

The Engineering Council

This engineering lens has been developed by Vitae and the Engineering Council.

The Engineering Council is the UK regulatory body for the engineering profession, responsible for setting and maintaining internationally recognised standards of professional competence and ethics, and holding the Registers of professionally qualified engineers and technicians.

Licences are granted by the Engineering Council to discipline-specific professional engineering institutions, allowing them to assess candidates for inclusion on its register of professional engineers and technicians, and to accredit academic programmes and professional development schemes. To gain CEng status, you must be a member of a licensed professional engineering institution, who will act as the awarding body for your registration.

For further information about the Engineering Council see www.engc.org.uk

Information about CEng registration is available see www.engc.org.uk/ceng

UK-SPEC for Chartered Engineer

Chartered Engineers are characterised by their ability to develop appropriate solutions to engineering problems, using new or existing technologies, through innovation, creativity and change. This might involve developing and applying new technologies, promoting advanced design and design methods, introducing new and more efficient production techniques, marketing and construction concepts, or pioneering new engineering services and management methods.

There are five headline competence and commitment standards for Chartered Engineers:

- Use a combination of general and specialist engineering knowledge and understanding to optimise the application of existing and emerging technology
- Apply appropriate theoretical and practical methods to the analysis and solution of engineering problems
- Provide technical and commercial leadership
- Demonstrate effective interpersonal skills
- Demonstrate a personal commitment to professional standards, recognising obligations to society, the profession and the environment

Each is further explained with exemplar activities at:

www.engc.org.uk/ukspec

“The RDF ‘engineering lens’ will be a very useful tool. It will certainly be of interest to both researchers and potential employers in understanding the set of skills and competencies of professional engineers.”

Daniela Bultoc
Skills Development Programme Manager, Graduate School,
University College London

To protect and maintain the integrity of the Vitae Researcher Development Framework and the Researcher Development Statement (RDS)² and to ensure a consistent approach to the development of lenses on the RDF, anyone wishing to create a lens on the RDF should seek permission from Vitae, and must adhere to the RDF Conditions of Use³. Enquiries regarding the development of a lens on the RDF can be directed to: rdf@vitae.ac.uk

For further information about the range of Vitae activities go to www.vitae.ac.uk or contact website@vitae.ac.uk

Vitae is led and managed by CRAC: The Careers Research and Advisory Centre and supported by Research Councils UK (RCUK) and UK HE funding bodies

CRAC

RESEARCH COUNCILS UK

Department for
Employment
and Learning
www.delhi.gov.uk

hefce

Cyngor Cylido Addysg
Uwch Cymru
Higher Education Funding
Council for Wales

hefcw

Scottish Funding Council
Promoting further and higher education

Engineering Council

vitae
realising
the potential
of researchers

Researcher
Development
Framework

Engineering lens on the Vitae Researcher Development Framework and the Engineering Council’s UK Standard for Professional Engineering Competence

Overview

The Vitae Researcher Development Framework (RDF) underpins a major new approach to developing world-class researchers. The framework has been developed by and for researchers working in higher education as an aid to planning, promoting and enhancing professional and career development. It articulates the knowledge, behaviours and attributes of successful researchers and encourages all researchers to realise their potential.

This is one of a series of lenses on the Vitae Researcher Development Framework.

For further information about the Vitae Researcher Development Framework visit www.vitae.ac.uk/rdf

For further information about the UK Standard for Professional Engineering Competence (UK-SPEC) published by the Engineering Council visit www.engc.org.uk/ukspec

Supporting materials relating to this lens are available at www.vitae.ac.uk/rdfenses

What is this lens?

This lens is for researchers in engineering and technology who aspire to achieve Chartered Engineer (CEng) status. It provides a bridge between the Vitae Researcher Development Framework and the competence and commitment standard for CEng status that is set out in UK-SPEC¹, published by the Engineering Council.

The CEng title is awarded to those who can demonstrate the requirements published in UK-SPEC, and the assessment process includes a review of submitted documentary evidence. Evidence can be derived from a range of sources, for example research, managing research contracts, industry-related activity, taught modules and public engagement. This lens demonstrates the strong link between the UK-SPEC requirements for CEng and the development of an engineering researcher’s knowledge, understanding, skills, competence and attributes. It is intended to help researchers to make these links and assist them in identifying elements of their research activity that could demonstrate CEng competence. It can also be used as a professional development tool/planner to identify further areas of development. Gathering evidence around Phases 2 and 3 in the RDF will help in demonstrating CEng competence.

Why become registered as a Chartered Engineer?

Having CEng after your name carries considerable prestige. It demonstrates that you have achieved the high standards of competence and commitment that are required for this internationally recognised professional title. It sets you out as a key player in the world of engineering and technology, makes your skills more marketable in an international environment and commands respect from industry.

How to become registered?

If you don’t already belong to a professional engineering institution, then joining one is the first step on the way to achieving CEng status. A list of engineering institutions that are licensed to assess candidates for registration is available at www.engc.org.uk

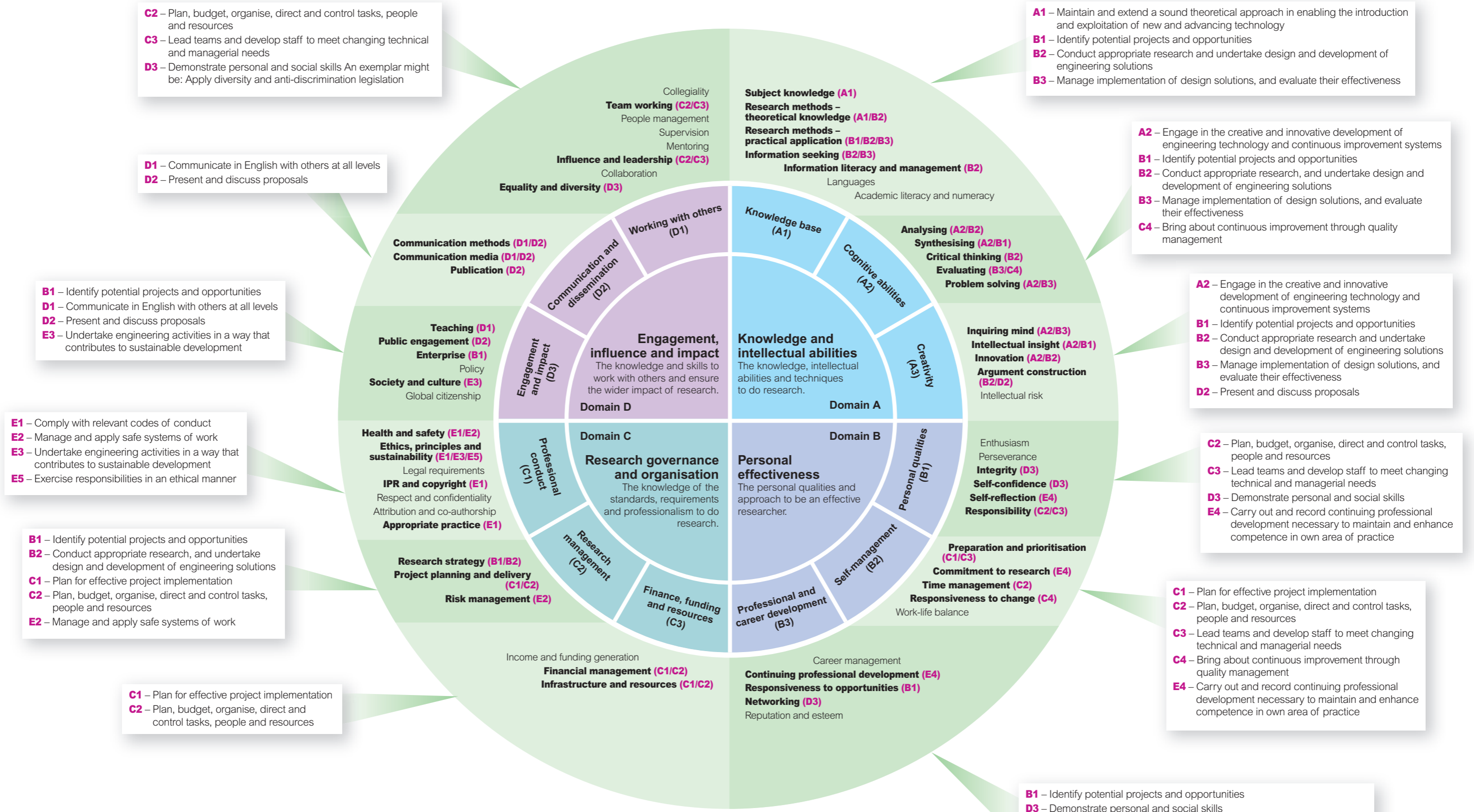
Institutions are usually able to put you in touch with a mentor who will support you through the registration process. You need to plan and document the development of your skills and competence for CEng. The lens over the page will help you to make the link between what you do as a researcher and the UK-SPEC standard for CEng registration.

² www.vitae.ac.uk/rds

³ www.vitae.ac.uk/rdfconditionsofuse

¹ UK-SPEC is available to download: www.engc.org.uk/ukspec

Engineering lens on the Vitae Researcher Development Framework



Key RDF descriptors that relate to the UK-SPEC competence and commitment standard for CEng are denoted in **bold in the outer circle**. The UK-SPEC standard for the descriptor is denoted in **pink (A1, B2 etc)** and listed in the **boxed text**. Further information about the standard and exemplar activities can be found at www.engc.org.uk/ukspec