

Office for
Students



2017-18 HESA Student post-collection outputs

**Very high-cost STEM subjects targeted
allocation technical document**

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Summary

Introduction

1. This document describes the very high-cost STEM subjects files supplied as part of the 2017-18 Higher Education Statistics Agency (HESA) student post-collection outputs, and the algorithms used to calculate the 2019-20 very high-cost STEM subjects targeted allocation.
2. The VHCSS outputs should be used by staff responsible for individualised data returns at higher education providers. This document is intended to help you understand in detail how the data has been used to calculate the very high-cost STEM subjects targeted allocation for your provider.
3. The VHCSS output is formed of 3 files. XXXXXXXXX denotes the UK Provider Reference Number (UKPRN). These are:
 - a. VHCSS workbook file 'VHCSS17_XXXXXXXX.xlsx'.
 - b. VHCSS individualised student file 'VHCSS17_XXXXXXXX_IND.csv'. VHCSS modularised file 'VHCSS17_XXXXXXXX_MOD.csv'.
4. 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 2017-18 (<https://www.hesa.ac.uk/collection/c17051>) when using this document.
5. These files can be accessed from the 2017-18 Post-collection outputs area of the Office for Students (OfS) portal. Access details will be sent to the appropriate contacts at providers when the files are available.

Very high-cost STEM individualised and modularised files

6. You should use the individualised and modularised files (VHCSS17_XXXXXXXX_IND.csv and VHCSS17_XXXXXXXX_MOD.csv) when working through this document. This shows the assignment of records to categories by our algorithms and, where relevant, provides the data that has been used to determine their exclusion from the relevant population.
7. HESA Student fields used to generate the data in the outputs are listed in Table 1.

Table 1: HESA Student fields used in the VHCSS outputs

Entity	Field	Description	Column in individualised file*	Column in individualised student on module file*
Course	COURSEID	Course identifier	F	F
Course subject	SBJCA1-3	Subject of course	Y - AA	AH - AJ
Instance	CAMPID [†]	Campus identifier	G	G
Instance	INSTCAMP [†]	Provider's own campus identifier	H	H
Instance	NUMHUS [†]	Student instance identifier	C	C
Instance	OWNINST [†]	Provider's own instance identifier	E	E
Provider	UKPRN [†]	UK Provider Reference Number	A	A
Module	MODFTE	Module FTE	N/A	Z
Module	MODID	Module identifier	N/A	AA
Module subject	COSTCN	Cost centre	N/A	AE
Module subject	MODSBJP	Subject / cost centre percentage	N/A	AD
Student	HUSID [†]	HESA unique student identifier	B	B
Student	OWNSTU [†]	Provider's own identifier for student	D	D
Student on module	MODSTAT	Module status	AB	X
Student on module	MODYR	Module year	AC	Y

* The individualised data files VHCSS17_XXXXXXXX_IND.csv and the modularised file VHCSS17_XXXXXXXX_MOD.csv, downloadable from the OfS Portal.

[†] These fields are not used in the allocation but are included in the files to allow easy identification of students.

Description of derived fields

Fields derived from HESA student data are listed in Table 2.

Table 2: Derived fields which inform the VHCSS output

Field name	Description	Paragraph	Column in individualised file*	Column in modularised*
HESCOMP [‡]	HESES completion of year of instance indicator	39	J	J
HESEXCL [‡]	Reason for exclusion from the HESES population	83	L	L
HESLEVEL [‡]	Level of study	34	M	M
HESTYPE [‡]	Fundability status	37	O	O
HESESFTE	FTE of the year of instance	50	K	K
HESMODE	Mode of study	33	N	N
HHCOSTCN ^μ	HESES re-creation cost centre	58	N/A	AF
HHPRP ^{‡ μ}	HESES re-creation proportion of FTE in each cost centre x subject combination	57	N/A	AG
STUBID ^{‡‡}	Unique countable year of instance identifier	24	I	I
VHCSSSUBJECT ^μ	VHCSS subject	17	N/A	AP
VHCSSSUBJECTFTE ^μ	FTE in VHCSS subject	18	N/A	AQ
VHCSSEXCL	Reason for exclusion from the VHCSSEXCL calculations	16	N/A	P
VHCSSEXCL1-VHCSSEXCL8	Fields indicating reason(s) for a student's exclusion from the VHCSS calculations	12-15	N/A	AL - AO

VHCSSFTECHEMIST	Institutional VHCSS course subject FTE in chemistry cost centre	19	P	Q
VHCSSFTEPHYSICS	Institutional VHCSS course subject FTE in physics cost centre	20	Q	R
VHCSSFTECHEMENG	Institutional VHCSS course subject FTE in chemical engineering cost centre	21	R	S
VHCSSFTEMMMENG	Institutional VHCSS course subject FTE in mineral, metallurgy and materials engineering cost centre	22	S	T
VHCSSFTEOVER	Institutional VHCSS course subject FTE in where override agreed	23	T	U
VHCSSOVERCHEMIST	VHCSS override for chemistry subjects	8	U	V
VHCSSOVERPHYSICS	VHCSS override for physics subjects	9	V	W
VHCSSOVERCHEMENG	VHCSS override for chemical engineering subjects	10	W	X
VHCSSOVERMMMENG	VHCSS override for mineral, metallurgy and materials engineering subjects	11	X	Y

* The individualised data files VHCSS17_XXXXXXXXX_IND.csv or and the individualised student on module data file VHCSSMOD17_XXXXXXXXX_MOD.csv, downloadable from the OFS Portal

† These fields are not used in the allocation but are included in the individualised files to allow easy identification of students.

‡ The algorithms for deriving these fields are given in '[HESES17comparison technical document](#)' the paragraph references refer to this document.

‡ These fields are included in the modularised file but not the individualised student file.

VHCSOVERCHEMIST

8. This field indicates whether a provider-specific override to consider student activity in chemistry has been agreed as a result of an appeal.

Value	Description	Definition
1	Override agreed for chemistry	Provider-specific
0	Otherwise	Otherwise

VHCSOVERPHYSICS

9. This field indicates whether a provider-specific override to consider student activity in physics has been agreed as a result of an appeal.

Value	Description	Definition
1	Override agreed for physics	Provider-specific
0	Otherwise	Otherwise

VHCSOVERCHEMENG

10. This field indicates whether a provider-specific override to consider student activity in chemical engineering has been agreed as a result of an appeal.

Value	Description	Definition
1	Override agreed for chemical engineering	Provider-specific
0	Otherwise	Otherwise

VHCSOVERMMMENG

11. This field indicates whether a provider-specific override to consider student activity in mineral, metallurgy and materials engineering has been agreed as a result of an appeal.

Value	Description	Definition
1	Override agreed for mineral, metallurgy and materials engineering	Provider-specific
0	Otherwise	Otherwise

VHCSSEXCL1

12. This field indicates whether the student is excluded from the VHCSS population because they are not in the HESES17 population.

Value	Description	Definition
1	Student is not in the HESES17 population	HESEXCL \neq 0
0	Otherwise	Otherwise

VHCSSEXCL2

13. This field indicates whether the student is excluded from the VHCSS population because they did not complete the year of instance.

Value	Description	Definition
1	Student did not complete the year of instance	HESCOMP = 3
0	Otherwise	Otherwise

VHCSSEXCL4

14. This field whether a student is excluded from the VHCSS population because they are not OfS-fundable.

Value	Description	Definition
1	Student is not OfS-fundable	HESTYPE = HOMENF, ISOV
0	Otherwise	Otherwise

VHCSSEXCL8

15. This field indicates whether a student is exclude from the VHCSS population because they do not have a course subject that is considered to be VHCSS.

Value	Description	Definition
1	Student does not have a VHCSS course subject	SBJCAX \neq F0, F1, F2, F3, F5, H0, H8, J0, J1, J2, J3, Y0 and VHCSOVERCHEMIST = 0 and VHCSOVERPHYSICS = 0 and VHCSOVERCHEMENG = 0 and VHCSOVERMMMENG = 0
0	Otherwise	Otherwise

VHCSSEXCL

16. This field indicates whether the student will potentially be excluded from the VHCSS allocation. For students excluded from the allocation, VHCSSEXCL contains the sum of all applicable values from the table below.

Value	Description	Definition
1	Student excluded from the HESES17 student population	VHCSSEXCL1 = 1
2	Student did not complete the year of instance	VHCSSEXCL2 = 1
4	Student is not OfS-fundable	VHCSSEXCL4 = 1
8	Student does not have a VHCSS course subject	VHCSSEXCL16 = 1
0	Otherwise	Otherwise

This field contains the exclusion reason(s) for the instance. It is calculated as $(1 \times \text{VHCSSEXCL1}) + (2 \times \text{VHCSSEXCL2}) + (4 \times \text{VHCSSEXCL4}) + (8 \times \text{VHCSSEXCL8})$. The reason(s) which contribute to the exclusion of an instance can therefore be calculated. For example, if $\text{VHCSSEXCL} = 11$, by subtracting figures from the above table and starting at the bottom, we see that the instance does not have a course subject that is considered high cost ($\text{VHCSSEXCL8} = 1$), was a non-completion ($\text{VHCSSEXCL2} = 1$) and is excluded from the HESES population ($\text{VHCSSEXCL1} = 1$).

VHCSSSUBJECT

17. This field indicates module subjects that are considered to be very high cost STEM.

Value	Description	Definition
CHEMIST	Module subject in chemistry	$\text{VHCSSEXCL} = 0$ and $(\text{HHCOSTCN} = 113 \text{ or } \text{VHCSSOVERCHEMIST} = 1)$
PHYSICS	Module subject in physics	$\text{VHCSSEXCL} = 0$ and $(\text{HHCOSTCN} = 114 \text{ or } \text{VHCSSOVERPHYSICS} = 1)$
CHEM_ENG	Module subject in chemical engineering	$\text{VHCSSEXCL} = 0$ and $(\text{HHCOSTCN} = 116 \text{ or } \text{VHCSSOVERCHEMENG} = 1)$
MMM_ENG	Module subject in mineral, metallurgy and materials engineering	$\text{VHCSSEXCL} = 0$ and $(\text{HHCOSTCN} = 117 \text{ or } \text{VHCSSOVERMMMENG} = 1)$
OTHER	Otherwise	Otherwise

VHCSSSUBJECTFTE

18. This field contains the FTE of each module subject. It is calculated as $(\text{HHPRP}/100) \times (\text{HESESFTE}/100)$.

VHCSSFTECHEMIST

19. This field contains the 2017-18 total FTE in chemistry that is countable in the year of instance.

Value	Description	Definition
Sum of VHCSSSUBJECTFTE	2017-18 FTE in chemistry	$\text{VHCSSSUBJECT} = \text{CHEMIST}$
0	Otherwise	Otherwise

VHCSSFTEPHYSICS

20. This field contains the 2017-18 total FTE in physics that is countable in the year of instance.

Value	Description	Definition
Sum of VHCSSSUBJECTFTE	2017-18 FTE in physics	VHCSSSUBJECT = PHYSICS
0	Otherwise	Otherwise

VHCSSFTECHEMENG

21. This field contains the 2017-18 total FTE in chemical engineering that is countable in the year of instance.

Value	Description	Definition
Sum of VHCSSSUBJECTFTE	2017-18 FTE in chemical engineering	VHCSSSUBJECT = CHEM_ENG
0	Otherwise	Otherwise

VHCSSFTEMMMENG

22. This field contains the 2017-18 total FTE in mineral, metallurgy and materials engineering that is countable in the year of instance.

Value	Description	Definition
Sum of VHCSSSUBJECTFTE	2017-18 FTE in mineral, metallurgy and materials engineering	VHCSSSUBJECT = MMM_ENG
0	Otherwise	Otherwise

VHCSSFTEOVER

23. This field contains the 2017-18 total FTE as a result of a provider-specific override that is countable in the year.

Value	Description	Definition
Sum for all instances of VHCSSSUBJECTFTE	2017-18 FTE in a cost centre where an override has been agreed	VHCSSOVERCHEMIST = 1 or VHCSSOVERPHYSICS = 1 or VHCSSOVERCHEMENG = 1 or VHCSSOVERMMMENG = 1
0	Otherwise	Otherwise



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