



ACRO in Action



Isambard Kingdom Brunel

Job Profile

Job Title: Engineer

Job Profile: Engineers apply the principles of science and mathematics to develop economical solutions to technical problems. Their work is the link between scientific discoveries and the commercial applications that meet people’s needs. Many engineers develop new products.

Subjects: Design & Technology, Maths, Science

Key Skills	
A ttitude	Try New Things: Engineers use their knowledge of how things work but will often try new things to improve their designs and solve new problems.
C reativity	Problem-Solving: A key role of an engineer is to solve a problem. Brunel solved many problems with innovative ideas—eg SS Great Britain.
R elationships	Innovation: When engineers come up with new innovative ideas, they need to persuade others that they will work, solving the problem in the best, most efficient way.
O rganisation	Managing Risk: Engineers must constantly manage any risk associated with their designs. For example, ensuring a bridge will hold the weight it is designed for.

What I love about my job: I love solving problems. I believe that a great engineer can make life better for everyone and I like that my solutions are not only practical, but also beautiful. I love the variety in my job—I have designed bridges, railways, stations and boats.