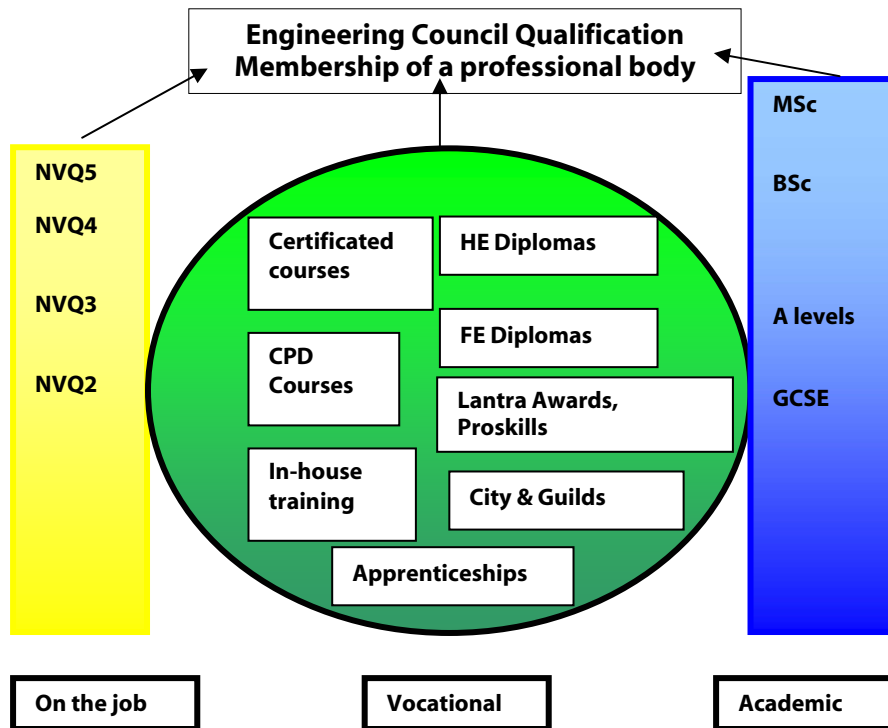


HOW CAN I GET QUALIFIED?

A guide to the qualifications needed to access EC registration



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To gain Engineering Council registration you need a combination of academic or vocational qualifications and work experience and to be exercising technical responsibility at the appropriate level. You also need to show professional commitment.

The pathways to registration are numerous and the demands of individual Institutions vary in detail.

Go to www.engc.org.uk for a full list of accredited qualifications across all engineering disciplines.

All degrees accredited (i.e. approved) by the Joint Board of Moderators (JBM) are accepted by its partner bodies: ICE, IStructE, CIHT and IHE. Look on www.jbm.org.uk

INSTITUTION CONTACTS

www.ice.org.uk

www.ciht.org

www.theihe.org

www.istructe.org

SUMMARY OF QUALIFICATIONS LEADING TO EC REGISTRATION AND RELEVANT TOP UP COURSES

FOR CHARTERED ENGINEER: MEng BEng (Hons) + MSc } - THE BENCHMARK		
Current Qualifications	Indicative Top Up	Available courses
BEng (Hons) started ≥ 1999 See Annex 1.2 for part time degrees	Accredited MSc (eg Construction Management, MBA or technical Masters) Postgraduate Diplomas: <i>Likely to be acceptable but considered as Individual cases and may not meet all the requirements.</i> Further Learning	www.jbm.org.uk See Annex 1.4 for part time Masters From universities with JBM accredited degrees. See Commentary 6
BSc (Hons) in engineering or cognate subject See Commentary 2	Accredited <u>technical</u> MSc (Pg D: see above) Further Learning	See Annex 1.5.3 & 1.5.4 See Commentary 6

OLDER QUALIFICATIONS: www.engc.org.uk/education--skills/accreditation/accredited-course-search.aspx		
Qualification	Level	Comment
Accredited engineering honours degrees started < 1999*	OK for CEng	If not accredited, need individual approval by your Institution
Engineering Higher Nationals started < 1999* (8 'H' levels, N/H Maths)	OK for IEng	If not accredited, need individual approval by your Institution See Commentary 8

* **This is not a fixed date. Accreditation years can vary.**

FOR INCORPORATED ENGINEER:		
BSc: 300 credits THE BENCHMARK BSc (Hons): 360 credits Also accepted BEng (Hons): 360 credits		
Current Qualifications	Indicative Top Up	Available courses
HNC in engineering or technology	Complete HND then as below	See Commentary 8
HND in engineering or technology	Transfer to BSc University post graduate certificate Bath HOT (30 credits) + 30 credits from BSc degree (I or H level) Post Graduate Diploma or MSc Further Learning Graduate Diploma	P/T Degrees: see Annex 1 NTU University Diploma (now closed) UWE certificate in Transport Planning and Engineering starting 2010. Worth 60 credits (IHE Only) P/T and Distance Learning degrees: see Annex 1.5 See Commentary 6 Stow College (Scotland)
Cognate degree (eg physics, geology, maths) See Commentary 2	MSc accredited by JBM Postgraduate Diploma in technical subject Cognate MSc Bath Highways Open Tech (IHE Only) Further Learning	See Annex 1.4 & 1.5 NTU Diploma (now closed) UWE certificate in Transport Planning and Engineering starting 2010. Worth 60 credits.
Construction or any other Honours degree (eg BA geography)	Technical MSc or Postgraduate Diploma in engineering or a cognate discipline with significant analytical skills (incl. Transportation Engineering) HNC Civils + 30 credits from BSc degree (level I or H) (IHE only)	See Annex 1.4 & 1.5

FOR ENGINEERING TECHNICIAN: At least Level 3 Qualifications in engineering

Acceptable Qualifications	Available courses
National Certificate/ Diploma	
NVQ3 in relevant areas Advanced Modern Apprenticeship See Commentary 5	NVQs / SVQs: Transport Technical Support 3 Transportation Support 3(2004) Site Supervision 3 Technical Design 3 Construction Contracting 3 Site Technical Support 3 Plant Supervision 3 Highway Maintenance 3 Site Inspection 3 Surveying Support 3 Road Safety 3 (Engineering Pathway) Laboratory and associated services 3
Bath HOT Certificate	Highway Technology + 3 Units + a Project. Professional Review will be more searching on knowledge and understanding.
MANCAT Diploma or HNC in Road Safety (IHE, IHT)	Must follow 'engineering pathway'. Professional Review will be more searching on knowledge and understanding.
NTU University Diploma	Entry now closed
UWE Certificate	Starting in 2010
Foundation degree in engineering or construction	Derby, Norwich (Peterborough)
HNC in engineering or technology or construction	See Commentary 8
DAPs Asphalt Technology Distance Learning	At Doncaster then Univ. of Derby from 2007 (=HNC equivalent)

COMMENTARY

1. Other qualifications

Engineers have a wide range of backgrounds and combinations of academic qualifications: do not despair. All the institutions are well used to assessing whether individual cases are equivalent to the benchmarks.

The process institutions use to assess non standard qualifications is variously known as the individual case procedure, the individual assessments route or a career assessment. The institutions' websites will give you details and there maybe a charge for the assessment. You will normally be asked to provide certified copies of your academic certificates and as much information on course content as possible, plus a CV, in order for your institution to make a judgement.

IHE recommends an engineering HNC plus 30 credits at H or I degree level to top up non-cognate degrees.

2. Cognate degrees

For IEng, science degrees can be topped up by a technical or cognate MSc.

With a technical Masters and the right work experience, it may be possible to use the Further Learning route **to CEng** and apply for the standard review.

Geography degrees are problematic, and each is judged on its merits. To be deemed 'cognate' the syllabus must contain sufficient science.

3. Overseas qualifications

The Washington, Sydney and Dublin Accords allow mutual recognition of many overseas degrees at **CEng**, **IEng** and **Eng Tech** level respectively.

See www.engc.org.uk/education--skills/international-recognition-agreements.aspx.

Most institutions can give informal advice on whether a degree is deemed equivalent to a UK counterpart. You will then need to make a formal request for consideration – see (1) above.

NARIC can provide evidence of equivalence – at a small cost: www.naric.org.uk. You then need to ask for an individual assessment by your institution.

4. Shorter Courses

There are many short courses varying from 1 or 2 week to 1 to 3 day courses which can contribute to Further Learning but most are unlikely to be accepted as top ups for academic qualifications.

http://www.transportationopportunities.org.uk/training/short_course_search.asp

5. NVQs / SVQs

Generally, a relevant NVQ3, SVQ3 or Advanced Modern Apprenticeship leads directly into a Technician Professional Review without the need for additional formal academic qualification.

The same is not true for level 4 and 5 NVQs and IEng or CEng registration. You still need an acceptable academic qualification.

The evidence in an NVQ4 or NVQ5 portfolio can be recycled in a review or Technical Report submission to provide evidence of your competence or your initial professional development. NVQ's/SVQ's may also contribute substantially to a Further Learning submission.

6. Further Learning

It is possible, starting from (1) a BEng (Hons) or a cognate degree **for CEng**, or (2) an HND or a science degree **for IEng**, to gain further knowledge through work or by a combination of experience and off-the-job courses to prove equivalent knowledge to the benchmark academic level.

Some companies have JBM accredited Further Learning Schemes specially designed to meet institution requirements: www.jbm.org.uk.

Each institution has specific guidance on self managed Further Learning which must be consulted. Essentially, you compile a report demonstrating knowledge and skills equivalent to the benchmark degree learning outcomes which the institution then assesses. In all cases you need to apply for clearance to use this option.

7. Technical Report Option

Anyone, with the right breadth, depth and level of experience but with less than the benchmark academic qualifications, can use the Technical Report route to IEng, CEng or Eng Tech.

Under the TR option, you submit a Technical Report on a project demonstrating that you have gained, by experience, engineering knowledge and understanding equivalent to that of an academically qualified contemporary.

Before embarking, you must submit a summary of your intended paper for approval and you will generally be given an Institution Mentor.

The profession review is different under this option: after presenting your Report and answering knowledge-led questions, you will have a second interview covering professional competence and commitment aspects.

8 Higher National Awards

- 8.1 Most HNCs and HNDs awarded by BTEC, Edexcel, SCOTVEC and SQA in engineering or technology started before 1999 are accepted for entry to the Incorporated Professional Review. Those post-1989 need 8 'H' units including a project and mathematics at N/H level.
- 8.2 The JBM no longer accredits individual college Higher Nationals as they are subject to national validation by Edexcel or SQA.
- 8.3 Most engineering HNCs started since 1999 are deemed acceptable BUT, for Incorporated Engineer, have to be topped up by further learning to degree level or you should follow the Technical Report Route.
- 8.4 HNCs are best extended into an HND before attempting further learning to the benchmark BSc level.

DISCLAIMERS

1. *These lists were revised in 2010.*
2. *Always check on www.engc.org.uk and www.jbm.org.uk for lists of past and current accredited courses. Accreditation always states which intake (i.e. entry) years it applies to: be careful.*
3. *The information has been compiled by IHE. It may not apply in all respects to other institutions.*
4. *Always find out your chosen institution's specific requirements. Some may charge a fee for individual case assessments. All are happy to give preliminary informal advice by phone or email.*

Annex 1 PART TIME ACADEMIC COURSES

1. BSc (HONS) IN CIVIL ENGINEERING

For Incorporated Engineer entry – most are accredited by JBM

Part-Time and Full-Time

Anglia Ruskin
Bolton
Coventry
Derby (Civils & infrastructure)
East London
Glamorgan (W)
Greenwich
Leeds Met
Napier (S)
Nottingham Trent
Salford
South Bank, London
Teeside
Wales/Newport (W)
West of England
Wolverhampton

Full-Time Only

Abertay
Bradford (Water)
Brighton
Kingston
Plymouth
Portsmouth
Ulster (NI)
West of Scotland (S) (Paisley)

2. PART-TIME BEng (HONS) IN CIVIL ENGINEERING

The CEng benchmark academic standard is MEng or BEng (Hons) plus a Masters.

*The following are accredited by JBM as part satisfying the CEng entry standards only.
They must be topped up by Further Learning or a Masters.*

Brighton
Coventry
East London
Glamorgan (W)
Greenwich
Kingston

Liverpool John Moores
Nottingham Trent
Salford
South Bank, London
Ulster (NI)

3. PART TIME MEng IN CIVIL ENGINEERING (may not run every year)

Coventry
Salford

4. PART TIME MASTERS DEGREES

The following are accredited by JBM as chartered level further learning for those with honours degrees. (See also 5 below)

University

Abertay
Bath *
Birmingham
Brighton
Cambridge

Indicative Subject Focus

Water/Environment
Construction Management/ Structures
Construction Management/ **Road Management**, Water
Civils, Geology, Water
Interdisciplinary Design

Cardiff	Civils, Environment, Structures
City	Structures/ Construction Management
Coventry	Civils
East London	Civils
Exeter	Urban Water
Glamorgan	Civils
Glasgow *	Water, Structures, Construction Management (may not allow IEng entry)
Herriot Watt *	Civils/ Construction Management/ Safety, Risk, Reliability
Imperial College	Structures, Transport , Geology, Environment
Kingston	Civils/ Management/ Law
Leeds	Transport Planning/ Infrastructure Engineering/ Civils
Loughborough *	Construction Management/ Water
Manchester	Project management
Napier *	Transport Planning & Engineering/ Project Management
Newcastle	Civils/ Transport/ Environment/ Geotechnics/ Flooding
Nottingham	Transportation Infrastructure
Nottingham Trent	Civils
Plymouth	Civils/ Flooding
Portsmouth *	Civils/ Structures
Salford	Transport Engineering/ Project Management/ Law
Sheffield	Structures/ Concrete
South Bank, London	Civils
Surrey *	Civils/ Water/ Transport Planning
Southampton	Transportation

* **Distance learning available for some courses**

The JBM list marks those Masters courses which are **Technical (T)** and hence suitable for topping up a BSc in engineering or cognate disciplines or an IEng.

Most Masters are unit based. You can complete each unit separately. Some offer e-learning or concentrate attendance in one week followed by project or tutor supported learning.

Non-accredited Masters may be acceptable: ask for an individual assessment.

5. OTHER COURSES

Institutions are always willing to consider other qualifications or combinations of qualifications under their individual case procedures and will advise on courses you are considering.

5.1 Post Graduate Diplomas

PgDs are often awarded by Universities offering Masters Programmes. Typically students follow the same taught courses but do not undertake a dissertation or project.

All PgDs are able to top up Higher Nationals or cognate degrees but, for CEng, they may not meet all further learning requirements: ask your institution.

5.2 Other Masters including Transportation Planning

www.tps.org.uk/main/masters-courses

Degrees from universities not listed on this link may not contain sufficient engineering to be accredited by the JBM.

They may contribute to further learning in individual cases, eg. Oxford Brookes MSc, Project Management in the Built Environment, which uses E-learning, and is open to graduates in any discipline.

5.3 Technical MSc Degrees

Cognate degrees and BSc engineering degrees can be topped up to chartered level only by a technical Masters (Hons) i.e. one in engineering or technology, not management.

Some institutions allow senior IEngs to top up with a technical Masters.

The JBM list marks out the technical Masters with **(T)**.

Some universities are developing 'technical' Masters Degrees specifically to top up BSc (Hons) civil engineering degrees to the benchmark MEng level for entry to CEng. None is yet accredited by the JBM.

A Masters or Postgraduate Diploma may top up a cognate, construction or other honours degrees to access the Incorporated Engineer review. A technical MSc will normally be needed in the latter two cases.

5.4 MSc Professional Engineering (new)

Kingston, Hertfordshire, Northumbria and Staffordshire universities are offering an innovative work-based Masters developed with the Engineering Council. Graduates agree a tailored schedule of work which will deliver assessed masters learning and development.

Before embarking, you must ask your institution if the degree will be acceptable.

For a brief description, see: <http://www.kingston.ac.uk/mscprofeng>

The JBM is considering if the civils sector can support a work-based Masters.

FIND OUT WHERE YOU STAND

To check if your qualifications meet requirements or if a planned top up is suitable, ring IHE for informal advice.

For a formal 'career assessment' email to secretary@theihe.org your CV, copies of your certificate and lists of modules or units and a brief note on any dissertations or final year project. You will be considered as an 'individual case' by the Institute.