MATHEMATICAL SCIENCES

APPLIED MATHEMATICS

What is Applied Mathematics

It is a branch of mathematics that concerns itself with the mathematical techniques typically used in the application of mathematical knowledge to other domains.
Mathematics is of vital importance to any serious scientist.

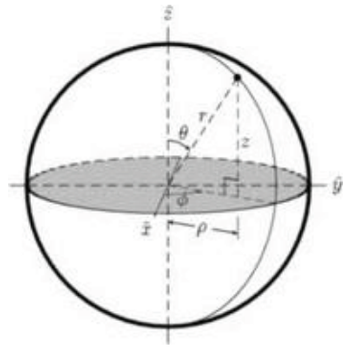
Career opportunities

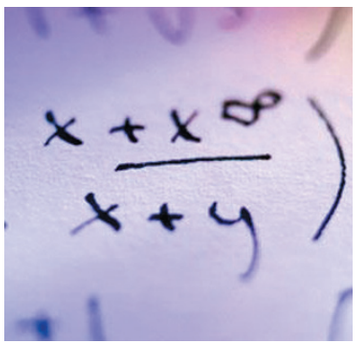
A career in applied mathematics is not just about crunching numbers. It's a career that uses mathematics to solve problems in the environment of your choice. Many different types of organizations, from governmental research organizations to independent consultants, hire mathematicians and computational scientists. Some examples of organizations, corporations, and research institutions that hire mathematicians and computational scientists:

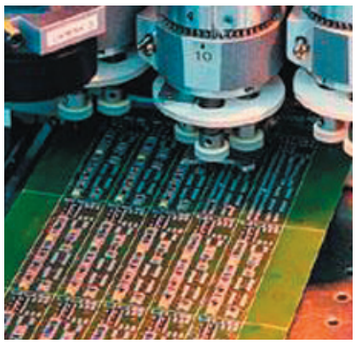
- Aerospace and transportation equipment manufacturers
- Chemical and pharmaceutical manufacturers
- Communications service providers
- Computer service and software firms
- Consulting firms
- Electronics and computer manufacturers
- Energy systems firms
- Engineering research organizations
- Financial service and investment management firms
- International government agencies
- Medical device companies
- Nonprofit organizations
- Producers of petroleum and petroleum products
- Publishers
- University-based research organizations
- Government agencies
- Government labs and research offices

What subjects should be taken at school

Mathematics and Physical Science







APPLIED SCIENCE

What is Applied Science

It is the application of scientific knowledge transferred into a physical environment. Examples include testing a theoretical model through the use of formal science, or solving a practical problem through the use of natural science. Applied science is important for technology development. Its use in industrial settings is usually referred to as research and development (R&D). Applied science differs from fundamental science, which seeks to describe the most basic objects and forces, having less emphasis on practical applications.

Career opportunities

Applied science career opportunities:

- Systems Analyst;
- Network Administrator; and
- Database Administrator.

What subjects should be taken

Mathematics and Physical Science

SCIENCE TRAINING

Considering that the prerequisites at universities and universities of technology sometimes differ, we recommend that you contact the university or university of technology of your choice, to ensure that you meet with their specific prerequisites.

University

The BSc (Bachelor of Science), the usual "first" degree in the Faculty, requiring a minimum of three years study after school. A wide range of subjects can be studied in order to qualify for this degree. The BSc(Hons) may be regarded as a fourth year to an ordinary BSc. The MSc (Master of Science) and PhD (Doctor of Philosophy) degrees are awarded after postgraduate research study, and the writing of a thesis.

University of technology

The National Diploma is awarded after three years successful study. After the fourth year a BTech (Bachelor in Technology) will be awarded. After the fifth year the MTech (Master of Technology) will be awarded and after that the DTech (Doctor of Technology).