A D B First Grade College, Harapanahalli

Program Outcomes (PO's)

Department of Physics

- Physics is a branch of science that studies matter and its motion through space and time, along with related concepts such as energy and force. Physics is one of the fundamental sciences because the other natural science deal with systems that seems to obey the law of Physics. According to Physics, the physical laws of matter, energy and the fundamental forces of nature govern the interactions between particles and physical entities (such as plants, molecules, atoms or the subatomic particles).
- Physics deals with a wide variety of systems, certain theories are used by all physicists. Each of these theories were experimentally tested numerous times and found to be an adequate approximation of nature.
- Physics uses mathematics to organize and formulate experimental results and from which new predictions can be made.
- The results from physics experiments are numerical measurements. Technologies based on mathematics, made computational physics as active area of research.

Department of Mathematics

- Ability to acquire in-depth knowledge of algebra, calculus, geometry, differential equations and several other branches of mathematics. This also leads to study of related areas like computer science and physical science. Thus, this Program helps learners in building a solid foundation for higher studies in mathematics.
- The skills and knowledge gained has intrinsic beauty, which also leads to proficiency in analytical reasoning. This can be utilized in modelling and solving real life problems.
- To recognize patterns and to distinguish between essential and irrelevant aspects of problems.
- Utilize mathematics to solve theoretical and applied problems by critical understanding, analysis and synthesis.
- Ability to share ideas and insights while seeking and benefitting from knowledge and insight of others. This helps them to learn behave responsibly in a rapidly changing interdependent society.
- Ability to communicate mathematics effectively by written, computational and graphic means.
- Create mathematical ideas from basic axioms.
- Ability to apply multivariable calculus tools in physics, economics, optimization, and understanding the architecture of curves and surfaces in plane and space etc.
- Able to present mathematics clearly and precisely, make vague ideas precise by formulating them in the language of mathematics, describe mathematical ideas from multiple perspectives and explain fundamental concepts of mathematics to non-mathematicians

- This Program will also help students to enhance their employability for jobs banking, insurance and investment sectors, and data analyst and in various other public and private enterprises.

Department of Electronics

By the end of this programme, the students will be able to:

- Understand the basic concepts of electronics components, network theorem, digital electronics, solid state semiconductor devices, amplifier theory, Analog and Digital circuits, basic circuits, design using circuit maker software and their application.
- Analyze different parameters of various circuits
- Understand the use of electronics in the field of computer science.
- Perform and testing of different electronics components and circuits.
- Analyze the I/P, O/P V-I characteristics of the circuits.
- PO6: Understand the application of Electronics in domestic appliances
- Analyze the relationship between analogue and digital circuits.
- Repair small household electrical and electronics appliances.
- This program provides basic knowledge in mathematics, science and technology related to Electronics field.
- Capability to design a System to meet user demand in Electronics technologic field.
- Strengthen the candidate to communicate technically effective in solving technical research and development issues.
- Encourage graduates to be good human beings and responsible citizen.
- Capability to work effectively as an individual, and as a member or leader in teams, or in multidisciplinary domain.