
	3	BME5305	Molecular Basis of Metabolic Disorders		3	3	0	0	20	-	30	50	-	

	4	BME5307	Pharmacology and Toxicology		3	3	0	0	20	-	30	50	-
	<b>S.No.</b>	<b>Course Code</b>	<b>Course Name</b>	<b>Type/Area</b>	<b>Cr</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>CWS</b>	<b>PRS</b>	<b>MTE</b>	<b>ETE</b>	<b>PRE</b>
	1	BME5201	Open Area Seminar I		2	2	0	0		-	100		-
<b>Elective 3</b>	2	BME5203	Advanced Human Genetics	Elective	2	2	0	0	20	-	30	50	-
	3	BME5205	Protein Engineering		2	2	0	0	20	-	30	50	-
	4	BME5207	Biosensors		2	2	0	0	20	-	30	50	-
	<b>S.No.</b>	<b>Course Code</b>	<b>Course Name</b>	<b>Type/Area</b>	<b>Cr</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>CWS</b>	<b>PRS</b>	<b>MTE</b>	<b>ETE</b>	<b>PRE</b>
<b>Elective 4</b>	1	BME5402	Biophysical Signal and System Simulations	Elective	4	3	0	2	15	25	20	40	-
	2	BME5404	OMICS in Medicine		4	4	0	0	20	-	30	50	-
	3	BME5406	Image Processing in Medicine		4	4	0	0	20	-	30	50	-
	4	BME5408	Industrial Biotechnology		4	4	0	0	20	-	30	50	-
	<b>S.No.</b>	<b>Course Code</b>	<b>Course Name</b>	<b>Type/Area</b>	<b>Cr</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>CWS</b>	<b>PRS</b>	<b>MTE</b>	<b>ETE</b>	<b>PRE</b>
<b>Elective 5</b>	1	BME5302	Minor Project-1	Elective	3					-	40	60	-
	2	BME5304	Neurobiology		3	3	0	0	20	-	30	50	-
	3	BME5306	Oncology		3	3	0	0	20	-	30	50	-
	4	BME5308	Drug Design and Development		3	3	0	0	20			30	50

	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE
<b>Elective 6</b>	1	BME5202	Microarray Technology	Elective	2	2	0	0	20	-	30	50	-
	2	BME5204	Genetic Manipulation in Medicine		2	2	0	0	20	-	30	50	-
	3	BME5206	Hospital Management		2	2	0	0	20	-	30	50	-
	4	BME5208	Open Area Seminar II		2	2	0	0			100		-
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE
<b>Elective 7</b>	1	BME6401	Bioinformatics	Elective	4	3	0	2	15	25	20	40	-
	2	BME6403	Biopharmaceuticals		4	4	0	0	20	-	30	50	-
	3	BME6405	Biostatistics		4	4	0	0	20	-	30	50	-
	4	BME6407	Molecular and Cellular Biophysics		4	4	0	0	20	-	30	50	-
	S.No.	Course Code	Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE	ETE	PRE
<b>Elective 8</b>	1	BME6301	Bioethics and IPR	Elective	3	3	0	0	20	-	30	50	-
	2	BME6303	Population Genetics		3	3	0	0	20	-	30	50	-
	3	BME6305	Artificial Intelligence		3	3	0	0	20	-	30	50	-
	4	BME6307	Research Methodology		3	3	0	0	20	-	30	50	-
		S.No.	Course Code		Course Name	Type/Area	Cr	L	T	P	CWS	PRS	MTE

<b>Elective 9</b>	1	BME6201	Gene Therapy	Elective	2	2	0	0	20	-	30	50	-
	2	BME6203	Entrepreneurship		2	2	0	0	20	-	30	50	-
	3	BME6205	Biomechanics		2	2	0	0	20	-	30	50	-
	4	BME6207	Alternative Medicine		2	2	0	0	20	-	30	50	-