FIVE-YEAR PROGRAMS CHEMISTRY EDUCATION PROGRAM

FIRST YEAR

		First Semester				Second Semester	
CHEM ENG	105 101	General Chemistry I Development of Reading and	(4-4)6	CHEM ENG	106 102	General Chemistry Development of Reading and	(4-4)6
MATH	117	Writing Skills I Calculus I	(4-0)4 (4-2)5	IS	100	Writing Skills II Introduction to Information	(4-0)4
PHYS	111	Physics I (Mechanics)	(4-2)5	MATH PHYS	118 112	Technologies and Applications Calculus II Physics II (El. And Magn.)	NC (4-2)5 (4-2)5
SECOND YEAR							
		Third Semester				Fourth Semester	
CHEM CHEM CHEM CHEM CHEM EDS HIST	200 221 223 233 257 200 2201	Colloquium in Chemistry I Analytical Chemistry I Analytical Chemistry Introduction to Organic Chemistry Mathematics for Chemists Introduction to Education Principles of Kemal Atatürk I	(1-0)0 (4-0)4 (0-6)3 (2-0)2 (4-0)4 (3-0)3 NC	CHEM CHEM CHEM CHEM EDS ENG HIST	234 236 252 254 220 211 2202	Organic Chemistry I Organic Chemistry Lab.I Physical Chemistry I Physical Chemistry Lab. I Educational Psychology Academic Oral Presentation Skills Principles of Kemal Atatürk II	(4-0)4 (0-4)2 (4-0)4 (0-4)2 (3-0)3 (3-0)3 NC
THIRD YEAR							
		Fifth Semester				Sixth Semester	
CHEM CHEM CHEM SSME	301 303 353 355 301	Organic Chemistry II Organic Chemistry Lab. II Physical Chemistry II Pysical Chemistry Lab.II Curriculum Development & Instruction in Science/Mathematics Education Oral Communication	(4-0)4 (0-6)3 (4-0)4 (0-4)2 (3-0)3 (2-0)2	CHEM CHEM ENG SSME	322 324 311 302 309	Analytical Chemistry II Analytical Chem. Lab. II Advanced Communication Skills Measurement and Evaluation in Science/Mathematics Education Theories and Approaches in Teaching and Learning of Science/Mathematics	(4-0)4 (0-6)3 (3-0)3 (3-0)3
TORK	303	Oldi Collinancation	(2 0)2	TURK	306	Written Communication	(2-0)2
FOURTH YEAR							
		Seventh Semester				Eighth Semester	
CHEM CHEM	400 361	Colloquium in Chemistry II (1-0)0 Inorganic Chemistry I	(4-0)4	CHEM SSME	362 403	Inorganic Chemistry II Laboratory Experiments in Science	(4-0)4
SSME	400	Computer Applications in Science/Mathematics Education	(2-2)3	SSME	512	Education Methods of Science/Mathematics	(3-0)3
SSME	511	Methods of Science/Mathematics Teaching I	(2-2)3	SSME	518	Teaching II	(2-2)3
Elective Elective		reaching r	(3-0)3 (3-0)3	Elective		Material Development	(2-2)3 (3-0)3
FIFTH YEAR							
Ninth Semester Tenth Semester							
SSME	534	School Experience in Science/		SSME	544	Practice Teaching in Science/	
EDS		Mathematics Education Turkish Educational System and	(1-4)3	SSME	555	Mathematics Education Research Projects in Science/	(2-6)5
School Management EDS 424 Guidance Restricted Elective I* Elective IV		(3-0)3 (3-0)3 (3-0)3 (3-0)3	EDS Restricte	304	Mathematics Education Classroom Management	(2-2)3 (2-2)3 (3-0)3	

^{*}Restricted electives: Courses offered by the Chemistry Department are defined as restricted elective.