

Office for  
Students



# **2020-21 HESA Student post-collection outputs**

**Annual Financial Return 2021 higher  
education student FTEs data summary  
technical document and rebuild instructions**

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# Summary

1. This document describes the Annual Financial Return 2021 (AFR21) higher education student FTEs data summary files supplied as part of the 2020-21 Higher Education Statistics Agency (HESA) Student post-collection outputs, and the algorithms used to generate the data needed to recreate the AFR21 higher education student FTEs from HESA Student data. Throughout the document, fields taken or derived from the HESA Student record are shown in capitals.
2. The AFR21 higher education student FTEs data summary files should be used by staff responsible for the completion of the AFR21 or the individualised data returns at higher education providers. This document is intended to help them understand in detail how the HESA Student data can be used to populate the FTEs in the AFR21.
3. The AFR21 higher education student FTEs data summary consists of two files. These are:
  - a. FTEs data summary workbook 'AFR21\_FTE\_XXXXXXXX.xlsx' where XXXXXXXX is the UK Provider Reference Number (UKPRN) for the provider.
  - b. FTEs data summary individualised file 'AFR21\_FTE\_XXXXXXXX\_IND.csv' where XXXXXXXX is the UK Provider Reference Number (UKPRN) for the provider.

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

4. These files can be accessed from the 2020-21 Post-collection outputs area of the OfS portal. Access details will be sent to the appropriate contacts at providers when the files are available. The data summary workbook can also be downloaded from the 'Templates' download package in the Annual Financial Return 2021 portal area. The individualised file is only available in the post-collection outputs area.
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 2020-21 (<https://www.hesa.ac.uk/collection/c20051>).
6. This document is for providers that had a financial year end of 31<sup>st</sup> July in the financial years 2018, 2019, 2020 and 2021. Providers with other year end dates should not use this document.
7. As this is the first time that this output has been provided, the algorithms listed in this document are experimental. This means that changes may be made to the algorithms when this output is next produced. If you have any feedback on any of the algorithms used to create this output, please email [FinanceData@officeforstudents.org.uk](mailto:FinanceData@officeforstudents.org.uk).

## AFR21 higher education student FTEs data summary workbook

8. The AFR21 higher education student FTEs data summary workbook is the Excel workbook AFR21\_FTE\_XXXXXXXX.xlsx. This file contains a table of similar structure to Table 7 in the AFR21 workbook, with the financial years ending in 2020 and 2021. This table is populated with FTEs obtained from the HESA Student data.

## **AFR21 higher education student FTEs data summary individualised file**

9. You should use the individualised file AFR21\_FTE\_XXXXXXXX\_IND.csv when working through this document. The individualised file contains the values of all fields used to generate the AFR21 higher education student FTEs data summary workbook AFR21\_FTE\_XXXXXXXX.xlsx.
10. Fields taken from the HESA Student return or derived as part of the AFR21 higher education student FTEs data summary workbook are shown in capitals using the names given in Tables 1 and 2 respectively. Fields prefixed with 'AFR' or 'HESA' are derived, all others are taken directly from the HESA Student returns, as indicated in Table 1.
11. Specific instructions for rebuilding the AFR21 higher education student FTEs data summary workbook from the individualised file are provided in this document.
12. The individualised file contains one record per student instance per HESA reporting year from 2017-18 to 2020-21. For example, a student instance (each unique combination of UKPRN, HUSID and NUMHUS) returned in the 2019-20 and 2020-21 HESA Student returns will have two rows in the individualised file, one for each HESA reporting year.

# HESA Student fields used to create AFR21 higher education student FTEs data summary

13. The HESA Student fields used to generate the data in the AFR21 higher education student FTEs data summary are listed in Table 1.

**Table 1: Fields used in the AFR21 higher education student FTEs data summary**

Entity	Field	Description	Column in individualised file
Course	COURSEAIM	General qualification aim of instance	AL
Course	COURSEID	Course identifier	F
Course	TTCID	Teacher training course	AS
Instance	COMDATE	Start date of instance	AK
Instance	ENDDATE	End date of instance	AM
Instance	EXCHANGE	Identifies whether the student is an exchange student	AN
Instance	LOCSDY	Location of study	AO
Instance	MODE	Mode of study	AP
Instance	NUMHUS	Student instance identifier	C
Instance	OWNINST	Provider's own instance identifier	E
Instance	SPLENGTH	Expected length of study	AQ
Instance	STULOAD	Student instance full-time equivalence (FTE)	AR
Instance	UNITLGTH	Units of length	AT
Institution	UKPRN	UK Provider Reference Number	A
Student	HUSID	HESA unique student identifier	B
Student	OWNSTU	Provider's own identifier for a student	D
HESA derived field	XDOMHM01	Domicile ( <u>HESA derived field</u> )	AU

## Description of derived fields

14. The derived fields used to generate the AFR21 higher education student FTEs data summary are listed in Table 2.

**Table 2: AFR21 higher education student FTEs data summary derived fields**

Derived field name	Description	Paragraph	Column in individualised file
AFRDOMICILE	Domicile	17	H
AFRELSP	Expected length of study programme	19	AJ
AFRENT20	Students that were entrants in financial year ending 2020	24	Q
AFRENT21	Students that were entrants in financial year ending 2021	24	M
AFRFTE18	Student FTE for financial year ending 2018	25	AD
AFRFTE19	Student FTE for financial year ending 2019	25	X
AFRFTE20	Student FTE for financial year ending 2020	25	R
AFRFTE21	Student FTE for financial year ending 2021	25	N
AFRFYE17	Provider's 2017 financial year end date	22	AH
AFRFYE18	Provider's 2018 financial year end date	22	AB
AFRFYE19	Provider's 2019 financial year end date	22	V
AFRFYE20	Provider's 2020 financial year end date	22	O
AFRFYE21	Provider's 2021 financial year end date	22	K
AFRLEVEL	Level of study	21	J
AFRMODE	Mode of study	20	I
AFRPGR18	Students at postgraduate research level in financial year ending 2018	28	AG

Derived field name	Description	Paragraph	Column in individualised file
AFRPGR19	Students at postgraduate research level in financial year ending 2019	31	AA
AFRPGR20	Students at postgraduate research level in financial year ending 2020	34	U
AFRPGT18	Students at postgraduate taught level in financial year ending 2018	27	AF
AFRPGT19	Students at postgraduate taught level in financial year ending 2019	30	Z
AFRPGT20	Students at postgraduate taught level in financial year ending 2020	33	T
AFRPOP18	Student instances in annual financial return population for year ending 2018	23	AC
AFRPOP19	Student instances in annual financial return population for year ending 2019	23	W
AFRPOP20	Student instances in annual financial return population for year ending 2020	23	P
AFRPOP21	Student instances in annual financial return population for year ending 2021	23	L
AFRUG18	Students at undergraduate level in financial year ending 2018	26	AE
AFRUG19	Students at undergraduate level in financial year ending 2019	29	Y
AFRUG20	Students at undergraduate level in financial year ending 2020	32	S
AFRWEEKS	Number of weeks of course	18	AI
HESASOURCE	HESA Student collection that the instance was returned in	16	G

## Linking between years

15. We have linked 2020-21 HESA data to 2019-20, 2018-19 and 2017-18 HESA data using the fields UKPRN and HUSID, for the purpose of deriving AFRENTRANT20 and AFRENTRANT21.

## Recreation algorithms

### HESASOURCE

16. This field contains the reporting period of the HESA Student collection that the instance was returned in. For example, for records returned in the 2020-21 HESA Student collection (C21051), HESASOURCE = 2020-21.

### AFRDOMICILE

17. This field allocates students to a domicile.

Value	Description	Definition
UK	UK-domiciled students	XDOMHM01 = 1, 2, 3, 4
OEU	Other EU-domiciled students	XDOMHM01 = 6
NONEU	Non-EU-domiciled students	Otherwise

### AFRWEEEKS

18. This field identifies the number of weeks in a student's course.

Value	Description	Definition
$SLENGTH \times 52$	The unit of length associated with SLENGTH is years, therefore AFRWEEKS is SLENGTH multiplied by 52.	UNITLGTH = 1 and SLENGTH $\neq$ BLANK
$((SLENGTH \div 12) \times 52) + ((SLENGTH \text{ mod } 12) \times 4)$	The unit of length associated with SLENGTH is months. Therefore, the value of SLENGTH is divided by twelve and AFRWEEKS is the sum of the quotient multiplied by 52 and the remainder multiplied by four.	UNITLGTH = 2 and SLENGTH $\neq$ BLANK
SLENGTH	The unit of length associated with SLENGTH is weeks, therefore AFRWEEKS is equal to SLENGTH.	UNITLGTH = 3 and SLENGTH $\neq$ BLANK
$SLENGTH \div 5$	The unit of length associated with SLENGTH is days, therefore AFRWEEKS is SLENGTH divided by five.	UNITLGTH = 4 and SLENGTH $\neq$ BLANK

Value		Definition
1	The unit of length associated with SPLength is hours, therefore AFRWEEKS is set to one.	UNITLGTH = 5
BLANK	The unit of length associated with SPLength is null or unknown.	Otherwise

## AFRELSP

19. This field identifies the expected length of study of programme.

Value	Description	Definition
1	Less than five weeks	AFRWEEKS < 5
2	Greater than or equal to five weeks and less than 24 weeks	AFRWEEKS >= 5 and AFRWEEKS < 24
3	Greater than or equal to 24 weeks and less than or equal to one year	AFRWEEKS >= 24 and AFRWEEKS <= 52
4	Greater than one year and less than or equal to two years	AFRWEEKS > 52 and AFRWEEKS <= 104
5	Greater than two years and less than or equal to three years	AFRWEEKS > 104 and AFRWEEKS <= 156
6	Greater than three years and less than or equal to four years	AFRWEEKS > 156 and AFRWEEKS <= 208
7	Greater than four years and less than or equal to five years	AFRWEEKS > 208 and AFRWEEKS <= 260
8	Greater than five years and less than or equal to six years	AFRWEEKS > 260 and AFRWEEKS <= 312
9	Greater than six years and less than 20 years	AFRWEEKS > 312 and AFRWEEKS < 1040
A	Not known or expected length of study programme is greater or equal to 20 years.	AFRWEEKS >= 1040 or SPLength = BLANK or UNITLGTH = 9, BLANK

## AFRMODE

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

Value	Description	Definition
FTS	Full-time	MODE = 01, 12, 73, 23, 24 or (MODE = 02, 13, 25 and AFRELSP = 3, 4, 5, 6, 7, 8, 9, A)
PT	Part-time	MODE = 14, 31, 33, 34, 35, 36, 38, 39, 74 or (MODE = 02, 13, 25 and AFRELSP = 1, 2)
BLANK	Otherwise	Otherwise

## AFRLEVEL

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

Value	Description	Definition
UG	Undergraduate	COURSEAIM = M22, M26, M28, H00, H11, H12, H16, H18, H22, H23, H50, I00, I11, I12, I16, H13, H41, H42, H43, H60, H61, H62, H70, H71, H72, H76, H78, H79, H80, H81, H88, H90, H91, H99, I60, I61, I70, I71, I72, I73, I74, I76, I78, I79, I80, I81, I90, I91, I99, J10, J13, J16, J20, J26, J30, J41, J42, J43, J45, J76, J80, J90, J99, C13, C20, C30, C41, C42, C43, C77, C78, C80, C90, C99
PGT	Postgraduate taught (excluding PGCE)	COURSEAIM = E00, E13, E40, E43, E90, M00, M01, M02, M10, M11, M13, M16, M40, M41, M42, M43, M44, M45, M50, M70, M72, M73, M76, M78, M79, M80, M86, M88, M90, M91, M99
PGCE	PGCE	COURSEAIM = M71
PGR	Postgraduate research	COURSEAIM = D00, D01, D90, L00, L80, L90, L91, L99
BLANK	Otherwise	Otherwise

## AFRFYE17, AFRFYE18, AFRFYE19, AFRFYE20, AFRFYE21

22. These fields contain the provider's year end dates for each financial year. Please email [FinanceData@officeforstudents.org.uk](mailto:FinanceData@officeforstudents.org.uk) if any of these dates are incorrect.

## AFRPOP18, AFRPOP19, AFRPOP20, AFRPOP21

23. These fields identify the student instances in the AFR population for each financial year.

Field	Definition	Value
AFRPOP18	(ENDDATE > AFRFYE17 or ENDDATE = BLANK) and COMDATE <= AFRFYE18 and HESASOURCE = 2017-18 and TTCID = 0, 1, 2, 5, 9, D, Q and LOCSDY ≠ S and EXCHANGE = N, Y, Z and AFRMODE ≠ BLANK and AFRLEVEL ≠ BLANK	1
AFRPOP19	(ENDDATE > AFRFYE18 or ENDDATE = BLANK) and COMDATE <= AFRFYE19 and HESASOURCE = 2018-19 and TTCID = 0, 1, 2, 5, 9, D, Q and LOCSDY ≠ S and EXCHANGE = N, Y, Z and AFRMODE ≠ BLANK and AFRLEVEL ≠ BLANK	1
AFRPOP20	(ENDDATE > AFRFYE19 or ENDDATE = BLANK) and COMDATE <= AFRFYE20 and HESASOURCE = 2019-20 and TTCID = 0, 1, 2, 5, 9, D, Q and LOCSDY ≠ S and EXCHANGE = N, Y, Z and AFRMODE ≠ BLANK and AFRLEVEL ≠ BLANK	1
AFRPOP21	(ENDDATE > AFRFYE20 or ENDDATE = BLANK) and COMDATE <= AFRFYE21 and HESASOURCE = 2020-21 and TTCID = 0, 1, 2, 5, 9, D, Q and LOCSDY ≠ S and EXCHANGE = N, Y, Z and AFRMODE ≠ BLANK and AFRLEVEL ≠ BLANK	1

## AFRUG18

24. This field indicates how many undergraduate taught years of instance were associated with the UKPRN and HUSID in the financial year ending in 2018 (AFRLEVEL in 2017-18 = UG).

### **AFRPGT18**

25. This field indicates how many postgraduate taught years of instance were associated with the UKPRN and HUSID in the financial year ending in 2018 (AFRLEVEL in 2017-18 = PGT, PGCE).

### **AFRPGR18**

26. This field indicates how many postgraduate research years of instance were associated with the UKPRN and HUSID in the financial year ending in 2018 (AFRLEVEL in 2017-18 = PGR).

### **AFRUG19**

27. This field indicates how many undergraduate taught years of instance were associated with the UKPRN and HUSID in the financial year ending in 2019 (AFRLEVEL in 2018-19 = UG).

### **AFRPGT19**

28. This field indicates how many postgraduate taught years of instance were associated with the UKPRN and HUSID in the financial year ending in 2019 (AFRLEVEL in 2018-19 = PGT, PGCE).

### **AFRPGR19**

29. This field indicates how many postgraduate research years of instance were associated with the UKPRN and HUSID in the financial year ending in 2019 (AFRLEVEL in 2018-19 = PGR).

### **AFRUG20**

30. This field indicates how many undergraduate taught years of instance were associated with the UKPRN and HUSID in the financial year ending in 2020 (AFRLEVEL in 2019-20 = UG).

### **AFRPGT20**

31. This field indicates how many postgraduate taught years of instance were associated with the UKPRN and HUSID in the financial year ending in 2020 (AFRLEVEL in 2019-20 = PGT, PGCE).

### **AFRPGR20**

32. This field indicates how many postgraduate research years of instance were associated with the UKPRN and HUSID in the financial year ending in 2020 (AFRLEVEL in 2019-20 = PGR).

### **AFRETRANT20, AFRETRANT21**

33. These fields identify students that were entrants in each financial year.

<b>Field</b>	<b>Description</b>	<b>Definition</b>	<b>Value</b>
AFRETRANT20	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 > AFRFYE19 and COMDATE <= AFRFYE20 and (AFRLEVEL = UG and AFRUG19 = 0 and AFRUG18 = 0)	1

Field	Description	Definition	Value
		or (AFRLEVEL = PGT and AFRPGT19 = 0 and AFRPGT18 = 0) or (AFRLEVEL = PGR and AFRPGR19 = 0 and AFRPGR18 = 0)	
AFRENT21	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 > AFRFYE20 and COMDATE <= AFRFYE21 and (AFRLEVEL = UG and AFRUG20 = 0 and AFRUG19 = 0) or (AFRLEVEL = PGT and AFRPGT20 = 0 and AFRPGT19 = 0) or (AFRLEVEL = PGR and AFRPGR20 = 0 and AFRPGR19 = 0)	1

#### **AFRFTE18, AFRFTE19, AFRFTE20, AFRFTE21**

34. These fields contain the student instance FTE that falls in each financial year.

Field	Definition	Value
AFRFTE18	AFRPOP18 = 1	STULOAD ÷ 100
AFRFTE19	AFRPOP19 = 1	STULOAD ÷ 100
AFRFTE20	AFRPOP20 = 1	STULOAD ÷ 100
AFRFTE21	AFRPOP21 = 1	STULOAD ÷ 100

## Rebuild instructions

35. The individualised file, AFR21\_FTE\_XXXXXXXX\_IND.csv, can be used to interrogate the data and our calculation of derived fields by filtering to certain groups of records. Full details of how to access and use individualised files are given on our website ([www.officeforstudents.org.uk/data-and-analysis/supplying-data/working-with-individualised-files/](http://www.officeforstudents.org.uk/data-and-analysis/supplying-data/working-with-individualised-files/)).
36. Specific instructions to rebuild the FTE figures shown in the output workbook, AFR21\_FTE\_XXXXXXXX.xlsx, are provided here.
37. The following instructions assume the user has the individualised file open in Microsoft Excel.
38. To apply filters to the column headings, highlight the headings. From the 'DATA' tab in the toolbar select 'Filter'.
39. You will need to use the SUBTOTAL function with option 9 to sum the values in the relevant column (AFRFTE21 or AFRFTE20) once the filters have been applied. Using the SUBTOTAL function instead of the SUM function will ensure that you only include those values that have been filtered to.
40. To rebuild the AFR21 higher education student FTEs data summary, apply the following filters:

Item in workbook	Derived field selection in individualised file
Students in AFR population for financial year ending 2020	AFRPOP20 = 1
Students in AFR population for financial year ending 2021	AFRPOP21 = 1
UK-domiciled students	AFRDOMICILE = UK
Other EU-domiciled students	AFRDOMICILE = OEU
Non-EU-domiciled students	AFRDOMICILE = NONEU
Full-time students	AFRMODE = FTS
Part-time students	AFRMODE = PT
Undergraduate students	AFRLEVEL = UG
PGCE students	AFRLEVEL = PGCE
Postgraduate taught (excluding PGCE) students	AFRLEVEL = PGT
Postgraduate research students	AFRLEVEL = PGR
Postgraduate taught students	AFRLEVEL = PGT, PGCE
Entrant students in financial year ending 2020	AFRENTRANT20 = 1
Entrant students in financial year ending 2021	AFRENTRANT21 = 1

Item in workbook	Derived field selection in individualised file
Continuing students in financial year ending 2020	AFRENTRANT20 = 0
Continuing students in financial year ending 2021	AFRENTRANT21 = 0

41. For example, to rebuild the FTE for the financial year ending in 2020 for UK-domiciled full-time undergraduate entrant students (cell C7 in the 'Data' tab of the AFR21 higher education student FTEs data summary workbook), you should apply the following filters: AFRDOMICILE = UK, AFRMODE = FTS, AFRLEVEL = UG, AFRPOP20 = 1 and AFRENTRANT20 = 1. Then use the SUBTOTAL function to sum the values in the AFRFTE20 column.
42. Similarly, to rebuild the FTE for the financial year ending in 2021 for Other EU-domiciled part-time postgraduate research continuing students (cell G23 in the 'Data' tab of the AFR21 higher education student FTEs data summary workbook), you should apply the following filters: AFRDOMICILE = OEU, AFRMODE = PT, AFRLEVEL = PGR, AFRPOP21 = 1 and AFRENTRANT21 = 0. Then use the SUBTOTAL function to sum the values in the AFRFTE21 column.
43. Values in the workbook cells have been rounded to the nearest whole number, as this is how they must be returned in the AFR21 data collection. Therefore, numbers in the data summary workbook may not match exactly.



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