PSN COLLEGE OF ENGINEERING AND TECHNOLOGY



(An Autonomous Institution Affiliated to Anna University, Chennai) Approved by AICTE, Recognized by UGC under section 2(f) & 12 (B) An ISO 9001:2015 Certified Institution Accredited by NAAC with A+ Melathediyoor, Tirunelveli - 627 152



DEPARTMENT OF BIO MEDICAL ENGINEERING

MINOR DEGREE SUBJECTS LIST

Vertical 1 – Bio Engineering

			ı		1			
Sl. No	Course Code	Course Name		Classification	L	T	P	C
1.	BM606101	Biomaterials	PE	Theory	3	0	0	3
2.	BM606102	Artificial Organs and Implants	PE	Theory	3	0	0	3
3.	BM606103	Biomedical Optics and Photonics	PE	Theory	3	0	0	3
4.	BM606104	Neural Engineering	PE	Theory	3	0	0	3
5.	BM606105	Principles of Tissue Engineering	PE	Theory	3	0	0	3
6.	BM606106	Laser and Ultrasonic Applications in		Theory with	3	0	0	3
		Medicine	PE	Project	3	U	U	3
7.	BM606107	Genetic Engineering	PE	Theory	3	0	0	3
8.	BM606108	Dental Engineering	PE	Theory	3	0	0	3

Vertical 2 – Medical Device Innovation and Development

Sl. No	Course Code	Course Name		Classification	L	T	P	C
1.	BM606201	Foundation Skills in Integrated Product Development	PE	Theory	3	0	0	3
2.	BM606202	Patient Safety, Standards and Ethics	PE	Theory	3	0	0	3
3.	BM606203	Medical device Regulations	PE	Theory	3	0	0	3
4.	BM606204	Computers in Medicine	PE	Theory	3	0	0	3
5.	BM606205	Embedded System in Medical Devices	PE	Theory	3	0	0	3
6.	BM606206	Design and Development of Medical Devices	PE	Theory with Project	3	0	0	3
7.	BM606207	Rapid Prototyping	PE	Theory	3	0	0	3
8.	BM606208	Medical Innovation and Entrepreneurship	PE	Theory	3	0	0	3

Vertical 3 – Management (Healthcare)

Sl. No	Course Code	Course Name		Classification	L	T	P	C
1.	BM606301	Medical Informatics	PE	Theory	3	0	0	3
2.	BM606302	Bio Statistics	PE	Theory	3	0	0	3
3.	BM606303	Clinical Engineering	PE	Theory	3	0	0	3

4.	BM606304	Medical Waste Management	PE	Theory	3	0	0	3
5.	BM606305	Home Medicare Technology	PE	Theory	3	0	0	3
6.	BM606306	Hospital Planning and Management	PE	Theory with Project	3	0	0	3
7.	BM606307	Drug Delivery System	PE	Theory	3	0	0	3
8.	BM606308	Forensic Science in Healthcare	PE	Theory	3	0	0	3

Vertical 4 – Mechanics

Sl. No	Course Code	Course Name		Classification	L	T	P	С
1.	BM606401	Biomechanics	PE	Theory	3	0	0	3
2.	BM606402	Bio fluid Dynamics	PE	Theory	3	0	0	3
3.	BM606403	Hepatics	PE	Theory	3	0	0	3
4.	BM606404	Physiological Modelling	PE	Theory	3	0	0	3
5.	BM606405	Assistive Technology	PE	Theory	3	0	0	3
6.	BM606406	Rehabilitation Engineering	PE	Theory with	3	0	0	3
				Project				
7.	BM606407	Mechanics of Human Movement	PE	Theory	3	0	0	3
8.	BM606408	Ergonomics	PE	Theory	3	0	0	3

Vertical 5– Signal and Image Processing

Sl. No	Course Code	Course Name		Classification	L	T	P	C
1.	BM606501	Digital Signal image Processing	PE	Theory	3	0	0	3
2.	BM606502	Speech and Audio Signal Processing	PE	Theory	3	0	0	3
3.	BM606503	Medical Imaging Systems	PE	Theory	3	0	0	3
4.	BM606504	Computer Vision	PE	Theory	3	0	0	3
5.	BM606505	Brain Computer Interface and Applications	PE	Theory	3	0	0	3
6.	BM606506	Biometric Systems	PE	Theory with Project	3	0	0	3
7.	BM606507	Acoustics and Optical Imaging	PE	Theory	3	0	0	3
8.	BM606508	Soft Computing Techniques	PE	Theory	3	0	0	3

Vertical 6 – Communication

Sl. No	Course Code	Course Name		Classification	L	T	P	C
1.	BM606601	Communication System	PE	Theory	3	0	0	3
2.	BM606602	Wearable Devices	PE	Theory	3	0	0	3
3.	BM606603	Body Area Networks	PE	Theory	3	0	0	3
4.	BM606604	Visual Reality and Augmented Reality in Healthcare	PE	Theory	3	0	0	3
5.	BM606605	Telemedicine	PE	Theory	3	0	0	3
6.	BM606606	IoT for Biomedical Sector	PE	Theory with Project	3	0	0	3

7.	BM606607	Neural Networks and Pattern Recognition	PE	Theory	3	0	0	3
8.	BM606608	Tele Healthcare Technology	PE	Theory	3	0	0	3

Vertical 7 – Advanced Healthcare Devices

Sl. No	Course Code	Course Name		Classification	L	Т	P	C
1.	BM606701	Machine Learning Techniques in Medicine	PE	Theory	3	0	0	3
2.	BM606702	Critical Care Equipment	PE	Theory	3	0	0	3
3.	BM606703	Therapeutic Equipment	PE	Theory	3	0	0	3
4.	BM606704	Advancements in Healthcare Technology	PE	Theory	3	0	0	3
5.	BM606705	Robotics in Medicine	PE	Theory	3	0	0	3
6.	BM606706	Recent Advances Applied to Hospital Engineering	PE	Theory with Project	3	0	0	3
7.	BM606707	Human Assist Devices	PE	Theory	3	0	0	3
8.	BM606708	MRI and its Clinical Applications	PE	Theory	3	0	0	3