

## INFORMATION NOTE

# HEAD START MATHS

## (REFRESHER MATHS PROGRAMME)

### HEAD START MATHS (REFRESHER MATHS PROGRAMME)

The Head Start Maths aims to allow prospective students a thorough revision and consolidation of key basic mathematical topics prior to attending their course.

#### Who is this course for?

The aim of this short course is to revise and consolidate key basic mathematical topics that are necessary for students prior to entry onto the programmes in IT Tallaght which contain mathematical content.

It will also act a refresher for those who have recently left school or for mature students that have been out of the education system for some time.

You should consider completing this short course if any of the following apply to you?

- You do not meet the mathematics requirements for the course of your choice.
- You are considering completing an Engineering or Science course which involves advanced mathematics for example FESCAP (Ab –Initio Ordinary Degree in Mechanical Engineering) part time
- You are a mature applicant who has applied to IT Tallaght for an engineering, science or computing course and you would like to do some preparatory work on your mathematics prior to starting your course in September 2018.

#### Entry Requirements

The course is open to all prospective students

#### Course Timetable

The course runs on 5 consecutive Saturday mornings from 10:00- 13:00, students will also be required to study online using resources that are provided.

The course will be run three times over the coming months:

#### Cohort 1

Saturday 13th January - Saturday 10th Feb.2018

#### Cohort 2

Saturday 26th May – Saturday 30th June 2018

#### Cohort 3

Saturday 11th August – Saturday 1st Sept.2018

#### Course Summary

The course will provide you with opportunities to cover the following topics:

- Calculate and simplify numerical expressions involving scientific (stand form) notation
- Manipulate and solve algebraic expressions and equations.
- Apply the basic techniques of trigonometry to solve problems.
- Find the equation of a straight line through data.

#### Course Content

##### Arithmetic

Real numbers, indices, fractions, scientific form

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### Algebraic expressions and formulae

Precedence rules

Manipulation of algebraic expressions

Manipulation of algebraic fractions

Factorisation of quadratic expressions

Recognition of the graphs of simple quadratic forms

### Algebraic equations

Solution of linear and quadratic equations

Co-ordinate geometry

Cartesian co-ordinates

Equation of a straight line

Plotting simple linear laws, y-intercept and slope

### Trigonometry.

Right-angles triangles, sin, cos and tan

Pythagoras' theorem

Solution of right-angles triangles

Introduction to sine and cosine rules

Please apply through by completing an application form available at <http://www.it-tallaght.ie/parttimecourses>

Total cost of course is €100 payable on application this fee (Postal order or Bank Draft – NO CASH is accepted). This fee includes the supply of your course book Foundations in Mathematics, a Scientific Calculator and access to online resources

### For further information or enquiries

Please contact [LLL@it-tallaght.ie](mailto:LLL@it-tallaght.ie) or phone the Lifelong Learning Team @ 01-4042101

**How to Apply**

**Students apply directly to IT Tallaght**