

St Mary's University, Twickenham compliance relating to assessment and awards

Summary

The Office for Students (OfS) requires all registered higher education providers' courses to meet a minimum set of requirements, expressed in our conditions of registration that relate to quality and standards. This includes:

- a requirement, in place since 1 May 2022, that academic regulations are designed to ensure that a provider's awards reflect students' knowledge and skills (that they are 'credible') (B4.2.c)
- a requirement that awards granted to students are credible at the point of being granted and when compared with those granted previously (B4.2.e).

This report assesses degree classification algorithms. These form part of a university's academic regulations or the rules and guidelines that govern the quality and integrity of its academic programmes.

Universities often use algorithms to apply rules that determine the final class of degree for a student. Historically, such rules might include:

- aggregating module marks for relevant years of study
- weighting the proportion of marks from each year or level of study that contribute to the final award
- determining the volume of credits that contribute to calculating the class of degree (discounting)
- using of more than one algorithm to calculate a students' final mark and then awarding the student the higher result
- additional rules specifically about students whose performance sits close to the classification borderlines (borderline rules).

Our concern is that the rules that providers include in their algorithms have the potential to inflate the proportion of first and upper second class awards without corresponding changes in student achievement.

This regulatory case report explains why the OfS found that St Mary's University, Twickenham was previously in breach of the condition of registration that concerns assessment and awards

(condition B4) for students who enrolled before September 2021.¹ The university also continues to be at increased risk of breaching the same condition for students who enrolled after September 2021.

The OfS assessed changes the university had made to its academic regulations, the impact these had on the classifications it awarded and the reasons for the changes. A university's academic regulations are the rules that govern its higher education courses, including the award of degrees and other qualifications. An algorithm is the part of a university's academic regulations that sets out the rules that determine the class of degree to be awarded to a student. We found that the university had made changes to its undergraduate academic regulations in 2016-17 to replace its existing degree classification algorithm with two algorithms – one new and one similar but not identical to its 2015-16 algorithm.

The second algorithm discounted the lowest 20 credits at both Levels 5 and 6, resulting in a higher classification calculation than would otherwise be the case. It also introduced a borderline rule to uplift students whose performance was within two percentage points of a grade boundary. Our view is that these changes were inflationary, by which we mean that the changes to academic regulations would have increased the proportion of first and upper second class awards without a corresponding change in student achievement to justify it.

In 2021 the university undertook a review and further amended its academic regulations for all students enrolling from September 2021. The university decided to retain the 2016-17 academic regulations for all students who enrolled before September 2021, with a cut-off date of June 2027, meaning that the 2016-17 regulations were still in place for some students. However, the university has since informed us that it discontinued the use of these algorithms as of September 2025. We found the university to be in breach of condition B4 in relation to the use of these regulations beyond the point at which condition B4 was introduced in May 2022. However, the university had identified the inflationary impact of its algorithms in the changes it made in 2021-22, and taken action to address it for all students enrolling from September 2021.

For this reason, and given that condition B4 only came into effect shortly after this point, we are not taking any further regulatory action in relation to the breach.

The university amended its regulations in 2021, which decreased the number of first and upper second class awards. The university's submission explained how it had assured itself that classifications reflected the knowledge and skills of students. This involved data modelling to identify patterns in 'good honours' (first and upper second class awards) and to determine the likely impact of any proposed changes to student degree outcomes, and input from an external consultant. The university's submission stated that 'comparative analysis of St Mary's Academic Regulations and those of its competitor institutions indicated that there was a marked disparity in the way that undergraduate degrees classifications were determined,' and went on to explain that the rationale for these changes was to bring regulations in line with sector guidance. The university's regulations for 2025-26 still include discounting the 20 credits with the worst marks at Level 5.

Our conclusion was that there are further actions we would expect the university to take to ensure that there is an appropriate connection between the actual attainment of students as evidenced by assessed student work in aggregate, and the class of degrees awarded. Our finding is therefore

¹ OfS, Condition B4: Assessment and awards.

that there is an increased risk of a future breach of condition B4 in relation to awards given to students who enrolled after 2021.

Every institution with degree awarding powers needs to ensure changes to its academic regulations do not result in a higher classification of degree being awarded based on the same student achievement, unless those changes are required to properly reflect this. Unless awards made appropriately reflect student attainment, such changes may result in a breach of condition B4.

Following engagement with the university, it has agreed to further actions, explained below, to resolve this increased risk.

Although it did not affect our final judgement or our decision on any penalty in this case, we recognise that the way the university currently secures its academic standards is likely to reflect wider practice in the sector. We are also publishing a report on bachelors' degree classification algorithms that sets out our views on how higher education providers can ensure that the classes of bachelors' degrees they award appropriately reflect students' achievement.²

Institutions need to pay particular attention if they are using rules that are likely to be inherently inflationary – such as discounting credits with the lowest marks, or selecting the best result from multiple algorithms as the class of degree to be awarded.

Background

We opened an investigation on 1 September 2022 on the basis of data relating to St Mary's University, Twickenham's awards of first and upper second class bachelors' degrees.³ When we opened the investigation the data showed an 11.4 percentage point increase in first and upper second class degrees awarded between 2015-16 and 2016-17 by the university. This was followed by a further 4.1 percentage point increase between 2016-17 and 2017-18, which did not substantially reduce in the period to 2018-19.

While noting that the data showed a small decrease from 2017-18 to 2018-19, we considered that evidence of a sustained increase in first and upper second class degrees combined indicated that changes might have been made to academic regulations. Other providers may have had higher levels of unexplained increases overall in the period 2014-15 to 2018-19. However, those providers did not have such a significant increase in their observed attainment in one year that was then sustained, or had much smaller student populations, or were already subject to other regulatory investigation by the OfS. We therefore decided to explore this through an investigation. As part of our investigation we requested that the university submit documents relating to changes to, or discussions of, any aspects of relevant academic regulations that were in effect in any academic year from 2014-15. We wanted this information to understand whether:

- a. The university had made changes to its academic regulations during this period.

² OfS, 'Bachelors' degree classification algorithms'.

³ OfS, 'Analysis of degree classifications over time: Changes in graduate attainment from 2010-11 to 2020-21'. Data was extracted from column 'T' to 'U' (observed percentage awarded first and upper second class degrees combined) of 'Annex A: Data – Table 1'.

- b. If so, whether these changes might have increased the proportion of first and upper second class degrees awarded by the university.
- c. The university could demonstrate that any increase in awards was a result of improvement in students' achievement.

We considered a range of evidence but did not place weight on data relating to 2019-20 to 2020-21, because of the potential impact of the Covid pandemic on degree classifications.

Summary of the university's submission

The university's submission showed that it had changed its academic regulations in 2016-17 and 2020-21. The changes made in 2016-17 were introduced mid-year with immediate effect for all students, whereas the changes approved in 2020-21 were introduced on a rolling basis for use from September 2021 onwards.

Changes made in 2016-17

In 2015-16 the university used a single algorithm to calculate degree classifications. In 2016-17 it replaced this with two different classification algorithms. The university applied both algorithms and used whichever algorithm produced the higher classification to generate the degree classification for each student.

Alongside these changes, the university also introduced a rule to allow the discounting of marks for 20 credits at both Levels 5 and 6. Previously this had only been allowed for Level 5 marks. This amendment meant that the average mark for each level was generated from a student's 'best 200 credits including compensation credits at [Framework for Higher Education Qualifications] Level 5 & 6'.

The university also made changes to its rules for dealing with performance close to the borderline between one classification and the next, including replacing a borderline rule based on the discretion of examiners to decide whether performance was close enough to the borderline to award the higher classification, with a borderline rule that used a numerical formula. The latter meant that students received a higher classification if their overall mark was no more than two per cent below the classification's lower boundary. The rule only applied if one of the following criteria was met:

- a. At least 60 Level 6 credits were from modules with marks in or above that classification.
- b. At least 120 credits from Levels 5 and 6 were in or above the higher classification.

The university told us that these changes were made following an externally commissioned review of its academic regulations in 2016-17. The review compared the proportions of 'good degrees' (first and upper second class degrees) being awarded by the university with the number and classification of awards being granted by other providers in the sector. The university argued that it had not been fairly reflecting its own students' performance based on the review of comparator regulations and data.

Alongside this review, the university set objectives in its academic strategy relating to students' attainment of 'good degrees'. This sought to increase the proportion of first and upper second class degrees awarded by the university. The target set out to increase its awards of first and upper

second class degrees combined, by 'at least 2 [per cent] in the first awarding year, to 62 [per cent]'. It also set a target to increase the number of these awards by 13 per cent (to reach 73 per cent) by eight years later in 2025. The university anticipated that the changes to its academic regulations would achieve this. The data available in 2019 demonstrated that in the first awarding year, 2017, the number of first and upper second class awards increased from 61.4 per cent in 2015-16 to 72.8 per cent in 2016-17.⁴

Changes made in 2021-22

In 2021 the university reviewed its degree classification algorithms in response to work across the sector on the appropriate design of classification algorithms.⁵ Following this review, the university made further changes to its classification algorithm in the academic regulations for 2021-22, moving back to one classification algorithm, which would be applied for new students starting from September 2021. The university removed one of the classification algorithms and changed the numerical rule for dealing with students' performance close to a classification borderline – with a reduction from 2 per cent to 1 per cent.

The university also amended the weightings for Levels 5 and 6 from a 30-70 split to a 33-67 split for bachelors' awards. Further, the university reviewed the discounting of credits in the final classification: where previously degree classification was determined by removing the marks associated with the worst 20 credits at both Levels 5 and 6, the university removed discounting at Level 6. This allowed the discounting of 20 credits in the first counting year only, with no discounting of core modules. The university introduced these new regulations for new students from September 2021 and retained the 2016-17 regulations for continuing students.

OfS analysis

OfS modelling

The OfS conducted a modelling exercise to understand the impact of the changes the university had made to its degree classification algorithms. We modelled the impact of the academic regulations used by the university in 2015-16, 2016-17 and 2021-22 by applying each set of regulations to the marks achieved by a subset of the university's 2021-22 student cohort (557 students). Our modelling had the effect of removing the impact of other variables that might have improved the classifications of awards, such as changes to teaching practices or increased student support.

Our modelling of the 2015-16 algorithms resulted in 74.5 per cent of students in the modelled population receiving a first or upper second class degree (see Figure 1). The use of the 2016-17 algorithms resulted in 79.5 per cent of students in the modelled student population receiving a first or upper second class degree, 4.7 percentage points higher. Similarly, the modelling showed that the number of first-class degrees that would have been awarded using the 2016-17 algorithms was 7.8 percentage points greater (35.8 per cent compared with 28 per cent) for the modelled student population than when the 2015-16 algorithms were applied to the same population. The modelling therefore showed that the changes the university made to its algorithms between 2015-16 and

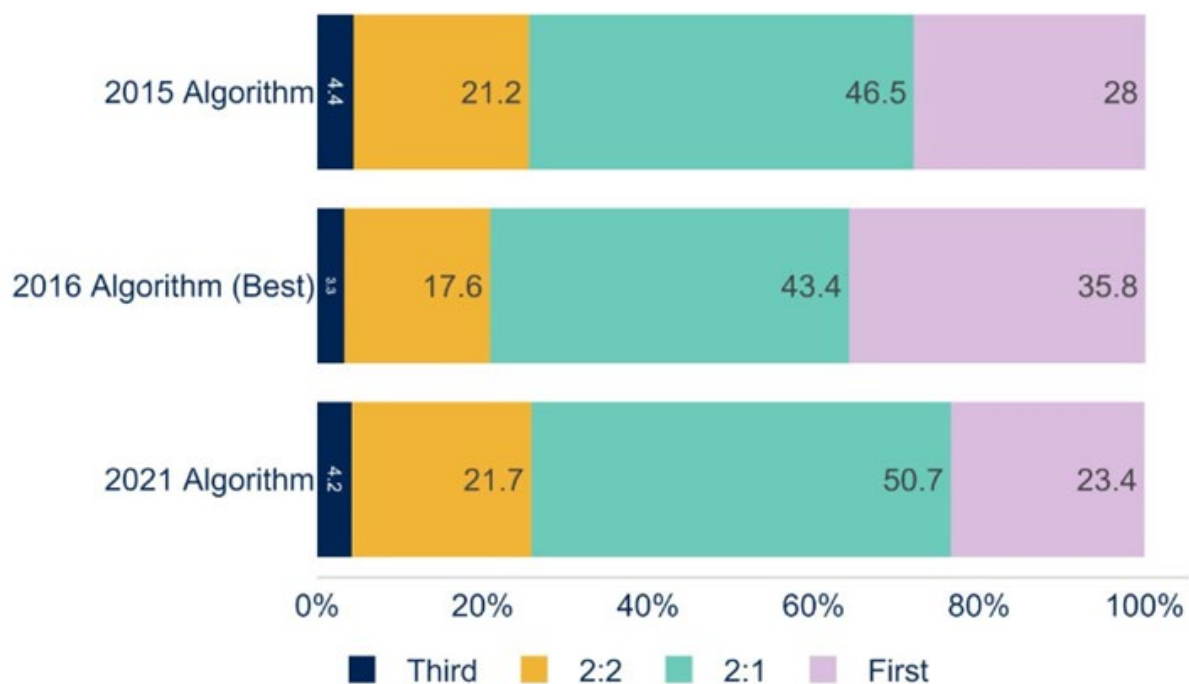
⁴ OfS, '[Analysis of degree classifications over time: Changes in graduate attainment from 2010-11 to 2020-21](#)'. Data was extracted from column 'T' to 'U' (observed percentage awarded first and upper second class degrees combined) of Annex A: Data –Table 1.

⁵ Universities UK, '[Principles for effective degree algorithm design](#)'.

2016-17 produced an increase in higher classifications when the same sets of student marks were put through each set of algorithms.

According to the same model, the changes made in the 2021-22 academic regulations resulted in a decrease in the proportion of first and upper second class degrees in the modelled student population when compared with the 2016-17 academic regulations. This fell from 79.2 per cent to 74.1 per cent (a decrease of 5.1 percentage points). The proportion of first-class degrees awarded to the modelled student population decreased from 35.8 per cent to 23.4 per cent (a decrease of 12.4 percentage points).

Figure 1: Percentage of classified awards in each classification under each set of regulations

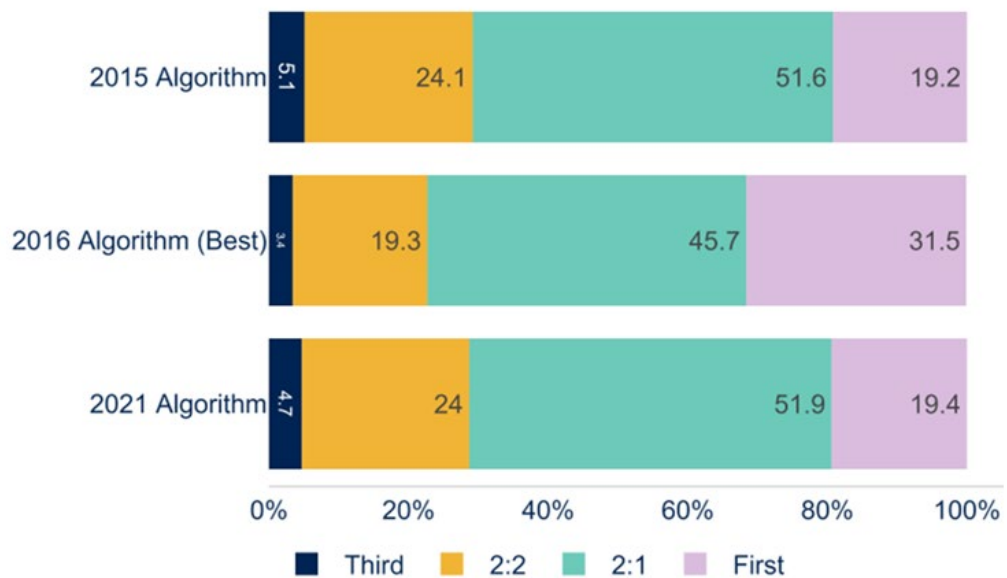


Borderline rules

We also modelled the impact of the university's algorithms for 2015-16 and 2016-17 without using its borderline rules (see Figure 2). We did this to assess the impact of the main changes the university made to its algorithms between 2015-16 and 2016-17, having factored out the discretionary borderlines used in 2015-16 and the more formal rules for borderlines adopted from 2016-17. This analysis showed that the 2016-17 algorithms would have produced 6.4 percentage points more first and upper second class degrees in the modelled student population than the 2015-16 algorithms.

The modelling also showed that the number of first-class degrees that would have been awarded using the 2016-17 algorithms was greater than the 2015-16 algorithms in the modelled population by 12.3 percentage points. The difference in the proportion of first and upper second class degrees and first-class degrees, with the borderline rules removed, demonstrates an inflationary impact of the changes made to the regulations in 2016-17, confirming the findings of our modelling with the borderline rules included.

Figure 2: Percentage of awards according to each set of regulations (before borderline rules have been applied)

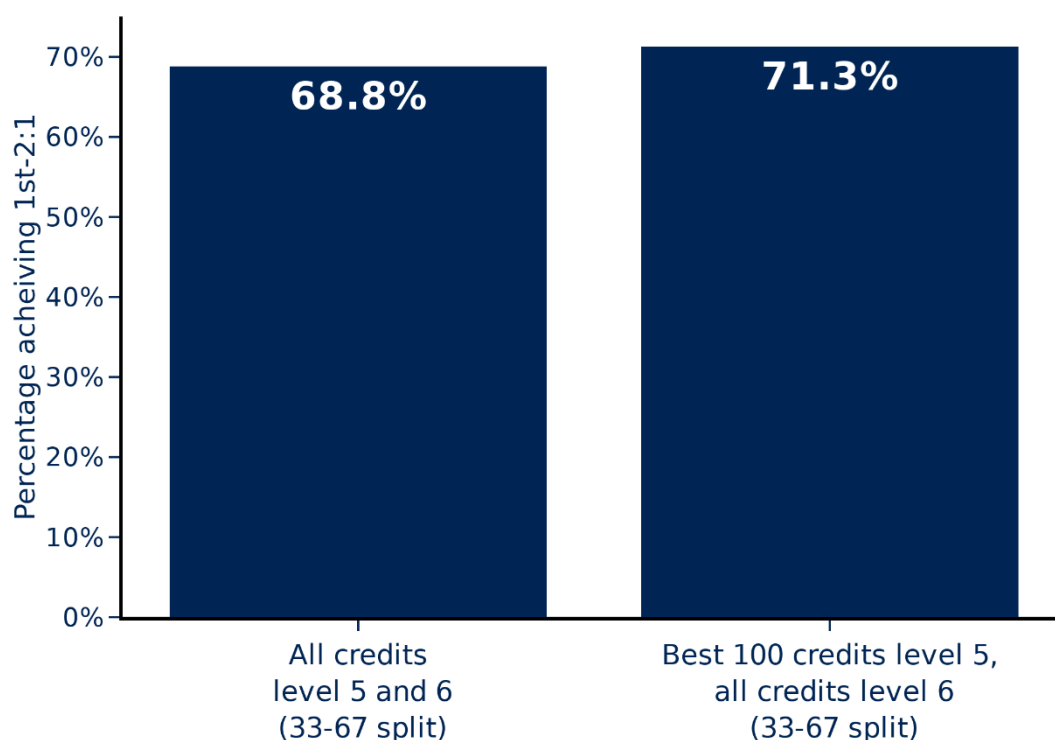


Discounting

Discounting within a degree classification algorithm refers to a calculation method that uses only a specified number of credits, with a number being discounted (the marks associated with these credits being removed from the calculation) according to a rule. Typically, each level of undergraduate study will involve a student completing 120 credits; a discounting method would see, for example, the marks from the best 100 credits being used in the degree classification calculation and the 20 credits with the weakest marks being discounted

We modelled the discounting approach of the 2021-22 regulations, where the marks associated with the worst 20 credits at Level 5 are discounted from the final classification. We excluded the borderline rules to understand the impact of the discounting alone. This demonstrated that the number of first or upper second class degrees that would have been awarded using discounting at Level 5 was 2.5 percentage points greater when compared with no discounting (see Figure 3).

Figure 3: Percentage of first and upper second class degrees by levels of discounting



Note: Before borderline adjustment – unclassified students excluded.

The university's analysis

The university's submission showed that in 2016-17, it introduced changes to its algorithm rules with the intended result of increasing the proportion of first and upper second class degrees that it awarded. The university told us that these changes resulted in a substantial increase in the classifications of awards solely due to the classification algorithms it employed.

In 2019, the university evaluated the impact of changes made in 2016-17 and determined that this substantial increase in the classifications of awards was not due to an increase in students' attainment. However, it continued to use these academic regulations until September 2021. At that point it made changes to its academic regulations for students who enrolled after this date. The university continued to use the algorithms from the 2016-17 regulations in a 'teach out' approach for students who enrolled before September 2021.

The university anticipated using these regulations until June 2027. However, the university has since informed us that it discontinued the use of these algorithms as of September 2025.

Summary

Our modelling has shown that the changes the university made in 2016-17, to introduce a second classification algorithm, introduce discounting at Level 6 and to amend the borderline rules, would have substantially increased the number of higher classes awarded. The university made changes to its regulations in 2021-22, which our modelling shows would have resulted in a decrease in the

proportion of first and upper second class degrees awarded, when compared with the 2016-17 academic regulations. The university provided an explanation of its reason for these changes and how it assured itself that the design of its regulations would ensure that its awards would reflect its own students' knowledge and skills. However, the university's approach to making changes focused on the comparability of its profile of classifications with other providers and alignment with sector guidance, rather than whether its classifications would reflect the attainment of its students.

Although it did not affect our assessment of the university's case or its merits, we recognise that the practice described by the university may be more widespread across the sector, as we have set out in our overview report. This university has agreed to take further action to ensure that its classifications reflect student attainment. The OfS asks providers to ensure that, when making changes to academic regulations, they carefully consider how the resulting classifications will reflect students' knowledge and skills. Our overview report sets out our views on how providers can ensure this.

In terms of algorithm design, our modelling also shows the inflationary impact of using discounting rules to determine a student's attainment, which continue to be used in the university's academic regulations for 2025-26. The university has agreed to conduct a calibration exercise and use this to consider whether it needs to make any further amendments to its academic regulations.

Relevant OfS conditions of registration

Our assessment sought to understand the design of the university's academic regulations and whether they produced awards that were credible at the time they were granted and compared with those granted previously. These issues fall within the scope of ongoing condition B4 (assessment and awards).

Condition B4.2 states that:

'Without prejudice to the principles and requirements provided for by any other condition of registration and the scope of B4.1, the provider must ensure that:

[...]

c. academic regulations are designed to ensure that relevant awards are credible.

[...]

e. relevant awards granted to students are credible at the point of being granted and when compared to those granted previously.'

The definition of 'credible' as it relates to condition B4 is:

"'credible" means that, in the reasonable opinion of the OfS, relevant awards reflect students' knowledge and skills [...]"

In determining whether awards are credible, the OfS has set out in condition B4.4.e.iii that it may consider any actions the provider has taken that would result in an increased number of relevant awards or changes in the classifications attached to them. This includes whether or not the

achievement of students has increased – for example, changes to assessment practices or academic regulations.

Conclusions on compliance

The OfS's modelling shows that the changes the university made in its 2016-17 regulations had a significant inflationary impact. While the university amended regulations for new students from 2021-22, these regulations remained in use for students that enrolled before September 2021. The OfS has therefore found that **the university breached condition B4** for the use of these regulations **after May 2022**, when the current version of condition B4 came into effect. We recognise and welcome the actions that the university took to address the inflationary impact of its algorithms in the changes it made in 2021-22, which was before the current condition B4 came into effect and before the OfS engaged with the university about this matter. Those changes now apply to all students. The OfS is therefore **not taking any further action** in relation to this matter.

The university introduced a revised degree classification algorithm for those students enrolled from September 2021 onwards. The university has provided evidence to show that it had considered the impact at the time it made the changes to these regulations, and that it had assurance processes in place to ensure comparability with other providers. We accept that this is standard practice in the sector. However, we think further work is needed to ensure an appropriate connection between the actual attainment of students as evidenced by assessed student work in aggregate, and the class of degrees awarded. This is important to establish that awards reflect students' knowledge and skills. Although the university's changes decreased the number of first and upper second class awards, the university has continued to discount the lowest credits at Level 5. Given that this aspect of algorithm design is likely to be inflationary, we are concerned that this practice needs to be tested to ensure that awards appropriately reflect students' knowledge and skills.

In conclusion, therefore, the OfS found that **the university is at increased risk of breaching condition B4** in relation to the academic regulations in place for **students who enrolled after September 2021**. We engaged with the university on these issues and it has agreed to take the actions set out below to resolve the increased risk. These address elements of concern in its regulations and provide assurance that awards made under those regulations reflect the knowledge and skills of students. For this reason, the OfS is **not taking any further action** in relation to this matter.

In considering our regulatory response, we have had regard to matters including the relevant intervention factors in our regulatory framework and the OfS's general duties.⁶

In light of these concerns the university has agreed to:

- a. Conduct a calibration exercise (see below) for its bachelors' degree classification algorithm or any algorithm it intends to introduce from September 2026. As part of this review, it will consider whether it will continue to discount credits with the lowest marks in its algorithm, in the light of our concerns about the inherently inflationary nature of such rules.
- b. Report back to the OfS on these matters.

⁶ See OfS, Overview of monitoring of risk for registered providers; Part I of the regulatory framework: The OfS's risk-based approach.

The OfS will review its assessment of the university's compliance with conditions of registration when the university has completed these actions.⁷

'Calibration exercise' means a rigorous exercise using objective academic judgement to assess whether the class of degree awarded appropriately reflects the level of knowledge and skills attained by students in their assessed work, across the full range of profiles of attainment that translate to that class of award. This should be done with reference to our sector-recognised standards and relevant course documentation.

This will be done by:

- a. Considering the aggregate achievement of individual students, where those students are representative of the full range of profiles of attainment.
- b. Confirming whether that student achievement justifies the classes of degrees awarded to those students.
- c. Referencing the OfS's sector-recognised standards and the university's own statements of the knowledge and skills a student should have demonstrated at the end of the course, such as course outcomes.⁸

Further details of our views on bachelors' degree classification algorithms and compliance with our conditions, including on the use of calibration exercises, can be found in our overview report.⁹

⁷ See OfS, [Overview of monitoring of risk for registered providers](#).

⁸ See OfS, [Sector-recognised standards](#).

⁹ See OfS, ['Bachelors' degree classification algorithms](#)'.