

ENGINEERING AT THALES





HANDS UP



WHAT DO
ENGINEERS DO ?

A LOT!

ENGINEERING AFFECTS ALMOST EVERY INDUSTRY IMAGINABLE.



ROLLERCOASTERS

VEHICLE ENGINEER

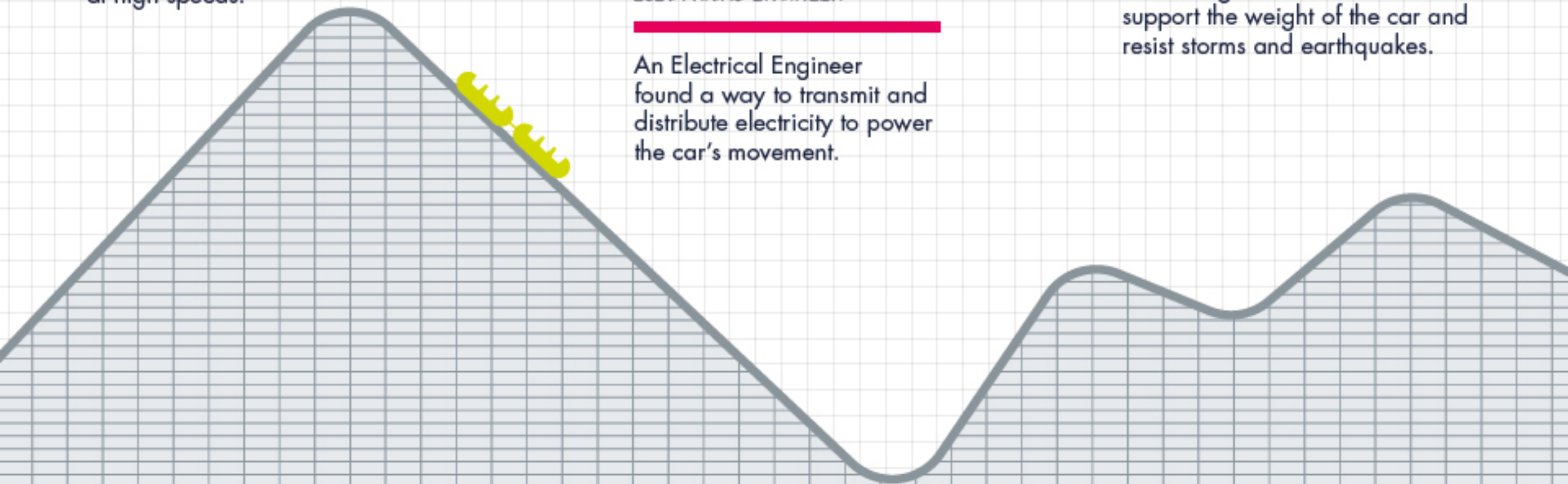
A Vehicle Engineer designed the systems that move the car at high speeds.

ELECTRICAL ENGINEER

An Electrical Engineer found a way to transmit and distribute electricity to power the car's movement.

STRUCTURAL ENGINEER

A Structural Engineer worked on making sure the track could support the weight of the car and resist storms and earthquakes.



PHONES

SOFTWARE ENGINEER

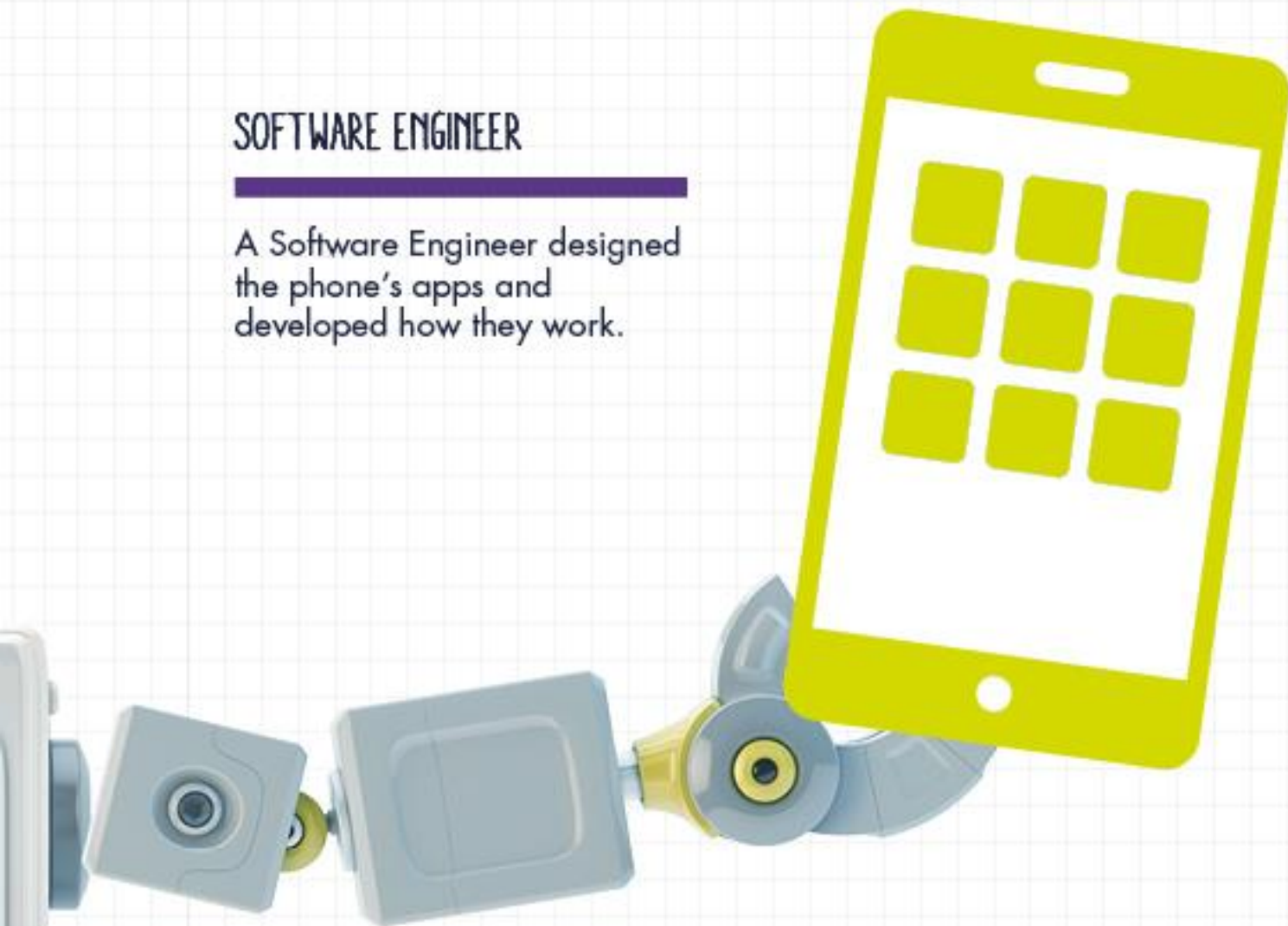
A Software Engineer designed the phone's apps and developed how they work.

TELECOMMUNICATIONS ENGINEER

Thanks to a Telecommunications Engineer your phone can connect to satellites and other phones, so you can make calls, send texts and get on the Internet.

HARDWARE ENGINEER

A Hardware Engineer created the circuits and the physical parts of the phone, and tested it, to make sure it worked properly.



TRAINERS

SPORTS ENGINEER

A Sports Engineer designed, developed and tested this trainer and all kinds of other sports equipment.



WEB ENGINEER

A Web Engineer made it possible for you to view and purchase these trainers and other bits of clothing online.

TEXTILE ENGINEER

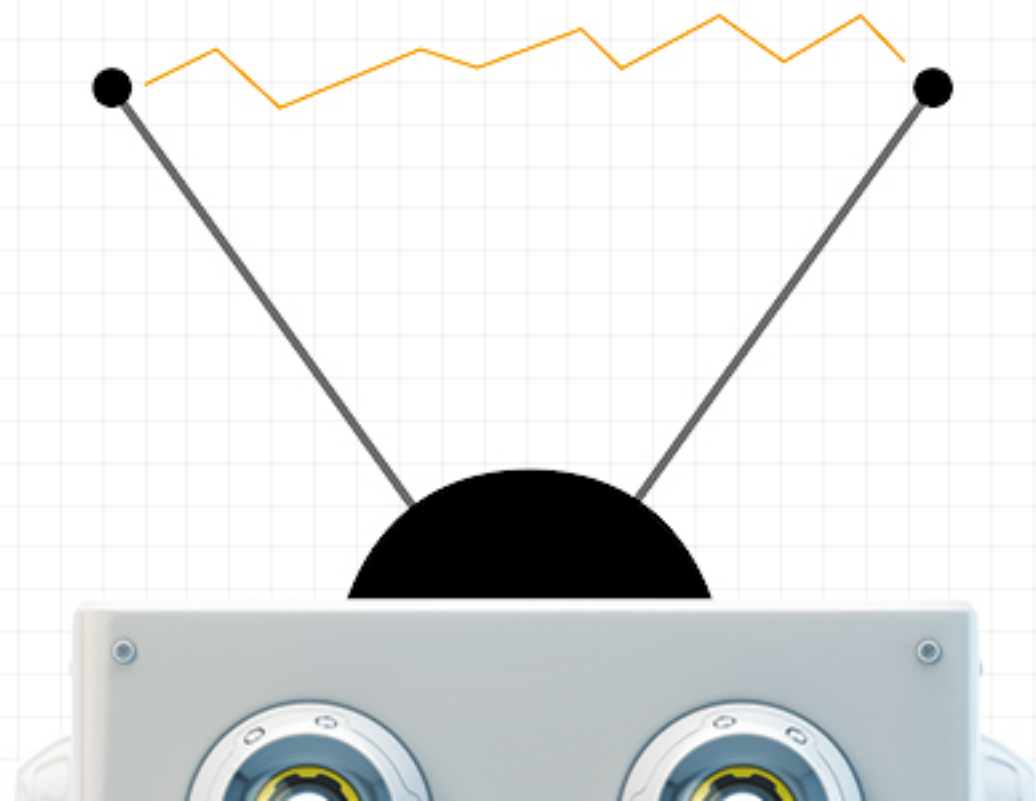
A Textile Engineer worked out what fabric to use and the machinery to actually make the trainers.

WHAT DO YOU
NEED TO BECOME AN
ENGINEER

?



SCIENCE
TECHNOLOGY
ENGINEERING
MATHS





SCIENCE
TECHNOLOGY
ENGINEERING
MATHS



CURIOSITY
COMMUNICATION
DEDICATION

WHY ARE WE
TALKING
TO YOU ABOUT
ENGINEERING





THE WORLD
NEEDS
MORE ENGINEERS.

THERE'S A SHORTAGE OF ENGINEERS.

AT LEAST

20,000 LESS

THAN WE NEED ANNUALLY



STATISTICS



1.74 jobs supported
by every person employed
in engineering

19% of total
UK employment is
in engineering

7% rise in 2015
in the number of UK
engineering enterprises

By 2024
there will be a demand for
265,000 skilled engineering
entrants annually

68% of engineering
graduates find full-time work
six months after graduation

96% of teachers
would recommend a career in
engineering to their pupils

WHAT DO WE DO AT

THALES



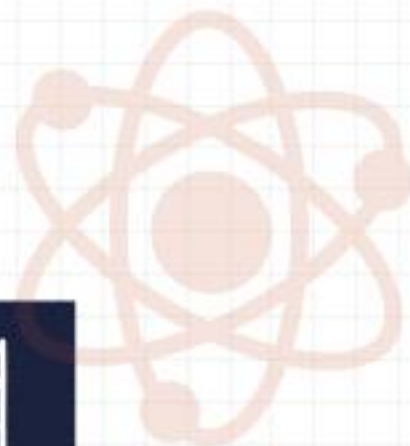
AEROSPACE

SPACE

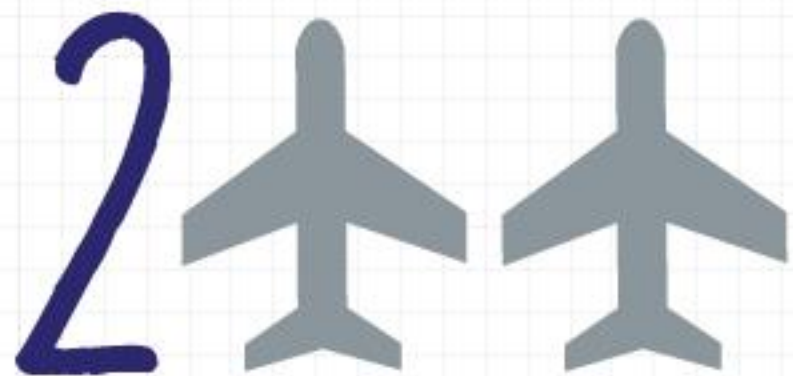
TRANSPORTATION

DEFENCE

SECURITY



AEROSPACE



OUT OF EVERY 3
AIRCRAFT IN THE WORLD
USE OUR EQUIPMENT TO
SAFELY TAKE OFF AND LAND.



OVER 130,000
PEOPLE ENJOY OUR IN-FLIGHT
ENTERTAINMENT SYSTEMS.

SPACE

WE'RE LEADING
IRIDIUM NEXT, THE

WORLD'S

LARGEST

CONSTELLATION OF SATELLITES.



WE'RE THE WORLDWIDE

LEADER

IN SATELLITE OCEANOGRAPHY.



TRANSPORTATION



WE HELPED
CREATE
THE NATIONAL RAIL
ENQUIRIES ONLINE
JOURNEY PLANNER AND
THE RAIL PLANNER LIVE APP.



OUR FARE COLLECTION
SYSTEMS HANDLE OVER
50 MILLION
TRANSACTIONS DAILY.

DEFENCE

WE HELP
DESIGN 
SOME OF THE NAVY'S
BIGGEST SHIPS.

WE MADE THE
RADAR SYSTEMS
 THAT ENABLE THEM
TO COMMUNICATE.

SECURITY

WE MADE
TEOPAD,



WHICH USES PATENTED
TECHNOLOGY TO ENSURE
PEOPLE'S DATA AND
INFORMATION STAYS SAFE.

THALES
SECURES



THE INFORMATION
SYSTEMS OF 19 OF THE
WORLD'S 20 LARGEST BANKS.

ALL THIS AMAZING WORK IS
BEING DONE BY THALES'
VERY OWN ENGINEERS.

SOFTWARE ENGINEERS

ARE CREATIVE PROBLEM-SOLVERS
WHO LOVE CODING AND DESIGNING
LARGE COMPUTER SOFTWARE SYSTEMS.



AT THALES

Software Engineers
write flight simulator
training programmes to
train pilots to fly.



SYSTEMS ENGINEERS

THEY DO EVERYTHING FROM
DESIGNING NEW PRODUCTS
TO CREATING LARGE
SOFTWARE PROJECTS
AND DEVELOPING NEW TECH.

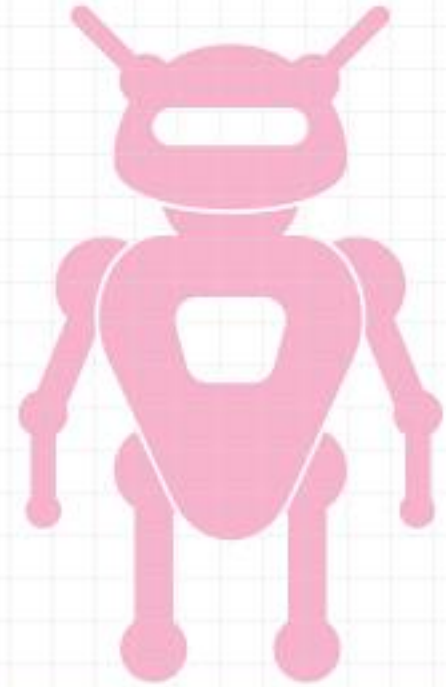


AT THALES

Systems Engineers get involved in so many different projects that they often work in teams with other engineers.

MECHANICAL ENGINEERS

DESIGN, BUILD, TEST AND
PRODUCE ALL KINDS OF MACHINES
AND DEVICES FROM POWER
STATIONS TO HOUSEHOLD APPLIANCES.



AT THALES

Mechanical Engineers work on
aircrafts and in other areas like
robotics and cyber security.

ELECTRICAL ENGINEERS

ARE SCIENCE WHIZZES THAT
OFTEN CREATE NEW
TECHNOLOGIES AND MAKE SURE
THOSE TECHNOLOGIES WORK
WITH THE HARDWARE
THEY ARE BEING PUT INTO.

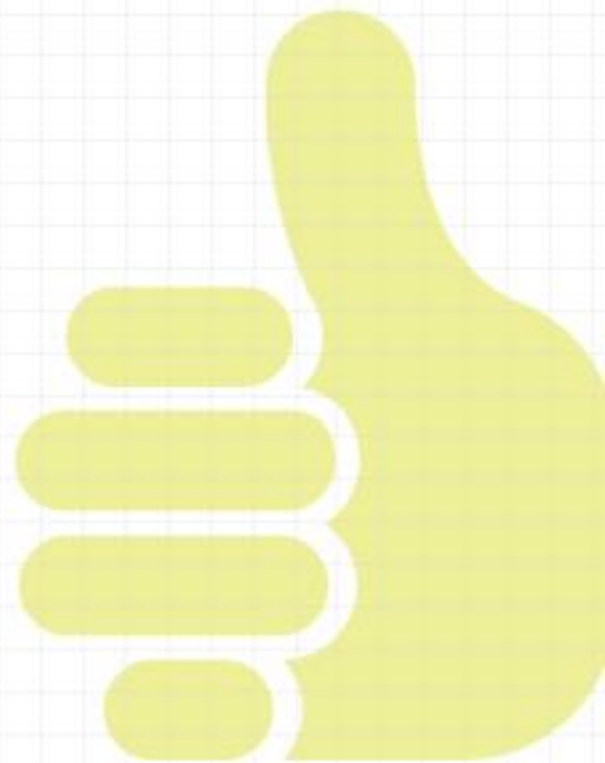


AT THALES

Electrical Engineers design,
make and test the electrical
systems in electric motors,
radars and navigation systems.

MANUFACTURING ENGINEERS

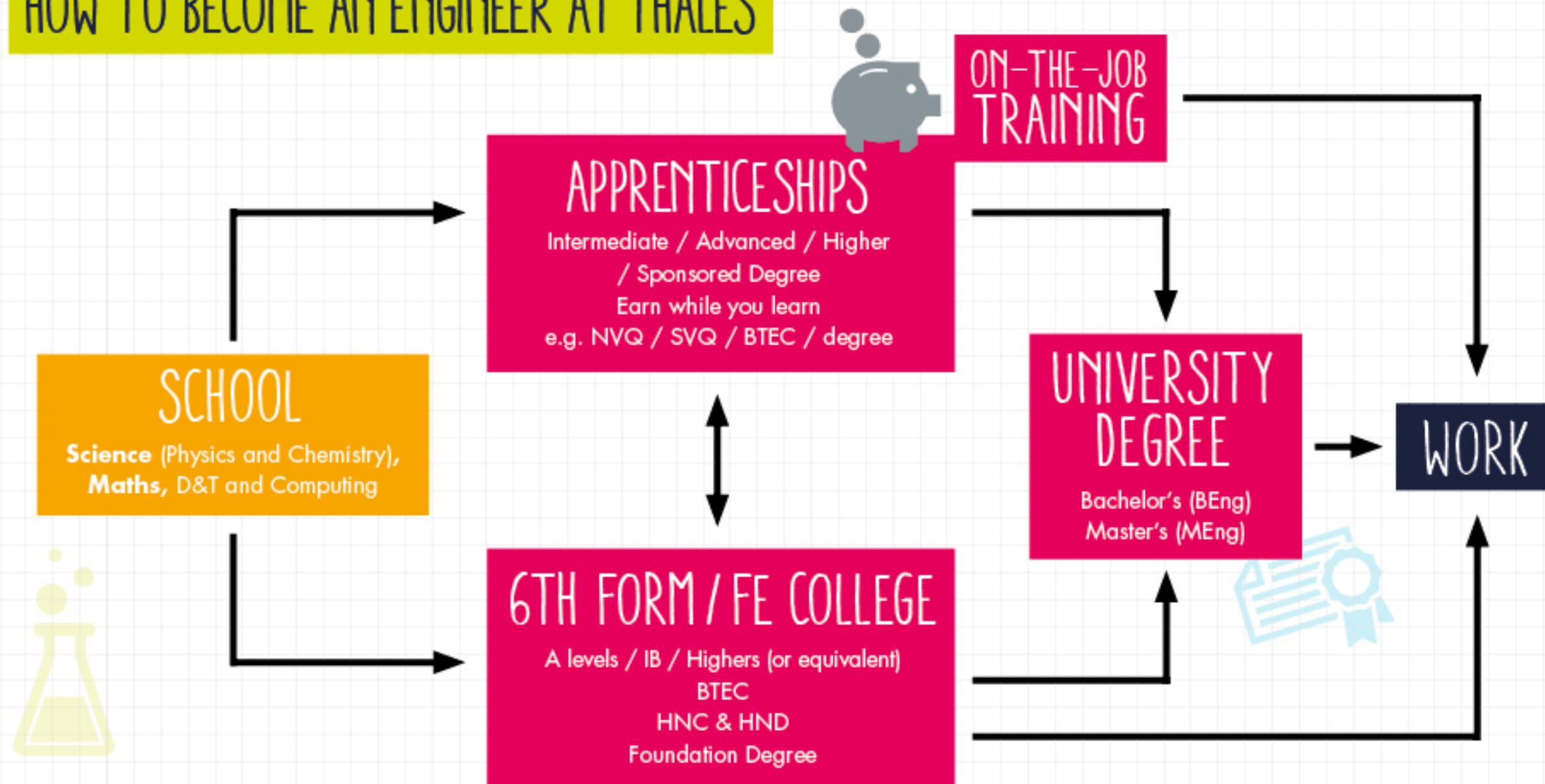
HAVE THE JOB OF FIGURING
OUT HOW TO MAKE THE
PRODUCTION OF THINGS MORE
EFFICIENT AND RELIABLE.



AT THALES

Manufacturing Engineers are part
of product development and are
always making changes to improve
how things are working.

HOW TO BECOME AN ENGINEER AT THALES



WHAT'S IT LIKE BEING AN APPRENTICE?

There are lots of different kinds of apprenticeships that vary in length and give you a different qualification.

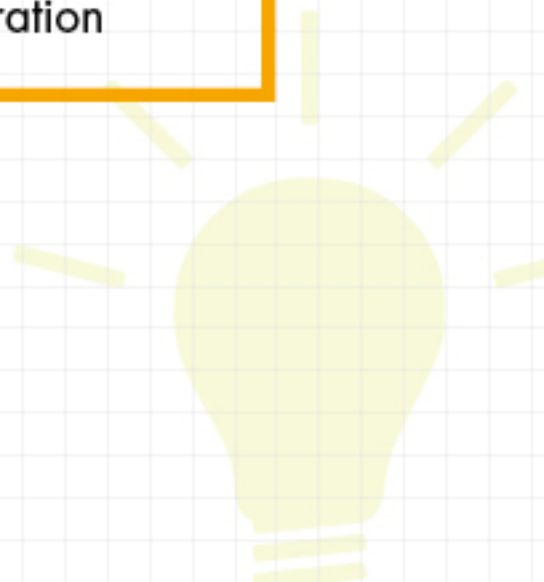
You'll get on-the-job training and classroom learning

You'll earn while you learn

You'll work towards your professional registration

You can apply from 16

You'll greatly improve your chances of getting a full-time job after completing your training



WHAT'S IT LIKE BEING A GRADUATE?

The most popular route is to do an undergraduate degree. Sometimes people will go on to do a master's degree to really develop their expertise in engineering.

You'll study a lot of different courses

You'll network with professors and learn from industry professionals

You can become eligible for a professional registration as an Incorporated Engineer or Chartered Engineer

If your degree allows, you could work abroad for a year as part of your programme

Once you graduate, you'll have a lot of career options available



WHY I LOVE BEING AN
ENGINEER AT THALES.





ANY QUESTIONS?



HANDS UP

A stylized illustration of a robotic hand, colored in shades of grey and purple, holding a bright yellow rectangular sign. The sign features the words "THANK YOU" in a large, dark blue, hand-drawn font. The background of the entire image is a light blue grid.

THANK YOU

THALES

Together • Safer • Everywhere