

VEL TECH MULTI TECH Dr. RANGARAJAN Dr. SAKUNTHALA ENGINEERING COLLEGE

DEPARTMENT OF BIOMEDICAL ENGINEERING

BATCH: 2019-2023 (CO-PO & PSO ATTAINMENT)

S.No	Course Code	Course Name	CO ATTAINMENT	MAPPING WITH PO'S												MAPPING WITH PSO'S			
				PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3	
1	191HS101	English for Engineering Students	2.16									2.16	2.16	2.16		1.44			
2	191CH101	Engineering Chemistry	1.89	1.89	1.89	1.26	1.26		1.26	1.26						1.26	0.63		
3	191PH101	Engineering Physics	2.14	2.14	2.14	1.43	1.43		1.43	1.43	1.43	1.43				1.42667	0.713		
4	191MA101	Engineering Mathematics I	1.93	1.93	1.93	1.29	1.29	0.64								0.64333			0.643
5	191ME111	Basic Civil and Mechanical Engineering	1.96	1.96	1.96	0.65	0.65		1.31	1.31	0.65					1.30667			
6	191EE111	Basic Electrical and Electronics Engineering	1.79	1.79	1.19	1.19	0.6	0.6											
7	191ME112	Engineering Graphics	1.97	0.99	0.66	1.31		1.97	0.66				0.66	0.66	0.65667				
8	191PH10A	Physics Laboratory	2.69	2.69	2.69	1.79	1.79		1.79	1.79	1.79	1.79				1.79333	0.897		
9	191CH10A	Chemistry laboratory	2.75	2.75	2.75	1.83	1.83		1.83	1.83	0.92	1.83				1.83333	0.917		
10	191HS201	Environment Science and Engineering	2.78	2.78	2.78	1.85	1.85		1.85	2.78	1.85					1.85333			
11	191MA201	Engineering Mathematics II	2.9	2.9	2.9	1.93	1.93	1.93								1.93333	0.967		
12	191PH201	Materials Science For Biomedical Engineering	2.89	2.89	2.89	1.93	1.93		1.93	1.93	1.93	1.93				1.92667	0.963		
13	191EC21A	Electronic Devices and Circuits	2.78	2.78	2.78	1.85	1.85									1.85333	1.853	0.9267	
14	191BM221	Introduction To Biomedical Engineering	2.58	2.58	2.58	2.58	1.72	0.86			1.72					0.86	2.58	1.72	
15	191BM222	Fundamentals Of Biochemistry	2.49	2.49		1.66	1.66		1.66							0.83	2.49	0.83	
16	191ME21A	Engineering Practices Laboratory	2.84	2.84	2.84	1.89	1.89		1.89	2.84	1.89					1.89333	1.893	0.9467	
17	191EC21A	Circuits and Devices Laboratory	2.86	2.86	2.86	1.91	1.91									1.90667	2.86	1.9067	
18	191BM22A	Bio-Chemistry Laboratory	2.82	2.82		1.88	1.88		1.88							1.88	2.82	0.94	0.94
19	191MA301	Linear Algebra And Numerical Methods	2.34	2.34				2.34								0.78	0.78		
20	191CS311	Data Structures In C	2.37	2.37	2.37	2.37	2.37	2.37	2.37					2.37	2.37	2.37	2.37	2.37	1.58
21	191BM321	Anatomy And Human Physiology	2.51	2.51	1.67	0.84	0.84					0.84		0.84	1.67333	2.51	0.8367	0.837	
22	191BM322	Digital Logic Design	2.51	2.51	2.51	2.51	0.84									0.83667	2.51	1.6733	0.837

23	191BM323	Signals And System	2.21	2.21	2.21	2.21	1.47	1.47	0.74						2.21	2.21	1.4733	0.737
24	191BM324	Biosensors & Instrumentation	2.62	2.62	2.62	2.62	2.62	1.75	1.75	0.87		0.87		0.87	2.62	2.62	0.8733	1.747
25	191CS31A	Data Structures In C Laboratory	2.64	2.64	2.64	2.64	1.76		0.88	0.88	0.88	0.88	1.76		2.64	2.64	1.76	2.64
26	191BM32A	Anatomy And Human Physiology Laboratory	2.78	2.78	1.85	1.85	0.93	1.85	1.85		0.93	0.93	0.93		1.85333	2.78	0.9267	0.927
27	191BM32B	Digital Design Laboratory	2.71	2.71	2.71	2.71	1.81								1.80667	2.71	1.8067	1.807
28	191MA401	Probability And Random Process	2.58	2.58	1.72			2.58							0.86	0.86		
29	191BM421	Biomedical Instrumentation	2.48	2.48	2.48	1.65	0.83	0.83	0.83	0.83					1.65333	2.48	1.6533	0.827
30	191BM422	Biomechanics	2.38	2.38	1.59	0.79	0.79	2.38	0.79	0.79	1.59				1.58667	2.38	1.5867	0.793
31	191BM423	Biosignal Processing	2.55	2.55	1.7	1.7	1.7	1.7	1.7	0.85					1.7	2.55	1.7	0.85
32	191BM424	Pathology And Microbiology	2.15	2.15	1.43	0.72	0.72					0.72		0.72	2.15	2.15	1.4333	0.717
33	191BM425	Bioethics & Intellectual Property Rights (IPRs)	2.46				1.64		0.82	0.82	2.46		0.82		0.82	0.82		
34	191HS40A	Reading And Writing Skill Laboratory	2.75								1.83	2.75	2.75		2.75	0.917		
35	191BM42B	Biosignal Processing Lab	2.68	2.68	2.68	2.68	1.79	2.68							1.78667	2.68	1.7867	0.893
36	191BM42A	Pathology And Microbiology Lab	2.68	1.79	2.68	2.68	0.89	1.79			1.79	1.79			1.78667	2.68	1.7867	0.893
37	191BM521	Diagnostic And Therapeutic Equipment	2.26	2.26	1.51	1.51	1.51		1.51	1.51	0.75				2.26	2.26	2.26	1.507
38	191BM522	Hospital Management	2.34						2.34	1.56	2.34	0.78		1.56	0.78			1.56
39	191BM523	Control Systems in medicine	2.3	2.3	2.3	2.3	2.3	1.53								1.533	1.5333	2.3
40	191BM524	Biomaterials & Artificial Organs	2.28	1.52		2.28			2.28	2.28	0.76	1.52			2.28	2.28	2.28	1.52
41	191BM525	Microprocessor& Microcontroller	2.03	2.03	2.03	2.03	2.03	1.35								1.353	1.3533	2.03
42	191BM52B	Diagnostic And Therapeutic Equipments Lab	2.54	2.54	1.69	1.69	1.69								2.54	2.54	2.54	1.693
43	191BM52A	Microprocessor & Microcontroller Lab	2.5	2.5	2.5	2.5	2.5	1.67								1.667	1.6667	2.5
44	191BM621	Advanced Microcontrollers and its Applications	2.06	2.06	1.37	1.37	1.37	1.37							1.37333	1.373	1.3733	
45	191BM622	Communication Systems	2.16	2.16	1.44	1.44	1.44		1.44						1.44	1.44	1.44	
46	191BM623	Medical Informatics	2.17	2.17				1.45	0.72	0.72	0.72					0.723	0.7233	0.723
47	191BM624	Radiological Equipments	2.06	2.06	2.06	1.37	2.06		0.69						0.68667	1.373	0.6867	0.687
48	191ME546	Renewable Energy Sources	2.29	2.29	1.53	1.53	1.53		1.53	1.53	0.76				2.29	1.527		0.763
49	191HS60A	Communication Skills Laboratory	2.65									0.88	2.65	2.65				
50	191BM62A	Communication Systems Laboratory	2.57	2.57	1.71	1.71	1.71		1.71						1.71333	1.713	1.7133	

51	191BM62B	Innovation Practices Laboratory	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	1.69	1.69	1.69	1.69	2.54	2.54	2.54	2.54
52	191BM721	Medical Device Design	2.16	2.16	1.44	0.72	0.72		0.72							0.72	2.16	0.72	0.72
53	191BM722	Medical Imaging Processing	2.12	2.12	2.12	2.12	1.41	1.41								0.70667	2.12	0.7067	
54	191BM723	Medical Robotics	2.12	2.12	2.12	2.12	2.12	1.41	2.12			1.41				1.41333	2.12	1.4133	0.707
55	191CS547	Internet of Things	2.08	2.08	1.39	1.39	1.39	1.39								2.08	2.08	2.08	
56	191BM72A	Medical Devices Laboratory	2.41	2.41	2.41	1.61	1.61	1.61	0.8							1.60667	2.41	0.8033	
57	191BM72B	Medical Image Processing Laboratory	2.49	2.49	2.49	2.49	2.49	2.49								0.83	2.49	0.83	
58	191BM77A	Project Work Phase-I	2.59	2.59	2.59	2.59	2.59	2.59	2.59	2.59	1.73	1.73	1.73	1.73	2.59	2.59	2.59	2.59	2.59
59	191BM87A	Project Work Phase-II	2.54	2.54	2.54	2.54	2.54	2.54	2.54	2.54	1.69	1.69	1.69	1.69	2.54	2.54	2.54	2.54	2.54
60	191BM532	Biometric Systems	2.32	2.32	1.55	2.32	1.55	1.55	1.55		1.55	0.77	0.77			1.54667	2.32	2.32	1.547
61	191BM633	Telehealth Technology	2.1	2.1	1.4	1.4	0.7	0.7	0.7	0.7		1.4				2.1	2.1	1.4	0.7
62	191BM733	Lasers In Medicine	2.08	2.08	1.39	1.39	1.39		1.39		0.69					0.69333	1.387	0.6933	
63	191BM738	Pattern Recognition And Neural Networks	2.03	2.03	1.35	1.35	1.35	1.35								2.03	2.03	2.03	
64	191BM831	Assist Devices	2.08	2.08	1.39	1.39	1.39	1.39	1.39	1.39	0.69					2.08	2.08	1.3867	2.08
65	191BM837	Rehabilitation Engineering	2.23	1.49	1.49	2.23	1.49	1.49	1.49	2.23	0.74	1.49	1.49	2.23	2.23	2.23	2.23		1.487
		Direct Attainment		1.87	1.66	1.46	1.28	1.35	1.22	1.27	1.12	1.14	1.27	1.24	1.3322	1.561	1.2188	1.094	
		Indirect Attainment		0.41	0.39	0.43	0.41	0.4	0.41	0.43	0.41	0.46	0.44	0.41	0.446	0.423	0.4232	0.413	
		Attainment		2.28	2.05	1.9	1.7	1.76	1.63	1.71	1.54	1.6	1.71	1.65	1.7782	1.984	1.642	1.507	

VEL TECH MULTI TECH Dr.RANGARAJAN Dr.SAKUNTHALA ENGINEERING COLLEGE
DEPARTMENT OF BIOMEDICAL ENGINEERING
BATCH: 2019-2023

PO/PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
MAPPING	2.69	2.18	2	1.72	1.12	1.17	0.78	0.75	0.58	0.35	0.32	1.88	2.12	1.32	0.92
ATTAINMENT	1.94	2	2.08	1.94	1.92	1.94	2.08	1.94	2.14	2.08	1.94	2.09	2.05	2.05	1.94

PO/PSO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2	PSO3
Direct Attainment	1.87	1.66	1.46	1.28	1.35	1.22	1.27	1.12	1.14	1.27	1.24	1.33	1.56	1.22	1.09
Indirect Attainment	0.41	0.39	0.43	0.41	0.40	0.41	0.43	0.41	0.46	0.44	0.41	0.45	0.42	0.42	0.41
Attainment	2.28	2.05	1.90	1.70	1.76	1.63	1.71	1.54	1.60	1.71	1.65	1.78	1.98	1.64	1.51

