



KAZI NAZRUL UNIVERSITY

FACULTY OF SCIENCE

**DEGREE PROGRAMME:
B.Sc. HONOURS IN ELECTRONICS**

WITH EFFECT FROM THE ACADEMIC SESSION: 2020-21

| Abbreviated Degree | Discipline | Abbreviated Degree Programme | Semester | Course Name | Course Type | Course Code | Course Details | L - T - P | Course Credit | Sem Credit | CA Marks | | ESE Marks | | Total Marks | Sem Marks |
|-------------------------------|---|------------------------------|--|--|--------------|---------------|-----------------|-----------|---------------|------------|----------------------------|-------------|-----------|-------------|-------------|--------------------|
| | | | | | | | | | | | Practical | Theoretical | Practical | Theoretical | | |
| BSCHELC | ELECTRONICS | BSCHELC | I | Mathematical Methods -I and Solid State Electronics -I | C | BSCHELCC101 | CC-1 | 5 - 1 - 0 | 6 | 22 | | 10 | | 40 | 50 | 150 + Marks of GEC |
| | | | | Classical Mechanics & Thermal and Statistical Physics | | BSCHELCC102 | CC-2 | 5 - 1 - 0 | 6 | | | 10 | | 40 | 50 | |
| | | | | Choose from the Pool of Generic Elective Courses offered in 1st Semester by Honours Disciplines other than the Discipline in which Honours course is taken | GE | See Pool | GEC-1 | See Pool | 6 | | See Pool | | | | | |
| | | | | Environment Studies | AE | AEE101 | AECC-1 | 4 - 0 - 0 | 4 | | | 10 | | 40 | 50 | |
| | | | II | Electromagnetics | C | BSCHELCC201 | CC-3 | 5 - 1 - 0 | 6 | 22 | | 10 | | 40 | 50 | 200 + Marks of GEC |
| | | | | Network Analysis and Circuit Theory | | BSCHELCC202 | CC-4 | 4 - 0 - 4 | 6 | | | 30 | 10 | 20 | 40 | |
| | | | | Choose from the Pool of Generic Elective Courses offered in 2nd Semester by Honours Disciplines other than the Discipline in which Honours course is taken | GE | See Pool | GEC-2 | See Pool | 6 | | See Pool | | | | | |
| | | | | English/MIL Communication | AE | See Pool | AECC-2 | 4 - 0 - 0 | 4 | | | 10 | | 40 | 50 | |
| | | | III | Mathematical Methods – II & Quantum Mechanics | C | BSCHELCC301 | CC-5 | 5 - 1 - 0 | 6 | 28 | | 10 | | 40 | 50 | 250 + Marks of GEC |
| | | | | Solid State Electronics - II | | BSCHELCC302 | CC-6 | 5 - 1 - 0 | 6 | | | 10 | | 40 | 50 | |
| | | | | Analog Electronics - I | | BSCHELCC303 | CC-7 | 4 - 0 - 4 | 6 | | | 30 | 10 | 20 | 40 | |
| | | | | Choose from the Pool of Generic Elective Courses offered in 3rd Semester by Honours Disciplines other than the Discipline in which Honours course is taken | GE | See Pool | GEC-3 | See Pool | 6 | | See Pool | | | | | |
| | | | Design and Fabrication of Electronic Circuits I | SE | BSCHELCSE301 | SEC-1 | 0 - 0 - 8 | 4 | | 30 | | 20 | | 50 | | |
| | | | IV | Analog Electronics - II | C | BSCHELCC401 | CC-8 | 4 - 0 - 4 | 6 | 28 | 30 | 10 | 20 | 40 | 100 | 300 + Marks of GEC |
| | | | | Digital Electronics - I | | BSCHELCC402 | CC-9 | 4 - 0 - 4 | 6 | | 30 | 10 | 20 | 40 | 100 | |
| | | | | Electronic Communication | | BSCHELCC403 | CC-10 | 5 - 1 - 0 | 6 | | | 10 | | 40 | 50 | |
| | | | | Choose from the Pool of Generic Elective Courses offered in 4th Semester by Honours Disciplines other than the Discipline in which Honours course is taken | GE | See Pool | GEC-4 | See Pool | 6 | | See Pool | | | | | |
| | | | Design and Fabrication of Electronic Circuits II | SE | BSCHELCSE401 | SEC-2 | 0 - 0 - 8 | 4 | | 30 | | 20 | | 50 | | |
| | | | V | Digital Electronics - II | C | BSCHELCC501 | CC-11 | 4 - 0 - 4 | 6 | 24 | 30 | 10 | 20 | 40 | 100 | 250 |
| | | | | Optical Communication | | BSCHELCC502 | CC-12 | 5 - 1 - 0 | 6 | | | 10 | | 40 | 50 | |
| | | | | Radio and Television | DSE | BSCHELCDSE501 | DSEC-1 & DSEC-2 | 5 - 1 - 0 | 6X2 | | | 10 | | 40 | 50X2 | |
| | | | | Basics of Control Systems | | BSCHELCDSE502 | | 5 - 1 - 0 | | | | 10 | 40 | | | |
| | | | | Microprocessor and Microcontroller | | BSCHELCDSE503 | 5 - 1 - 0 | | | | 10 | 40 | | | | |
| | | | Numerical Analysis and Computer Programming | BSCHELCDSE504 | 5 - 1 - 0 | | 10 | 40 | | | | | | | | |
| VI | Instrumentation and Measurements | C | BSCHELCC601 | CC-13 | 4 - 0 - 4 | 6 | 24 | 30 | 10 | 20 | 40 | 100 | 250 | | | |
| | Sensors, Transducers and Electronic Materials | | BSCHELCC602 | CC-14 | 5 - 1 - 0 | 6 | | | 10 | | 40 | 50 | | | | |
| | Satellite Communication | DSE | BSCHELCDSE601 | DSEC-3 & DSEC-4 | 5 - 1 - 0 | 6X2 | | | 10 | | 40 | 50X2 | | | | |
| | Microwaves and Opto Electronic Devices | | BSCHELCDSE602 | | 5 - 1 - 0 | | | | 10 | 40 | | | | | | |
| | Antenna and Wave Propagation | | BSCHELCDSE603 | | 5 - 1 - 0 | | | | 10 | 40 | | | | | | |
| | Power Electronics | | BSCHELCDSE604 | | 5 - 1 - 0 | | | | 10 | 40 | | | | | | |
| Project | BSCHELCDSE605 | 0 - 0 - 12 | | 30 | | 20 | | | | | | | | | | |
| Total Credit and Marks | | | | | | | | | | 148 | 1400 + Marks of GEC | | | | | |

Abbreviations: C= Core; CC=Core Course; AE= Ability Enhancement; AECC= Ability Enhancement Compulsary Course; GE= Generic Elective; GEC= Generic Elective Course; SE= Skill Enhancement; SEC= Skill Enhancement Course; DSE= Discipline Specific Elective; DSEC= Discipline Specific Elective Course; CA= Continuous Assessment, ESE= End Semester Examination, L= Lecture Hour; T= Tutorial Hour and P= Practical Hour/ Field Work and NA= Not Applicable

Generic Elective Courses (GEC) : Students of a particular Honours Course will choose from the Pool of Generic Elective Courses offered by Disciplines other than the Discipline in which Honours course is taken

Semesterwise Pool of Generic Elective Courses offered by this Discipline

| Discipline | Semester | Course Name | | Course Type | Course Code | Course Details | L - T - P | Course Credit | Sem Credit | CA Marks | | ESE Marks | | Total Marks | Sem Marks |
|-------------|----------|-------------------------|-----------|-------------|-------------|----------------|-----------|---------------|------------|-----------|-------------|-----------|-------------|-------------|-----------|
| | | | | | | | | | | Practical | Theoretical | Practical | Theoretical | | |
| ELECTRONICS | I | Basic Electronics | (Any One) | GE | BSCHELCE101 | GEC-1 | 5 - 1 - 0 | 6 | NA | | 10 | | 40 | 50 | NA |
| | | Sensors and Tranducers | | | BSCHELCE102 | | 5 - 1 - 0 | | | | 10 | | 40 | | |
| | II | Circuit Theory | (Any One) | | BSCHELCE201 | GEC-2 | 5 - 1 - 0 | 6 | | | 10 | | 40 | 50 | |
| | | Electronic Measurements | | | BSCHELCE202 | | 5 - 1 - 0 | | | | 10 | | 40 | | |
| | III | Analog Electronics | | | BSCHELCE301 | GEC-3 | 4 - 0 - 4 | 6 | | 30 | 10 | 20 | 40 | 100 | |
| | IV | Digital Electronics | | | BSCHELCE401 | GEC-4 | 4 - 0 - 4 | 6 | | 30 | 10 | 20 | 40 | 100 | |

Pool of Communication Courses offered as Ability Enhancement Compulsary Courses

| Discipline | Semester | Course Name | | Course Type | Course Code | Course Details | L - T - P | Course Credit | Sem Credit | CA Marks | | ESE Marks | | Total Marks | Sem Marks |
|---------------------------|----------|-----------------------|-----------|-------------|-------------|----------------|-----------|---------------|------------|-----------|-------------|-----------|-------------|-------------|-----------|
| | | | | | | | | | | Practical | Theoretical | Practical | Theoretical | | |
| English/MIL Communication | II | English Communication | (Any One) | AE | AECCE201 | AECC-2 | 4 - 0 - 0 | 4 | NA | | 10 | | 40 | 50 | NA |
| | | Bengali Communication | | | AECCE201 | | 4 - 0 - 0 | | | | 10 | | 40 | | |
| | | Hindi Communication | | | AECCH201 | | 4 - 0 - 0 | | | | 10 | | 40 | | |
| | | Urdu Communication | | | AECCE201 | | 4 - 0 - 0 | | | | 10 | | 40 | | |