International University of Sarajevo, Faculty of Engineering and Natural Sciences (FENS)

Master Curriculum - Electrical and Electronics Engineering Programme (2018 - 2019)

Semester I							Semester II					
Code	**Title**	**Prerequisites**	**T**	**P**	**ECTS**		**Code**	**Title**	**Prerequisites**	**T**	**P**	**ECTS**
MATH51	Advanced Mathematics for Engineers and Scientists		3	1	6		EExxx	Program elective V	See Table1			6
EExxx	Program elective I	See Table1			6		EE599	Master Thesis	See Table1	2	20	24
EExxx	Program elective II	See Table1			6							
EExxx	Program elective III	See Table1			6							
EExxx	Program elective VI	See Table1			6							
		Semester Total =			**30**				**Semester Total =**			**30**
Abbreviations: T (Theory), P (Practice), ECTS credit							**No. of Courses**					**7**
Total Credits Required for Graduation					**60**		**Average ECTS Credits Per Semester**					**30**
Total Credits of Electives					**30**		**Elective Ratio**					**50%**

5 Program Electives are taken from Table 1. At most 2 undergraduate level courses in EEE can be taken as program elective with academic advisor's approval.

Faculty Elective courses of level 500 and 600 can replace program elective with academic advisor's approval.

This new curriculum is being implemented for the new students who entered the class in the year 2017/2018 or after.

Table 1: Program Electives of EEE *

Code	Title	Pre-requisites	T	P	ECTS		Code	Title	Pre-requisites	T	P	ECTS
EE502	Measurement Techniques and Instrumentation		3	0	6		EE563	Digital Image Processing		3	0	6
EE503	Electromagnetic Fields		3	0	6		EE564	Power system protection		3	0	6
EE504	Applications of Complex Function Variable		3	0	6		EE565	Power electronics & machines		3	0	6
EE510	Digital Control Systems		3	0	6		EE566	Power markets & economics		3	0	6
EE520	Optical Communication Systems		3	0	6		EE567	Advanced Power Systems Technology		3	0	6
EE521	Nonlinear Optics		3	0	6		EE568	Renewable Energy and Clean Technology		3	0	6
EE530	Electromagnetic Engineering		3	0	6		EE569	Control of power systems		3	0	6
EE531	Numerical Electromagnetics		3	0	6		EE570	Industrial Automation		3	0	6
EE540	Advanced Antenna Theory		3	0	6		EE571	Advanced Digital Signal Processing		3	0	6
EE541	Planar Antenna Design		3	0	6		EE572	Signals, Sensors and Acquisition Systems		3	0	6
EE550	Microwave Filter Design		3	0	6		EE573	Design of Embedded Systems		3	0	6
EE551	Microwave Amplifiers Design		3	0	6		EE574	State-Space and Multivariable Control		3	0	6
EE555	Wireless and Mobile Networks		3	0	6		EE575	Sliding Modes and Their Application		3	0	6
EE560	Energy management systems		3	0	6		EE576	Optimal & Robust Control		3	0	6
EE561	Power system plant		3	0	6		EE577	Real Time and Distributed Systems		3	0	6
EE562	Transient & overvoltage phenomena		3	0	6		EE580	Special Topics in Engineering		3	2	6

* Or Any new elective course offered later due to new technologies or new facilities in the university with academic advisor's approval