

Qurtuba University Of Science & IT, D.I.Khan

Department of Electrical Engineering

Scheme of Studies BSc. Electrical Engineering – (For Session Fall-18 to Onwards)

| Code | Course | Course Contact hours | | Credit hours | Prerequisite |
|---------------------|-------------------------------------|----------------------|-------|-----------------|--------------|
| | | Theory | Pract | Total | |
| QNS-111 | Calculus and Analytic Geometry | 3 | 0 | 3 | |
| QNS-112 | Electricity and Magnetism (Physics) | 3 | 3 | 4 | |
| QEE-113 | Engineering Drawing | 0 | 3 | 1 | |
| QBH-114 | Functional English | 3 | 0 | 3 | |
| QEE-115 | Introduction to Computing | 2 | 3 | 3 | |
| QBH-116 | Pakistan Studies | 2 | 0 | 2 | |
| Total Contact Hours | | 13 | 9 | - | |
| Total Credit | Hours | 13 | 3 | 16 | |

| Semester 2 | | | | | |
|----------------|--------------------------|---------------|-------|-----------------|--------------|
| Code | Course | Contact hours | | Credit hours | Prerequisite |
| | | Theory | Pract | Total | |
| QNS-121 | Linear Algebra | 3 | 0 | 3 | |
| QEE-122 | Programming Fundamentals | 2 | 3 | 3 | QEE-115 |
| QBH-123 | Islamic Studies | 2 | 0 | 2 | |
| QNS-124 | Engineering Mechanics | 3 | 3 | 4 | |
| QEE-125 | Linear Circuit Analysis | 3 | 3 | 4 | |
| QBH-126 | Sociology & Development | 2 | 0 | 2 | |
| Total Contact | t Hours | 15 | 9 | - | |
| Total Credit H | lours | 15 | 3 | 18 | |

| Semester 3 | | | | | |
|---------------------|------------------------------|---------------|-------|-----------------|--------------|
| Code | Course | Contact hours | | Credit hours | Prerequisite |
| | | Theory | Pract | Total | |
| QNS-231 | Differential Equations | 3 | 0 | 3 | |
| QEE-232 | Digital Logic Design | 3 | 3 | 4 | |
| QEE-233 | Electrical Network Analysis | 3 | 3 | 4 | QEE-125 |
| QEE-234 | Data Structures & Algorithms | 3 | 3 | 4 | QEE-122 |
| QEE-235 | Workshop Practice | 0 | 3 | 1 | |
| Total Contact Hours | | 12 | 12 | - | |
| Total Credit | Hours | 12 | 4 | 16 | |

| Code | Course | Contact hours | | Credit hours | Prerequisite |
|--------------|------------------------------------|---------------|-------|-----------------|--------------|
| | | Theory | Pract | Total | |
| QEE-241 | Probability Methods in Engineering | 3 | 0 | 3 | QNS-111 |
| QMS-242 | Engineering Economics | 2 | 0 | 2 | |
| QEE-243 | Electromagnetic Field Theory | 3 | 0 | 3 | |
| QNS-244 | Complex Variables and Transforms | 3 | 0 | 3 | |
| QEE-245 | Electronic Devices & Circuits | 3 | 3 | 4 | |
| QBH-246 | Communication Skills | 2 | 0 | 2 | |
| Total Contac | t Hours | 16 | 3 | - | |
| Total Credit | Hours | 16 | 1 | 17 | |

| Code | Course | Contact hours | | Credit hours | Prerequisite |
|---------------------|------------------------------------|---------------|-------|-----------------|--------------|
| | | Theory | Pract | Total | |
| QEE-351 | Instrumentation and Measurements | 3 | 3 | 4 | |
| QEE-352 | Microprocessor Based System Design | 3 | 3 | 4 | QEE-232 |
| QEE-353 | Electrical Machines | 3 | 3 | 4 | QEE-233 |
| QEE-354 | Signal & Systems | 3 | 3 | 4 | QNS-244 |
| QNS-355 | Numerical Analysis | 3 | 0 | 3 | |
| Total Contact Hours | | 15 | 12 | - | |
| Total Credit | Hours | 15 | 4 | 19 | |

| | Semester 6 | | | | |
|--------------|---------------------------|---------------|-------|-----------------|--------------|
| Code | Course | Contact hours | | Credit hours | Prerequisite |
| | | Theory | Pract | Total | |
| QEE-361 | Digital Signal Processing | 3 | 3 | 4 | QEE-354 |
| QEE-362 | Electronic Circuit Design | 3 | 3 | 4 | QEE-245 |
| QIE-363 | Data Communication | 3 | 3 | 4 | |
| QMS-364 | Engineering Management | 2 | 0 | 2 | |
| QEE-365 | Communication System | 3 | 3 | 4 | QEE-354 |
| Total Contac | t Hours | 14 | 12 | - | |
| Total Credit | Hours | 14 | 4 | 18 | |

| Code | Course | Contact hours | | Credit hours | Prerequisite |
|---------------------|--|---------------|-------|-----------------|--------------|
| | | Theory | Pract | Total | |
| QEE-471 | Computer Communication Networks | 3 | 3 | 4 | |
| QBH-472 | Technical Writing & Presentation Skills | 3 | 0 | 3 | |
| QEE-473 | Power Generation Transmission & Distribution | 3 | 3 | 4 | QEE-233 |
| QEE-474 | Power Electronics | 3 | 3 | 4 | QEE-245 |
| QEE-475 | Electrical Engineering Project | 0 | 9 | 3 | |
| Total Contact Hours | | 12 | 18 | - | |
| Total Credit H | lours | 12 | 6 | 18 | |

| Semester 8 | | | | | |
|------------|------------------------------------|---------------|-------|-----------------|--------------|
| Code | Course | Contact hours | | Credit hours | Prerequisite |
| | | Theory | Pract | Total | |
| QEE-481 | Linear Control System | 3 | 3 | 4 | QEE-354 |
| QEE-482 | Power System Analysis & Protection | 3 | 3 | 4 | QEE-233 |
| QEE-483 | Digital Communication * | 3 | 3 | 4 | QEE-365 |
| QEE-475 | Electrical Engineering Project | 0 | 9 | 3 | |
| Total Con | tact Hours | 9 | 18 | - | |
| Total Cred | lit Hours | 9 | 6 | 15 | |

| Total Credit Hours 1 | L 37 |
|----------------------|-------------|

*Elective may be changed