# Engineering Physics - 2019 (Senate approved, April 2021)

| Semester | Course No | Course Name | Credits | Offered by... |
|---|---|---|---|---|
| 1 | ID1054 | Digital Fabrication | 2 | ME |
| 1 | ID1035 | Independent Project | 1 | ID |
| 1 | EP1567 | Maths for Physics - I | 1 | PH |
| 1 | MA1220 | Basic Calculus - II | 2 | PH |
| 1 | EP1017 | Classical Physics | 1 | PH |
| 1 | ID1303 | Introduction to Programing | 2 | CSE |
| 1 | ID1310 | Electric Circuits | 1 | EE |
| 1 | ID1320 | Magnetic Circuits | 1 | EE |
| 1 | MA1110 | Basic Calculus I | 1 | MA |
| 1 | XXxxxx | Free elective | 2 | FE |
| 1 | ID1340 | Digital System Design | 1 | EE |
| 1 | ID1330 | Applied Digital Logic Design | 1 | EE |
| 1 | EP2217 | Classical Electromagnetism | 1 | PH |
| 1 | ID1393 | Introduction to Drones | 1 | EE |
|  |  |  | 18 |  |
| 2 | EP1587 | Tensors and differential forms | 1 | PH |
| 2 | EE1040 | Matrix Analysis | 1 | MA |
| 2 | CS1353 | Introduction to Data Structures | 3 | CSE |
| 2 | CY1020 | Dynamics of Chemical Systems - 1 | 1 | CY |
| 2 | EP1027 | Electromagnetism and Maxwell Eqn | 1 | PH |
| 2 | EP2817 | Modern Physics | 1 | PH |
| 2 | EP2827 | Thermodynamics | 1 | PH |
| 2 | EP2027 | Quantum Physics | 1 | PH |
| 2 | XXxxxx | Free elective | 3 |  |
| 2 | Laxxxx | LA/CA | 2 | FE |
|  |  |  | 15 |  |
| 3 | CS2233 | Data Structure | 3 | CSE |
| **3** | **EE2137** | **Analog electronics** | **2** | **EE** |
| **3** | **EE2230** | **Power Electronics** | **2** | **EE** |
| 3 | CY1031 | Chemistry Lab | 2 | CY |
| 3 | EP1031 | BTech Physics Lab | 2 | PH |
| 3 | EP2117 | Photonics | 1 | PH |
| 3 | EP2017 | Relativity | 1 | PH |
| 3 | Mexxxx/ID | Fluid Mechanics | 2 | ME |
| 3 | EP3288 | Analytical Mechanics | 2 | PH |
|  |  |  | 17 |  |
| 4 | EE2134 | Analog System Design | 1 | EE |
| 4 | XXxxxx | Free elective | 3 | FE |
| 4 | CS2440 | Algorithm | 3 | CSE |

| | | | | |
|---|---|---|---|---|
| 4 | EP2127 | Astroparticle Physics | 1 | PH |
| 4 | EP3317 | Statistical Physics - I | 1 | PH |
| 4 | EP2041 | Engineering Physics Lab - I | 2 | PH |
| 4 | Laxxxx | LA/CA | 2 | LA |
| | | | 13 | |
| 5 | EP3100 | Quantum Mechanics-1 | 3 | PH |
| 5 | PH3095 | Project | 3 | PH |
| 5 | EP3110 | Electrodynamics | 3 | PH |
| 5 | PH3348 | Statistical Physics - II | 2 | PH |
| 5 | PH3051 | Engineering Physics Lab - II | 2 | PH |
| 5 | LAxxxx | LA/CA | 2 | |
| 5 | EP3130 | Mathematical Phyics-1 | 3 | PH |
| | | | 17 | |
| 6 | EP3200 | Solid State Physics | 3 | PH |
| 6 | EP3210 | Quantum Mechanics-II | 3 | PH |
| 6 | EP3230 | Atomic and Molecular Physics | 3 | PH |
| 5 | EP3105 | Project-1 | 2 | PH |
| 6 | PHxxxx | Core elective | 2 | PH |
| 6 | EP5101 | Core EP lab-4 | 2 | PH |
| 6 | PH3588 | Computational Physics I | 1 | PH |
| 6 | EP3208 | Advanced Mathematical Physics | 2 | PH |
| 6 | PH3338 | Photonics & Laser | 2 | PH |
| 6 | PH3227 | Nonlinear Dynamics | 1 | PH |
| | | | 21 | |
| 7 | EP4108 | Nuclear Physics | 2 | PH |
| 7 | EP4710 | Particle Physics | 3 | PH |
| 7 | EPxxxx | Elective-II | 3 | PH |
| 7 | EP5201 | Core-EP Lab-5 | 2 | PH |
| 7 | FExxxx | Free Elective | 3 | FE |
| 7 | LAxxxx | LA/CA | 2 | LA |
| **Total** | | | **15** | |
| | | | | |
| 8 | EPxxxx | Elective-III | 3 | PH |
| 8 | XXxxxx | Free Elective | 3 | FE |
| 8 | FExxxx | Free Elective | 3 | FE |
| 8 | XXxxxx | LA/CA | 2 | FE |
| 8 | Laxxxx | Professional Ethics | 1 | LA |
| | | | 9 | |
| | | | **125** | |