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Institution of Agricultural Engineers

**Guide to IAgrE Membership Grades** 

# **G2** – Guide to IAgrE Membership Grades, Requirements for Engineering Council (UK) and Society for the Environment Registration

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#### Introduction

The Institution of Agricultural Engineers (IAgrE) is the professional body for engineers, scientists, technologists, managers, technicians and students working in the land based sector including machinery manufacture, research, agriculture, horticulture, forestry, amenity and the environment.

IAgrE acknowledges that Agricultural Engineering is a diverse subject area and is truly multi-disciplinary – some say a mix of two thirds engineering and technology and a third biological science application. Therefore IAgrE has always welcomed non-engineers into membership. Indeed, all those working at any level in the land based sector are welcome to join at the entry level of IAgrE Associate (AIAgrE).

Those engineers and technologists with appropriate qualifications are able to commence their IAgrE membership at the professional grade of Associate Member (AMIAgrE). With appropriate qualifications and/or suitable experience they may join in the "Corporate" (voting) IAgrE grades of Member (MIAgrE) and Fellow (FIAgrE). This guide will explain the various entry requirements.

IAgrE offers members the opportunity to gain Engineering Council (UK) (EngC) registration at Engineering Technician (EngTech), Incorporated Engineer (IEng), and Chartered Engineer (CEng). Similarly, members working in the associated environmental sector can gain Society for the Environment (SocEnv) registration at Registered Environmental Technician (REnvTech), and Chartered Environmentalist (CEnv). Qualification and experience requirements for professional registration are described later in this guide.

#### Who Qualifies?

IAgrE welcomes members from the following sectors:

- Manufacturing
- The Environment
- Landbased equipment
- Service and repair
- Soil and water engineering
- Farm buildings and process equipment
- Crop storage and handling
- Food process engineering
- Precision Farming

- Outdoor Power Equipment
- Education and Training
- University Research
- Agro-industrial products
- Agrochemicals
- Agriculture
- Horticulture
- Forestry
- Amenity and leisure

# **Grades of IAgrE Membership**

Associate AIAgrE
Associate Member AMIAgrE
Member MIAgrE
Fellow FIAgrE

IAgrE offers **Student Membership** for those following vocational and academic studies in Agricultural Engineering and associated subjects. This is free during college and university with continued free membership during the year immediately following graduation. The details of this will be explained later.

There is a *Commercial Membership* Scheme for organisations across industry (Industry Members) and education (Academic Members).



# **Progression Routes to Membership and Registration - Overview**

#### Read through the following descriptor and associated advice.

This has been written in four sections; for those starting out as students and Associates, those now qualified and starting out in their careers, those with more experience and becoming established in their careers, through to those at the top of their career with high levels of experience and responsibility.

#### **Students and Associates**

Does this describe you?	If so	
I am not qualified as an agricultural engineer but have an interest in the industry and/or work in an allied area.	You should join as an IAgrE Associate and can use the letters AIAgrE after your name.	
I am following an apprenticeship, vocational, academic or post graduate programme in agricultural engineering, land-based technology or a related scientific subject.	You should join IAgrE as a <b>Student Member</b> sponsored by the Douglas Bomford Trust (DBT)	
I have graduated from college or university this year and have a qualification in engineering/agricultural engineering, land-based technology or a related scientific subject.	<ul> <li>IAgrE will classify you as a Pre-Professional.</li> <li>You can continue with your free Student         Membership for a further year.</li> <li>During this period you are eligible to upgrade to         IAgrE Associate (AIAgrE) at a special discounted         rate.</li> <li>You may be eligible to apply to be an Associate         Member of IAgrE (AMIAgrE) – see below.</li> </ul>	

#### **Associate Member Grade**

Does this describe you?	If so
I have followed an academic route and I am at the start of my career. I have a foundation degree, degree or post graduate degree in engineering/agricultural engineering, land-based technology or related scientific subject.	<ul> <li>You should apply to become an IAgrE Associate         Member (AMIAgrE).</li> <li>At this stage of your career, you should consider         interim Engineering Council (EngC) professional         registration as you undergo industrial training and         gain professional experience.</li> <li>After a further 5 years of appropriate responsibility         you should apply to upgrade to IAgrE Member         (MIAgrE)</li> </ul>
I have followed a vocational route and have a technical qualification in engineering/agricultural engineering, land-based technology or related scientific subject at Level 3 or above – for example an extended diploma or an advanced apprenticeship. In addition, including my training period, I have at least 4 years industrial experience. If I am involved with the LTA scheme I will be at LTA 3 or LTA 4.	<ul> <li>You should apply to become an IAgrE Associate         Member (AMIAgrE).</li> <li>At this stage of your career, you should apply for         Engineering Council professional registration as an         Engineering Technician (EngTech).</li> <li>After a further 5 years of appropriate responsibility         you should apply to upgrade to IAgrE Member         (MIAgrE)</li> </ul>



# **Member Grade**

Does this describe you?	If so
I am established in my career and have more than five years of appropriate industrial training and experience with an advanced apprenticeship, Level 3 diploma, foundation degree, degree or post graduate degree in engineering/agricultural engineering, land-based technology or a related scientific subject.	<ul> <li>You should apply to become an IAgrE Member (MIAgrE).</li> <li>If you have completed an Advanced Apprenticeship and/or a Level 3 Diploma you should apply to be become an Engineering Technician (EngTech).</li> <li>Those with degrees and above should apply for Engineering Council professional registration as an Incorporated Engineer (IEng) or Chartered Engineer (CEng).</li> <li>If you work in the environmental sector, you should apply to become professionally registered with Society for the Environment as a Registered Environmental Technician (REnvTech) or Chartered Environmentalist (CEnv).</li> </ul>
I am very well established in my career and have over 15 years of appropriate industrial training and experience. I do not hold the requisite academic qualifications.	<ul> <li>You should apply to become an IAgrE Member (MIAgrE).</li> <li>At this stage you could apply for Engineering Council professional registration (EngTech/IEng/CEng) using the IAgrE Career Learning Assessment. Please ask for advice on this.</li> <li>If you work in the environmental sector, you should apply to become professionally registered with Society for the Environment as a Registered Environmental Technician (REnvTech) or Chartered Environmentalist (CEnv).</li> </ul>

# **Fellow Grade**

Does this describe you?	If so
I am an IAgrE Member (MIAgrE) and would like to upgrade. I am very well established in my career with a foundation degree, degree or post graduate degree in engineering/agricultural engineering, land-based technology or related scientific subject.	<ul> <li>You should apply to become an IAgrE Fellow (FIAgrE).</li> <li>Under normal circumstances, you will have been MIAgrE for at least eight years.</li> <li>It is expected that you will have already gained professional registration with the Engineering Council or Society for the Environment.</li> </ul>
I consider myself to be an exceptional candidate even though I do not hold formal engineering or environmental qualifications. I am not currently an IAgrE member. I have more than 15 years of appropriate experience in a position of responsibility in landbased engineering or environmental technology which is in line with CEng and/or CEnv requirements.	<ul> <li>You may be eligible to become an IAgrE Fellow (FIAgrE) providing certain criteria are met.</li> <li>Please submit an application form and a comprehensive CV for IAgrE review and consideration.</li> </ul>



# **Progression Routes to Membership and Registration – Detailed Requirements**

#### **Grades of Membership**

The Member and Fellow grades of membership are defined as "Corporate Grades". In these cases, eligibility is assessed by the IAgrE Membership Committee.

Student Member	<ul> <li>There is no charge for students attending courses in agricultural engineering or relevant scientific subjects within or recognised by the European Union.</li> <li>If you wanted to upgrade your membership to Associate or Associate Member there is a reduced fee which applies during your time as a student.</li> </ul>
IAgrE Associate (AIAgrE)	<ul> <li>One of the following routes</li> <li>Candidates with a technical education to at least Level 3 such as the BTEC Extended Diploma or equivalent level in a scientific, engineering, agricultural engineering or other relevant technical subject.</li> <li>Candidates who are actively involved in the land based sector or related activities but who do not hold formal qualifications.</li> </ul>
Associate Member (AMIAgrE)	<ul> <li>One of the following routes</li> <li>For those following the academic route, technical education to at least the level of a First Degree, or for those who qualified pre 2000, the BTEC Higher National Diploma (or equivalent) in a scientific, engineering, agricultural engineering or other relevant technical subject. (Candidates qualifying for registration with the Engineering Council UK at the Interim Stage of the Chartered Engineer, Incorporated Engineer or Engineering Technician Registers will be encouraged to apply for registration, whilst undergoing industrial training and gaining professional experience).</li> <li>For those following the vocational route, candidates are required to have a technical education to at least Advanced Apprenticeship, or Level 3 Extended Diploma (or equivalent)in a scientific, engineering, agricultural engineering or other relevant technical subject and have at least 4 years of industrial training and experience in a position appropriate to the Associate Member grade. The programme of study contributes to the period of industrial training and experience. These may also apply for registration as Engineering Technician (EngTech) or Registered Environmental Technician (RenvTech).</li> <li>Technicians following the Land-based Technician Accreditation (LTA) Scheme who have gained a Level 3 qualification as specified in the LTA Scheme or have completed a range of approved manufacturer training courses mapped to the Engineering Council UK-SPEC and approved as meeting the requirements for Engineering Technician (EngTech) Registration.</li> </ul>



#### Member (MIAgrE)

#### One of the following routes

- Education to at least the level of an First Degree, or for those who qualified pre 2000, the BTEC Higher National Diploma (or equivalent) in a scientific, engineering, agricultural engineering or other relevant technical subject.
   Candidates must have at least 2 years of industrial training and at least 2 years of experience in a position of responsibility appropriate to the Member grade, usually 5 years post-graduation.
- Those who have undertaken an Advanced Apprenticeship with Level 3
  qualifications in an engineering subject, and who also qualify for registration
  with the Engineering Council as an Engineering Technician will also qualify for
  this grade of membership.
- A route for Member grade is available for those who have at least 15 years of considerable experience and do not hold the requisite academic qualifications as above. They must be able to demonstrate that:
  - their technical knowledge of agricultural engineering has developed at least to Higher National Certificate level (for IEng) or NVQ3 level (for EngTech).
  - they have 15 years of industrial training and experience in posts of increasing responsibility in a relevant branch of engineering of which 5 years should be in agricultural engineering.
  - they satisfy assessment at Member level by means of a technical submission and a professional interview.
- Exceptionally, those holding senior positions in agricultural engineering, or related professions, will be eligible for entry into this grade by invitation.

#### In Addition

 Those holding academic qualifications and with industrial training and experience meeting the criteria of the Engineering Council and/or the Society for the Environment will be encouraged to apply for registration as a Incorporated Engineer (IEng) or Engineering Technician (EngTech); or Chartered Environmentalist (CEnv) or Registered Environmental Technician (REnvTech) as appropriate.



#### Fellow (FIAgrE)

- For this senior Corporate grade of membership, technical education will normally be to the level of a First Degree in engineering, agricultural engineering or a relevant scientific subject of a British University.
- Candidates should have post-qualifying industrial training and experience of 8 years in positions of considerable responsibility appropriate to the Fellow grade.
- Candidates having appropriate qualifications, industrial training and experience who are not already registered with the Engineering Council UK or the Society for the Environment will be encouraged to apply for registration.
- A route for Fellow grade is available for those with at least 15 years of considerable experience at senior management level and who do not hold the requisite academic qualifications as above.
- They must be able to demonstrate that their academic knowledge of their discipline has developed to a level comparable with a University degree, have very substantial responsible experience in senior positions in relevant branches of our profession, and satisfy assessment at Fellow level by means of a technical submission and professional interview.
- Exceptionally, outstanding individuals not holding formal qualifications
  who, in the opinion of IAgrE, have substantial experience in a position of
  considerable responsibility in the land based sector may join by invitation
  of the President.



# **Professional Registration with Engineering Council**

Registration for the three grades of Chartered Engineering (CEng), Incorporated Engineer (IEng) and Engineering Technician (EngTech) is in two stages:

- INTERIM STAGE Successful completion of an approved academic course
- FINAL STAGE Completion of approved industrial training and experience

#### Chartered Engineers (CEng)

- Chartered Engineers (CEng) are characterised by their ability to create and
  develop appropriate solutions and designs to engineering problems, using
  new or existing technologies, through innovation, creativity and change. They
  might develop and apply new technologies, promote advanced designs and
  design methods, introduce new and more efficient production techniques,
  marketing and construction concepts, pioneer new engineering services and
  management methods. Chartered Engineers are variously engaged in
  technical and commercial leadership and possess interpersonal skills.
- There are two routes to registration, the Standard Route for those with relevant exemplifying qualifications and the Individual Route for those without the exemplifying qualifications but with lengthy relevant experience.
- Standard Route An accredited 4-year MEng programme or 3-year
  BEng(Hons) degree supplemented by further approved learning in agricultural
  engineering or relevant branch of engineering, and having at least 2 years of
  post-degree industrial training and at least 2 years of responsible industrial
  experience in agricultural engineering. Registration at the final Stage is
  subject to satisfactory Professional Review Interview.
- Individual Route Applicants without these exemplifying qualifications can demonstrate the required knowledge and understanding in other ways, but must clearly demonstrate they have achieved the same level of knowledge and understanding as those with qualifications. These include:
  - An assessment of learning and development gained through experience. This is called a Career Learning Assessment. (This route is preferred by IAgrE)
  - Writing a Technical Report (IAgrE refers to this as the TRO route)
  - Following assessed work-based learning programmes
  - Taking academic programmes specified by the IAgrE



#### Incorporated Engineers (IEng)

- Incorporated Engineers (IEng) are characterised by their ability to act as
  exponents of today's technology through creativity and innovation. To this
  end, they maintain and manage applications of current and developing
  technology, and may undertake engineering design, development,
  manufacture, construction and operation. Incorporated Engineers are
  variously engaged in technical and commercial management and possess
  effective interpersonal skills.
- There are two routes to registration, the Standard Route for those with relevant exemplifying qualifications and the Individual Route for those without the exemplifying qualifications but with lengthy relevant experience.
- Standard Route An accredited 3-year Bachelor level degree or BTEC Higher National Diploma/Higher National Certificate supplemented by a 'matching section' equivalent to one further year of study, in agricultural engineering or relevant branch of engineering, and having at least 2 years of approved industrial training and at least 2 years of approved industrial experience in engineering or agricultural engineering. Registration at the Final Stage is subject to satisfactory Professional Review Interview.
- Individual Route Applicants without these exemplifying qualifications can demonstrate the required knowledge and understanding in other ways, but must clearly demonstrate they have achieved the same level of knowledge and understanding as those with qualifications. These include:
  - An assessment of learning and development gained through experience. This is called a Career Learning Assessment. (This route is preferred by IAgrE)
  - Writing a Technical Report (IAgrE refers to this as the TRO route)
  - Following assessed work-based learning programmes
  - Taking academic programmes specified by the IAgrE



# Engineering Technicians (EngTech)

- Engineering Technicians (EngTech) are involved in applying proven techniques and procedures to the solution of practical engineering problems. They carry supervisory or technical responsibility, and are competent to exercise creative aptitudes and skills within defined fields of technology. Professional Engineering Technicians contribute to the design, development, manufacture, commissioning, operation or maintenance of products, equipment, processes or services. Professional Engineering Technicians are required to apply safe systems of work.
- In order to gain the competencies necessary for EngTech registration, a
  period of training and experience must have been undertaken. Formal,
  supervised training such as is provided by some engineering based
  apprenticeships leading to a Level 3 qualification can provide most, if not all,
  of the training and experience necessary. IAgrE recognises that some
  apprenticeships will lead directly to Professional EngTech registration. Please
  contact IAgrE for details of these. There are two routes to registration at
  EngTech
- **Standard Route** Candidates who hold the following qualifications in land based/agricultural engineering or relevant branch of engineering:
  - National Diploma or National Certificate
  - Foundation Degree
  - Approved level 6 qualification in Scottish Qualifications and Credit Framework
  - City & Guilds Higher Professional Diploma
  - Technical Certificate as part of an Approved AMA Programme
  - ➤ Level 3 NVQ or SVQ
  - Work based learning route approved by the IAgrE
  - Similar qualifications providing they have been assessed and approved by the IAgrE
- Individual Route Candidates without exemplifying qualifications may apply
  for an individual appraisal. This is a separate procedure administered by the
  Institution and involves an in-depth appraisal of the knowledge and
  experience acquired.
- Experienced, practising professional Engineering Technicians often have gained the necessary knowledge and skills through working closely with other skilled colleagues over a number of years. For further details about this route, contact the IAgrE Membership Secretary.



# **Registration with the Society for the Environment**

As a constituent body of the Society for the Environment, IAgrE is able to nominate suitably qualified members for registration as a Chartered Environmentalist and Registered Environmental Technician.

## Chartered Environmentalist (CEnv)

- Being a Chartered Environmentalist (CEnv) is about having the professional knowledge, experience and commitment to apply sustainable thinking throughout your daily working life. To register as a Chartered Environmentalist, you must be a full member of IAgrE.
- To be eligible to apply to become a CEnv, you must be able to demonstrate a level of knowledge and understanding equivalent to a Master's Degree, and have sufficient relevant experience to be able to meet the CEnv Key Competences. (Normally four or more years' practical experience is required, but IAgrE may accept a shorter period in individual cases).
- It is acknowledged that Chartered Environmentalists will have built up their professional knowledge, experience and commitment through both academic study and experience. It is suggested that academic study will need to be combined with suitable relevant experience for it to count and a combined period of around 8 to 10 years of study and experience is typical. Registration at the Final Stage is subject to satisfactory Professional Review Interview.
- You must be willing to comply with Society for the Environments Code of Conduct and your own Licensed Body's continuing professional development requirements.

# Registered Environmental Technician (REnvTech)

- A Registered Environmental Technician (REnvTech) is a professional who
  demonstrates the ability to apply environmental knowledge, understanding
  and skills to protect and enhance the environment in a sustainable way. A
  REnvTech will operate within a range of environmental disciplines and
  knowledge based found across agricultural engineering or relevant scientific
  subjects.
- To be eligible for registration as REnvTech, the candidate will need to have a
  level of knowledge, understanding and skills equivalent to at least Level 3 in
  the Qualifications and Credit Framework of England, Wales and Northern
  Ireland, and the Scottish equivalent.
- They will possess sufficient relevant practical experience to be able to demonstrate the REnvTech competencies and demonstrate underpinning environmental knowledge and an ability to apply it in practice.
- Applicants will normally have the equivalent of two years full-time workbased practice and this must have a direct and distinct environmental focus and/or context. This can include paid employment, voluntary activity and work placements but not pure educational study