

INDIAN INSTITUTE OF TECHNOLOGY TIRUPATI**M.Sc. Curriculum: Physics****From the Academic Year 2020-21****Semester-I**

| S.No. | Course Code | Course Name | L-T-P-C | Course Code (prior to Jul 2022) | Senate |
|----------------------|-------------|---------------------------|-----------|---------------------------------|--------|
| 1. | PH506L | Mathematical Physics-I | 3-0-0-3 | PH5101 | 10 |
| 2. | PH503L | Classical Mechanics | 3-1-0-4 | PH5103 | 10 |
| 3. | PH502L | Classical Electrodynamics | 3-1-0-4 | PH5105 | 10 |
| 4. | PH510L | Quantum Mechanics-I | 3-1-0-4 | PH5107 | 10 |
| 5. | PH501M | Applied Electronics | 2-0-3-4 | PH5109 | 10 |
| 6. | PH508P | Physics Laboratory-I | 0-0-3-2 | PH5191 | 10 |
| Total Credits | | | 21 | | |

Semester-II

| S.No. | Course Code | Course Name | L-T-P-C | Course Code (prior to Jul 2022) | Senate |
|----------------------|-------------|--------------------------|-----------|---------------------------------|--------|
| 1. | PH507L | Mathematical Physics-II | 3-0-0-3 | PH5202 | 10 |
| 2. | PH511L | Quantum Mechanics-II | 3-1-0-4 | PH5204 | 10 |
| 3. | PH512L | Statistical Physics | 3-1-0-4 | PH5206 | 10 |
| 4. | PH505L | Condensed Matter Physics | 3-1-0-4 | PH5208 | 10 |
| 5. | PH504M | Computational Physics | 2-0-3-4 | PH5210 | 10 |
| 6. | PH509P | Physics Laboratory-II | 0-0-3-2 | PH5292 | 10 |
| Total Credits | | | 21 | | |

Semester-III

| S.No. | Course Code | Course Name | L-T-P-C | Course Code (prior to Jul 2022) | Senate |
|----------------------|-------------|------------------------------|-----------|---------------------------------|--------|
| 1. | PH601L | Atomic and Molecular Physics | 3-0-0-3 | PH6101 | 10 |
| 2. | PH602L | Classical and Quantum Optics | 3-0-0-3 | PH6103 | 10 |
| 3. | FRE1 | Free Elective-1 | 3-0-0-3 | | |
| 4. | PH603P | Advanced Physics Laboratory | 0-0-6-4 | PH6191 | 10 |
| 5. | PH693G | Seminar | - - - 1 | PH6111 | 9 |
| 6. | PH691G | Project Phase-I | - - - 3 | PH6150 | 9 |
| Total Credits | | | 17 | | |

Semester-IV

| S.No. | Course Code | Course Name | L-T-P-C | Course Code (prior to Jul 2022) | Senate |
|----------------------|-------------|------------------------------|-----------|---------------------------------|--------|
| 1. | PH604L | Nuclear and Particle Physics | 3-0-0-3 | PH6202 | 10 |
| 2. | DPE | Department Elective | 3-0-0-3 | | |
| 3. | FRE2 | Free Elective-2 | 3-0-0-3 | | |
| 4. | PH692G | Project Phase-II | - - - 6 | PH6250 | 9 |
| Total Credits | | | 15 | | |

Total credits: 74