

**MANGALORE UNIVERSITY**  
**Bachelor of Science [B.Sc. (PCM / PMC / BZC)] Degree Programme**

**Semester-wise Course List**  
**[Choice Based Credit System (CBCS)]**  
 (From 2019 Batch onwards)



**CORE COURSE : PHYSICS**

| First Semester             |                                           |                       |                      |       |          |       |         |
|----------------------------|-------------------------------------------|-----------------------|----------------------|-------|----------|-------|---------|
| Group & Course Details     |                                           | Instruction Hrs./Week | Duration of the Exam | Marks |          |       | Credits |
|                            |                                           |                       |                      | IA    | Sem Exam | Total |         |
| Group I : Core Courses     |                                           |                       |                      |       |          |       |         |
| BSCPHC131                  | General Physics Paper I                   | 04                    | 03                   | 20    | 80       | 100   | 02      |
| BSCPHP132                  | Physics Practicals I                      | 03                    | 03                   | 10    | 40       | 50    | 01      |
| Group II : Elective Course |                                           |                       |                      |       |          |       |         |
| BSCPHCE133                 | Basics of Radiation & Environment         | 02                    | 02                   | 10    | 40       | 50    | 01      |
| Second Semester            |                                           |                       |                      |       |          |       |         |
| Group I : Core Courses     |                                           |                       |                      |       |          |       |         |
| BSCPHC181                  | General Physics Paper II                  | 04                    | 03                   | 20    | 80       | 100   | 02      |
| BSCPHP182                  | Physics Practicals II                     | 03                    | 03                   | 10    | 40       | 50    | 01      |
| Group II : Elective Course |                                           |                       |                      |       |          |       |         |
| BSCPHCE183                 | Physics of Nano Science & Smart Materials | 02                    | 02                   | 10    | 40       | 50    | 01      |
| Third Semester             |                                           |                       |                      |       |          |       |         |
| Group I : Core Courses     |                                           |                       |                      |       |          |       |         |
| BSCPHC231                  | Optics                                    | 04                    | 03                   | 20    | 80       | 100   | 02      |
| BSCPHP232                  | Physics Practicals III                    | 03                    | 03                   | 10    | 40       | 50    | 01      |
| Group II : Elective Course |                                           |                       |                      |       |          |       |         |
| BSCPHCE233                 | Electrical Appliances                     | 02                    | 02                   | 10    | 40       | 50    | 01      |
| Fourth Semester            |                                           |                       |                      |       |          |       |         |
| Group I : Core Courses     |                                           |                       |                      |       |          |       |         |
| BSCPHC281                  | Electricity & X-ray Crystallography       | 04                    | 03                   | 20    | 80       | 100   | 02      |
| BSCPHP282                  | Physics Practicals IV                     | 03                    | 03                   | 10    | 40       | 50    | 01      |
| Group II : Elective Course |                                           |                       |                      |       |          |       |         |
| BSCPHOE283                 | Basics of Communication & Astronomy       | 02                    | 02                   | 10    | 40       | 50    | 01      |
| Fifth Semester             |                                           |                       |                      |       |          |       |         |
| Group I : Core Courses     |                                           |                       |                      |       |          |       |         |
| BSCPHC331                  | Modern Physics                            | 03                    | 03                   | 20    | 80       | 100   | 02      |
| BSCPHP332                  | Physics Practicals V                      | 04                    | 03                   | 20    | 80       | 100   | 02      |
| BSCPHC333                  | Condensed Matter Physics                  | 03                    | 03                   | 20    | 80       | 100   | 02      |
| Sixth Semester             |                                           |                       |                      |       |          |       |         |
| Group I : Core Courses     |                                           |                       |                      |       |          |       |         |
| BSCPHC381                  | Nuclear Physics                           | 03                    | 03                   | 20    | 80       | 100   | 02      |
| BSCPHP382                  | Physics Practicals VI                     | 04                    | 03                   | 20    | 80       | 100   | 02      |
| BSCPHC383                  | Electronics                               | 03                    | 03                   | 20    | 80       | 100   | 02      |