Prominent Aluminae Department of Mathematics

- **Raiza D'Souza** (2010-2012) - Former JRF at IIT Chennai from 2013-2018.
- **Iffath Ayesha (2014-2016)** - Cleared KSET in 2019.
- **Sumbul Rashid (2016-2019)** - Economist at national highways, UK.
- **Shreya Dhir (2016-2019)** -MSc Data science at The London school of economics and political science.
- **Akshara Sinha (2016-2019)**-MSc Data science at The London school of economics and political science.
- **Nida Murad (2017-2020)** - MSc at University of Saarland.

Career Prospects

There are a number of job opportunities available for a B.Sc. Physics graduate. Some of the top job profiles being Physicist, Lab Assistant, Research Associate, Subject Matter Expert, Technician, Radiologist Assistant. Job opportunities as a scientist exist with organizations like BARC, ISRO, DRDO, VSSC, SSPL and other many well-established research centres in India as well as abroad.

The students can carry out their research after the master programme in mathematics at various universities and institutes like TIFR (Tata Institute of Fundamental research), IISC (Indian Institute of Science) and IITs.

List of Courses after B.Sc Physics, Mathematics

1. **M.Sc in Physics**
2. **MSc in Applied Physics**
3. **MSc in Advanced physics**
4. **MSc in Particle/Nuclear Physics**
5. **MSc in Biophysics**
6. **MSc in Applied Electronics**
7. **MSc in Nuclear Science & Technology**
8. **MSc in Astronomy/Planetary Science/Astrophysics**
9. **MSc in Nanoscience**
10. **Msc Mathematics**
11. **M.Sc Actuarial Science**
12. **M.Sc Financial Mathematics and Computation**
13. **M.A/M.Sc. Statistics**
14. **M.Sc. Statistics and Operational Research**
15. **Master of Data Science**
16. **Master of Computer Applications**
17. **M.S in Applied mathematics**
18. **B.Ed**

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Department of Physics and Mathematics

Overview of the Programme

This programme facilitates the students to study two key disciplines of science, i.e., Mathematics and Physics, in depth-covering a broad range of topics in both, as comprehending high-level physics requires a strong mathematical foundation. Mathematical models are developed to explain our observations of the physical world.

The Bachelor's Degree in B.Sc (Physics-Mathematics) is awarded to the students on the basis of knowledge, understanding skills, attitudes, values and academic achievements sought to be acquired by learners at the end of this program. Hence, the learning outcomes of Physics and mathematics for this course are aim edat facilitating the learners to acquire these attributes, keeping in view of their preferences and aspirations for knowledge of these subjects. Physics is used to help us answer some of the important questions which arise in the world around us. Once we understand the processes involved in these problems, we need to translate our ideas into mathematics to find the solutions.

This programme helps learners in building a solid foundation for higher studies in mathematics and Physics which also leads to proficiency in analytical reasoning. This can be utilised in modelling and solving real life problems.

Bachelor's degree in mathematics is the culmination of 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, financial mathematics, statistics and many more. Similarly physics is the study of optics, magnetism, astrophysics, nuclear physics, thermodynamics etc. Thus they also share ideas and insights while seeking and benefitting from knowledge and insight of other subjects. This strengthens their knowledge to compete with rapidly changing interdependent society. Completion of this programme will also enable the learners to join

- Teaching profession
- Governmentjobs,
- Lab Assistant.
- Research Associate.
- Subject Expert.
- Technician.
- Radiologist Assistant.
- Academic Counsellor.
- Data Analyst jobs
- and jobs in various other public and private enterprises.

Broad Objectives of the Programme:

- Provides a synergistic, coherent, and parallel education in mathematics and Physics.
- Acquire knowledge in functional areas of Physics and Mathematics and apply invarious fields of learning.
- Recognise the need for lifelong learning and demonstrate the ability to explore mathematical and physical content independently.
  Employ mathematical ideas encompassing logical reasoning, analytical, numerical ability, theoretical skills to model real-world problems and solve them.
- Develop critical and creative thinking, self-confidence for eventual success in career.
- Analyze, interpret solution sand to enhance their entrepreneurial skills, managerial skills and leadership.
  To prepare the students to communicate mathematical ideas effectively and develop their ability to collaborate both intellectually and creatively in diverse contexts.
- Rewarding careers in Education, Industry, Banks, MNCs and pursue higher studies.

Prominent Aluminae Department of PHYSICS

Kamalam Vanninathan- Program Manager, The Science and Technology Facilities Council Swindon,United kingdom

Rashmi Ravindra Nakate- Ph.D, Bonn, GermanyBonn, Nordrhein-Westfalen, Deutschland · Researcher · Justus Liebig University, Giessen

Roopa T - 1998 batch- Ph.D and Post Doc at Stanford University.

Nidhi Sinha : Vice president , Strategy at contract India , contract Advertising India Pvt. Ltd. (A WPP Company) University of Glasgow.

Punam Ghimire: Instructor at University of Portland

Komala Shivanna- Ph. D- Maine University,currently working as Graduate Assistant at University of Maine. University of MaineSt Josephs College. Orono, Maine, United States.

Swathi Ramanathan- Ph.D- Ohio state university.(Swati Ramanathan is co-founder of Janaagraha Centre of Citizenship and Democracy

Aishwarya- Pursuing Ph. D –Uppasala University, Sweden Malvika Garikapati - Ph.Dat Steven's Institute of technology, USA, currently working as Qunatum LiDAR Engineer

Veena Jain - Principal Program Manager at Walmart. 2003 batch, University topper, Physics

Gowri patil- Research associate IISc

Divya Singh- MNIT, Jaipur

Many are working as lecturers and professors in reputed colleges across the country.