

# Handout Package

This Handout provides preliminary information for the Transition Year project week. It will also help you to answer some questions in the online application form. We recommend you review as many of the links below, but you are also free to do your own research.

## The Application Process

To apply for the Infineon TY project week and competition you must complete an application process. Go to <u>chipsatschool.typeform.com/to/yI03gX</u> here and complete the questions. The links below and the topics covered in this document will help you answer the questions in the application process and introduce you to the variety of topics you will encounter over the course of the Chips@School experience.

If you have any technical issue please contact ChipsAtSchool.Ireland@infineon.com.

Your application will be reviewed by a panel of judges. The panel will look at your application and mark it for enthusiasm, your depth of knowledge and creativity. The closing date for receipt of application is 09.02.2018. We will let you know if you have a place on the programme by 16.02.2018.

## Semiconductors → How do Transistors Work?

Short videos and documents on the fundamentals of semiconductors and their applications. As well as the fundamentals of numeric systems for better understanding.

Why is Silicon used for Computer Chips? How to Diodes How do Transistors work? How do Transistors work 2? Binary and other numeric systems Periodic table

## <u>CPU</u>

A video on the complete process producing a CPU and the different process stages.

The making of a CPU

#### Analog vs. Digital

Important fundamentals to understand the way sensors work.

<u>Analogue vs. Digital video</u> <u>Analogue vs. Digital read</u> <u>Analogue vs. Digital comparison chart</u>









## Intro to sensors

Basic explanation of sensors and their physical fundamentals with some examples.

Intro to sensors

## <u>loT</u>

Short video on what the Internet of things is and what possibilities it can establish.

What is IoT

## <u>Marketing</u>

Explanation of the stages a product goes through when newly introduced to the market

Product lifecycle stages

#### Team Management

Explanation on roles of teams and how set up a good team atmosphere

https://www.mindtools.com/pages/article/newTMM\_95.htm

Have fun researching and good luck with your application! We are looking forward to it!





