

**Office for
Students**



2018-19 ILR data checking tool: Higher Education (HE) level apprenticeships data

**Summary technical algorithms and rebuild
instructions**

Enquiries to ILRData@officeforstudents.org.uk

Publication date: 25 September 2019

Contents

Purpose	4
HE-level apprenticeships data summary workbook	4
Table 1: Student characteristics data summary tables created using 2018-19 ILR data	4
Using the individualised files	4
ILR fields used in the HE-level apprenticeship tables	5
Table 2 ILR Fields used in the data summary	5
Derived fields used to create HE-level apprenticeship tables	6
Table 3 Derived fields created for the data summary	6
OFSQAIM	8
NVQ_LEVEL	8
SCCRSELGTH	8
SCLEVEL_DETAIL	9
SCAPPRENTICE	10
SCLEVEL	10
SCYEAR_ST	10
SCAGE_DETAIL	11
SCCOMDATE_MONTH	11
SCOUTCOMEPOP	12
SCDISABLE	12
SCDISABLETYPE	13
SCETHNIC	13
SCENTRANT	14
SCFPE	14
SCLDCS	14
SCJACS	14
SCSEX	14
SCOUTCOME	15
SCWITHDRAWREASON	15
Apprenticeships data summary: rebuild instructions	16
Table 4 HE-level apprenticeship data summary tables created using 2018-19 ILR data	16
Table 5 Additional field in the individualised file	17
Characteristics and Starts-Student characteristics	18
Notional NVQ level	18
Sex	18
Age	19
Ethnicity	19
Disability	20
Starts-Provision characteristics	20
Starts-Subjects	20

Starts-Employers	21
Starts-Outcomes.....	22
Notional NVQ level.....	22
Outcome and reason for withdrawal.....	23

Purpose

1. This document provides technical detail regarding the Higher Education (HE) level apprenticeships data summary within the 2018-19 Individualised Learner Record (ILR) data checking tool. The summary comprises of two files:
 - a. The HE-level apprenticeships data summary workbook 'APPR18_DCT_100XXXXXX.xlsx'.
 - b. The HE-level apprenticeships individualised file 'APPR18_DCT_100XXXXXX_IND.csv'.
2. The algorithms applied to the ILR data to create the figures for the data summary are provided within this document. It also includes the instructions that allow providers to rebuild the data summary tables from the individualised file provided. This document is aimed at readers with in-depth knowledge of the data. Readers are advised to have a copy of 'Specification of the Individualised Learner Record for 2018 to 2019' (available from the Education & Skills Funding Agency via <https://www.gov.uk/government/publications/ilr-specification-validation-rules-and-appendices-2018-to-2019>) to hand when using this document.
3. The HE-level apprenticeships data summary uses fields taken from the ILR to categorise students on Higher Education level apprenticeships. This separately provides information on student apprenticeship programme aims and components.

HE-level apprenticeships data summary workbook

4. The HE-level apprenticeships workbook can be accessed from the OfS portal. The Excel workbook APPR18_DCT_XXXXXXXX.xlsx (where XXXXXXXXX is the UK Provider Reference Number (UKPRN) for the provider) contains the following worksheets:

Table 1: Student characteristics data summary tables created using 2018-19 ILR data

Worksheet*	Title
Coversheet	Title page
Student Characteristics	Characteristics of students at component level
Starts-Student characteristics	Characteristics of student starts at component level and program level
Starts-Provision characteristics	Student starts by month, and student headcount by franchise
Starts-Subjects	Student headcount by subject at component level and program level
Starts-Employers	Student headcount by employer
Starts-Outcomes	Student headcount by outcome

* This worksheet reference corresponds to the spreadsheet tabs.

Using the individualised files

5. Full details of how to access this file are given on the OfS website (www.officeforstudents.org.uk/data-and-analysis/supplying-data/working-with-individualised-files/).
6. When working through this document it is necessary to use the individualised file, APPR18_DCT_XXXXXXXX_IND.csv, where XXXXXXXXX is the UKPRN for the provider. This

will show the allocation of students to cells within the tables. Full details of how to access this file are given on the OfS website (www.officeforstudents.org.uk/data-and-analysis/supplying-data/working-with-individualised-files/). Fields prefixed with 'SC' or 'OFS' are derived, all others are taken directly from the Individualised Learner Record (ILR) or Learning Aim Reference Service (LARS).

- The individualised file contains one record per subject area per learning aim per learner in the latest academic year. For example, a student who is studying for a first degree in biology in 2018-19 will have one record for that instance and will count as one full-person equivalent (FPE = 100; a headcount measure). A student who is studying a joint course first degree with equal proportions of mathematics and physics in 2018-19 will have two records for that instance; one for each subject area, with each assigned an FPE of 50 (their single headcount for the instance being apportioned across the subject areas according to the proportion of the course that relates to each subject they are studying).

ILR fields used in the HE-level apprenticeship tables

- Only certain fields, detailed in Table 2, were used to generate the data summary. Fields taken from the ILR return or derived as part of the comparison tables are shown in capitals using the names given in Tables 2 and 3 respectively.

Table 2 ILR Fields used in the data summary

Name	Description	Dataset
UKPRN [†]	UK provider reference number	ILR
LEARNREFNUMBER [†]	Learner reference number	ILR
AIMSEQNUMBER [†]	Learning aim data set sequence	ILR
ULN [†]	Unique learner number	ILR
NUMHUS [†]	Student instance identifier	ILR
LEARNAIMREF	Learning aim reference	ILR
COMPSTATUS	Completion status	ILR
DATEOFBIRTH	Date of birth	ILR
EMPID	Employer identifier	ILR
EMPNAME	Employer name	ESFA
ETHNICITY	Ethnicity	ILR
FWORKCODE	Framework code	ILR/LARS
LEARNACTENDDATE	Learning actual end date	ILR
LEARNSTARTDATE	Learning start date	ILR
LEARNPLANENDDATE	Learning end date	ILR
OUTCOME	Indicates whether the learner achieved the learning aim	ILR
PROGTYPE	Programme type	ILR
QUAL_TIT [†]	Learning aim title	ILR
QUAL_TYP	Learning aim type	ILR
REGULATEDCREDITVA LUE	Learning aim's credit value within a regulated credit framework	ILR

Name	Description	Dataset
SEX	Sex of student	ILR
STDCODE	Apprenticeship standard code	ILR/LARS
STULOAD	Student instance FTE	ILR
TYPEYR	Type of instance year	ILR
UNITTYPE	Unit type	ILR
WITHDRAWREASON	Withdrawal reason	ILR
NOTIONALENDLEVEL	Level of NVQ	LARS
SECTORSUBJECTAREA TIER1	Tier 1 classification of learning aim	LARS
SECTORSUBJECTAREA TIER1DESC	Tier 1 description of learning aim	LARS
SECTORSUBJECTAREA TIER2	Tier 2 classification of learning aim	LARS
SECTORSUBJECTAREA TIER2DESC	Tier 2 description of learning aim	LARS
STANDARDNAME	Apprenticeship standard name	LARS

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

Derived fields used to create HE-level apprenticeship tables

9. Here we give details of the derived fields in the individualised file. These fields are used to build the key dimensions of the HE-level apprenticeship tables.

Table 3 Derived fields created for the data summary

Derived field name	Description
OFSQAIM†	Recognised HE qualification aim
NVQ_LEVEL	Level of NVQ
SCCRSELGTH	Expected duration of study
SCLEVEL_DETAIL	Level of study
SCAPPRENTICE	Apprenticeship
SCLEVEL	Level of study, broad categories
SCYEAR_ST	Academic start year
SCAGE_DETAIL	Age
SCCOMDATE_MONTH	Month of starting learning aim
SCOUTCOMEPOP	Indicates student is excluded from the outcomes population
SCDISABLE	Disability
SCDISABLETYPE	Disability type
SCETHNIC	Ethnicity
SCENTRANT	Indicates whether the student is an entrant.
SCFPE	Full person equivalent
SCJACS	JACS subject codes
SCLDCS	Learn direct codes

Derived field name	Description
SCSEX	Sex of the student
SCOUTCOME	Completion status of the student
SCWITHDRAWREASON	Reason for withdrawing from the learning aim.

† The algorithms for deriving these fields are given in 'HEIFES17 comparison algorithms' (see the 'HEIFES17 comparison technical document'); the paragraph references refer to this document

OFSQAIM

10. This field classifies qualification aims into broad levels of higher education. For a full definition of this field please refer to '2018-19 ILR data checking tool: Classifying learning aims technical document' (available via: www.officeforstudents.org.uk/data-and-analysis/data-checking-tools/2018-19-ilr-data-checking-tool/).

NVQ_LEVEL

11. This field indicates the level of NVQ.

Value	Description	Definition
4	Level 4	PROGTYPE = 20 or NOTIONALENDLEVEL = 4
5	Level 5	PROGTYPE = 21 or NOTIONALENDLEVEL = 5
6	Level 6	PROGTYPE = 22 or NOTIONALENDLEVEL = 6
7	Level 7	PROGTYPE = 23 or NOTIONALENDLEVEL = 7
BLANK	Otherwise	Otherwise

SCCRSELGTH

12. This field contains the number of years that the qualification aim is expected to last. If a student's planned end date falls within the first 14 days of a second year of study, the number of years is taken as one. Otherwise, it is rounded up to the nearest whole number. SCCRSELGTH is the difference in years between LEARNSTARTDATE and LEARNPLANENDDATE. For example, a course with LEARNSTARTDATE = 1 October 2014 and LEARNPLANENDDATE = 5 January 2016 will have SCCRSELGTH = 2.

SCLEVEL_DETAIL

13. This field classifies qualification aims into specific levels of study.

Value	Description	Definition
HNC	HNC	OFSQAIM = HNC
HND	HND	OFSQAIM = HND
FOU	Foundation degree	OFSQAIM = FOUDEG
UGDIP	Undergraduate diploma	OFSQAIM = DIPHE, DTLLS, DET
FDBC	Foundation degree bridging course	OFSQAIM = FDBC
OUG	Other undergraduate	OFSQAIM = CERTED, UGOTHER, UNICERT, CET, CTLLS, PTLLS, HIGHCERT, OTHL4_Q, OTHL4_CC, OTHL4_U, OTHL5_Q, OTHL5_CC, OTHL5_U, OTHL6_Q, OTHL6_CC, OTHL6_U, OTHHEQ, OTHHE_CC, OTHHE_U
DEG	First degree	OFSQAIM = FIRST
INTM	Integrated masters	OFSQAIM = ENHANCED
PGCE	PGCE	OFSQAIM = PGCE
OPGT	Other postgraduate taught	OFSQAIM = PGDIP, PGOTHER, PGCERT, OTHL7_Q, OTHL7_CC, OTHL7_U, OTHL8_Q, OTHL8_CC, OTHL8_U
PGTM	Postgraduate taught masters	OFSQAIM = MASTER
PHD	PhD and MPhil	OFSQAIM = HIGHER
OTHER	Further education	OFSQAIM = FE

SCAPPRENTICE

14. This field indicates whether the learning aim is part of an apprenticeship at any level.

Value	Description	Definition
1	The learning aim is part of an apprenticeship at any level	PROGTYPE = 02, 03, 10, 20, 21, 22, 23, 25
0	The learning aim is not part of an apprenticeship at any level	Otherwise

SCLEVEL

15. This field classifies qualification aims into broad levels of study.

Value	Description	Definition
APPR	Apprenticeship	SCAPPRENTICE = 1 and NVQ_LEVEL = 4, 5, 6, 7
OUG	Other undergraduate	SCLEVEL_DETAIL = OUG, FOU, HND, HNC, UGDIP, FDBC
DEG	First degree	SCLEVEL_DETAIL = DEG, INTM
PG	Postgraduate	SCLEVEL_DETAIL = PHD, PGTM, PGCE, OPGT
OTHER	Other	Otherwise

SCYEAR_ST

16. The academic year the student entered on to the course taken from LEARNSTARTDATE. If the month of LEARNSTARTDATE is between January and July, then SCYEAR_ST is the year prior to the calendar year of entry.

SCAGE_DETAIL

17. This field indicates the age category of the student at 31 August in the year they commence their studies.

Value	Description	Definition
UNKNOWN	Unknown	DATEOFBIRTH = BLANK or Year of DATEOFBIRTH = 9999 or DATEOFBIRTH > 31 August SCYEAR_ST - 10
U21	Under 21 on entry	DATEOFBIRTH > 31 August SCYEAR_ST - 21
21_25	Between 21 and 25 on entry	DATEOFBIRTH ≤ 31 August SCYEAR_ST - 21 and DATEOFBIRTH > 31 August SCYEAR_ST - 26
26_30	Between 26 and 30 on entry	DATEOFBIRTH ≤ 31 August SCYEAR_ST - 26 and DATEOFBIRTH > 31 August SCYEAR_ST - 31
31_40	Between 31 and 40 on entry	DATEOFBIRTH ≤ 31 August SCYEAR_ST - 31 and DATEOFBIRTH > 31 August SCYEAR_ST - 41
41_50	Between 41 and 50 on entry	DATEOFBIRTH ≤ 31 August SCYEAR_ST - 41 and DATEOFBIRTH > 31 August SCYEAR_ST - 51
51+	51 and over on entry	Otherwise

SCCOMDATE_MONTH

18. This field indicates the month of the student LEARNSTARTDATE.

SCOUTCOMEPOP

19. This field indicates students excluded from the outcomes population as they are not entrants or have left their course early.

Value	Description	Definition
0	Student is an entrant	LEARNSTARTDATE ≥ 18 July 20YY and LEARNSTARTDATE < 18 July 20YY+1 and (LEARNACTENDDATE = BLANK or LEARNACTENDDATE - LEARNSTARTDATE ≥ 14 days)
1	Otherwise	Otherwise

SCDISABLE

20. This field indicates whether the student has a reported disability.

Value	Description	Definition
Y	The student has declared a disability	LLDDHEALTHPROB = 1 and SCDISABLETYPE ≠ NONE
N	The student has declared no disability	LLDDHEALTHPROB = 2 and SCDISABLETYPE = NONE
UNKNOWN	No information provided by the learner	Otherwise

SCDISABLETYPE

21. This field indicates the type of disability a student has.

Value	Description	Definition
NONE	The student is not disabled or has an unknown disability	PRIMARYLLDD = 98, 99, BLANK
MULTI	The student has other or multiple impairments	PRIMARYLLDD = 2, 97
SOC	The student has a social or communication impairment	PRIMARYLLDD = 1, 8, 14, 15, 17
COG	The student has cognitive or learning difficulties	PRIMARYLLDD = 3, 10, 11, 12, 13, 94, 96
MH	The student has a mental health condition	PRIMARYLLDD = 9
PHY	The student has sensory, medical or physical impairments	PRIMARYLLDD = 4, 5, 6, 7, 16, 93, 95

SCETHNIC

22. This field indicates the student's ethnicity.

Value	Description	Definition
A	Asian	ETHNICITY = 39, 40, 41, 42, 43
B	Black	ETHNICITY = 44, 45, 46
W	White	ETHNICITY = 31, 32, 33, 34
M	Mixed	ETHNICITY = 35, 36, 37, 38
O	Other	ETHNICITY = 47, 98
UNKNOWN	Unknown ethnicity	Otherwise

SCENTRANT

23. This field indicates whether the student is an entrant.

Value	Description	Definition
1	Student is an entrant	LEARNSTARTDATE ≥ 1 August 20YY and LEARNSTARTDATE < 1 August 20YY+1
0	Otherwise	Otherwise

SCFPE

24. This field shows the nominal full person equivalence (FPE) associated with the SCJACS code. This is derived using PCFLDCS, PCSLDCS and PCTLDCS.

SCLDCS

25. This field shows the Learn Direct codes that have been assigned to the student's programme of study. This directly maps from LDCS_CO1, LDCS_CO2, and LDCS_CO3.

SCJACS

26. This field shows the full 4-digit JACS code that has been assigned to the student's programme of study. The Learn Direct codes used to identify subject areas of study for students returned to the ILR (LDCS_CO1, LDCS_CO2, and LDCS_CO3) have been mapped to full 4-digit JACS codes.

SCSEX

27. This field indicates the sex of the student.

Value	Description	Definition
M	Male	SEX = M
F	Female	SEX = M

SCOUTCOME

28. This field indicates the completion status of the student.

Value	Description	Definition
COMPLETED	Student has completed	COMPSTATUS = 2
TEMPORARILY WITHDRAWN	Student has temporarily withdrawn	COMPSTATUS = 6
WITHDRAWN	Student has withdrawn	COMPSTATUS = 3, 4
CONTINUING	Student is continuing	Otherwise

SCWITHDRAWREASON

29. This field indicates the reason for withdrawing from the learning aim.

Value	Description	Definition
FAILURE	Academic failure / left in bad standing / not permitted to progress	SCOUTCOME = WITHDRAWN and WITHDRAWREASON = 42
LEARNING AIM TRANSFER	Student has transferred to a new learning aim with the same provider	SCOUTCOME = WITHDRAWN and WITHDRAWREASON = 40
PROVIDER TRANSFER	Student has transferred to another provider	SCOUTCOME = WITHDRAWN and WITHDRAWREASON = 2
REDUNDANCY	Student has been made redundant	SCOUTCOME = WITHDRAWN and WITHDRAWREASON = 29
OTHER	Otherwise	SCOUTCOME = WITHDRAWN and not above

Apprenticeships data summary: rebuild instructions

30. The individualised file, APPR18_DCT_XXXXXXXXX_IND.csv, can be used to interrogate the data and our calculation of derived fields by filtering to certain groups of records. Specific instructions to rebuild the HE-level apprenticeships data summary workbook, APPR18_DCT_XXXXXXXXX.xlsx, are provided here.
31. The following sections of this document detail how to rebuild the populations of students found in the sheets of the data summary workbook. Each sheet either includes information which need to be filtered from the individualised file by programme aim and/or component aim. This is summarised in the table below.

Table 4 HE-level apprenticeship data summary tables created using 2018-19 ILR data

Worksheet	Description	Programme and/or component aims
Coversheet	Title page	N/A
Characteristics	Characteristics of students at component level	Component
Starts-Student characteristics	Characteristics of student starts at component level and program level	Program and component
Starts-Provision characteristics	Student starts by month, and student headcount by franchise	Component
Subjects	Student headcount by subject at component level and program level	Program and component
Employers	Student headcounts of level 6 and 7 apprentices by employer	Component
Outcomes	Student headcount by outcome	Component

32. An additional field has been added to the individualised file which is listed in the table below.

Table 5 Additional fields in the individualised file

Field name	Description
APPRPOP	A column provided to enable filtering to the apprenticeship population
APPRLEVEL	A column provided to enable filtering to either program or component aims

33. To rebuild the headcounts in the workbook summary tables, apply the following filters to the individualised files:

- a. Restrict the data to the required population by filtering to APPRPOP = '1'
- b. Restrict the data to the level required by filtering on APPRLEVEL to 'Program' or 'Component'.
- c. This can be further restricted to only the starts population by applying the filter: SCENTRANT = 1.
- d. The additional filters which should be applied to the individualised file to create the population for each specific row and column of the characteristics tables are shown at the end of this paragraph.
- e. Once all the required filters have been applied the headcount is returned by summing the values in the SCFPE column and dividing by 100.

Characteristics and Starts-Student characteristics

Notional NVQ level

Column value	Filter
Level 4	NVQ_LEVEL = 4
Level 5	NVQ_LEVEL = 5
Level 6	NVQ_LEVEL = 6
Level 7	NVQ_LEVEL = 7

Sex

Row value	Filter
Male	SCSEX = M
Female	SCSEX = F

Age

Row value	Filter
Under 21	SCAGE_DETAIL = U21
21 to 25	SCAGE_DETAIL = 21_25
26 to 30	SCAGE_DETAIL = 26_30
31 to 40	SCAGE_DETAIL = 31_40
41 to 50	SCAGE_DETAIL = 41_50
51 and over	SCAGE_DETAIL = 51+

Ethnicity

Row value	Filter
Asian	SCETHNIC = A
Black	SCETHNIC = B
Mixed	SCETHNIC = M
Other	SCETHNIC = O
White	SCETHNIC = W
Unknown	SCETHNIC = UNKNOWN

Disability

Row value	Filter
Disability reported	SCDISABLE = Y
No disability reported	SCDISABLE = N
No information provided by the learner	SCDISABLE = UNKNOWN

Starts-Provision characteristics

34. This sheet summarises the number of component aim starts per month on a bar chart where each bar represents a month in the academic year 2018-19. These can be recalculated by restricting to the month of the component aim start using SCCOMDATE_MONTH and then following the instructions in paragraph 33.
35. Where a HE-level apprenticeship student has been recorded with a franchise partner (PARTNERUKPRN), this sheet also summarises the number of component aim starts per franchise partner and can be recalculated by filtering to a PARTNERUKPRN then using the instructions in paragraph 33.

Starts-Subjects

36. Where a HE-level apprenticeship student has been recorded on either an apprenticeship framework (via FWORKCODE) or an apprenticeship standard (via STDCODE) on the ILR, this has been linked to the LARS to retrieve information on the standard name, notional NVQ level, subject area tier 1 and subject area tier 2 which are populated on this sheet. These fields are all available within the individualised file and are labelled as shown in the table below. Note that, apprenticeship frameworks do not have a standard name, and are just populated with 'Framework'.

Column value	Variable in the individualised file
Standard code	STDCODE (for apprenticeship standards) or FWORKCODE (for apprenticeship frameworks)
Standard name	STANDARDNAME
Notional NVQ level	NVQ_LEVEL
Subject area tier 1	SECTORSUBJECTAREATIER1DESC
Subject area tier 2	SECTORSUBJECTAREATIER2DESC

37. The number of program aim starts on the apprenticeship framework or apprenticeship standard are shown and can be recalculated using the instructions in paragraph 33.

38. Students returned with either an apprenticeship framework or an apprenticeship standard are linked to their component aims present in the 2018-19 ILR data and the qualification title (variable QUAL_TIT in the individualised file). There may be multiple qualification titles per framework or standard.

39. The number of component aim starts on the apprenticeship framework or apprenticeship standard are shown and can be recalculated using the instructions in paragraph 33.

Starts-Employers

40. Where a HE-level apprenticeship student has been recorded with an employer identifier (EMPID), this has been linked to ESFA's data resources to retrieve the employer name (variable EMPNAME in the individualised file).

41. This sheet summarises the number of employers by:

- a. Overall number of employers
- b. Employers with 10 or more component aim starts

- c. Employers with between 2 and 9 (inclusive) component aim starts
- d. Employers with 1 component aim starts

42. This sheet also lists each employer, ordered in descending order by the number of component aim starts and can be recalculated using the instructions in paragraph 33.

Starts-Outcomes

43. This sheet summarises the completion status, as recorded on ILR via COMPSTATUS and WITHDRAWREASON, for component aim starts per notional NVQ level. The possible options that are displayed on this sheet are listed in the table below. The number of component aims starts can be recalculated using the instructions in paragraph 33.

Notional NVQ level

Column value	Filter
Level 4	NVQ_Level = 4
Level 5	NVQ_Level = 5
Level 6	NVQ_Level = 6
Level 7	NVQ_Level = 7

Outcome and reason for withdrawal

Outcome	Reason for withdrawal	Filter
Completed	N/A	SCOUTCOME = COMPLETED
Continuing	N/A	SCOUTCOME = CONTINUING
Temporarily withdrawn	N/A	SCOUTCOME = TEMPORARILY WITHDRAWN
Withdrawn	Provider transfer	SCOUTCOME = WITHDRAWN and SCWITHDRAWREASON = PROVIDER TRANSFER
Withdrawn	Learning aim transfer	SCOUTCOME = WITHDRAWN and SCWITHDRAWREASON = LEARNING AIM TRANSFER
Withdrawn	Redundancy	SCOUTCOME = WITHDRAWN and SCWITHDRAWREASON = REDUNDANCY
Withdrawn	Failure	SCOUTCOME = WITHDRAWN and SCWITHDRAWREASON = FAILURE
Withdrawn	Other	SCOUTCOME = WITHDRAWN and SCWITHDRAWREASON = OTHER



© The Office for Students copyright 2019

This publication is available under the Open Government Licence 3.0 except where it indicates that the copyright for images or text is owned elsewhere.

www.nationalarchives.gov.uk/doc/open-government-licence/version/3/