Obtaining Chartered Status in the Chartered Institute for IT

Keith Taylor

About me

- I worked for IBM most of my life as a designer, technical specialist, and product planner
- I am a CITP, Chartered Engineer, and a Fellow of the BCS
- I have now retired from IBM, but do voluntary work for the BCS both assessing membership applications and also excellence awards
- I am also on the Hampshire Branch committee

Personal Development

The following qualities are the sorts of things we look for in people working in Information Technology:

- Technical skills
- Autonomy
- Professionalism
- Good communication
- Business awareness
- Influence
- Innovation
- Leadership
- Eminence

- **Membership level**
  MBCS
- **Chartered level**
  CITP
  I. Eng. C. Eng.
  C. Sci
- **Fellowship level**
  FBCS

SFIA= Skills Framework for the Information Age

MBCS Criteria

MBCS

SFIA= Skills Framework for the Information Age

What is SFIA ?

The *Skills Framework for the Information Age* (SFIA) provides a common reference model for the identification of the skills needed in Information Technology

The SFIA Foundation:

BCS – Chartered Institute for IT

IET – Institute of Engineering and Technology

IMIS – Institute for the Management of Information Systems

*it*SMF UK – IT Service Management Forum

SFIA*plus* version 5

The aim of the framework is to create a common language to benchmark IT competences and develop IT professionals.

SFIA*plus v*5 is latest version of the BCS's extended version of SFIA

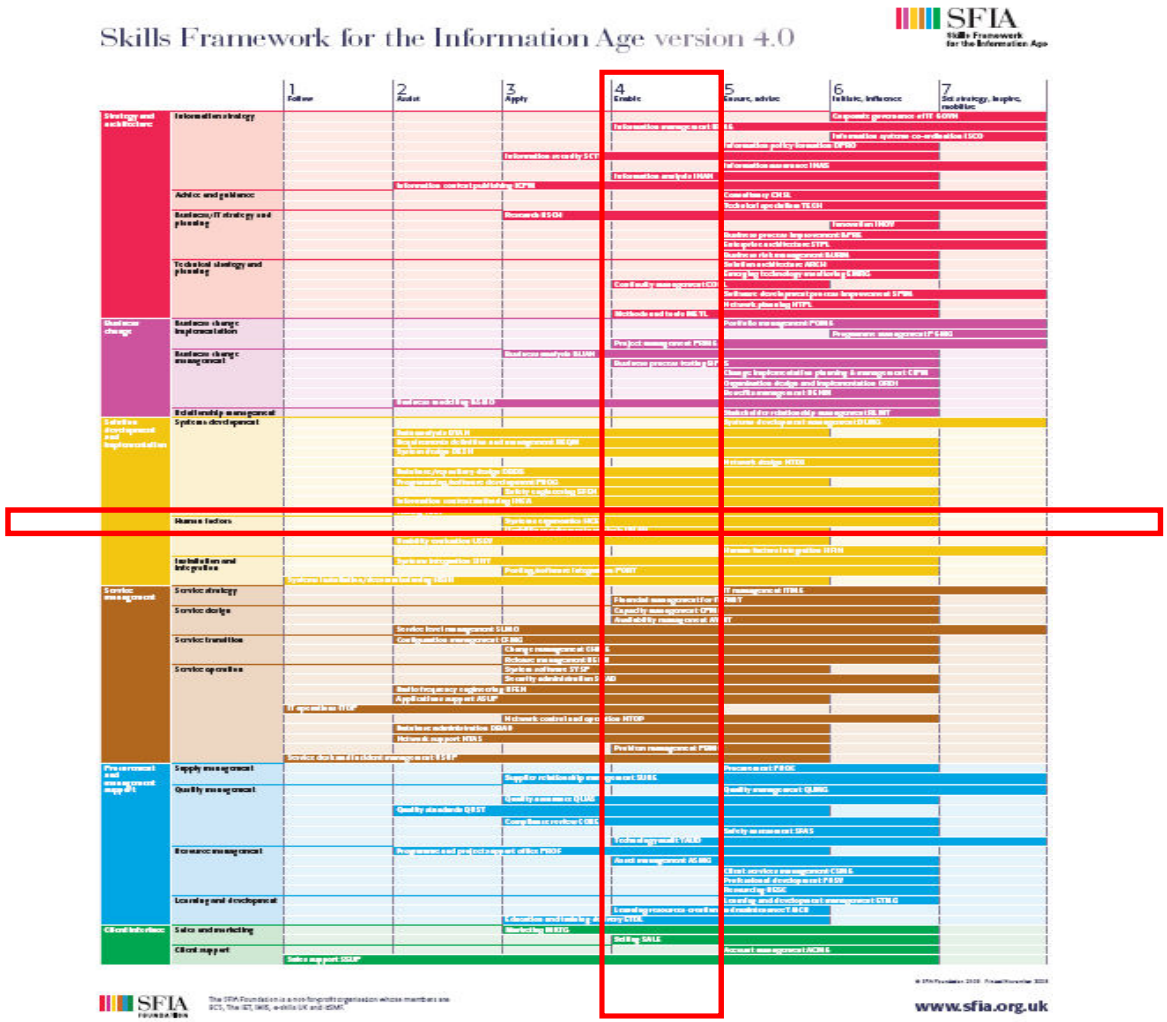
It can be accessed by signed-on BCS members via the web at **www.bcs.org.uk**

It now defines 96 Skills…

broken down into 344 tasks

at 7 levels

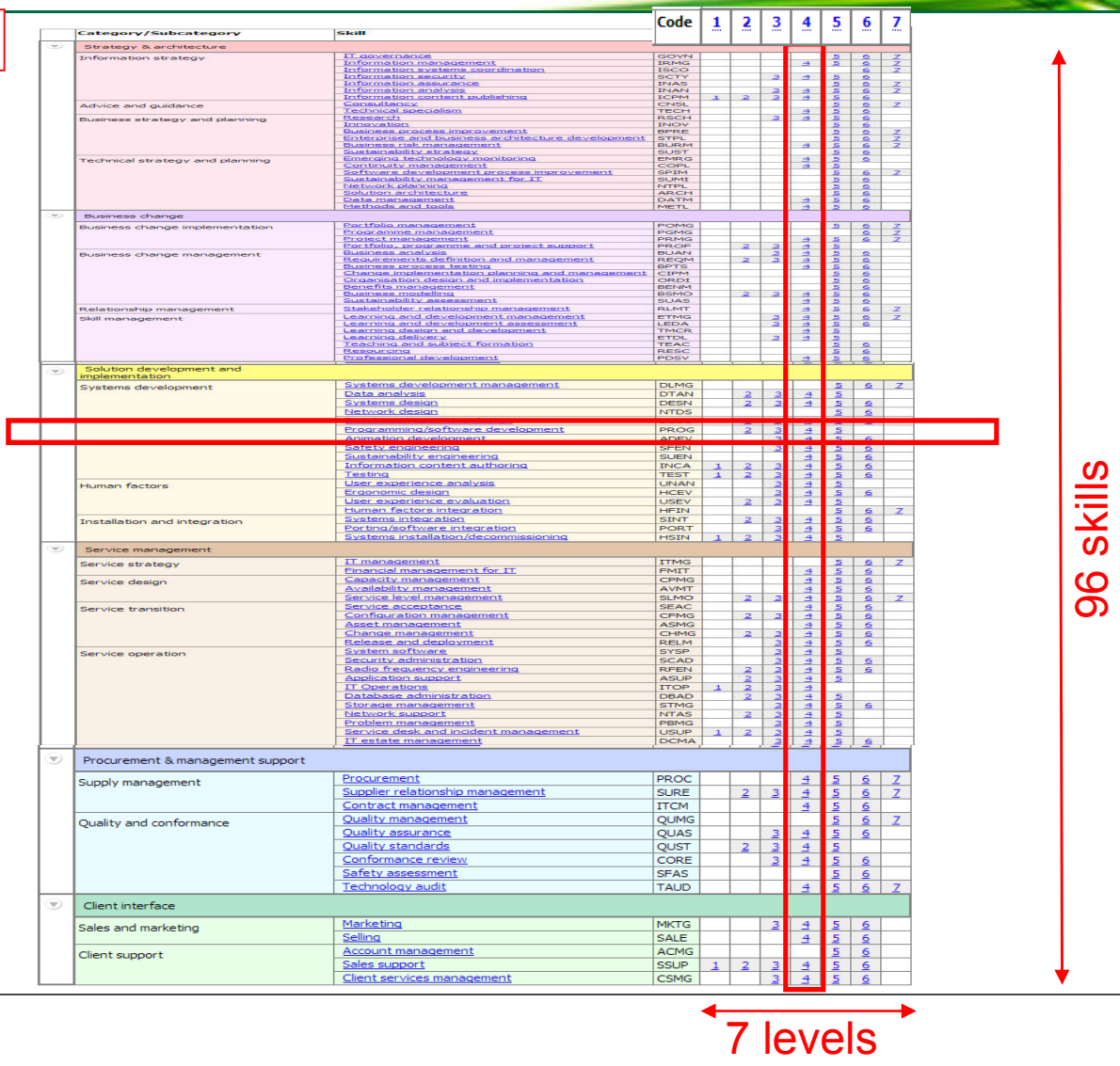
The IT Profession – Skills for the Information Age



The IT Profession – Skills for the Information Age

CITP Specialisms

- Strategy and architecture
- Business change
- Solution development and implementation
- Service management
- Procurement and management support
- Client Interface



Business Change Specialism

Business change		Code	1	2	3	4	5	6	7
Business change implementation	Portfolio management	POMG					5	6	7
	Programme management	PGMG						6	7
	Project management	PRMG				4	5	6	7
	Portfolio, programme and project support	PROF		2	3	4	5		
Business change management	Business analysis	BUAN			3	4	5	6	
	Requirements definition and management	REQM		2	3	4	5	6	
	Business process testing	BPTS				4	5	6	
	Change implementation planning and management	CIPM					5	6	
	Organisation design and implementation	ORDI					5	6	
	Benefits management	BENM					5	6	
	Business modelling	BSMO		2	3	4	5	6	
	Sustainability assessment	SUAS				4	5	6	
Relationship management	Stakeholder relationship management	RLMT				4	5	6	7
Skill management	Learning and development management	ETMG			3	4	5	6	7
	Learning and development assessment	LEDA			3	4	5	6	
	Learning design and development	TMCR				4	5		
	Learning delivery	ETDL			3	4	5		
	Teaching and subject formation	TEAC					5	6	
	Resourcing	RESC					5	6	
	Professional development	PDSV				4	5	6	

SFIA*plus* skill codes

SFIAplus defines 96 skill codes divided into …

19 sub-categories and

6 categories (which are the CITP specialisms)

Skills do not normally span all levels 1-7

Only one (IT operator) does not include level 5

These skill codes should include all those working in IT

SFIA*plus* levels

SFIAplus defines seven levels of competency from 1 (very junior) to 7 (very senior)

1. Follow
2. Assist
3. Apply
4. Enable
5. Ensure, advise
6. Initiate, influence
7. Set strategy, inspire, mobilise

To obtain CITP (and other professional registrations), you need to be working at level 5 or above

Level 4 competencies

Autonomy
Works under general direction within a clear framework of accountability. Exercises substantial personal responsibility and autonomy. Plans own work to meet given objectives and processes.

Influence
Influences team and specialist peers internally. Influences customers at account level and suppliers. Has some responsibility for the work of others and for the allocation of resources. Participates in external activities related to own specialism. Makes decisions which influence the success of projects and team objectives.

Complexity
Performs a broad range of complex technical or professional work activities, in a variety of contexts. Investigates, defines and resolves complex problems.

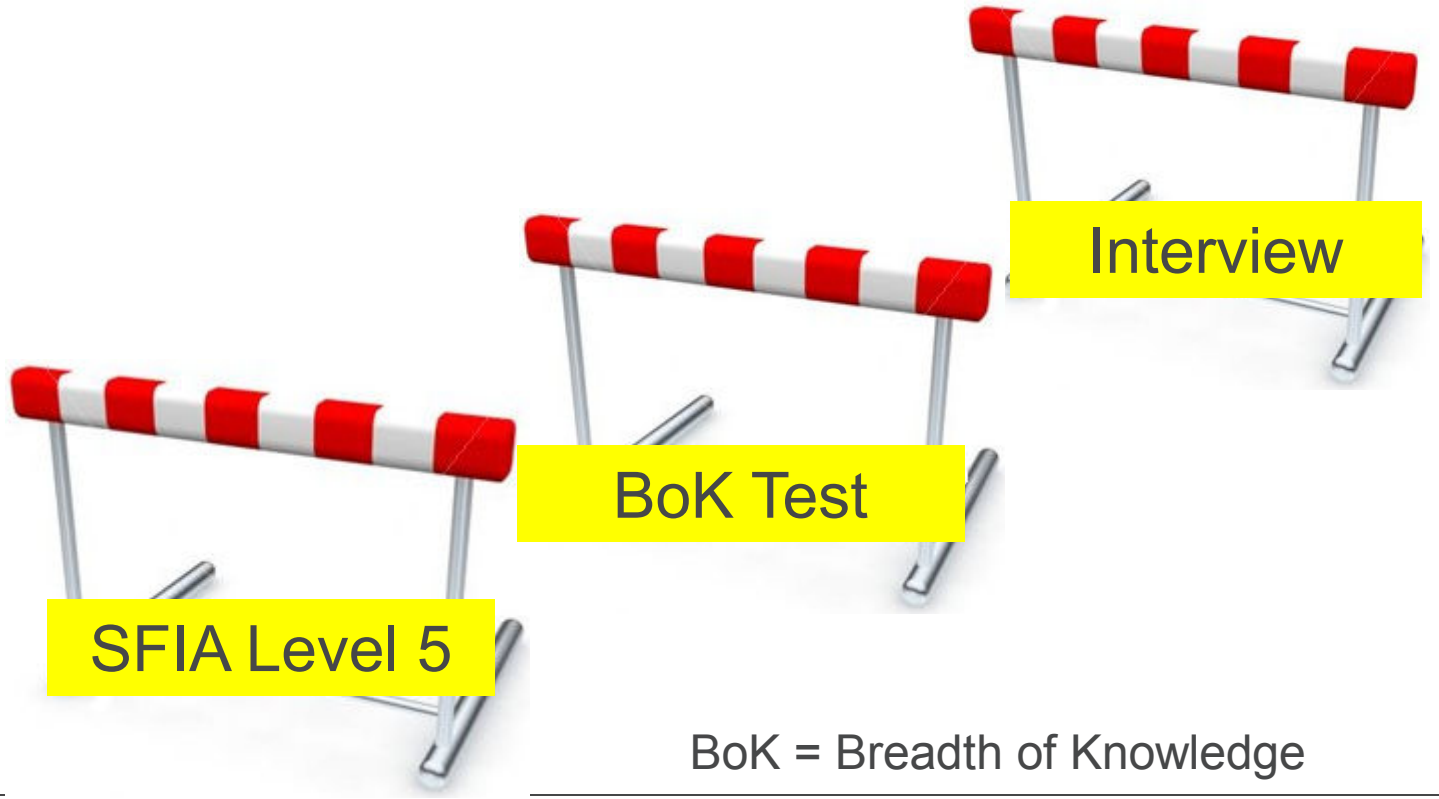
Business Skills
Selects appropriately from applicable standards, methods, tools and applications. Demonstrates an analytical and systematic approach to problem solving. Communicates fluently orally and in writing, and can present complex technical information to both technical and non-technical audiences. Facilitates collaboration between stakeholders who share common objectives. Plans, schedules and monitors work to meet time and quality targets and in accordance with relevant legislation and procedures. Rapidly absorbs new technical information and applies it effectively. Has a good appreciation of the wider field of information systems, their use in relevant employment areas and how they relate to the business activities of the employer or client. Maintains an awareness of developing technologies and their application and takes some responsibility for personal development.

Screen shot from on-line system

Chartered IT Professional (CITP)

CITP Criteria

CITP



BoK = Breadth of Knowledge

Application requirements

- Your current CV or résumé
- A personal statement detailing your experience (required only if this information is not covered in sufficient detail in your CV or résumé)
- Payment by credit or debit card
- Details of one or more supporters who can validate your application

CV hints and tips

- Be positive about your qualities, but have suitable evidence
- State details of job responsibilities for at least the last 5 years
- Include responsibilities for systems, staff and budgets
- List all IT qualifications, include business training
- State distinctions or awards gained
- Give membership of other professional bodies or committees
- List conferences, publications and patents (if any)
- Include any relevant hobbies or social activities

Chartered IT Professional – 3 stages

- Education and Experience Review (via CV), looking for:

  *A period of experience working in IT including recent experience at **SFIAplus Level 5 or above***

- Breadth of Knowledge Test

  A 75-question multiple choice test on IT and its application

- Specialist Competence Interview

  A peer review interview with two assessors

CITP is awarded for 5 years before renewal is required

Stage 1 - Initial Assessment

Stage 1 criteria

- Working for 3 out of the last 5 years at SFIA*plus* level 5 in a *challenging role*
- Full accountability for your own work (**Autonomy**)
- Responsibility and **influence** with colleague, peers, or customers
- Demonstrate a range of complex **technical skills** in IT
- **Business skills** both general, and specific to the business you work in

Level 5 competencies

Autonomy
Works under broad direction. Work is often self-initiated. Is fully accountable for meeting allocated technical and/or project/supervisory objectives. Establishes milestones and has a significant role in the delegation of responsibilities.

Influence
Influences organisation, customers, suppliers, partners and peers on the contribution of own specialism. Builds appropriate and effective business relationships. Makes decisions which impact the success of assigned projects i.e. results, deadlines and budget. Has significant influence over the allocation and management of resources appropriate to given assignments.

Complexity
Performs an extensive range and variety of complex technical and/or professional work activities. Undertakes work which requires the application of fundamental principles in a wide and often unpredictable range of contexts. Understands the relationship between own specialism and wider customer/organisational requirements.

Business Skills
Advises on the available standards, methods, tools and applications relevant to own specialism and can make appropriate choices from alternatives. Analyses, designs, plans, executes and evaluates work to time, cost and quality targets. Assesses and evaluates risk. Communicates effectively, both formally and informally. Demonstrates leadership. Facilitates collaboration between stakeholders who have diverse objectives. Understands the relevance of own area of responsibility/specialism to the employing organisation. Takes customer requirements into account when making proposals. Takes initiative to keep skills up to date. Mentors colleagues. Maintains an awareness of developments in the industry. Analyses requirements and advises on scope and options for continuous operational improvement. Demonstrates creativity and innovation in applying solutions for the benefit of the customer/stakeholder. Takes account of relevant legislation.

Screen shot from on-line system

SFIA*plus* level 5

Ensure, advise

Autonomy

- Works under broad direction
- Accountable for own technical work or project
- Establishes milestones and delegates responsibilities
- Work is often self-initiated

SFIA*plus* level 5

Ensure, advise

Influence

- Influences organisation, customers, suppliers and peers
- Builds appropriate and effective business relationships
- Decisions that impact on assigned projects - deadlines and budgets
- Allocates resources

SFIA*plus* level 5

Ensure, advise

Complexity

•Work requires application of fundamental IT principles in a wide and unpredictable range of contexts

• Works on a variety of complex technical and/or professional activities

• Understands relationship between specialism and wider organisational requirements

SFIA*plus* level 5

Ensure, advise

Business skills - 1

Advises on the available standards, methods, tools and applications in own area of specialisation

Clear understanding of the relationship between own area of responsibility /specialisation and user requirements of the employing organisation

Keeps skills up to date and mentors colleagues

Takes account of relevant legislation

SFIA*plus* level 5

Ensure, advise

Business skills - 2

- Can analyse, diagnose, design, plan, execute and cost work
- Communicates effectively; formally and informally
- Demonstrates leadership; facilitates collaboration
- Demonstrates creativity and innovation in applying solutions
- Can analyse user requirements and advise users

Breadth of Knowledge test

- The second stage involves a formal testing of core knowledge across the breadth of IT. The test comprises 75 multiple choice questions which cover a broad range of sectors and topics in 5 categories.
- You must achieve a pass mark (8) in each of the individual categories, as well as an overall pass of 50 or more.
- If you do not pass at your first attempt, one re-sit will be allowed within a six month period without additional payment
- The details of the syllabus are available from the BCS web site

CITP *specialisms*

Strategy and Architecture

People who define technical direction and standards

Business Change

People who manage, teach, and understand business needs

Solution, Development and Implementation

People who develop new systems and products

Service Management

People who keep things working

Procurement and management support

People who support and check IT functions

Client interface

People who sell products and manage accounts

Stage 3 Interview

- You will be expected to provide a short presentation and speak for about 10 minutes, using examples from work for which you have been personally responsible, to demonstrate your professional competence in your area of IT specialism.
- The interview is by 2 assessors, at least one of whom will have knowledge and experience of your specialism. The presentation and interview will last no longer than 45 minutes, and will be carried out on-line using conferencing software and secure document portals.
- During the interview you need to provide specific evidence relating to SFIA*plus* level 5 competencies in relation to your competence in your declared specialism

Procurement and Management Support Specialism

Procurement & management support		Code	1	2	3	4	5	6	7
Supply management	Procurement	PROC				4	5	6	7
	Supplier relationship management	SURE		2	3	4	5	6	7
	Contract management	ITCM				4	5	6	
Quality and conformance	Quality management	QUMG					5	6	7
	Quality assurance	QUAS			3	4	5	6	
	Quality standards	QUST		2	3	4	5		
	Conformance review	CORE			3	4	5	6	
	Safety assessment	SFAS					5	6	
	Technology audit	TAUD				4	5	6	7

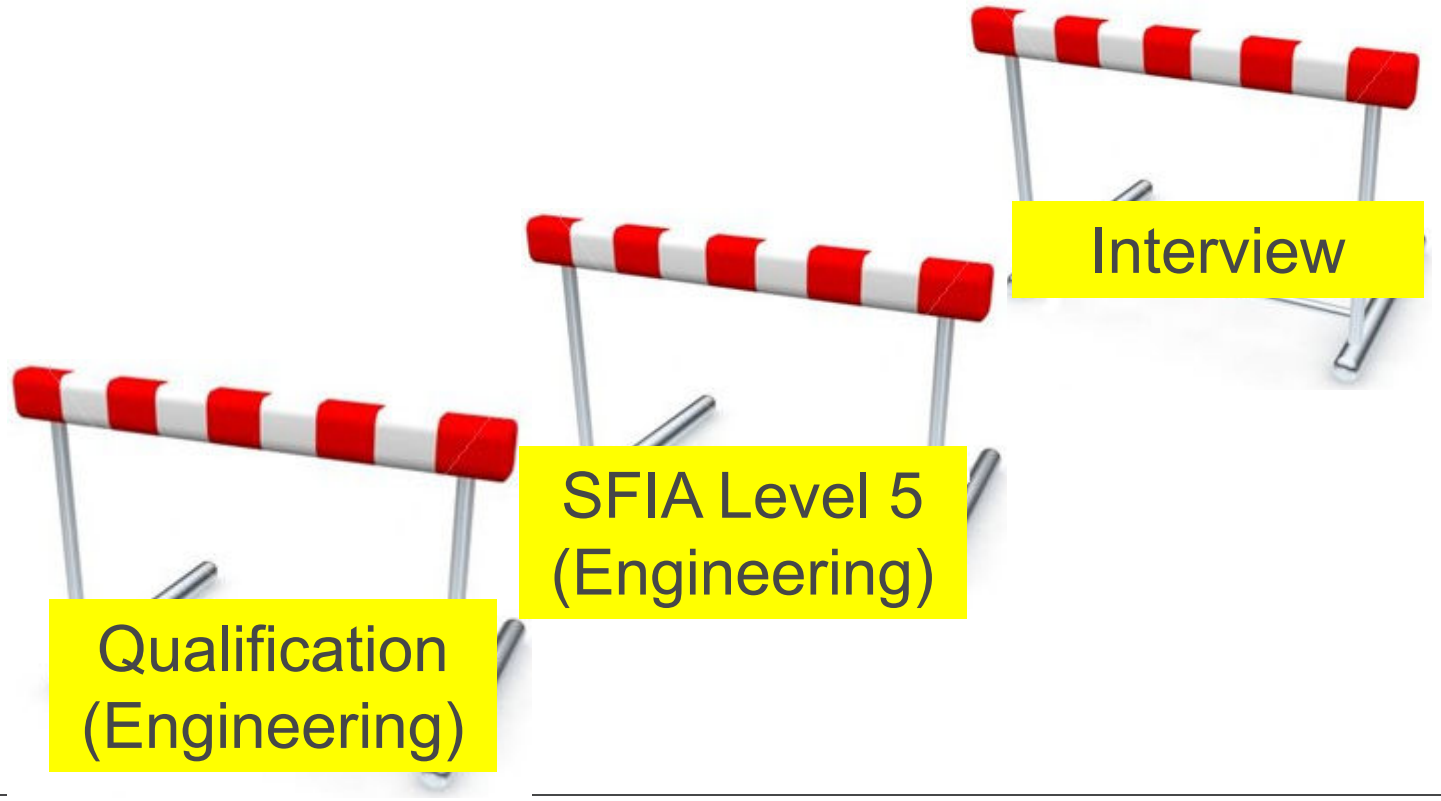
CITP Summary

- Applicant working at SFIA*plus* Level 5 or above?
- Autonomy, influence and business skills?
- Breadth of IT knowledge test passed?
- Specialist IT technical knowledge?
- Have they used all these in their challenging job (together with professionalism) for 3 years (out of last 5)?

Engineering Council and Science Council

Engineering Council Criteria

C.Eng, I. Eng



Engineering Council

- Has applicant got academic qualifications† accredited for EC registration?
- Have they been working at SFIA level 5 or above*?
- Can they apply engineering methods in their job?
- Do they have creative, innovative skills (for C.Eng) ?
- Are they committed to professional standards?

* *There is no a specified period for this, unlike CITP*

† *Applicants can also submit a suitable technical report or apply for exemption by an individual academic review or on their experience*

Solution Development & Implementation

Solution development and implementation		Code	1	2	3	4	5	6	7
Systems development	Systems development management	DLMG					5	6	7
	Data analysis	DTAN		2	3	4	5		
	System design	DESN		2	3	4	5	6	
	Network design	NTDS					5	6	
	Database/repository design	DBDS		2	3	4	5	6	
	Programming/software development	PROG		2	3	4	5		
	Animation development	ADEV			3	4	5	6	
	Safety engineering	SFEN			3	4	5	6	
	Sustainability engineering	SUEN				4	5	6	
	Information content authoring	INCA	1	2	3	4	5	6	
	Testing	TEST	1	2	3	4	5	6	
Human factors	User experience analysis	UNAN			3	4	5		
	Ergonomic design	HCEV			3	4	5	6	
	User experience evaluation	USEV		2	3	4	5		
	Human factors integration	HFIN					5	6	7
Installation and integration	Systems integration	SINT		2	3	4	5	6	
	Porting/software integration	PORT			3	4	5	6	
	Systems installation/decommissioning	HSIN	1	2	3	4	5		

I.Eng and C.Eng differences

- I.Eng and C.Eng are fairly similar; both are for engineers
- C.Eng must be capable of innovation and development
- For I.Eng you need an accredited bachelors or honours degree (otherwise take the technical report option etc.)
- For C.Eng you need an accredited honours degree and a masters degree, or a MEng (otherwise take the technical report option etc.)
- Competencies are assessed according to ECUK Spec described on the EC website:

http://www.engc.org.uk/ecukdocuments/internet/document%20library/UK-SPEC.pdf

PRI Interview

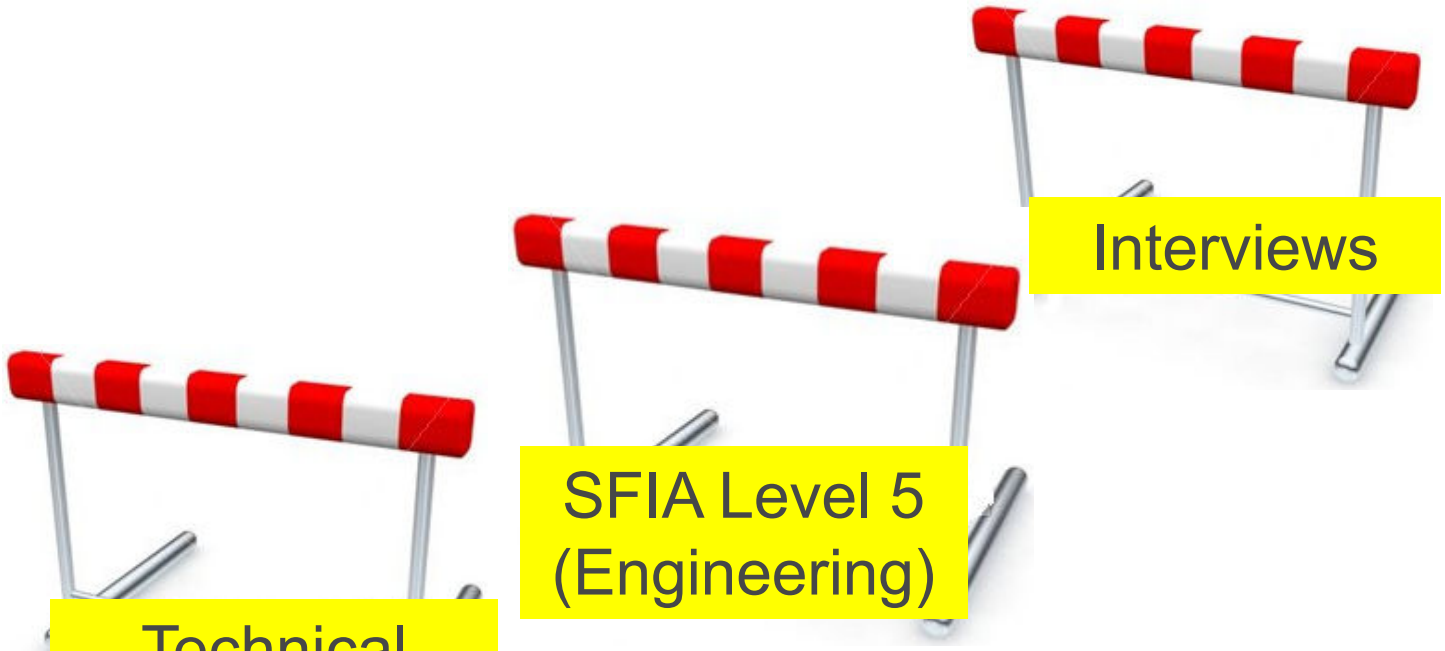
- The interview is by 2 assessors and lasts 45 to 60 minutes. It will normally be carried out on-line using conferencing software and secure document portals but can be face-to-face on request.
- During the interview you need to provide specific evidence relating to the competencies defined by the Engineering Council
- If you are applying for Chartered Engineer, you will need to demonstrate innovation and development skills.

Criteria for the award of CEng include demonstration of

- Maintain and extend a sound theoretical approach and engage in the creative and **innovative** development of **engineering** technology and solutions
- Apply appropriate theoretical and practical methods to the analysis and solution of engineering problems:
- Identify potential projects and opportunities
- Provide technical and commercial **leadership**
- Bring about continuous improvement through quality management
- Demonstrate effective interpersonal skills and personal and social skills
- Demonstrate a personal commitment to **professional standards**:
- Comply with relevant codes of conduct
- Manage and apply safe systems at work
- Undertake engineering activities in a way that contributes to sustainable development
- **Carry out CPD** to maintain and enhance competence in own area of practice

Engineering Council Criteria for unqualified applicants

C.Eng, I. Eng



IEng/CEng Technical report process

See: "BCS Guidance notes for Professional members seeking Chartered status registrations IEng/CEng"

- Applicant writes Synopsis
- Synopsis reviewed by Assessor
- Technical report must be received within 6 months
- Technical report reviewed by Assessors
- Technical Report Interview by two assessors (both CEng)

Followed by..

- Engineering Council Professional Review Interview based on ECUK by two assessors (both CEng)

Career-based assessment instead of Technical Reports

The Engineering Council suggested in 2011 that all awarding institutions consider this route because:

- **Senior engineers who are clearly C Eng material may not have time to write a technical report in the correct format.**
- **Individual Academic review route is expensive and time-consuming**
- **Overseas candidates with good but non-accredited degrees are being penalised because their degrees are not accredited**

Career-based assessment is now available!

Each assessor considers whether “the experiential route” might be appropriate, and if so scores the applicant

Further information can also be asked for

Two assessors have to agree that the applicant passes

If there is disagreement, a third assessor has the casting vote

Failure to “pass” means the applicant must choose a different route

IEng/CEng Career-based assessment ("Experiential route" - questions - 1)

All questions have a score of 0 (no evidence) to 3 (excellent)

- Applicant's formal academic qualifications and post-nominals
  - (Degrees, CITP, etc.)
- Applicant's professional certificates and affiliations
  - (e.g. Microsoft, Cisco etc. certificates)
- Applicant's other technical training and CPD
  - (e.g. in-house training at work)
- Applying fundamental principles in their work† (Job Complexity):
  - *Related to SFIA job codes and level*

† *Low scores on these questions could indicate that the applicant will fail the PRI*

IEng/CEng Career-based assessment ("Experiential route" - 2)

- Length of technical experience with some budget or project responsibility †
  - (Guideline: 5 years scores 2)
- Evidence of using technical skills to guide or direct the work of others †

- Other evidence of technical skill
  - (Conference papers, presentations, patents, etc.)
- Other evidence of initiative and academic ability
  - (Interests outside of work, general academic history)

Guideline pass 13-15 for C Eng. 11-13 for I Eng.

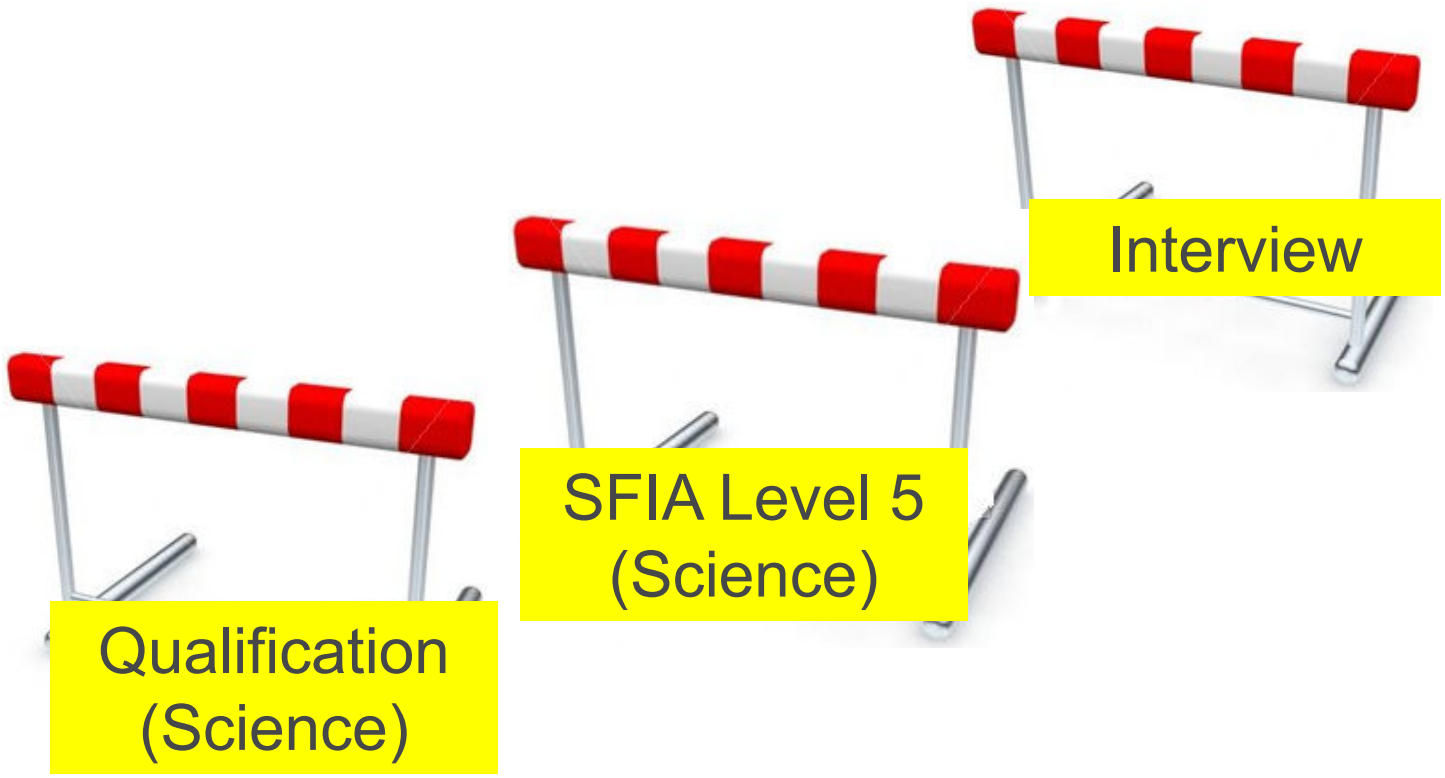
† *Low scores on these questions could indicate that the applicant will fail the PRI*

European Engineer (Eur Ing,)

- International professional qualification for engineers in over 30 European countries.
- Granted by national members of the European Federation of National Engineering Associations (FEANI), such as the UK EC
- European Engineer requires proven experience in the application of knowledge, level of skill, safety and environmental consciousness, sense of responsibility, ability to communicate and level of supervision received.
- In UK Chartered Engineer is a prerequiste requirement for an application for the Eur Ing title
- Some foreign European language skills are desirable but not mandatory at present

Science Council Criteria

C.Sci.



Chartered Scientist

- Accredited honours degree and masters degree or take technical report option (experiential route just approved)
- You need to be a scientist or computer scientist; read the Science Council web pages on :

  http://www.charteredscientist.org/about-csci

Scientists typically investigate hypotheses using experiments

Engineers typically design products or services

Chartered Scientist check list

- Has applicant got academic qualifications† accredited for SC registration?
- Are they working at SFIA level 5 or above?
- Do they work in science (and IT) or computer science?
- Does their work help advance scientific knowledge?
- Do they use scientific methods in their work?
- Do they have other business and professional skills?

† *Applicants could also submit a suitable technical report or thesis, or use the experiential route*

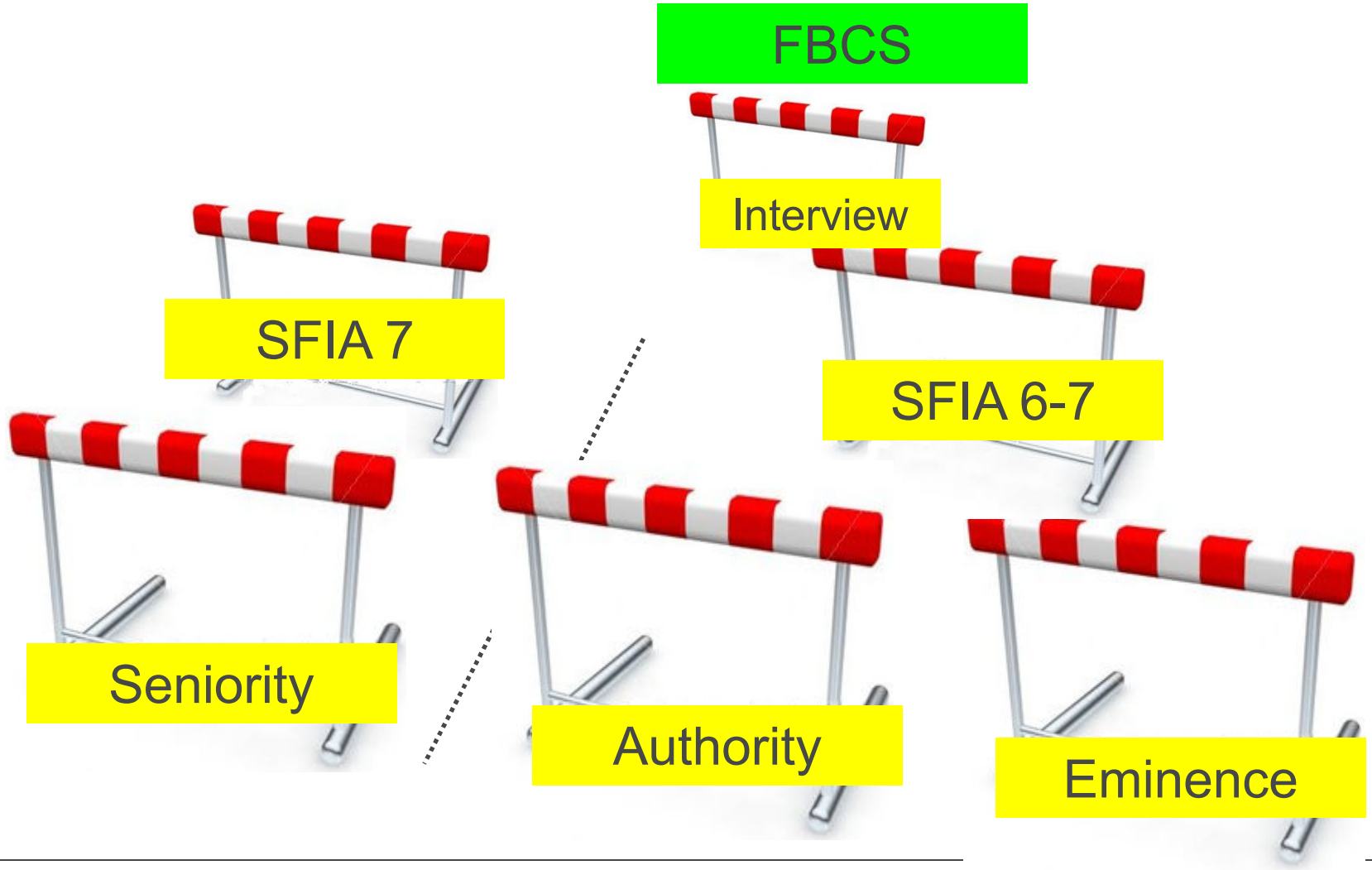
Criteria for the award of CSci include demonstration of

- Use of the **scientific method** to apply appropriate subject knowledge
- Use theoretical and practical methods to analyse and solve problems
- Communicate effectively
- Exercise self-direction and **originality** in solving problems
- Evidence of operating at the **professional level** for at least two years
- Plan and organise projects effectively and work effectively in a team
- Use effective influencing, negotiating and **business skills**
- Continue to advance their knowledge, with a **commitment to CPD**
- Demonstrate an commitment to Health & Safety and environmental issues

Fellowship

Note that Fellowship by itself is not chartered status

Fellowship Criteria



Fellowship criteria

- Are they working at SFIA level 7 ? For example,
    - do they have 50+ people reporting to them (Seniority)?

or

- Do they have international recognition in their field (Authority)?

or

- Are they a well-respected proponent of IT (e.g. BCS and other committees) (Eminence) ?

or do they have some combination of the above?

Karen Burt Award

- Awarded only to women resident in the UK
- Must be newly chartered and doing exceptional work in the field of engineering

Personal Development

The following qualities are the sorts of things we look for in people working in Information Technology:

- Technical skills
- Autonomy
- Professionalism
- Good communication
- Business awareness
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- Leadership
- Eminence

- Membership level
  MBCS
- Chartered level
  CITP
  I. Eng. C. Eng.
  C. Sci
- Fellowship level
  FBCS

http://www.bcs.org/category/10966