

Job Advert Notes

Background

The STER report identified up-skilling for Computing Science (CS) teachers as an essential component in raising uptake for CS education. STACS has secured Scottish Government approval and funding to continue a teacher-led programme. The STACS teacher-reference group called for up-skilling opportunities to focus specifically on CS topics across course levels. The programme should be informed by SQA data and course reports as well as feedback from teachers to target improved pupil attainment.

The Up-skilling Programme: Learning with a Community of Practice

The reference group also identified the importance of sharing the classroom expertise of CS teachers to offer up-skilling experiences grounded in practical methodologies. We recognise that teachers collaborating to learn with each other represents a Community of Practice approach to up-skilling. STACS will invite the wider CS teacher community to take part in shared learning through a programme of interactive workshops as well as access to classroom materials and related on-demand self-study resources. The programme content and activity will be led by a team of teacher-tutors. The tutors will bring and share their own rich classroom experience and expert insights to develop and deliver the programme. The STACS core team will support the teacher-tutors and provide overall programme coordination and management in consultation with partners.

2024-5 project

Previous STACS up-skilling programmes focussed closely on requirements arising from CS NQ courses and SQA course reports. This time the scope will build on and evolve from prior programmes but will also broaden, for example, to include the CS learning experiences within the BGE in relation to NQ courses such as across primary-secondary transition. To enable a flexible programme for tutors and teachers in terms of content options and duration, STACS will provisionally establish 15-20 tutor posts which feature a number of core hours with options to extend the programme duration.

Co-development of a flexible programme

The programme seeks to balance evidenced up-skilling requirements and teacher needs with the practical realities of tutor and teacher priorities in terms of time and topics of professional interest. STACS proposes a flexible programme co-produced with tutors where:

- STACS identifies a set of programme characteristics and a list of provisional up-skilling development areas. (See appendix below).
- Tutors collaborate in small teams (at least 2 people) to draft a design for a bespoke programme they wish to deliver together.
- Tutor teams discuss their draft programme with the STACS core team and finalise agreed programmes.
- Programmes are published and teachers are invited to participate in one or more of the programmes.

STACS will work with tutors to co-develop a programme structure that fulfils the programme characteristics and implements up-skilling in one of the development areas. These are described in the appendix. Implementation details will be made available after the interview and appointment.

Job Purpose: Outline

Tutors will collaborate to define a focussed up-skilling programme which supports the key development areas and programme characteristics. Tutors will prepare and deliver a series of at least two live workshop tutorials, online or in-person. The workshops will operate between November 2024 and March 2025. Tutors will support teachers to continue with activities related to up-skilling outwith the core tutorials, specifically engagement on the STACS connected platform. A STACS led core team will provide organisational and content support for tutors and teachers. The core team will have input from the course PAs for SQA.

Tutors would be allocated a baseline of 15 core hours. It is anticipated that programmes will require additional time, and so tutors will return monthly time sheets for agreed hours spent on duties and responsibilities relating to the project. The 2024-5 project notionally runs from 1 November 2024 until 31 March 2025, the effective start date for this post will be announced after appointments made. The post will be remunerated on the University of Glasgow scale point 7 (pro rata). Appointment to post may be renewed in the next project financial year (2025-6) subject to mutual agreement.

Main Duties & Responsibilities

1. Collaborate with co-tutors and the core team to define, propose and prepare an agreed up-skilling programme for a teacher community at local or national level.
2. Define timescale, initial project hours. Negotiate content, format and any extension or additions.
3. Lead the delivery of up-skilling activity as part of a tutor team of at least 2 teacher-tutors.
4. Support teachers in applying up-skilling content within the appropriate course. Importantly helping teachers identify outputs which can evidence up-skilling.
5. Collaborate with the core team to collate evidence and conduct an evaluation of the programme.

Knowledge, Qualifications, Skills & Experience

Essential

- At least 3 years recent experience in successful presentation of National 5 and / or Higher Computing. Alternatively, 3 years' experience in developing and leading CS in Early years or Primary stage.
- Proven ability to create materials for teaching and learning in Computing Science courses or learning programmes and use them effectively.
- Demonstrated ability to bring about improvements for learners in Computing Science.

Desirable

- At least 2 years recent experience in marking of National 5 and / or Higher Computing or lead responsibility for assessing learner progress in the BGE CS outcomes.
- Experience in leading or presenting to others in development work relating to Computing Science NQ courses or BGE CS learning programmes.
- Experience in leading and supporting STACS activities such as reference group, up-skilling tutor, session presenter for STACS connect or STACS virtual festival.

Application

Please submit your application to the [University of Glasgow jobs website](#).

Please include the following to your application

- CV
- Cover letter
- 2 References
- A copy (photo) of most recent diploma or qualification

Appendix

Activity characteristics for bespoke programme options

The programme content will:

- complement the professional interests, skills, knowledge and experience of the tutor(s)
- relate to SQA NQ course reports or previous STACS up-skilling programmes or previous STACS activities including workshops from the virtual festivals and summer STACS connected in-person events in Glasgow
- aim to be inclusive; relevant to NQT and experienced teachers
- complement other STACS up-skilling programmes in terms of content in order to offer an appropriate range of topics
- implement one of the development areas identified below

The programme format will:

- be compatible with the personal and professional responsibilities of the tutors and teachers
- provide a route for access by teachers at national scale, for example, contribute material for the STACS-connected platform
- include live interaction through blend of online and in-person activity, locally or nationally
- support on-demand up-skilling through a recording of activity as well as classroom support materials, (the materials could be produced as part of the up-skilling activities)
- complement other STACS up-skilling programmes in order to create a timetable that is appropriate for tutors and teachers

The programme purpose will:

- emphasise the Community of Practice approach - all participants are thinking and learning together
- acknowledge the social nature of human learning conducted and an experimental approach by professional practitioners within the subject area

Development areas

Each development area is a source for a range of possible programmes which tutors would formulate in discussion with STACS core team. Each programme would be guided by the characteristics above. Each development area could include several complementary programmes from different tutor teams and offer a range of tutorials suitable for different groups of teachers. The list is for guidance rather than being prescriptive.

1. Collaborative production of prelim papers or other related assessment materials
 - Follow-up to course content covered in the STACS N5 and H up-skilling programme 2023-4 and incorporate key ideas from those tutorials
 - Begin with common straight forward creation of suitable question contexts and clarification on the various assessment formats and purposes related to CS NQ courses.
 - Progress into a range of actions from co-production of smaller scale assessment materials such as end-of-topic formative assessments to larger SQA prelim style assessments.
2. Analysis, design, testing and evaluation of computing solutions in BGE with an emphasis on primary-secondary transition context
 - Follow up on the "golden threads" theme from the 2023-4 up-skilling programme which suggested that learners would benefit from an earlier and well-founded experience.
 - Collaboration between practitioners in the primary and secondary stages could be beneficial to teachers and learners in both.
3. Advanced Higher 101
 - Revisit the aims of the original pilot up-skilling programme of 2022-3 which covered object-oriented software development
 - Cover other aspects and topics of the AH course
 - Provide sound advice and support for teachers with little or no prior experience of AH