DEPARTMENT OF PHYSICS

Course Outcomes

of Physics Honours Course

Semester 1:

CC1(Mathematical Physics I):

- Develop the knowledge of different topics for application in Physical problems
- Induces logical reasoning

CC2(Mechanics):

- Understanding of Newtonian mechanics and its applications in real life dynamics

Semester 2:

CC3(Electricity and Magnetism):

- Gain an understanding of different theoretical and practical perspectives
- Applications in different aspects of the topic

CC4(Waves and Optics):

- Gain an understanding of different theoretical and practical perspectives
- Learn about the physical explanation of different phenomena

Semester 3:

CC5(Mathematical Physics II):

- Develop the knowledge of different topics for application in Physical problems
- Writing Python programs for scientific applications

CC6(Thermal Physics):

- Develop an understanding of different theoretical and practical aspects

CC7(Modern Physics):

- Gain an understanding of various topics in the course
- Apply knowledge and skills in modern technology for better and cheaper gadgets

SEC-A1 (Scientific Writing**):**

- Writing articles/research papers/reports

- Documentation of experimental results using tables, graphs and analysis of the same

SEC-A2 (Renewable energy and Energy Harvesting**):**

- Explore the various energy resources for our future needs
- Applications in different spheres

Semester 4:

CC8(Mathematical Physics III):

- Develop the knowledge of different topics for application in Physical problems

CC9(Analog Systems and Applications):

- Gain an understanding of different theoretical and practical perspectives
- Applications in modern day technology

CC10(Quantum Mechanics):

- Learn and gain knowledge about the topic

SEC-B1 (Arduino**):**

- Develop technical skill about programming and interfacing

SEC-B2 (Electrical circuits & Network skills**):**

- Gain knowledge skill about circuits and its applications

Semester 5:

CC11(Electromagnetic Theory):

- Develop the knowledge of different topics for application in wave propagation

CC12(Statistical Physics):

- Gain an understanding of different theoretical and practical perspectives

DSE-A1 (Advanced Mathematical Methods or Laser & Fibre Optics**):**

- Develop the knowledge of different topics for application in Physical problems
- Explore the possible applications in communication and different fields

DSE-B1 (Astronomy or Astrophysics or Nuclear Physics**):**

- Develop knowledge about the universe and the various laws related to it
- Learn and understand about the nuclear phenomena

Semester 6:

CC13(Digital Electronics):

- Gain an understanding of different theoretical and practical perspectives
- Applications in modern day technology

CC14(Solid State Physics):

- Study of different theoretical and practical aspects
- Applications in present science and technology

DSE-A2 (Nanomaterials or Advanced Classical Dynamics**):**

- Gain an understanding of the subject and develop skill for future applications in different spheres of science
- Study and its applications of dynamical systems

DSE-B2 (Communication Electronics or Advanced Statistical Mechanics**):**

- Applications in wireless communication and navigation systems
- Study of different theoretical topics and models

Physics General course

Semester 1:

CC1/GE1(Mechanics):

- Understanding of Newtonian mechanics and its applications in real life dynamics

Semester 2:

CC2/GE2(Electricity and Magnetism):

- Gain an understanding of different theoretical and practical perspectives
- Applications in different fields of the topic

Semester 3:

CC3/GE3(Thermal Physics):

- Develop an understanding of different theoretical and practical aspects

SEC-A1 (Scientific Writing**):**

- Writing articles/research papers/reports
- Documentation of experimental results using tables, graphs and analysis of the same

SEC-A2 (Renewable energy**):**

- Explore the various energy resources for our future needs
- Applications in different spheres

Semester 4:

CC4/GE4(Waves and Optics):

- Gain an understanding of different theoretical and practical perspectives
- Learn about the physical explanation of different physical phenomena

SEC-B1 (Arduino**):**

- Develop technical skill about programming and interfacing

SEC-B2 (Electrical circuits & Network skills**):**

- Gain knowledge skill about circuits and its applications

Semester 5:

DSE A1(Analog Electronics):

- Gain an understanding of different theoretical and practical perspectives
- Applications in modern day technology

DSE A2(Modern Physics):

- Gain an understanding of various topics in the course
- Apply knowledge and skills in modern technology for better and cheaper gadgets

Semester 6:

DSE B1(Digital Electronics):

- Develop an understanding of different theoretical and practical perspectives
- Applications in modern day technology

DSE B2(Nuclear Physics):

- Learn and understand about the nuclear phenomena
- Applications in energy harvesting