IOP Institute of Physics

Chartered Physicist
Application Guidelines

CPhys

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Application Guidelines

Chartered Physicist (CPhys) is the professional qualification awarded by the Institute of Physics to practicing physicists. Being a Chartered Physicist proves that you have a level of knowledge and experience that can be relied on by employers and the wider community.

By becoming a Chartered Physicist, you agree to a code of conduct that reflects best practice. The code requires that our members not only show a high level of professionalism, but also advance their competence through continuous professional development.

To be eligible for CPhys you will need to be a Member or Fellow of the Institute of Physics (MInstP or FInstP). You can submit your membership and chartership applications at the same time if necessary however your chartership application won't be processed until your application for membership has been approved. For information and to apply for membership please visit **iop.org/join.**

Eligibility Requirements

To be eligible for Chartered Physicist you will:

1. **Have a good breadth and depth of physics knowledge**
   You will demonstrate this by either:
   - Holding an IOP-accredited integrated master's degree (MPhys/MSci)
   - Or showing knowledge and skills equivalent to this through completing the Masters Equivalence Report (see page six for more details)

2. **Have sufficient work experience to enable you to demonstrate the CPhys competencies and provide examples of sustained experience at a responsible level**
   You will demonstrate this by completing the Professional Review Report
   (See page seven for more details)

3. **Nominate supporters who can vouch for you**
   You will provide us with details of two people who can confirm your experience and knowledge

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1. How do I apply?

To apply for Chartered Physicist status, you will need to complete the online application form, which can be found at applications.iop.org

Please note that depending on your qualifications and experience, you may not need to complete every section of the form. Please see the table below for details.

	I hold an IOP-accredited master's degree	I don't hold an IOP-accredited master's but I do hold an IOP accredited bachelor's degree	I don't hold an IOP-accredited master's or bachelor's degree
Main application form	Yes	Yes	Yes
Your current CV	Yes	Yes	Yes
Physics Knowledge			
Your degree certificates	Yes	Yes	Yes
Master's Equivalence Report: - Core of Physics topics - Project Equivalence (thesis or dissertation abstract accepted as an alternative)	 No No	 No Yes	 Yes Yes
Professional Review Report			
An organisational chart showing your current position	Yes	Yes	Yes
A written professional review report: - IPD (If you have completed an ACTS scheme accredited for CPhys this section is not mandatory until Jan 2019 but is strongly recommended)	Yes	Yes	Yes
- Responsible experience examples	Yes	Yes	Yes
- CPD	Yes	Yes	Yes
The application fee	Yes	Yes	Yes
Supporters			
	I have two supporters		I have three supporters
Supporter details required		Supply contact details plus a covering letter explaining your choices	

If you have any questions, or require a paper copy of the application form, please contact us on **+44 (0)20 7470 4800** or email **cpd@iop.org**.

Fee information

Our current subscription and professional fees can be found on our website at membership.iop.org/become-a-member?

2. Eligibility Criteria

Physics knowledge

All applicants are required to demonstrate that they have the breadth and depth of physics knowledge that is required of a Chartered Physicist.

There are two ways that you can show this:

Option 1: Accredited master's degree
You hold an integrated master's degree accredited by the Institute of Physics, and can provide evidence of this.

Option 2: Submission of a Master's Equivalence Report
If you do not hold an accredited integrated master's degree, we ask that you demonstrate the missing parts of your degree through a Master's Equivalence Report. If you hold a physics degree awarded prior to 1998 you don't need to complete the Core of Physics section.

This report consists of two parts:

1. **The Core of Physics topics**
   Please indicate your knowledge of the Core of Physics topics, as listed within the application form, and how this was gained. The majority of these topics should be covered through your degree however you may supplement some of this section with private and/or work-related study. These topics are based upon the criteria for an accredited bachelor's degree therefore you do not need to complete this section if you hold a bachelor's degree accredited by the Institute of Physics.

2. **The CPhys Master's Equivalence Section**
   This section requires you to write a report of around 2000 words, describing your personal responsibilities and achievements in relation to an in-depth study that included project work. You may be able to utilise or reference past reports to fulfil this requirement if supplemented by a description of your personal involvement in the project. Alternatively, a thesis or dissertation abstract may be provided in place of this section for those with a relevant PhD or master's with a project element.

Please note *that whichever route you follow you may be asked to attend an interview to discuss your knowledge and experience in greater depth (see page 15).*

2. Eligibility Criteria

Professional Review Report

All applicants are required to demonstrate that they have sufficient professional experience in a physics-related role.

Career length: There is no specific time-served requirement, however you will need to have been working for long enough to allow you to demonstrate all the CPhys competencies, and provide evidence of sustained work at a responsible level.

As a guide, we would normally expect that the IPD section would cover your first two to three years after graduation - you can also include your PhD here if applicable. The RE section should cover two to three years following IPD.

As these two sections should be independent of each other time wise, generally we find it takes applicants four to six years for both the IPD and RE combined.

For us to assess your professional experience, ALL applicants are required to send us a professional review report. This report summarises and links your experiences to the competencies for CPhys. It should also highlight how you have gained experience at a responsible level, and provide us with a snapshot of your career at the time of application.

A template for the report is provided within the application form. It includes the following sections:

INTRODUCTION – A brief outline of your current role and career history, around 500 words in length.

ORGANISATIONAL CHART – Attach a chart showing your current position within your organisation, displayed as a hierarchical company structure.

INITIAL PROFESSIONAL DEVELOPMENT (IPD) – Specify the experience you have gained in the following five competency areas. Around 100–200 words per section.

2. Eligibility Criteria

Professional Review Report *cont*

Competence A - Application of general and specialist knowledge
Demonstrate your ability to:

a) Evaluate data critically, drawing logical conclusions
b) Apply a logical approach to problem solving
c) Apply a creative problem-solving approach to physics-related projects

In addition, you are asked to demonstrate your ability in two of the following areas:

a) Exploit and/or develop emerging technologies to enhance current practices
b) Ensure continuing fitness for purpose of products and services
c) Publish in peer-reviewed scientific journals to further the understanding of the physics community
d) Promote innovation and technology transfer
e) Supervise undergraduate or post-16 physics project work
f) Design and deliver undergraduate programmes
g) Contribute to the profession outside your immediate working environment
h) Contribute to the public understanding of physics

Competence B - Applying physics to the analysis and solution of problems
Demonstrate your ability to:

a) Identify potential projects and opportunities using your physics knowledge
b) Conduct and document appropriate research and design possible solutions
c) Plan and implement solutions
d) Evaluate solutions and make improvements

Competence C - Technical and managerial skills
Demonstrate your ability to:

a) Plan for effective project implementation
b) Make effective use of all resources (such as people, time, finance, physics knowledge) and demonstrate leadership in carrying out tasks
c) Develop the capabilities of people for whom you are responsible, eg students, team members, etc, to meet the demands of changing technical and managerial requirements
d) Bring about continuous improvement through quality management

2. Eligibility Criteria

Professional Review Report *cont*

Competence D - Communication and interpersonal skills
Demonstrate your ability to:

a) Communicate clearly and effectively with others at all levels, by both oral and written methods
b) Present and discuss concepts, ideas and plans convincingly and objectively with your superiors and others
c) Participate effectively within a team
d) Exert appropriate influence and effective leadership qualities

Competence E - Professional conduct
Demonstrate how you will perform these behaviours as a responsible Chartered Physicist:

a) Comply with the Institute of Physics code of conduct, which can be found on our website at iop.org/about/royal_charter/file_67323.pdf. Please read it before completing your application
b) Observe rules and regulations relating to your professional practice as a physicist
c) Be aware of and sensitive to health, safety and environmental issues
d) Carry out the continuing professional development (CPD) necessary to ensure competence in your future career. Note that anyone awarded CPhys is required to maintain a record of their CPD and may be asked to submit this to the Institute for monitoring purposes.

Please note *that we expect you to interpret these statements in the context of your job. While everyone must satisfy each of the major headings A–E, we realise that within each heading you are likely to be stronger in some areas than others.*

First person: We recommend that you write all statements for the report in the first person as this will help you to emphasise your personal involvement in the examples.

RESPONSIBLE EXPERIENCE – You will be able to provide at least three (preferably four) examples of work that you have carried out at a responsible level. These should show progression from your Initial Professional Development and demonstrate a sustained period of responsibility. This section should be around 800 words.

We ask that you demonstrate competence in a range of work that has required your independent technical judgement, and some direct responsibility for resources; taking account of financial, commercial, safety, statutory and national considerations. Responsible experience will usually include an element of responsibility for risk.

2. Eligibility Criteria

Professional Review Report *cont*

Your knowledge and experience must reflect a broad view of your employer and work environment. The main facets you will need to show evidence of are:

- CPD aimed at developing a deep specialism and/or broad knowledge across a physics-related area
- Ability to carry out complex tasks in a flexible and adaptable manner
- Beginning to gain greater skills in dealing with customers/colleagues/students
- Identifying new opportunities for both your own development and that of the organisation
- Working to support the aims of your organisation and to promote it within your sector
- Starting to demonstrate leadership qualities and to take on team-leader responsibilities
- Aspects of people development

The following are ways in which the above criteria might be shown. This list is not exhaustive and no applicant is expected to be able to provide evidence in all these areas.
All applicants are expected to exhibit skills from the general examples.

General

- Leads or manages a small study, research or project team
- Works independently
- Identifies new opportunities and is consulted on technical, research or business plans
- Can make appropriate use of financial/budgetary information
- Responds to the needs of customers/colleagues/students
- Proactive in making changes, allowing for needs for quality standards and continuous improvement
- Encourages flexibility from others
- Proactive in encouraging others to seek out, record and share new knowledge
- Manages and applies safe systems of work
- Awareness of intellectual property issues

Functional

- Applies knowledge in a broad range of contexts within accepted practice and procedure
- Offers professional advice in complex situations, maintaining professional integrity
- Applies project management principles, identifying milestones and juggling resources
- Works using delegation without abdicating responsibility
- Makes reliable and consistent judgements, where there are few guidelines or precedents
- Carries out risk assessment on projects
- Promotes team spirit and keeps others focused on tasks ahead

2. Eligibility Criteria

Professional Review Report *cont*

Technical

- Applies knowledge creatively in a broad range of complex and non-routine contexts, including design and development, although still within a framework of accepted practice and procedure
- Has a growing ability to bridge between technical areas
- Demonstrates technical integrity in approach and ability to meet technical scrutiny
- Oversees the technical aspects of projects, both programs and standards of work
- Shares technical information and ensures the passing on of lessons learned

Academic

- Lecturing at an undergraduate level in pure and applied physics
- Contributing to the design of post or undergraduate courses
- Collaborating with industry and the wider physics community
- Lecturing to peers at academic events
- Publishing in peer-reviewed journals

Confidentiality: We have many applicants whose work is of a confidential nature, so please contact us if you have any concerns about sharing information to support your application.

CONTINUING PROFESSIONAL DEVELOPMENT (CPD) – Outline your career, training and development plans for the next five years. This section should explain how you intend to retain competence once you are chartered. This should be around 200 words.

2. Eligibility Criteria

Choosing your supporters

First supporter - This must be someone who knows, or has known you professionally, working at a senior level to you and with direct knowledge of your role and responsibilities. This could be fulfilled by your current line manager, employer, head of department or faculty, head teacher or training scheme mentor

Second supporter – This must be someone who knows or has known you professionally at a relevant point in your career.

Optional third supporter - A third supporter may be necessary if your application covers periods spent at several different organisations or if you undertake consultancy work. Please ensure that between them, your supporters are willing and able to verify your experience.

They should be contactable by email for several months after you submit your application. Supporters will be sent links to the form they need to complete online via a generic IOP email address. Please ask your supporters to provide an email address that doesn't have a high firewall as this can cause delays in your application.

In the event of inconclusive comment from your supporters, we may contact them for further information or ask you to nominate an additional supporter.

3. How is my application assessed?

A panel of five Chartered Physicists sees each application. The panel assesses the information in your application along with the comments of your supporters, and compares these to the requirements for Chartered Physicist. Once assessed, the panel will choose to accept, reject, or defer your application.

Occasionally, applications are deferred to allow the applicant an opportunity to supply additional information. Other deferrals are generally due to insufficient responsible experience. A deferral can be granted for up to a maximum of 12 months. Where an application is deferred or rejected the applicant will always receive a letter explaining the reason for this and a suggested future course of action as put forward by the assessing panel.

4. How long will my application take to process?

You will normally receive a decision on your application within six – eight weeks of your supporters returning their forms. You can log back on to the online system to check the progress of your application.

Poorly prepared applications will inevitably take longer so it is in your best interest to ensure that the information supplied is as accurate, clear and complete as possible.

5. Interviews

There is no requirement for you to undertake an interview when you apply for CPhys. The application process can be based purely on your written submission. However, we understand that sometimes you might prefer to have an interview, as you might feel you can communicate your skills and knowledge better verbally. Also, on occasion applicants are asked to attend an interview by the panel.

The aim of the interview is to confirm the information supplied within the application and to verify that you meet the standards required of a Chartered Physicist. Further guidance will be supplied if the need for an interview is confirmed. Interviews typically last between 45 and 60 minute and are conducted by two members who also hold CPhys.

All Interviews are arranged regularly throughout the year and are usually held in London

IOP Institute of Physics

Visit our website
iop.org/chartership

or contact us to discuss your application
on **+44 (0)20 7470 4800**
or **cpd@iop.org**

Apply online: **applications.iop.org**