



Concrete Technology

Professional Qualifications offered by
the Institute of Concrete Technology
and associated Course Providers



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Purpose of the Document

The purpose of this extended statement is to make potential candidates aware of various qualification-based courses that are available in the field of concrete technology. Courses are available in the UK and other countries at a range of competency levels. The courses are primarily knowledge-based, but include some skill-based aspects too. The qualifications journey is like a roadmap with direction indicators along the route – available courses marking a way forward to professional development. This document should help candidates to choose an appropriate course and links these with contact details, so assisting with enquiries and registration for a particular course.

The document will be updated from time to time and the ICT's Executive Officer* can provide the most recent version.

* Edwin Trout, Executive Officer

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Preamble

There can be little doubt that concrete will remain the material of choice in construction and building work. Equally so, there can be little doubt that skills, competency and understanding relating to the material and its correct use will have to be maintained and probably added to.

Whether you are already, or wish to become, involved in the concrete industry as a site operative, technician, technologist or manager, demonstrated capability and professional qualifications are, and will become even more important.

Recognising this need, the Institute of Concrete Technology (ICT), together with other bodies, have been working to provide a range of training, educational and professional options set out as courses resulting in qualifications by way of examination. These qualifications are professionally recognised and, in the case of the ICT, can be used to seek Incorporated or Chartered Engineer status via the ICT's affiliation with the Engineering Council.

Whether as a newcomer to the industry or someone already involved, you may wish to underwrite your employment and career progress with a relevant qualification. Choosing the right course is important and guidance is given in the attached tables. Courses are available at introductory, intermediate and advanced levels* (refer to Tables A, B, C, D and E). The ICT-based course providers cover the various levels and may be further identified with what each course contains. For instance, in the case of the ICT:

Concrete Technology and Construction (CT&C)

Stage 1 – Concrete Practice

Stage 2 – General Principles

Stage 3 – Practical Applications

Stage 4 – Advanced Concrete Technology

Alternatives are available up to MSc level and these are referred to in the tables.

* You will see that levels are indicated in the tables against the course that may assist in gauging the status of a course; the higher the level the higher the status. These levels align with those used by the Regulated Qualification Framework (RQF). Accreditation means confirming that requirements have been met in a satisfactory manner. Accreditation is usually performed by an independent body detached from the services being accredited, and it is desirable that courses be accredited by a recognised body to confirm (or establish) credibility.



For over 40 years the ICT has been involved in awarding recognised qualifications in concrete technology, initially via by the City and Guilds of London Institute and now in its own right, and these qualifications are widely recognised around the world. Candidates are prepared for examination by independent course providers.

The ICT has used the same methodology recommended by the RQF for the rating of courses by level and credit (units of study: 1 credit = 10 hours), and is detached from the course providers to set and mark the examinations independently. University-based providers will have their own accreditation processes.

In Tables A, B, C, D and E we have listed courses indicating what they are, what they relate to and who provides them, together with the qualifications that may result. Each table is identified by way of the recognised RQF level. Most courses are primarily based on distance learning. Contact details of course providers are also given separately in Annex 1.

As a hypothetical example, imagine you are at the start of your working life and find yourself employed in some area of concrete, or are thinking of becoming so, and wish to demonstrate your competence by way of a recognised qualification. If you have no experience and are working as a site operative then certification offered by the Mineral Products Qualifications Council (MPQC) may be an appropriate starting point (see Annex 1). Alternatively, you can find a starting point in Tables A or B. The choice depends on your experience and the location and cost of the course.

The first option could be ICT Stage 1 (level 3), which would be a sound introduction if you have some experience, and can lead to membership of the ICT at Technician grade with the designatory letters 'TechICT'.

The next levels are intermediate (ICT Stages 3 and 4, at levels 4 and 5) and you have a choice. The University of Derby courses (UoD) or alternatively the ICT Stage 2 and 3 courses that can result in either Affiliate or Associate membership of the ICT. Stages 1, 2, 3 (and also 4), interrelate one to the other and have carry-forward recognition for accumulating credits. Completing Stages 2 and 3 can lead to Associate membership of the ICT and the designatory letters AMICT. Alternatively, if you stop at Stage 2, you can become an Affiliate of the ICT with the designatory letters AffICT.

There is also opportunity within the ICT to obtain Incorporated or Chartered Engineer status. The ICT is a Professional Affiliate of the Engineering Council and can progress candidates' applications for registration via the Society of Operations Engineers.

It is fortunate that so many personal development options are available. Selecting the right one is important. Some courses are provided overseas and their identities are given in the tables. More information can be obtained by contacting the appropriate person listed in Annex 1. Contacts in all mentioned organisations are available to help you make your choice and give you objective guidance.

This document will be updated from time to time as new courses and providers arise. Each revision will be dated and can be obtained from ExecutiveOfficer@theict.org.uk



UK and Overseas Courses

In Tables A, B, C, D and E various courses are laid out in detail. Further information can be obtained by contacting the organisation given against a particular course. Contact details are given in Annex 1. Most of the qualifications are recognised by the ICT for a level of professional membership of the Institute. In addition to the listed courses, those candidates who may be seeking skill-orientated competence qualifications, e.g. National Vocational Qualifications (NVQs) should contact the Mineral Products Qualifications Council (MPQC) – details also in Annex 1.

Table A: Introductory Courses

Course title	Course provider	Delivery method	Awarding body & qualification	ICT membership grade
The Concrete Ticket	Irish Concrete Society	Half-day classwork	ICS: Concrete Ticket photo card	Preparation for Technician
Site Acceptance of Concrete	QSRMC	Half-day session	ICT certificate for CPD	Preparation for Technician
ACI*-ICT EN Standards Concrete Field Testing Technician (CFTT)	Prior-training assumed	Refresher session optional	ACI and ICT jointly: certificate <i>(for 5 years from date of issue)</i>	Technician: TechICT

Table B: Introductory Courses (Level 3)**

Course title	Course provider	Delivery method	Awarding body & qualification	ICT membership grade
CT&C Stage 1: Concrete Practice	Go Academy (South Africa)	Distance learning / classwork	ICT: Certificate in CT&C Concrete Practice	Technician: TechICT
CT&C Stage 1: Concrete Practice	The Concrete Society (UK)	Revision course (one day)	ICT: Certificate in CT&C Concrete Practice	Technician: TechICT
CT&C Stage 1: Concrete Practice	Ulster University (UK)	Supported flexible online learning	ICT: Certificate in CT&C Concrete Practice	Technician: TechICT
CT&C Stage 1: Concrete Practice	Heriot Watt University (Malaysia campus)	Classroom teaching over two days	ICT: Certificate in CT&C Concrete Practice	Technician: TechICT
Concrete Fundamentals	Irish Concrete Society (Ireland)	Lectures and practical work (three half-day sessions)	ICT: Certificate in CT&C Concrete Practice	Technician: TechICT
Certificate in Ready Mixed Concrete Technology	University of Derby (UK)	Distance learning (one module over seven months, part time)	University of Derby (Certificate of Credit)	Technician: TechICT

* American Concrete Institute. ** Examined by the ICT (with the exception of the University of Derby's single-module, level 4 course Certificate in Ready Mixed Concrete Technology). Related courses are occasionally available. Contact the ICT's Executive Officer for details (see Annex 1)



Table C: Intermediate Courses (Level 4)

Course title	Course provider	Delivery method	Awarding body & qualification	ICT membership grade
CT&C Stage 2: General Principles	TALENT Concrete Training * (UK)	Distance learning Revision workshop optional	ICT: Certificate in CT&C General Principles	Affiliate: AffICT
CT&C Stage 2: General Principles	Oscrete Construction Products * (UK)	Taught course for staff and and external candidates	ICT: Certificate in CT&C General Principles	Affiliate: AffICT
CT&C Stage 2: General Principles (SCT 41)	Concrete & Concrete SA * (South Africa)	Distance learning	ICT: Certificate in CT&C General Principles	Affiliate: AffICT
CT&C Stage 2: General Principles	Go Academy * (South Africa)	Distance learning and lectures	ICT: Certificate in CT&C General Principles	Affiliate: AffICT
Professional Development (Concrete Technology)	University of Derby ** (UK)	Distance learning with a two- day seminar per term	University of Derby: University Certificate	Associate: AMICT

Table D: Intermediate Courses (Level 5)

Course title	Course provider	Delivery method	Awarding body & qualification	ICT membership grade
Aggregates in Construction	By arrangement	Distance learning + class work	ICT: Certificate in CT&C Aggregates in Construction	Associate: AMICT?
CT&C Stage 3: Practical Applications	TALENT Concrete Training * (UK)	Distance learning Revision workshop optional	ICT: Certificate in CT&C Practical Applications	Associate: AMICT
CT&C Stage 3: Practical Applications (SCT 42)	Cement & Concrete SA * (South Africa)	Distance learning	ICT: Certificate in CT&C Practical Applications	Associate: AMICT
CT&C Stage 3: Practical Applications	Go Academy * (South Africa)	Distance learning and lectures	ICT: Certificate in CT&C Practical Applications	Associate: AMICT
Concrete Studies	University of Derby ** (UK)	Distance learning with a two- day seminar per term	University of Derby: Diploma	Associate: AMICT
Mineral Extractives (Concrete Technology)	University of Derby ** (UK)	As above, but with the option of an apprenticeship route	University of Derby: Foundation Degree	Associate: AMICT

* ICT-recognised

** Complying with the Credit Accumulation and Transfer Scheme (CATS)



Table E: Advanced Courses (Level 7)

Course title	Course provider	Delivery method	Awarding body & qualification	ICT membership grade
ICT Concrete Technology * & Construction, Stage 4: Advanced Concrete Technology	Cement, Concrete & Aggregates Australia with the University of Queensland	Three residential fortnightly sessions and one-year individual project	ICT: Diploma in Advanced Concrete Technology	Corporate Member: MICT
ICT Concrete Technology * & Construction, Stage 4: Advanced Concrete Technology	Go Academy (South Africa)	Distance learning, lectures and individual project	ICT: Diploma in Advanced Concrete Technology	Corporate Member: MICT
ICT Concrete Technology * & Construction, Stage 4: Advanced Concrete Technology	Cement & Concrete SA (South Africa)	Fortnightly blocks of lectures, a one-week workshop and an individual project	ICT: Diploma in Advanced Concrete Technology	Corporate Member: MICT
Postgraduate Diploma in Advanced Concrete Technology (120 CATS)	University of Leeds (UK)	Distance learning, online tutorials, revision seminar, but no dissertation	University of Leeds (PGDip) <i>Accredited by ICT and the Joint Board of Moderators</i>	Eligible for Membership: MICT
MSc in Advanced Concrete Technology (180 CATS)**	University of Leeds (UK)	Distance learning, online tutorials, revision seminar & a research-based dissertation	University of Leeds (MSc) <i>Accredited by ICT and the Joint Board of Moderators</i>	Corporate Member: MICT

* ICT syllabus credit-rated according to RQF

** ICT Diploma awarded 120 credits towards Leeds MSc (180 credits)

Summary of Qualifications and ICT Membership Grades

Course / Qualification	ICT Membership Grade	CSCS recognition
CCFT	Technician (TechICT)	Professionally Qualified Person (PQP)
Stage 1	Technician (TechICT)	Professionally Qualified Person (PQP)
Stage 2	Affiliate (AffICT)	Professionally Qualified Person (PQP)
Stage 3	Associate (AMICT)	Academically Qualified Person or PQP
Professional Development in Concrete Technology		Academically Qualified Person or PQP
Stage 4	Member (MICT)	Academically Qualified Person or PQP
Postgraduate Diploma in Advanced Concrete Technology ***		Academically Qualified Person or PQP
MSc in Advanced Concrete Technology		Academically Qualified Person or PQP

***On application and depending on relevant experience



Annex 1: Contact Details

Institute of Concrete Technology

All CT&C Stages and initial contact for additional courses
Edwin Trout, Executive Officer: ExecutiveOfficer@theict.org.uk
www.theict.org.uk

Mineral Products Qualifications Council

Skills training programmes through MP Skills
Helen Hewitt: info@mpskills.co.uk
www.mp-qc.org

The Concrete Society

CT&C Stage 1 refresher courses
and registrations for the University of Derby courses
Dr Ian Heritage: education@concrete.org.uk
www.concretequalifications.org

The Irish Concrete Society

Concrete Fundamentals to CT&C Stage 1
Rosemary Byrne, Executive Officer: rbyrne2@concrete.ie
www.concrete.ie

Ulster University

CT&C Stage 1
Dr Bryan Magee: b.magee@ulster.ac.uk
www.ulster.ac.uk

Herriot Watt University, Malaysia

CT&C Stage 1
Dr Teo Wee: wee.teo@gmail.com

Go Academy (South Africa)

CT&C Stages 1 to 4
Jacques Smith, Principal, via: Hayley@go-consult.co.za
www.go-academy.co.za

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Oscrete Construction Products

CT&C Stage 2
Dean Clarke: Dean.Clarke@christeyns.com
www.oscrete.com

TALENT-ctct

CT&C Stages 2 and 3
Tony Binns, Director: info@talentconcretetraining.org.uk
www.talentconcretetraining.org.uk

Cement & Concrete SA (South Africa)

CT&C Stages 2, 3 and 4
Rennisha Sewnarain, Administrator: rennisha.sewnarain@cemcon-sa.org.za
<https://www.cemcon-sa.org.za>

University of Derby

University Certificate in Concrete Technology, Diploma in Concrete Studies
and Foundation Degree in Mineral Extractives (Concrete Technology)
John Mawer: J.Mawer@derby.ac.uk
<http://www.derby.ac.uk/business-services/training/development/workbased/sectors/minerals/>

University of Queensland / Cement, Concrete & Aggregates Australia

CT&C Stage 4
Dr Vinh Dao, Senior Lecturer, School of Civil Engineering: v.dao@uq.edu.au
www.ccaa.com.au and click on 'Training', 'ACT'

University of Leeds

CT&C Stage 4 as a PGDip or MSc in Advanced Concrete Technology
Dr Leon Black: l.black@leeds.ac.uk
<https://engineering.leeds.ac.uk/courses/PG/D884/masters-advanced-concrete-technology>