

Table num 18

Study plan for the first year Department of Biomedical Engineering

First term											
Course ID	Course name	Number of weekly hours				Distribution of grades			Number of hours for the written exam	Total course grades	Credit hours
		lecture	Applications		total	in-term evaluation	Practical and oral	Written			
			practice	lab							
GEN 1601	Mathematics (3)	2	3	-	5	50	-	100	3	150	3
GEN 1602	Thermodynamics	2	1	-	3	30	-	70	3	100	2
GEN 1603	Chemical Engineering	2	1	-	3	30	-	70	3	100	2
GEN 1604	Human Biology and Physiology	3	-	1	4	30	30	90	3	150	3
POW 1605	Electrical Engineering	2	2	1	5	40	40	120	3	200	3
GEN 1606	Technical English	2	-	-	2	10	-	40	2	50	2
Total number of weekly hours		13	7	2	22	Number of credit hours					15
Second term											
Course ID	Course name	Number of weekly hours				Distribution of grades			Number of hours for the written exam	Total course grades	Credit hours
		lecture	Applications		total	in-term evaluation	Practical and oral	Written			
			practice	lab							
GEN 1607	Mathematics 4	2	3	-	5	50	-	100	3	150	3
GEN 1608	Biophysics	2	1	1	4	30	30	90	3	150	2
GEN 1609	Solid Mechanics	2	1	-	3	30	-	70	3	100	2
ELC 1610	Basic Electronics	2	2	2	6	40	40	120	3	200	4
GEN 1611	Engineering Ethics	2	-	-	2	10	-	40	2	50	2
GEN 1612	Fluid Mechanics	2	1	-	3	30	-	70	3	100	2
Total number of weekly hours		12	8	3	23	Number of credit hours					15
						Total score				1500	

Table num 19

Study plan for the second year Department of Biomedical Engineering

First term											
Course ID	Course name	Number of weekly hours				Distribution of grades			Number of hours for the written exam	Total course grades	Credit hours
		lecture	Applications		total	in-term evaluation	Practical and oral	Written			
			practice	lab							
GEN2601	Mathematics 5	2	2	-	4	50	-	100	3	150	3
ELC 2602	Digital Circuits	2	2	1	5	30	30	90	3	150	3
MEC2603	Engineering Economics	2	1	-	3	30	-	70	3	100	2
GEN2604	Biochemistry	2	-	1	3	20	20	60	3	100	2
GEN2605	Human Anatomy	2	-	-	2	40	-	60	3	100	2
CSE 2606	Data structures in healthcare Delivery	2	1	2	5	30	30	90	3	150	3
Total number of weekly hours		12	6	4	22	Number of credit hours					15
Second term											
Course ID	Course name	Number of weekly hours				Distribution of grades			Number of hours for the written exam	Total course grades	Credit hours
		lecture	Applications		total	in-term evaluation	Practical and oral	Written			
			practice	lab							
ELC 2607	Measurement and Measurement Devices	2	1	1	4	30	30	90	3	150	2
MEC2608	Stress Analysis	2	1	-	3	30	-	70	3	100	2
ELC 2609	Advanced Electronics	2	2	2	6	40	40	120	3	200	4
BIO2610	Microprocessor-Based Medical Applications	2	1	1	4	30	30	90	3	150	2
CSE2611	Databases In Healthcare Delivery	2	1	1	4	20	20	60	3	100	2
GEN2612	Environmental Engineering	2	-	-	2	10	-	40	2	50	2
Total number of weekly hours		12	6	5	23	Number of credit hours					14
					1	Total score				1500	

- Summer field training at specialized sites outside the college for four weeks after the second semester exams for the third year.

Table num 20

Study plan for the third year Department of Biomedical Engineering

First term											
Course ID	Course name	Number of weekly hours				Distribution of grades			Number of hours for the written exam	Total course grades	Credit hours
		lecture	Applications		total	in-term evaluation	Practical and oral	Written			
			practice	lab							
BIO 3601	Statistics	2	1	-	3	40	-	60	3	100	2
BIO 3602	Bio Medical Instrumentation (1)	4	1	-	5	50	-	150	3	200	4
BIO 3603	Medical Pattern recognition	2	1	2	5	30	30	90	3	150	3
BIO 3604	Biomechanics	2	1	-	3	30	-	70	3	100	2
	elective course	2	2	-	4	30	-	70	3	100	3
	Field training									100	
Total number of weekly hours		12	6	2	20	Number of credit hours					14
Second term											
Course ID	Course name	Number of weekly hours				Distribution of grades			Number of hours for the written exam	Total course grades	Credit hours
		lecture	Applications		total	in-term evaluation	Practical and oral	Written			
			practice	lab							
BIO 3607	Systems Dynamics and Control	2	1	1	4	30	30	90	3	150	2
BIO 3608	Biomedical Instrumentation (2)	4	1	-	5	50	-	150	3	200	4
BIO 3609	Biomedical Signal Processing	2	1	1	4	30	30	90	3	150	2
BIO 3610	Medical laser	2	1	-	3	30	-	70	3	100	2
MEC3611	Project Management	2	-	-	2	10	-	40	3	50	2
	elective course (2)	2	1	-	4	30	-	70	3	100	3
Total number of weekly hours		14	6	2	22	Number of credit hours					15
						Total score				1500	

Elective course 1 list: (BIO3605) Biomaterial – (BIO3606) Internet of Things in Medicine

Elective course 2 list: (BIO3612) Rehabilitation Science and Instrumentation – (BIO3613) Software Engineering - (BIO3614) Selected Topics

- Summer field training at specialized sites outside the college for four weeks after the second semester exams for the third year.

Table num 21

Study plan for the fourth year Department of Biomedical Engineering

First term											
Course ID	Course name	Number of weekly hours				Distribution of grades			Number of hours for the written exam	Total course grades	Credit hours
		lecture	Applications		total	in-term evaluation	Practical and oral	Written			
			practice	lab							
BIO4601	Biomedical image processing	2	1	1	4	30	30	90	3	150	2
BIO4602	medical imaging systems(1)	3	1	-	4	50	-	100	3	150	3
BIO4603	Biomedical Modeling and Simulation	2	1	1	4	30	30	90	3	150	2
BIO4604	Hospital design	2	-	-	2	30	-	70	3	100	2
	elective course (3)	2	2	-	4	30	-	70	3	100	3
	Field training									100	
	Graduation project	-	4	-	4	continuous					2
Total number of weekly hours		11	9	2	22	Number of credit hours					14
Second term											
Course ID	Course name	Number of weekly hours03366+9				Distribution of grades			Number of hours for the written exam	Total course grades	Credit hours
		lecture	Applications		total	in-term evaluation	Practical and oral	Written			
			practice	lab							
ELC 4608	Digital Control Systems	2	1	1	4	30	-	70	3	100	2
BIO4609	Medical Imaging Systems(2)	3	1	-	4	50	-	100	3	150	3
BIO4610	Advanced Statistics	2	1	-	3	40	-	60	3	100	2
BIO4611	Clinical Engineering	2	2	-	4	30	-	70	3	100	3
	Elective Course (4)	2	2	-	4	30	-	70	3	100	3
BIO4615	Graduation Project	-	4	-	4	100	Discussion 100			200	2
Total number of weekly hours		11	11	1	23	Number of credit hours					15
						Total score				1500	

Elective course (3) list : Clinical laboratory Instrumentation (BIO4605) - Computer-Aided Diagnosis (BIO4606) - Selected Topics (BIO4607)

Elective course (4) list: Medical information (BIO4612) - Bioinformatics and Genetics (BIO4613) - Selected Topics (BIO4614)

- Elective course: The academic department determines the courses that are added to the list of elective courses.
- The graduation project preparation for fourth-year students continues for 36 hours per week for four weeks, after the second semester exam.

