

# FIG WORKING WEEK 2019

22-26 April, Hanoi, Vietnam

Presented by the FIG Working Week 2019,  
April 22-26, 2019 in Hanoi, Vietnam

"Geospatial Information for a Smarter Life  
and Environmental Resilience"



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## Land & Resources Professional Qualification Pathway - Core Competencies for Global Land Professionals

James Kavanagh and Nigel Sellars (United Kingdom)

TS06B: Professional Development Experiences and Pathways

Commission: 2

Thursday, 25 April 11:00–12:30 ArcGIS ROOM (210a)

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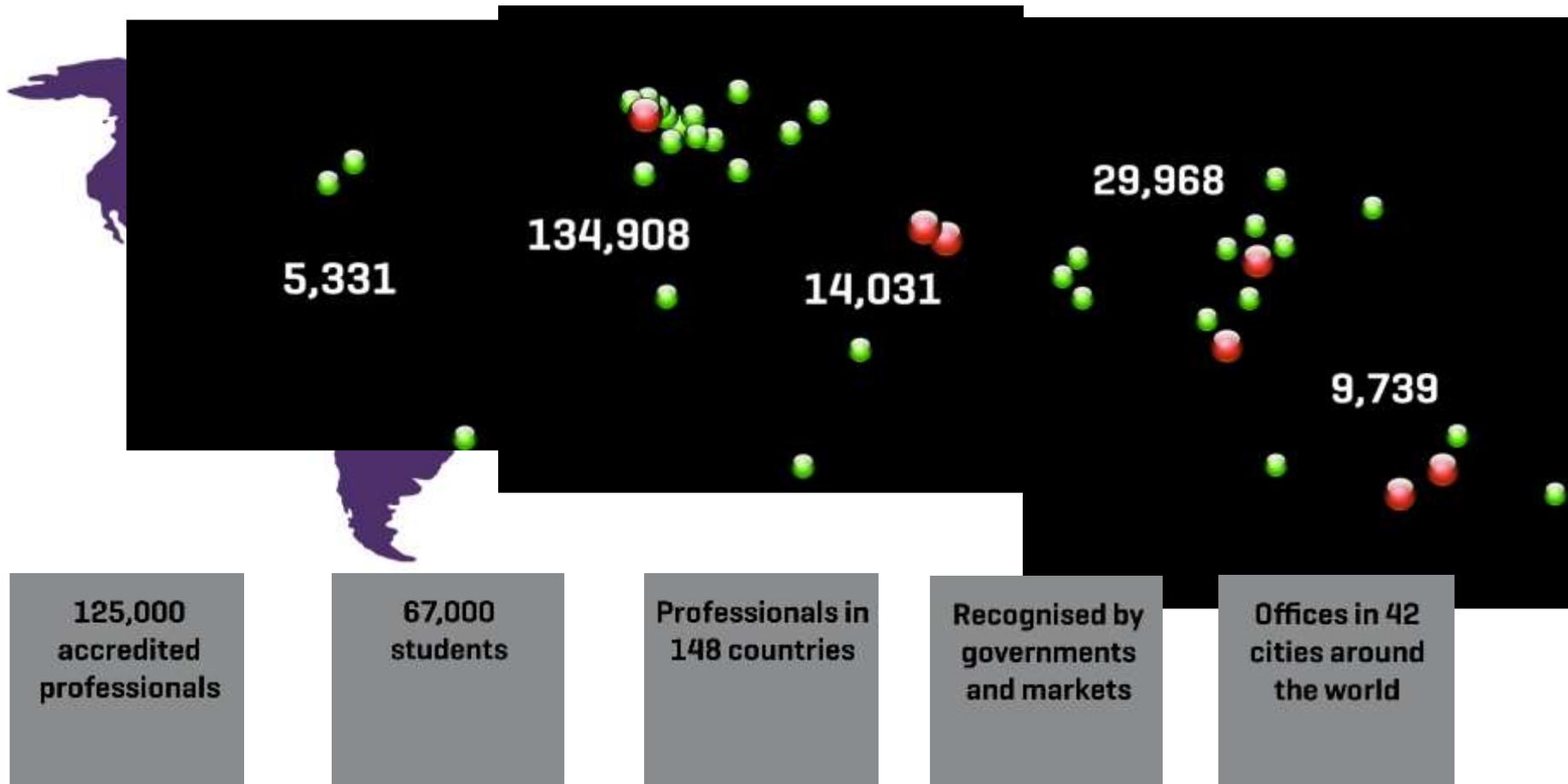
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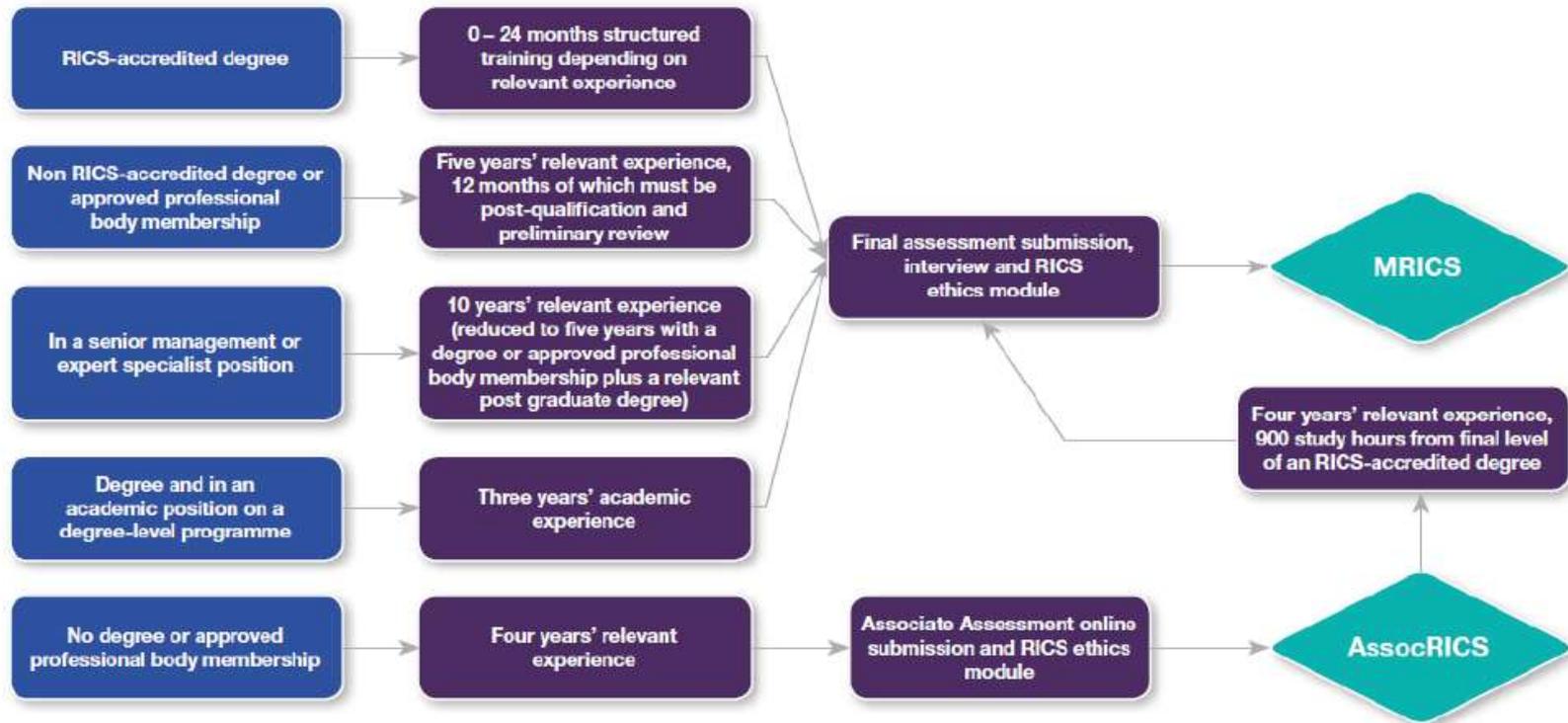
# Introduction and background

- **A very brief introduction to RICS and our history of global (Commonwealth) interaction**
- **RICS professional qualification pathways – the chaos of complexity**
- **Drivers for change**
- **The Land & Resources APC/AssocRICS pathway**
- **Back to the future**

# A very brief introduction to RICS



# RICS professional qualification pathways – the chaos of complexity

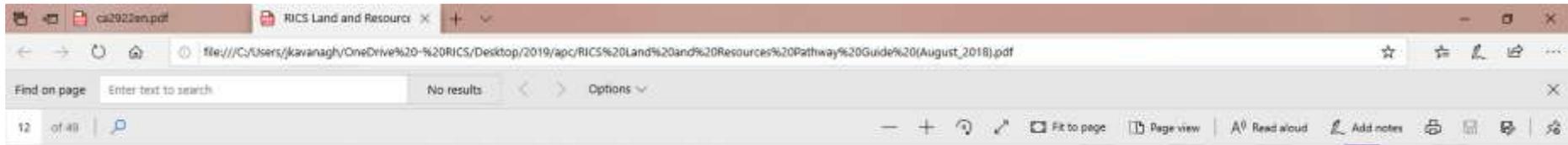


Membership of other professional bodies may mean that you can become RICS qualified directly or without a degree.

Our senior professional assessment is available to those who have made a significant contribution to the profession, are industry leaders or are recognised experts in their field.

More information is available at [rics.org/join](https://www.rics.org/join)

# Drivers for change



## Cadastre and land administration

This competency deals with assessing documents relating to the demarcation, registration and transfer of land to define, on the ground, the extent of legal and/or registered title. It involves the preparation of expert reports for the legal profession and provision of opinions to the legal profession and property owners. It should also involve the integration of Fit for Purpose principles within the design of land administration, mapping, demarcation, land valuation and taxation system and the understanding of how Fit for Purpose can be used in middle/low income countries. Issues around formalisation processes, different forms of tenure and unregistered land should also be understood (global).

### Examples of likely knowledge, skills and experience at each level

#### Level 1

Demonstrate knowledge and understanding of field and office procedures for boundary and/or cadastral surveys appropriate to your national and/or international location. Understand legal and physical boundaries and provide examples of these. Understand the principles of land management, administration, differing types of cadastre, systems, tenure types and Fit for Purpose principles (global).

Examples of knowledge comprised within this level are:

- The property registers in use
- All all plans relating to the registration process
- Limitations of national mapping
- Definition of 'extent of registered title'
- Paper-title (the deeds)
- The status of a deed plan when referred to in the text of a deed
- Legal presumptions regarding property boundaries and the differences between general boundary and fixed boundary systems
- The different types of cadastral system and their relationship to registration and mapping
- The law relating to 'moving boundaries' accretion, erosion, and foreshore.

#### Level 2

Apply your knowledge of the principles of land registration, land management, administration and legislation related to rights in real estate internationally and nationally. Understand the relationship between the surveyor, client and legal profession and preparation of evidence for the legal process.

Examples of activities and knowledge comprised within this level are:

- Adopting appropriate scales for measured surveys to be used in cadastre
- Choosing which documentation to rely upon
- Practising with complete independence from the client
- Requesting documents from the legal profession
- Obtaining documents from the Land Registries
- Using and interpreting of aerial photography and digital imagery
- Reporting relevant matters back to the legal profession
- Understanding of the national requirements for determining boundaries.

#### Level 3

Provide evidence of reasoned advice, and fully understand the role and responsibility of an expert witness, on the resolution of disputes by litigation and alternative procedures.

Examples of activities and knowledge comprised within this level are:

- Advising on the duty of an expert to the court
- Preparing expert reports for use in litigation
- Advising on the requirements of an expert witness within the civil procedure rules
- Advising on the requirements and role of an expert at a 'meeting of experts'
- Advising on the role of an expert at a 'conference with counsel'
- Preparing for trial
- Advising on the role of an expert during and after the trial
- Alternative dispute resolution options, particularly the differences and advantages/disadvantages when comparing mediation with arbitration.



# The geomatics pathway

## Pathway requirements

Mandatory	Core	Optional
<p><b>Level 3</b></p> <ul style="list-style-type: none"> <li>Ethics, Rules of Conduct and professional practice</li> </ul> <p><b>Level 2</b></p> <ul style="list-style-type: none"> <li>Client care</li> <li>Communication and negotiation</li> <li>Health and safety</li> </ul> <p><b>Level 1</b></p> <ul style="list-style-type: none"> <li>Accounting principles and procedures</li> <li>Business planning</li> <li>Conflict avoidance, management and dispute resolution procedures</li> <li>Data management</li> <li>Diversity, inclusion and teamworking</li> <li>Inclusive environments</li> <li>Sustainability</li> </ul>	<p><b>Three to Level 3</b></p> <ul style="list-style-type: none"> <li>Cadastral and land administration</li> <li>Conflict avoidance, management and dispute resolution procedures</li> <li>Engineering surveying</li> <li>Geodesy</li> <li>GIS</li> <li>Hydrographic surveying</li> <li>Legal/regulatory compliance</li> <li>Measurement</li> <li>Remote sensing and photogrammetry</li> <li>Surveying and mapping</li> <li>Surveying of land and sea</li> <li>Use of the marine environment</li> </ul> <p><b>Level 1</b></p> <ul style="list-style-type: none"> <li>Measurement</li> </ul>	<p><b>One to Level 3 and two to Level 2, including any not already chosen from the core list</b></p> <ul style="list-style-type: none"> <li>Big data</li> <li>BIM management</li> <li>Construction technology and environmental services</li> <li>Consultancy services</li> <li>Data management</li> <li>Development/project briefs</li> <li>Environmental assessment</li> <li>Ground engineering and subsidence</li> <li>Management of the natural environment and landscape</li> <li>Planning and development management</li> </ul> <p>Plus, one to Level 2 from the full list of technical competencies, including any not already chosen from the core or optional lists.</p> <div data-bbox="1483 654 1874 946" style="background-color: #e0f2f1; padding: 5px;"> <p>To achieve the Chartered Engineering Surveyor designation candidates must select <b>Engineering surveying</b> to Level 3</p> <p>To achieve the Chartered Hydrographic Surveyor designation candidates must select <b>Hydrographic surveying</b> to Level 3</p> <p>To achieve the Chartered Land Surveyor designation candidates must select <b>Surveying and mapping</b> to Level 3.</p> </div>

Geomatics changes to note – ‘Surveying and mapping’ is the core and is an amalgam of the old ‘spatial data capture & advanced spatial data capture’ competencies.

# Land & Resources pathway

The **Land & Resources** pathway is designed to be applicable across a wide-ranging group of land and resource related sectors. It combines the best from the Environment, Geomatics, Minerals and Waste Management, Planning and Development, and Rural Professional Groups to produce a well-rounded professional Chartered Surveyor.

Although there is a wide choice of competencies available in the pathway there are 12 competencies which we view as the primary skillset for a land professional. Candidates are encouraged to consider these in the first instance.

- Access and rights over land • Cadastre and land administration
- Compulsory purchase and compensation • GIS
- Inspection • Landlord and tenant
- Legal / regulatory compliance • Planning and development management
- Property management • Surveying and mapping
- Sustainability



# Land & Resources core competencies

Mandatory competencies	Optional competencies															
<p><b>Level 3</b></p> <ul style="list-style-type: none"> <li>Ethics, Rules of Conduct and professional practice</li> </ul> <p><b>Level 2</b></p> <ul style="list-style-type: none"> <li>Client care</li> <li>Communication and negotiation</li> <li>Health and safety</li> </ul> <p><b>Level 1</b></p> <ul style="list-style-type: none"> <li>Accounting principles and procedures</li> </ul>	<p>Five to Level 3 and one to Level 2</p> <ul style="list-style-type: none"> <li>Access and rights over land</li> <li>Agriculture</li> <li>Cadastral and land administration</li> <li>Client care</li> <li>Compulsory purchase and compensation</li> <li>Consultancy services</li> <li>Contaminated land</li> <li>Development appraisals</li> </ul>	<ul style="list-style-type: none"> <li>Strategic real estate consultancy</li> <li>Surveying and mapping</li> <li>Sustainability</li> </ul> <p>Plus, two to Level 2 from the full list of technical competencies, including any not already chosen from the optional list</p>														
<p>Although there is a wide choice of competencies available in the pathway there are 12 competencies which we view as the primary skillset for a land professional. Candidates are encouraged to consider these in the first instance.</p>	<ul style="list-style-type: none"> <li>Economic development</li> <li>Energy and renewable resources</li> <li>Engineering surveying</li> <li>Environmental management</li> <li>Geodesy</li> <li>GIS</li> <li>Hydrographic surveying</li> <li>Inspection</li> <li>Land use and diversification</li> <li>Landlord and tenant</li> <li>Legal/regulatory compliance</li> <li>Management of the natural environment</li> <li>Measurement</li> <li>Minerals management</li> <li>Planning and development management</li> <li>Property management</li> <li>Risk management</li> <li>Spatial planning policy and infrastructure</li> <li>Smart cities and intelligent buildings</li> </ul>	<table border="1"> <thead> <tr> <th data-bbox="1016 665 1329 743">Competency</th> <th data-bbox="1329 665 1676 743">Chartered Alternative Designation</th> </tr> </thead> <tbody> <tr> <td data-bbox="1016 751 1329 829">Engineering surveying</td> <td data-bbox="1329 751 1676 829">Chartered Engineering Surveyor</td> </tr> <tr> <td data-bbox="1016 836 1329 915">Environmental management</td> <td data-bbox="1329 836 1676 915">Chartered Environmental Surveyor</td> </tr> <tr> <td data-bbox="1016 922 1329 1001">Hydrographic surveying</td> <td data-bbox="1329 922 1676 1001">Chartered Hydrographic Surveyor</td> </tr> <tr> <td data-bbox="1016 1008 1329 1086">Minerals management or Waste management</td> <td data-bbox="1329 1008 1676 1086">Chartered Minerals Surveyor</td> </tr> <tr> <td data-bbox="1016 1093 1329 1172">Planning and development management</td> <td data-bbox="1329 1093 1676 1172">Chartered Planning and Development Surveyor</td> </tr> <tr> <td data-bbox="1016 1179 1329 1243">Surveying and mapping</td> <td data-bbox="1329 1179 1676 1243">Chartered Land Surveyor</td> </tr> </tbody> </table>	Competency	Chartered Alternative Designation	Engineering surveying	Chartered Engineering Surveyor	Environmental management	Chartered Environmental Surveyor	Hydrographic surveying	Chartered Hydrographic Surveyor	Minerals management or Waste management	Chartered Minerals Surveyor	Planning and development management	Chartered Planning and Development Surveyor	Surveying and mapping	Chartered Land Surveyor
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# Conclusions





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The new Land & Resources pathway can be downloaded @  
<https://www.rics.org/uk/join/pathway-guides/land-and-resources/>

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