



Recommended Study Plan for Bachelor's
Degree in Electrical Power and Energy Engineering
for year 2015-2016

| First Year | | | | | |
|----------------|--|-----------|-----------------|----------------------------|-----------|
| First Semester | | | Second Semester | | |
| Course No. | Course Title | Cr. Hrs. | Course No. | Course Title | Cr. Hrs. |
| 20132 | Calculus (1) | 3 | 11103 | Structured Programming | 3 |
| 20141 | Physics (1) | 3 | 11151 | Structured Programming Lab | 1 |
| 20148 | Physics (1) Lab | 1 | 20133 | Calculus (2) | 3 |
| 31111 | Arabic Language | 3 | 20142 | Physics (2) | 3 |
| 31151 | National Education | 3 | 20149 | Physics (2) Lab | 1 |
| 31153 | Introduction to Society, Technology and Environment Protection | 0 | 31121 | English Language | 3 |
| | Elective University Requirements (General) | 3 | | Total | 14 |
| | Total | 16 | | | |

| Second Year | | | | | |
|----------------|--|-----------|-----------------|--|-----------|
| First Semester | | | Second Semester | | |
| Course No. | Course Title | Cr. Hrs. | Course No. | Course Title | Cr. Hrs. |
| 20200 | Technical Writing and Communication Skills | 3 | 20234 | Linear Algebra | 3 |
| 20231 | Calculus (3) | 3 | 21231 | Electronics (1) | 3 |
| 20232 | Engineering Mathematics(1) | 3 | 22241 | Digital Logic Design | 3 |
| 24218 | Engineering Drawing Using Computers | 1 | 24222 | Electric Circuits (2) | 3 |
| 24219 | Engineering Workshop | 1 | 24229 | Electric Circuits Lab | 1 |
| 24221 | Electric Circuits (1) | 3 | 31251 | Military Science | 3 |
| | Elective University Requirements (Scientific, Practical) | 3 | | Elective University Requirements (General) | 3 |
| | Total | 17 | | Total | 19 |

| Third Year | | | | | |
|----------------|---|-----------|-----------------|------------------------------------|-----------|
| First Semester | | | Second Semester | | |
| Course No. | Course Title | Cr. Hrs. | Course No. | Course Title | Cr. Hrs. |
| 20331 | Engineering Mathematics(2) | 3 | 20333 | Numerical Analysis | 3 |
| 21331 | Electronics (2) | 3 | 20334 | Applied Probability | 3 |
| 21338 | Electronics Lab | 1 | 22340 | Microprocessors & Embedded Systems | 3 |
| 23351 | Signals and Systems | 3 | 22346 | Logic & Embedded Systems Lab | 1 |
| 23352 | Programming Applications in Signals & Systems | 1 | 24311 | Thermodynamics | 3 |
| 24322 | Instruments and Measurements | 3 | | Total | 13 |
| 24329 | Instruments and Measurements Lab | 1 | | | |
| | Total | 15 | | | |

| Fourth Year | | | | | |
|----------------|--|-----------|-----------------|--|-----------|
| First Semester | | | Second Semester | | |
| Course No. | Course Title | Cr. Hrs. | Course No. | Course Title | Cr. Hrs. |
| 24461 | Electric Machines (1) | 3 | 24321 | Applied Electromagnetics | 3 |
| 24463 | Power Systems Analysis | 3 | 24411 | Engineering Ethics | 1 |
| 24471 | Automatic Control | 3 | 24462 | Electric Machines (2) | 3 |
| 24472 | Energy Conversion | 3 | 24465 | Power Systems Economics | 3 |
| 24479 | Automatic Control Lab | 1 | 24468 | Electric Machinery Lab | 1 |
| | Elective University Requirements (Scientific, Practical) | 3 | 24469 | Power Systems lab | 1 |
| | Total | 16 | 32431 | Engineering Economics | 3 |
| | | | | Elective University Requirements (Scientific, Practical) | 3 |
| | | | | Total | 18 |



| Fifth Year | | | | | |
|----------------|---|--------------|-----------------|-------------------------------|-----------|
| First Semester | | | Second Semester | | |
| Course No. | Course Title | Cr. Hrs. | Course No. | Course Title | Cr. Hrs. |
| 24561 | Power Electronics | 3 | 24562 | Power Systems Protection | 3 |
| 24563 | Power Systems Planning, Operation and Control | 3 | 24569 | Power Systems Protection Lab | 1 |
| 24564 | Transmission & Distribution Systems | 3 | 24571 | Renewable Energy Systems | 3 |
| 24565 | High Voltage Engineering | 3 | 24592 | Senior Project (2) | 2 |
| 24568 | Power Electronics Lab | 1 | | Elective Program Requirements | 3 |
| 24591 | Senior Project (1) | 1 | | | |
| | Elective Program Requirements | 3 | | | |
| | | | | Total | 12 |
| | | Total | | | 17 |