

ULUBORLU SELAHATTIN KARASOY VOCATIONAL SCHOOL
Biomedical Device Technology Course Schedule

1st Year / Fall Semester

Course Code	Course Title	Theory	Practice	Lab/App	Ects	T. Credits	Hours	Prerequisite	Type
BCT-3103	Anatomy and Physiology	2	0	1	3	2,5	3		Compulsory
BCT-3105	Basic Electronics	3	0	1	4	3,5	4		Compulsory
BCT-3107	Medical Instrumentation	2	0	1	4	2,5	3		Compulsory
BCT-3109	Introduction to Biomedical Devices	3	0	1	4	3,5	4		Compulsory
BCT-3111	Biomedical Technology	2	0	1	3	2,5	3		Compulsory
BCT-3117	Direct Current Circuit Analysis	3	0	1	4	3,5	4		Compulsory
BCT-3119	Operating Room and Life Support Devices	2	0	1	3	2,5	3		Compulsory
MAT-3000	General Mathematics	2	0	1	3	2,5	3		Compulsory
ING-101	English I	2	0	0	2	2	2		YÖK
Total Compulsory Courses :		19	0	8	30	23	27		
Total Semester Course Load :					30	23	27		

1st Year / Spring Semester

Course Code	Course Title	Theory	Practice	Lab/App	Ects	T. Credits	Hours	Prerequisite	Type
BCT-3104	Maintenance, Repair and Calibration	2	0	1	3	2,5	3		Compulsory
BCT-3106	Digital Electronics	2	0	1	3	2,5	3		Compulsory
BCT-3112	Alternating Current Circuit Analysis	3	0	1	4	3,5	4		Compulsory
BCT-3114	Power Electronics	2	0	1	3	2,5	3		Compulsory
ING-102	English II	2	0	0	2	2	2		YÖK
Total Compulsory Courses :		9	0	4	15	11	13		
BCT-3150	Biophysics - Biochemistry	2	0	1	3	2,5	3		Elective
BCT-3152	Sensors and Transducers	2	0	1	3	2,5	3		Elective
BCT-3154	Medical Laboratory Devices	2	0	1	3	2,5	3		Elective
BCT-3158	Troubleshooting in Biomedical Devices	2	0	1	3	2,5	3		Elective
BCT-3160	Biomedical Electromechanics	2	0	1	3	2,5	3		Elective
BCT-3162	Electromagnetic Compatibility in Biomedical Devices	2	0	1	3	2,5	3		Elective
BCT-3166	Medical Imaging Devices	2	0	1	3	2,5	3		Elective
BCT-3168	Biomedical Device Safety and Occupational Health	2	0	1	3	2,5	3		Elective
BCT-3174	Medical Device Quality Management System Standards	2	0	1	3	2,5	3		Elective
Total Elective Courses :		18	0	9	27	22,5	27		
BCT-3170	Biomedical Device Technologies	2	0	1	3	2,5	3		Non-Departmental Elective
BCT-3172	Biomaterials and Their Applications	2	0	1	3	2,5	3		Non-Departmental Elective
Total Elective Courses :		4	0	2	6	5	6		
Total Semester Course Load :					30	21	25		

2st Year / Fall Semester

Course Code	Course Title	Theory	Practice	Lab/App	Ects	T. Credits	Hours	Prerequisite	Type
BCT-3205	Microprocessors and Microcontrollers	2	0	1	4	2,5	3		Compulsory
BCT-3209	Biomaterials	2	0	1	3	2,5	3		Compulsory
BCT-3211	Radiation and Environmental Interaction	2	0	1	3	2,5	3		Compulsory
MYO-3003	Graduation Project	0	0	2	2	1	2		Compulsory
UOS-3000	University Common Elective I	2	0	0	3	2	2		Compulsory
Total Compulsory Courses :		8	0	5	15	10,5	13		
BCT-3251	Physiological Signal Processing	2	0	1	3	2,5	3		Elective
BCT-3257	Technical Service Organization	2	0	1	3	2,5	3		Elective
BCT-3261	Biomedical Product Marketing	2	0	1	3	2,5	3		Elective
BCT-3263	Algorithms and Programming	2	0	1	3	2,5	3		Elective
BCT-3265	Ophthalmic Diagnosis and Treatment Devices	2	0	1	3	2,5	3		Elective
BCT-3269	Biomedical Innovation	2	0	1	3	2,5	3		Elective
BCT-3271	Medical Informatics and Artificial Intelligence Applications	2	0	1	3	2,5	3		Elective
BCT-3273	Occupational Foreign Language	2	0	1	3	2,5	3		Elective
BCT-3275	Physical Therapy Devices	2	0	1	3	2,5	3		Elective
BCT-3277	First Aid	2	0	1	3	2,5	3		Elective
Total Elective Courses :		20	0	10	30	25	30		
Total Semester Course Load :					30	23	28		

2st Year / Spring Semester

Course Code	Course Title	Theory	Practice	Lab/App	Ects	T. Credits	Hours	Prerequisite	Type
MYO-3011	Institutional Internship	0	2	0	5	0	2		Compulsory
MYO-3020	Workplace Vocational Training	5	35	0	20	20	40		Compulsory
ATA-3000	Atatürk's Principles and History of Reforms	4	0	0	4	4	4		YÖK
TUR-3000	Turkish Language	4	0	0	4	4	4		YÖK
Total Compulsory Courses :		5	37	0	33	20	42		
BCT-3204	Medical Communication	2	0	0	2	2	2		Elective 2
BCT-3206	History of Science	2	0	0	2	2	2		Elective 2
Total Elective Courses :		4	0	0	4	4	4		
Total Semester Course Load :					35	22	44		
Grand Total :					125	89	124		