



# Annual academic report to Council

## 2020-21

## Foreword

### Another year of Covid-19 restrictions

Last academic year saw an acceleration of innovation in academic delivery to meet the shifting demands of national restrictions. A migration of all of Cranfield's provision to a single Virtual Learning Environment (Canvas) was completed in time for the new cohort, and timetables recast to deliver the blend of face-to-face and live online which we offered our students. There was a step change in sophistication of online delivery for taught students, while enhancements to the supervisory and progress review arrangements for research students have been implemented through the year.

We witnessed a striking esprit de corps, with academic and professional service teams working together tirelessly under difficult circumstances. Taught and research students engaged actively through multiple channels, with communications and listening to the student voice more real-time than ever before. We have provided regular webinars, supported students during periods of quarantine and offered a chat service with staff volunteers. Equally, we recognise the toll taken on staff wellbeing by workloads and uncertainty. Student mental health and wellbeing has been a concern, with increases in demand for student support services, evidence of disruption to campus life, and a significant sustained increase in volume and complexity of informal and formal complaints.

### The apprenticeship challenge

A significant proportion of taught students are on an apprenticeship route. This proportion is expected to grow, not least as MK:U Level 6 apprenticeships come on stream. Level 6 and 7 apprenticeship provision became subject to Ofsted monitoring from April 2021, a change with substantial implications for Cranfield in regulatory obligations to individuals as trainees, not just as students. This is reflected in actions last year and planned through the next. The concept of non-award bearing apprenticeships is a further challenge for the University in its positioning and management of such schemes, as are integrated apprenticeships in which the University acts as End Point Assessor as well as training provider. Cranfield will continue to engage with the Institute for Apprenticeships and Technical Education consultations as the market develops.

### Strategy and the future

2021-22 will see the creation of a new corporate plan for the University, which will form the basis for the subsequent new Education Strategy, Research Strategy and International Strategy. In practice, the Pro-Vice-Chancellors Education, Research and Innovation and International and Recruitment will work closely together to ensure their strategies are ready to follow swiftly.

Scholarship and the importance of research students will feature strongly in the research agenda. Enhancing the research culture is anticipated to be a major theme. There will also be reflections on lessons learned from REF. Senate will oversee a major review of Cranfield credit and award bearing arrangements during 2021-22 to ensure it is in line with sector best practice and norms, and best serves our students.

On academic partnerships, the new joint institute with Jiangsu University is a significant initiative for taught and research degree provision in SWEE. A defence-focused partnership with Rabdan Academy in UAE is planned for next year. The Muscat University arrangement is coming to an end after five years. Given the range of opportunities and risks presented by collaborative provision, particularly overseas, not to mention the need to prioritise scarce resources in supporting them, it is anticipated that development of academic partner strategy will be an important part of the strategy renewals indicated above.

**Professor Leon Terry (Pro-Vice-Chancellor Research)**

**Professor Sean Tyrrel (Pro-Vice-Chancellor Education)**

# Contents

## 1 Introduction

- 1.1 Senate business
- 1.2 Covid-19 response
- 1.3 Undergraduate awards
- 1.4 External oversight of apprenticeship provision
- 1.5 Approval for new collaboration with Jiangsu University (JSU)

## 2 Review of educational offering

- 2.1 Periodic reviews
- 2.2 External examiners
- 2.3 Professional, statutory and regulatory bodies course accreditations
- 2.4 Review of research provision

## 3 Student outcomes and demographics

- 3.1 Student population
- 3.2 Student demographics – Students taught directly in the UK
- 3.3 Student achievement (taught non-apprentice students)
- 3.4 Apprenticeship students - Demographics
- 3.5 Apprenticeship students' Achievement
- 3.6 Students studying with validated partners and overseas

## 4 Student experience and student journey

- 4.1 Admissions experience
- 4.2 Student wellbeing and learning support
- 4.3 Student engagement
- 4.4 National student surveys
- 4.5 Complaints, appeals and disciplinary issues

## 5 2020-21 action plan update

## 6 2021-22 action plan

**Some material in this published report has been redacted where information might otherwise allow individuals to be identified and contravene data protection legislation, or where information is commercial-in-confidence.**

# 1 Introduction

## 1.1 Senate business

In 2020-21, Senate met five times (23 November 2020, 25 January 2021, 29 March 2021, 21 June 2021 and 13 September 2021).

Meetings of its delegated sub-committees (Education Committee and Research Committee) were held throughout the year where matters were discussed and reported to Senate. The University's Student Experience Committee, which sits as a sub-committee of both Education and Research Committee, met four times during the last year, providing a forum for student engagement.

Due to the ongoing restrictions these meetings were held fully online.

## 1.2 Covid-19 response

The whole of the 2020-21 academic year was in effect delivered under lockdown restrictions, albeit that these changed throughout the year in line with Government requirements and associated Sites Operating Procedures applied by the University. Welcome and registration week was replaced by enhanced online registration arrangements to avoid the need for large-scale face-to-face interaction. These worked extremely well. This was supported by the provision of a full quarantine service in on-campus accommodation to large numbers of students before they commenced face-to-face teaching.

For taught students, timetables were adapted to aim at 70% of course delivery face-to-face, with the remainder delivered by live online teaching sessions on Zoom, particularly at the start of the year while many new students were confined to their rooms. Heightened restrictions later in the academic year led to all teaching moving online, with considerable innovation being shown by academic staff in the use of newly created teaching booths, and in designing group project work suitable for online collaboration. In addition, all taught sessions were recorded and made available to students together with automated transcripts. This provided a resource to support any student required to self-isolate throughout the year.

For research students, access to laboratories for research purposes had to be managed closely. While this created challenges for students, processes put in place to plan experimental work and book time in advance have led to improvements both in the efficient use of resources, but also in helping researchers to organise their study more effectively. Arrangements for supervision of research students live online rather than face-to-face have in the main been a very positive development. Researchers were restricted in their access to offices, as were all members of staff, which was a challenge in maintaining a sense of community. Through the year, bookable study spaces were made available to enable students to work away from their accommodation in a communal, but Covid-secure environment.

Throughout the period, the University continued to apply good practice advice on arrangements in the pandemic issued by the Quality Assurance Agency, and to meet relevant conditions of registration of the Office for Students. All taught students have been supported to complete their courses in a timely way, and supervisors have ensured that doctoral students research plans were adapted to available facilities.

Further notes on Covid-related aspects of the year occur throughout this report.

## 1.3 Undergraduate awards

Cranfield's Education Committee established an Undergraduate Working Group to support the development of undergraduate regulations, policies and courses in preparation for the University offering degrees to undergraduate apprentices through MK:U.

As part of this work, the Working Group recommended to Education Committee and Senate the adoption of Regulations and Handbooks to support the awarding of undergraduate degrees, the admission of students and the management of undergraduate students and course. In addition, the Working Group supported the development of four initial courses to be delivered to undergraduate apprentices. The standard course validation process was adapted into a staged process prior to final approval by Education Committee to accommodate the exceptional circumstances that apply to the initial course development process and timeline for the first tranche of MK:U apprenticeship courses starting in 2021. Stage 1 and Stage 2 of the course validation process were undertaken during 2020-21. Stage 1 of the process reviewed course aims, rationale and course- and module-level ILOs, as well as the high-level assessment strategy. The Stage 2 panel was undertaken in Spring 2021 and addressed the recommendations and conditions set during the Stage 1 panel and the assessment strategy, mapping and module descriptors for Level 4 of the courses. The Stage 3 and Stage 4 panels, covering Levels 5 and 6 of the courses will take place during 2021-22, with the outcomes reported to Education Committee to provide oversight of progress. (Note: in the national Framework for Higher Education Qualifications, Levels 4, 5 and 6 are the three years of a standard undergraduate degree).

## 1.4 External oversight of apprenticeship provision

From 1 April 2021 the Office for Standards in Education, Children's Services and Skills (Ofsted) assumed responsibility for inspecting Level 6 (undergraduate degree) and Level 7 (postgraduate) apprenticeship provision, in addition to its responsibility for the quality of apprenticeship provision at Levels 2-5.

Ofsted's new remit includes inspection of all apprenticeship providers delivering training at Levels 6 and 7, which includes both Cranfield's existing Level 7 provision and its new Level 6 undergraduate provision. Ofsted's inspection process involves an initial visit within two years, followed by full and regular inspections of the University's apprenticeship training provision. Ofsted's powers of inspection extend only to the University's apprenticeship provision, while the Office for Students (OfS) remains the independent regulator for higher education in England, with Cranfield responsible for ensuring it meets the conditions of its registration with OfS. The Education and Skills Funding Agency (ESFA) retains contractual and financial oversight of apprenticeship delivery, with Cranfield as the registered Apprenticeship Training Provider for provision at both Levels 6 and 7.

During 2020-21 a working party of senior University staff was convened to ensure that the University was prepared for Ofsted oversight, which included engaging external expertise to undertake a review of the University's existing apprenticeship provision and provide guidance on improvements to the University's offering and support for apprentices. Considerable efforts have since been made to engage with Ofsted expectations and prepare for the monitoring visit following that review including the development of an action plan and the creation of an Apprenticeship Quality Group (AQG) to oversee its implementation. Briefings have been provided to Senate and other relevant staff, and a dedicated intranet site provides further guidance and links to Cranfield's Apprenticeships Strategy and Governance Strategy. A self-assessment of strengths and weaknesses is in place, which will be expanded and kept up-to-date as provision matures. Areas identified for ongoing enhancement include:

- the incorporation of apprenticeship standard Knowledge, Skills and Behaviours in the curriculum;
- the onboarding process and communications between provider, employer and apprentice;
- progress monitoring;
- expectations around safeguarding, Prevent and British values.

The Quality Assurance and Enhancement team commenced work on adapting existing quality assurance mechanisms, particularly around new course approval, to ensure that regulatory requirements around training are addressed from the outside alongside the University's concerns for its academic provision.

Due to the University commencing delivery to undergraduate apprentices, the provision at Level 7, previously referred to as for Mastership students, will be referred to as apprenticeship provision going forwards.

## 1.5 Approval for new collaboration with Jiangsu University (JSU)

The "Jiangsu University Cranfield Tech Futures Graduate Institute" (JSU CU Joint Institute) is a collaboration between Cranfield University and Jiangsu University. Codified by the People's Republic of China Ministry of Education (MoE) as a Sino-UK "Joint Institute", it has a semi-autonomous status as a Chinese-centred institute that benefits from UK academic input. The Institute has a physical presence in the grounds of JSU through refurbishment of JSU's former teacher training college. Typically, students will be based at JSU with the option of spending six to 12 months at the Cranfield campus dependent on the course the student is registered on.

The Pro-Vice-Chancellor International and Recruitment led an extensive due diligence process on behalf of the Executive. JSU is ranked among the top 100 universities out of over 2,000 higher education institutions in China. It is a teaching, research and community-oriented comprehensive institution with an emphasis on engineering and allied disciplines. Four disciplines have been ranked as global top 1% by the research output analysis tool ESI: Engineering, Materials Science, Clinical Medicine and Chemistry.

Academic approval for the partnership was obtained through Senate's approval process which includes external representation. Follow-up actions to the approval event in March 2021 and ongoing monitoring and review is overseen by Senate's Education Committee. Arrangements are in place for the registration of students and a joint management committee for the courses is in place to ensure that students are managed in accordance with appropriate regulations.

Both taught and research programmes are approved for delivery through the Joint Institute as follows:

### Research programmes:

- PhD/MPhil/MSc by Research in Energy Systems and Thermal Processes.
- PhD/MPhil/MSc by Research in Environmental Engineering and Environmental Management.
- PhD/MPhil/MSc by Research in Materials and Corrosion for Energy Systems.

### The Partnership also offers four taught courses:

- MSc in Agricultural Engineering.
- MSc in Engineering Management.
- MSc in Environmental Engineering.
- MSc in Mechanical Engineering.

## 2 Review of educational offering

**As part of its ongoing commitment to ensuring the quality of our awards, the University's educational offering continues to be reviewed through a number of quality assurance mechanisms, which identify areas of enhancement or improvement required.**

### 2.1 Periodic reviews

In line with the UK Quality Code for Higher Education, Senate operates, through its Education and Research Committees, a cycle of periodic reviews of its academic provision, governed by the relevant Senate Handbook.

Following a major review by Education Committee in 2019-20, changes to the way in which Senate periodically reviews its learning and teaching provision were implemented in 2020-21. These changes include a refocussed Senate Review of a School, the introduction of new Partnership Review and Course Review categories, and the incorporation of Research Committee (where relevant) within the process.

The School of Water, Energy and Environment was the first School to participate in the refocussed Senate Review of School in June 2021. 2021-22 will see the first set of taught programmes undergo Periodic Course Review.

#### 2.1.1 Periodic reviews undertaken in 2020-21

##### **Senate school review of the School of Water, Energy and Environment**

The review focussed on top-level educational and research strategy addressing specific areas of concern both in the PGT and PGR environment. The standard terms of reference were adopted with specific attention on the overall management of the quality of the student experience, learning environment, teaching, learning and assessment, student support and feedback, and the academic portfolio.

A range of commendations were made including:

- recognition of the processes implemented within the School to ensure courses align with the University's Education Strategy;
- the impressive range of facilities;
- the volume and breadth of CDTs within the School;
- improvements in PTES ratings to include the work being undertaken to address issues in relation to feedback and assessment; the introduction of staff workshops by the School's Director of Education to set expectations of assessment, feedback and timelines;
- the introduction of the 'breaking the mould' initiative to encourage staff to look at ways to enhance course design and delivery. Students particularly mentioned the outstanding level of support provided by the IT department during the pandemic.

Recommendations for action included:

- reviewing the strategy for growth of student numbers through consideration of current or new markets;
- leveraging research activity in programme design;
- reviewing the standard course design model implemented within the School to provide opportunities for greater distinctiveness of courses in the market place;
- to take learnings from changes implemented during the pandemic in course delivery and assessment to review opportunities for new programmes and international markets;
- reviewing the effectiveness of the research student supervision monitoring system following feedback from students;
- reviewing ethics approval processes to ensure changes in research direction are captured in a timely manner;
- reviewing the clarity and depth of assessment feedback, continuing to work on addressing timely feedback;
- reviewing the technical support in the Energy Theme.

#### 2.1.2 Future planned periodic reviews for 2021-22

##### **Senate review of a school: School of Management**

##### **Partnership review: Royal School of Military Engineering (validated external provision)**

The Royal School of Military Engineering (RSME) is the Operating Division within the Land Warfare Centre that is responsible for training all ranks of the Royal Engineers. Cranfield University, through Cranfield Defence and Security, has validated postgraduate-level education provided by the RSME since 1997 and currently awards taught master's degrees in Military Construction Engineering (Civil) and Military Construction Engineering (Electrical and Mechanical). The course is currently accredited by the IET, IMechE, ICE, CIHT, IHE and IStructE.

### Periodic course reviews:

#### School of Aerospace, Transport and Manufacturing:

- Aerospace Dynamics.
- Aircraft Engineering.
- Airworthiness.
- Engineering and Management of Manufacturing Systems.
- Thermal Power.

#### School of Management:

- Master of Business Administration.
- Executive Master of Business Administration.

#### School of Water, Energy and Environment:

- Applied Bioinformatics.
- Geographical Information Management.

#### Cranfield Defence and Security:

- Battlespace Technology.
- Applied Mathematics and Operational Research Programme:
  - Defence Simulation and Modelling,
  - Military Operational Research.

## 2.2 External examiners

### Taught courses

To assure the quality of the awards made, and as required by the UK Quality Code for Higher Education, the University appoints external examiners to cover all the University's taught provision. In 2020-21, 120 individuals were engaged in external examiner roles across 128 taught areas of provision (modules, courses or consolidated programmes).

External examiner reports are sent to Course Directors and Administrators, School Pro-Vice-Chancellors, Directors of Education and the Academic Registrar. Course Directors are required to review external examiner's comments in their Annual Reflective Review and propose action where needed. An external examiner may request a response on any particular issue raised. For the last period for which reports have been received (reporting on 2019-20), seven such requests were received. Responses sent by Course Directors are tracked by Quality Assurance and Enhancement (QA&E). All the reports received indicated that the standards set for the course, assessment processes, marking and classification schemes were appropriate.

In total 141 external examiner reports were received during 2020-21 (reflecting on 2019-20), with all examiners reporting that the standards set, and assessment processes were appropriate for the level of qualification. External examiners are also asked if they wish to comment on the overall student experience for students on the courses they cover. Of the 118 external examiners who wished to comment, 65% felt that the overall student experience was excellent (65% in 2019-20) with 31% stating that the overall student experience was above average (35% in 2019-20). Unlike 2019-20, where all external examiners felt that the experience was either excellent or above average, there were a small number of external examiners who felt that the student experience was average (3) or below average (1, based on low student numbers) compared with equivalent provision at other UK higher education institutions. The reporting period included the onset of the Covid-19 pandemic, and the fact that the excellent and above average experiences were comparable with previous years is an indication that the efforts undertaken to support students during the pandemic were mostly effective.

External examiner arrangements are operated in accordance with the relevant Senate Handbook. During 2020-21 Education Committee agreed appropriate fee levels for undergraduate external examiners, as part of the approval process of the Handbooks and policies required for the admittance of undergraduate students. As part of this process, the fees paid to postgraduate taught external examiners were reviewed by Education Committee, with a change to the fee structure agreed for new appointments from 2021-22.

### Research students

External examiners are a fundamental and central feature of assuring the quality of the assessment of research students. Each research student is examined by at least one internal and one external examiner, with an independent Chair overseeing the examination. By approving the award of such a research degree the external examiners thereby confirm that the standard achieved is at doctoral level and comparable with the standards across the sector.

The Covid-19 pandemic required some processes to be adapted with the majority of staff and students having to work remotely. Remote viva examinations continued to be held for students during 2020-21, with guidance notes published to guide examiners through the process.

Over the course of 2020-21, the University engaged with 128 external examiners in the examination of 126 research students, the vast majority of which were undertaken remotely. Of the 126 examinations which took place, 50 led to the award of research degrees with 76 students awaiting the outcome of their viva or still to complete corrections or revisions to their thesis.

The process for the appointment of external examiners remains robust to ensure that external examiners have sufficient expertise and impartiality.

## 2.3 Professional, Statutory and Regulatory Bodies course accreditations

As both a method of endorsing the content and assuring the quality of our taught degrees, the University seeks accreditation from a large number of Professional, Statutory and Regulatory Bodies (PSRBs) for its taught courses where relevant. Such accreditations demonstrate to applicants the quality of the University's degrees and allow graduates to register with these PSRBs upon successful completion of their courses.

Of the University's 102 Taught Courses, 82 (80%) are accredited by one or more PSRB. In addition, the School of Management is triple-accredited by AACSB, AMBA and EQUIS, one of only a few business schools worldwide to achieve such accreditation. Courses may be accredited by a number of individual PSRBs. Courses may not be accredited for a variety of reasons, including that the subject matter of a course is too specialised to be accredited by any PSRB, that due to the popularity of courses accreditation is not required to attract students or that, for new courses, they have not been running for long enough to achieve accreditation.

Over the academic year 2020-21 accreditation visits were held to accredit or re-accredit a number of the University's courses. In particular, a successful visit was held in March 2021 with the Institution of Mechanical Engineers and the Royal Aeronautical Society involving 31 courses from the School of Aerospace, Transport and Manufacturing and the School of Water, Energy and Environment. In addition, the University's academic development portfolio was re-accredited by Advance HE for a further 4 years.

Looking forward, a Continuous Improvement Review (CIR) by the AACSB will be undertaken in the School of Management in the Autumn of 2021. Reviews are conducted every five years and signal that an AACSB-accredited institution has documented continuous improvements in support of its stated mission and strategic management plan to sustain AACSB accreditation. The review includes the production of a comprehensive CIR Report that is organised around the themes of the business accreditation standards of engagement, innovation, and impact. This follows a successful reaccreditation by EQUIS in 2019.

The Quality Assurance and Enhancement team continue to align accreditation periods where possible to reduce the overall number of visits by professional institutes and to ensure a more centred, co-ordinated approach in relation to the technical schools.

## 2.4 Review of research provision

The Research and Innovation Office together with Research Committee and the Research Academic Processes and Support subcommittee have been working on a number of initiatives to continue to enhance research student processes and student support. The key changes over the last 12 months are detailed below.

### 2.4.1 Student recruitment

#### Doctoral training funding

Following the approval of the University's EPSRC Doctoral Training Partnership (DTP) strategy for 2020-21 in early 2020, where the University was awarded a total of £1,584,860, the 3rd and final call for studentship applications to be supported by the fund was undertaken at the start of 2021. The call attracted 17 applications with six studentships supported. In total, 22 fully funded studentships were supported from this DTP award, as well as three studentships under a cotutelle partnership. To date nine students have registered and commenced their research degree programme. In addition, prestigious doctoral prizes to support the very best EPSRC PhD students to undertake a Fellowship for two years were appointed, both based in SATM. They will form a cohort for researcher development with the three 75th Anniversary fellows.

Cranfield is currently in receipt of three DTPs:

**Table 1 EPSRC Doctoral Training Partnership (DTP) Awards**

Year DTP awarded	Allocation (£)	Number with industry support	Number of PhDs awarded	Number unfilled	Number completed
2016-17	1,256,420	<5	15	<5	7
2018-19	968,114	<5	13	<5	<5
2020-21	1,584,860	22	25	16	<5

Eight EPSRC iCASE awards were made during 2020-21 to support four-year PhDs with an industry partner, including at least a three-month placement with the partner organisation.

## International partnerships

Cranfield has continued to develop its relationship with its European partner universities. As a result of this ongoing work, five double degrees have been approved between Cranfield and Université de Technologie de Compiègne (UTC), with three of these supported through the Doctoral Training Partnership funding. The successful candidates will have a supervisor at both Cranfield and UTC and will be spending 18 months at each institution.

As noted in the Introduction, arrangements are in place for the delivery of doctoral degrees through the Joint Institute with Jiangsu University.

## Research student inductions

The University has continued to run its set intake dates during 2020-21, offering new students an online and interactive induction programme. The number of students attending the online induction sessions are detailed below. As the CDS induction date is a week after the Cranfield one, students registering at CDS receive a separate induction.

**Table 2 Research student inductions 2020-21**

School	September 2020	February 2021	June 2021
SATM	44	53	33
SWEE	42	22	12
SOM	7	<5	<5
CDS	9	5	8

RIO have continued to review the content of the student induction programme with a new session added in February 2021 on Introduction to Plagiarism, complementing the Referencing and Avoiding Plagiarism (eRAP) online training module that students are required to complete.

## Streamlining processes for self-funded PhDs

The PhD admissions group have reviewed the challenges involved in progressing self-funded PhD opportunities to the point of a confirmed offer. In particular, it was found that there were large volumes of applications where time had been dedicated to creating a research proposal and putting together a supervisory team which then progressed no further due to lack of funding.

To address this it has been agreed that a 1st stage offer letter is introduced, to allow prospective students to seek funding but without committing to a full project proposal or supervisory team. IPSR are working with IT to scope out the changes required for the online admissions system to accommodate a 1st stage offer letter.

## Clarifying PhD course titles

Cranfield PhD degree certificates cite the title of the thesis rather than theme or subject area. However, for record keeping and reporting purposes, PhD students are grouped into “courses” on the student record system SITS. These “course” names are currently the Theme names plus a descriptor, for example: Design; Water Infrastructure and Resilience.

Whilst these names are not cited on degree certificates, the University’s system does use them to generate the award letters which accompany degree certificates, the website, application links, offer letters and any document that is generated from SITS, e.g. student status confirmation letters. It is also the basis for any internal reporting.

Research Committee approved a change in degree title for two subject areas at CDS at the end of 2020: PhD in Forensic Science and PhD in Archaeology. This has prompted a wider review of degree titles which will be ongoing throughout 2021-22.

## Clarification of research degree routes

Definitions for the EngD and PhD with Integrated Studies were revised to provide a clearer distinction between the two routes. EngD research degrees would require input from an industry partner, while PhD with Integrated Studies may have this but it is not a requirement. Part-time EngD awards were included in the new definitions.

Within the integrated studies route, a trial programme will begin during 2021-22 in the Energy and Power Theme to offer a Cranfield University Global Faculty Development PhD Programme including a PgCAP taught element. This is aimed at developing countries wanting to upskill faculty in their universities.

A more detailed definition has been agreed for the DSc higher doctorate, available to alumni and staff for prolonged contribution to knowledge and academic excellence.

Work is also underway to develop and pilot a Portfolio PhD with a 12-month registration aimed at individuals working in industry (our key partners) who have obtained a significant body of research data which could be used towards a PhD.

The newly appointed Pro-Vice-Chancellor Research and Innovation, Professor Leon Terry will be conducting a comprehensive review of the nascent PhD framework at Cranfield during 2021-22 as part of the Research Strategy planning.

## 2.4.2 Monitoring student progress

### Online monitoring

A working group was established towards the end of 2020 to look at moving the research student progress monitoring processes online.

This work included moving the monthly meeting records online, through the new Virtual Learning Environment (VLE), Canvas. These are records that all research students are required to complete as a summary of their discussions with their supervisors. Following user testing, a pilot commenced in SWEE in May 2021. A number of training sessions were delivered for both students and supervisors ahead of the pilot as well as a supporting guidance document. Following completion of the pilot and having listened to feedback which raised concerns by both students and supervisors involved, it was agreed to delay the launch of the online process to ensure that any changes to current processes improve the student experience, and to consider how the online process can be revised to address issues raised.

In addition work has also commenced to consider how the initial and annual review documents can be moved online, which cannot be achieved simply through Canvas. Other solutions are being explored which represent a tangible improvement to current practice.

### Student development conversations

Work has been undertaken to look at ways of giving greater emphasis to discussions around development needs between supervisors and their students. A new form has been developed, with questions based on the Vitae Researcher Development wheel to facilitate these discussions. The form is expected to be completed annually and also shared with the Progress Review panel. The form has been piloted in SoM and received positive feedback.

The form will be rolled out to the rest of the University via the "Research Student Progress" area on Canvas, for use from 2021-22 onwards.

## 2.4.3 Research governance

### Academic Misconduct Handbook

Concerns were raised by Research Committee that the current Senate Handbook focused more on taught students with suggested sanctions not being applicable to research students. It was also felt that the Handbook placed greater emphasis on plagiarism than on the broader topic of academic misconduct. A working group was set up to redevelop the Handbook with a wider focus on all types of academic misconduct and which provided one process for all students with appropriate sanctions. Recommendations approved for implementation include improvements to training, revised process for investigation, a clearer list of sanctions for research students and improved clarity.

### Ethical approval

To ensure all research conforms to the appropriate ethical principles and standards, it is University policy that all research undertaken by staff and students is required to gain ethical approval.

From January 2020, all research students were required to submit evidence of ethical approval when they submit their thesis. Any thesis submitted without evidence of ethical approval is checked with CURES Support and could result in the degree not progressing.

Over the last 12 months, CURES Support has seen an increase in the number of requests for retrospective ethical approval. Seven requests were made where students had reached the point of submitting their thesis, often stating that their supervisor had advised them that ethical approval was not required.

In February 2021 one of the retrospective applications was referred to a Research Misconduct Review Group (RMRG) for investigation due to the high risk identified to be associated with the project. The RMRG made a number of recommendations as a result of this investigation:

1. The University should conduct a review of the current policy and procedures related to ethics and its approval for research activities. The aim is to enhance the resilience of delivery of the University's ethics policy. This should include specific reference to:
  - a. Communication strategies to ensure all staff and students are aware of the ethics policy, the importance of gaining approval before beginning their studies and are engaged with the role of ethics within research.
  - b. The potential to provide mandatory training on research ethics to all staff and students.
  - c. Reviewing the processes that provide QA associated with ensuring the approved ethics are appropriate for the research project. This needs to incorporate the requirement for multiple time points for ethics approval to reflect potential changes in projects as they progress, or a complete change of project.
  - d. Amending the progress review forms to reflect that ticking the ethics box indicates that all required ethical approvals are in place for the research being conducted to date.

These recommendations will be taken forward by the University Research Ethics Committee(CUREC) in the next academic year.

## Research integrity

Following the publication of the revised Concordat to Support Research Integrity in October 2019, a new online training course focused on research integrity had been developed; the Research Ethics training module was also updated. The new and updated training modules have both been placed on Canvas. All research students are required to undertake training in ethics and integrity and it is proposed that all students will need to pass the online assessments for both the training modules prior to their four month initial review. The training module is also available for staff but is not currently mandatory.

## MODREC

At the end of 2019 the Ministry of Defence (MOD) published new guidance on the implementation of Governance of Research Involving Human Participants (JSP 536). As a result of this Cranfield had to readdress its processes for the ethical approval of research involving human participants where the researcher and/or participants are MOD employees or the research is funded by the MOD. A new Scientific Advisory Committee (DefAc SAC) has been created, chaired by Professor Simon Denny on behalf of the Defence Academy of the UK with representatives from Cranfield (Director of Research and Innovation), the Defence Academy of the UK and King's College London. Detailed guidance for Cranfield staff and students has been produced and added to the newly updated ethics and integrity intranet pages. A Q&A session was held for staff at CDS whose research and students are most impacted by the changes.

## Human tissue committee

A new sub-committee of the CUREC has been created, externally chaired by Karen Coopman of Loughborough University. The remit of the committee is to work with CUREC on compliance and operational aspects, ensuring that any work involving human tissue is compliant with requirements.

## Research policies

Following a review of the current research-related policies and in preparation for the Research Excellence Framework (REF), the Research Ethics Policy was updated and republished. The policy now includes details of the University's Research Ethics Committee (CUREC) and how to apply for ethical approval.

## 2.4.4 Research student experience

### Access to facilities

In response to the ongoing restrictions imposed as a result of the Covid-19 pandemic, some research students raised concerns regarding access to laboratory facilities and the impact on their welfare and their ability to progress their studies. Particular concerns were raised about the process to access labs being restrictive, paperwork burdensome and a lack of office or study space.

As a result, dedicated study space for research students was made available in May 2021 and Schools have reviewed and streamlined their lab allocation processes. In addition, a series of measures have been implemented to assist research students:

- All supervisors were asked to create mitigation plans with their students to minimise the level of data collection needed and to create a deliverable programme of research, whilst still in line with QAA guidance.
- A session on how to develop and articulate intellectual contributions with revised research plans was organised for July 2021.
- Requests by students for extensions could be made at any time, included funded extensions for UKRI students, and through a grant from Research England, a limited number of non-UKRI students.
- Extensions were discussed on a case-by-case basis, maintaining the aim for research students to complete in as timely fashion as possible.

Separate issues had been highlighted at CDS regarding access to study space which had been particularly challenging as the University's access to the Shrivenham site is controlled by the MOD.

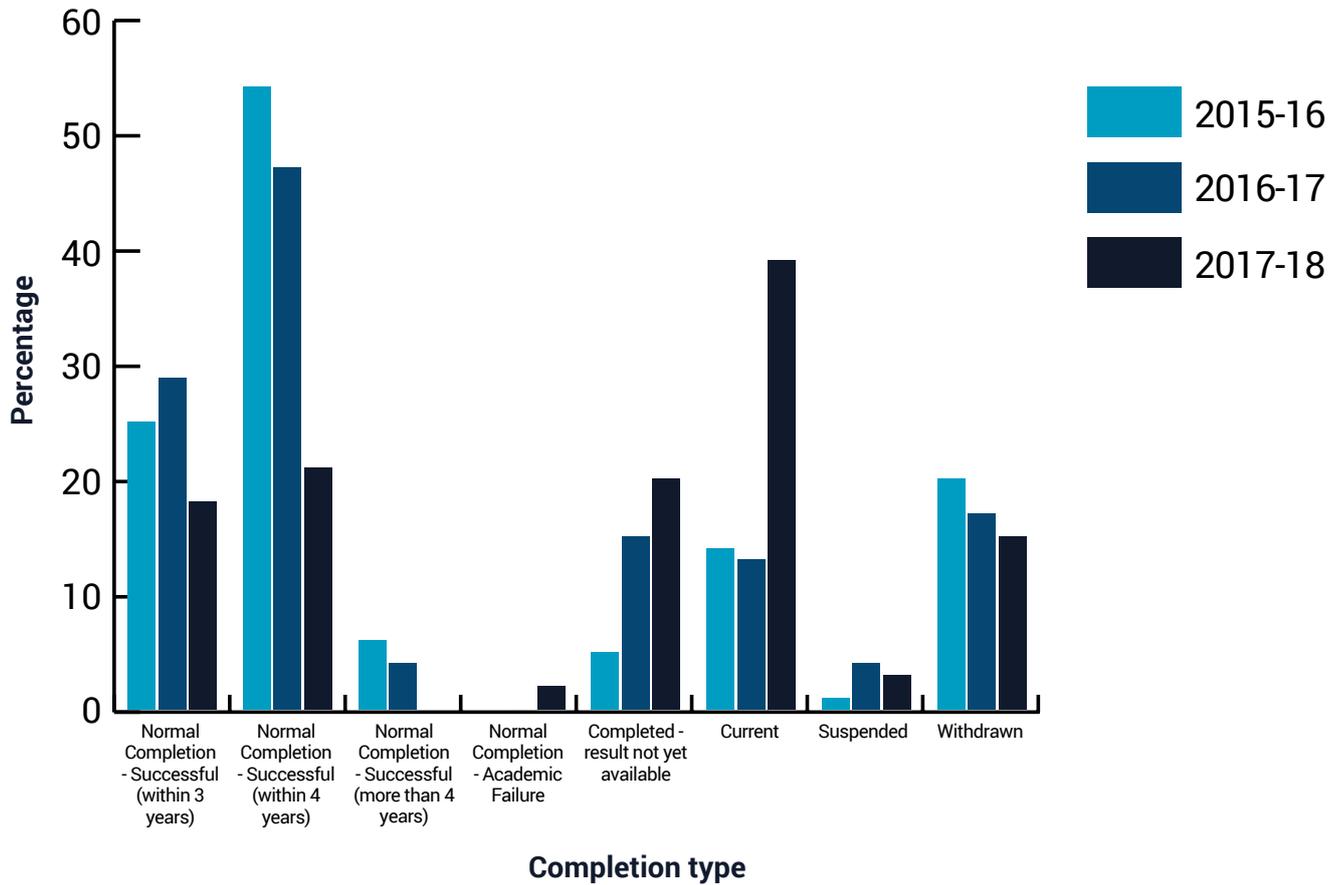
### Cranfield Doctoral Network

The Cranfield Doctoral Network held its 3rd Annual Conference in September 2020. This was an online event with 121 attendees joining (100 students and 21 staff) which had a focus on entrepreneurship as well as presentations from each of the University's Grand Challenge leads. The keynote address was delivered by a former Cranfield PhD student who had gone on to set up a spin-out company, Corrosion Radar. This subsequently led to a follow-on event for researchers with an interest in the Resilience Grand Challenge, engaging 19 PhD students.

### Three minute thesis (3MT)

Two 3MT competitions were held during 2020-21, one in December 2020, with 87 registered participants (27 staff and 60 students) and one in March 2021, with 74 registered participants (17 staff and 57 students). Both events were held online. The finalists from all the 3MTs held over the last 12 months were considered by a judging panel to agree who should be put forward for the National Vitae 3MT competition.

## 2.4.4 Research Student completion rates



**Fig 1 Research student completion data by start year**

Figure 1 details the outcomes within three and four years for those full-time students expected to complete by the end of 2020-21 up to July 2021 (those who started during 2017-18), with a comparison to the previous two years' (those who commenced their studies during 2016-17 and 2015-16). The chart above shows a reduction in the number of students who successfully completed their studies within 3 years (18%) compared with 2016-17 starters at the same point in 2020, as presented in last year's Senate Report to Council (23%). In addition, a significantly lower percentage of 2017-18 starters had completed their thesis but were still awaiting their results in 2021 (20%) compared with 2016-17 starters at the same point last year (32%). This 17% reduction in the number of 2017-18 starters completing their thesis within three years may be attributed to the impact Covid has had on research students, including reduced access to laboratories and research sites.

## 3 Student outcomes and demographics

The University reports to the Higher Education Statistics Agency (HESA) data on all students it directly teaches or supervises within the UK towards a named award. The data collected by HESA as part of the student record is used extensively by various stakeholders for funding purposes, performance indicators, publications and league tables. Extracts from this data have been used to compile the below statistics correct as of July 2021.

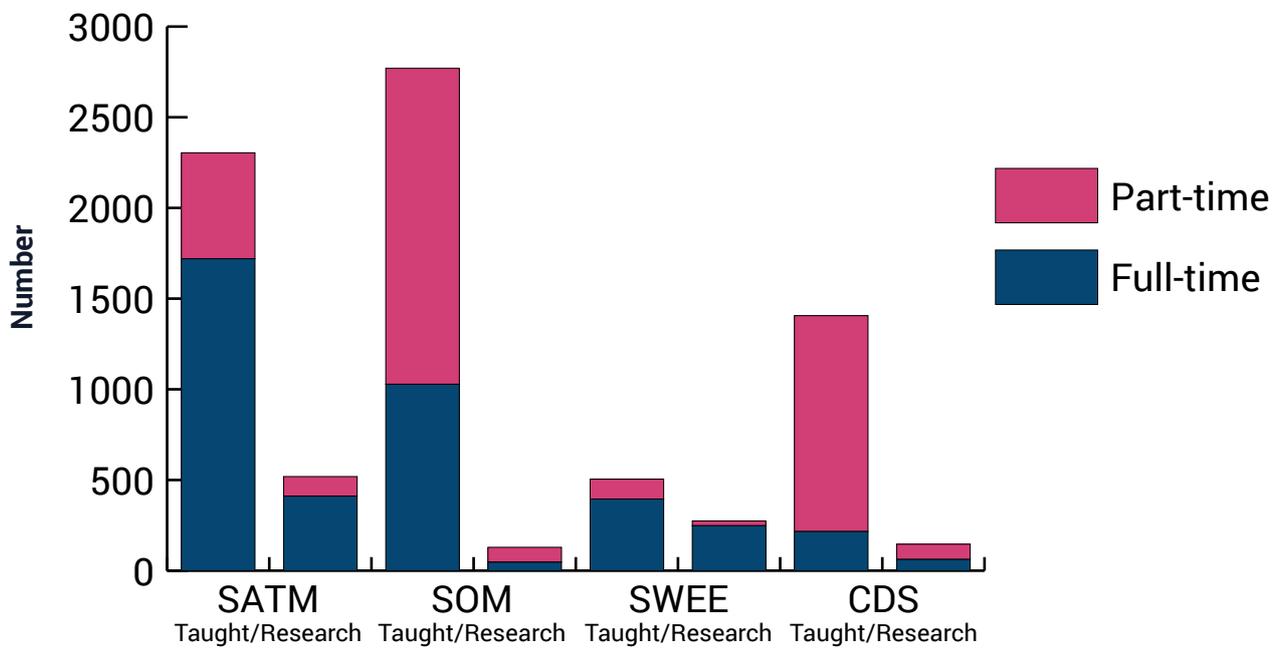
### 3.1 Student population

This year the overall total of students studying at the University rose by just under 5% (8050 vs. 7684 in 2019-20), which included 50 extra research students and a rise in the number of apprenticeship students (+240 compared to 2019-20). SATM, SoM and SWEE all increased their numbers of both taught and research students in 2020-21 compared with 2019-20, with CDS seeing a 4% decrease in student numbers overall.

**Table 3 Total student populations by School, gender and mode of study**

Gender	Research		Taught		Apprenticeship students (% of Taught Totals)		
	FT	PT	FT	PT	Number of Apprenticeship students	% of all Taught students	% of PT Taught students
<b>SATM</b>							
Female	73	23	332	87	39	9.3%	44.8%
Male	337	85	1388	497	172	9.1%	34.6%
Other	<5						
<b>SOM</b>							
Female	22	21	512	596	461	41.6%	77.3%
Male	25	61	516	1146	780	46.9%	68.1%
<b>SWEE</b>							
Female	104	6	136	36	<5	<2.0%	8.3%
Male	144	17	259	74	<5	<2.0%	<2.0%
<b>CDS</b>							
Female	24	16	89	163	11	<2.0%	6.7%
Male	38	68	126	1026	21	<2.0%	2%
Other			<5	<5			

The split of part- and full-time students remains at approximately 50%. The percentage of part-time students in SoM continues to increase year on year due to apprenticeship courses.



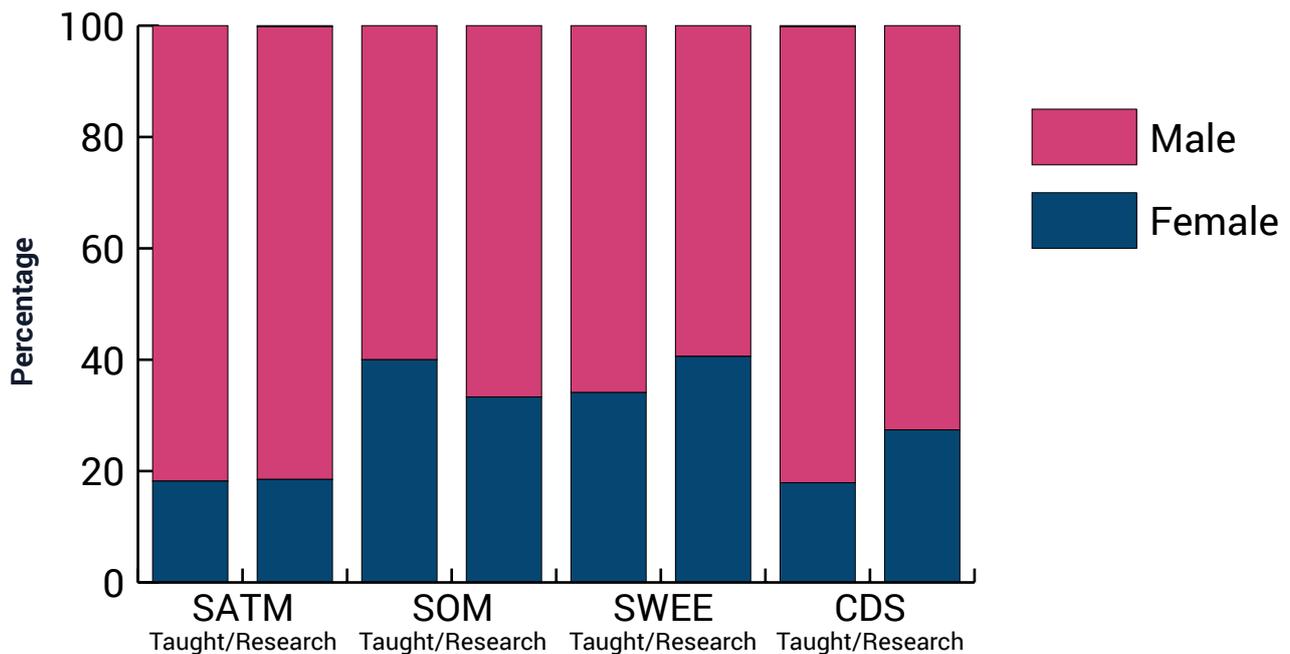
**Fig 2 Total number of taught and research students by School**

The number of students studying as part of an apprenticeship rose by 4% overall, and at 21% of all taught students represents a significant area of business for the University, and a significant level of exposure should there be changes in the apprenticeship landscape. The overall University percentage is heavily influenced by SoM, where 45% of all taught students are studying as part of an apprenticeship, whereas the percentage of taught students studying as part of an apprenticeship in the other schools (SATM 9%, SWEE 1%, CDS 2%) is significantly lower.

### 3.2 Student demographics - students taught directly in the UK

The below information has been prepared using the data which the University reports to the Higher Education Statistics Agency (HESA) on the students it directly teaches or supervises within the UK towards a named award.

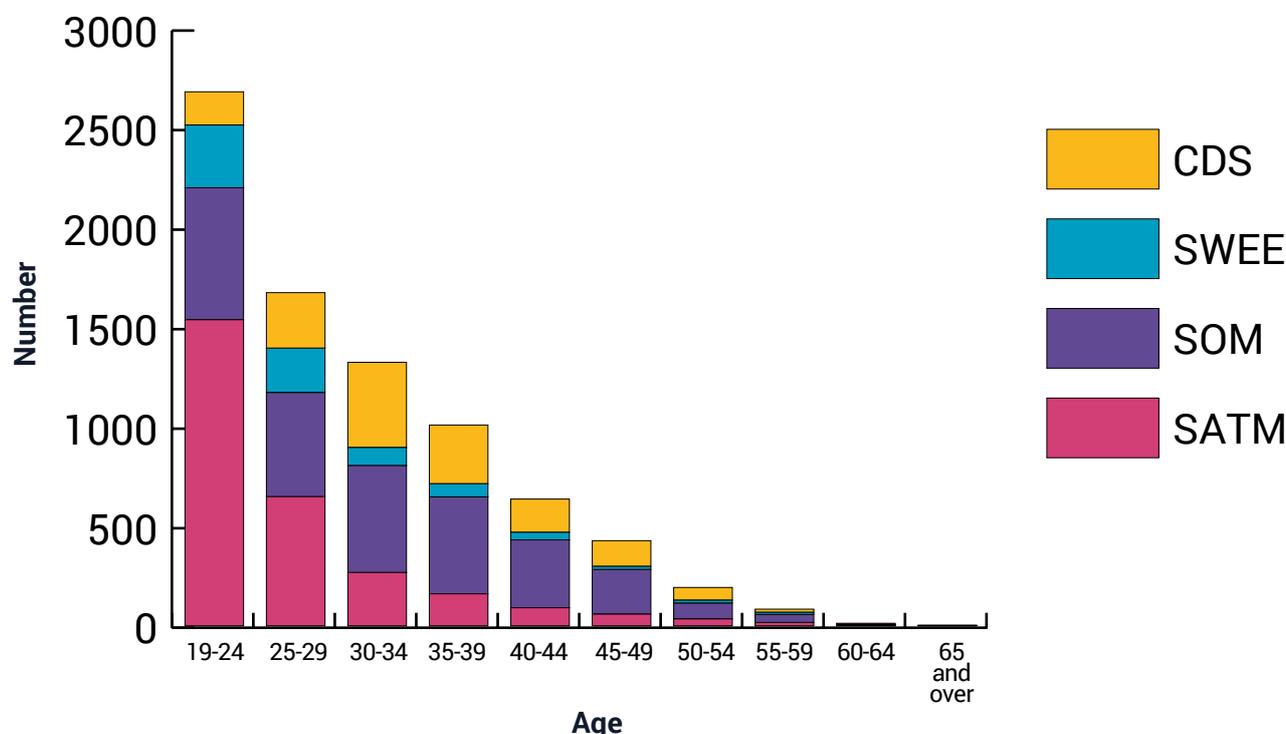
Comparison is also made to sector-level equality and diversity data published by the Office for Students for all postgraduate students at English universities for the year 2019-20 (the latest available data).



**Fig 3 Student gender percentages by School and degree type**

The University population is made up of a large percentage of males, which is fairly consistent across all four Schools. The differences in gender have reduced slightly in several areas since 2019-20, with CDS (taught and research), SATM (taught) and SoM and SWEE (research) seeing an increased percentage of female students.

The University totals of 28% female students (27% in 2019-20) and 72% male students (73% in 2019-20) is significantly at odds with the sector averages for all subjects for 2019-20, where 58% of the students in postgraduate education were female. Across the sector in 2019-20 however, the total percentage of students studying for an engineering or technology postgraduate award showed greater disparity than the University's overall percentage of female students, with just 20% of postgraduate engineering or technology students across England being female. The representation of females in SoM (39.7%) was not as strong as for those studying for a business and management postgraduate award across the sector, where 48% of students were female. This data continues to drive initiatives for attracting female students to Cranfield, as outlined in the action plans.



**Fig 4 Age on entry by School**

Of the 8,050 students included in the data that the University reports to HESA, one third (33.3%) were in the 19-24 age bracket on entry, and over half (54%) under the age of 30 on entry, which was comparable to the percentages detailed in last year's report (34% 19-24 and 55% under 30). In the rest of the sector in 2019-20, 65% of students were under the age of 30 on entry. 46% of Cranfield's students are over the age of 30 on entry, compared to just 35% sector-wide in 2019-20, demonstrating Cranfield's commitment to life-long learning.

**Table 4 Declared disability types amongst student population**

Disability type	Number of students declared	Percentage of total student population	Percentage of those declaring a disability
A long standing condition (e.g. cancer, diabetes)	57	0.7	12.1
Communication difficulty (e.g. Asperger's, autism)	12	0.1	2.6
Deaf or a serious hearing difficulty	20	0.2	4.3
Learning difficulty (e.g. dyslexia, dyspraxia, AD(H)D)	251	3.1	53.3
Mental health condition (e.g. depression, anxiety)	63	0.8	13.4
Multiple disabilities	17	0.2	3.6
Other disability not listed above	32	0.4	6.8
Physical, visual or mobility difficulty	19	0.2	4.0
<b>Total</b>	<b>471</b>	<b>5.9%</b>	<b>100%</b>

Table 4 details those students declaring a disability, both as a percentage of the total student population and as a percentage of the 5.9% of students who have declared a disability. The percentage of students declaring a disability is identical to the figures for 2019-20, with an increase of 14 students declaring a disability overall. Learning difficulties is again by far the single largest declared disability, but 2019-20 saw small rises in the number of students declaring mental health conditions and long-standing conditions. The 5.9% of students at Cranfield who have declared a disability remains significantly lower than the sector average for postgraduate students (10% in 2019-20).

**Table 5 Declared ethnicity of student population**

Ethnicity	SATM	SOM	SWEE	CDS
Arab	5		<5	
Asian or Asian British	1020	931	209	71
Black or Black British	105	165	176	72
Information refused	47	31	10	33
Mixed	69	36	15	21
Not known	<5			<5
Other ethnic background	139	119	48	28
White	1437	1617	317	1325

Table 5 shows the numbers of students in each school and their declared ethnicities. In percentage terms the declared ethnicity of the student population is almost identical to the previous academic year, with only a small increase in the percentage of Mixed students and a small drop in those declaring Other ethnic background. As in previous years, the proportion of Asian or British Asian students at Cranfield is far in excess of the sector average for UK domiciled postgraduate students (11% in 2019-20). Whilst the declared ethnicity of the majority of students at Cranfield is White, at 58% this is significantly lower than the 74% reported for 2019-20 across the sector. Although the numbers of students declaring their ethnicity as Black or Black British is low (6.4%) it is comparable with the rest of the sector (8% in 2019-20). Although this data supports the continuation of the University's plans to enhance our student recruitment and outreach to increase our inclusivity and diversity, it shows that limited progress was made during 2019-20, which may have been partly attributable to challenges in international recruitment.

**Table 6 Nationality of student population by continent**

Nationality	SATM	SOM	SWEE	CDS
British	662	1604	204	1308
European Union, EEA and Swiss	956	267	180	75
European (non-EU/EEA/Swiss)	28	20	6	6
African	134	88	152	55
Asian	962	855	216	39
North American	45	32	9	54
South American	17	18	8	<5
Oceanian	18	15	<5	8
Unknown	<5			<5

Table 6 shows the grouped nationalities of students. The above shows that almost half of students at the University are British (47%), with a large contingent of Asian and European students represented. SoM's proportion of British students is heavily influenced by eligibility criteria for those studying on apprenticeship courses (44.8% of SoM's total taught students). In addition, the above table shows that 29.4% of students in SoM (down from 32% in 2019-20) and 34% of students in SATM are Asian (compared to the University average of 26%). Overall there was a 1.5% drop in the percentage of British students in 2020-21 compared to 2019-20, with a similar increase in the percentage of the student body declaring their nationality as from an EU, EEA or Swiss country. The data reported to HESA showed 141 different nationalities represented at the University during 2020-21.

**Table 7 Religious beliefs of student population by School**

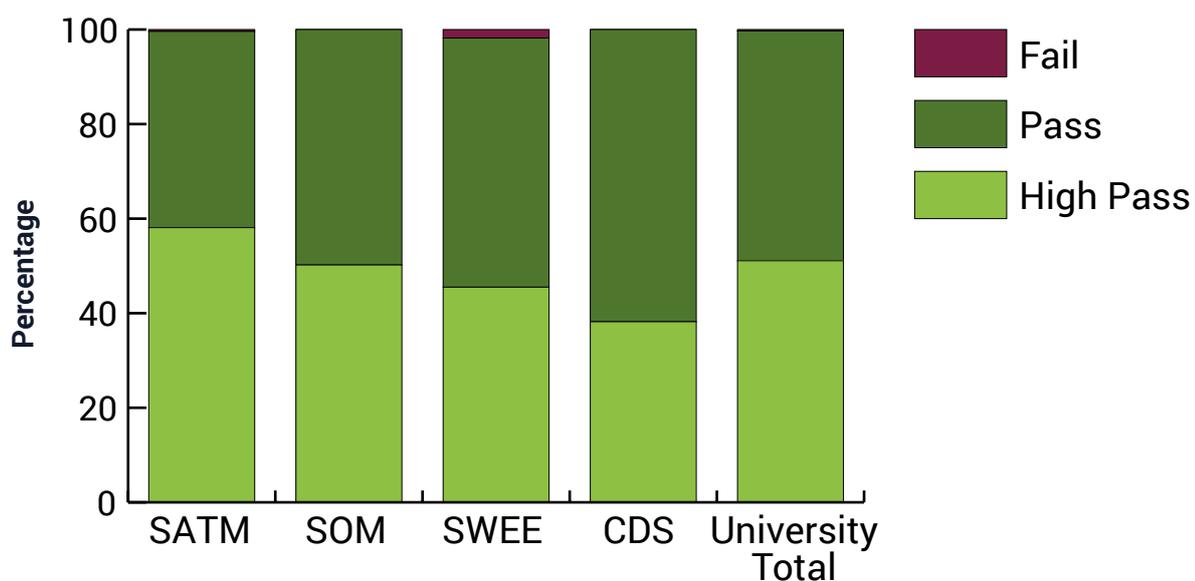
Religion	SATM	SOM	SWEE	CDS
Buddhist	26	38	5	<5
Christian	642	813	230	371
Hindu	222	207	45	18
Jewish	<5	7	<5	<5
Muslim	232	97	86	24
Sikh	12	23	<5	<5
Spiritual	15	28	11	6
Any other religion or belief	30	40	16	15
No religion	1081	1228	223	334
Not known	561	418	155	775

The University has recently begun collecting information on student’s religion or belief, presented in Table 7. The data shows a significant number of students who declare themselves as Christian, and relatively small numbers of those declaring themselves to be any other religion. Although there has been a significant reduction in the number of students for whom this information is not known, this information is still unknown for nearly a quarter of the student body. As this data is collected on entry, over time the University should be able to generate a more accurate picture of the religious diversity across the student population, and analyse the religious support and provision offered to students.

During 2019-20 the University, as required by HESA, began collecting information on the sexual orientation of students, which will be reported on in 2021-22.

### 3.3 Student achievement (taught non-apprentice students)

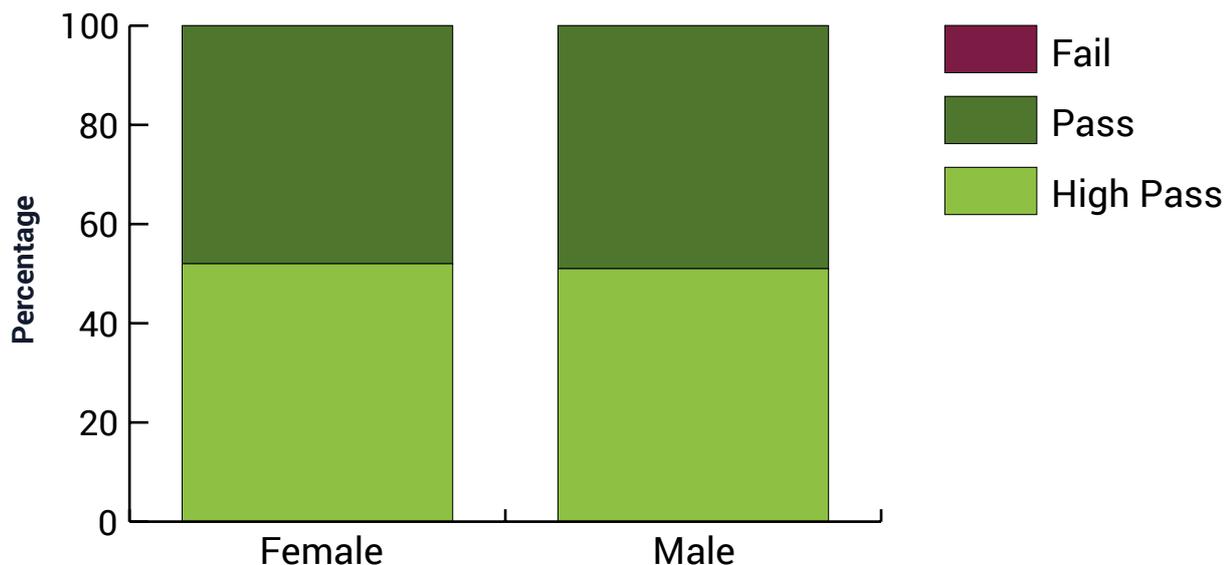
The achievement of taught non-apprentice students is presented as those achieving a high pass (70%+), pass (50%-69%) and fail (<50%) for students completing their award during 2020-21 (2636 in total). The overall percentages for each School, and a University total are presented in Figure 5.



**Fig 5 2020-21 Leavers with outcomes by School - non-apprentice students**

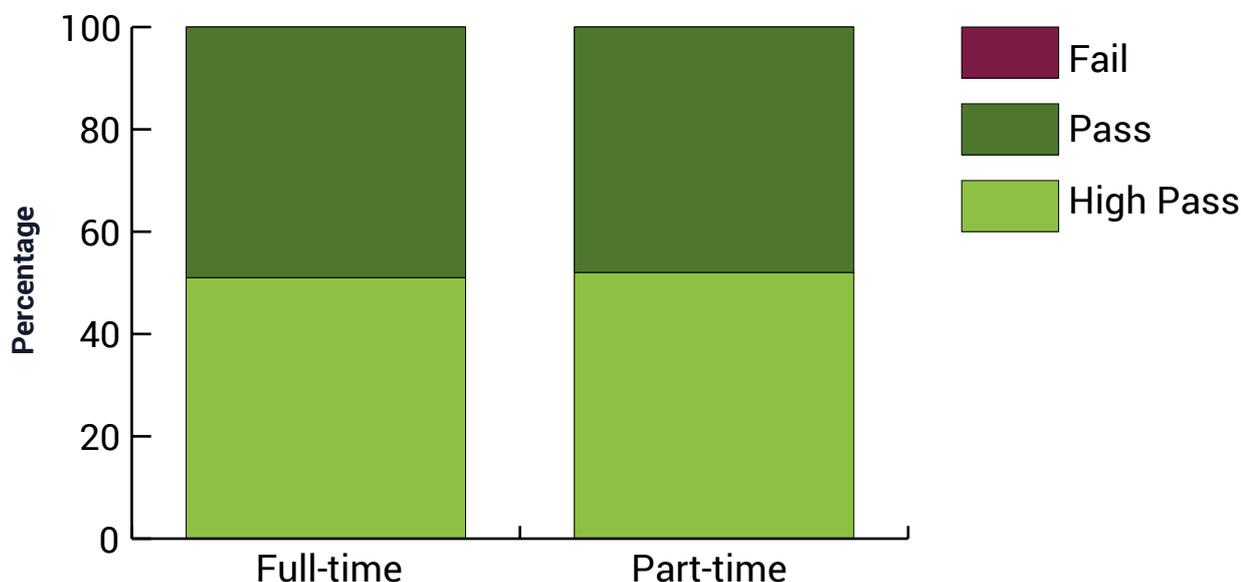
Figure 5 shows a very small failure rate across the University, with just 8 students (0.3%) completing but failing their award (down from 35 students in 2019-20). Overall the percentage of students achieving a high pass across the University remained the same (51%). This shows that, looking at the overall University total, student achievement remained the same despite the challenges faced as a result of the Covid-19 pandemic, which endorses the measures put into place to ensure students were able to complete their awards during the Covid-19 pandemic.

The overall percentage of students achieving a high pass varies across the schools, although the variation reduced slightly compared with 2019-20, with both CDS and SoM students more likely to complete their award with a high pass than in 2019-20. There was, however, a significant reduction in the percentage of SWEE students achieving a high pass in 2020-21 (46%) compared with 2019-20 (60%). The number of retakes required in SWEE was higher during 2020-21 than in previous years, resulting in students' individual module marks being capped at 50%, which affected their overall percentage. It was also noted that there was a significant rise in the number of academic misconduct cases in SWEE, which also resulted in marks being capped at 50%, attributed to the number of late arrivals and students studying remotely who were not part of the formal induction programme. Although all induction materials were made available to late arrivals/remote students, and students were explicitly directed to these, it is evident academic misconduct was more widespread and impacted on the overall mark profile in SWEE.



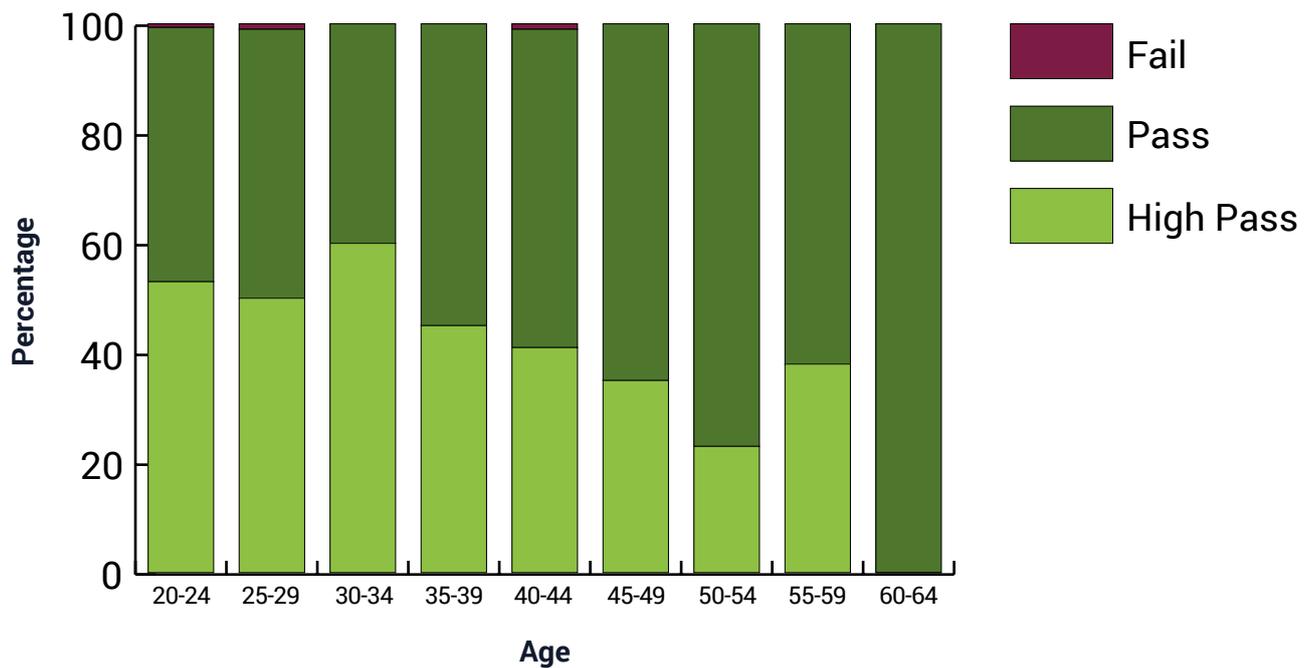
**Fig 6 Gender vs. Student achievement - non-apprentice students**

There is little variation in achievement levels on the basis of a student's gender (figure 6). The data indicates that females were slightly more likely to achieve a high pass within their course during 2020-21, whereas there was no variation by gender in 2019-20. This trend continues to show that student achievement is not contingent on gender, which is encouraging in regard to the academic delivery and overall educational experience of our students.



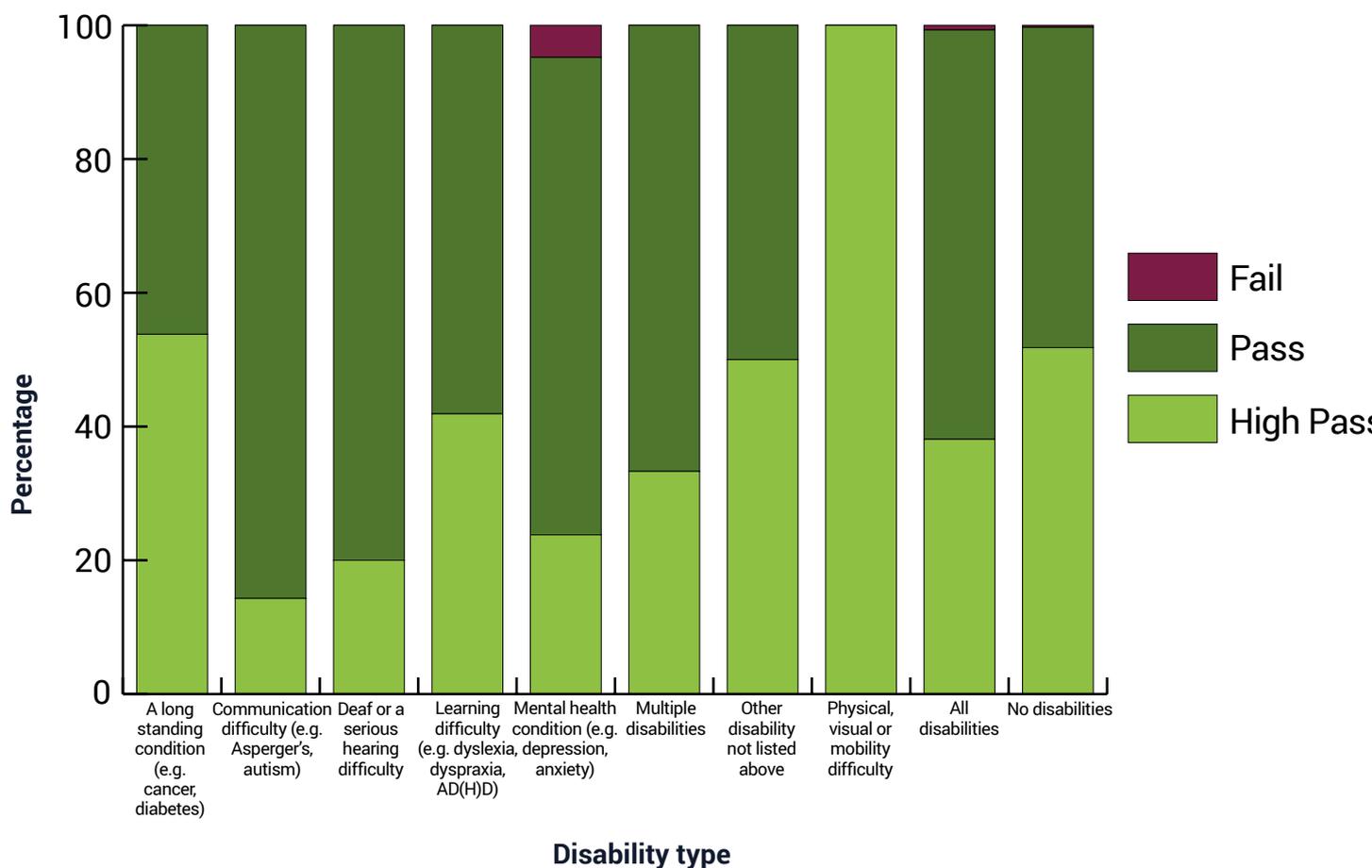
**Fig 7 Mode of study vs. Student achievement - non-apprentice students**

Figure 7 shows the achievement levels of all students across the University based on their mode of study. This data shows that the likelihood of course failure is comparable regardless of mode of study. In 2019-20 there was a significant disparity between full- and part-time students achieving a high pass (56% and 40% respectively), however in 2020-21 a reduction in the percentage of full-time students achieving a high pass (51%) and a significant rise in the number of part-time students achieving a high pass (52%) has created more level attainment between part and full-time students.



**Fig 8 Age on entry vs. Student achievement - non-apprentice students**

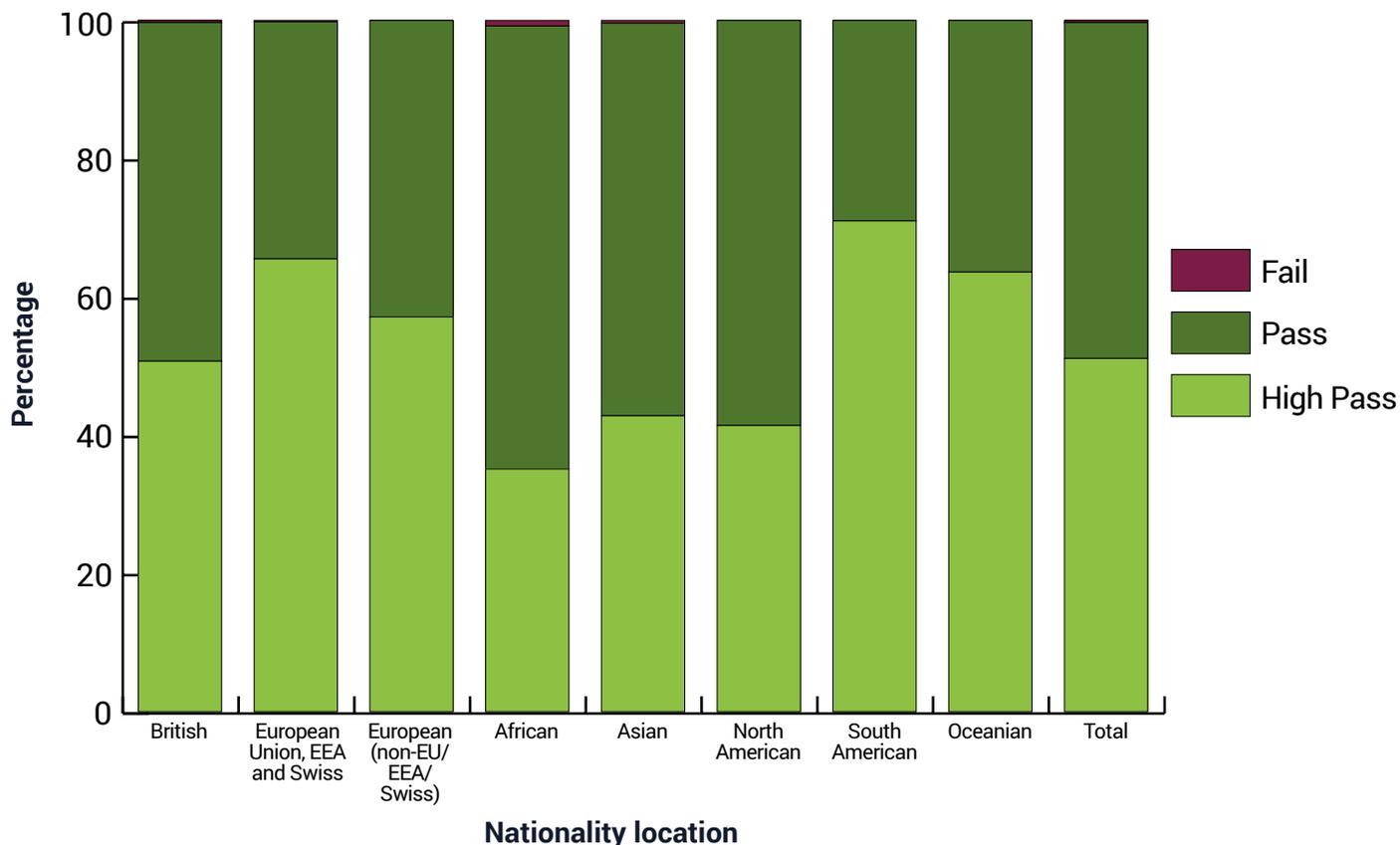
Figure 8 compares the achievement rates of students depending on their age on entry. In 2019-20 there was a noticeable trend that the likelihood of students failing their award increased in line with their age on entry. Whilst this trend is not evident in 2020-21, there is a noticeable dip in the percentage of students achieving a high pass for those aged 35 or above on entry.



**Fig 9 Disability vs. Student achievement - non-apprentice students**

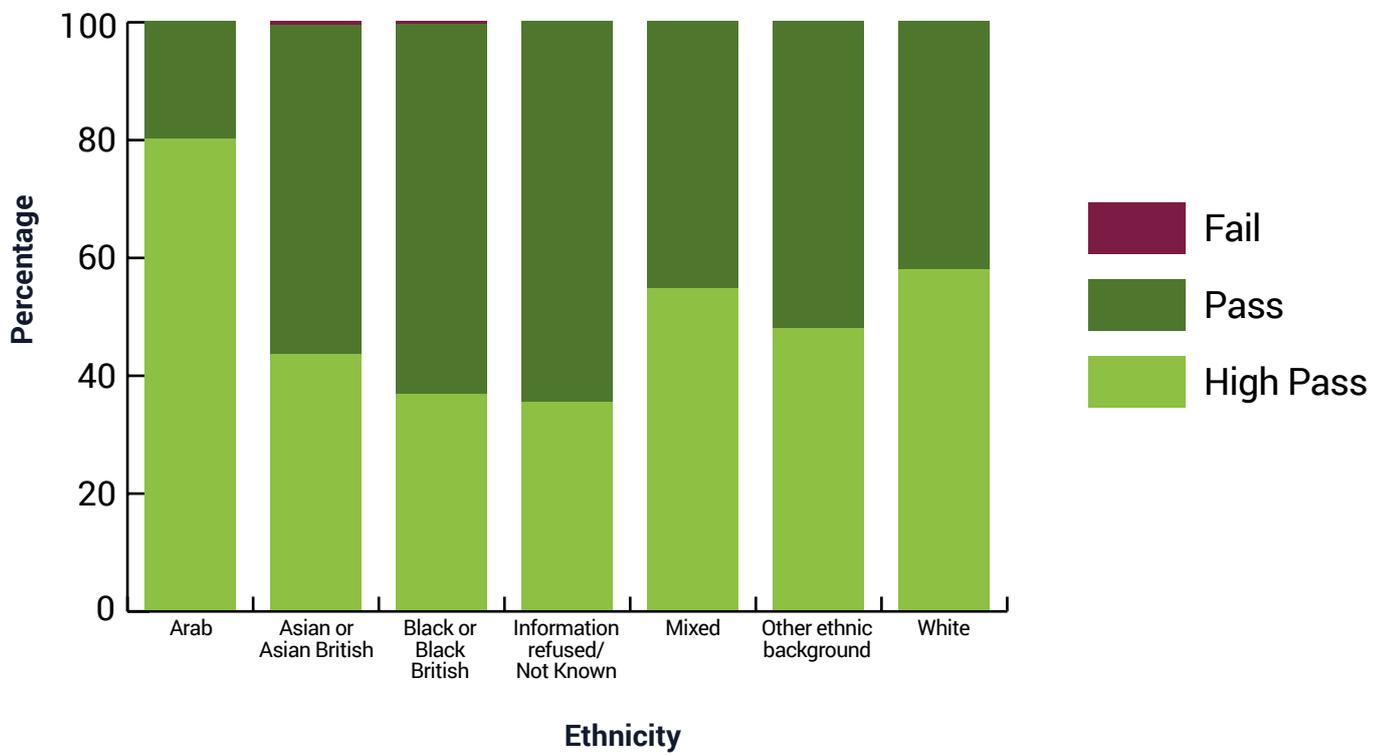
Figure 9 shows the impact of disability on a student's achievement. This provides a useful insight into the range of support students require from the University when faced with the potential challenges of a disability. The support offered to students through the Student Advice Centre and beyond is tailored and based on individual need, and data supports this service model.

The above figure shows that overall students who declare a disability are less likely to achieve a high pass than those who do not. The percentage of students who declared a disability achieving a high pass in 2020-21 (38%) is lower than the equivalent figure in 2019-20 (42%), with those with a communication difficulty or mental health condition the least likely to achieve a high pass. At 24%, those achieving a high pass having declared a mental health condition is significantly lower than the same achievement level for such students in 2019-20 (62%), which may be attributed to the additional challenges students faced during the Covid-19 pandemic. The percentage of students with a disability who fail their award has dropped significantly (from 6.8% in 2019-20), which was significantly higher than the failure rate for students who had not declared a disability (3.0% in 2019-20). The data highlights the importance of supporting students through issues around mental health and wellbeing, and the approved strategy for enhancing this will be fully implemented in 2021-22.



**Fig 10 Nationality of student population by continent vs. Student achievement - non-apprentice students**

Figure 10 compares the achievement levels of students on the basis of their nationality/continent of origin. The data shows that students of African or Asian nationality are less likely to achieve a high pass than British or European students, which may be explained by such students hailing from countries where the education system diverges further from the UK Sector approach. North American students also achieved significantly less high pass outcomes than those of British or European nationality, with South American students significantly more likely to achieve a high pass. This, however, is based on a relatively small total number of students from these countries (29 North American, 31 South American), compared to 2,394 students from either Britain, the EU or Asia. Overall this data shows that nationality has some influence on a student's achievement. From 2019-20 there were significant dips in the achievement level of African and North American students (both 10% less students achieving a high pass in 2020-21 compared to 2019-20) and a slight drop in the Asian student achieving a high pass (down 4% compared to 2019-20), which may reflect the additional challenges faced by students from outside Europe during the Covid-19 pandemic.



**Fig 11 Ethnicity vs. Student achievement - non-apprentice students**

Figure 11 shows that White students are more likely to achieve a high pass than any other ethnicity (aside from Arab, which is based on less than ten students), and that black students are significantly less likely to achieve a high pass than other declared nationalities. Further analysis of this data, alongside data on specific nationalities may help the University determine where specific support can be targeted to address this.

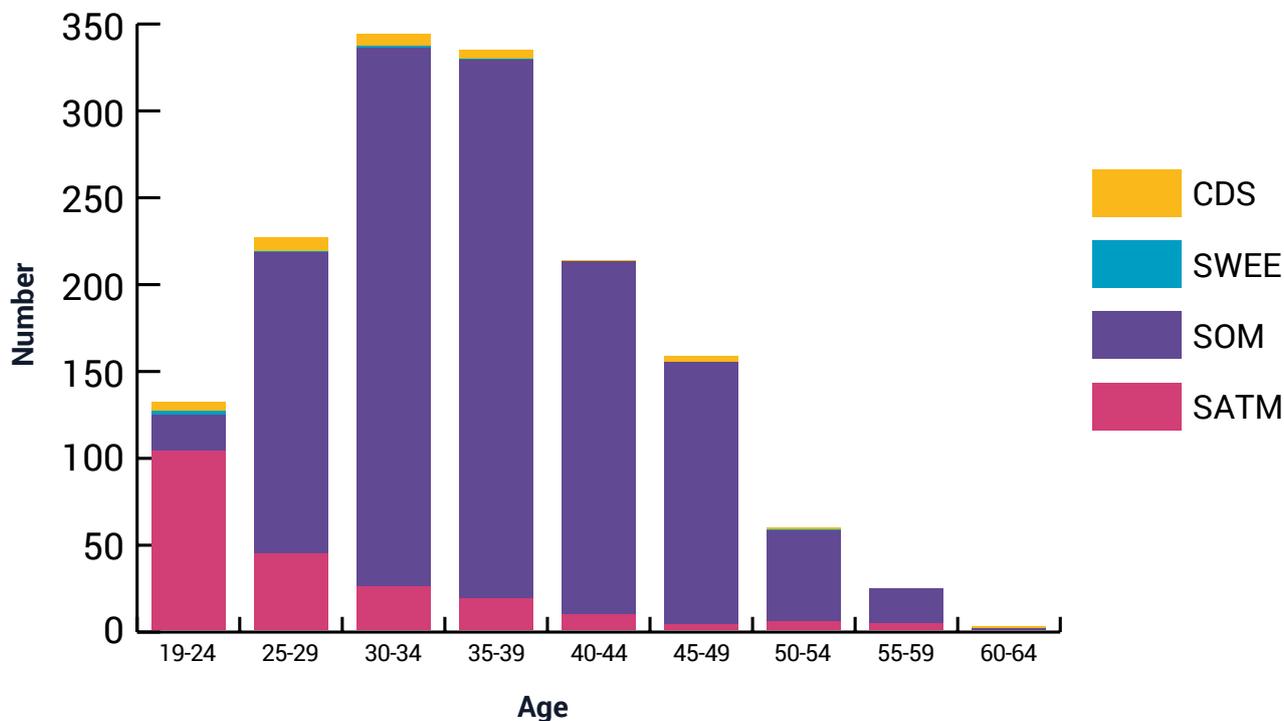
## 3.4 Apprenticeship students - Demographics

As part of the UK Government Apprenticeship scheme the University teaches and makes awards to apprentices on a number of apprenticeship courses. These courses are either closed, apprentice-specific courses or open courses that apprenticeship students may be enrolled on. Such students are funded through the Apprenticeship Levy. Apprenticeship Levy funded students are reported to HESA alongside our other students (and included in the other demographic data presented in this report), but are presented separately here for information. The University taught 1,490 apprenticeship students during 2020-21, a 19% increase on the 1,250 taught during 2019-20.

**Table 8 Apprenticeship students by course**

Students per course	Gender	
	Female	Male
<b>SATM</b>		
Engineering Competence (MSc)		6
Operations Excellence (MSc)	<5	23
Through-life System Sustainment (MSc)	10	34
Engineering Competence (PgDip)	17	102
Aviation Safety Management, Risk and Regulation (MSc)	7	<5
Manufacturing Technology and Management (MSc)	<5	<5
<b>SOM</b>		
Business and Strategic Leadership	93	154
Executive MBA Programme	152	376
Executive Logistics and Supply Chain Management (MSc)	25	39
Management and Leadership (MSc)	138	114
Retail and Digital Banking (MSc)	46	92
Marketing and Leadership (MSc)	7	5
<b>SWEE</b>		
Applied Bioinformatics (MSc)	<5	<5
<b>CDS</b>		
Systems Engineering for Defence Capability (MSc)	<5	5
Systems Engineering (MSc)	5	7
Systems Engineering for Defence Capability (PgDip)	<5	9

Table 8 shows the numbers of apprenticeship students on each course in each School, with 15 different apprenticeship award courses (in 13 subjects) on offer, up from 13 courses in 2019-20. The number of students studying as part of an apprenticeship has continued to rise in SoM, up from 989 apprentices in 2019-20. The number of apprentices in the other schools has fallen slightly from 2019-20, apart from a small increase in SWEE. The percentage of female apprentices has risen from 31% in 2019-20 to 35% in 2021-22, with the two schools with most apprentices (SATM and SoM) having similar gender percentages to the taught totals for all students (SATM 18% taught and apprentices, SoM 40% taught, 37% apprentices). The percentage of female apprentice students is significantly higher than the University average of 28%.



**Fig 12 Age on entry - Apprenticeship students**

Figure 12 shows the age on entry of apprenticeship students. Just 24% of apprenticeship students were under the age of 30 at the point of entry, compared to 54% of the general student population, although apprentices in SATM were, both in number and percentage terms far more likely to be under the age of 24. The variance between apprenticeship students and the general student population is expected, as those studying for a postgraduate apprenticeship are likely to be further into their careers in their respective industries (and so older) than those undertaking postgraduate study independently.

**Table 9 Declared ethnicity - Apprenticeship students**

Ethnicity	SATM	SOM	SWEE	CDS
Asian or Asian British	24	134		<5
Black or Black British	9	49	<5	<5
Information refused/Not known	<5	5		<5
Mixed	5	30		<5
Other ethnic background	<5	15		
White	168	1008	5	24

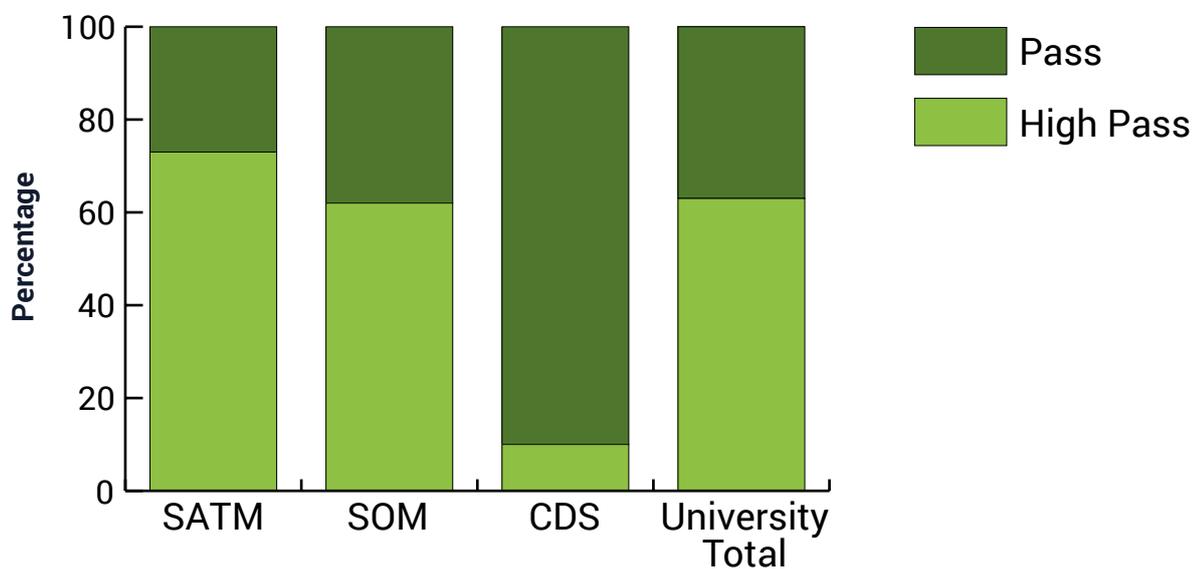
Table 9 details the declared ethnicities of apprenticeship students. the vast majority apprenticeship students declared their ethnicity as White, which may in part be due to the eligibility criteria of the Apprenticeship Levy scheme, which does not permit apprentices who are from outside the UK without significant recent UK work experience.

### 3.5 Apprenticeship students' achievement

Table 10 compares the achievement of apprentice students compared to non-apprentice students on the same course. The data shows that apprentices performed better than non-apprentices in four of the five courses on which apprentices completed their award during 2020-21.

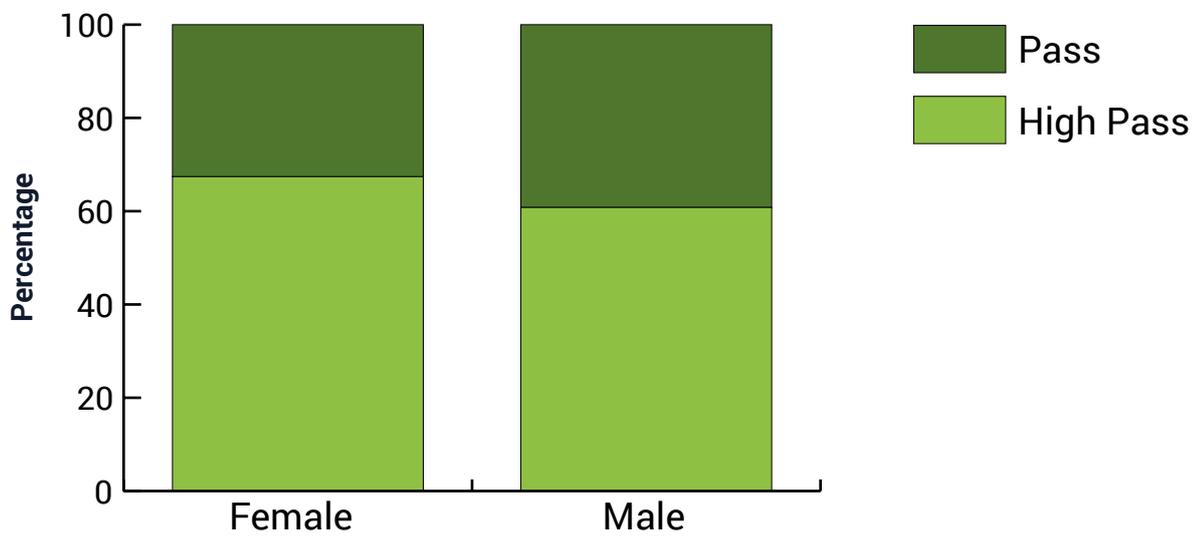
**Table 10 Apprenticeship students' achievement vs. non-apprentice students by course**

	High Pass	Pass
<b>Engineering Competence</b>		
Apprenticeship	73%	27%
Standard	33%	67%
<b>Executive Logistics and Supply Chain Management</b>		
Apprenticeship	92%	8%
Standard	78%	22%
<b>Executive MBA Programme</b>		
Apprenticeship	59%	41%
Standard	47%	53%
<b>Retail and Digital Banking</b>		
Apprenticeship	44%	56%
Standard	100%	
<b>Systems Engineering for Defence Capability</b>		
Apprenticeship	10%	90%
Standard		100%



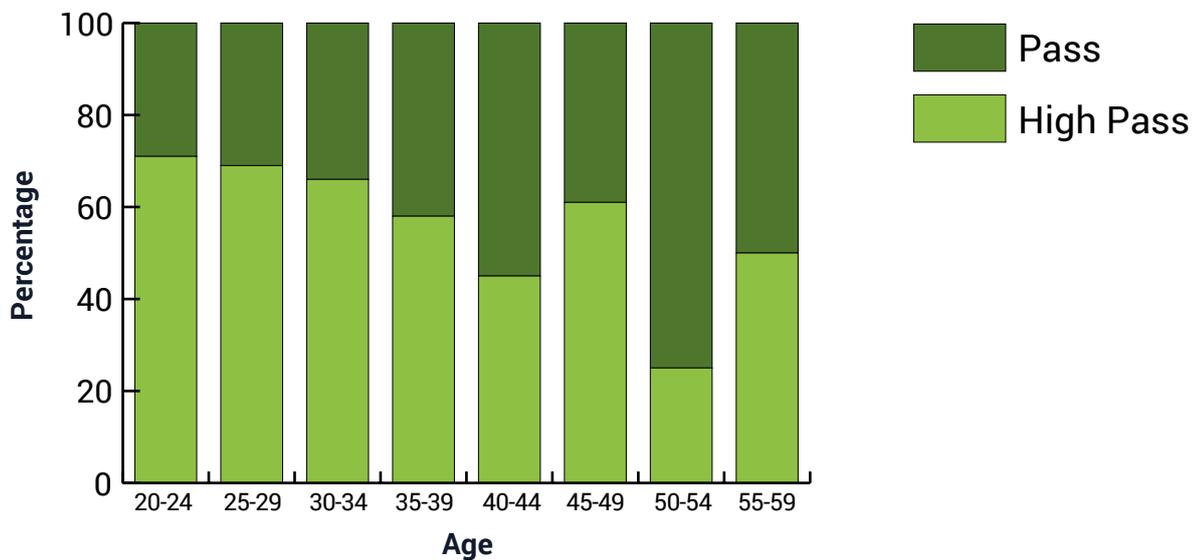
**Fig 13 2020-21 Leavers with outcomes by School - apprentice students**

Figure 13 shows the achievement of apprentices by School, with a large disparity between achievement in SATM and SoM and achievement in CDS. The University total for apprentices achieving a high pass is higher than the University total for non-apprentice students (51%).



**Fig 14 Gender vs. Student achievement - apprentice students**

Figure 14 shows that female apprentices were slightly more likely to achieve a high pass than male apprentices, whereas there was no gender variation for non-apprentice students. Figure 15 shows that across all age ranges apprenticeship students were more likely to achieve a high pass than their non-apprentice counterparts.



**Fig 15 Age on entry vs. Student achievement - apprentice students**

In addition to completion of their academic course, apprenticeship students undertake an End Point Assessment (EPA) in order to assess that they have met the required Knowledge, Skills and Behaviours as set out in the relevant Apprenticeship Standard, with successful students receiving a pass, merit or distinction. During 2020-21 209 apprentices completed their EPA, with an even spread of grades achieved (69 Passes, 69 Merits and 71 Distinctions). Prior to undertaking their EPA, students are required to go through Gateway, to assess their readiness for their EPA. Only one student was given a referral at the Gateway stage during 2020-21, but subsequently passed through Gateway following a resubmission.

## 3.6 Students studying with validated partners and overseas

Students studying with validated partners in the UK and those studying overseas for degrees taught by Cranfield are not included in the data that the University returns to HESA, and are reported separately as below.

### 3.6.1 Validated partners

In 2020-21 158 students were registered with validated partners. Such arrangements see Cranfield approve programmes specific to the partner, with the partner delivering teaching and assessing students. Cranfield retains overall responsibility for quality and standards, managed by link tutors and running Boards of Examiners in accordance with Cranfield regulations. The validated partners during the year were:

Royal School of Military Engineering; Royal School of Military Survey and Nuclear Department.

As of July 2021 the registration statuses of these students were as below (the 2019-20 figures are given for comparison):

**Table 11 Validated partner students' registration statuses**

Registration status	2020-21	2019-20
Current continuing students	89	87
Completed, being assessed	11	10
Successful completion	50	59
Withdrawn	8	<5

The University's strategy has been to choose "blue-chip" partners in cognate areas to its own specialisms for such partnerships. The University may end partnerships where they no longer add value to Cranfield's portfolio or where the risk outweighs the reward. It is anticipated that partnership strategy will be articulated more fully in the future review of the Education and International strategies.

### 3.6.2 Overseas students

During the academic year 2020-21, 219 students were registered with the University overseas (compared to 200 in 2019-20). In contrast to validated arrangements, these students are registered on Cranfield programmes, taught and assessed by Cranfield staff but delivered overseas. While there are challenges with the logistics of transnational delivery, risks to quality and standards are mitigated by Cranfield's control over admissions, teaching and assessment functions. The University remains open to exploring the development of a small number of high-quality arrangements for overseas delivery and has progressed a number of international partnerships and associated activity to build its international cohorts and student recruitment. In addition to the relationships noted in the Foreword, the University has strengthened its teaching relationship with Nanjing University of Aeronautics and Astronautics on aerospace manufacturing; developed a suite of internship opportunities with Indian feeder universities; and secured a wide range of funded scholarships from various UK and overseas Government sources to support our postgraduates.

The International Partnerships and Student Recruitment professional service unit is responsible for managing the University's network of 130+ agents and for the oversight of international academic partnerships (taught and research). Much has been done over recent years, including with revisions to the Senate Handbook on Partnerships, to ensure that all international partnerships are meaningful, auditable, and established with firm due diligence, thereby meeting our regulatory obligations. The International team manages relationships with international funding bodies (scholarships), with Government sponsors (education attachés) and with Kaplan International College London, the University's MSc pathway partner. The impacts of Brexit are being mitigated by cementing relationships with the University's top 25 or so European partners. The agent business has grown rapidly and is professionally run and governed through an in-house 'Agent Manual'. Cranfield University is active in UUKi and its Regional Groups, in the BUILA Regional Groups and adheres to BUILA's Code of Best Practice for Agent management.

As for validated partnerships, the University recognises the need to articulate its strategic approach in order to provide a clearer framework for decision making in relation to future potential partnerships.

**Table 12 Overseas provision**

	2020-21	2019-20
Ethiopia	40	48
France	24	21
India	<5	<5
Oman	130	103
Singapore	<10	<10
United States	17	18

In addition, 17 students joined the University remotely from China as part of the Sino UK programme. These students were unable to travel to the UK due to Covid-19 travel restrictions.

As of the end of July the registration statuses of these students were:

**Table 13 Overseas students registration statuses**

	2020-21	2019-20
Current continuing students	127	122
Completed, being assessed	17	17
Successful completion	83	59
Withdrawn	<10	<5

# 4 Student experience and student journey

## 4.1 Admissions experience

This year was a busy year for admissions with a significant growth in application numbers and managing applicant expectations due to Covid-19.

### Application numbers



### Covid-19 response

Admissions responded to Covid-19 with a range of measures to provide increased support for prospective students. This included:

- Alternative online English tests due to the closure of English test centres. This activity was in collaboration with the Centre for Andragogy and Academic Skills as it involved interviews by English Tutors and proctoring of online tests.
- Extended deadlines for tuition fee deposit payments.
- Increased flexibility on deadlines for providing application supporting documentation.
- Additional email communications, webinars and virtual Open Days to provide applicants with the latest advice and guidance, working with various departments, including Communications and Externals Affairs.

### Pre-Sessional English Language provision and testing

Cranfield provides applicants with a pre-sessional 'English for Academic Purposes Course' (EAP) each year if they are not able to meet our English language entry requirements. This is usually face-to-face provision over a 20, 10, five or three-week period, depending on the student's IELTS score (or equivalent).

In 2020 the summer programme could not be delivered face-to-face, and therefore moved to an online course, using Canvas. To allow for online content to be prepared, the provision was streamlined to a 10- and five-week course, starting in early June. The timeline for the course was important as it needed to ensure successful candidates were able to then apply for a visa to study.

There were two separate intakes for the 10-week EAP and one intake for the five-week EAP. The courses attracted similar numbers to previous years (150+) and all candidates were able to pass the course, with some additional support offered as needed. The in-sessional support (for students once registered) for English was launched for the 2020-21 cohorts as a pilot, and enabled all students to benefit from this, but with early support particularly focused on the former EAP students.

In addition to the EAP, due to many IELTS test centres being closed, including in China, the University offered applicants the option of taking the Cranfield Online English Test (COET), to be able to show their current English standard. This was a backup test if no other approved tests were available in their country. The COET was provided by Password, an established test provider, and Cranfield covered applicant costs. Applicants took the test whilst on a zoom call with a Cranfield member of staff acting as invigilator. This test was successful in enabling applicants to show English language proficiency where they would not have otherwise been able to do so.

## 4.2 Student wellbeing and learning support

In line with the sector, there has been an increase in the number of students presenting with mental health issues and seeking reasonable adjustments to support their learning (Table 14). Cranfield, with 5.9% (as shown in [Table 4](#)) is still notably below the 10% average of postgraduate students nationally who declared a disability (2019-20). This may in part be explained by the high proportion of international students where cultural norms present a barrier to disclosing a mental health need or other disability. This is reflected in the demographic of students seeking support from the Student Advice Centre (SAC) (Table 18).

The impact of the Covid-19 pandemic on student mental health and wellbeing is further evidenced by the increase in students presenting to the Student Advice Centre (Table 14) with mental health concerns, or who are considered “at risk”, and the continued high demand for counselling support (Table 15). Closer partnership working with NHS services has facilitated co-ordinated support to those most vulnerable within the UK. Table 14 also shows a marked increase in the number of students presenting to the Student Advice Centre with bullying or harassment concerns in 2020-21. Much of this is accounted for by one student disciplinary case arising from a group complaint. Nonetheless, a review of the University’s processes to ensure the safety of students will be ongoing through 2021-22 as noted later in this report.

**Table 14 SAC presenting issue (number of students)**

Issue type	2020-21	2019-20	2018-19
Bullying / harassment	16	7	5
Academic complaints / appeals	41	48	46
Academic concerns	224	161	114
Accommodation	72	74	36
Family / schools /pregnancy	25	21	13
Disability (SpLD, mobility, health)	109	123	152
Mental health	155	95	63
Student of concern/self-harm/suicidal ideation	39	33	27
Victim of crime	7	8	<5
Welfare	155	257	13
Other (e.g. issues with students, budgeting)	115	32	21

**Table 15 Student use of counselling services**

Year		Number of students	Number of sessions
2020-21	Cranfield	152	839
	Shrivenham	9	65
2019-20	Cranfield	108	821
	Shrivenham	7	90
2018-19	Cranfield	120	708
	Shrivenham	7	84

Engagement with the Advice Centre services saw a significant increase at the start of the Covid-19 pandemic in March 2020, which impacted the 2019-20 overall figures and remained consistent during 2020-21 (Table 16). While limited face-to-face services have been offered throughout, students have shown a preference for accessing services online with video calling becoming the new norm. Student feedback indicates the convenience and comfort of video calling from their own space/ accommodation has helped increase access to services, particularly when distressed, where coming on site/to the SAC office becomes a barrier to reaching out for support. Limited face-to-face services were offered throughout the year, when restrictions allowed, however the majority of students preferred to engage online with only 59 face-to-face meetings taking place in 2020-21 compared to 379 in 2019-20.

**Table 16 Students accessing Student Advice Centre support**

Academic year	2020-21	2019-20	2018-19
New student registrations	3139	2918	2733
Number of students accessing SAC support	933	859	493
% accessed SAC services	29.7%	29.4%	18%

**Table 17 Engagement with the Student Advice Centre**

Academic year	2020-21	2019-20	2018-19
Total number of students	933	859	493
Total number of individual contacts	3688	2975	1539

**Table 18 SAC - demographics**

Mode of study	2020-21	2019-20	2018-19
Part-time	162	215	94
Full-time	771	644	399
<b>Fee status</b>			
EU	144	111	68
Overseas	564	476	190
UK	225	272	235

### Service development and safeguarding

As part of the University's commitment to providing a safe community and environment to work and study a supportive framework has been put in place to help members of staff understand their role in safeguarding activities. This includes a new e-learning module for staff on 'Safeguarding Vulnerable Adults', designed specifically for universities, which provides an overview of safeguarding responsibilities and the legal background with regards to recognising and reporting abuse. It also has a short section on the Prevent Duty which complements our current provision and strengthens knowledge and understanding.

The University's recently revised safeguarding policy and procedures for raising a safeguarding concern can be found on our [website](#).

Raising awareness with students of safeguarding and expectations around student conduct is also under review. With harassment on campuses under increased focus in the sector, and the release of revised OfS guidance on addressing harassment, we are working with students to review the visibility and communication of our policies, expectations in terms of behaviour, training, and routes to raising a concern (safeguarding, wellbeing, and harassment).

As part of this review, our online training module for students on 'Equality, Diversity and Inclusion' (ED&I) has been refreshed and will become mandatory for the new academic year. The module highlights a range of important cultural and behavioural expectations beyond ED&I.

## 4.3 Student engagement

University-level engagement with students in 2020-21 built on the changes that were made in late 2019-20 in response to Covid-19, with frequent two-way engagement opportunities proving effective, and further enhanced through senior management involvement.

The University-wide [Student Voice](#) initiative (launched October 2018) has a number of feedback methods which are available to students, but in 2020-21 particular focus was given to Q&A forums, enabling discussion and 'live feedback'. The timing of the forums remained flexible and was often linked to updates to Government restrictions. The forums enabled the University to reinforce messaging, as well as providing further information relevant to our students. At least one member of the Executive attended each University-level forum, and at their peak there were 300 students attending live, with recordings then available for others. Questions could be submitted prior to the events or asked in the forum directly.

The forums offered a chance to provide information, but also get feedback about wider matters, which meant short-term and immediate changes could be made throughout the academic year.

The Q&A forums were conducted separately for taught and research students, as previously. However, it was also decided to separate full- and part-time students, given the different nature of their experiences and personal situations. This proved effective and will be continued to further understand the experience and challenges of part-time students.

Course-level engagement varied in approach but in many cases course teams chose the conversational approach to complement feedback data (via EvaSys). In areas where some cohorts showed particular concern on their experience, course teams set up smaller versions of the Q&A forums, which proved effective.

The University continued to work closely with the Cranfield Students' Association and the officers, as well as with the course representatives. Two exclusive events were hosted by the Director of Student Experience (online) to offer special insight for the representatives and officers, as a thank you for their time and engagement. Regular emails were exchanged with the course representatives and Director of Student Experience to inform a continuous oversight of current issues that needed attention or intervention beyond course or programme level.

Student representation at committees continued throughout the year, including at the Student Experience Committee (SEC). The Terms of Reference of the SEC were changed to allow the CSA President to co-chair the Committee with the Director of Student Experience. This change was made to ensure students felt ownership on agenda items and direction of discussion.

The [Student Charter](#) (approved by Council July 2020) was launched on the University website and made visible to all new students, as well as current students. The next stage will be a Student Engagement Strategy, to be developed in 2021-22.

## 4.4 National student surveys

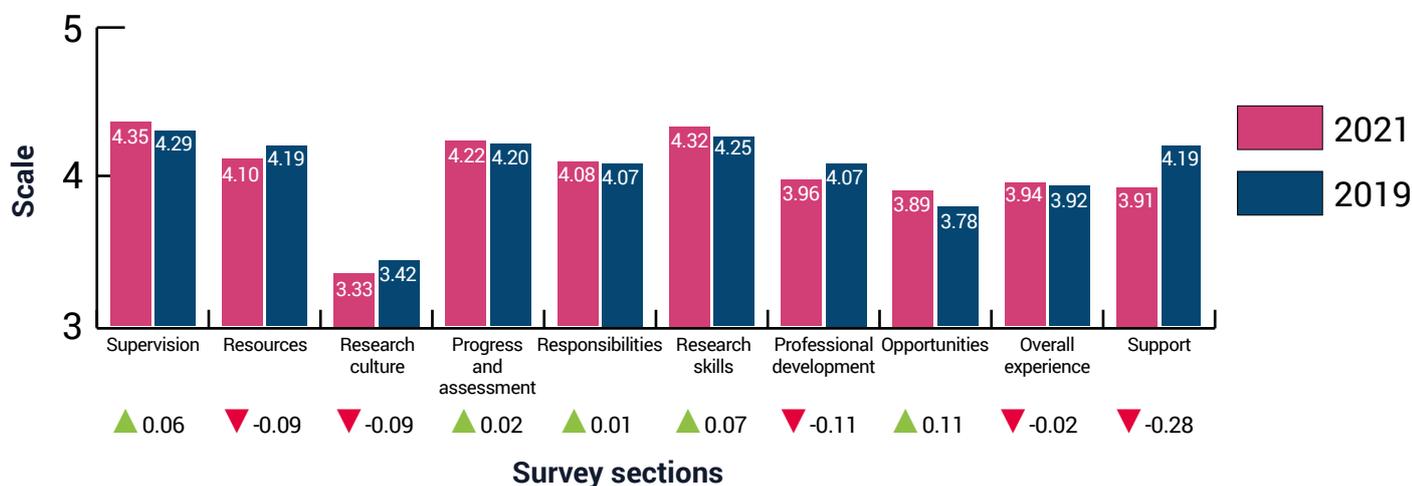
### National postgraduate experience surveys 2021

#### Background

The Postgraduate Research Experience Survey (PRES) and Postgraduate Taught Experience Survey (PTES) are UK higher education sector-wide surveys designed to gain insight from postgraduate students about their research, learning and teaching experiences. Organised annually by AdvanceHE, the surveys provide robust, benchmarked data from a large number of higher education providers across the UK, against which individual institutions can assess their own performance and drive enhancement of the student experience. Cranfield University participated in the 2021 survey following a gap in 2020 due to the timing of the survey period coinciding with the first Covid-19 lockdown.

#### Headlines of 2021 surveys

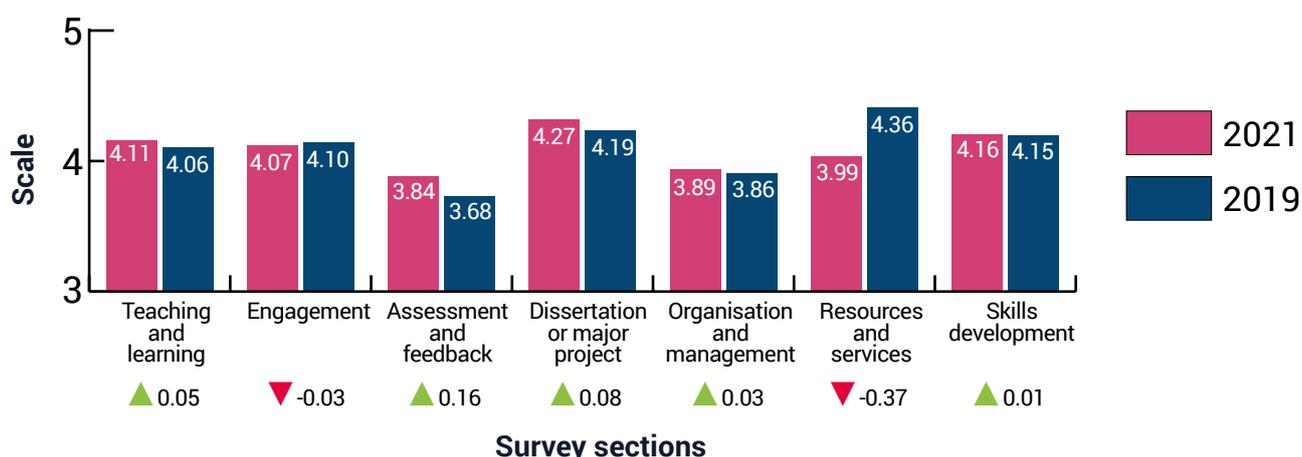
The surveys ran from 6 April to 17 May 2021. Cranfield's response rate was 36% for [PRES](#) and 35% for [PTES](#), compared to 57% and 61% respectively in 2019 (n.b. the 2019 response rates were the highest Cranfield had previously achieved). The national response rates for 2021 were 23% for PTES and 36% for PRES. Whilst the response rates are significantly lower than in 2019, they are at least as good as the national average and are judged to be sufficiently representative, at least at higher levels of aggregation (Theme, School, University), to draw secure conclusions.



**Fig 16 PRES performance (0 Very poor - 5 Very good)**

Overall, there was an equal number of categories that improved and declined in PRES rating. Opportunities saw the greatest improvement and Supervision was the most highly rated category. Support saw the greatest decline and Research Culture was the least highly rated category.

The percentage of respondents that overall were satisfied with the experience of their research degree programme was 74% compared to 75% in 2019. The percentage of respondents who would recommend Cranfield to other students was 83% compared to 84% in 2019.



**Fig 17 PTES performance (0 Very poor - 5 Very good)**

Overall, five out of seven categories improved in PTES rating. Assessment and Feedback saw the greatest improvement and Dissertation or Major Project was the most highly rated category. Resources and Services saw a very significant decline in PTES rating. This is normally Cranfield's best rated category and this unusual result is attributed to students' expectations not being met during the Covid-19 disruption. Assessment and Feedback was narrowly the least highly rated category but is on a consistent upward trend year-on-year.

The percentage of respondents that overall were satisfied with the experience of their taught degree programme was 81% compared to 82% in 2019. The percentage of respondents who would recommend Cranfield to other students was 90% compared to 89% in 2019.

### Comments and institutional questions

The surveys allow participants to complete text boxes in each section, and these verbatim comments are useful in providing further insight into specific areas of a student's experience. In addition, for both PTES and PRES there is the option of each institution setting a limited number of questions themselves, that can go beyond the national survey topics. Cranfield carefully considered the institutional questions, and these had a broad focus on gaining insight into a student's digital experience and preferences, campus access and staff engagement throughout the Covid-19 period.

### Sharing results and communication

Results were shared with staff at the end of July and staff engagement sessions took place during September 2021, led by the Pro-Vice-Chancellors for Education and Research and the Directors of Student Experience and Research and Innovation, to gather ideas on initiatives and changes in response to the survey data. This approach has been taken previously and proved successful in informing University-level actions that directly respond to shared theme, school and course-level concerns.

Communications were shared with all students around engagement levels and results, and a specific engagement session was run with research students within a Q&A forum.

## 4.5 Complaints, appeals and disciplinary issues

The policies and processes in place which govern how the University manages complaints and academic appeals are set out in Senate Handbooks, which are regularly reviewed to take account of casework experience and external regulatory changes.

The charts below show the total numbers of formal Stage 2 complaints and academic appeals submitted during the academic year 2020-21, a comparison with the two previous years, and details of the outcomes of cases which have been resolved.

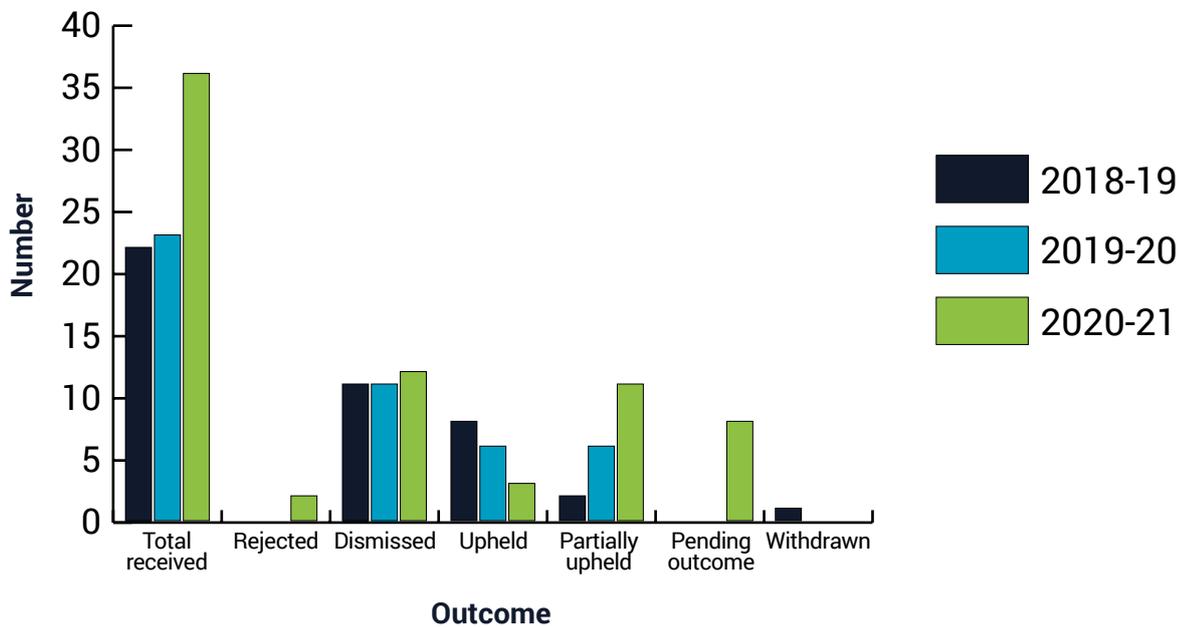


Fig 18 Complaints received (number)

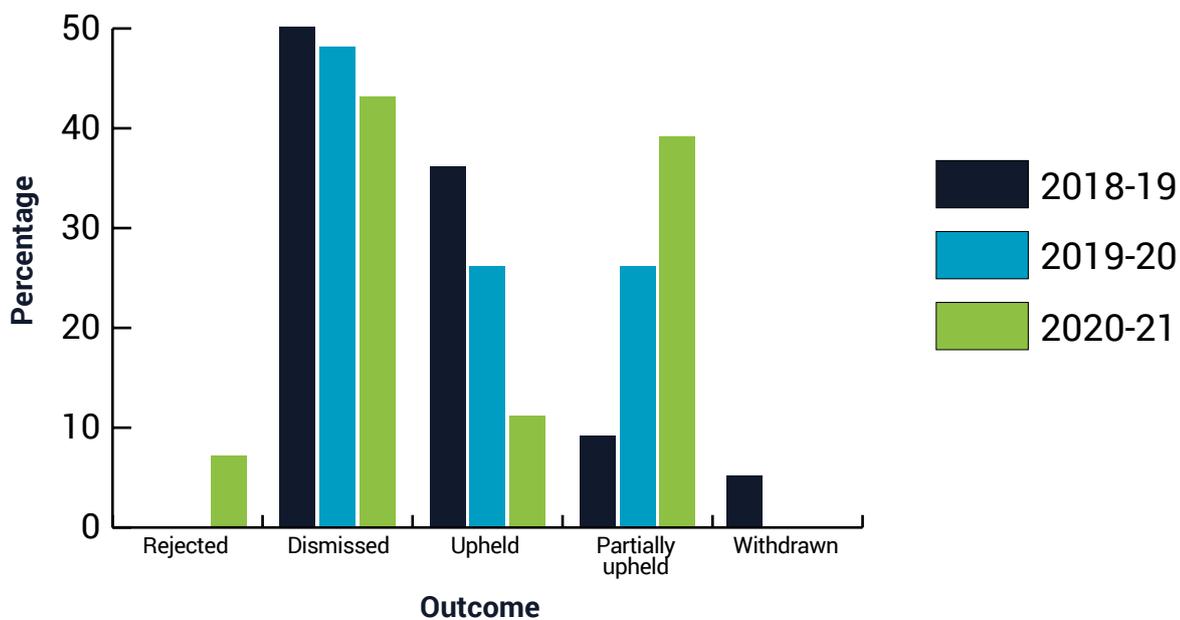


Fig 19 Resolved complaints outcomes (percentage)

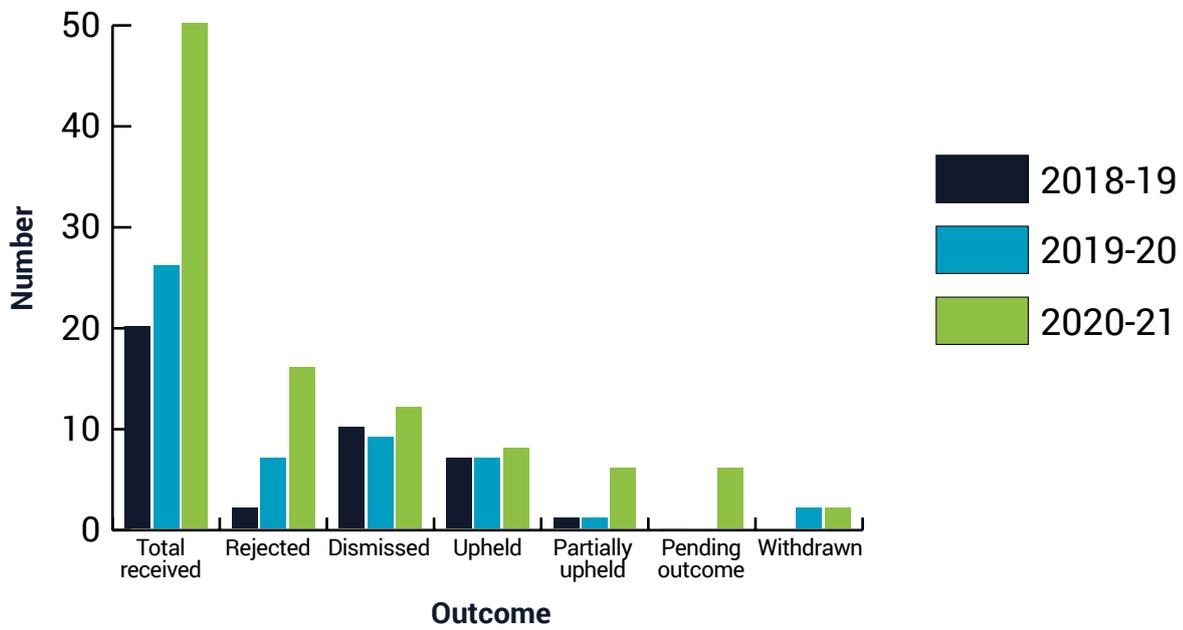


Fig 20 Academic appeals received (number)

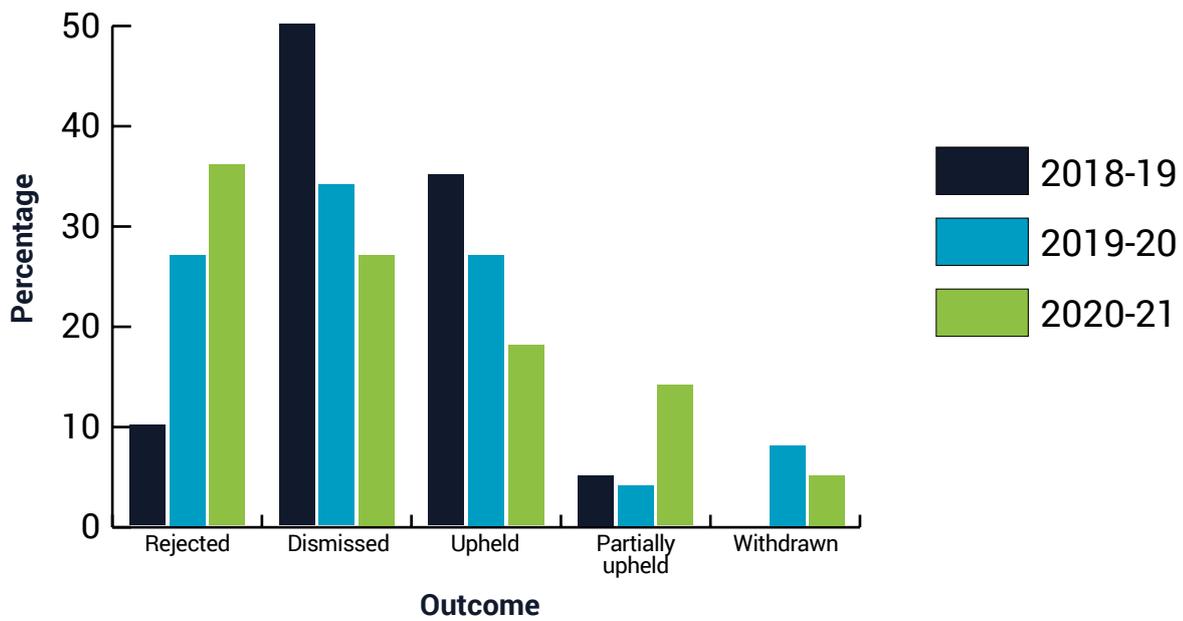


Fig 21 Resolved academic appeal outcomes (percentage)

Complaints made by students for reasons relating to the Covid-19 pandemic were handled informally as Stage 1 complaints, and wherever possible resolved at Stage 1 in order to provide students with a prompt resolution. The University considered 76 Stage 1 Covid-19-related complaints during 2020-21, which included four group complaints. The vast majority of these complaints (71) were from taught students. Of the 76 Covid-19-related complaints 11 were unresolved at Stage 1 and progressed to Stage 2, and are included in the formal Stage 2 complaints charts above.

Overall, in 2020-21 there were 12 more formal complaints received by the University, which represents a 33% rise in the number of complaints over the previous academic year, but correlates with the number of Covid-19-related complaints which were progressed to Stage 2. Despite the significant rise in formal complaints the number of students making a formal complaint represents just 0.4% of the total University population.

The number of academic appeals received in 2020-21 (50) was almost double that of 2019-20 (26), with a large percentage of those submitted being rejected as being without grounds for appeal. A small number of the 50 appeals received were from research students.

Complaints about Higher Education Institutions in England are reviewed by an independent body, the Office of the Independent Adjudicator (OIA). During 2020-21 the OIA received eight complaints made against the University (up from <5 in 2019-20), where the students were dissatisfied with the University's response to their complaint. Of these eight complaints, <5 were found to be not justified, <5 were withdrawn, <5 were rejected by the OIA as not eligible and <5 are pending an outcome. During 2020-21 the OIA returned outcomes on <5 outstanding cases from 2019-20, with <5 complaints found to be not justified and <5 partially upheld. <5 appeal outcomes were referred to the OIA in 2020-21, which were found to be not justified.

The release of a framework of expectations issued by the OfS regarding Harassment and Sexual Misconduct, along with student disciplinary casework, prompted a review of the processes the University has in place to ensure the safety of its staff and students, which will be ongoing through 2021-22. The review includes changes to the University's Dignity at Study policy and measures put into place for staff, students and visitors.

## 5 2020-21 action plan update

The below activities were included in the action plan presented to Council in November 2020 to support the academic aspects of the Research and Education Strategies, in particular to achieve a top 10 learner experience. The progress made against each activity is listed below. The impact of Covid-19 has delayed several of the proposed actions.

Action No.	Action	Purpose	Progress
1	Research Strategy refresh.	To establish clear direction of travel for the University in Research.	Ongoing. The Research Strategy will be refreshed in line with the preparation of the new Education Strategy in 2021-22. Led by the new Pro-Vice-Chancellor Research and Innovation, it will focus on quality, research culture and scholarship and take account of lessons learned from REF 2021, outputs from PRES and extensive staff consultation.
2	Deliver the pilot cohort of 75th Anniversary Fellowships.	To increase the focus on research culture and hypothesis-driven research.	Complete. 75th Anniversary Fellows are expected to be of very high quality, of a standard which is competitive with externally funded early career fellows. Recruitment is therefore rigorous with only the very best candidates appointed. The pilot cohort of three 75th Anniversary Fellows began their fellowships in October 2020; one further Fellow will join the cohort in October 2022. The researcher development programme to support them has begun.
3	Develop a timetabled plan of funding bids to UKRI with each Director of Theme.	To ensure support for a balanced portfolio of research activity and to address funding gaps arising from Covid-19 and Brexit.	Complete. Research funding planning has been taken forward at a local, Theme level supported by researchers' line management and promoted by Directors of Theme. Research and Innovation effort has been placed on developing a pan-university internal peer review process to support academics in making high quality bids. Currently 49 academics are signed up as internal reviewers.
4	Improve visibility of research culture in Cranfield.	To provide students and staff with a clear understanding of research culture in Cranfield and how they might engage with it.	Ongoing. Raising the profile of research culture will be taken forward as part of the Research Strategy refresh. RIO and Student Experience will be running more workshops in the near future where staff will be invited to discuss their thoughts on research culture which will then be presented to students for their comments. A number of actions to develop research culture have been completed: School specific research culture workshops, re-introduction of inaugural lectures and research summaries from new fellows and research students and an initiative to improve imagery promoting research in SoM; RIO-led workshops on research funding; Cranfield Doctoral Network events and others run by the Thematic Doctoral Communities including paper writing sessions and two new Communities of Practice, supported by RIO staff.
5	Migrate on-line training and development programmes for research students to Canvas.	To provide students with a more flexible way of learning and networking to be inclusive of part-time students and those studying abroad; and to align with the principles of the Researcher Concordat.	Ongoing. Research ethics and integrity training has been migrated to Canvas. The transfer of eRAP (Referencing and Avoiding Plagiarism) is almost complete. A Development Needs Analysis tool (DNA) will also be included on Canvas and a pilot programme to trial the Canvas platform for monthly meeting minutes is nearing completion. The Progress Review process may not be suitable for Canvas so alternatives are being considered. These changes to be communicated to students during the early part of the new academic year.
6	Develop a joint activity programme with Midlands Innovation (MI) universities for students and early career researchers.	To provide greater development and networking opportunities.	Ongoing. Sharing of best practice between the MI partners for research student support has been ongoing via online meetings. A project is underway to design a MI-wide network for research students. Joint training programmes for technicians have been enabled through the MI TALENT programme and Cranfield technicians have benefitted (37 places taken up from 315 offered in total). Cranfield is one of the lead partners in the MI C-DICE programme to enhance the development of postdoctoral researchers in infrastructure, cities and energy. The Cranfield-specific Doctoral Network was expanded to include research staff and delivered the annual networking event and two three Minute Thesis (3MT) competitions plus the annual publishing prize awarded.
7	Deliver more senior-level online networking and consultation sessions.	To provide all students with a regular opportunity to ask questions of senior staff and to celebrate successes.	Complete. A programme of Q&A webinars focusing on the immediate impacts of the pandemic was fronted by the Pro-Vice-Chancellors for Research and Innovation and Education and the Director of Student Experience with regular sessions throughout the year. Executive-level communications and e-bulletins highlighting key messages were also circulated. Consultation meetings with research reps on Research Committee were introduced ahead of each meeting.

Action No.	Action	Purpose	Progress
8	Launch a marketing programme to increase applications for research degrees, taking account of Equality, Diversity and Inclusion.	To improve the take-up of available PhD opportunities by high quality candidates.	Ongoing. Research testimonials have been boosted with 51 now live across a range of themes, nationalities and genders. Marketing activity continues to promote research opportunities and highlight our diversity, with tracking in place to influence future marketing strategies and plans. We have started a review of our own prospective PGR student and competitor marketing and website activity. We are also reviewing our international PGR partnerships.
9	Formalise and consolidate strategic international research partnerships.	To increase opportunity for international recruitment.	Ongoing. We have awarded 7 PhDs jointly with UTC (France) in two cohorts. A Senate panel approved three PhD programmes as part of the Joint Institute in Jiangsu University Cranfield Tech Futures Graduate Institute. The European Partners Programme is being extended to include research degrees - allowing a 50% scholarship discount for high quality partners. An agreement is nearing completion for a joint PhD programme with A* Star in Singapore. Research Committee has also approved a Global Faculty Development programme (PhD (Academic Practice)) - a PhD incorporating the Postgraduate Certificate of Academic Practice currently only available to academic staff.
10	PhD by portfolio offering for industry.	To increase opportunity for engaging with core strategic industry partners.	Complete. Research Committee (5 July 2021) approved the process for a new PhD route named PhD by Portfolio. This will initially be for Cranfield's strategic industry partners to enable their staff to use a portfolio of research they have already conducted within that company towards a PhD. Candidates for the programme will undergo a rigorous interview and will register for 12 months for a full-time programme (with a part-time option) during which they will be expected to undertake a mandatory training programme to ensure they emerge as well-rounded researchers.
11	Extend Athena Swan principles to the student body.	To build on the work done within the team for staff, and ensure benefits for students can be seen also.	Ongoing. To be established through avenues such as expanding the Step Up Network activity and audience. Some success with recent Scholarships for women released - Santander and British Council Women in STEM. There was also a Women in Engineering event run through the Cranfield Doctoral Network.
12	Review of student recruitment, communications and outreach to ensure we are in line with our staff diversity action plans.	To attract more diverse students to Cranfield. Capturing protected characteristic information on students to enable us to report on our student profile and identify appropriate support.	Ongoing. Initial discussions have taken place with the ED&I teams and key departments (IPSR, Student Exp, CEA and RIO) and looked at developing information on the website and in other areas. Work on outreach is being done via the events team in CEA. Focus now on implementing changes.
13	Deliver a Student Engagement Policy for Cranfield to convey and bolster current practise.	To ensure a shared understanding by all on how student engagement happens at Cranfield and the value in this activity for students, staff, standards and experience.	Ongoing. Timeline revised to early 2022. Strategy to be informed by the different forms of engagement that took place in 2020-21, which proved effective in shaping the student experience.
14	Education strategy refresh.	To establish clear direction of travel for the University in Education.	Ongoing. Preparatory work on the refreshed Education Strategy is complete. The next step is consultation with the incoming Vice-Chancellor and agreement on format, extent of refresh and timeline.
15	Digital learning strategy embedded within Education Strategy.	Create a clear direction for services and investment in this area, and ensure the University is able to provide an educational offering that exceeds that of the wider sector.	Ongoing. Preparatory work for the creation of a digital learning strategy is complete. The next step is consultation with the incoming Vice-Chancellor and agreement on how to embed within the new Education Strategy.
16	Teaching room standards - Formation of a project team to focus on the teaching rooms on campus.	To evaluate the overall learning environment and capabilities that we need to be offering to provide a top learner experience, and to ensure this informs both strategy and investment across the University to allow a process of standardisation and enhancement.	Ongoing. Covid-19 disrupted planned progress with strategic development of teaching rooms as the focus has been on socially-distanced education provision. Teaching room strategy will be an integral part of estate planning post-Covid led by the Capital Planning Committee (Chaired by the Chief Operating Officer).

Action No.	Action	Purpose	Progress
17	Implementation of single VLE platform for the University.	To enhance student experience, for consistency of delivery and to increase efficiency for academic and administrative staff.	Complete. VLE (Canvas) implemented and continuous improvement embedded in business as usual processes.
18	MK:U course validation.	Subject to Council's "go-no go" decision, take the undergraduate degree apprenticeships through a pilot undergraduate course validation process.	Ongoing. Stage 2 validations complete, Stage 3 (final) validations expected early 2022.
19	Development of Training Action Plan and Professional Practice Commitment.	Develop a new co-ordinated approach to training for academics to ensure QAA good practice guidance is being followed. Develop a new academic practice commitment which sets out expectations of the University, its academics and its academic support professionals with regards continuing professional development and professional recognition.	Ongoing. Consultations through Executive, HR and Senate's Committees complete. Next step is consultation with the incoming Vice-Chancellor on the proposal for an Academic Charter.
20	Assessment and Feedback Working Group (A&FWG).	To ensure an ongoing focus on institutional improvement of Assessment and Feedback practices.	Ongoing. A&FWG re-established, work programme agreed with Education Committee and projects ongoing. Improvement in PTES 2021 Assessment and feedback score achieved.
21	Part-time student experience.	To ensure that the part-timer experience is better understood through increased engagement with part-time students through student voice activity.	Ongoing. New initiatives on part-time experience complete. Further work needed to embed a focus on part-timers in Student Voice and Student Engagement Policy initiatives.
22	Course Documentation Project.	To modernise and automate course documentation and information at Cranfield University.	Ongoing. Phase 1 needs assessment and procurement process complete.
23	International Strategy update.	To ensure that Education Strategy and Research Strategy initiatives are reflected in the International Strategy, in particular on globalisation of the curriculum and international partnership strategy.	Ongoing - to be developed further throughout 2021-22.

## 6 2021-22 action plan

This plan sets out headline activities commencing in 2021-22 to support the academic aims of the University.

Action No.	Action	Purpose	To be taken forwards by	Timelines
1	Education Strategy refresh.	Sets out the University's educational goals and how they will be achieved.	PVC Education	To align with timetable for new Corporate Plan.
2	Digital learning strategy embedded within Education Strategy.	To embed digital learning within the Education Strategy and align with the IT Strategy with the aim of advancing Cranfield's blended and online-only provision and learner experience, supported by automated workflows.	PVC Education and Chair of IT Strategy Committee on Systems Development	To align with the timetable for the Education Strategy refresh.
3	Plan for efficient use and development of teaching estate.	In tandem with the New Working Arrangements Framework, plan for how our estate can best support education in the post-Covid world, including the planned review of the Beacon project.	Capital Planning Committee (PVC Education is member)	To align with the timetable for the New Working Arrangements Framework pilot (September 2021 - April 2022) and including the Beacon project review in November 2021.
4	MK:U course development.	To allow delivery of undergraduate apprenticeship courses.	PVC Education and CEO of MK:U	Stage 3 (Level 5 and 6) validations expected early 2022. Pilot course launch in 2021-22 academic year.
5	Development of Academic Charter.	To draw together Cranfield's existing policies for academic professionalisation (including academic professional development and recognition) into a coherent policy framework and embed in our academic staff development practice.	PVC Education, PVC Research and Innovation, HR	Establish Academic Charter in 2021-22 academic year.
6	Apprenticeships quality processes.	Integrate degree apprenticeship quality processes with existing quality assurance and enhancement processes for award-bearing courses and establish complementary processes for non-award-bearing apprenticeships.	PVC Education	During 2021-22 academic year.
7	Postgraduate degree classification and credit framework.	Undertake reviews with a view to the introduction of degree classification and rationalisation of credit frameworks.	PVC Education	Review recommendations considered by Senate in 2021-22 academic year.
8	Annual portfolio review.	Build on the Cranfield Learner Framework process established in 2021 to create an efficient and high value annual review of course offer and opportunities for and barriers to growth.	PVC Education	Establish new process in 2021-22 academic year.
9	Research Strategy refresh.	Sets out the University's research goals and how they will be achieved. It will focus on quality, research culture and scholarship and take account of lessons learned from REF 2021, outputs from PRES and extensive staff consultation.	PVC Research and Innovation	March 2022. The Research Strategy will be refreshed in line with the new Education Strategy in 2021-22.

Action No.	Action	Purpose	To be taken forwards by	Timelines
10	Review the 75th Anniversary Fellowship scheme and propose next steps.	The first cohort of three 75th Anniversary Fellows began their fellowships in October 2020; one further Fellow will join the cohort in October 2022. The researcher development programme to support them has begun. 2021-22 will be the final year of recruitment to the agreed pilot programme so it is timely to review and consider the continuation of the programme.	PVC Research and Innovation	2021-22 academic year.
11	Develop and implement a programme to support early career researchers in building their research CVs.	Target to increase the number of externally funded research fellows from prestigious sources such as RAEng and UKRI Future Leaders by providing focused development and targeted support from senior academics including pitch panels and feedback sessions.	PVC Research and Innovation and PVC Schools	2021-22 academic year.
12	Improve visibility of research culture in Cranfield.	Raising the profile of research culture will be taken forward as part of the Research Strategy refresh and addressing the issues raised through PRES and the Government's new People and Culture Strategy. RIO and Student Experience will be running consultation workshops for staff and students.	Research and Innovation Office and Student Experience	Ongoing - To be delivered in line with the Research and Education Strategy refresh.
13	Review research degree portfolio and develop new offerings based on user demand.	Aim to develop consolidated offerings, e.g. for industry-focused research degrees and international partners; review and refresh marketing for research degrees to ensure a clear and attractive research degree offering to attract UK, international and industry stakeholders.	PVC Research and Innovation through Research Academic Processes (RAPS) Working Group reporting to Research Committee	2021-22 academic year.
14	Review and refresh marketing plan to increase applications for research degrees.	Aim to increase uptake of research degree opportunities; to promote Cranfield as a place of positive equality, diversity and inclusion taking account of the post-pandemic environment, international strategy, new degree offerings.	Research and Innovation Office and International Partnerships and Student Recruitment	March 2022.
15	Review and refresh doctoral researcher development offering (DRCD).	Aim to co-develop with student body a new and vibrant Doctoral Researcher Core Development programme, in line with requirements of the Researcher Development Concordat, KE concordat and guidance from UKRI.	Research and Innovation Office and Student Experience	2021-22 academic year.
16	Develop and implement a programme to reward academic scholarship.	Aim to improve scholarship within the University. We will refresh the doctoral publishing award for doctoral students and expand to all academics.	PVC Research and Innovation and Student Experience (Library)	2021-22 academic year.
17	Develop and implement an action plan to address issues raised in 2021 Postgraduate Research Experience Survey.	Aim to address issues raised in recent PRES and feedback to students. Will take account of staff and student consultation of PRES outcomes.	PVC Research and Innovation through RAPS	2021-22 academic year.

Action No.	Action	Purpose	To be taken forwards by	Timelines
18	Extend ED&I principles to student body.	Aim to ensure ED&I principles are embedded in everything we do.	Research and Education Committees and HR	2021-22 academic year.
19	Formalise and consolidate strategic international research partnerships.	In line with development of new international strategy, aim to consolidate research offerings and processes associated with them to simplify access to an international audience.	PVC Research and Innovation, PVC International and Recruitment	2021-22 academic year.
20	Develop and implement a plan to provide more networking opportunities for research degree students.	Aim to involve students in student-led activities including Cranfield Doctoral Network, Doctoral Communities, Global Challenges, Communities of Practice and public engagement. To provide more networking and development opportunities and to raise the research culture provision.	PVC Research and Innovation, PVC Schools and Directors of Theme. Grand Challenges	2021-22 academic year.
21	International Strategy refresh.	To set out the University's approach to international partnerships.	PVC International and Recruitment	2021-22 academic year, to align with Education and Research Strategy refreshes.
22	Enhanced systems/ processes linked to Stakeholder engagement: More innovative and better informed comms, resolve OAO development backlog, better enquiry email management, further develop in-country partner and agent network.	Increase International Impact.	PVC International and Recruitment and Director of IPSR	2021-22 academic year.
23	Increased applicant engagement activities: develop application and post-offer guides, web content review, develop an admissions pack for ATs, engage and utilise broader stakeholders in student recruitment e.g. regs, academics, alumni.	Enhanced visibility for our global reputation.	PVC International and Recruitment and Director of IPSR	2021-22 academic year.
24	Further scope out the International Student Experience project to include key areas in the early experience of enquirer/applicant: Develop an enquirer and applicant experience review, further expand student ambassador activity and academic use of Unibuddy, publish an application guide.	A first-class international student experience.	PVC International and Recruitment and Director of IPSR	2021-22 academic year.