

Sultan Qaboos University Academic Degree and Degree Plan of Postgraduate Studies Program

College	Engineering				
Department	Electrical and Computer Engineering	Degree	Master of Science		
Program- Major	Electrical and Computer Engineering	Cohort	2019		
Specialization	Communications & Signal Processing	Mode of Study	□Full time □ Part time ■ Both		
Credit Required	30				
for Graduation					
Core Courses	Thesis	Elective	Elective Courses		
9	6		15		
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Program Option					
Courses and thesis	☐ Thesis Only	□ Courses Only			
☐ Courses & Examination					
	Core Courses				
Course Code	Course Title	Cr	edits		
ECCE6122	Digital Signal Processing		3		
ECCE6124	Digital Transmission		3		
ECCE6132	Linear System Theory		3		
ECCE6261	Advanced Modeling and Simulation		3		
ECCE6242	Advanced Computer Networks		3		
ECCE6315	Power System Analysis		3		
ECCE6316	Power System Stability and Control		3		
ECCE6400	Optimization Techniques in Engineering		3		

3

9

Advanced Engineering Management

Advanced Engineering Mathematics

Total

ENGR6911

ENGR6913

Elective Courses					
ECCE6150	Microwave Remote Sensing	3			
ECCE6127	Information Theory and Coding	3			
ECCE6128	Antenna Theory and Design	3			
ECCE6133	Optical communication Systems	3			
ECCE6162	Radio wave Propagation and Radio Spectrum Management	3			
ECCE6134	Selected Topics in Communications	3			
ECCE6232	Advanced Computer Architecture	3			
ECCE6244	Network Analysis: Theory and Applications	3			
ECCE6275	Neural Networks and Intelligent System	3			
ECCE6161	High Speed Digital Design	3			
ECCE6282	Advanced Network Security	3			
ECCE6284	Reliability and Fault-Tolerant Systems	3			
ECCE6250	Digital Image Processing	3			
ECCE6262	Real Time Systems	3			
ECCE6325	Integrated Resource Planning for Electric Utilities	3			
ECCE6346	High Voltage Technology	3			
ECCE6355	Distributed Generation	3			
ECCE6367	New Trends in Electrical Machines Technology	3			
ECCE6450	Advanced Robot Manipulation	3			
ECCE6424	Computer Control of Dynamic Systems	3			
ECCE6440	Intelligent Sensor Systems	3			
ECCE6431	Control of Electrical Drives	3			
ECCE6430	Advanced Power Electronics	3			
ECCE6423	Optimal Control Systems	3			
ECCE6510	Advanced Spectral Analysis for Biomedical Signals	3			
ECCE6213	Directed Studies	3			
ENGR6910	Advanced Engineering Probability & Statistics	3			
ENGR6920	Renewable Energy Systems	3			
ECCE6425	Nonlinear systems and Engineering Applications	3			
ECCE6426	Modelling and Control of Renewable energy systems	3			
ECCE6317	Economic Operations of Power Systems	3			
ECCE6318	Power System Operation and Control	3			
ECCE6319	Microgrids and Smart Grid	3			
ECCE6320	Advanced Power Systems Protection	3			
	Total	15			
	Thesis				
Course Code	Course Title	Credits			
ECCE7001	Master Thesis	6			
	6				

Approval and Signatures				
Program Coordinator:	Head of Department:	Assistant Dean for Postgraduate Studies and Research:		
Dr. Mostefa Mesbah	Dr. Mohammed Al-Badi	Dr. Nasser Al-Azri		

Note: - New courses can be added.

- Please seal all pages when adding new pages.