OSMANİYE KORKUT ATA UNIVERSITY NATURAL & APPLIED SCIENCES
DEPARTMENT OF PHYSICS 2019 -2020 ACADEMIC YEAR

2019 -2020 FALL SEMESTER I. SEMESTER COURSES					
CODE	**COURSE TITLE**	**T**	**U**	**K**	**ECTS**
FZK-501	Field Course (Compulsory)	4	0	0	6
FZK-531	Quantum Mechanics I (Compulsory)	3	0	3	6
FZK-533	Scientific Research Methods and Publication Ethics (Compulsory)	3	0	3	6
FZK-5XX	Elective Course I (*)	3	0	3	6
FZK-5XX	Elective Course II (*)	3	0	3	6
	TOTAL				30
	ELECTIVE COURSES (*)				
FZK-503	Radiation Shielding	3	0	3	6
FZK-505	Nuclear Reactions I	3	0	3	6
FZK-507	Mathematical Methods in Physics I	3	0	3	6
FZK-509	Introduction to Nuclear Engineering I	3	0	3	6
FZK-511	Spectral Properties of Stars	3	0	3	6
FZK-513	Interstellar Environment and HII Regions	3	0	3	6
FZK-517	Semiconductor Physics	3	0	3	6
FZK-519	Radiation Detection and Measurement	3	0	3	6
FZK-521	Imaging Methods in Medical Physics	3	0	3	6
FZK-527	Nuclear Reactor Physics	3	0	3	6
FZK-529	Advanced Nuclear Physics	3	0	3	6
FZK-535	Atoms and Nuclei	3	0	3	6
FZK-537	Radiation and Materials	3	0	3	6
FZK-539	Nuclear Detectors and Devices	3	0	3	6
FZK-541	Superconducting Materials I	3	0	3	6
FZK-543	Production Techniques of Materials	3	0	3	6
FZK-545	Solid State Physics I	3	0	3	6
FZK-547	Semiconductor Device Basics	3	0	3	6
FZK-549	Artificial Neural Networks and Applications-I	3	0	3	6
FZK-551	Introduction to Astronomy	3	0	3	6

FZK-553	Nuclear Materials I	3	0	3	6
FZK-555	Nuclear Dating Techniques I	3	0	3	6
FZK-557	Principles of Nuclear Engineering	3	0	3	6
FZK-559	Nuclear Reactor Theory I	3	0	3	6
FZK-561	Neutron Diffusion Theory I	3	0	3	6
FZK-563	Introduction to Superconducting Physics I	3	0	3	6
FZK-565	Characterization Techniques of Superconducting Materials I	3	0	3	6
FZK-567	Materials Production Techniques in Solid State Physics I	3	0	3	6
FZK-569	Structural Properties of Superconducting Materials I	3	0	3	6
FZK-571	Crystal Physics	3	0	3	6
FZK-573	Introduction to Semiconductor Physics	3	0	3	6
FZK-575	Alternative Energy Sources-I	3	0	3	6
FZK-577	Computer Programming	3	0	3	6
FZK-579	Materials Science-I	3	0	3	6
FZK-581	Academic Turkish	3	0	3	6

2019 -2020 SPRING II. SEMESTER COURSES					
CODE	**COURSE TITLE**	**T**	**U**	**K**	**ECTS**
FZK-502	Field Course (Compulsory)	4	0	0	6
FZK-532	Quantum Mechanics II (Compulsory)	3	0	3	6
FZK-5XX	Elective Course I (*)	3	0	3	6
FZK-5XX	Elective Course II (*)	3	0	3	6
FZK-555	Seminar (Compulsory)	0	0	0	6
	TOPLAM				30

ELECTIVE COURSES (*)					**ECTS**
FZK-506	Optical and Optical Measurement Methods	3	0	3	6
FZK-508	Solar energy	3	0	3	6
FZK-512	X-Rays	3	0	3	6
FZK-516	Nuclear Reactor Physics II	3	0	3	6
FZK-518	Neutron Transport Theory	3	0	3	6
FZK-520	Radiation Physics	3	0	3	6
FZK-522	Nuclear Reactions II	3	0	3	6
FZK-524	Environmental Radioactivity and Analysis	3	0	3	6
FZK-526	Gamma Ray Spectropopy	3	0	3	6
FZK-528	Introduction to Nuclear Engineering II	3	0	3	6
FZK-530	Numerical Methods in Transport Theory	3	0	3	6
FZK-534	Nuclear Decay and Radioactivity	3	0	3	6
FZK-536	Nuclear Electronics	3	0	3	6
FZK-538	Superconducting Materials II	3	0	3	6
FZK-540	Application Areas of Superconducting Materials	3	0	3	6
FZK-542	Solid State Physics II	3	0	3	6
FZK-544	Characterization Methods of Materials	3	0	3	6
FZK-546	Artificial Neural Networks and Applications-II	3	0	3	6
FZK-548	Double Star Systems	3	0	3	6

FZK-550	Nuclear Materials II	3	0	3	6
FZK-552	Nuclear Dating Techniques II	3	0	3	6
FZK-554	Nuclear Reactor Theory II	3	0	3	6
FZK-556	Orthogonal Polynomials	3	0	3	6
FZK-558	Neutron Diffusion Theory II	3	0	3	6
FZK-560	Introduction to Superconducting Physics II	3	0	3	6
FZK-562	Characterization Techniques of Superconducting Materials II	3	0	3	6
FZK-564	Materials Production Techniques in Solid State Physics II	3	0	3	6
FZK-566	Structural Properties of Superconducting Materials II	3	0	3	6
FZK-568	Semiconductor Device Applications	3	0	3	6
FZK-570	Condensed Matter Physics	3	0	3	6
FZK-572	Alternative Energy Sources-II	3	0	3	6
FZK-572	Materials Science-II	3	0	3	6

2019 -2020 FALL SEMESTER III. SEMESTER COURSES						
CODE	**COURSE TITLE**	**T**	**U**	**K**	**ECTS**	**RESPONSIBLE FACULTY MEMBER**
FZK-501	Field Course (Compulsory)	4	0	0	6	Faculty Members
FZK-997	Master Thesis (Compulsory)	0	0	0	24	Faculty Members
	TOPLAM				30	

2019 -2020 FALL SEMESTER IV. SEMESTER COURSES						
CODE	**COURSE TITLE**	**T**	**U**	**K**	**ECTS**	**RESPONSIBLE FACULTY MEMBER**
FZK-502	Field Course (Compulsory)	4	0	0	6	Faculty Members
FZK-998	Master Thesis (Compulsory)	0	0	0	24	Faculty Members
	TOPLAM				30	