# FİZİK ÖĞRETMENLİĞİ LİSANS PROGRAMI (PHED)

## Year 1

First Semester					Second Semester					
Code	Course Name Credit ECTS			Code	Course Name	Credit	ECTS			
CHEM 101	General Chemistry I	(4-2)5	7.5		CHEM 102	General Chemistry II	(4-2)5	7.5		
ENG 101	English for Academic Purposes I	(4-0)4	6		ENG 102	English for Academic Purposes II	(4-0)4	6		
MATH 117	Calculus I	(4-2)5	7.5		MATH 118	Calculus II	(4-2)5	7.5		
EDS 200	Introduction to Education	(3-0)3	5		PHYS 112	Physics II (Electricity and Magnetism)	(4-2)5	7.5		
PHYS 111	Physics I (Mechanics)	(4-2)5	7.5		MSE 210	Theories of Teaching and Learning in Science and Mathematics	(3-0)3	5		
					IS 100	Introduction to Information Technologies and Applications	(0-2)0	1		
					BA 100	Career Planning	(1-0) 0	2		

## Year 2

Third Semester					Fourth Semester					
Code	Course Name	Credit	ECTS		Code	Course Name	Credit	ECTS		
HIST 201	Principles of Kemal Atatürk I	(2-0)0	2		ENG 211	Academic Oral Presentation Skills	(3-0)3	4		
PHYS 203	Introductory Electronics	(3-2)4	8		HIST 202	Principles of Kemal Atatürk II	(2-0)0	2		
PHYS 209	Mathematical Methods in Physics I	(4-0)4	8		MSE 305	Assessment of Learning in Science and Mathematics	(3-0)3	6		
PHYS 221	Optics and Waves	(4-0)4	8		PHYS 202	Modern Physics	(4-0)4	8		
MSE 326	Curriculum Development and Instruction in Science and Mathematics Education	(3-0)3	6		PHYS 210	Mathematical Methods in Physics II	(4-0)4	8		
	Free Elective I				PHYS 222	Optics and Waves Laboratory	(1-4)3	6		

### Year 3

Fifth Semester					Sixth Semester					
Code	Course Name	Credit	ECTS		Code	Course Name	Credit	ECTS		
PHYS 307	Applied Modern Physics	(1-4)3	7		ENG 311	Advanced Communication Skills	(3-0)3	4		
PHYS 335	Classical Mechanics I	(4-0)4	8		MSE 310	Methods of Secondary Science Teaching I	(2-2)3	5		
	Restricted Elective I (MSE443)					Restricted Elective II (MSE405)				
TURK 305	Oral Communication	(2-0)2	3		TURK 306	Written Expression	(2-0)2	3		
	Free Elective II	(3-0)3	5			Free Elective III	(3-0)3	5		
						Restricted Elective III	(3-0)3	5		

### Year 4

Seventh Semester					Eighth Semester				
Code	Course Name	Credit	ECTS		Code	Course Name	Credit	ECTS	
EDS 304	Classroom Management	(3-0)3	5		EDS 424	Guidance	(3-0)3	5	
MSE 411	Methods of Secondary Science Teaching II	(2-2)3	5		MSE 410	Practice Teaching II	(2-6) 5	10	
MSE 329	Instructional Technology and Material Development	(2-2)3	5			Restricted Elective V	(3-0)3	5	
MSE 409	Practice Teaching I	(2-6) 5	10			Depart. Elective	(3-0)3	5	
	Restricted Elective IV	(3-0)3	5						

Departmental, restricted and free electives must be at least 3 METU credit and 5 ECTS credit each. Restricted Electives: MSE 443, MSE 405, and the courses offered by PHYS or ASTR.