

Notes for guidance for CStat applicants via the standard route

The Society offers two routes to Chartered Statistician (CStat) status – a standard route and a competence based route.

Applicants whose qualifications meet both the Society's standards for a Graduate Statistician and at least one of three academic criteria detailed below should apply for CStat status via the standard route. If you are not sure whether your qualifications fulfil the criteria, we would advise you to first review the Society's standards below. If there are gaps in coverage of the required points, then you may still be eligible for CStat status via the competence based route if you can demonstrate that the necessary knowledge or skills have been acquired in a different way (i.e. through training). Please refer to the separate guidance notes for the competence based route to CStat for further details. The criteria for professional statistical experience are equivalent for both the standard and competence based routes.

Applications are considered by the Professional Affairs Committee and the confidential nature of the assessment process is stressed. Nevertheless, it is recognised that some applicants may need further assurance or guidance in this regard. This might for example relate to the use of an organisation's internal documents as part of an applicant's training portfolio, or if there are issues of security clearance. Applicants who anticipate problems with confidentiality should contact the RSS office for advice.

Chartered Statistician standard route - academic criteria

To fulfil the academic requirements for the standard route to CStat, candidates must meet at meet the Society's standards for a Graduate Statistician:

Graduates must have a good knowledge of

- the frequentist and Bayesian methods for conducting data analyses
- their logical foundations, including relevant probability theory
- the principles of systematic data collection, management and curation

They can use this knowledge, together with software and programming skills, to

- build, assess and refine models appropriate for describing and understanding a wide variety of processes or problems
- draw appropriate inferences from them
- effectively communicate both substantive results and the nature of the uncertainty inherent in them, to expert or lay audiences.

They are aware of the implications of their work for the rights of individuals, are trustworthy, maintain the highest ethical standards and work for the public good.

In addition to the above, qualifications must meet at least one of the following three criteria:

1.

a. a UK Bachelors degree of classification 2:2 honours or better (or equivalent under UK NARIC) that was, at time of award, on the list of the Society's accredited degrees. Holders of a non-accredited UK Bachelors degree programme must have completed a combination of modules that successfully meet the Society's standard for a Graduate Statistician as mentioned above[to be evidenced by a copy of the transcript and degree certificate];

OR

b. a UK Masters level degree of classification pass or better (or equivalent under UK NARIC) that was, at time of award, on the list of the Society's accredited degrees. Holders of a non-accredited UK Masters level degree programme must have completed a combination of modules that successfully meet the Society's standard for a Graduate Statistician as mentioned above. [to be evidenced by a copy of the transcript and degree certificate];

OR

- c. more than one degree at UK Bachelors, Masters and/or Doctoral level (or equivalent under UK NARIC) of classification as given in 2 a. and/or 2 b. The degrees must in combination successfully meet the Society's standard for a Graduate Statistician as mentioned above [to be evidenced by copies of transcripts, degree certificates, module / unit descriptions including learning outcomes and candidate's dissertation / research project (or equivalent)];
- 3. The Society's Graduate Diploma [this award can be verified from the Society's records]. Exceptionally, where an applicant has partially completed the Graduate Diploma but does not hold the award, they may submit evidence of further study that successfully meet the Society's standard for a Graduate Statistician as mentioned above. [to be evidenced by a copy of module/unit descriptions and award letters for any further study].

For UK undergraduate Honours Degrees (including enhanced undergraduate degrees of the MMath type), the content must meet the Society's standard for a Graduate Statistician as mentioned above. Joint degrees in Statistics and/with other subjects or those with a high content of statistics-based modules, where the high-level statistics content is substantial, might also qualify.

For UK taught Masters degrees (usually MSc), the content must successfully must meet the Society's standard for a Graduate Statistician as mentioned above.

For overseas degrees, a broad equivalence with UK degrees as set out above is required. The Society is normally guided by UK NARIC (the National Recognition Information Centre for the United Kingdom) in assessing the level of overseas degrees. In some cases, the level of MSc is a necessary requirement.

For research degrees, whether at Masters level (often called MPhil) or at Doctors level (PhD), it will be necessary for an applicant to demonstrate a breadth of study as well as the depth that is inherent in research work which successfully must meet the Society's standard for a Graduate Statistician as mentioned above. This might for example be achieved by

taking some taught courses alongside the research work, or it might be implicit in an undergraduate degree obtained previously.

All qualification(s) are assessed for being appropriate by the Professional Affairs Committee. Some university courses are formally accredited; other cases are considered on an individual basis.

The criteria also make reference to the Society's own professional examinations and to the transition arrangements put in place for candidates who had partially completed the Graduate Diploma prior to its withdrawal after the May 2017 examination session.

Chartered Statistician - criteria for professional development

Applicants for Chartered Statistician status have to demonstrate professional development consisting of appropriate refereed professional statistical training and experience. It is acceptable for the training to be partly or wholly experiential, i.e. on-the-job.

Typically at least five years of a statistical career will be required to complete the necessary overall professional development. Applications via the standard route will normally be based on a five-year (full-time equivalent) history of professional statistical training and experience, normally since the date of the *first* academic award which would have qualified the applicant for Graduate Statistician status. Applicants must show that sufficient training and experience, in line with the Society's continuing professional development policy, have been acquired to satisfy the Professional Affairs Committee.

Any study, full-time or part-time, for a higher degree or any other qualification (with the exception of the degree used to fulfill the academic criteria) may be included in the period. In the case of PhD study, the norm is to allow this to count as one year of training/experience, on the basis that it is usually very deep but narrow. Any part-time work carried out alongside further full-time study can be included; details are needed.

In the majority of cases, the practical professional training/experience will have been acquired after the date of the first qualification which meets the academic criteria set out above. Occasional cases arise where an applicant has a five-year period of professional statistical training/experience at an appropriate level *before* the date of that academic award, or spanning the time when a qualification was earned. An example might be someone with an Honours degree that contained only a small amount of statistics, who entered a professional statistical career and subsequently took an MSc in Statistics or perhaps completed the Society's Graduate Diploma. Applications should be made in the usual way but the applicant should make clear exactly what period(s) of professional training/experience are being offered, and how these relate to the date(s) of academic award(s). The training that led to the qualifying degree for Graduate Statistician status cannot be used as part of the five-year period.

Professional experience for Chartered Statistician

Any relevant practical professional statistical experience will be considered. The following list is indicative of types of experience but it is not exhaustive.

- Managing a statistics section
- Leading projects with a substantial amount of statistical analysis or modelling
- Undertaking statistical analysis of data and reporting on the results
- Having responsibility for the interpretation and presentation of statistical information
- Designing statistical databases and reporting systems

 Teaching statistical theory and methods, and their applications, in a practically oriented way; at undergraduate and/or postgraduate level.
Unsupervised statistical consultancy

Professional training for Chartered Statistician

Applicants must provide details of the continuing professional development (CPD) activities in which they have been engaged. A CPD summary covering the preceding 2 years, demonstrating compliance with the <u>Society's CPD policy</u> must be submitted as part of the application (a CPD summary template is available from the RSS website).

Applicants are strongly advised to consult the <u>examples of continuing professional</u> <u>development (CPD) profiles</u> for statisticians in various sectors and at various stages in their careers that are available on the Society's website.

Applicants should also keep appropriate documents and other supporting material, and are strongly advised to maintain a portfolio for this purpose. The contents of such a portfolio are at the applicant's discretion, but should be seen as a selection of key material. The Society does not believe that it will commonly be necessary or desirable for applicants to maintain extensive portfolios. Compact but informative portfolios are encouraged. A portfolio might contain a selection of the following items, or others, depending on the career of the applicant. The items in this list are offered as guidelines. The list is not intended to be prescriptive, nor should it be interpreted as an order of importance.

- · Publications, refereed.
- Publications or presentations at conferences.
- Internal organisation reports.
- Internal presentations.
- Training material, internal or external.
- Other material in which participation of the applicant in a development activity is acknowledged.
- Extramural statistical work (this might include appropriate service on committees).

The portfolio should not be submitted as part of the application, but should be available on request; as the Professional Affairs Committee reserves the right to see it.

Referees

At least two referees are required, and the references in combination must usually cover the most recent 5 years of an applicant's career. Referees must be able to comment authoritatively on the statistical aspects of the applicant's work, professional experience and any on-the-job professional training. At least one referee should be in a position of seniority (for example, the applicant's line manager).

In the majority of cases two referees is likely to be sufficient, but this depends on the career path of the applicant.

Normally, all referees should themselves be statisticians and where possible should hold CStat status. It is however appreciated that some applicants will not be able to provide such referees, though in such cases applicants should endeavour to nominate referees who hold equivalent status in other professions.

Assessment process for CStat applications via the standard route

All applications are considered by members of the Professional Affairs Committee (PAC). The Committee may defer making a decision, pending receipt of additional information and the RSS office will contact the applicant to request this.

If an applicant is found to meet the academic criteria but has not yet acquired the necessary professional experience or training, then they will be offered the award of GradStat status in the interim.

Applicants who do not fulfil the academic criteria but appear to have suitable professional training and experience may be advised to apply for CStat status via the competence based route.

The RSS office is happy to liaise with applicants individually to help them determine which route is most suitable based on their individual circumstances.

May 2020