

2019-20 HESA Student data checking tool

HESES19 comparison technical document

Contents

Summary	3
Changes from HESES18A comparison post-collection output	3 3
HESES19 comparison workbook	15
HESES19 comparison individualised file	17
Description of derived fields	20
Linking between years	23
Tables 1-3 recreation algorithms	23
Calculation of FTE	29
Calculation of price groups	32
Calculation of exclusion flags	36
Table 4 recreation algorithms	39
Table 5 recreation algorithms	40
Tables 6a-6c recreation algorithms	42
Overrides	43
Recreating Columns 3, 4 and 4a	43

Summary

- This document describes the Higher Education Students Early Statistics survey 2019-20
 (HESES19) comparison files generated by the 2019-20 Higher Education Statistics Agency
 (HESA) Student data checking tool, and the algorithms used to generate the data needed to
 recreate HESES19 from 2019-20 HESA Student data. Throughout the document, fields taken
 or derived from the HESA Student record are shown in capitals.
- 2. The HESES19 comparison outputs can be used by higher education providers to verify and correct their 2019-20 individualised student data before signing off the final data with HESA.
- 3. The HESES19 comparison is formed of two files. These are:
 - a. HESES19 comparison workbook 'HES19_DCT_XXXXXXXX.xlsx', where XXXXXXXX denotes the UK Provider Reference Number (UKPRN).
 - b. HESES19 comparison individualised file 'HES19_DCT_XXXXXXXX_IND.csv'.

Details of how to use individualised files are given on the Office for Students (OfS) website at: www.officeforstudents.org.uk/data-and-analysis/supplying-data/working-with-individualised-files/.

- 4. These files can be accessed via the Information Reporting Interface Service (IRIS) report which is available on HESA's data collection site at https://datacollection.hesa.ac.uk/. Access details will be sent to the appropriate contacts at providers when the data checking tool is available.
- 5. This document is aimed at readers with in-depth knowledge of the data. Readers are advised to refer to the HESA Student Record Coding Manual 2019-20 (https://www.hesa.ac.uk/collection/c19051), 'HESES19 Higher Education Students Early Statistics survey 2019-20' (https://www.hesa.ac.uk/collection/c19051), and the latest individualised files for the HESES18 comparison and the HESES17 comparison to hand when using this document.
- 6. We will document any changes or corrections to the algorithms in this document on the Office for Students (OfS) website: www.officeforstudents.org.uk/data-and-analysis/data-checking-tools/2019-20-hesa-student-data-checking-tool/under 'Updates'.

Changes from HESES18A comparison post-collection output

7. This section describes any changes to the outputs and algorithms since the equivalent was published for the 2018-19 HESA Student post-collection outputs, available here: www.officeforstudents.org.uk/data-and-analysis/post-collection-outputs/hesa-student-post-collection-outputs/ under 'Documentation'. Any deletions are shown with a strikethrough. Any other changes are shown as bold and underlined.

Changes due to the coronavirus (COVID-19) pandemic

8. As stated in the exceptional guidance published by HESA in response to the pandemic (https://www.hesa.ac.uk/definitions/student-collection/c19051-student-record-exceptional-guidance), we have decided not to use the FUNDCOMP field from the 2019-20 HESA Student

- record, other than to identify records which are excluded from the HESES population (FUNDCOMP = 9).
- 9. As we cannot use FUNDCOMP to assign years of instance to Column 3 or Column 4 of Tables 1, 2 and 3 of the HESES19 recreation, we have developed an alternative method of assigning years of instance to Columns 3 and 4. This method creates the following new fields: HESNCOMPLEVEL Y, HESNCOMPRATE Y, HESNCOMPLEVEL Z, HESNCOMPRATE Z, HESNCOL3 PROFX, HESCOL3 Y, HESCOL3, HESCOL4 PROFX, HESCOL4 Y, HESCOL4, HESCOL4. The algorithms for these fields are shown in the 'Recreating Columns 3, 4 and 4a' sub-section of the 'Description of derived fields' section of this document.

Recreating Columns 3 and 4 using HESES19 non-completion rates

- 10. For the HESES19 comparison, we are using non-completion rates calculated from HESES19 data to determine the likelihood that a student did not complete a particular year of instance. This likelihood is used to determine the proportion of the year of instance that is counted in Column 3, and the proportion that is counted in Column 4. These proportions are recorded in the HESCOL3 and HESCOL4 fields, which, for the HESES19 comparison, replace the HESCOMP field. For example, if the non-completion rate applicable to a particular year of instance is 15 per cent, then (HESCOL3 = 0.15) and (HESCOL4 = 0.85) for that year of instance.
- 11. Headcounts from Columns 1, 2 and 3 of Tables 1, 2 and 3 of HESES19 have been used to calculate non-completion rates at five different levels. These are used to calculate HESCOL3 and HESCOL4 for years of instance recorded in Tables 1, 2 and 3 but not in Tables 6a, 6b and 6c. Headcounts from Columns 1, 2 and 3 of Tables 6a, 6b and 6c were deducted from the headcounts from Tables 1, 2 and 3 before the rates were calculated, because non-completion rates for years of instance recorded in Tables 6a, 6b and 6c were calculated separately using a different method (see paragraph 13). At the lowest level, rates have been calculated for all combinations of the following parameters: provider; mode of study; level of study; residential and fundability status; price group; length of year of instance. At the highest level, rates have been calculated using the total headcounts from Columns 1, 2 and 3 of Tables 1, 2 and 3 of HESES19 (minus those also recorded in Tables 6a, 6b and 6c) for each provider. The combination of parameters used for each level are shown below:
 - a. Level 1: (provider) x (mode of study) x (level of study) x (residential and fundability status) x (price group) x (length of year of instance).
 - b. Level 2: (provider) x (mode of study) x (level of study) x (residential and fundability status) x (price group).
 - c. Level 3: (provider) x (mode of study) x (level of study).
 - d. Level 4: (provider) x (mode of study).
 - e. Level 5: (provider).
- 12. As well as calculating the non-completion rate, the (Column 1 + Column 2) headcount has also been calculated for each combination at each level. These headcounts are used to determine the reliability of the calculated rate. A rate is deemed reliable if there are at least 10 years of

- instance in the group for which the rate was calculated, except at Level 5 where all rates are deemed reliable irrespective of the number of years of instance in the group.
- 13. Headcounts from Columns 1, 2 and 3 of Tables 6a, 6b and 6c of HESES19 have been used to calculate non-completion rates at five different levels. These are used to calculate HESCOL3 and HESCOL4 for years of instance recorded in Tables 6a, 6b and 6c. At the lowest level, rates have been calculated for all combinations of the following parameters: provider; mode of study; profession; residential and fundability status; level of study. At the highest level, rates have been calculated using the total headcounts from Columns 1, 2 and 3 of Tables 6a, 6b and 6c of HESES19 for each provider. The combination of parameters used for each level are shown below:
 - a. Level 1: (provider) x (mode of study) x (profession) x (residential and fundability status) x (level of study).
 - b. Level 2: (provider) x (mode of study) x (profession) x (residential and fundability status).
 - c. Level 3: (provider) x (mode of study) x (profession).
 - d. Level 4: (provider) x (mode of study).
 - e. Level 5: (provider).
- 14. As well as calculating the non-completion rate, the (Column 1 + Column 2) headcount has also been calculated for each combination at each level. These headcounts are used to determine the reliability of the calculated rate. A rate is deemed reliable if there are at least 10 years of instance in the group for which the rate was calculated, except at Level 5 where all rates are deemed reliable irrespective of the number of years of instance in the group. Where there are no years of instance in the group at Level 5, the rate is set to zero.
- 15. In the first step of the process of finding a suitable non-completion rate for a year of instance, we look for the corresponding rate at Level 1, using the combination of parameters shown in either paragraph 10 or paragraph 12, depending on whether the year of instance is only recorded in Tables 1 to 3, or whether it is also recorded in Tables 6a-c. If a rate at this level is not found (i.e. the year of instance does not correspond with a year of instance recorded by the provider at this level in HESES19), or the corresponding rate is deemed unreliable because there are not enough years of instance in the group for which the rate was calculated, then we look for the corresponding rate at Level 2. If a rate at this level is not found, or the corresponding rate is deemed unreliable, then we look for the corresponding rate at Level 3. This process of moving to higher levels continues until a suitable rate is found. Note that if the level of study for a year of instance is not determined, then no rate will be found.
- 16. Because a year of instance can be in more than one price group or profession, and the non-completion rates at some levels are dependent on price group or profession, it may be necessary to apply more than one non-completion rate to a year of instance. For this reason, the process of finding a suitable non-completion rate is carried out for each price group or profession that has activity in it. It is therefore possible for the values of HESCOL3 and HESCOL4 for a particular year of instance in Table 1, 2 or 3 (but not in Tables 6a-c) to be calculated using five different non-completion rates if there is activity in each of the five price groups. Similarly, it is possible for the values in HESCOL3 and HESCOL4 for a year of

instance in Table 6a, 6b or 6c to be calculated using two different non-completion rates if there is activity in two professions.

17. The contribution to the proportions recorded in HESCOL3 and HESCOL4 from each price group or profession is determined by the proportion of activity in each price group or profession. For example, if 60 per cent of the activity for a year of instance is in price group B and 40 per cent is in price group C1, and the non-completion rates are 15 per cent for the price group B activity and 20 per cent for the price group C1 activity, then the value of HESCOL3 would be calculated as follows: (0.60 x 0.15) + (0.40 x 0.20) = 0.17. Or if 50 per cent of the activity for a year of instance is in 'Nursing – adult' and 50 per cent is in 'Nursing – children', and the non-completion rates are 11 per cent for 'Nursing – adult' and 9 per cent for 'Nursing – children', then the value of HESCOL3 would be calculated as follows: (0.50 x 0.11) + (0.50 x 0.09) = 0.10.

Using HESCOL4 to estimate full-time equivalence (FTE)

- 18. By applying the method described above, every year of instance in the HESES19 population contributes to both Column 3 and Column 4 of Table 1, 2 or 3 of the HESES19 recreation. Consequently, every part-time year of instance also contributes to the FTE in Column 4a. For the 2018-19 post-collection output, FTEY (where Y is the price group) was calculated for each instance by multiplying the value of HESESFTE by the proportion of activity in each price group. We cannot apply this method for the 2019-20 data checking tool, because without using FUNDCOMP it would not be possible to exclude the FTE of non-completed years of instance. Instead, we must exclude non-completed years of instance before we calculate the FTE in each price group. For this reason, the algorithm that calculates FTEY has been modified so that only the proportion of a year of instance that is counted in Column 4 is used to calculate FTE. In addition, a new HESCOL4A field has been created to record the sum of the FTE (FTEY) from all price groups. This is necessary to rebuild Column 4a, because without using FUNDCOMP it is not possible to exclude FTE associated with non-completed years of instance when summing HESESFTE.
- 19. The FTEA, FTEB, FTEC1, FTEC2 and FTED fields are now calculated by multiplying HESESFTE by the contribution of the activity in the price group to Column 4 of Tables 1-3 of the HESES19 recreation, instead of simply by the proportion of activity in each price group.

Field	Value
name	
FTEA	PRGA_HESCOL4_A × HESESFTE
FTEB	PRGB HESCOL4_B × HESESFTE
FTEC1	PRGC1.HESCOL4_C1 × HESESFTE
FTEC2	PRGC2 HESCOL4_C2 × HESESFTE
FTED	PRGD HESCOL4_D × HESESFTE

20. HESCOL4A is calculated by multiplying HESESFTE by the contribution of the year of instance to Column 4 of Tables 1-3 of the HESES19 recreation (HESCOL4), and then dividing by 100.

EXCL512

21. The EXCL512 field has been updated to replace FUNDCOMP with RSNEND. This algorithm would normally use FUNDCOMP to identify students who did not complete their year of instance but due to the coronavirus pandemic, for the 2019-20 data checking tool RSNEND is being used as a proxy for FUNDCOMP.

Value	Description	Definition
1	Student who withdrew before 2 December 2019 or left within 14 days of starting the instance without completing	REDUCEDI = 08 or (ENDDATE ≠ BLANK and (ENDDATE < 2 December 2019 and FUNDCOMP = 2 RSNEND ≠ 01, 98) or (ENDDATE ≠ BLANK and ENDDATE – COMDATE < 14 and FUNDCOMP = 2 RSNEND ≠ 01, 98)
0	Otherwise	Otherwise

Other changes

22. TYPEYR18 has been added to the STUBID field algorithm. A student will only meet the criteria 'the student undertakes activity both before and after the anniversary of their commencement date and has not undertaken activity in the first year of instance in the previous academic year' if they are on a non-standard year. TYPEYR18 values 2 and 4 identify non-standard years of instance where it is possible to meet the above criteria.

Value	Description	Definition
1	First countable year of instance	FDBRIDGE = 1 or (LOADYRA ≠ 0, BLANK and LOADYRB ≠ 0, BLANK and ((LOADYRB18 = 0 and INSTAPP18 = 1 and TYPEYR18 = 2, 4) or ((STULOAD18= 0 or HESLINK18 = 0) and COMDATE < 1 August 2018)))
2	Second countable year of instance	FDBRIDGE = 1 or (LOADYRA ≠ 0, BLANK and LOADYRB ≠ 0, BLANK and ((LOADYRB18 = 0 and INSTAPP18 = 1 and TYPEYR18 = 2, 4) or ((STULOAD18 = 0 or HESLINK18 = 0) and COMDATE < 1 August 2018)))
0	One countable year of instance	Otherwise

23. The HESHEALTHYEAR field has an additional value of '2019-20' to account for the cohort of students who started in the 2019-20 academic year.

Value	Description	Definition
2019-20		COMDATE > 31 July 2019 and COMDATE < 1 August 2020

Value	Description	Definition
2018-19	Student started in 2018- 19 academic year	COMDATE > 31 July 2018 and COMDATE < 1 August 2019
2017-18	Student started in 2017- 18 academic year	COMDATE > 31 July 2017 and COMDATE < 1 August 2018
2016-17	Student started in 2016- 17 academic year	COMDATE > 31 July 2016 and COMDATE < 1 August 2017
OTHER	Otherwise	Otherwise

24. The HESLEVEL field has been updated to account for a third occurrence of INITIATIVES.

Value	Description	Definition
UG	Undergraduate	FUNDLEV = 10, 11
PGT_UGF	Postgraduate taught and eligible under the undergraduate student support regime	FUNDLEV = 20, 21 and (SPECFEE ≠ 9, BLANK or ((REGBODY1 = 44, 06, 61, 62, 63, 64, 65, 46, 47, 48, 52, 50, 42, 56, 57, 55 or REGBODY2 = 44, 06, 61, 62, 63, 64, 65, 46, 47, 48, 52, 50, 42, 56, 57, 55) and COURSEAIM = M16, M26, M86, H62))
PGT_ML	Postgraduate taught course eligible for masters' loans	FUNDLEV = 20, 21 and (INITIATIVES1 = U or INITIATIVES2 = U or INITIATIVES3 = U) and (COURSEAIM = M00, M01, M10, M11, M88 or (COURSEAIM = M16 and REGBODY1 ≠ 44, 06, 61, 62, 63, 64, 65, 46, 47, 48, 52, 50, 42, 56, 57, 55 and REGBODY2 ≠ 44, 06, 61, 62, 63, 64, 65, 46, 47, 48, 52, 50, 42, 56, 57, 55))
PGT_OTH	Postgraduate taught course that does not fall under the previous two categories	FUNDLEV = 20, 21 and SPECFEE = 9, BLANK and not above
PGR	Postgraduate research	FUNDLEV = 30, 31

25. The HESAVRGFTEPOP field had been updated to remove MODE ≠ 98 as this is no longer a valid entry. HESCOMP is not being used for 2019-20 (as mentioned in the changes due to the coronavirus pandemic section) so has been removed from this algorithm for 2019-20.

Value	Description	Definition
1	In the 2018-19 average FTE population	TYPEYR ≠ 1 and COMDATE < 1 August 2019 and ENDDATE = BLANK and HESCOMP ≠ 3 and STULOAD ≠ 0 and FUNDLEV ≠ 99 and FUNDCOMP ≠ 9 and MODE ≠ 43, 44, 51, 63, 64, 73, 74, 98 and HESMODE = PT
0	Otherwise	Otherwise

26. The HESMDV field has been updated as follows:

- a. For HESES19, providers mapped activity to price groups on the basis of the Higher Education Classification of Subjects (HECoS) codes for their courses, instead of the Joint Academic Coding System (JACS) codes that were used to map activity to price groups in HESES18. JACS codes were specified in the 2018-19 algorithms to exclude students on courses with JACS codes that should never be mapped to price group A. It is unclear at this stage which HECoS codes will be used for pre-clinical and clinical medicine, dentistry and veterinary science, and so HECoS codes are not specified in the algorithms. If it becomes clear during data verification that certain HECoS codes should never be mapped to price group A, we will modify the algorithms to exclude these codes.
- b. HESLEVEL is now used instead of FUNDLEV so that it is clearer how the algorithm relates to the level of study. FUNDLEV is used in the derivation of HESLEVEL.
- c. REGBODY2 is no longer used in the algorithms, because other REGBODY codes are never used in combination with REGBODY codes 01, 14 and 30.
- d. COURSEAIM codes M16 and M86 are no longer used in the algorithms as only postgraduate courses used these COURSEAIM codes.

Value	Description	Definition
UMED	Undergraduate medic	FUNDLEV = 10, 11 HESLEVEL = UG and COURSEAIM = H16, I16, M16, M26, M86 and (REGBODY1 = 01 or REGBODY2 = 01) and (SBJCA1 = A100, A300 or SBJCA2 = A100, A300 or SBJCA3 = A100, A300)
UDEN	Undergraduate dentist	FUNDLEV = 10, 11 HESLEVEL = UG-and COURSEAIM = H16, I16, H16, M26, M86 and (REGBODY1 = 30 or REGBODY2 = 30) and (SBJCA1 = A200, A400 or SBJCA2 = A200, A400 or SBJCA3 = A200, A400)

Value	Description	Definition
UVET	Undergraduate veterinary science	HESLEVEL = UG FUNDLEV = 10, 11 and COURSEAIM = H16, I16, M16, M26, M86 and (REGBODY1 = 14 or REGBODY2 = 14) and (SBJCA1* = D1, D2 or SBJCA2* = D1, D2 or SBJCA3* = D1, D2)
ОТН	Otherwise	Otherwise

27. The HESCLIN field has been updated as follows:

- a. The SBJCA field in the 2019-20 HESA Student record stores Higher Education Classification of Subjects (HECoS) codes, instead of the Joint Academic Coding System (JACS) codes that were used in the previous academic year. The values of SBJCAX specified in the algorithms for (HESCLIN = 2) and (HESCLIN = 3) have therefore been changed from JACS codes to HECoS codes. These algorithms also take account of the possibility of there being five occurrences of the SBJCA field.
- b. HESLEVEL is now used instead of FUNDLEV so that it is clearer how the algorithm relates to the level of study. FUNDLEV is used in the derivation of HESLEVEL.

Value	Description	Definition
1	Undergraduate clinical, dentistry or veterinary science student assigned to price group A	(HESMDV = UMED and (HESCRSELGTH - YEARPRG - HESYRZEROADJ) = 0, 1, 2) or (HESMDV = UDEN and (HESCRSELGTH - YEARPRG - HESYRZEROADJ) = 0, 1, 2, 3) or (HESMDV = UVET and (HESCRSELGTH - YEARPRG - HESYRZEROADJ) = 0, 1, 2, 3, 4)
2	Postgraduate clinical or dentistry student assigned to price group A	FUNDLEV = 20, 21, 30, 31 HESLEVEL = PGR, PGT_ML, PGT_OTH, PGT_UGF and (SBJCA1 = A300, A400, C842, C845 or SBJCA2 = A300, A400, C842, C845 or SBJCA3 = A300, A400, C842, C845) (SBJCA1 = 100267, 100266, 100494 or SBJCA2 = 100267, 100266, 100494 or SBJCA3 = 100267, 100266, 100494 or SBJCA4 = 100267, 100266, 100494 or SBJCA5 = 100267, 100266, 100494)
3	Postgraduate veterinary science student	FUNDLEV = 20, 21, 30, 31 HESLEVEL = PGR, PGT_ML, PGT_OTH, PGT_UGF and (SBJCA1* = D2 or SBJCA2* = D2 or SBJCA3* = D2) (SBJCA1 = 100531, 101347 or SBJCA2 = 100531, 101347 or SBJCA3 = 100531, 101347 or SBJCA4 = 100531, 101347 or SBJCA5 = 100531, 101347)
0	Otherwise	Otherwise

28. The PRGA, PRGB, PRGC1, PRGC2, PRGD fields have been updated to reflect the use of HECoS codes in place of cost centres and JACS (Joint Academic Coding System) codes. For the most part, the Common Aggregation Hierarchy (CAH) standard groupings of HECoS codes can be used to determine price groups. Any exceptions are shown in brackets in the algorithm below.

Field name	Definition	Value
PRGC2	HESMODE = SWOUT	1.
PRGA	HESCLIN = 1, 2, 3 or (COURSEAIM = H16, H62, I16, J26, M16, M26, M86 and (HESHEALTHPROF1 = DENHYG, DENTHE or HESHEALTHPROF2 = DENHYG, DENTHE)) and not above	1
PRGC2	HESMODE = SWOUT or TTCID = 1, 2, Q or (QTS = 4 and TTCID = 5) or FDTEACH = 1 and not above	4
PRGB	COURSEAIM = H16, H62, I16, J26, M16, M26, M86 and (HESHEALTHPROF1 = DIETET, MIDWIF, OCCTHE, OPDEPT, ORTHOP, ORTPRO, PHYSIO, PODCHI, RADTHE, RADDIA, SPELAN or HESHEALTHPROF2 = DIETET, MIDWIF, OCCTHE, OPDEPT, ORTHOP, ORTPRO, PHYSIO, PODCHI, RADTHE, RADDIA, SPELAN) and not above	1
PRGC1	COURSEAIM = H16, H62, I16, J26, M16, M26, M86 and (HESHEALTHPROF1 = NURSUN, NURSAD, NURSCH, NURSLD, NURSMH or HESHEALTHPROF2 = NURSUN, NURSAD, NURSCH, NURSLD, NURSMH) and not above	1
PRGC2	TTCID = 1, 2, Q or (QTS = 4 and TTCID = 5) or FDTEACH = 1 or REGBODY1 = 09, 10, 11, 54 or REGBODY2 = 09, 10, 11, 54 and not above	1
PRGA	HESCLIN = 3 and not above	PRGMODVET

Field name	Definition	Value
PRGB	PRGMODB > 0 or PRGMODVET > 0 and not rows 1 to 4 above SBJCAX corresponds to one of the following Common Aggregation Hierarchy codes: CAH01, CAH02-02, CAH02-05, CAH02-06-01, CAH02-06-02, CAH02-06-03, CAH02-06-06 (only when SBJCAX = 100241, 100243), CAH03-01-01, CAH03-01-02, CAH03-01-03, CAH03-01-05, CAH03-01-06, CAH03-01-07, CAH03-01-08, CAH03-01-10, CAH05, CAH06-01-01, CAH06-01-02, CAH06-01-03, CAH06-01-05, CAH06-01-07, CAH07, CAH10-01-01, CAH10-01-02, CAH10-01-03 (only when SBJCAX = 100152, 100170, 100193, 100201, 100202, 100205, 100206, 100209, 100211, 101397, 101398), CAH10-01-04, CAH10-01-05, CAH10-01-06, CAH10-01-07 (only when SBJCAX = 100120, 100148, 100153, 100154, 100156, 100157, 100180, 100551, 100565), CAH10-01-08, CAH10-03-03, CAH10-01-10, CAH10-03-01, CAH10-03-02, CAH10-03-03, CAH10-03-04, CAH10-03-05, CAH10-03-06 (only when SBJCAX = 100186, 100222, 100230, 100560, 101356), CAH10-03-07, CAH15-01-04 (only when SBJCAX = 101218), CAH26-01-04, CAH26-01-06	PRGMODB + (PRGMODVET —PRGA) Sum of SBJPCNT1, SBJPCNT2, SBJPCNT3, SBJPCNT5 divided by 100
PRGC1	PRGMODC1 > 0 and not rows 1 to 4 above SBJCAX corresponds to one of the following Common Aggregation Hierarchy codes: CAH10-01-03 (only when SBJCAX = 100109, 100110), CAH11, CAH20-01-03, CAH24-01-01, CAH24-01-03, CAH24-01-04, CAH24-01-05, CAH25, CAH26-01-05 (only when SBJCAX = 100369) and not above	PRGMODC1 Sum of SBJPCNT1, SBJPCNT2, SBJPCNT3, SBJPCNT4, SBJPCNT5 divided by 100
PRGC2	PRGMODC2 > 0 and not rows 1 to 4 above SBJCAX corresponds to one of the following Common Aggregation Hierarchy codes: CAH02-04, CAH02-06-04, CAH02-06-05, CAH02-06-06 (only when SBJCAX = 100233, 100234, 100235, 100236, 100237, 100239, 100242, 100253, 100739, 101241, 101340, 101375), CAH02-06-07, CAH03-01-09, CAH03-02, CAH04, CAH06-01-06, CAH06-01-08, CAH09, CAH10-01-03 (only when SBJCAX = 100213), CAH10-01-07 (only when SBJCAX = 100219, 100548, 100549, 101048), CAH10-03-06 (only when SBJCAX = 100093), CAH13, CAH15-04-03, CAH17-01-06, CAH19-04-01, CAH19-04-06, CAH19-04-07, CAH19-04-09, CAH26-01-01, CAH26-01-02, CAH26-01-03, CAH26-01-05 (only when SBJCAX = 101056) and not above	PRGMODC2 Sum of SBJPCNT1, SBJPCNT3, SBJPCNT4, SBJPCNT5 divided by 100

Field name	Definition	Value
PRGD	PRGMODD > 0 and not rows 1 to 4 above SBJCAX corresponds to one of the following Common Aggregation Hierarchy codes: CAH06-01-04, CAH15-01-01, CAH15-01-02, CAH15-01-03, CAH15-01-04 (only when SBJCAX = 100436, 100437, 100663), CAH15-01-05, CAH15-01-06, CAH15-02, CAH15-03, CAH15-04- 01, CAH15-04-02, CAH16, CAH17-01-01, CAH17-01-02, CAH17- 01-03, CAH17-01-04, CAH17-01-05, CAH17-01-07, CAH17-01-08, CAH17-01-09, CAH19-01, CAH19-02, CAH19-04-08, CAH20-01- 01, CAH20-01-02, CAH20-01-04, CAH20-01-05, CAH20-02, CAH22, CAH23, CAH24-01-02 and not above	PRGMODD Sum of SBJPCNT1, SBJPCNT3, SBJPCNT4, SBJPCNT5 divided by 100

29. The EXCL4 field has been updated to remove COURSEAIM = Z99 as it is no longer a valid entry.

Value	Description	Definition
1	Student with no qualification aim	COURSEAIM = C99, H99, I99, J99, M99 , Z99
0	Otherwise	Otherwise

30. The EXCL8 field has been updated to exclude students on a nonstandard year of instance spanning the academic years 2018-19 and 2019-20, with no activity in the academic year 2019-20.

Value	Description	Definition
1	Student explicitly excluded from the HESES population	FUNDLEV = 99 or FUNDCOMP = 9 or (INSTAPP = 1 and LOADYRB = 0 and COMDATE < 1 August 2019 and TYPEYR = 2, 4)
0	Otherwise	Otherwise

31. The HESHEALTHPOP field has been updated to reflect that all years of instance for Home and EU students on pre-registration nursing, midwifery and allied health profession courses are now included in the population of Tables 6a to 6c in HESES19.

Value	Description	Definition
1	Year of	HESEXCL = 0 and
	instance	(UKPRN ≠ 10007773 or
	included in	(UKPRN = 10007773 and DOMICILE ≠ XG, XH, XI)) and
	Tables 6a to	COURSEAIM = H16, H62, I16, J26, M16, M26, M86 and
	6c	HESLEVEL = UG, PGT_UGF and
		HESTYPE = HOMEF, HOMENF and
		(HESHEALTHPROF1 ≠ BLANK or HESHEALTHPROF2 ≠ BLANK)
		((HESHEALTHYEAR = 2016-17 and
		HESLEVEL = UG and
		((HESTYPE = HOMEF and
		(HESHEALTHPROF1 = OCCTHE, OPDEPT, ORTHOP,
		PHYSIO, RADDIA, RADTHE
		or HESHEALTHPROF2 = OCCTHE, OPDEPT, ORTHOP, PHYSIO, RADDIA, RADTHE))
		or (HESTYPE = HOMENF and
		(HESHEALTHPROF1 + DENHYG, DENTHE, BLANK
		or HESHEALTHPROF2 + DENHYG, DENTHE, BLANK))))
		OF HESHEALTHEROFZ & DENTITY, DENTITY, BLANKIJI)
		or (HESHEALTHYEAR = 2017-18 and
		((HESLEVEL = UG and
, , ,		(HESTYPE = HOMEF, HOMENF and
		(HESHEALTHPROF1 + BLANK
	or HESHEALTHPROF2 + BLANK))) or (HESLEVEL = PGT_UGF_and	
- ((HESTYPE = HOMEF and		·
		(HESHEALTHPROF1 = OCCTHE, OPDEPT, ORTHOP,
PHYSIO, RA		PHYSIO, RADDIA, RADTHE
		or HESHEALTHPROF2 = OCCTHE, OPDEPT, ORTHOP, PHYSIO, RADDIA, RADTHE))
		or (HESTYPE = HOMENF and
		(HESHEALTHPROF1 + DENHYG, DENTHE, BLANK
		or HESHEALTHPROF2 + DENHYG, DENTHE, BLANK))))))
		or (HESHEALTHYEAR = 2018-19 and
		((HESLEVEL = UG and
		(HESTYPE = HOMEF, HOMENF and
		(HESHEALTHPROF1 + BLANK
		or HESHEALTHPROF2 + BLANK)))
		or (HESLEVEL = PGT_UGF and
		(HESTYPE = HOMEF, HOMENF and
		· · · · · · · · · · · · · · · · · · ·
		(HESHEALTHPROF1 + DENHYG, DENTHE, BLANK
		or HESHEALTHPROF2 + DENHYG, DENTHE, BLANK))))))
0	Otherwise	Otherwise

- 32. As data on subcontractual arrangements was not collected in HESES19, all fields relating to subcontractual arrangements have been removed.
- 33. The modularised file is no longer included in the HESES comparison outputs because modularised data is no longer used to derive price group fields or fields related to

subcontractual arrangements. As stated in the HESES19 guidance, price group proportions should now be assigned for courses as a whole, so variations in price group proportions between years of an instance are no longer taken into account.

HESES19 comparison workbook

34. The HESES19 comparison is the Excel workbook HES19_DCT_XXXXXXXX.xlsx which contains the following worksheets:

Table 1: Worksheets in the HESES19 comparison workbook

Workbook tab*	Title
Information	Workbook information
Key differences	Key differences between HESES19 and HESES19 recreated using 2019-20 HESA data
Rebuild information	Comparison of HESES19 data and the recreated HESES19 data with rebuild instructions
1 Full-time	HESES19 recreation Table 1: Full-time counts of years of instance
2 Sandwich	HESES19 recreation Table 2: Sandwich year out counts of years of instance
3 Part-time	HESES19 recreation Table 3: Part-time counts of years of instance and full-time equivalence (FTE)
4 Year abroad	HESES19 recreation Table 4: Home and EU undergraduate years abroad
5 Planning	HESES19 recreation Table 5: Further student breakdowns for planning purposes
6a Health full-time	HESES19 recreation Table 6a: Full-time counts of years of instance on pre-registration health courses
6b Health sandwich	HESES19 recreation Table 6b: Sandwich year out counts of years of instance on pre-registration health courses
6c Health part-time	HESES19 recreation Table 6c: Part-time counts of years of instance and FTE on pre-registration health courses
h1 Full-time	HESES19 Table 1: Full-time counts of years of instance
h2 Sandwich	HESES19 Table 2: Sandwich year out counts of years of instance
h3 Part-time	HESES19 Table 3: Part-time counts of years of instance and FTE
h4 Year abroad	HESES19 Table 4: Home and EU undergraduate years abroad
h5 Planning	HESES19 Table 5: Further student breakdowns for planning purposes

Workbook tab*	Title
h6a Health full-time	HESES19 Table 6a: Full-time counts of years of instance on pre- registration health courses
h6b Health sandwich	HESES19 Table 6b: Sandwich year out counts of years of instance on pre- registration health courses
h6c Health part-time	HESES19 Table 6c: Part-time counts of years of instance and FTE starters on pre-registration health courses
1 Full-time diff	Difference between HESES19 and HESES19 recreation Table 1: Full-time counts of years of instance
2 Sandwich diff	Difference between HESES19 and HESES19 recreation Table 2: Sandwich year out counts of years of instance
3 Part-time diff	Difference between HESES19 and HESES19 recreation Table 3: Part-time counts of years of instance and FTE
4 Year abroad diff	Difference between HESES19 and HESES19 recreation Table 4: Home and EU undergraduate years abroad
5 Planning diff	Difference between HESES19 and HESES19 recreation Table 5: Further student breakdowns for planning purposes
6a Health full-time diff	Difference between HESES19 and HESES19 recreation Table 6a: Full-time counts of years of instance on pre-registration health courses
6b Health sandwich diff	Difference between HESES19 and HESES19 recreation Table 6b: Sandwich year out counts of years of on pre-registration health courses
6c Health part-time diff Difference between HESES19 and HESES19 recreation Table time counts of years of instance and FTE on pre-registration in courses	
A Summary	2020-21 Grant tables Table A: 2020-21 Summary of allocations
B High-cost	2020-21 Grant tables Table B: 2020-21 High-cost subject funding
C NMAH supplement	2020-21 Grant tables Table C: 2020-21 Nursing, midwifery and allied health supplement
D Erasmus+	2020-21 Grant tables Table D: 2020-21 Erasmus+ and overseas study programmes
E Other high-cost TAs	2020-21 Grant tables Table E: 2020-21 Other high-cost targeted allocations
F Student access and success	2020-21 Grant tables Table F: 2020-21 Student access and success
G Parameters	2020-21 Grant tables Table H: 2020-21 Parameters in the funding models

^{*} Shading corresponds to the colour of the workbook tab.

- 35. The difference sheets (see worksheets ending in 'diff' in Table 1) will indicate where differences between the HESES19 recreation tables and HESES19 tables exceed a given threshold. The size of this threshold can be altered by entering the required value where indicated on the worksheets. These sheets are to assist providers in reconciling differences between HESES19 data and HESES19 recreation data.
- 36. Providers are strongly encouraged to use the 'Rebuild information' worksheet in the HES19_DCT_XXXXXXXX.xlsx workbook, which may highlight data quality issues relating to the HESA fields used in the HESES19 recreation algorithms.

HESES19 comparison individualised file

- 37. You should use the individualised file HES19_DCT_XXXXXXXX_IND.csv when working through this document. This shows the assignment of records to categories by our algorithms and, where applicable, provides the data that has been used to determine their exclusion from the relevant population.
- 38. The HESES19 comparison rebuild document provides instructions for rebuilding key figures in the workbook from the individualised file.
- 39. HESA Student fields used to generate the data in the outputs are listed in Table 2.

Table 2: Fields used in the HESES19 comparison outputs

Entity	Field	Description	Column in individualised file
Course	COURSEAIM	General qualification aim of course	BB
Course	COURSEID	Course identifier	F
Course	CTITLE	Course title	ВС
Course	REDUCEDC	Reduced course return indicator	EE
Course	REGBODY1-2	Regulatory body for health and social care students	EG-EH
Course	TTCID	Teacher training course	EX
Course subject	SBJCA1-5	Subject of course	EJ-EN
Course subject	SBJPCNT1-5	Subject percentage	EO-ES
Entry profile	DOMICILE	Domicile	BD
Instance	BRIDGE	Foundation degree to degree bridging course	AZ
Instance	CAMPID†	Campus identifier	G
Instance	COMDATE	Start date of instance	ВА
Instance	ENDDATE	End date of instance	BE
Instance	EXCHANGE	Exchange programmes	BF

Entity	Field	Description	Column in individualised file
Instance	FEEELIG	Fee eligibility	ВТ
Instance	FUNDCODE	Fundability code	BZ
Instance	FUNDCOMP	Completion of year of instance	CA
Instance	FUNDLEV	Level applicable to funding council HESES	СВ
Instance	INITIATIVES1-3	Initiatives	DC-DE
Instance	INSTCAMP†	Provider's own campus identifier	Н
Instance	LOADYRA	Full time equivalent (FTE) in year A	DH
Instance	LOADYRB	FTE in year B	DI
Instance	LOCSDY	Location of study	DK
Instance	MCDATE	Change of mode date	DL
Instance	MODE	Mode of study	DM
Instance	MSTUFEE	Major source of tuition fees	EC
Instance	NUMHUS	Student instance identifier	С
Instance	OWNINST†	Provider's own instance identifier	E
Instance	QTS	Qualified Teacher Status	ED
Instance	REDUCEDI	Reduced instance return indicator	EF
Instance	RSNEND	Reason for ending instance	EI
Instance	SPECFEE	Special fee indicator	ET
Instance	SPLENGTH	Expected length of study	EU
Instance	STULOAD	Student instance FTE	EV
Instance	TYPEYR	Type of instance year	EY
Instance	UNITLGTH	Units of length	FA
Instance	YEARPRG	Year of course	FB
Instance	YEARSTU	Year of student on this instance	FC
Provider	INSTAPP	Indicator for funding approximations	DF
Provider	UKPRN	UK provider reference number	A
Mobility	MOBDURA	Mobility duration	See Table 3
Mobility	MOBSCHEME	Mobility scheme	See Table 3
Mobility	MOBTYPE	Mobility type	See Table 3
Student	HUSID	HESA unique student identifier	В
Student	OWNSTU†	Provider's own internal identifier for the student	D

Entity	Field		Column in individualised file
Student	UCASAPPID†	UCAS Application Number	I
Student	UCASPERID†	UCAS Personal Identifier	J

[†] These fields are not used in the comparison but are included in the individualised file to allow easy identification of students.

Description of derived fields

40. Fields derived from HESA Student data are listed in Table 3.

Table 3: HESES19 comparison derived fields

Derived field name	Description	Paragraph	Column in individualised file
ANNIV	Anniversary of start date in academic year	45	AY
EXCL1-EXCL1024	Exclusion reason(s)	87-97	BG-BQ
FDBRIDGE	Student on a foundation degree bridging course	46	BR
FDTEACH	Student on a foundation degree teaching assistant course	79	BS
FTEA, FTEB, FTEC1, FTEC2, FTED	FTE of the year of instance assigned to each price group	127	BU-BY
HESAVRGFTE	Average FTE	71	CC
HESAVRGFTEPOP	Average FTE population	68	CD
HESAVRGFTETYPE	Average FTE type	69	CE
HESBROADLEVEL	Broad level of study	104	CF
HESCOL3	Contribution of year of instance to Column 3 of Tables 1-3	123	L
HESCOL3_Y	Contribution of activity in price group to Column 3 of Tables 1-3	122	M-Q
HESCOL3_PROFX	Contribution of activity in health profession to Column 3 of Tables 1-3 and Tables 6a-6c	121	R-S
HESCOL4	Contribution of year of instance to Column 4 of Tables 1-3	126	Т
HESCOL4_Y	Contribution of activity in price group to Column 4 of Tables 1-3	125	U-Y
HESCOL4_PROFX	Contribution of activity in health profession to Column 4 of Tables 1-3 and Tables 6a-6c	124	Z-AA
HESCOL4A	Estimated contribution to FTE for year of instance	128	АВ
HESCLIN	Price group A clinical and veterinary students	83	CG
HESCRSELGTH	Expected length of the course in years	66	СН
HESEC	Indicates whether a student has a UK, other Home and EU, or other domicile.	62	CI

Derived field name	Description	Paragraph	Column in individualised file
HESESFTE	FTE of the year of instance	77	AC
HESEXCL	Reason(s) for exclusion from the HESES population	98	AD
HESFDBRIDGEYR	The year of instance is a foundation degree bridging course	53	Cl
HESFTE_CASE	Method used to calculate HESESFTE	76	СК
HESHEALTHPOP	Identifies whether the student will be included in pre-registration nursing, midwifery and allied health profession courses	115	AE
HESHEALTHPROFX	Identifies which nursing, midwifery and allied health profession the student is recorded against	84	AF-AG
HESHEALTHPROP1- HESHEALTHPROP2	The proportion of the student's activity that is allocated to each health profession	113-114	AH-AI
HESHEALTHYEAR	Indicates whether the student started their course in 2016-17, 2017-18, 2018-19, 2019-20 or another academic year	61	AJ
HESLEVEL	Level of study	64	AK
HESLINK18	Link made to 2018-19 data	44	CL
HESMDV	Clinical and veterinary student	80	СМ
HESMODE	Mode of study	60	AL
HESNCOMPLEVEL_Y	Level at which HESNCOMPRATE_Y is calculated for year of instance	117	FD, FF, FH, FJ, FL
HESNCOMPLEVEL_Z	Level at which HESNCOMPRATE_Z is calculated for year of instance	119	FN, FP, FR, FT, FV, FX, FZ, GB, GD, GF, GH, GJ, GL, GN, GP, GR, GT, GV
HESNCOMPRATE_Y	Estimate of likelihood that activity in price group was not completed	118	FE, FG, FI, FK, FM
HESNCOMPRATE_Z	Estimate of likelihood that activity in health profession was not completed	120	FO, FQ, FS, FU, FW, FY, GA, GC, GE, GG, GI, GK, GM, GO, GQ, GS, GU, GW
HESNEWENTRANT	Identifies whether a student is a new entrant	111	AM

Derived field name	Description	Paragraph	Column in individualised file
HESOVER	Primary derived field(s) being overwritten	116	CN
HESPGR17	Number of postgraduate research (PGR) years of instance in 2017-18	110	СО
HESPGR18	Number of PGR years of instance in 2018-19	107	СР
HESPGT17	Number of postgraduate taught (PGT) years of instance in 2017-18	109	CQ
HESPGT18	Number of PGT years of instance in 2018-	106	CR
HESPROP	Proportion of STULOAD counted in the year of instance	75	CS
HESREG	HESES Column 1 or 2 indicator	67	AN
HESRESSTAT	Fundability and residential status	103	AO
HESTOTWORKWKS	Total number of weeks spent working abroad	59	СТ
HESTYPE	Fundability status	63	AP
HESUG17	Number of undergraduate (UG) years of instance in 2017-18	108	CU
HESUG18	Number of UG years of instance in 2018- 19	105	CV
HESWORKWKSXΩ	Maximum number of weeks that may be spent working abroad for each mobility experience	58	CW-CY
HESYAMOBSCHEME	Identifies if the year of instance is on an Erasmus+ scheme	100	CZ
HESYAPOP	Indicates whether year of instance is included in the count of Table 4 years abroad	102	AQ
HESYATYPE	Type of fee charged to students spending a year abroad	101	AR
HESYRZERO	The year in which a student last took a foundation year	81	DA
HESYRZEROADJ	Indicates whether the student has taken a foundation year	82	DB
INSTAPP18	2018-19 approximation indicator	47	DG
LENGTH	Long or standard length year of instance	65	AS
LOADYRB18	FTE in year B for 2018-19	49	DJ

Derived field name	Description	Paragraph	Column in individualised file
MOBDURAXΩ	Elapsed length in weeks of the mobility experience	56	DN-DP
MOBSCHEMEXΩ	Type of mobility scheme	57	DQ-DS
ΜΟΒΤΥΡΕΧΥΩ	Type of mobility experiences	55	DT-EB
PRGA, PRGB, PRGC1, PRGC2, PRGD	Proportion of countable year in each price group	85	AT-AX
STUBID	Unique countable year of instance identifier	51	К
STULOAD18	STULOAD value from the 2018-19 HESA record	48	EW
TYPEYR18	TYPEYR for the 2018-19 academic year	50	EZ

 $^{^{\}Omega}$ The number of occurrences of this field is restricted to 3.

Linking between years

- 41. We have linked the 2019-20 HESA data to earlier years' data using UKPRN, HUSID and NUMHUS. This is to help account for definitional differences between HESA and HESES data. HESLINK18 is equal to 1 where records have been linked to 2018-19 HESA data by this method.
- 42. The data from earlier years will be used to help determine the FTE for some students on standard years of instance who were on a non-standard year of instance in the previous year and for students on medical or dental programmes that have taken a foundation year.
- 43. We have also linked 2019-20 HESA data to 2018-19 and 2017-18 HESA data using the fields UKPRN and HUSID, for the purpose of deriving HESNEWENTRANT.

Tables 1-3 recreation algorithms

HESLINK18

44. This field indicates if a successful link was made between the 2019-20 data and 2018-19 data that may inform the calculation of FTE for some students.

Value	Description
	A link was made to 2018-19 data using the method described in paragraphs 42-43 of this document
0	Otherwise

ANNIV

45. This field contains the anniversary of the start date (COMDATE) during the current academic year.

FDBRIDGE

46. This field identifies students on foundation degree bridging courses that form part, but not all, of the instance.

Value	Description	Definition
1	Student generates countable foundation degree bridging course	BRIDGE = 1 and COURSEAIM ≠ H90, I90, J90
0	Otherwise	Otherwise

INSTAPP18

47. This field contains the indicator for funding approximations for 2018-19 (2018-19 INSTAPP).

STULOAD18

48. This field contains the student instance FTE for 2018-19 (2018-19 STULOAD).

LOADYRB18

49. This field contains the FTE in year B for 2018-19 (2018-19 LOADYRB).

TYPEYR18

50. This field contains the value of the type of instance year for 2018-19 (2018-19 TYPEYR).

STUBID

51. This field uniquely identifies years of instance when used in conjunction with UKPRN, HUSID and NUMHUS. Where the HESA data generates two years of instance within a single academic year, we create two records in the individualised file. This can happen where either the student is on a foundation degree bridging course that is countable in the year of instance, or the student undertakes activity both before and after the anniversary of their commencement date and has not undertaken activity in the first year of instance in the previous academic year. These records are distinguished using STUBID.

Value	Description	Definition
1	First countable year of instance	FDBRIDGE = 1 or (LOADYRA ≠ 0, BLANK and LOADYRB ≠ 0, BLANK and ((LOADYRB18 = 0 and INSTAPP18 = 1 and TYPEYR18 = 2, 4) or ((STULOAD18= 0 or HESLINK18 = 0) and COMDATE < 1 August 2018)))
2	Second countable year of instance	FDBRIDGE = 1 or (LOADYRA ≠ 0, BLANK and LOADYRB ≠ 0, BLANK and ((LOADYRB18 = 0 and INSTAPP18 = 1 and TYPEYR18 = 2, 4) or ((STULOAD18 = 0 or HESLINK18 = 0) and COMDATE < 1 August 2018)))
0	One countable year of instance	Otherwise

Example of a student who would generate two countable years

52. An undergraduate has an anniversary of commencement (ANNIV) of 1 January 2020. The student was active in the 2017-18 academic year until 1 June 2018 and recommenced activity on 1 August 2019, resulting in no activity in the 2018-19 academic year. The student generated an FTE of 0.25 between 1 August 2019 and 31 December 2019, and generated an FTE of 0.5 between 1 January 2020 and 31 July 2020. The HESA return for this student would (if they choose not to rely on our approximations, INSTAPP = 1) contain the following field values:

HESA field	2018-19 HESA return	2019-20 HESA return
LOADYRA	0	025.0
LOADYRB	0	050.0
INSTAPP	1	1

HESFDBRIDGEYR

53. This field indicates that the year of instance is a foundation degree bridging course.

Value	Description	Definition
1	Year of instance is a foundation degree bridging course	FDBRIDGE = 1 and STUBID = 1
0	Otherwise	Otherwise

INITIATIVES1-3

54. These fields identify students who are part of a specific scheme.

MOBTYPEXY

55. These fields record the type of mobility experiences, where X denotes the mobility entity and Y denotes the occurrence of mobility type (MOBTYPE) within the mobility entity. For example, MOBTYPE21 is the first MOBTYPE occurrence from the second mobility entity. The number of mobility entities is unbounded; due to file size restrictions we only show the three mobility entities with the longest duration.

MOBDURAX

56. These fields record the elapsed length in weeks of the mobility experience, where X denotes the mobility entity. For example, MOBDURA2 is the mobility duration field (MOBDURA) from the second mobility entity. The number of mobility entities is unbounded; due to file size restrictions we show only the three mobility entities with the longest duration.

MOBSCHEMEX

57. These fields record the type of the mobility scheme that the student is on, where X denotes the mobility entity. For example, MOBSCHEME2 is the mobility scheme field (MOBSCHEME) from the second mobility entity. The number of mobility entities is unbounded; due to file size restrictions we only show the three mobility entities with the longest duration.

HESWORKWKSX

58. These fields record the maximum number of weeks that may be spent working abroad for each mobility experience, where X denotes the mobility entity. The total number of mobility entities is unbounded; due to file size restrictions we only show the three mobility entities with the longest duration. The calculation uses all mobility entities.

Value	Description	Definition
MOBDURAX	The mobility experience is spent working	MOBTYPEX1 = 02, 03 or MOBTYPEX2 = 02, 03 or MOBTYPEX3 = 02, 03
0	The mobility experience is not spent working	Otherwise

HESTOTWORKWKS

59. This field records the total number of weeks spent working. HESTOTWORKWKS = sum of all HESWORKWKSX, including those not shown in the individualised file (due to the file size restriction).

HESMODE

60. This field allocates students to a mode of study.

Value	Description	Definition
FTS	Full-time	HESFDBRIDGEYR ≠ 1 and (MODE = 01 or (MODE = 43, 51, 73 and MCDATE ≠ BLANK and MCDATE > ANNIV + 168) or (MODE = 23, 24 and SPECFEE ≠ 1 and (SPECFEE ≠ 3 or HESTOTWORKWKS < 21)))
SWOUT	Sandwich year-out	HESFDBRIDGEYR ≠ 1 and MODE = 23, 24 and (SPECFEE = 1 or (SPECFEE = 3 and HESTOTWORKWKS > 20))
PT	Part-time	Otherwise

HESHEALTHYEAR

61. This field identifies whether the student started their course in 2016-17, 2017-18, 2018-19, 2019-20 or another academic year.

Value	Description	Definition
2019-20	Student started in 2019- 20 academic year	COMDATE > 31 July 2019 and COMDATE < 1 August 2020
2018-19	Student started in 2018- 19 academic year	COMDATE > 31 July 2018 and COMDATE < 1 August 2019
2017-18	Student started in 2017- 18 academic year	COMDATE > 31 July 2017 and COMDATE < 1 August 2018

Value	Description	Definition
2016-17		COMDATE > 31 July 2016 and COMDATE < 1 August 2017
OTHER	Otherwise	Otherwise

HESEC

62. This field indicates whether a student has a UK, other Home and EU, or other domicile.

Value	Description	Definition
UK	UK-domiciled	DOMICILE = XF, XG, XH, XI, XK
OEU	Other Home and EU domiciled	DOMICILE = AI, AN, AT, AW, AX, BE, BG, BL, BM, BQ, CH, CW, CZ, DE, DK, EE, ES, EU, FI, FK, FO, FR, GF, GI, GL, GP, GR, GS, HR, HU, IC, IE, IS, IT, KY, LI, LT, LU, LV, MF, MQ, MS, MT, NC, NL, NO, PF, PL, PM, PN, PT, RE, RO, SE, SH, SI, SK, SX, TC, VG, WF, XA, YT
OTHER	Otherwise	Otherwise

HESTYPE

63. This field allocates students to the three categories of fundability and residential status.

Value	Description	Definition
HOMENF	Home and EU non- fundable	(FUNDCODE = 1 and FUNDLEV = 30,31) or (FUNDCODE = 2, 5, 7 and (FEEELIG = 1 or (FEEELIG = 3 and HESEC = OEU, UK))) or (UKPRN = 10007773 and FUNDCODE = 1 and DOMICILE = XG, XH, XI)
HOMEF	Home and EU fundable	FUNDCODE = 1 and not above
ISOV	Island and overseas	Otherwise

HESLEVEL

64. This field allocates students to a level of study.

Value	Description	Definition
UG	Undergraduate	FUNDLEV = 10, 11
PGT_UGF	Postgraduate taught and eligible under the undergraduate student support regime	FUNDLEV = 20, 21 and (SPECFEE ≠ 9, BLANK or ((REGBODY1 = 44, 06, 61, 62, 63, 64, 65, 46, 47, 48, 52, 50, 42, 56, 57, 55 or REGBODY2 = 44, 06, 61, 62, 63, 64, 65, 46, 47, 48, 52, 50, 42, 56, 57, 55) and COURSEAIM = M16, M26, M86, H62))

Value	Description	Definition
PGT_ML	Postgraduate taught course eligible for masters' loans	FUNDLEV = 20, 21 and (INITIATIVES1 = U or INITIATIVES2 = U or INITIATIVES3 = U) and (COURSEAIM = M00, M01, M10, M11, M88 or (COURSEAIM = M16 and REGBODY1 ≠ 44, 06, 61, 62, 63, 64, 65, 46, 47, 48, 52, 50, 42, 56, 57, 55 and REGBODY2 ≠ 44, 06, 61, 62, 63, 64, 65, 46, 47, 48, 52, 50, 42, 56, 57, 55))
PGT_OTH	Postgraduate taught course that does not fall under the previous two categories	FUNDLEV = 20, 21 and SPECFEE = 9, BLANK and not above
PGR	Postgraduate research	FUNDLEV = 30, 31

LENGTH

65. This field indicates whether the student is on a standard or long year of instance.

Value	Description	Definition
L	Long	FUNDLEV = 11, 21, 31
S	Standard	Otherwise

HESCRSELGTH

66. This field contains the expected length of the course in whole numbers of years. Expected course lengths that contain a fraction of a year that exceeds two weeks are rounded up to the next whole year. Otherwise the value is rounded down to the nearest whole year, except where the expected course length is less than one year – such expected course lengths will be rounded up to one year. For example, an expected length of course that is one year and three weeks will be rounded up to two years. An expected length of course that is one year and one week will be rounded down to one year.

Value	Definition
SPLENGTH	UNITLGTH = 1
SPLENGTH / 12	UNITLGTH = 2
SPLENGTH / 52	UNITLGTH = 3
6	UNITLGTH = 9
1	Otherwise

HESREG

67. This field assigns students to Column 1 or 2 of Tables 1 to 3 of the HESES recreation.

Value	Description	Definition
1	Column 1 student	ANNIV < 2 December 2019
2	Column 2 student	Otherwise

HESAVRGFTEPOP

68. The 2019-20 average FTE population is defined as follows:

Value	Description	Definition
1	In the 2019-20 average FTE population	TYPEYR \neq 1 and COMDATE < 1 August 2019 and ENDDATE = BLANK and STULOAD \neq 0 and FUNDLEV \neq 99 and FUNDCOMP \neq 9 and MODE \neq 43, 44, 51, 63, 64, 73, 74 and HESMODE = PT
0	Otherwise	Otherwise

Calculation of FTE

HESAVRGFTETYPE

69. This field identifies the level at which HESAVRGFTE is calculated for the student.

Value	Description
1	More than 9 students over provider (UKPRN), course aim (COURSEAIM), mode (MODE), expected length of the course in years (HESCRSELGTH) with HESAVRGFTEPOP = 1
2	More than 9 students in the 2019-20 average FTE population match over provider (UKPRN), course aim (COURSEAIM) with HESAVRGFTEPOP = 1 and not above
3	More than 9 students in the 2019-20 average FTE population match over provider (UKPRN) and level of study (HESLEVEL) with HESAVRGFTEPOP = 1 and not above
4	Level of study (HESLEVEL) in the 2018-19 average FTE population and not above (for Levels of study PGT_ML and PGT_OTH records will be matched with the PGT average FTE population from 2018-19).

70. The 2018-19 average FTE population is defined as follows:

2018-19 TYPEYR ≠ 1 and

2018-19 COMDATE < 1 August 2018 and

2018-19 ENDDATE = BLANK and

2018-19 HESCOMP ≠ 3 and

2018-19 HESEXCL = 0 and

2018-19 MODE \neq 43, 44, 51, 73, 74 and

2018-19 HESMODE = PT.

HESAVRGFTE

71. This field gives the average FTE for the population identified in HESAVRGFTETYPE. This field is only completed for students on non-standard years of instance (TYPEYR ≠ 1).

Example

72. A provider only has 46 students in the 2019-20 average FTE population.

UKPRN	COURSEAIM	MODE	HESCRSELGTH	TOTAL
10000000	H00	31	2	9
10000000	H00	31	3	12
10000000	H00	31	1	25

- 73. For a student at this provider with COURSEAIM = H00, MODE = 31, HESCRSELGTH = 1, HESAVRGFTETYPE would be 1 as there are more than 9 students in the average FTE population that match on COURSEAIM, MODE and HESCRSELGTH.
- 74. For a student at this provider with COURSEAIM = H00, MODE = 31, HESCRSELGTH = 2, HESAVRGFTETYPE would be 2 as there are fewer than 10 students in the average FTE population that match on COURSEAIM, MODE and HESCRSELGTH, but there are more than 9 (46) that match on COURSEAIM alone.

HESPROP

75. This field contains the estimate of the proportion of STULOAD that is allocated to the countable year of instance and is mainly used for students in their final year. HESPROP is calculated as (ENDDATE – ANNIV) / (ENDDATE - 31 July 2019). Where ENDDATE is BLANK we will assume a date of 31 July 2020 in this calculation. If ENDDATE is before ANNIV then HESPROP equals 0. While this field is calculated for all records, the value is only meaningful for students who are on a standard year of instance in the current year and were on a non-standard year of instance in the previous year.

HESFTE CASE

- 76. For part-time years of instance the method used to calculate HESESFTE is dependent on the following factors:
 - a. Number of countable years of instance generated in the HESES recreation.
 - b. Whether the year of instance countable in the current academic year is standard or non-standard.
 - c. Whether the year of instance countable in the previous academic year was standard or non-standard.
 - d. Whether the provider has chosen to rely on the known approximations in our algorithms.
 - e. Whether the instance started in the current academic year.

The table below shows how we identify different cases of the FTE calculation.

Value	Description	Definition
0	Standard year of instance and standard year of instance in the previous academic year	(STUBID = 0 or (STUBID = 2 and FDBRIDGE = 1)) and TYPEYR = 1 and TYPEYR18 = 1, BLANK
1	Standard year of instance and non-standard year of instance in the previous academic year and a provider that has chosen to rely on the approximations in our algorithms	(STUBID = 0 or (STUBID = 2 and FDBRIDGE = 1)) and TYPEYR = 1 and TYPEYR18 = 2, 3, 4 and (INSTAPP = 0 or LOADYRB = 0, BLANK)
2	Standard year of instance and non-standard year of instance in the previous academic year and a provider that has chosen not to rely on the approximations in our algorithms	(STUBID = 0 or (STUBID = 2 and FDBRIDGE = 1)) and TYPEYR = 1 and TYPEYR18 = 2, 3, 4 and INSTAPP = 1 and LOADYRB ≠ 0, BLANK
3	Non-standard year of instance and an instance that starts in the current academic year	(STUBID = 0 or (STUBID = 2 and FDBRIDGE = 1)) and TYPEYR = 2, 3 and COMDATE > 31 July 2019
4	Non-standard year of instance and an instance that does not start in the current academic year	(STUBID = 0 or (STUBID = 2 and FDBRIDGE = 1)) and TYPEYR = 2, 4, 5 and COMDATE < 1 August 2019

Two years of instance are generated from one record and the provider has chosen not to rely on the approximations in our algorithms

Value	Description	Definition
5a	First countable year of instance	STUBID = 1 and FDBRIDGE ≠ 1 and INSTAPP = 1
5b	Second countable year is a standard year of instance	STUBID = 2 and TYPEYR = 1 and FDBRIDGE ≠ 1 and INSTAPP = 1
5c	Second countable year is a non-standard year of instance	STUBID = 2 and TYPEYR = 2, 4 and FDBRIDGE ≠ 1 and INSTAPP = 1

HESESFTE

77. This field contains the FTE counted in the year of instance. HESESFTE is capped at 100.

Value	Definition
100	HESMODE = FTS
50	HESMODE = SWOUT
30	HESFDBRIDGEYR = 1
STULOAD	HESFTE_CASE = 0 and not above
STULOAD x HESPROP	HESFTE_CASE = 1 and not above
LOADYRB	HESFTE_CASE = 2 and not above
HESAVRGFTE	HESFTE_CASE = 3 and not above
STULOAD	HESFTE_CASE = 4 and not above
LOADYRA	HESFTE_CASE = 5a and not above
LOADYRB	HESFTE_CASE = 5b and not above
STULOAD	HESFTE_CASE = 5c and not above

78. For students generating two countable years, where one of the years is a foundation degree bridging course, for part-time students we will reduce the HESESFTE given in the table above by 30 for the other instance (FDBRIDGE = 1 and STUBID = 2, and HESFTE_CASE = 0, 1, 4).

Calculation of price groups

FDTEACH

79. This field identifies students on foundation degrees for teaching assistants awarded as an additional student number bid, or otherwise agreed by the Office for Students.

Value	Description	Definition
1	Foundation degree teaching assistant	Provider specific algorithm
0	Otherwise	Otherwise

HESMDV

80. This field identifies undergraduate pre-clinical and clinical medicine, dentistry and veterinary science students.

Value	Description	Definition
UMED	Undergraduate pre-clinical or clinical medicine student	HESLEVEL = UG and COURSEAIM = H16, I16, M26 and REGBODY1 = 01
UDEN	Undergraduate pre-clinical or clinical dentistry student	HESLEVEL = UG and COURSEAIM = H16, I16, M26 and REGBODY1 = 30
UVET	Undergraduate pre-clinical or veterinary science	HESLEVEL = UG and COURSEAIM = H16, I16, M26 and REGBODY1 = 14
ОТН	Otherwise	Otherwise

HESYRZERO

81. This field indicates the year in which a student last took a foundation year (YEARPRG = 0) as part of this instance. For students who have not taken a foundation year, this field is blank. We have linked back to 2005-06 HESA student data.

HESYRZEROADJ

82. This field indicates whether the student took a foundation year (YEARPRG = 0) as part of this instance since 2005-06.

Value	Description	Definition
1	Foundation year taken as part of instance	HESYRZERO ≠ BLANK or YEARPRG = 0
0	Otherwise	Otherwise

HESCLIN

83. This field identifies clinical medicine, dentistry and veterinary science students who are assigned to price group A.

Value	Description	Definition
1	Undergraduate clinical medicine, dentistry or veterinary science student assigned to price group A	(HESMDV = UMED and (HESCRSELGTH - YEARPRG - HESYRZEROADJ) = 0, 1, 2) or (HESMDV = UDEN and (HESCRSELGTH - YEARPRG - HESYRZEROADJ) = 0, 1, 2, 3) or (HESMDV = UVET and (HESCRSELGTH - YEARPRG - HESYRZEROADJ) = 0, 1, 2, 3, 4)
2	Postgraduate clinical medicine or dentistry student assigned to price group A	HESLEVEL = PGR, PGT_ML, PGT_OTH, PGT_UGF and (SBJCA1 = 100267, 100266, 100494 or SBJCA2 = 100267, 100266, 100494 or SBJCA3 = 100267, 100266, 100494 or SBJCA4 = 100267, 100266, 100494 or SBJCA5 = 100267, 100266, 100494)
3	Postgraduate clinical veterinary science student assigned to price group A	HESLEVEL = PGR, PGT_ML, PGT_OTH, PGT_UGF and (SBJCA1 = 100531, 101347 or SBJCA2 = 100531, 101347 or SBJCA3 = 100531, 101347 or SBJCA4 = 100531, 101347 or SBJCA5 = 100531, 101347)
0	Otherwise	Otherwise

HESHEALTHPROFX

84. These fields identify the profession(s) of the nursing, midwifery and allied health course, where X is equal to 1 or 2.

Value	Description	Definition
DENTHE	Dental therapy	REGBODYX = 36

Value	Description	Definition
DENHYG	Dental hygiene	REGBODYX = 37
DIETET	Dietetics	REGBODYX = 44
NURSUN	Nursing - unclassified	REGBODYX = 06
NURSAD	Nursing - adult	REGBODYX = 61
NURSCH	Nursing - children	REGBODYX = 62
NURSLD	Nursing - learning disability	REGBODYX = 63
NURSMH	Nursing - mental health	REGBODYX = 64
MIDWIF	Midwifery	REGBODYX = 65
OCCTHE	Occupational therapy	REGBODYX = 46
OPDEPT	Operating department practice	REGBODYX = 47
ORTHOP	Orthoptics	REGBODYX = 48
ORTPRO	Orthotics and prosthetics	REGBODYX = 52
PHYSIO	Physiotherapy	REGBODYX = 50
PODCHI	Podiatry and chiropody	REGBODYX = 42
RADTHE	Radiography (therapeutic)	REGBODYX = 56
RADDIA	Radiography (diagnostic)	REGBODYX = 57
SPELAN	Speech and language therapy	REGBODYX = 55
BLANK	Otherwise	Otherwise

${\tt PRGA, PRGB, PRGC1, PRGC2, PRGD}$

85. The proportion of activity in each price group. CAH codes stated include all sub-levels, unless otherwise stated.

Field name	Definition	Value
PRGC2	HESMODE = SWOUT	1
PRGA	HESCLIN = 1, 2, 3 or (COURSEAIM = H16, H62, I16, J26, M16, M26, M86 and (HESHEALTHPROF1 = DENHYG, DENTHE or HESHEALTHPROF2 = DENHYG, DENTHE)) and not above	
PRGB	COURSEAIM = H16, H62, I16, J26, M16, M26, M86 and (HESHEALTHPROF1 = DIETET, MIDWIF, OCCTHE, OPDEPT, ORTHOP, ORTPRO, PHYSIO, PODCHI, RADTHE, RADDIA, SPELAN or HESHEALTHPROF2 = DIETET, MIDWIF, OCCTHE, OPDEPT, ORTHOP, ORTPRO, PHYSIO, PODCHI, RADTHE, RADDIA, SPELAN) and not above	

Field name	Definition	Value
PRGC1	COURSEAIM = H16, H62, I16, J26, M16, M26, M86 and (HESHEALTHPROF1 = NURSUN, NURSAD, NURSCH, NURSLD, NURSMH or HESHEALTHPROF2 = NURSUN, NURSAD, NURSCH, NURSLD, NURSMH) and not above	1
PRGC2	TTCID = 1, 2, Q or (QTS = 4 and TTCID = 5) or FDTEACH = 1 or REGBODY1 = 09, 10, 11, 54 or REGBODY2 = 09, 10, 11, 54 and not above	1
PRGB		
PRGC1	SBJCAX corresponds to one of the following Common Aggregation Hierarchy codes: CAH10-01-03 (only when SBJCAX = 100109, 100110), CAH11, CAH20-01-03, CAH24-01-01, CAH24-01-03, CAH24-01-04, CAH24-01-05, CAH25, CAH26-01-05 (only when SBJCAX = 100369) and not above	Sum of SBJPCNT1, SBJPCNT2, SBJPCNT3, SBJPCNT4, SBJPCNT5 divided by 100

Field name	Definition	Value
PRGC2	SBJCAX corresponds to one of the following Common Aggregation Hierarchy codes: CAH02-04, CAH02-06-04, CAH02-06-05, CAH02-06-06 (only when SBJCAX = 100233, 100234, 100235, 100236, 100237, 100239, 100242, 100253, 100739, 101241, 101340, 101375), CAH02-06-07, CAH03-01-09, CAH03-02, CAH04, CAH06-01-06, CAH06-01-08, CAH09, CAH10-01-03 (only when SBJCAX = 100213), CAH10-01-07 (only when SBJCAX = 100219, 100548, 100549, 101048), CAH10-03-06 (only when SBJCAX = 100093), CAH13, CAH15-04-03, CAH17-01-06, CAH19-04-01, CAH19-04-02, CAH19-04-03, CAH19-04-04, CAH19-04-05, CAH19-04-06, CAH19-04-07, CAH19-04-09, CAH26-01-01, CAH26-01-02, CAH26-01-03, CAH26-01-05 (only when SBJCAX = 101056) and not above	Sum of SBJPCNT1, SBJPCNT2, SBJPCNT3, SBJPCNT4, SBJPCNT5 divided by 100
PRGD	SBJCAX corresponds to one of the following Common Aggregation Hierarchy codes: CAH06-01-04, CAH15-01-01, CAH15-01-02, CAH15-01-03, CAH15-01-04 (only when SBJCAX = 100436, 100437, 100663), CAH15-01-05, CAH15-01-06, CAH15-02, CAH15-03, CAH15-04-01, CAH15-04-02, CAH16, CAH17-01-01, CAH17-01-02, CAH17-01-03, CAH17-01-04, CAH17-01-05, CAH17-01-07, CAH17-01-08, CAH17-01-09, CAH19-01, CAH19-02, CAH19-04-08, CAH20-01-01, CAH20-01-02, CAH20-01-04, CAH20-01-05, CAH20-02, CAH22, CAH23, CAH24-01-02 and not above	

86. In some cases, the sum of PRGA, PRGB, PRGC1, PRGC2 and PRGD may not equal one. In this case we scale them so that their sum is one.

Calculation of exclusion flags

EXCL1

87. Field indicating students who have left prior to the start of the academic year.

Value	Description	Definition
1	Student not active in academic year	ENDDATE ≠ BLANK and ENDDATE < 1 August 2019
0	Otherwise	Otherwise

EXCL2

88. Field indicating further education (FE), National Vocational Qualification (NVQ) or Qualified Teacher Status (QTS) only or visiting students.

Value	Description	Definition
1	FE, NVQ, QTS only or visiting student	COURSEAIM = C43, E40, H43, H91, I71, I91, J43, J45, L91, M43, M45, M91, P-X*
0	Otherwise	Otherwise

^{*} First character of COURSEAIM.

EXCL4

89. Field indicating students with no qualification aim.

Value	Description	Definition
1	Student with no qualification aim	COURSEAIM = C99, H99, I99, J99, M99
0	Otherwise	Otherwise

EXCL8

90. Field indicating students explicitly excluded from the HESES population.

Value	Description	Definition
1	from the HESES population	FUNDLEV = 99 or FUNDCOMP = 9 or (INSTAPP = 1 and LOADYRB = 0 and COMDATE < 1 August 2019 and TYPEYR = 2, 4)
0	Otherwise	Otherwise

EXCL₁₆

91. Field indicating students who are mostly taught outside of the UK.

Value	Description	Definition
1	Student taught mostly outside the UK	(LOCSDY = S or EXCHANGE = Z) and MSTUFEE ≠ 02, 03, 04, 52, 53, 54
0	Otherwise	Otherwise

EXCL32

92. Field indicating students who are dormant, on sabbatical or writing up.

Value	Description	Definition
1	Student who is dormant, on sabbatical or writing up	MODE = 63, 64 or (MODE = 43, 44, 51, 73, 74 and (MCDATE = BLANK or MCDATE < ANNIV + 14)) or STULOAD = 0
0	Otherwise	Otherwise

EXCL64

93. Field indicating incoming exchange students.

Value	Description	Definition
1	Incoming exchange student	EXCHANGE = 4, G
0	Otherwise	Otherwise

EXCL128

94. Field indicating students with an FTE of less than 0.03.

Value	Description	Definition
1	Student with an FTE of less than 0.03	HESESFTE < 3
0	Otherwise	Otherwise

EXCL256

95. Field indicating students on non-standard years of instance in their final year of study.

Value	Description	Definition
1	Student on non-standard year of instance in final year of study	TYPEYR ≠ 1 and ENDDATE < ANNIV + 14 and ENDDATE ≠ BLANK
0	Otherwise	Otherwise

EXCL512

96. Field indicating students who withdrew before 2 December 2018 or left within 14 days of starting the instance without completing.

Value	Description	Definition
1	Student who withdrew before 2 December 2019 or left within 14 days of starting the instance without completing	REDUCEDI = 08 or (ENDDATE ≠ BLANK and ENDDATE < 2 December 2019 and RSNEND ≠ 01, 98) or (ENDDATE ≠ BLANK and ENDDATE – COMDATE < 14 and RSNEND ≠ 01, 98)
0	Otherwise	Otherwise

EXCL1024

97. Field indicating where the student has an FTE of at least 0.03 but does not have any HESA course subject information.

Value	Description	Definition
1	,	HESESFTE ≥ 3 and (PRGA + PRGB + PRGC1 + PRGC2 + PRGD) = 0

Value	Description	Definition
0	Otherwise	Otherwise

HESEXCL

98. This field indicates whether the student will be included in Tables 1 to 4 of the HESES recreation. For students excluded from Tables 1 to 4 of the HESES recreation, HESEXCL contains the sum of all applicable values from the table below.

Value	Description	Definition
1	Student not active in academic year	EXCL1 = 1
2	FE, NVQ, QTS only or visiting student	EXCL2 = 1
4	Student with no qualification aim	EXCL4 = 1
8	Student explicitly excluded from the HESES population	EXCL8 = 1
16	Student taught mostly outside the UK	EXCL16 = 1
32	Student who is dormant, sabbatical or writing up	EXCL32 = 1
64	Incoming exchange student	EXCL64 = 1
128	Student with an FTE of less than 0.03	EXCL128 = 1
256	Student on non-standard year of instance in final academic year	EXCL256 = 1
512	Student who withdrew before 2 December 2019 or left within 14 days of starting the instance without completing	EXCL512 = 1
1024	No HESA course subject information and FTE of at least 0.03	EXCL1024 = 1
0	Otherwise	None of the above

99. This field contains the exclusion reason(s) for the instance. It is calculated as (1 × EXCL1) + (2 × EXCL2) +...+ (1024 × EXCL1024). The reason(s) which contribute to the exclusion of an instance can therefore be calculated. For example, if HESEXCL = 137, by subtracting figures from the above table and starting at the bottom, we see that the instance has an FTE of less than 0.03 (EXCL128 = 1), is explicitly excluded from the HESES population (EXCL8 = 1) and is not active in the academic year (EXCL1 = 1).

Table 4 recreation algorithms

HESYAMOBSCHEME

100. This field identifies if the year of instance is on an Erasmus+ scheme. This includes the mobilities not explicitly shown in the individualised file.

Value	Description	Definition
1	,	At least one occurrence of MOBSCHEME = 03 across all mobilities
0	Otherwise	Otherwise

HESYATYPE

101. This field identifies Erasmus+ years abroad.

Value	Description	Definition
ERASMUS		SPECFEE = 3 or HESYAMOBSCHEME = 1
OTHER	Otherwise	Otherwise

HESYAPOP

102. This field indicates if the year of instance is included in the count of years abroad included in Table 4.

Value	Description	Definition
1	Student on year abroad	HESEXCL = 0 and HESLEVEL = UG and HESMODE = FTS, SWOUT and HESTYPE ≠ ISOV and (SPECFEE = 2, 3 or (SPECFEE = 1 and LOCSDY = T))
0	Otherwise	Otherwise

Table 5 recreation algorithms

HESRESSTAT

103. This field allocates students to the five categories of fundability and residential status.

Value	Description	Definition
HOMEF_UK	Fundable, UK-domiciled	HESTYPE = HOMEF and DOMICILE = XF, XG, XH, XI, XK
HOMEF_OTH	Fundable, other Home and EU	HESTYPE = HOMEF and not above
HOMENF_UK	Non-fundable, UK-domiciled	HESTYPE = HOMENF and DOMICILE = XF, XG, XH, XI, XK
HOMENF_OTH	Non-fundable, other Home and EU	HESTYPE = HOMENF and not above
ISOV	Island and overseas	HESTYPE = ISOV

HESBROADLEVEL

104. This field shows the broad level of study in 2019-20 for the purpose of defining new entrant status.

Value	Description	Definition
UG	Undergraduate	HESLEVEL = UG
PGT	Postgraduate taught	HESLEVEL = PGT_UGF, PGT_ML, PGT_OTH
PGR	Postgraduate research	HESLEVEL = PGR

HESUG18

105. This field indicates how many undergraduate taught years of instance for a higher education course recognised for OfS funding purposes were associated with the UKPRN and HUSID in the 2018-19 HESA Student record (HESLEVEL in 2018-19 = UG). This field will be blank if no HESA student data is available for the provider in 2018-19.

HESPGT18

106. This field indicates how many postgraduate taught years of instance for a higher education course recognised for OfS funding purposes were associated with the UKPRN and HUSID in the 2018-19 HESA Student record (HESLEVEL in 2018-19 = PGT_ML, PGT_OTH, PGT_UGF). This field will be blank if no HESA student data is available for the provider in 2018-19.

HESPGR18

107. This field indicates how many postgraduate research taught years of instance for a higher education course recognised for OfS funding purposes were associated with the UKPRN and HUSID in the 2018-19 HESA Student record (HESLEVEL in 2018-19 = PGR). This field will be blank if no HESA student data is available for the provider in 2018-19.

HESUG17

108. This field indicates how many undergraduate taught years of instance for a higher education course recognised for OfS funding purposes were associated with the UKPRN and HUSID in the 2017-18 HESA Student record (HESLEVEL in 2017-18 = UG). This field will be blank if no HESA student data is available for the provider in 2017-18.

HESPGT17

109. This field indicates how many postgraduate taught years of instance for a higher education course recognised for OfS funding purposes were associated with the UKPRN and HUSID in the 2017-18 HESA Student record (HESLEVEL in 2017-18 = PGT, PGT_UGF). This field will be blank if no HESA student data is available for the provider in 2017-18.

HESPGR17

110. This field indicates how many postgraduate research taught years of instance for a higher education course recognised for OfS funding purposes were associated with the UKPRN and HUSID in the 2017-18 HESA student record (HESLEVEL in 2017-18 = PGR). This field will be blank if no HESA student data is available for the provider in 2017-18.

HESNEWENTRANT

111. This field indicates whether a student is a new entrant according to the definition in HESES19.

Value	Description	Definition
1	Has not been active at the same broad level at the registering provider in either of the two previous academic years, linked by UKPRN and HUSID	COMDATE > 31 July 2019 and HESEXCL = 0 and ((HESBROADLEVEL = UG and HESUG18 = 0, BLANK and HESUG17 = 0, BLANK) or (HESBROADLEVEL = PGT and HESPGT18 = 0, BLANK and HESPGT17 = 0, BLANK) or (HESBROADLEVEL = PGR and HESPGR18 = 0, BLANK and HESPGR17 = 0, BLANK))
0	Otherwise	Otherwise

112. Where a student starts more than one instance at the same broad level in the same academic year and could be considered as a new entrant for each instance they will be recorded as a new entrant for only one. If one such instance has an earlier start date than the others the student will be recorded as a new entrant for that instance.

Tables 6a-6c recreation algorithms

HESHEALTHPROP1

113. This field shows the proportion of the student's activity that is allocated to the health profession shown in HESHEALTHPROF1.

Value	Definition
1	(HESHEALTHPROF1 ≠ BLANK and HESHEALTHPROF2 = BLANK) or HESHEALTHPROF1 = DENTHE
0.5	HESHEALTHPROF1 ≠ BLANK and HESHEALTHPROF2 ≠ BLANK, DENTHE and not above
0	Otherwise

HESHEALTHPROP2

114. This field shows the proportion of the student's activity that is allocated to the health profession shown in HESHEALTHPROF2.

Value	Definition
1	(HESHEALTHPROF1 = BLANK and HESHEALTHPROF2 ≠ BLANK) or HESHEALTHPROF2 = DENTHE
0.5	HESHEALTHPROF1 ≠ BLANK, DENTHE and HESHEALTHPROF2 ≠ BLANK and not above
0	Otherwise

HESHEALTHPOP

115. This field identifies students that will be included in the health population and is based on, level of study, fundability and residential status, and the profession of the pre-registration course. The population is defined in HESES19 (Annex L, paragraph 3).

Value	Description	Definition
1	Year of instance included in Tables 6a to 6c	HESEXCL = 0 and (UKPRN ≠ 10007773 or (UKPRN = 10007773 and DOMICILE ≠ XG, XH, XI)) and COURSEAIM = H16, H62, I16, J26, M16, M26, M86 and HESLEVEL = UG, PGT_UGF and HESTYPE = HOMEF, HOMENF and (HESHEALTHPROF1 ≠ BLANK or HESHEALTHPROF2 ≠ BLANK)
0	Otherwise	Otherwise

Overrides

HESOVER

116. This field indicates the primary derived field(s) that have been overridden for the student. For example, if HESOVER = 74, by subtracting figures from the following table starting at the bottom, we see that the student has had overrides for HESTYPE (HESOVER = 64), HESLEVEL (HESOVER = 8) and HESESFTE (HESOVER = 2) applied.

Value	Description
1	Override to HESCOMP (not used in 2019-20)
2	Override to HESESFTE
4	Override to HESEXCL
8	Override to HESLEVEL
16	Override to HESMODE
32	Override to HESREG
64	Override to HESTYPE
128	Override to HESYAPOP
256	Override to HESYATYPE
512	Override to LENGTH
1024	Overrides to PRGA-PRGD
2048	Override to STUBID
4096	Override to HESHEALTHPROP1/2
8192	Override to HESHEALTHPOP

Recreating Columns 3, 4 and 4a

HESNCOMPLEVEL_Y

117. These fields identify the level at which HESNCOMPRATE_Y (where Y is each price group) is calculated for the year of instance.

Value	Description	Definition
BLANK	There is no activity in the price group for this instance in the 2019-20 HESA Student data.	PRGY = 0
BLANK	There is activity in the price group for this instance in the 2019-20 HESA Student data, but the year of instance is included in Tables 6a-6c of the HESES19 recreation.	PRGY > 0 and HESHEALTHPOP = 1
1	More than 9 years of instance in Columns 1 and 2 of Tables 1, 2 and 3 (excluding those also included in Tables 6a, 6b and 6c) in HESES19 for this provider with the same mode, level, residential and fundability status, price group and length, and not above.	PRGY > 0 and HESHEALTHPOP = 0
2	More than 9 years of instance in Columns 1 and 2 of Tables 1, 2 and 3 (excluding those also included in Tables 6a, 6b and 6c) in HESES19 for this provider with the same mode, level, residential and fundability status, and price group, and not above.	PRGY > 0 and HESHEALTHPOP = 0
3	More than 9 years of instance in Columns 1 and 2 of Tables 1, 2 and 3 (excluding those also included in Tables 6a, 6b and 6c) in HESES19 for this provider with the same mode and level, and not above.	PRGY > 0 and HESHEALTHPOP = 0
4	More than 9 years of instance in Columns 1 and 2 of Tables 1, 2 and 3 (excluding those also included in Tables 6a, 6b and 6c) in HESES19 for this provider with the same mode, and not above.	PRGY > 0 and HESHEALTHPOP = 0
5	Otherwise	PRGY > 0 and HESHEALTHPOP = 0

${\bf HESNCOMPRATE_Y}$

118. These fields show an estimate of the likelihood that the activity in each price group (Y = A, B, C1, C2, D) was not completed. Each estimate is based on a non-completion rate taken from HESES19 at the appropriate level as identified in HESNCOMPLEVEL_Y. This rate is calculated as follows: (-1 × Column 3) ÷ (Column 1 + Column 2).

Value	Definition
BLANK	HESNCOMPLEVEL_Y = BLANK
Calculated from years of instance in Tables 1, 2 and 3 (excluding those also included in Tables 6a, 6b and 6c) of HESES19 for this provider with the same mode, level, residential and fundability status, price group and length.	HESNCOMPLEVEL_Y = 1
Calculated from years of instance in Tables 1, 2 and 3 (excluding those also included in Tables 6a, 6b and 6c) of HESES19 for this provider with the same mode, level, residential and fundability status, and price group.	HESNCOMPLEVEL_Y = 2
Calculated from years of instance in Tables 1, 2 and 3 (excluding those also included in Tables 6a, 6b and 6c) of HESES19 for this provider with the same mode and level.	HESNCOMPLEVEL_Y = 3

Value	Definition
Calculated from years of instance in Tables 1, 2 and 3 (excluding those also included in Tables 6a, 6b and 6c) of HESES19 for this provider with the same mode.	HESNCOMPLEVEL_Y = 4
Calculated from years of instance in Tables 1, 2 and 3 (excluding those also included in Tables 6a, 6b and 6c) of HESES19 for this provider.	HESNCOMPLEVEL_Y = 5

HESNCOMPLEVEL_Z

119. These fields identify the level at which HESNCOMPRATE_Z (Z = HESHEALTHPROFX, e.g. HESNCOMPRATE_DENTHE) is calculated for the year of instance.

Value	Description	Definition
BLANK	The year of instance is not included in Tables 6a-6c of the HESES19 recreation.	HESHEALTHPOP = 0
BLANK	The year of instance is included in Tables 6a-6c of the HESES19 recreation, but there is no activity in the profession for this instance in the 2019-20 HESA Student Alternative data.	HESHEALTHPOP = 1 and (HESHEALTHPROFX ≠ Z or (HESHEALTHPROFX = Z and HESHEALTHPROPX = 0))
1	More than 9 years of instance in Columns 1 and 2 of Tables 6a, 6b and 6c in HESES19 for this provider with the same mode, profession, residential and fundability status, and level, and not above.	HESHEALTHPOP = 1 and (HESHEALTHPROFX = Z and HESHEALTHPROPX ≠ 0)
2	More than 9 years of instance in Columns 1 and 2 of Tables 6a, 6b and 6c in HESES19 for this provider with the same mode, profession, and residential and fundability status, and not above.	HESHEALTHPOP = 1 and (HESHEALTHPROFX = Z and HESHEALTHPROPX ≠ 0)
3	More than 9 years of instance in Columns 1 and 2 of Tables 6a, 6b and 6c in HESES19 for this provider with the same mode and profession, and not above.	HESHEALTHPOP = 1 and (HESHEALTHPROFX = Z and HESHEALTHPROPX ≠ 0)
4	More than 9 years of instance in Columns 1 and 2 of Tables 6a, 6b and 6c in HESES19 for this provider with the same mode, and not above.	HESHEALTHPOP = 1 and (HESHEALTHPROFX = Z and HESHEALTHPROPX ≠ 0)
5	Otherwise	HESHEALTHPOP = 1 and (HESHEALTHPROFX = Z and HESHEALTHPROPX ≠ 0)

HESNCOMPRATE_Z

120. These fields show an estimate of the likelihood that the activity in each health profession (Z = HESHEALTHPROFX) was not completed. Each estimate is based on a non-completion rate taken from HESES19 at the appropriate level as identified in HESNCOMPLEVEL_Z. This rate is calculated as follows: (-1 × Column 3) ÷ (Column 1 + Column 2).

Value	Definition
BLANK	HESNCOMPLEVEL_Z = BLANK

Value	Definition
Calculated from years of instance in Tables 6a, 6b and 6c of HESES19 for this provider with the same mode, profession, residential and fundability status, and level.	HESNCOMPLEVEL_Z = 1
Calculated from years of instance in Tables 6a, 6b and 6c of HESES19 for this provider with the same mode, profession, and residential and fundability status.	HESNCOMPLEVEL_Z = 2
Calculated from years of instance in Tables 6a, 6b and 6c of HESES19 for this provider with the same mode and profession.	HESNCOMPLEVEL_Z = 3
Calculated from years of instance in Tables 6a, 6b and 6c of HESES19 for this provider with the same mode.	HESNCOMPLEVEL_Z = 4
Calculated from years of instance in Tables 6a, 6b and 6c of HESES19 for this provider.	HESNCOMPLEVEL_Z = 5

HESCOL3_PROFX

121. These fields show the contribution of the activity in each health profession (X = 1, 2; Z = HESHEALTHPROFX) to Column 3 of Tables 1-3 and Tables 6a-6c of the HESES19 recreation. Note that HESCOL3_PROF1 is the contribution for HESHEALTHPROF1, and HESCOL3_PROF2 is the contribution for HESHEALTHPROF2.

Value	Description	Definition
BLANK	The year of instance is not included in Tables 6a-6c of the HESES19 recreation.	HESHEALTHPOP = 0
0	The year of instance is included in Tables 6a-6c of the HESES19 recreation, but a profession is not recorded, or there is no activity in the profession.	HESHEALTHPOP = 1 and (HESHEALTHPROFX = BLANK or HESNCOMPRATE_Z = BLANK)
HESHEALTHPROPX × HESNCOMPRATE_Z	The contribution of the activity in the profession to Column 3 of Tables 1-3 and Tables 6a-6c of the HESES19 recreation.	HESNCOMPRATE_Z ≠ BLANK

HESCOL3_Y

122. These fields show the contribution of the activity in each price group (Y = A, B, C1, C2, D) to Column 3 of Tables 1-3 of the HESES19 recreation. (For years of instance included in Tables 6a-6c, they also show the contribution of the activity in each price group to Column 3 of Tables 6a-6c of the HESES19 recreation).

Value	Description	Definition
0	There is no activity in the price group for this instance.	PRGY = 0

Value	Description	Definition
PRGY × HESNCOMPRATE_Y	The contribution of the activity in the price group to Column 3 of Tables 1-3 of the HESES19 recreation, where the year of instance is not included in Tables 6a-6c of the HESES19 recreation.	PRGY > 0 and HESHEALTHPOP = 0
HESCOL3_PROF1 + HESCOL3_PROF2	The contribution of the activity in the price group to Column 3 of Tables 1-3 of the HESES19 recreation, where the year of instance is included in Tables 6a-6c of the HESES19 recreation.	PRGY > 0 and HESHEALTHPOP = 1

HESCOL3

123. This field shows the contribution of the year of instance to Column 3 of Tables 1-3 of the HESES19 re-creation. It is the sum of HESCOL3_A, HESCOL3_B, HESCOL3_C1, HESCOL3_C2 and HESCOL3_D.

HESCOL4_PROFX

124. These fields show the contribution of the activity in each health profession (X = 1, 2; Z = HESHEALTHPROFX) to Column 4 of Tables 1-3 and Tables 6a-6c of the HESES19 recreation. Note that HESCOL3_PROF1 is the contribution for HESHEALTHPROF1, and HESCOL3_PROF2 is the contribution for HESHEALTHPROF2.

Value	Description	Definition
BLANK	The year of instance is not included in Tables 6a-6c of the HESES19 recreation.	HESHEALTHPOP = 0
0	The year of instance is included in Tables 6a-6c of the HESES19 recreation, but a profession is not recorded, or there is no activity in the profession.	HESHEALTHPOP = 1 and (HESHEALTHPROFX = BLANK or HESNCOMPRATE_Z = BLANK)
HESHEALTHPROPX × (1 – HESNCOMPRATE_Z)	The contribution of the activity in the profession to Column 4 of Tables 1-3 and Tables 6a-6c of the HESES19 recreation.	HESNCOMPRATE_Z ≠ BLANK

HESCOL4 Y

125. These fields show the contribution of the activity in each price group (Y = A, B, C1, C2, D) to Column 4 of Tables 1-3 of the HESES19 recreation. (For years of instance included in Tables 6a-6c, they also show the contribution of the activity in each price group to Column 4 of Tables 6a-6c of the HESES19 recreation).

Value	Description	Definition
0	There is no activity in the price group for this instance.	PRGY = 0

Value	Description	Definition
PRGY × (1 – HESNCOMPRATE_Y)	The contribution of the activity in the price group to Column 4 of Tables 1-3 of the HESES19 recreation, where the year of instance is not included in Tables 6a-6c of the HESES19 recreation.	PRGY > 0 and HESHEALTHPOP = 0
HESCOL4_PROF1 + HESCOL4_PROF2	The contribution of the activity in the price group to Column 4 of Tables 1-3 of the HESES19 recreation, where the year of instance is included in Tables 6a-6c of the HESES19 recreation.	PRGY > 0 and HESHEALTHPOP = 1

HESCOL4

126. This field shows the contribution of the year of instance to Column 4 of Tables 1-3 of the HESES19 re-creation. It is the sum of HESCOL4_A, HESCOL4_B, HESCOL4_C1, HESCOL4_C2 and HESCOL4_D.

FTEA, FTEB, FTEC1, FTEC2, FTED

127. The estimated FTE of the activity assigned to each price group is contained in the five FTE fields as shown in the table below. These fields are calculated by multiplying the contribution of the activity in the price group to Column 4 of Tables 1-3 of the HESES19 recreation (HESCOL4 A, HESCOL4 B, HESCOL4 C1, HESCOL4 C2, HESCOL4 D).

Field	Definition
FTEA	HESCOL4_A x HESESFTE
FTEB	HESCOL4_B x HESESFTE
FTEC1	HESCOL4_C1 x HESESFTE
FTEC2	HESCOL4_C2 x HESESFTE
FTED	HESCOL4_D x HESESFTE

HESCOL4A

128. This field is the recreated HESES19 FTE for the year of instance. For part-time years of instance, this is used to populate Column 4a of Table 3. It is calculated by multiplying the contribution of the year of instance to Column 4 of Tables 1-3 of the HESES19 recreation (HESCOL4) by HESESFTE, and then dividing by 100.

