Program Information Form

Program Name	M.Sc. Programme in Biomedical Engineering
Academic Unit	Department of Biomedical Engineering
Programme Director	Muhammed Hamza Müslümanoğlu
Type	Master Program
Level Of Qualification	This is a Second Cycle (Master's Degree) Program
Qualification Awarded	The students who successfully complete the program are awarded the degree of Master of Science (M.S.) in M.Sc. Programme in Biomedical Engineering
Mode Of Study	Full-Time
Specific Admission Requirements	The general achievement score for all candidates who apply to this programs is calculated by the candidate assessment judges by taking the %60 of ALES the %20 of the CGPA of undergraduate program and the %20 of the entrance exam into account. Candidates are put in an order of achievement and accepted within the limits of the contingency. The admission requirement details a candidate should provide are stated in YTU Regulations on Graduate Studies Article 10 (4-a). For further information, please refer to: http://www.fbe.yildiz.edu.tr/haberler.php?id=121
Specific Arrangements For Recognition Of Prior Learning	A student can only be exempt from maximum four previous elective courses in which they have been successful in being a special student, transfer from another university or another master program that they no longer have an enrollment.
Qualification Requirements And Regulations	The graduate students in this program must complete a minimum of 21 local credits (7 courses), a seminar course and a thesis; they must be successful in all of the courses with a minimum achievement grade of CB, must have completed 90-120 ECTS credits and have scored a minimum CGPA of 2.50/4.00 to qualify for graduation.
Profile Of The Programme	
Occupational Profiles Of Graduates With Examples	
Access To Further Studies	The graduates of this program can apply to Ph.D. programs to enhance their academic skills and their career.
Examination Regulations Assessment And Grading	(1) A student has to attend at least 70 per cent of the courses he has added. (2) In one semester, there must at least be two measurements of success. One of these must be a written exam by all means at the discretion of relevant faculty member. In case of on written examination, the other assessment could be an assignment, project, laboratory report or similar kinds of assessment. (3) At the end of the semester, a final exam on the entire course is administered. Achievement grade is calculated taking the work during the semester with a percentage between 40 and 60 and the final exam with a percentage between 60 and 40 into consideration. In case of failure, except for F0, resit exam is granted to the student. (4) Achievement grades are defined as follows: a) Percentage Points — Achievement — Coefficient 90-100 — AA — 4.00 80-89 — BA — 3.50

	70-79	BB	3.00
	60-69	CB	2.50
	50-59	CC	2.00
	40-49	DC	1.50
	30-39	DD	1.00
	20-29	FD	0.50
	0-19	FF	0.00
	NA	F0	0.00

b) Grades not included in the Average Scores:

1) G: Pass/Successful,

2) K: Fail/Unsuccessful,

3) M: Exemption,

4) E: Incomplete

(5) Minimum achievement grade to be successful in a course is CB (2.50).

(6) A student can only be successful in all courses if he has scored a minimum GPA of 2.50.

(7) The student who has scored CC, DC, DD, FD, FF and F0 are considered to have failed the course. These grades are included in his CGPA (AGNO).

(8) G (Pass/Successful) grade indicates that the student has been successful / satisfactory in a course or activity. K (Fail/Unsuccessful) grade indicates that the student has been unsuccessful / unsatisfactory in a course or activity. M (Exemption) grade indicates that the student have exemption for the previous program courses which are deemed equivalent to the courses offered in the program. Decision for the course exemption is made by the relevant faculty committee. G, K and M grades aren't included in the CGPA (AGNO). E (Incomplete) grade indicates that the faculty member who carries out the course hasn't entered the grade into the automation system. These grades are entered into the system by the decision of the execute board of the institute.

Graduation Requirements	The graduate students in this master program must complete a minimum of 21 local credits (7 courses), a seminar course and a thesis; they must be successful in all of the courses with a minimum achievement grade of CB, must have completed 120 ECTS credits and have scored a minimum GPA of 2.50/4.00 to qualify for graduation.

Program Outcomes

Curriculum

1. Year - Fall Semester

Code	Req.	Title	Lecture	Practical	Laboratory	Local Credit	ECTS
SEC0001		Elective 1	3	0	0	3	7.5
SEC0002		Elective 2	3	0	0	3	7.5
SEC0003		Elective 3	3	0	0	3	7.5
SEC0004		Compulsary	3	0	0	3	7.5

						Total:	30
1. Year - Spring Semester							
Code	Req.	Title	Lecture	Practical	Laboratory	Local Credit	ECTS
SEC0005		Elective 4	3	0	0	3	7.5
SEC0006		Elective 5	3	0	0	3	7.5
SEC0007		Elective 6	3	0	0	3	7.5
BME5001		Seminar	0	2	0	0	7.5
BME5004		Research Methods and Scientific Ethics	2	0	0	2	5
						Total:	35
2. Year - Fall Semester							
Code	Req.	Title	Lecture	Practical	Laboratory	Local Credit	ECTS
BME5000		M.Sc. Thesis	0	1	0	0	20
BME5003		Specialized Field Course	3	0	0	0	10
						Total:	30
2. Year - Spring Semester							
Code	Req.	Title	Lecture	Practical	Laboratory	Local Credit	ECTS
BME5000		M.Sc. Thesis	0	1	0	0	20
BME5003		Specialized Field Course	3	0	0	0	10
						Total:	30
						Program Total ECTS:	125
Elective Courses							
Code	Req.	Title	Lecture	Practical	Laboratory	Local Credit	ECTS
BME5006		Advanced Topics in Biomedical Engineering	3	0	0	3	7.5
BME5007		Applied Machine Learning	3	0	0	3	7.5
BME5008		Applied Image Processing	3	0	0	3	7.5
BME5009		Nanomaterials for Medical Applications	3	0	0	3	7.5
BME5010		Drug Delivery Systems	3	0	0	3	7.5
BME5011		Advanced Tissue Engineering	3	0	0	3	7.5
BME5012		Advanced Stem Cells	3	0	0	3	7.5
BME5013		Neural Signal Processing	3	0	0	3	7.5
BME5014		Deep Learning	3	0	0	3	7.5
BME5015		Time-Frequency and Time-Scale Analysis of Biomedical Signals	3	0	0	3	7.5
BME5016		Advanced Medical Imaging	3	0	0	3	7.5
BME5017		Advanced Nuclear Medicine	3	0	0	3	7.5
BME5018		Advanced Topics on Biomechanics	3	0	0	3	7.5
BME5019		Advanced Topics on Fluid Mechanics	3	0	0	3	7.5
BME5021		CV System Mechanics	3	0	0	3	7.5
BME5020		System Dynamics Theory	3	0	0	3	7.5

Compulsory Courses							
Code	Req.	Title	Lecture	Practical	Laboratory	Local Credit	ECTS
BME5005		Advanced Mathematics for Biomedical Science	3	0	0	3	7.5

Extra Notes	