

Mathematics and Physics Degree

Vision: To train future leaders, productive and enriching citizens for society with disciplinary maturity and pedagogical skills, with clear interest in research, education and their area of training, and the ability to work with professionals from other disciplines productively. The program seeks to meet the needs of the graduates and teachers of Mathematics and Physics, keeping training, renovation, and extension and research projects oriented to the community of the region.

Objectives:

- Train Mathematics and Physics Graduates, committed to the education and the changes
- that may generate globalization processes.
- Train well rounded Mathematics and Physics Graduates, for the practice of teaching, research and extension.
- Encourage the importance of the knowledge of Mathematics and Physics in the region and surrounding areas.
- Integrate the program to national and international networks of science and technology.
- Train people with regional awareness and global vision that are aware of the importance of basic sciences in the world and their role in the development of intelligence.
- To promote educational research in basic sciences.
- Develop disciplinary training programs aimed at all faculty members of the Mathematics and Physics Department.
- Promote forums for the creation and innovation of new teaching strategies for teaching Mathematics and Physics.
- Define and promote research lines in coordination with the departments of other faculties.
- Train educators with a sense of social responsibility, skills and motivation to become leaders of this country.

Professional Profile

The Basic Sciences Faculty of the Universidad Tecnológica de Pereira seeks to train graduates in Mathematics and Physics as well rounded human beings with a research, educational and scientific capability, which may serve primarily as educators of Elementary and Middle and High School education in the areas of mathematics and Physics; Researchers of social and educational processes; Leaders and agents that carry out social changes; Educators with capacity to promote and develop innovations in teaching mathematics and physics.

For the performance of its duties it is necessary to acquire and develop disciplinary, interdisciplinary, social, research and communication skills.

Occupational Profile

The graduate in Mathematics and Physics is qualified to perform the following tasks:
Teach.

- Develop Math and Physics programs.
- Design, develop and evaluate curriculum projects in mathematics and physics.
- Coordinate and encourage learning activities for mathematics and physics.
- Induce leadership to the students so they learn tolerance, democracy and free discretion.

In order for the Mathematics and Physics graduate to perform these tasks he/she must learn how to: learn, be, do, research, live, teach and learn by doing. In other words, he/she shall:

- Have theoretical and practical mastery of the basic sciences.
- Possess knowledge in curriculum planning and educational administration.
- Prove domain of the knowledge and learning theories.
- Have pedagogical and research skills and knowledge.

Fuente:

<http://www2.utp.edu.co/english/academic-programs/83/mathematics-and-physics-degree>



Universidad Tecnológica
de Pereira