

DOUBLE MAJOR PROGRAMS BETWEEN MBG AND MATH DEPARTMENTS												NEW
MBG PROGRAM			MBG-MATH PROGRAM			MATH-MBG PROGRAM			MATH PROGRAM			
First Semester	Cr.	ECTS	First Semester	Cr.	ECTS	First Semester	Cr.	ECTS	First Semester	Cr.	ECTS	
BIO 101	3	5	BIO 101	3	5	AE 111/HSS/MLE # (Ext)	3	3	AE 111/HSS/MLE # (Ext)	3	3	
BIO 111 (Sem-2, Code-322)	1	1	BIO 111 (Sem-2, Code-322)	1	1	MATH 111	4	8	MATH 111	4	8	
CHEM 103	3	7	CHEM 103	3	7	MATH 131 (Ects)	4	8	MATH 131 (Ects)	4	8	
CHEM 109	1	2	CHEM 109	1	2	PHYS 101##	4	8	PHYS 101##	4	8	
MATH 101	4	6	MATH 101	4	6	Unrestricted Elect.(Ects)	3	5	Unrestricted Elect.(Ects)	3	5	
PHYS 101*	4	8	PHYS 101*	4	8							
	16	29		16	29		18	32		18	32	
Second semester			Second semester			Second semester			Second semester			
BIO 102 (Code-104)	3	5	BIO 102 (Code-104)	3	5	MATH 132	4	8	MATH 132	4	8	
BIO 106 (Sem-3, Code-103)	2	3	BIO 106 (Sem-1, Code-103)	2	3	AE 112/HSS/MLE # (Ext)	3	4	AE 112/HSS/MLE # (Ext)	3	4	
CHEM 104	3	6	CHEM 104	3	6	MATH 162 (Ects)	4	8	MATH 162 (Ects)	4	8	
HSS	3	4	HSS	3	4	PHYS 102##	4	8	PHYS 102##	4	8	
MATH 102	4	6	MATH 102	4	6	Unrestricted Elect.(Add)	3	5	Unrestricted Elect.(Sem-3)	3	5	
PHYS 130*	4	7	PHYS 130*	4	7							
	19	31		19	31		18	33		18	33	
Third semester			Third semester			Third semester			Third semester			
BIO 201 (Code-241)	3	3	BIO 201 (Code-241)	3	3	BIO 101 (Add)	3	5	CMPE 150 (Sem-2)	3	5	
BIO 203 (Add) *****	3	5	BIO 203 (Add) *****	3	5	BIO 201 (Code-241)	3	3	MATH 221 (Add)	4	8	
CHEM 203	1	3	CHEM 203	1	3	BIO 203 (Add)###	3	5	MATH 231 (Ects)	4	8	
CHEM 221	4	5	CHEM 221	4	5	CMPE 150 (Sem-2)	3	5	PHYS 201##	4	6	
PHYS 201*	4	6	MATH 111 (Add)	4	8	MATH 221 (Add)	4	8	TK 221	2	3	
HIST106/HUM101****	3/4	5/6	MATH 201	4	5	MATH 231 (Ects)	4	8				
TK 221	2	3	MATH 231 (Add)	4	8	TK 221	2	3				
	20/21	30/31	TK 221	2	3							
				25	40		22	37		17	30	
Fourth Semester			Fourth Semester			Fourth Semester			Fourth Semester			
BIO 252	3	6	BIO 252	3	6	BIO 102 (Add)	3	5	HSS/MLE (Ext)	3	5	
MATH 201	4	6	BIO 254 (Add)	3	6	BIO 252	3	6	MATH 202	4	7	
Computer Elect.****	3	5	Computer Elect. (Sem-1)	3	5	BIO 254 (Add)	3	6	MATH 222 (Sem-5, Code-321)	4	8	
HIST106/HUM102****	3/4	5/6	MATH 222 (Sem-5, Code-321)	4	8	MATH 222 (Sem-5, Code-321)	4	8	MATH 234 (Add)	4	8	
TK 222	2	3	MATH 234 (Add)	4	8	MATH 234 (Add)	4	8	TK 222	2	3	
	18/19	30/31	PHYS 201* (Sem-3)	4	6	PHYS 201* (Sem-3)	4	6				
			TK 222	2	3	TK 222	2	3				
				23	42		23	42		17	31	
Fifth Semester			Fifth Semester			Fifth Semester			Fifth Semester			
BIO 301	4	6	BIO 301	4	6	BIO 301	4	6	HSS	3	5	
BIO 331 (Sem-6, Code-332)	3	6	BIO 331 (Sem-6, Code-332)	3	6	BIO 331 (Sem-6, Code-332)	3	6	HTR 311	2	3	
BIO 333 (Code-305-306)	3	6	BIO 333 (Code-305-306)	3	6	BIO 333 (Code-305-306)	3	6	MATH 323 (Sem-6, Code-322)	4	8	
BIO 353 (Ects)	4	5	BIO 353 (Ects)	4	5	BIO 353 (Ects)	4	5	MATH 331	4	8	
BIO 355 (Sem-7, Code-409)	3	4	BIO 355 (Sem-7, Code-409)	3	4	BIO 355 (Sem-7, Code-409)	3	4	Unrestricted Elect. (Add)	3	5	
HTR 311	2	3	MATH 323 (Sem-6, Code-322)	4	8	MATH 323 (Sem-6, Code-322)	4	8				
	19	30	MATH 331 (Sem-7)	4	8	MATH 331	4	8				
				25	43		25	43		16	29	
Sixth Semester			Sixth Semester			Sixth Semester			Sixth Semester			
BIO 302	4	6	BIO 302	4	6	BIO 310 (Sem-7, Code-401)	4	6	HSS	3	5	
BIO 308 (Add)	1	2	BIO 308 (Add)	1	2	BIO 302 (Add)	4	6	HTR 312	2	3	
BIO 310 (Sem-7, Code-401)	4	6	BIO 310 (Sem-7, Code-401)	4	6	BIO 322 (Add)	1	2	MATH 338 (Sem-7, Code-431)	4	8	
BIO 322 (Add)	1	2	BIO 322 (Add)	1	2	BIO 342 (Add)	3	6	MATH Elect. (Add)	3	6	
BIO 342	3	6	BIO 342 (Sem-8)	3	6	MATH 202 (Sem-4)	4	7	MATH Elect. (Add)	3	6	
HSS	3	5	MATH 202 (Sem-4)	4	7	MATH 338 (Sem-7, Code-431)	4	8	Science Elect. (Sem-4)	3	5	
HTR 312	2	3	MATH 338 (Sem-7, Code-431)	4	8							
	18	30	HSS	3	6							
				24	43		20	35		18	33	
Seventh Semester			Seventh Semester			Seventh Semester			Seventh Semester			
BIO 403 (Add)	1	2	BIO 403 (Add)	1	2	BIO 403 (Add)	1	2	Unrestricted Elect. (Add)	3	5	
BIO 407	2	3	BIO 407	2	3	BIO 407	2	3	MATH Elect.	3	6	
BIO Elective	3	6	BIO Elective (Res Ects)	3	6	BIO Elective (Add)	3	6	MATH Elect. (Cr)	3	6	
COMP/BIO Elective (Ects)	3	7	HSS (Sem-4)	3	6	HSS	3	5	Science Elect.	3	5	
Unrestricted Elect.	3	6	HTR 311 (Sem-5)	2	3	HTR 311 (Sem-5)	2	3	Unrestricted Elect.	3	5	
Unrestricted Elect. (Add)	3	6	MATH Elect. (Add)	3	6	MATH Elect.	3	6				
	15	30	MATH Elect. (Add)	3	6							
				17	32		17	31		15	27	
Eighth Semester			Eighth Semester			Eighth Semester			Eighth Semester			
BIO Elective (Add)	3	6	BIO Elective (Add)	3	6	BIO Elective	3	6	HSS	3	5	
BIO Elective	3	6	BIO Elective	3	6	BIO Elective (Add)	3	6	MATH Elect.	3	6	
COMP/BIO Elective (Sem-7, Ects)	3	7	HTR 312 (Sem-6)	2	3	HTR 312 (Sem-6)	2	3	MATH Elect.	3	6	
Unrestricted Elect.	3	6	MATH Elect.	3	6	MATH Elect.	3	6	MATH Elect.	3	6	
HSS	3	5	MATH Elect. (Add)	3	6	MATH Elect. (Add)	3	6	Unrestricted Elect.	3	5	
	15	30	MATH Elect. (Add)	3	6							
				17	33		17	33		15	28	
TOTAL CREDITS	140/142	240/242		166	293		160	286		134	243	
OVERLOAD				24/26			26					

Add: Added to the program  
 Cr: Credits is updated  
 Ects: Ects is updated  
 Del: Deleted from the program  
 Ext: Choices are extended  
 Res: Choices are restricted.  
 Sem #: Moved to/from the semester #  
 Code-###: The code is changed to/from MATH/ BIO###

Indicates the changes in MATH courses.

Indicates the changes in MBG courses

Indicates the changes in courses other than MATH and MBG courses

\* Physics courses are one of the three series: Phys 101- Phys 130-Phys 201 or Phys 101- Phys 102- Phys 201- Phys 202 or Phys 121- Phys 201- Phys 202.

\*\*\* HUM/ HIST electives are one of the two series: HUM 101- HUM 102 or HIST 105- HIST 106;

\*\*\*\* Computer Elective: CMPE 150 or higher-level computer elective courses;

\*\*\*\*\* In case BIO 203 is not provided in that semester, MATH 344 can be taken instead of BIO 203.

# Students who pass the preparatory year with an English proficiency level of C are required to take AE 111 and AE 112. Students whose Proficiency Exam scores are B and above are required to take HSS or MLE (Modern Language Elective). MLE courses should be selected from among any of the language courses of the same sequence (being offered by the Boğaziçi University).

## Physics courses are one of the three series: Phys 101- Phys 130-Phys 201 or Phys 101- Phys 102- Phys 201- Phys 202 or Phys 121- Phys 201- Phys 202.

### In case BIO 203 is not provided in that semester, MATH 344 can be taken instead of BIO 203.