

DEPARTMENT OF PHYSICS
North Eastern Hill University
Shillong-793022

M.Sc. Physics Course Structure (CBCS)

Semester I

No of credits = 18

| <u>Code No.</u> | <u>Name of the Course</u> | <u>Credit</u> |
|-----------------|---------------------------|---------------|
| PHYCC1 | Classical Mechanics | 4 |
| PHYCC2 | Quantum Mechanics-I | 4 |
| PHYCC3 | Mathematical Physics | 4 |
| PHYCC4 | Laboratory-I | 6 |

Semester II

No. of credits = 18

| | | |
|--------|----------------------|---|
| PHYCC5 | Quantum Mechanics-II | 4 |
| PHYCC6 | Electrodynamics | 4 |
| PHYOC1 | Electronics | 4 |
| PHYCC7 | Laboratory-II | 6 |

Semester III

No. of credits = 18

| | | |
|---------|----------------------------|---|
| PHYOC2 | Nuclear Physics-I | 4 |
| PHYOC3 | Solid State Physics-I | 4 |
| PHYCC8 | Atomic & Molecular Physics | 4 |
| PHYCC9 | Laboratory-III | 4 |
| PHYCC10 | Environment | 2 |

Semester IV

No. of credits = 18

| | | |
|------------|---|---|
| PHYCC11 | Thermal Physics | 4 |
| PHYCC12 | Computational Techniques & Numerical Methods | 4 |
| PHYCC13(a) | Solid State Physics-II | 4 |
| PHYCC13(b) | High Energy Physics | 4 |
| PHYCC13(c) | Laser Physics | 4 |
| PHYCC13(d) | Nuclear Physics-II | 4 |
| PHYCC14 | Computational Techniques Laboratory | 6 |

PHYCC13(a), PHYCC13(b), PHYCC13(c) and PHYCC13(d) are the elective papers, the M. Sc. Physics students can opt one of them.