



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 | Power Systems & Engineering | Mode of Study | <input type="checkbox"/> Full time <input type="checkbox"/> Part time <input checked="" type="checkbox"/> Both |

| | | |
|---------------------------------------|---------------|-------------------------|
| Credit Required for Graduation | 30 | |
| Core Courses | Thesis | Elective Courses |
| 9 | 6 | 15 |

| Program Option | | |
|---|---|--|
| <input checked="" type="checkbox"/> Courses and thesis | <input type="checkbox"/> Thesis Only | <input type="checkbox"/> Courses Only |
| <input type="checkbox"/> Courses & Examination | | |

| Core Courses | | |
|--------------|--|---------|
| Course Code | Course Title | Credits |
| ECCE6315 | Power System Analysis | 3 |
| ECCE6316 | Power System Stability and Control | 3 |
| ECCE6400 | Optimization Techniques in Engineering | 3 |
| 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 |
| ENGR6911 | Advanced Engineering Management | 3 |
| ENGR6913 | Advanced Engineering Mathematics | 3 |
| Total | | 9 |

| Elective Courses | | |
|------------------|--|---------|
| ECCE6325 | Integrated Resource Planning for Electric Utilities | 3 |
| ECCE6346 | High Voltage Technology | 3 |
| ECCE6355 | Distributed Generation | 3 |
| ECCE6335 | Special Topics in Power Systems | 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 |
| 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 |
| 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 |
| 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 |
| Total | | 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.