**SCHEME OF STUDIES FOR B.S. PHYSICS**

**Old Scheme of study for 4th, 6th and 8th semesters**

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| **Semester-IV** | | |
| Course Code | Course Title | Credit hours |
| PHY-4401 | Modern Physics and Electronics | 3(3-0) |
| PHY-4402 | Electricity and Magnetism-II | 3(3-0) |
| MAT-4403 | Differential Equations | 3(3-0) |
| PST-4404 | Pak Studies | 2(2-0) |
| CHM-4405 | Physical Chemistry | 3(3-0) |
| PHY-4406 | Physics Lab-IV | 1(0-1) |
| ***Total*** | | ***15*** |
| **Semester-VI** | | |
| Course Code | Course Title | Credit hours |
| PHY-5601 | Lab -VI (Solid State Physics) | 3(0- 3) |
| PHY-5602 | Quantum Mechanics-I | 3(3-0) |
| PHY-5603 | Nuclear Physics | 3(3-0) |
| PHY-5604 | Methods of Mathematical Physics-II | 3(3-0) |
| PHY-5605 | Electromagnetic Theory-II | 3(3-0) |
| PHY-5606 | Solid State Physics (General) | 3(3-0) |
| ***Total*** | | ***18*** |
| **Semester-VIII** | | |
| Course Code | Course Title | Credit hours |
| PHY-6801 | Lab-VIII (Modern Physics) | 3(0- 3) |
| PHY-6802 | Statistical Mechanics and Thermal Physics | 3(3-0) |
| PHY-6803 | Computational Physics | 3(2-1) |
| Elective Advance Course-II Code | Elective Advance Course-II (See Below) | 3(3-0) |
| PHY-6800  OR  Optional Course Code | Thesis  OR  Optional Course | As per nature |
| 3(3-0) |
| PHY-6807 | Comprehensive Viva | S/U |
| ***Total*** | | ***15*** |
| ***Elective Advance Course-II (Semester-VIII)*** | | |
| PHY-6804 | Electronics, Elective-II | 3(3-0) |
| PHY-6805 | Solid State Physics, Elective-II | 3(3-0) |
| PHY-6806 | Nuclear Physics, Elective-II | 3(3-0) |
| ***Optional Courses (Semester-VIII)*** | | |
| PHY-6808 | Radiation and Medical Physics | 3(3-0) |
| PHY-6809 | Experimental Plasma Physics | 3(3-0) |
| PHY-6810 | Introduction To Particle Physics | 3(3-0) |
| PHY-6811 | Computer Simulation | 3(2-1) |

**New Scheme of study for 2nd semester according to the HEC policy 2023/2nd semester old scheme of study (for repeaters)**

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| **Semester-II** | | |  |
| Course Code | Course Title | Credit hours | Category |
| GEN-3201 | Arabic/History of Kashmir/History of Islam | 2(2-0) | General |
| GEN-3202 | Quantitative Reasoning-I | 3(3-0) | General |
| GEN-3203 | Expository Writing | 3(3-0) | General |
| MATH-3204 | Calculus-II | 3(3-0) | Major |
| MATH-3205 | Introduction to Linear Algebra | 3(3-0) | Interdisciplinary |
| PHY-3206 | Electricity and Magnetism | 3(3-0) | Major |
| PHY-3207 | Physics Lab-II | 1(0-1) | Major |
| ***Total*** | | ***18(17-1)*** |  |