



**Graduate
Development
Grant 2021**

Introduction & background

ECITB have developed the Graduate Development Grant to meet a demand from industry to support the development of engineering graduates' soft skills against the standards set out in the Engineering Council Standard for Professional Engineering Competencies (UK-SPEC) C, D & E. The grant supports employers training graduates towards the outcomes expressed in these competencies. In implementing this grant, the ECITB are assuring consistency of development and providing all employers with the opportunity to develop their engineering graduates.

This year, this scheme has been updated to reflect the new, fourth edition of the UK-SPEC and to include the development of graduates in the areas of sustainable development and ethical responsibilities.

The funding is to support employers through the period of development for any new graduate entering the industry and supports the development of engineering graduates in areas which should lead to improved project delivery – specifically:

- project capability
- leadership
- commercial awareness
- interpersonal skills
- diversity and inclusion
- ethical awareness
- communication and stakeholder management
- risk management
- negotiation skills
- digital leadership
- contributing towards the net zero economy

Developing graduates in these areas should increase their ability to bring value within the company and, in particular, the effective delivery of projects and the creation of a welcoming, forward thinking and innovative working environment.

Funding details

The funding value for this grant will be up to £12,000 across a three year period and will be paid against the following milestones:

1. Company training plan approved and graduates' eligibility approved by ECITB.
2. Graduate still in employment, on approved training plan at commencement of 2nd year and evidence of training completed in year 1 provided to ECITB.
3. Graduate in employment, and evidence of completion of training plan at the end of 2nd year provided to ECITB.

Applying for the funding – process and requirements

To be able to access this funding your company's graduate training plan must be approved by the ECITB Graduate development grant panel and your graduates must meet specific requirements.

1. Company graduate training plan

First, your company must submit evidence of how your company graduate training plan will provide training interventions for your graduates in the knowledge, skills and behaviours (KSBs) needed to deliver each work-based activity (WBA) that underpins the learning outcomes in the ECITB's graduate development grant training framework. The same training intervention can underpin more than one WBA.

The ECITB's training framework links to the Chartered Engineer standard for the Engineering Council's UK-SPEC (fourth edition) for providing technical management and leadership (C), communication and interpersonal skills (D), personal and professional commitment to sustainable development and ethics (E3 and E5).

Your graduate development scheme may already link to these competencies. There are also recommended ECITB training courses designed to support development of some of these key skills.

The scheme that you submit can be a mix of training interventions on and off the job – the key thing is that at the end of the training, supported by this grant, your graduates have undertaken training to gain the KSBs needed to enable them to undertake work that provides evidence of competencies against the UK-SPEC for Chartered Engineer.

It is expected that this training will take around 24 months for the graduate to complete.

Once submitted, your application is reviewed by the ECITB's Graduate development grant panel to ensure it meets the requirements of the grant (for more information on these requirements see later in this document).

If it does, you will receive notification that your company's training programme has been approved by the ECITB and you can move to the second stage of the process – confirming eligibility of the graduates to be developed.

2. Graduates that are supported

Once your company's graduate framework training plan has been approved by ECITB then you must provide evidence for each graduate that they are eligible to receive this funding.

This funding is available for any engineering graduate who has graduated at either Bachelors or Masters level with an engineering degree which means they are eligible to be put forward for professional development against the UK-SPEC of the Engineering Council. For clarity, a list of institutions associated with the engineering construction industry below. The graduates must also:

- Be employed by an ECITB in scope company throughout the duration of the training.
- Have graduated within the last 24 months of starting the ECITB approved scheme.

Funding Process

Funding is managed through the Membership Services Portal (MSP) and, after the training programme has been approved by the ECITB and eligibility of the graduates confirmed, an Agreement between the employer & ECITB is required to be signed by both parties before funding can commence.

Each graduate is entered into the ECITB's MSP system by your company. Your designated Account Manager will review the eligibility of each graduate and either approve or defer them. If approved this will trigger the grant. If deferred your Account Manager will contact you to discuss.

List of Institutions licensed by Engineering Council to assess against UK Spec

British Institute of Non-Destructive Testing (BINDT)
Chartered Institution of Building Services Engineering (CIBSE)
Chartered Institution of Highways & Transportation (CIHT) **
Chartered Institution of Plumbing & Heating Engineering (CIPHE) **
Chartered Institution of Water & Environmental Management (CIWEM)
Energy Institute (EI)
Institution of Agricultural Engineers (IAgrE) **
Institution of Civil Engineers (ICE)
Institution of Chemical Engineers (ICHE)
Institute of Cast Metals Engineers (ICME) **
Institution of Engineering Designers (IED)
Institution of Engineering & Technology (IET)
Institution of Fire Engineers (IFE) **
Institution of Gas Engineers & Managers (IGEM)
Institute of Highway Engineers (IHE)
Institute of Healthcare Engineering & Estate Management (IHEEM) **
Institution of Lighting Professionals (ILP)

Company deliverables to ECITB

As the training progresses, interim evidence of each graduate's individual training achieved at the end of year 1 and planned training for year 2 will be requested. This evidence must be mapped to the learning outcomes and each work activity as detailed on the following pages.

Again, this is loaded into the MSP and then reviewed by your account manager.

This process is repeated at the end of year 2 where evidence of all training against each learning objective and each work activity must be provided for each graduate in order to be awarded the final completion grant.

Funding for other elements of UK-SPEC

Funding remains available for training against competencies A&B which support the technical knowledge of a graduate. This funding would be managed with an ECITB Account Manager in the normal account management meeting and training plan reviews.

Future updates to this scheme

The learning outcomes of this scheme will be reviewed and updated annually against UK-SPEC and any new product offerings from ECITB.

Institute of Marine Engineering, Science & Technology (IMar-EST)
Institution of Mechanical Engineers (IMechE)
Institute of Measurement and Control (InstMC)
Institution of Royal Engineers (InstRE)
Institute of Acoustics (IOA)
Institute of Materials, Minerals & Mining (IoM3)
Institute of Physics (IOP)
Institute of Physics & Engineering in Medicine (IPEM)
Institution of Railway Signal Engineers (IRSE) **
Institution of Structural Engineers (IStructE)
Institute of Water
Permanent Way Institution (PWI) **
Nuclear Institute (NI)
Royal Aeronautical Society (RAeS) **
Royal Institution of Naval Architects (RINA)
The Association of Cost Engineers (ACost)
The Society of Operations Engineers (SOE)
The Welding Institute

** These institutes/institutions are not included in the graduate funding.

ECITB Graduate development grant scheme (2021)

Learning Outcomes (LO)*	ID	Work-based activity (WBA) from the UK-SPEC (map a training intervention to each of these)	Example training interventions
Plan the work and resources needed to enable effective implementation of a significant engineering task or project: (C1 in UK-SPEC, Chartered engineer)	C1.1	Preparing budget and associated work programmes for projects or tasks	Project management training
	C1.2	Systematically reviewing the factors affecting the project implementation including safety, sustainability and disposal or decommissioning considerations	Training on the ECITB's project collaboration toolkit Risk management training (ECITB 1 day course)
	C1.3	Carrying out a task of project risk assessment and identifying mitigating measures	ECITB commercial awareness course (1 day)
	C1.4	Lead on preparing and agreeing implementation plans and method statements	Stakeholder management training Contract development and negotiation training
	C1.5	Negotiate and agreeing arrangements with customers, colleagues, contractors and other stakeholders including regulatory bodies	Training based on the ECITB higher level commercial awareness training standards
	C1.6	Ensuring that information flow is appropriate and effective	
Manage (organise, direct and control), programme or schedule, budget and resource elements of a significant engineering task or project: (C2 in UK-SPEC, Chartered engineer)	C2.1	Operating or defining appropriate management systems including risk registers and contingency systems	ECITB Certificate in project controls (9-month course)
	C2.2	Managing the balance between quality, cost and time	ECITB Introduction to project control (3 day course)
	C2.3	Monitoring progress and associated costs and cost forecasts, taking appropriate actions when required	ECITB risk management training (1 day course)
	C2.4	Establishing and maintaining appropriate quality standards within legal and statutory requirements	APM PFQ or equivalent project management qualification
	C2.5	Interfacing effectively with customers, contractors and other stakeholders	Participation in ACTIVE cup

Lead teams or technical specialisms and assist others to meet changing technical and managerial needs. (C3 in UK-SPEC, Chartered engineer)	C3.1	Agreeing objectives and work plans with teams and individuals	ECITB supervisory programme Company delivered leadership programmes Performance development training Company personal management training (performance reviews etc) Stakeholder management training Mentor and/or coaching training
	C3.2	Reinforcing team commitment to professional standards	
	C3.3	Leading and supporting team and individual development	
	C3.4	Assessing team and individual performance, and providing feedback	
	C3.5	Seeking input from other teams or specialists where needed and managing the relationship	
	C3.6	Providing specialist knowledge, guidance and input in your specialism to engineering teams, engineers, customers, management and relevant stakeholders	
	C3.7	Developing and delivering a teaching module at Master level, or leading a University research programme	
Bring about continuous quality improvement and promote best practice. (C4 in UK-SPEC, Chartered engineer)	C4.1	Promoting quality throughout the organisation as well as its customer and supplier networks	Training based on the ECITB continuous improvement training standard
	C4.2	Developing and maintaining operations to meet quality standards e.g. ISO9000, EQFM	Digital leadership training
	C4.3	Supporting or directing project evaluation and proposing recommendations for improvement	Learning from experience training
	C4.4	Implementing and sharing the results of lessons learned	Quality auditing, quality standard(s) training Benchmarking techniques training

Learning Outcomes (LO)*	ID	Work-based activity (WBA) from the UK-SPEC (map a training intervention to each of these)	Training Requirements
Communicate effectively with others, at all levels, in English (D1 in UK-SPEC, Chartered engineer)	D1.1	Preparing reports, drawings, specifications and other documentation on complex matters	Effective communication course Effective use of software training
	D1.2	Leading, chairing, contributing and recording meetings and discussions	Technical report writing training Personal impact course
	D1.3	Exchange information and providing advice to technical and non-technical colleagues	Internal opportunities to lead meetings, prepare documents, be given feedback

Clearly present and discuss proposals, justifications and conclusions (D2 in UK-SPEC, Chartered engineer)	D2.1	Contributing to scientific papers or articles as an author	ECITB presentation skills course
	D2.2	Preparing and delivering presentations on strategic matters	Effective presentation skills training
	D2.3	Preparing bids, proposals or studies	Creative thinking training
	D2.4	Identifying, agreeing and leading work towards collective goals	Influencing skills training Internal opportunities chair meetings etc. given feedback and mentored
Demonstrate personal and social skills and awareness of diversity and inclusion issues (D3 in UK-SPEC, Chartered engineer)	D3.1	Knowing and managing own emotions, strengths and weaknesses	ECITB Supervisory programme
	D3.2	Being confident and flexible in dealing with new and changing interpersonal situations	Diversity and inclusion training
	D3.3	Identifying, agreeing and working towards collective goals	Unconscious bias training
	D3.4	Creating, maintaining and enhancing productive working relationships, and resolving conflicts	Emotional intelligence training Personal impact course
	D3.5	Being supportive of the needs and concerns of others, especially where this relates to diversity and inclusion	Conflict management course

Learning Outcomes (LO)*	ID	Work-based activity (WBA) from the UK-SPEC (map a training intervention to each of these)	Training Requirements
Undertake the principles of sustainable development and apply them in their work (E3 in UK-SPEC, Chartered engineer)	E3.1	Operating and acting responsibly, taking account of the need to progress environmental, social and economic outcomes simultaneously	Training on environmental technologies
	E3.2	Providing products and services which maintain and enhance the quality of the environment and community, and meet financial objectives	Sustainable development training
	E3.3	<ul style="list-style-type: none"> Recognising how sustainability principles(as described in the UK -SPEC) can be applied in your day-to- day work Understanding and securing stakeholder involvement in sustainable development 	Net zero/carbon reduction training Training on environmental management systems
	E3.4	<ul style="list-style-type: none"> Using resources efficiently and effectively in all activities Taking action to minimise environmental impact in your area of responsibility 	
Understand the ethical issues that may arise in their role and carry out their responsibilities in an ethical manner (E5 in UK-SPEC, Chartered engineer)	E5.1	<ul style="list-style-type: none"> Understanding the ethical issues that you may encounter in your role Giving an example of where you have applied or upheld ethical principles as defined by your organisation or company or in the UK-SPEC 	Ethical principles training

These descriptors are subject to change upon reviews and update of UK Spec by the Engineering Council.

Date	Version No	Change	Name
16/8/19	Release version 1		Dawn Thompson
22/9/20	Release version 2	Update to process and training framework, typos corrected in Annex A	Catherine Lambert
30/3/21	Release version 3	Update to scheme to include mandatory sustainability and ethical training interventions and to reflect version 4 of UK-SPEC	Catherine Lambert