

B.Sc. PHYSICS – PROGRAMME STRUCTURE

| Sem. | Part | Course Code | Title of the Course | Cr. | Hrs./ Week | Marks | | Total | |
|------|------|------------------------------|--|---|---------------|--------|-----------|------------|-----------|
| | | | | | | Int. | Ext. | | |
| I | I | 711T | Tamil / Other Languages – I | 3 | 6 | 25 | 75 | 100 | |
| | II | 712E | English – I | 3 | 6 | 25 | 75 | 100 | |
| | III | | 7BPH1C1 | Core – I – Properties of matter and Sound | 4 | 5 | 25 | 75 | 100 |
| | | | 7BPH1C2 | Core–II– Mechanics and Relativity | 4 | 5 | 25 | 75 | 100 |
| | | | --- | Core – III – General Physics Practical – I | - | 2** | -- | -- | --- |
| | | | | Allied – I (Theory only) (or) Allied – I (Theory cum Practical) | 5 4 | 5 3 | 25 15 | 75 60 | 100 75 |
| | | | | Allied Practical – I | - | 2** | -- | -- | --- |
| | IV | 7NME1A/ 7NME1B/ 7NME1C | (1) Non-Major Elective – I (A) தமிழ்மொழியின் அடிப்படைகள் (B) இக்கால இலக்கியம் (C) Communicative English | 2 | 1 | 25 | 75 | 100 | |
| | | | Total (Allied Theory only) | 21 | 30 | -- | -- | 600 | |
| | | | Total (Allied Theory cum Practical) | 20 | | | | 575 | |
| II | I | 721T | Tamil / Other Languages – II | 3 | 6 | 25 | 75 | 100 | |
| | II | 722E | English – II | 3 | 6 | 25 | 75 | 100 | |
| | III | | 7BPH2P1 | Core – III – General Physics Practical – I | 4 | 2 | 40 | 60 | 100 |
| | | | 7BPH2C1 | Core – IV – Thermal and Statistical Physics | 4 | 4 | 25 | 75 | 100 |
| | | | 7BPH2C2 | Core – V – Electricity, Magnetism and Electromagnetism | 4 | 5 | 25 | 75 | 100 |
| | | | | Allied – II (Theory only) (or) Allied– II (Theory cum Practical) | 5 4 | 5 3 | 25 15 | 75 60 | 100 75 |
| | | | | Allied Practical – I | 2 | 2 | 20 | 30 | 50 |

| | | | | | | | | | |
|-----|-----|--|-------------------------------------|---|-----------|-----|-----------|------------|-----|
| | IV | 7BES2 | Environmental Studies | 2 | 2 | 25 | 75 | 100 | |
| | | Total (Allied Theory only) | | 25 | 30 | -- | -- | 700 | |
| | | Total (Allied Theory cum Practical) | | 26 | | | | 725 | |
| III | I | 731T | Tamil /Other Languages – III | 3 | 6 | 25 | 75 | 100 | |
| | II | 732E | English – III | 3 | 6 | 25 | 75 | 100 | |
| | III | | 7BPH3C1 | Core–VI– Optics and Spectroscopy | 4 | 7 | 25 | 75 | 100 |
| | | | --- | Core – VII – General Physics Practical – II | - | 3** | -- | -- | --- |
| | | | | Allied – III (Theory only) (or) Allied– III (Theory cum Practical) | 5 | 5 | 25 | 75 | 100 |
| | | | | | 4 | 3 | 15 | 60 | 75 |
| | | | | Allied Practical – II | - | 2** | -- | -- | --- |
| | IV | | 7NME3A/ 7NME3B/ 7NME3C | (1) Non-major Elective – II (A)இலக்கியமும் மொழிப் பயன்பாடும் (B) பழந்தமிழ் இலக்கியங்களும்இலக்கியவரலாறும் (C) Employability Skills | 2 | 1 | 25 | 75 | 100 |
| | | | 7SBS3A1/ 7SBS3A2/ 7SBS3A3 | Skill Based Subjects – I | 2 | 2 | 25 | 75 | 100 |
| | V | 7BEA3 | Extension activities | 1 | -- | 100 | -- | 100 | |
| | | Total (Allied Theory only) | | 20 | 30 | -- | -- | 700 | |
| | | Total (Allied Theory cum Practical) | | 19 | | | | 675 | |
| IV | I | 741T | Tamil / other languages – IV | 3 | 6 | 25 | 75 | 100 | |
| | II | 742E | English – IV | 3 | 6 | 25 | 75 | 100 | |
| | III | | 7BPH4P1 | Core – VII – General Physics Practical – II | 4 | 3 | 40 | 60 | 100 |
| | | | 7BPH4C1 | Core – VIII – Atomic & Nuclear Physics | 4 | 6 | 25 | 75 | 100 |
| | | | | Allied – IV(Theory only) (or) Allied – IV(Theory cum Practical) | 5 | 5 | 25 | 75 | 100 |
| | | | | | 4 | 3 | 15 | 60 | 75 |
| | | | Allied Practical - II | 2 | 2 | 20 | 30 | 50 | |

| | | | | | | | | |
|----|-------------------------------------|---|--|-----------|-----------|-----------|-----------|------------|
| | IV | 7SBS4B1/ 7SBS4B2/ 7SBS4B3 | Skill Based Subjects – II | 2 | 2 | 25 | 75 | 100 |
| | | 7BVE4/ 7BMY4/ 7BWS4 | Value Education / Manavalakalai Yoga / Women’s Studies | 2 | 2 | 25 | 75 | 100 |
| | | Total (Allied Theory only) | | 23 | 30 | -- | -- | 700 |
| | | Total (Allied Theory cum Practical) | | 24 | | | | 725 |
| V | III | 7BPH5C1 | Core – IX – Analog Electronics | 4 | 5 | 25 | 75 | 100 |
| | | 7BPH5C2 | Core–X–Computer Programming in C | 4 | 5 | 25 | 75 | 100 |
| | | --- | Core–XI– General Physics Practical III | | 3** | -- | -- | -- |
| | | --- | Core–XII- Electronics Practical IV | | 3** | -- | -- | -- |
| | | 7BPHE1A/ 7BPHE1B/ 7BPHE1C | Elective–I–A) Mathematical Physics (or) B) Non-Conventional Energy Sources (or) C) Laser Physics and Fibre Optics | 5 | 5 | 25 | 75 | 100 |
| | 7BPHE2A/ 7BPHE2B/ 7BPHE2C | Elective–II– A) Communication Electronics (or) B) Numerical methods and statistics (or) C) Solid State Physics | 5 | 5 | 25 | 75 | 100 | |
| | IV | 7SBS5A4/ 7SBS5A5/ 7SBS5A6/ 7SBS5A7 | (2) Skill Based Subjects – I | 2 | 2 | 25 | 75 | 100 |
| | | | (2) Skill Based Subjects – I | 2 | 2 | 25 | 75 | 100 |
| | | Total | | 22 | 30 | -- | -- | 600 |
| VI | III | 7BPH6P1 | Core – XI – General Physics Practical III | 4 | 3 | 40 | 60 | 100 |
| | | 7BPH6P2 | Core–XII–Electronics Practical-IV | 4 | 3 | 40 | 60 | 100 |
| | | 7BPH6C1 | Core – XIII – Elements of Theoretical Physics | 4 | 6 | 25 | 75 | 100 |
| | | 7BPH6C2 | Core – XIV – Digital Electronics | 4 | 5 | 25 | 75 | 100 |
| | | 7BPH6PR | Core XV – Project* | 4 | 4 | 40 | 60 | 100 |

| | | | | | | | | |
|--------------------|----|---|--|------------|------------|----|----|-------------|
| | | 7BPHE3A/7 BPHE3B/ 7BPHE3C | Elective– III– A)Microprocessors (or) B) Computer Programming in C++ (or) C) Fundamentals of Nano Science | 5 | 5 | 25 | 75 | 100 |
| | IV | 7SBS6B4/ 7SBS6B5/ 7SBS6B6/ 7SBS6B7 | (2) Skill Based Subjects – II | 2 | 2 | 25 | 75 | 100 |
| | | | (2) Skill Based Subjects – II | 2 | 2 | 25 | 75 | 100 |
| Total | | | | 29 | 30 | -- | -- | 800 |
| Grand Total | | | | 140 | 180 | -- | -- | 4100 |

* **Students are advised to visit Industries, academic institutions as part of the educational tour for project or any theoretical or electronics project.**

** **University Examinations will be held in the Even Semesters only.**