TSL review: **Digital & Technology**
Evidence Submission for SOC 3111, 3119, 3544, 3549
Submitted by Universities UK International (UUK) and the Universities and Colleges Employers Association (UCEA)

Overview

UCEA surveyed member higher education institutions (HEIs) based on the MAC's stage 2 call for evidence questionnaire. UCEA's survey was structured around the occupations at RQF levels 3- 5 previously identified by HEIs for possible inclusion on the Temporary Shortage List (TSL).

HEIs play a central role in the UK's design, technology and digital innovation ecosystem through applied research, specialist facilities, prototyping, digital infrastructure and workforce development.

Survey responses from higher education (HE) employers identify several technical and associate professional roles as being in persistent shortage and critical to the delivery of design- and technology-intensive activity. This submission draws on employer evidence relating to:

- SOC 3111 – Laboratory Technicians
- SOC 3119 – Science, Engineering and Production Technicians
- SOC 3544 – Data Analysts
- SOC 3549 – Business and Related Associate Professionals n.e.c.

Each role supports core teaching, research and innovation functions within design, technology, computing and digital disciplines.

SOC 3111

Overview

Laboratory Technicians are consistently identified as essential to design- and technology-based teaching and research environments, including prototyping labs, digital fabrication workshops, engineering laboratories and specialist technical spaces.

Survey responses show **strong and consistent support** for retaining SOC 3111 on the Temporary Shortage List, including several respondents selecting the role without additional free-text detail, indicating broad agreement on its importance.

Drivers of shortage

Responding HEIs highlighted:

- Persistent shortages of technicians with specialist technical and equipment-specific skills
- Strong competition from industry, manufacturing, engineering and technology firms
- Limited domestic pipelines for roles requiring practical, hands-on expertise
- Increasing technical complexity of laboratories and workshops

Several HEIs reported difficulties recruiting technicians capable of supporting both teaching and applied research functions.

Employer action

HEIs report ongoing efforts to address shortages through apprenticeships, internal progression frameworks and participation in the Technician Commitment. Responding HEIs emphasised that these are **long-term measures** and do not address immediate gaps in specialist technical roles.

Recruitment trends and outlook

Recruitment difficulties have persisted over recent years, with demand expected to remain stable or increase as design and technology teaching and applied research expand.

Impact of removal from TSL

Removal of SOC 3111 from the TSL would reduce institutions' ability to staff specialist facilities, constrain practical teaching capacity and limit delivery of applied research and innovation activity.

SOC 3119

Overview

SOC 3119 technicians support engineering, production and applied technical functions across design, technology and digital disciplines. Responding HEIs consistently selected this role as one requiring retention on the TSL.

Drivers of shortage

Responding HEIs cited:

- Competition with industry employers offering higher salaries
- Demand for hybrid skillsets spanning engineering, production and digital technologies
- Insufficient domestic training pipelines

Recruitment trends and outlook

HEIs described shortages as structural, with demand expected to increase alongside automation, digital fabrication and advanced production methods.

Impact of removal from TSL

Removal would reduce institutional capacity to support applied research, slow project delivery and increase pressure on existing technical staff.

SOC 3544

Overview

Data Analysts support digital systems, modelling, analysis and optimisation across design, technology and computing contexts within HE. Survey responses show clear support for retaining SOC 3544 where it underpins teaching, research and institutional capability.

Drivers of shortage

Responding HEIs highlighted:

- Intense cross-sector competition for analytical and data skills
- Rapidly evolving technical requirements
- HE salary constraints relative to private-sector employers

Recruitment trends and outlook

Demand is expected to grow as design and technology activity becomes increasingly data driven.

Impact of removal from TSL

Removal would exacerbate skills shortages, limit analytical capacity and weaken HE's contribution to digital innovation.

SOC 3549

Overview

SOC 3549 roles support business, operational and project-based functions linked to design, technology and digital activity within higher education, including roles that combine technical understanding with coordination, analysis and stakeholder engagement.

Survey responses indicate **more targeted but still meaningful support** for retaining this SOC where it underpins technical and innovation-focused activity.

Drivers of shortage

Respondents noted:

- Difficulty recruiting candidates with blended business, analytical and technical skills
- Competition from private-sector employers
- Increasing demand for roles that support complex, cross-disciplinary projects

Recruitment trends and outlook

Demand for these hybrid roles is expected to increase as institutions expand innovation, digital transformation and industry-linked activity.

Impact of removal from TSL

Removal would constrain institutions' ability to support complex design and technology projects, reduce operational capacity and weaken collaboration with external partners.

Actions taken and impact of removal from TSL

Across these occupations, HE employers report taking reasonable domestic mitigation steps, including training, internal progression, role redesign and targeted recruitment. However, survey responses consistently indicate that shortages persist due to structural labour market conditions.

Removal of these occupations from the TSL would:

- Increase vacancy durations
- Reduce teaching and research capacity
- Limit delivery of design- and technology-intensive programmes
- Weaken higher education's contribution to the UK's design, digital and innovation priorities

Additional occupations identified by respondents

SOC 3132 – IT User Support Technicians

Responding HEIs identified IT user support technicians as important to the effective functioning of digital, data and technology-enabled activity within HE. These roles underpin the operation of secure systems, digital platforms and specialist software used in teaching, research and professional services functions aligned to digital innovation and financial operations.

While detail was limited, responding HEIs selected this occupation as one requiring continued access to sponsorship, reflecting difficulties recruiting suitably skilled domestic candidates at HE pay levels and the operational risks created by prolonged vacancies. Removal of this occupation from the TSL would reduce institutional capacity to support digital infrastructure essential to teaching delivery, research activity and financial systems.

SOC 3133 – Database Administrators and Web Content Technicians

Database and web content technicians were selected by responding HEIs as critical to supporting data-driven research, digital platforms and specialist systems within higher education. These roles support the management, integrity and accessibility of complex datasets and online environments that underpin innovation, digital teaching and applied research.

Selection of this occupation reflects recognised recruitment challenges in a highly competitive labour market, where HE employers compete with private-sector digital roles offering higher pay. Responding HEIs indicated that removal from the TSL would further constrain the ability to recruit and retain staff with the required technical expertise.

Conclusion

HE employer evidence demonstrates that these SOC codes are critical to the delivery of design and technology activity within HE and are subject to persistent recruitment challenges that cannot be resolved through domestic recruitment alone.

Retention of these occupations on the TSL is therefore essential to sustaining teaching quality, research capacity and innovation across the UK's design and technology ecosystem.