

Appendix 1

HESES03 re-creation algorithms

Purpose

1. This appendix describes the methods used to generate the data needed to re-create HESES03 from the HESA 2003-04 student data. It also describes the method used to generate the grant adjustment reports.
2. This appendix is aimed at expert readers with in-depth knowledge of the data. Readers are advised to have a copy of the 2003-04 HESA student record coding manual and the 'Higher Education Students Early Statistics Survey 2003-04' (HEFCE 2003/44) to hand when using this appendix. They should also have copies of their institution's finalised 2003 grant tables.
3. The algorithms described in this appendix are similar to those in Appendix 1 of '2003-04 statistics derived from HESA data: Guide to HEFCE web facility' (HEFCE 2004/29), but some alterations have been made to improve the matching and clarity.

HESA fields used in the re-creation

4. Only certain fields, detailed in Table 3, were used to generate the HESES03 re-creation. The field numbers shown relate to the combined record format of the HESA record. For institutions making a student module return, cost centre information is taken from the module portion of the return.
5. Throughout this appendix, fields taken from the HESA return or derived as part of the re-creation are shown in capitals using the names given in Tables 3 and 4 respectively.

Using the individualised file

6. When working through this appendix it is necessary to use the individualised file HESR03XXXX.ind, where XXXX is the HESA institution identifier. Full details of how to access this file are given in Annex G. This will show the allocation of students to cells within the tables and, where relevant, details of why they were excluded.

Table 3 **Fields used in the re-creation**

Field number	Description	Name	Column in individualised file*
1	Record type indicator	RECID	BS
2	HESA institution identifier	INSTID	A
4	Student identifier	HUSID	B
12	Country code of student's permanent address	DOMICILE	AQ
21	Highest qualification on entry	QUALENT2	BR
26	Date of commencement of programme	COMDATE	AN
28	Special students	SPCSTU	BX
30	Year of student on this programme	YEARSTU	CL
35	Date left institution or completed the programme of study	DATELEFT	AP
41	General qualification aim of student	QUALAIM	BQ
43-45	Subject of qualification aim	SBJQA1-3	BU-BW
49	Expected length of study programme	SPLENGTH	BY
50	Units of length	UNITLGTH	CH

52	Special programmes	SPPRG	CA
53	Teacher training course identifier	TTCID	CF
64	Major source of funding	MSFUND	BL
65	Fundability code	FUNDCODE	AZ
66	Fee eligibility	FEEELIG	AU
67	Fee band	FEEBAND	AT
68	Major source of tuition fees	MSTUFEE	BM
70	Mode of study	MODE	BI
71	Location of study	LOCSDY	BD
72	Year of programme	YEARPRG	CK
74	Student FTE	STULOAD	CC
101,104,107,110, 113,116,119,122, 125,128,131,134, 137,140,143,146	Subject area of study 1-16	SBJ01-16	Not included
102,105,108,111, 114,117,120,123, 126,129,132,135, 138,141,144,147	Proportion of subject 1-16	SBJPER01-16	Not included
149 [†]	Institution's own identifier for student	OWNSTU	D
150 [†]	Institution's own programme of study identifier	OWNPSD	E
151	Student instance number	NUMHUS	C
153	Type of programme year	TYPEYR	CG
154	Level applicable to Funding Council HESES	FUNDLEV	BB
155	Completion of year of programme of study	FUNDCOMP	BA
170	Regulated body for health and social care students	REGBODY	BT

* The individualised data file HESR03XXXX.ind, downloadable from the HEFCE extranet (see Annex G).

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

Linking programmes of study between years

7. We have linked the 2003-04 HESA student data to data from 1998-99 onwards using the HUSID, INSTID, NUMHUS (HIN) triple. This is to help account for definitional differences between HESA and HESES data.

8. The link was used to help determine the following:
 - a. Mode of study in previous year for students who are writing-up a thesis or dissertation.
 - b. Programme of study attributes for the first countable year for students who are generating two countable years.
 - c. FTE and price group distribution for final year students on non-standard academic years, where the FTE for each year of programme of study is split over HESA returns.
 - d. Whether the student's course includes an integrated foundation year at HE level (year 0).
9. For a and b above, only records from 2002-03 were included in the linking process. For c and d, records from all years were used.

Description of derived fields

10. Here we give details of the derived fields contained on the individualised data file. These fields are used to build the key dimensions of the HESES03 re-creation.

Table 4 **Derived fields**

Field name	Description	Paragraph	Column in individualised file*
ANNIV	Anniversary of commencement date in academic year	41	AK
ATT_LINK	Flag indicating whether linking was used for course attributes	29-30	AL
AVRGLOAD	Average load	50	AM
CRSELGTH	Expected length of the course in years	53	AO
ELAPSED	Expected length of the course in days	71	AR
EXCL1- EXCL1024	Flag indicating reason(s) for a student's exclusion	74-84	H-R
FDBRIDGE	Flag indicating student on foundation degree bridging course	27	AS
FOU_LINK	Flag indicating whether course includes an integrated foundation year	37	AV
FTE_CASE	Indicator showing how HESESFTE was calculated	46-48	AW
FTE_LINK	Flag indicating whether linking was used to calculate FTE	43	AX
FTE_TYPE	Method used to return FTE for non-standard academic years	14-18	AY
HESCOL4	Flag indicating whether the student was included in Column 4	85	U
HESCOMP	HESES completion of year of programme of study indicator	70	V
HESESFTE	FTE for the year of programme of study	51-52	Z
HESEXCL	Reason for exclusion from the HESES population	72-73	G
HESFEELV	Fee level	36	AI
HESLEVEL	Level of study	23	X
HESMED	Table 1b inclusion flag	61	Y

HESMODE	Mode of study	22	S
HESNHS	Eligibility for NHS bursary group	35	AJ
HESREG	Column 1 or 2 indicator	69	T
HESTYPE	Fundability status	24	W
LENGTH	Flag indicating long or standard length years of programme of study	40	BC
LOW_FTE	Flag indicating whether assumptions have been made for students with low FTE	12	BE
MEDIAB	Proportion of media activity assigned to price group B	64	BF
MEDIAC	Proportion of media activity assigned to price group C	65	BG
MEDIAD	Proportion of media activity assigned to price group D	66	BH
MODEYPS	Mode for the year of programme of study	21	BJ
MODE_OLD	MODE taken from HESA 2002-03 student record	20	BK
PRGA PRGB PRGC PRGD PRGMEDIA PRGPSYCH PRGITT PRGINSET	Proportion of countable year in each price group	56-60	AA-AH
PRIKEY	Unique programme of study identifier	11	F
PROP	Proportion of FTE	49	BN
PSYCHB	Proportion of psychology activity assigned to price group B	67	BO
PSYCHD	Proportion of psychology activity assigned to price group D	68	BP
SPORT	Flag indicating allocation of cost centre 38 to price groups	62-63	BZ
STUBID	Unique countable year of programme identifier	31-34	CB
STULOAYY	STULOAD field from HESA July record in year YRSTULOA	44	CD
TAIL	Flag indicating last year of split FTE course	42	CE
TOTFTE	This field evaluates the sum of FTE for all modules for a HESA student record	54	Not included
WUP_LINK	Flag indicating whether linking was used for writing-up students	19	CI
XPRP101	Cost centre subject proportion indicator	55	Not included
YEARONE	New entrant flag	38-39	CJ
YRSTULOA	Year STULOAYY taken from	45	CM

* The individualised data file HESR03XXXX.ind, downloadable from the HEFCE extranet (see Annex G).

PRIKEY (Column F in individualised file HESR03XXXX.ind)

11. This is a derived field which uniquely identifies HESA records.

LOW_FTE (Column BE in individualised file HESR03XXXX.ind)

12. This field identifies students on low-credit bearing courses. The following assumptions have been made for these students:

SPCSTU = 9

UNITLGTH = 1

FEEBAND = 99

LOCSDY = X

if DATELEFT is completed then SPLNGTH = DATELEFT - COMDATE is rounded up to the nearest year, otherwise SPLNGTH = 2.

Value	Description	Definition
1	Assumptions have been made	RECID = 03111, 03112
0	Assumptions have not been made	Otherwise

SPCSTU, UNITLGTH, FEEBAND, LOCSDY, SPLNGTH, DATELEFT, COMDATE and RECID are included in columns BX, CH, AT, BD, BY, AP, AN and BS in the individualised file HESR03XXXX.ind.

Method of reporting FTE

13. The method chosen to return student load on the HESA student record affects the way years of programme of study are counted. This information was sought by HESA in a letter of 19 August 1996, 'Completion of Field 74 (Student FTE) for students following a non-“standard” academic year'. Some institutions have since changed their method of returning FTE and we have updated our records accordingly. Institutions that wish to change their method of returning FTE should seek our agreement beforehand.

FTE_TYPE (Column BA in individualised file)

14. This field is used to identify the institution's method of returning FTE for students on non-standard academic years. Students are on a standard academic year if all activity for the year of programme of study falls within a single academic year (1 August – 31 July). Students where this is not the case are on a non-standard academic year.

Value	Description
1	No students on non-standard academic years
2	Split FTE
3	100:0
4	0:100

No students on non-standard academic years

15. Where all the institution's activity for years of programme of study are within one academic year.

Split FTE

16. Where activity for a year of programme of study spans two academic years the FTE is split proportionally across them.

100:0

17. Where activity for a year of programme of study spans two academic years the whole of the FTE is reported in the academic year in which the year of programme of study begins.

0:100

18. Where activity for a year of programme of study spans two academic years the whole of the FTE is reported in the academic year in which the year of programme of study ends.

WUP_LINK (Column CI in individualised file HESR03XXXXX.ind)

19. This field indicates whether a link has been made to improve our estimate of MODE for writing-up students.

Value	Description	Definition
1	MODE from HESA 2002-03 assumed	<u>In 2003-04 data</u> MODE = 43, 44 and HIN link can be made to 2002-03 data <u>In 2002-03 data</u> MODE ≠ 43, 44
0	MODE from HESA 2003-04	Otherwise

MODE is included in column BI in the individualised file HESR03XXXXX.ind.

MODE_OLD (Column BK in individualised file HESR03XXXXX.ind)

20. This field contains the MODE returned in the HESA 2002-03 student record.

MODEYPS (Column BJ in individualised file HESR03XXXXX.ind)

21. This field contains the MODE we have used in the re-creation, incorporating any approximations we have made for writing-up students.

Value	Definition
MODE_OLD	WUP_LINK = 1
MODE	WUP_LINK = 0

WUP_LINK is included in column CI in the individualised file HESR03XXXXX.ind.

HESMODE (Column S in individualised file HESR03XXXXX.ind)

22. This field allocates students to mode of study.

Value	Description	Definition
FTS	Full-time and sandwich	MODEYPS = 01, 52, 53 or (MODEYPS = 23, 24 and FEEBAND ≠ 02, 42)
SWOUT	Sandwich year-out	MODEYPS = 23, 24 and FEEBAND = 02, 42 and LOCSYD = D, E, F, G
PT	Part-time	Otherwise

MODEYPS, FEEBAND and LOCSYD are included in columns BJ, AT, and BD in the individualised file HESR03XXXXX.ind.

HESLEVEL (Column X in individualised file HESR03XXXX.ind)

23. This field allocates students to level of study.

Value	Description	Definition
UG	Undergraduate	FUNDLEV = 10, 11
PGT	Postgraduate taught	FUNDLEV = 20, 21
PGR	Postgraduate research	FUNDLEV = 30, 31

FUNDLEV is included in column BB in the individualised file HESR03XXXX.ind.

HESTYPE (Column W in individualised file HESR03XXXX.ind)

Undergraduates and postgraduate taught students

24. This field allocates students to the four categories of fundability and residential status. Undergraduates and postgraduate taught students (HESLEVEL = UG, PGT) were assigned as follows:

Value	Description	Definition
HOMEF	Home and EC HEFCE funded	FUNDCODE = 1
HOMEIF	Home and EC independently funded	FUNDCODE = 4
HOMENF	Home and EC non-fundable	FUNDCODE = 2, 5, 7 and FEEELIG = 1, 3 or (INSTID = 0001 and DOMICILE = 7826 and HESLEVEL ≠ PGR and FUNDCODE = 1)
ISOV	Island and overseas	Otherwise

FUNDCODE, FEEELIG, INSTID, DOMICILE and HESLEVEL are included in columns AZ, AU, A, AQ and X in the individualised file HESR03XXXX.ind.

Postgraduate research students

25. Full-time and sandwich (HESMODE = FTS, SWOUT), postgraduate research students (HESLEVEL = PGR) were assigned fundability status as follows:

Value	Description	Definition
HOMENF	Home and EC non-fundable	((FTE_TYPE = 1, 3 or TYPEYR = 1) and COMDATE < 1 August 2003) or (FTE_TYPE = 2, 4 and TYPEYR = 2, 4, 5 and COMDATE < 1 August 2002) and FUNDCODE = 1, 4) or (FUNDCODE = 2, 5, 7 and FEEELIG = 1, 3)
HOMEF	Home and EC HEFCE funded	Not above and FUNDCODE = 1
HOMEIF	Home and EC independently funded	Not above and FUNDCODE = 4
ISOV	Island and overseas	Otherwise

FTE_TYPE, TYPEYR, COMDATE, FUNDCODE and FEEELIG are included in columns AY, CG, AN, AZ and AU in the individualised file HESR03XXXX.ind.

26. Part-time (HESMODE = PT) postgraduate research students (HESLEVEL = PGR) were assigned fundability status as follows:

Value	Description	Definition
HOMENF	Home and EC non-fundable	((FTE_TYPE = 1, 3 or TYPEYR = 1) and COMDATE < 1 August 2002) or (FTE_TYPE = 2, 4 and TYPEYR = 2, 4, 5 and COMDATE < 1 August 2001) and FUNDCODE = 1, 4) or (FUNDCODE = 2, 5, 7 and FEEELIG = 1, 3)
HOMEF	Home and EC HEFCE funded	Not above and FUNDCODE = 1
HOMEIF	Home and EC independently funded	Not above and FUNDCODE = 4
ISOV	Island and overseas	Otherwise

FTE_TYPE, TYPEYR, COMDATE, FUNDCODE and FEEELIG are included in columns AY, CG, AN, AZ and AU in the individualised file HESR03XXXXX.ind.

FDBRIDGE (Column AS in individualised file HESR03XXXXX.ind)

27. This field identifies students on foundation degree bridging courses.

Value	Description	Definition
1	Student generates countable foundation degree bridging course	SPPRG = 08 and QUALAIM ≠ 61
0	Otherwise	Otherwise

SPPRG and QUALAIM are included in columns CA and BQ in the individualised file HESR03XXXXX.ind.

Second countable years of programme of study

28. Non-standard academic years returned using the split FTE or 0:100 methods where all activity for the final year of programme of study falls entirely within an academic year will generate two countable years of programme of study.

ATT_LINK (Column AL in individualised file HESR03XXXXX.ind)

29. This field indicates whether a link has been made, to improve our estimate of attributes for the first countable year, when two years of programme of study are generated.

Value	Description	Definition
1	HESA record generates two countable years of programme of study	<u>In 2003-04 data</u> FTE_TYPE = 2, 4 and TYPEYR = 1 and COMDATE < 1 August 2003 and DATELEFT < 1 August 2004 and DATELEFT > ANNIV <u>In linked 2002-03 data</u> FTE_TYPE = 2, 4 and TYPEYR = 2 to 4
0	Single countable year of programme of study generated	Otherwise

FTE_TYPE, TYPEYR, COMDATE and DATELEFT are included in columns AY, CG, AN and AP in the individualised file HESR03XXXXX.ind.

30. We make assumptions about the first countable year for students generating two countable years. The reason for the problem of fit is described in paragraph 19 of Appendix 3 and further information is provided in paragraph 32.

STUBID (Column CB in individualised file HESR03XXXX.ind)

31. This field uniquely identifies years of programme of study when two years are generated.

Value	Description	Definition
1	First countable year of programme of study	ATT_LINK = 1 or FDBRIDGE = 1
2	Second countable year of programme of study	ATT_LINK = 1 or FDBRIDGE = 1
0	One countable year of programme of study	Otherwise

ATT_LINK and FDBRIDGE are included in columns AL and AU in the individualised file HESR03XXXX.ind.

32. When STUBID = 1 and FDBRIDGE ≠ 1, we used HESA 2002-03 data to populate the following fields:

CAMPID	FTE_TYPE	FUNDLEV	SPCSTU
FEEBAND	FUNDCODE	LOCSDY	TYPEYR
FEEELIG	FUNDCOMP	QUALAIM	YEARPRG

33. Where FDBRIDGE = 1 and STUBID = 1, we will make the following assumptions: MODEYPS = 31, STULOAD = 30. In addition, if QUALAIM = 21 we will assume FUNDCOMP = 1.

34. Where FDBRIDGE = 1 and STUBID = 2, we will assume STULOAD = STULOAD – 30. In addition, if QUALAIM = 28 we will assume FUNDCOMP = 1.

HESNHS (Column AJ in individualised file HESR03XXXX.ind)

35. This field identifies the three different groups of students that are eligible for NHS bursaries.

Value	Description	Definition
NHS1	Pre-registration students of nursing, midwifery, the allied health professions, dental auxiliaries, audiologists and operating department practitioners	((MSFUND = 31 and FUNDCODE = 2) or FUNDCODE = 5) and QUALAIM = 18, 33 and REGBODY = 02, 06, 07, 13 and (SBJQA1* = B or SBJQA2* = B or SBJQA3* = B) and (FEEELIG = 1 or (COMDATE < 31 December 2001 and REGBODY = 06 and QUALAIM = 33))
NHS2	English domiciled, pre-registration medical and dental students undertaking the 5 or 6 year undergraduate programme	QUALAIM = 18 and REGBODY = 01, 02 and CRSELGTH ≥ 5 and YEARSTU ≥ 5 and (SBJQA1* = A or SBJQA2* = A or SBJQA3* = A)
NHS3	Pre-registration medical and dental students attending the accelerated four year graduate entry programme	QUALAIM = 18 and REGBODY = 01, 02 (SBJQA1* = A or SBJQA2* = A or SBJQA3* = A) and CRSELGTH = 4 and QUALENT2 = 11 and YEARPRG > 1

MSFUND, FUNDCODE, QUALAIM, REGBODY, SBJQA1-3, FEEELIG, COMDATE, CRSELGTH and YEARSTU are included in columns BL, AZ, BQ, BT, BU-BW, AU, AN, AO and CL in the individualised file HESR03XXXX.ind.

* The first two characters of the field are used.

HESFEELV (Column AI in individualised file HESR03XXXX.ind)

36. This field contains the level of tuition fee chargeable to the student. The table below shows the hierarchy of values we use, with NHS bursaried courses being the highest tuition fee level.

Value	Description	Definition
NHS	NHS bursaried courses	HESNHS = NHS1, NHS2, NHS3
FDBC	Foundation degree bridging course	FDBRIDGE = 1 and STUBID = 1
1125	Undergraduate full fee	FEEBAND = 01
550	Undergraduate half fee	FEEBAND = 02
0	ERASMUS/SOCRATES students	FEEBAND = 03
OTHER	Other fee charged	Otherwise

HESNHS, FDBRIDGE, STUBID and FEEBAND are included in columns AJ, AS, CB and AT in the individualised file HESR03XXXX.ind.

FOU_LINK (Column AV in individualised file HESR03XXXX.ind)

37. This field indicates whether the programme of study includes an integrated foundation year at HE level.

Value	Description	Definition
1	Programme of study includes a foundation year	In linked data YEARPRG = 0
0	Otherwise	Otherwise

YEARPRG is included in column CK in the individualised file HESR03XXXX.ind.

YEARONE (Column CJ in individualised file HESR03XXXX.ind)

38. This indicates whether a student is a new entrant.

Value	Description	Definition
1	New entrant	(FTE_TYPE = 1, 3 and YEARPRG = 0, 1 and FOU_LINK = 0) or (FTE_TYPE = 2, 4 and TYPEYR = 1 and YEARPRG = 0, 1 and FOU_LINK = 0) or (FTE_TYPE = 2, 4 and TYPEYR = 2, 4, 5 and ((YEARPRG = 2 and FOU_LINK = 0) or (YEARPRG = 1 and FOU_LINK = 1)))
0	Not new entrant	Otherwise

FTE_TYPE, YEARPRG, FOU_LINK, and TYPEYR are included in columns AY, CK, AV, and CG in the individualised file HESR03XXXX.ind.

39. For students on a course for which a year of programme is not a recognised concept (YEARPRG = 99), we calculated an indicative YEARPRG as one plus the number of elapsed years between COMDATE and 31 July 2004 for use in the above calculations. Details about this assumption are given in paragraph 24 of Appendix 3.

LENGTH (Column BC in individualised file HESR03XXXXX.ind)

40. This field indicates whether the student is on a standard or long year of programme of study.

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

FUNDLEV is included in column BB in the individualised file HESR03XXXXX.ind.

ANNIV (Column AK in individualised file HESR03XXXXX.ind)

41. This field contains the anniversary of commencement date during the academic year 2003-04.

TAIL (Column CE in individualised file HESR03XXXXX.ind)

42. This field indicates whether the year of programme of study is the end of a sequence of non-standard years of programme of study reported using the split FTE method.

Value	Description	Definition
1	Last year of split FTE course	FTE_TYPE = 2 and ((STUBID = 2 and FDBRIDGE ≠ 1) or (TYPEYR = 2, 5 and DATELEFT > 31 July 2003 and DATELEFT < 1 August 2004))
0	Otherwise	Otherwise

FTE_TYPE, STUBID, FDBRIDGE, TYPEYR and DATELEFT are included in columns AY, CB, AS, CG and AP in the individualised file HESR03XXXXX.ind.

FTE_LINK (Column AX in individualised file HESR03XXXXX.ind)

43. This field indicates whether a successful link was made to improve our estimates of FTE and price group allocations for students studying on non-standard academic years when the FTE is split proportionally across years. The link has only been made for students starting such courses after 31 July 1998 and completing them during the academic year 2003-04.

Value	Description	Definition
1	Student load from first year used in calculating HESESFTE	<u>In 2003-04 data</u> TAIL = 1 <u>In linked data</u> FTE_TYPE = 2 and TYPEYR = 2, 3 and COMDATE in academic year
0	Otherwise	Otherwise

TAIL, FTE_TYPE, TYPEYR and COMDATE are included in columns CE, AY, CG and AN in the individualised file HESR03XXXXX.ind.

STULOAYY (Column CD in individualised file HESR03XXXXX.ind)

44. This field contains the value of STULOAD, capped at 100, from the year of linked FTE data. The year the STULOAD is taken from is given in YRSTULO. This field is only completed where FTE_LINK = 1.

YRSTULOA (Column CM in individualised file HESR03XXXX.ind)

45. This field contains the year the value in STULOAYY is taken from. For example if YRSTULOA = 1998 then STULOAYY was taken from the 1998-99 July student record. This field is only completed if FTE_LINK = 1.

STULOAYY and FTE_LINK are included in columns CD and AX in the individualised file HESR03XXXX.ind.

FTE_CASE (Column AW in individualised file HESR03XXXX.ind)

46. For non-standard academic years or when two years of programme of study are generated, the method used to calculate HESESFTE is dependent on the following factors:

- a. Method used to return FTE.
- b. Length of the programme of study.
- c. Number of countable years of programme of study generated in HESES03.
- d. Whether the year of programme of study is the last or not.

47. The table below shows how we identify different cases of non-standard academic years of programme of study.

Value	Description	Definition
0	Standard academic year	TYPEYR = 1 and ATT_LINK = 0
1	100:0	FTE_TYPE = 3
2	0:100 and one year generated in HESES03	FTE_TYPE = 4 and ATT_LINK = 0
<u>0:100 and two years generated in HESES03</u>		
3a	First year	FTE_TYPE = 4 and STUBID = 1 and ATT_LINK = 1
3b	Second year	FTE_TYPE = 4 and STUBID = 2 and ATT_LINK = 1
4	Split FTE, one year generated in HESES03 and the programme of study is in the final year and a link was made to the first year	FTE_TYPE = 2 and FTE_LINK = 1 and ATT_LINK = 0
5	Split FTE, one year generated in HESES03 and the programme of study is in the final year and a link was not made to the first year	FTE_TYPE = 2 and FTE_LINK = 0 and TAIL = 1
6	Split FTE, one year generated in HESES03, on a programme of study generating two or more years which is not the final year	FTE_TYPE = 2 and FTE_LINK = 0 and TAIL = 0
<u>Split FTE, two years generated in HESES03 and a link was made to the first year of programme of study</u>		
7a	First year	FTE_TYPE = 2 and FTE_LINK = 1 and STUBID = 1 and ATT_LINK = 1
7b	Second year	FTE_TYPE = 2 and FTE_LINK = 1 and STUBID = 2 and ATT_LINK = 1

Split FTE, two years generated in HESES03 and a link was not made to the first year of programme of study

8a	First year	FTE_TYPE = 2 and FTE_LINK = 0 and STUBID = 1 and ATT_LINK = 1
8b	Second year	FTE_TYPE = 2 and FTE_LINK = 0 and STUBID = 2 and ATT_LINK = 1

TYPEYR, ATT_LINK, FTE_TYPE and STUBID are included in columns CG, AL, AY and CB in the individualised file HESR03XXXX.ind.

48. We do not attempt to link across years to obtain FTE for full-time and sandwich year-out and sandwich students (HESMODE = FTS, SWOUT) that do not generate two countable years in the re-creation.

PROP (Column BN in individualised file HESR03XXXX.ind)

49. This field contains the proportion of STULOAD that should be allocated to the second countable year of programme of study where two countable years are generated. PROP is only calculated where FTE_TYPE = 2, 4.

Value	Definition
$(DATELEFT - ANNIV) / (DATELEFT - (ANNIV - 365))$	FTE_TYPE = 4
$(DATELEFT - ANNIV) / (DATELEFT - 31 \text{ July } 2003)$	FTE_TYPE = 2

FTE_TYPE is included in column AY in the individualised file HESR03XXXX.ind.

AVRGLOAD (Column AM in individualised file HESR03XXXX.ind)

50. AVRGLOAD is the arithmetic mean of STULOAD for all students on non-standard academic years of programme of study in their first academic year, with the same MODE and QUALAIM at the same institution.

STULOAD, MODE and QUALAIM are included in columns CC, BI and BQ in the individualised file HESR03XXXX.ind.

HESESFTE (Column Z in individualised file HESR03XXXX.ind)

51. This field contains the FTE we assume for the year of programme of study in Column 4a of the HESES03 re-creation. When the year of programme of study is contained in a standard academic year and one year of programme of study is generated, HESESFTE is taken to be STULOAD. The table below shows the method of calculating HESESFTE for different groups of non-standard academic years of programme of study.

FTE_CASE	HESESFTE
0	STULOAD
1	STULOAD
2	STULOAD
3a	$STULOAD - (STULOAD \times PROP)$ or $STULOAD \times (1 - PROP)$
3b	$STULOAD \times PROP$
4	$STULOAD + STULOAYY$
5	$STULOAD + AVRGLOAD$
6	STULOAD

7a	$(STULOAD + STULOAYY) - STULOAD \times PROP$
7b	$STULOAD \times PROP$
8a	$(STULOAD + AVRGLOAD) - STULOAD \times PROP$
8b	$STULOAD \times PROP$

STULOAD, PROP, STULOAYY and AVRGLOAD are included in columns CC, BN, CD and AM in the individualised file HESR03XXXX.ind.

52. HESESFTE is capped at 100. HESESFTE is set to 50 for all sandwich year-out years of programme of study (HESMODE = SWOUT). HESESFTE is set to 100 for all full-time and sandwich years of programme of study (HESMODE = FTS). Where FDBRIDGE = 1 and STUBID = 1, we will set HESESFTE = 30.

HESESFTE, HESMODE, FDBRIDGE and STUBID are included in columns Z, S, AS and CB in the individualised file HESR03XXXX.ind.

CRSELGTH (Column AO in individualised file HESR03XXXX.ind)

53. This field contains the expected length of the course in years. The values are rounded up to the nearest whole year.

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

SPLENGTH and UNITLGTH are included in columns BY and CH in the individualised file HESR03XXXX.ind.

TOTFTE (Not included in individualised file HESR03XXXX.ind)

54. This field evaluates the sum of FTE for all modules for a HESA student record.

XPRP101 (Not included in individualised file HESR03XXXX.ind)

55. This field evaluates the proportion of FTE in each cost centre/subject combination.

Value	Definition
SBJPER01-16	RECID = 03011
SBJPER01	RECID = 03111
$(FTE/TOTFTE) \times 100$	RECID = 03012/03113, 03112/03113 and TOTFTE > 0
$(SBJPER01-02 \times ((FTE/TOTFTE) \times 100)/100$	RECID = 03012/03013, 03112/03113 and TOTFTE > 0 and SBJ01-02 ≠ blank
0	RECID = 03211, 03311, 03411, 03711, 03212, 03312, 03412, 03612, 03712 or (RECID = 03012/03113, 03112/03113 and TOTFTE = 0) and (RECID = 03012/03013, 03112/03113 and (TOTFTE = 0 or SBJ01-02 = blank))

RECID is included in column BS in the individualised file HESR03XXXX.ind.

Price groups

PRGA, PRGB, PRGC, PRGD, PRGMEDIA, PRGPSYCH, PRGITT, PRGINSET (Columns AA-AH in individualised file HESR03XXXX.ind)

56. The proportion of activity in each price group is contained in the eight price group fields given in the table below. The proportion of activity in each price group is calculated by mapping cost centre codes to price groups and summing the values of XPRP101 for each cost centre over each price group. The table below shows the mapping of cost centre codes to price group fields and the value each field will take.

57. Where FTE from earlier academic years (FTE_CASE = 4, 7a) is used to improve the estimate of HESESFTE, price group allocations are also adjusted to take account of this. The same algorithm as detailed is applied to cost centre information from YRSTULO A to get a price group distribution for the first year. The price group distribution for the re-creation is weighted according to the relative balance of contribution of STULOAD and STULOAYY to HESESFTE. For students on ITT or INSET(QTS) courses, PRGITT and PRGINSET are set respectively.

58. In some cases the sum of PRGA, PRGB, PRGC, PRGD, PRGMEDIA, PRGPSYCH, PRGITT, PRGINSET may not equal one. In this case we scale PRGA, PRGB, PRGC, PRGD, PRGMEDIA, PRGPSYCH, PRGITT, PRGINSET so that their sum is one.

Field name	Cost centres	Value of field
PRGA	See paragraphs 59 and 60	
PRGB	01 [#] , 02 [#] , 03 [#] , 04, 08, 09, 10, 11, 12, 13, 14, 16, 17, 18, 19, 20, 21, 39	sum of XPRP101s/100
PRGC [†]	05, 06, 23, 24, 25, 26, 28, 33, 35, 36, 37, 38*	sum of XPRP101s/100
PRGD	27, 29, 31, 32, 34, 38*, 41	sum of XPRP101s/100
PRGMEDIA	30	sum of XPRP101s/100
PRGPSYCH	07	sum of XPRP101s/100
PRGITT	Courses of initial teacher training leading to QTS (TTCID = 1, 6, 7)	1
PRGINSET	Courses of in-service education of teachers, where the student has QTS (TTCID = 3)	1

[#] Except those students identified as clinical medicine, dentistry and veterinary science in paragraphs 59 and 60.

[†] Activity that is ITT but does not lead to QTS (TTCID = 2) is entirely allocated to price group C.

* Activity in cost centre 38 described in paragraphs 62 and 63 is assigned to price group C in the re-creation tables.

Medicine, dentistry and veterinary science – undergraduates

59. Undergraduate (HESLEVEL = UG) medicine, dentistry and veterinary science were assigned to price groups as follows:

Field	Description	Definition	Value of field
PRGA	Clinical medicine	FUNDLEV = 10, 11 and QUALAIM = 18 and REGBODY = 01 and CRSELGTH – YEARPRG = 0, 1, 2 and (SBJQA1* = A3 or SBJQA2* = A3 or SBJQA3* = A3)	1
	Veterinary science	QUALAIM = 18 and REGBODY = 14 and (SBJQA1* = D1, D2 or SBJQA2* = D1, D2 or SBJQA3* = D1, D2)	
	Clinical dentistry	FUNDLEV = 10, 11 and QUALAIM = 18 and REGBODY = 02 and CRSELGTH – YEARPRG = 0, 1, 2, 3 and (SBJQA1* = A4 or SBJQA2* = A4 or SBJQA3* = A4)	
PRGB	Pre-clinical medicine and dentistry	FUNDLEV = 10, 11 and QUALAIM = 18 and REGBODY = 01, 02 and not above	1

FUNDLEV, QUALAIM, REGBODY, CRSELGTH, YEARPRG and SBJQA1-3 are included in columns BB, BQ, BT, AO, CK and BU-BW in the individualised file HESR03XXXX.ind.

* The first two characters of the field are used.

Clinical medicine, dentistry and veterinary science – postgraduates

60. Postgraduate (HESLEVEL = PGR, PGT) medicine, dentistry and veterinary science were assigned to price groups as follows:

Field	Description	Definition	Value of field
PRGA	Clinical medicine and dentistry	Cost centre = 01, 02 and SBJQA1* = A3, A4	sum of XPRP101s/100
PRGA	Veterinary science	Cost centre = 03	sum of XPRP101s/100

* The first two characters of the field are used

HESMED (Column Y in individualised file HESR03XXXX.ind)

61. A flag to identify whether the student is a medical or dental student that meets the criteria for inclusion in Table 1b.

Value	Definition
1	HESLEVEL = UG and HESMODE = FTS and QUALAIM = 18 and REGBODY = 01, 02
0	Otherwise

HESLEVEL, HESMODE, QUALAIM and REGBODY are included in columns X, S, BQ and BT in the individualised file HESR03XXXX.ind.

Sports science and leisure

62. In 1998 we reviewed the mapping of the Sports Science and Leisure cost centre (cost centre 38) to price groups. As a result, a list of institutions was drawn up whose provision in this cost centre met threshold criteria

for the use of well equipped sports science laboratories and/or sports facilities, and hence allocated to price group C. This list was used in the allocation of students to price groups. This list has subsequently been updated after receiving confirmation from institutions that their provision met the threshold criteria stated in HEFCE circular letter 38/98.

SPORT (Column BZ in individualised file HESR03XXXX.ind)

63. A flag to identify whether sports science and leisure studies activity is assigned to price group C.

Value	Description
1	Sports science allocated to price group C
0	Sports science allocated to price group D

MEDIAB (Column BF in individualised file HESR03XXXX.ind)

64. This field contains the proportion of media activity assigned to price group B.

MEDIAC (Column BG in individualised file HESR03XXXX.ind)

65. This field contains the proportion of media activity assigned to price group C.

MEDIAD (Column BH in individualised file HESR03XXXX.ind)

66. This field contains the proportion of media activity assigned to price group D.

PSYCHB (Column BO in individualised file HESR03XXXX.ind)

67. This field contains the proportion of psychology activity assigned to price group B.

PSYCHD (Column BP in individualised file HESR03XXXX.ind)

68. This field contains the proportion of psychology activity assigned to price group D.

HESREG (Column T in individualised file HESR03XXXX.ind)

69. This field indicates whether the student will appear in Column 1 or 2 of the HESES03 re-creation. If the student is excluded (HESEXCL \neq 0), this field is not used to populate the tables.

Value	Description	Definition
1	Included in Column 1	(FTE_TYPE = 1, 3 and ANNIV < 2 December 2003) or (FTE_TYPE = 2, 4 and (TYPEYR = 2 to 5 or (TYPEYR = 1 and ANNIV < 2 December 2003)))
2	Included in Column 2	Otherwise

FTE_TYPE, ANNIV and TYPEYR are included in columns BA, AK and CK in the individualised file HESR03XXXX.ind.

HESCOMP (Column V in individualised file HESR03XXXX.ind)

70. This field indicates whether the student will appear in Column 3 or 4 of the HESES03 re-creation. If the student is excluded (HESEXCL \neq 0) this field is not used to populate the tables.

Value	Description	Definition
3	Included in Column 3	((FTE_TYPE = 1, 3 or TYPEYR = 1) and FUNDCOMP = 2) or (FTE_TYPE = 2, 4 and TYPEYR = 2 to 5

4	Included in Column 4	Otherwise
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FTE_TYPE, TYPEYR, FUNDCOMP and DATELEFT are included in columns AY, CG, BA and AP in the individualised file HESR03XXXX.ind.

ELAPSED (Column AR in individualised file HESR03XXXX.ind)

71. This field contains the expected length of the course in days.

Value	Definition
365 × SLENGTH	UNITLGTH=1
365/12 × SLENGTH	UNITLGTH=2
365/52 × SLENGTH	UNITLGTH=3
2191	UNITLGTH=9
0	Otherwise

UNITLGTH is included in column CH in the individualised file HESR03XXXX.ind.

HESEXCL (Column G in individualised file HESR03XXXX.ind)

72. This field indicates whether the student is included in the HESES03 re-creation. For students excluded from the re-creation HESEXCL contains the sum of all applicable values from the table below. Students included in the re-creation have HESEXCL = 0.

Value	Description	Definition
1	Not active in academic year	COMDATE > 31 July 2004 or DATELEFT < 1 August 2003
2	FE, NVQ or QTS only students	QUALAIM = 44, 45, 51 to 55, 71 to 83
4	Students with no qualification aim	QUALAIM = 97 to 99
8	Students explicitly excluded from the HESES03 population	FUNDAEV = 99 or FUNDCOMP = 9
16	Students taught wholly outside the UK	LOCSDY = 7 and not institution specific approval given
32	Dormant, sabbatical or students writing-up	MODEYPS = 51, 63, 64 or (MODEYPS = 43, 44 and ((COMDATE + ELAPSED) < 1 August 2003 or MODE_OLD = 43, 44)
64	Incoming exchange students	SPCSTU = 3 to 6, 8
128	Students with an FTE of less than 3%	HESESFTE < 3
256	Students on non-standard academic years using the split FTE or 0:100 methods in first academic year	FTE_TYPE = 2, 4 and COMDATE > 31 July 2003 and COMDATE < 1 August 2004 and TYPEYR = 2, 3
512	Students on standard academic years who withdrew before 2 December 2003 or students on non-standard academic years who withdrew before the anniversary of their commencement date	DATELEFT < 2 December 2003 and FUNDCOMP = 2 and (TYPEYR = 1 or (DATELEFT < ANNIV and TYPEYR = 2 to 5) or COMDATE > 31 July 2003)
1024	No cost centre information and FTE of at least 3%	(PRGA + PRGB + PRGC + PRGD + PRGPSYCH + PRGMEDIA + PRGINSET + PRGITT) = 0 and HESESFTE ≥ 3

COMDATE, DATELEFT, QUALAIM, FUNDLEV, FUNDCOMP, LOCSDY, MODEYPS, ELAPSED, MODE_OLD, INSTID, MODE, SPCSTU, HESESFTE, FTE_TYPE, TYPEYR, PRGA, PRGB, PRGC, PRGD, PRGPSYCH, PRGMEDIA, PRGINSET and PRGITT are included in columns AN, AP, BQ, BB, BA, BD, BJ, AR, BK, A, BI, BX, Z, AY, CG, AA-AH in the individualised file HESR03XXXX.ind.

73. The value in HESEXCL will be the sum of all applicable codes for a student. For example, if HESEXCL = 74, then subtracting figures from the above table starting at the bottom, we see that the student is an incoming exchange (HESEXCL = 64), explicitly excluded (HESEXCL = 8) and an FE student (HESEXCL = 2).

EXCL1 (Column H in individualised file HESR03XXXX.ind)

74. Flag indicating whether the student was excluded due to non-activity in the academic year.

Value	Description	Definition
1	Not active in academic year	COMDATE > 31 July 2004 or DATELEFT < 1 August 2003
0	Active in academic year	Otherwise

COMDATE and DATELEFT are included in columns AN and AP in the individualised file HESR03XXXX.ind.

EXCL2 (Column I in individualised file HESR03XXXX.ind)

75. Flag indicating whether the student was excluded due to non-HE qualification aim.

Value	Description	Definition
1	FE, NVQ or QTS only student	QUALAIM = 44, 45, 51 to 55, 71 to 83
0	Student with other qualification aim	Otherwise

QUALAIM is included in column BQ in the individualised file HESR03XXXX.ind.

EXCL4 (Column J in individualised file HESR03XXXX.ind)

76. Flag indicating whether the student was excluded due to no qualification aim.

Value	Description	Definition
1	Student with no qualification aim	QUALAIM = 97 to 99
0	Student with qualification aim	Otherwise

QUALAIM is included in column BQ in the individualised file HESR03XXXX.ind.

EXCL8 (Column K in individualised file HESR03XXXX.ind)

77. Flag indicating whether the student was explicitly excluded from the HESES03 student population.

Value	Description	Definition
1	Student explicitly excluded from the HESES03 population	FUNDLEV = 99 or FUNDCOMP = 9
0	Student not explicitly excluded from the HESES03 population	Otherwise

FUNDLEV and FUNDCOMP are included in columns BB and BA in the individualised file HESR03XXXX.ind.

EXCL16 (Column L in individualised file HESR03XXXX.ind)

78. Flag indicating whether the student was excluded due to being wholly taught outside the UK.

Value	Description	Definition
1	Student taught wholly outside UK	LOCSDY = 7 and not institution specific approval given
0	Student not taught wholly outside UK	Otherwise

LOCSDY is included in column BD in the individualised file HESR03XXXX.ind.

EXCL32 (Column M in individualised file HESR03XXXX.ind)

79. Flag indicating whether the student was excluded due to being dormant, sabbatical or writing-up.

Value	Description	Definition
1	Dormant, sabbatical or students writing-up	MODEYPS = 51, 63, 64 or (MODEYPS = 43, 44 and ((COMDATE + ELAPSED) < 1 August 2003 or MODE_OLD = 43, 44)
0	Not dormant, sabbatical or writing-up student	Otherwise

MODEYPS, COMDATE, ELAPSED, MODE_OLD, INSTID and MODE are included in columns BJ, AN, AR, BK, A and BI in the individualised file HESR03XXXX.ind.

EXCL64 (Column N in individualised file HESR03XXXX.ind)

80. Flag indicating whether the student was excluded for being an incoming exchange student.

Value	Description	Definition
1	Incoming exchange student	SPCSTU = 3 to 6, 8
0	Not incoming exchange student	Otherwise

SPCSTU is included in column BX in the individualised file HESR03XXXX.ind.

EXCL128 (Column O in individualised file HESR03XXXX.ind)

81. Flag indicating whether the student was excluded due to an FTE of less than 3 per cent.

Value	Description	Definition
1	Students with an FTE of less than 3%	HESESFTE < 3
0	Students with an FTE of at least 3%	Otherwise

HESESFTE is included in column Z in the individualised file HESR03XXXX.ind.

EXCL256 (Column P in individualised file HESR03XXXX.ind)

82. Flag indicating whether the student on a non-standard academic year in the first academic year was excluded.

Value	Description	Definition
1	Students on non-standard academic years using the split FTE or 0:100 methods in first academic year	FTE_TYPE = 2, 4 and COMDATE > 31 July 2003 and COMDATE < 1 August 2004 and TYPEYR = 2, 3
0	Otherwise	Otherwise

FTE_TYPE, COMDATE and TYPEYR are included in columns AY, AN and CG in the individualised file HESR03XXXX.ind.

EXCL512 (Column Q in individualised file HESR03XXXX.ind)

83. Flag indicating whether the student was excluded due to being on a standard academic year and withdrawing before 2 December 2003 or on a non-standard academic year and withdrawing before the anniversary of their commencement date.

Value	Description	Definition
1	Early withdrawal	DATELEFT < 2 December 2003 and FUNDCOMP = 2 and (TYPEYR = 1 or (DATELEFT < ANNIV and TYPEYR = 2 to 5) or COMDATE > 31 July 2003)
0	Not an early withdrawal	Otherwise

DATELEFT, FUNDCOMP, TYPEYR, ANNIV and COMDATE are included in columns AP, BA, CG, AK and AN in the individualised file HESR03XXXX.ind.

EXCL1024 (Column R in individualised file HESR03XXXX.ind)

84. Flag indicating whether the student was excluded for having no cost centre information and an FTE of at least 3 per cent.

Value	Description	Definition
1	No cost centre information and FTE of at least 3%	(PRGA + PRGB + PRGC + PRGD + PRGPSYCH + PRGMEDIA + PRGINSET + PRGITT) = 0 and HESESFTE ≥ 3
0	Cost centre information or FTE of less than 3%	Otherwise

PRGA, PRGB, PRGC, PRGD, PRGMEDIA, PRGPSYCH, PRGITT, PRGINSET and HESESFTE are included in columns AA-AH and Z in the individualised file HESR03XXXX.ind.

HESCOL4 (Column U in individualised file HESR03XXXX.ind)

85. This field indicates whether the student is included in Column 4 of the HESES03 re-creation.

Value	Description	Definition
1	Included in Column 4	HESCOMP = 4 and HESEXCL = 0
0	Not included in Column 4	Otherwise

HESCOMP and HESEXCL are included in columns V and G in the individualised file HESR03XXXX.ind.

Funding for teaching

86. As part of the re-creation we produce the following reports which show the calculation of grant adjustments:

- Cover sheet
- HESES03 re-creation grant adjustments
- HESES03 re-creation recalculation of standard resource
- HESES03 re-creation recalculation of assumed fee income.

87. Further details on the calculation of teaching grant can be found in 'Funding higher education in England: How HEFCE allocates its funds' (HEFCE 2003/29).

Cover sheet

88. The cover sheet consists of the following key statistics that are used in the thresholds to select institutions to respond to the exercise:

- difference in holdback for exceeding contract range
- percentage of total recurrent teaching funding for 2003-04
- difference between medical and dental holdback
- difference in any grant adjustments relating to funding conditional upon delivery of growth
- students with undetermined completion status
- difference in grant adjustment.

Difference in holdback for exceeding contract range

89. This is calculated by subtracting 'Contract range holdback' in the HESES03 grant adjustments report from the 'Provisional contract range holdback' in the 'HESES03 re-creation grant adjustments' report.

Percentage of total recurrent teaching funding for 2003-04

90. The percentage of total recurrent teaching funding for 2003-04 is calculated by dividing the difference in holdback for exceeding contract range by the 'Total mainstream teaching funds for 2003-04' that is included in the HESES03 grant adjustments report.

Difference between medical and dental holdback

91. The difference between medical and dental holdback is calculated by subtracting 'Medical and dental holdback' in the HESES03 grant adjustments report from the 'Medical and dental holdback' in the 'HESES03 re-creation grant adjustments' report.

Difference in any grant adjustments relating to funding conditional upon delivery of growth

92. The difference in any grant adjustments relating to funding conditional upon delivery of growth is calculated by adding the 'Funds due back' to the 'Funds to be held back' in the HESES03 grant adjustments report and subtracting the sum of the 'Funds due back' and the 'Funds to be held back' in the 'HESES03 re-creation grant adjustments' report.

Students with undetermined completion status

93. Students with undetermined completion status are all students that are included in the re-creation (HESEXCL=0) with 'year of programme of study not yet completed, but has not failed to complete' (FUNDCOMP=3) and HESTYPE = 'HOMEF'.

Difference in grant adjustment

94. The difference in grant adjustment is calculated by adding the 'difference in holdback for exceeding contract range' to the 'Medical and dental holdback' and the 'difference in any grant adjustments relating to funding conditional upon delivery of growth'.

HESES03 re-creation grant adjustments

95. The figures shown in the 'HESES03 re-creation grant adjustments' report are sourced from HESA 2003-04 student data and the final 2003-04 individual grant tables. In this section we describe the figures that are sourced from HESA 2003-04 student data. Figures that are sourced from the 2003-04 individual grant tables are described in the annex to Bridget Josselyn's letter of 4 March 2003 that was sent to heads of institutions.

96. The 'HESES03 re-creation grant adjustments' report is made up of the following sections:

- funding conditional upon delivery of growth
- medical and dental holdback
- contract range holdback/divergence
- adjustment to 2003-04 and 2004-05 grants.

Funding conditional upon delivery of growth

Actual FTEs (HEFCE-fundable)

97. The students used to derive 'Actual FTEs (HEFCE-fundable)' can be identified by selecting HESCOL4 = 1 and HESTYPE = HOMEF, HOMEIF and HESCOL4 = 1. 'Actual FTEs (HEFCE-fundable)' can be found by summing HESESFTE and dividing by 100 for these students.

Funds due back

98. If the 'Associated maximum funding (£)' for 'FTEs required to fully recover reductions in ASN funding' is 'Not applicable' then we set 'Funds due back' to £0. Otherwise, if 'Actual FTEs (HEFCE-fundable)' is greater than '2003-04 Baseline FTEs', we subtract '2003-04 Baseline FTEs' from 'Actual FTEs (HEFCE-fundable)' and multiply this difference by 'Rate per FTE (£)' to give 'Funds due back'. If this calculation of 'Funds due back' is greater than the 'Associated maximum funding (£)', then we adjust 'Funds due back' to equal the 'Associated maximum funding (£)'.

Funds to be held back

99. If the 'Associated maximum funding (£)' for 'FTEs required to avoid reduction in ASN funding' is 'Not applicable' then we set 'Funds to be held back' to £0. Otherwise, if 'Actual FTEs (HEFCE-fundable)' is less than 'FTEs required to avoid reduction in ASN funding', we subtract 'Actual FTEs (HEFCE-fundable)' from 'FTEs required to avoid reduction in ASN funding' and multiply this difference by 'Rate per FTE (£)' to give 'Funds to be held back'. If this calculation of 'Funds to be held back' is greater than the 'Associated maximum funding (£)', then we adjust 'Funds to be held back' to equal the 'Associated maximum funding (£)'.

Medical and dental holdback

100. The students used to derive 'Medical and dental FTEs' can be identified by selecting HESMED = 1 and HESTYPE = HOMEF, HOMEIF and HESCOL4 = 1. 'Medical and dental FTEs' can be found by summing HESESFTE and dividing by 100 for these students.

101. 'Difference' is calculated by subtracting 'Medical and dental FTEs' from 'Medical and dental CFTE for 2003-04'.

102. If 'Difference' is greater than zero then 'Medical and dental holdback' is calculated as 'Difference' multiplied by £8,703. This is the average rate based on the standard five-year medical course, and details of how it is calculated can be found in 'HEFCE grant adjustments 2003-04' (HEFCE 2003/24).

Contract range holdback/divergence

103. 'Net mainstream teaching funds' is calculated by subtracting 'Medical and dental holdback' and 'Funds to be held back' from 'Total mainstream teaching funds for 2003-04' and then adding 'Funds due back'.

104. 'Recalculated assumed fee income for 2003-04' is the total 'Fee estimate (average fee x HESES03 re-creation FTE)' that is calculated in the 'HESES03 re-creation recalculated assumed fee

income' report and is described in paragraphs 133-140.

105. 'Recalculated assumed resource for 2003-04' is calculated by adding 'Net mainstream teaching funds' to 'Recalculated assumed fee income for 2003-04'.

106. The base price for 2003-04 was below the level of the DfES-recommended postgraduate fee. In virtually all cases, this is not significant because the price group weights and additional premiums we apply ensure that, for any given student, standard resource is greater than the assumed fee income. However, for some institutions, the standard resource for postgraduate students on standard length courses in price group D may be less than their assumed fee income. For these institutions, an increase in standard resource is shown in 'Adjustment due to the postgraduate fee level', to ensure that, for all students, standard resource is not less than assumed fee income.

107. 'Total recalculated standard resource for 2003-04 (including PG fee level adjustment)' is the sum of the total '2003-04 Standard resource', that is calculated in the 'HESES03 re-creation recalculated standard resource' report and is described in paragraphs 117-132, and the 'Adjustment due to the postgraduate fee level'.

108. 'Difference' is calculated by subtracting 'Total recalculated standard resource for 2003-04 (including PG fee level adjustment)' from 'Recalculated assumed resource for 2003-04'.

109. To calculate 'Percentage difference', 'Difference' is divided by 'Total recalculated standard resource for 2003-04 (including PG fee level adjustment)' and multiplied by 100. If 'Percentage difference' falls within the '2003-04 Contract range' then 'Divergence from contract range' is 0.0 per cent. If 'Percentage difference' is outside the '2003-04 Contract range', 'Divergence from contract range' is the variance between the 'Percentage difference' and the '2003-04 Contract range'.

110. 'Divergence from contract range after small institution adjustment' only affects

institutions with more than 50, but no more than 400, HEFCE-fundable FTEs. For such institutions we divide 'Total recalculated standard resource for 2003-04 (including PG fee level adjustment)' by the total '2003-04 FTEs from the HESES03 re-creation', that is calculated in the 'HESES03 re-creation recalculated standard resource' report and described in paragraphs 117-132, and multiply by 10. We also divide the 'Recalculated assumed fee income for 2003-04' by the total '2003-04 FTEs from the HESES03 re-creation' and multiply by 10.

111. We add (for institutions above the contract range) or subtract (for institutions below it) these figures from 'Total recalculated standard resource for 2003-04 (including PG fee level adjustment)' and 'Recalculated assumed fee income for 2003-04' respectively. 'Percentage difference' is recalculated and 'Divergence from contract range' is recalculated as 'Divergence from contract range after small institution adjustment'.

112. 'Provisional contract range holdback/Provisional contract range divergence' is generated depending on whether the institution is above or below its contract range. If the institution is above its contract range, 'Provisional contract range holdback' is calculated by multiplying 'Divergence from contract range after small institution adjustment' by 'Total recalculated standard resource for 2003-04 (including PG fee level adjustment)'. If the institution is below its contract range, 'Provisional contract range divergence' is also calculated by multiplying 'Divergence from contract range after small institution adjustment' by 'Total recalculated standard resource for 2003-04 (including PG fee level adjustment)'.

In-year moderation

113. 'Provisional total funding adjustment for 2003-04 before moderation generated by HESES03 re-creation' is calculated as 'Funds due back' minus the sum of 'Funds to be held back', 'Medical and dental holdback' and 'Provisional contract range holdback'.

114. 'Provisional total funding adjustment for 2003-04 before moderation generated by HESES03 re-creation' is moderated so that, in general, no institution receives a reduction in resource (HEFCE funding for teaching and research plus regulated fee income) in 2003-04 compared with the equivalent unmoderated figure for 2002-03. We apply a minimum threshold of £100,000, below which moderation does not apply.

115. 'Provisional net funding adjustment to be applied in 2003-04 generated by HESES03 re-creation' is calculated as the sum of 'Provisional total funding adjustment for 2003-04 before moderation generated by HESES03 re-creation' and 'Provisional in-year moderation due to 2003-04 holdback generated by HESES03 re-creation'.

116. 'Provisional adjustment to 2004-05 baseline grant generated by HESES03 re-creation' is calculated as 'Funds due back' minus 'Funds to be held back' minus 'Provisional contract range holdback'.

HESES03 re-creation recalculated standard resource

117. We calculate the recalculated standard resource for 2003-04 using:

- 2003-04 FTEs from the HESES03 re-creation
- 2003-04 Base-weighted FTE students
- premiums applied to unweighted FTEs
- premiums applied to FTEs weighted by price group
- base price.

2003-04 FTEs from the HESES03 re-creation

118. '2003-04 FTEs from the HESES03 re-creation' are identified by summing the FTE of students in each combination of length (LENGTH), level (HESLEVEL), mode (HESMODE) and price group. Examples of the assignment to price groups are described below.

Price group A

119. To identify HEFCE-funded, long, full-time and sandwich, and sandwich year-out undergraduates assigned to price group A, from the individualised file, select HESTYPE = HOMEF and LENGTH = L and HESMODE = FTS, SWOUT and HESLEVEL = UG and HESCOL4 = 1 and PRGA > 0. The number of '2003-04 FTEs from the HESES03 re-creation' can be found by summing the values of HESESFTE multiplied by PRGA and dividing by 100 where PRGA > 0.

Price group B

120. To identify HEFCE-funded, long, full-time and sandwich, and sandwich year-out undergraduates assigned to price group B, from the individualised file, select HESTYPE = HOMEF and LENGTH = L and HESMODE = FTS, SWOUT and HESLEVEL = UG and HESCOL4 = 1 and, PRGB > 0 or PRGMEDIA > 0 or PRGPSYCH > 0. The number of '2003-04 FTEs from the HESES03 re-creation' can be found by adding the following totals:

- multiplying HESESFTE by PRGB, summing the values and dividing by 100 where PRGB > 0
- multiplying HESESFTE by PRGMEDIA and MEDIAB, summing the values, and dividing by 100 where PRGMEDIA > 0
- multiplying HESESFTE by PRGPSYCH and PSYCHB, summing the values, and dividing by 100 where PRGPSYCH > 0.

Price group C

121. To identify HEFCE-funded, long, full-time and sandwich, and sandwich year-out undergraduates assigned to price group C, from the individualised file, select HESTYPE = HOMEF and LENGTH = L and HESMODE = FTS, SWOUT and HESLEVEL = UG and HESCOL4 = 1 and, PRGC > 0 or PRGMEDIA > 0. The number of '2003-04 FTEs from the HESES03 re-creation' can be found by adding the following totals:

- multiplying HESESFTE by PRGC, summing the values, and dividing by 100 where $PRGC > 0$
- multiplying HESESFTE by PRGMEDIA and MEDIAC, summing the values, and dividing by 100 where $PRGMEDIA > 0$.

Price group D

122. To identify HEFCE-funded, long, full-time and sandwich, and sandwich year-out undergraduates assigned to price group D, from the individualised file, select HESTYPE = HOMEF and LENGTH = L and HESMODE = FTS, SWOUT and HESLEVEL = UG and HESCOL4 = 1 and, $PRGD > 0$ or $PRGMEDIA > 0$ or $PRGPSYCH > 0$. The number of '2003-04 FTEs from the HESES03 re-creation' can be found by adding the following totals:

- multiplying HESESFTE by PRGD, summing the values, and dividing by 100 where $PRGD > 0$
- multiplying HESESFTE by PRGMEDIA and MEDIAD, summing the values, and dividing by 100 where $PRGMEDIA > 0$
- multiplying HESESFTE by PRGPSYCH and PSYCHD, summing the values, and dividing by 100 where $PRGPSYCH > 0$.

2003-04 Base-weighted FTE students

123. We calculate the '2003-04 Base-weighted FTE students' by multiplying '2003-04 FTEs from the HESES03 re-creation' by their price group weighting, for each combination of mode, level and length. The price group weightings are given in Table 5.

Premiums applied to unweighted FTEs

Small institutions

124. We calculate 'Small institutions' by multiplying '2003-04 FTEs from the HESES03 re-creation' by a small institution premium for each combination of price group, mode, level and length. Institutions will receive the variable, small

institution premium if they had a total student FTE of 1,000 or less on the 1997-98 HESA student record. The FTE used for this purpose includes all students at all levels (including further education), irrespective of the source of funding. However, it is not allocated to those small, specialist institutions that have an institution-specific weight of more than 10 per cent. The value of the small institutions premium is included in Table F of the final 2003-04 individual grant tables.

Table 5 **Price group cost weighting description**

Price group	Description	Cost weight
A	The clinical stages of medicine and dentistry courses and veterinary science	4.5
B	Laboratory-based subjects (science, pre-clinical stages of medicine and dentistry, 2 engineering and technology)	
C	Subjects with a studio, laboratory or fieldwork element	1.5
D	All other subjects	1

Historic buildings

125. We calculate 'Historic buildings' by multiplying '2003-04 FTEs from the HESES03 re-creation' by an old and historic buildings premium for each combination of price group, mode, level and length. Institutions will receive the variable old and historic buildings premium if they have buildings that were constructed before 1914. The value of the historic buildings premium is included in Table F of the final 2003-04 individual grant tables.

Premiums applied to FTEs weighted by price group

Long courses \geq 45 weeks (25%)

126. We calculate 'Long courses \geq 45 weeks (25%)' by multiplying '2003-04 Base-weighted FTE students' by 0.25 for each combination of mode and level, where LENGTH = L and PRGB > 0 or PRGC > 0 or PRGD > 0.

London weighting (inner = 8%, outer = 5%)

127. We calculate 'London weighting (inner = 8%, outer = 5%)' by multiplying '2003-04 Base-weighted FTE students' by 0.08 for inner London institutions and 0.05 for outer London institutions for each combination of price group, mode, level and length.

Pensions

128. We calculate 'Pensions' by multiplying '2003-04 Base-weighted FTE students' by 0.015 for each combination of price group, mode, level

and length. Institutions will only receive the pensions premium if they are in the Universities Superannuation Scheme (USS).

Institution-specific weights

129. We calculate 'Institution-specific weights' by multiplying '2003-04 Base-weighted FTE students' by an institution-specific weight for each combination of price group, mode, level and length. Institutions eligible to receive the institution-specific weight were notified in Jane Chenery's letter of 10 February 1998 that was sent to heads of institutions, but may have subsequently been revised, including as a result of recent reviews (the outcomes of which were notified in 'Funding of specialist higher education institutions' (HEFCE 00/51)). The value of the institution-specific weight is included in Table F of the final 2003-04 individual grant tables.

Total fundable weighted student FTE

130. 'Total fundable weighted student FTE' is the sum of:

- 2003-04 Base-weighted FTE students
- small institutions
- historic buildings
- long courses \geq 45 weeks (25%)
- london weighting (inner = 8%, outer = 5%)
- pensions
- institution-specific weights.

Base price

131. We calculate a basic amount of resource for a full-time student by dividing all the money available to fund teaching (HEFCE grant plus assumed tuition fees) by the total number of weighted FTE students in the whole sector. This basic rate of resource (grant plus fee) is called the base price and is the standard FTE rate in price group D. In 2003-04, the base price was calculated to be £2,808.

2003-04 Standard resource

132. We calculate '2003-04 Standard resource' by multiplying 'Total fundable weighted student FTE' by the base price for each combination of price group, mode, level and length.

HESES03 re-creation recalculated assumed fee income

133. We calculate the recalculated assumed fee income for 2003-04 using:

- 2003-04 Estimated FTE students, described in paragraph 134
- assumed fee income per FTE, shown in Table 7
- 2003-04 FTEs from the HESES03 re-creation.

2003-04 Estimated FTE students

134. The headcount of students used to derive '2003-04 Estimated FTE students' is identified by selecting Home and EC (HESTYPE ≠ ISOV) and non-ITT students (PRGITT = 0) included in the re-creation (HESEXCL = 0). All combinations of level (HESLEVEL) and mode (HESMODE) for the fee levels (HESFEELV) are given in Table 6.

Table 6 Fee levels

HESMODE	HESLEVEL	HESFEELV
FTS	UG	1125, 550, 0
FTS	PGT	1125, 550, OTHER
FTS	PGR	OTHER
SWOUT	UG	550
SWOUT	PGT	550, OTHER
SWOUT	PGR	OTHER
PT	UG	1125, 550, OTHER
PT	PGT	1125, 550, OTHER
PT	PGR	OTHER

135. For the sandwich year-out and part-time students selected above, the '2003-04 Estimated FTE students' is calculated by halving the number of students.

Total fee income

136. We assume the fees for each combination of mode (HESMODE), level (HESLEVEL) and fee level (HESFEELV) as given in Table 7.

137. For each estimated FTE we assume a fee for their mode, level and fee level. See Table 8 for a breakdown of the assumed fees. To calculate 'Total fee income' for each combination of mode and level, we sum the assumed fees for each estimated FTE within that mode and level.

Derived average fee per estimated FTE

138. We calculate the 'Derived average fee per estimated FTE' by dividing the 'Total fee income' by the '2003-04 Estimated FTE students' for each combination of mode and level.

2003-04 FTEs from the HESES03 re-creation

139. The students used to derive '2003-04 FTEs from the HESES03 re-creation' can be identified for each combination of mode (HESMODE) and level (HESLEVEL) by selecting HESCOL4 = 1 and HESTYPE = HOMEF. '2003-04 FTEs from the HESES03 re-creation' can be found by summing HESESFTE and dividing by 100 for these students. This total will match the '2003-04 FTEs from th

HESES03 re-creation' total on the standard resource table.

Fee estimate (average fee x HESES03 re-creation FTE)

140. We calculate 'Fee estimate (average fee x HESES03 re-creation FTE)' for each combination of mode and level by multiplying 'Derived average fee per estimated FTE' by '2003-04 FTEs from the HESES03 re-creation'.

Table 7 **Assumed fee income per FTE**

HESMODE	HESLEVEL	HESFEELV	Assumed fees (£)
FTS	UG	1125	1125
FTS	UG	550	550
FTS	UG	0	0
FTS	PGT	1125	1125
FTS	PGT	550	550
FTS	PGT	OTHER	2940
FTS	PGR	OTHER	2940
SWOUT	UG	550	1100
SWOUT	PGT	550	1100
SWOUT	PGT	OTHER	2940
SWOUT	PGR	OTHER	2940
PT	UG	1125	1100
PT	UG	550	1100
PT	UG	OTHER	830
PT	PGT	1125	1100
PT	PGT	550	1100
PT	PGT	OTHER	2940
PT	PGR	OTHER	2940