

Graduate Courses: PhD Program

a) Soil Chemistry and Fertility

04	Soil Testing	3
05	Advanced Plant Physiology	2
06	Advanced Soil Microbiology	3
07	Chemical Equilibria in Soil	3
08	Mathematics (1)	3
09	Mathematics (2)	3
10	Differential Equations	3
11	Advanced Soil, Water and Plant Relations	3
12	Advanced Biochemistry	3
13	Principle and Methods of Microbial Biotechnology	3
14	Advanced in Soil Chemistry and Fertility	2
15	General Biochemistry	3
16	Soil and Water Pollution	2
17	Advanced Plant Nutrition	3
18	Water Quality for Agriculture	3
19	Stable Isotope in Soil Science	2
20	Special Topics in Soil Science	2
21	Seminar (1)	1
22	Soil Physical Chemistry	3
23	Research Methodology	2
24	Geostatistics	3
25	Limitation of Iranian Soils	3
26	Seminar (2)	1
27	Soil Organic Matter	3
28	English for Soil Science Students	2
29	Chemical and Organic Fertilizers Technology	3

b) Soil Genesis and Classification

44	Micromorphology	3
45	Optical Mineralogy	3
40	Geomorphology (1)	3
37	Remote Sensing	3
46	Geographical Information Systems	3
41	Quantitative Land Suitability Evaluation	3
08	Mathematics	2
47	Advances in Pedology, Soil Classification and Land Evaluation	3
22	Soil Physical Chemistry	2
23	Research Methodology	3
24	Geostatistics	3
25	Limitation of Iranian Soils	2
28	English for Soil Science Students	3
48	General Mineralogy	2
49	Identification of Rocks	3
50	Geochemistry	2
16	Soil and Water Pollution	3
36	Sustainable Soil management	2
20	Special Topics in Soil Science	1
21	Seminar (1)	3
09	Mathematics (2)	2
51	Soil Geography (Iran and World)	1
26	Seminar (2)	

c) Soil Biology and Biotechnology

17	Advanced Plant Nutrition	
11	Advanced Soil, Water and Plant Relations	
19	Stable Isotopes in Soil Science	
52	Biological Relationships of Soil and Plant	
53	Microbial Genetics	
54	Taxonomy and Identification of Soil Bacteria	
27	Soil Organic Mater	
55	Principles of cell and Molecular Biology	
56	Principles and Methods of Microbiology	
06	Advanced Soil Microbiology	
57	Taxonomy and Identification of Soil Fungi	
58	Soil Enzymes	
59	Bioremediation	
21	Seminar (1)	
20	Special Topics in Soil Science	
28	English for Soil Science Student	
05	Advanced Plant Physiology	
12	Advanced Biochemistry	
60	Basic Principles of Soil and Plant Analysis	
22	Soil Physical Chemistry	
23	Research Methodology	
24	Geostatistics	
25	Limitation of Iranian Soils	

d) Soil Physics and Conservation

42	Remote Sensing	3
50	Flow in Porous Media	3
36	Mathematical Modeling in Soil Physics	2
59	Advanced Mathematics	3
19	Soil and Water Management	2
01	Soil Physical Chemistry	3
15	Methods and Instrumental Techniques in Soil Science	2
34	Advanced Hydrology	3
46	Soil Mechanics	3
44	Water Erosion	2
45	Quantitative Land Suitability	3
51	Soil and Landscape Analysis	3