Science and Engineering Fast Stream Narrative 2020

Narrative for Future SEFS

Society faces many challenges which science can help solve. The government needs a pipeline of highly talented, versatile, and numerate scientists and engineers to deliver on exciting and challenging work that will make a difference to the lives of people across the UK. The Covid-19 crisis has highlighted the essential role of scientists and engineers in improving the quality of government decisions: to ensure not only that scientific evidence underpins policy but also that it is effectively communicated.

You may be a science or engineering graduate straight out of university, an experienced postgraduate academic, a seasoned industry professional or a current civil servant with scientific experience. Join us and you will become part of a modern, vibrant, and active community of science and engineering professionals, who have one goal in common: to give back to the communities they serve. Whatever your disciplinary background, you will have a unique set of technical skills that make you stand out from the wider Fast Stream. Over three years, you will experience a wide range of stretching but rewarding postings while being supported to grow through a tailored personal development programme and mentoring. Your unique set of postings will be across different government departments, and may also include local government, charity, or private sector roles. Together, these will further develop your ability to apply your scientific mindset while building on your leadership potential to prepare you to become a future senior leader in the Civil Service.

During all your postings you will be involved in building and applying scientific knowledge so government can address key issues such as climate change or sustainable housing. You could be conducting critical analyses on large datasets, modelling a public health crisis, or generating evidence that will inform decision making around clean energy infrastructure. You might be creating new requirements and standards or helping industry and other stakeholders understand and comply with legislation and statutory regulations, such as food safety standards or transport emissions.

From your scientific background you will understand the importance of developing and communicating evidence bases by interacting with scientific communities in academia and industry. During the scheme you will often communicate science and engineering advice for government. For example, when evaluating new equipment and technologies to help protect our armed forces, you will use your critical perspective to interpret complex information for non-expert audiences.

You will be passionate about science and engineering. Whilst on the scheme you will advocate for increasing its use across government and helping to promote and develop your profession, such as through schools and university outreach work.

As a future leader of the civil service, you will be expected to lead on work from an early stage, including but not exclusively of a technical nature. This might involve management of research projects or working with policy teams to develop solutions for ministers and senior officials. By acting as an intelligent customer, you could oversee technical work to ensure successful delivery of a policy like a new inter-city transport project or a research programme into artificial intelligence. To do so, you will work adeptly and strategically with experts and key delivery partners in industry.

You could also be involved in horizon scanning work to identify future trends and patterns of emerging technologies, like autonomous vehicles, artificial intelligence, or genomics. You may be involved in applying systems thinking to help solve some of the highly complex problems government faces.

Your unique skillset combining technical and leadership ability and your adaptability to work in both technical and non-technical environments will make you widely deployable across the civil service both during and after the scheme. When you finish the three years, you may wish to specialise in specific areas and take on technical leadership and oversight roles, possibly influenced by your previous academic qualifications and experiences. You might instead want to apply your technical skills in a policy or operational delivery role. Alternatively, you may decide to go into more direct leadership and management roles in non-technical environments, but still be affiliated with the science and engineering profession and continue to help promote science and engineering and the use of evidence-based decision making across government.

Whichever path you eventually choose, the Science and Engineering Fast Stream will develop you into a confident and inspiring future senior leader in the civil service - supporting our ambition to put science and engineering at the heart of government policy.
