

Applied Mathematics Leaving Cert

Subject/Course Choice

Applied Mathematics is a subject that combines many real-life applications of maths and physics. This subject can be a good complimentary subject for students who excel in both Maths and Physics and can be a beneficial subject for getting additional points in the **Leaving Certificate**.

Applied maths brings the principles of maths and science into everyday use with questions on projectiles, fluids etc.

Subject Overview

The general aims of mathematics education apply.

Content

The entire course content is given below. Those parts given in italics are for Higher level only. The Higher level course includes the Ordinary level course treated in greater depth.

- Motion: displacement, velocity, relative velocity
- Newton's laws of motion; acceleration
- Straight line motion; inclined plane; connected particles
- Equilibrium under concurrent forces
- Centre of gravity
- Pressure in liquids; Archimedes' principle
- Projectiles; projectiles on inclined plane
- Angular velocity; uniform circular motion
- Conservation of momentum; direct collisions; oblique collisions
- Simple harmonic motion
- Rigid body motion; moments of inertia; angular momentum
- Differential equations: (a) first order, variable separable; (b) second-order reducing to type (a).

Assessment

There is a separate examination paper for Ordinary level and Higher level.

Did you know?

Did you know that TCD also accepts Applied maths as a science subject for entry into both the science and pharmacy faculties?

BEWARE: For TCD it cannot be used as a second science subject when the first is maths.