CollegeBoard

ACES (Admitted Class Evaluation Service™)

Data Preparation Guidelines

June 2025

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Overview

This document provides guidance and technical specifications to facilitate the preparation of your Admitted Class Evaluation Service™ (ACES) data file submission and ensure it meets data quality requirements for the completion of your ACES study.

It is intended for data administrators and/or users responsible for preparing and submitting the data through the ACES portal.

Submitting data to the ACES portal is a multi-step process that occurs during the selected study design workflow. After the user selects a study, the study design screen(s) enable the user to make choices on predictors, outcomes, and subgroups, at which point the data submission screen(s) prompt the user to upload and map the data according to the ACES data specification document. The following steps are included in the general workflow for your data submission:

1. *Prepare*: In this step you will bring together the student data necessary for your study (possibly from various sources at your institution) into a single file.
2. *Upload*: This step involves uploading the data file, at which time the system will ensure it can read it and gather information on its content to assist you through the submission process.
3. *Describe*: In this step you will provide information about your data file in keeping with the ACES data specifications described in this document. This step consists of documenting and describing your data elements.
4. *Quality Assurance*: This automated step consists of transforming and standardizing your data file and verifying that it complies with the specifications and quality assurance rules.
5. *Confirmation*: This step involves reviewing the quality assurance reports to ensure the data meets your expectations.

The first step in preparing your data is performed at your institution and occurs outside of the ACES portal, while the other steps are completed within the ACES portal.

Note that we understand this process can be challenging, especially for first time users. Do not hesitate to contact us via email at aces-collegeboard@norc.org or 1-800-439-8309. You can also use the ACES portal Discussion feature (icon on the top of the screen) should you require assistance or have any questions on the data preparation and submission process.

Glossary

The following terms, concepts, and abbreviations are used throughout this document.

Terms and definitions

- *Dataset*: A collection of records holding data that can be saved in a file or a database. In our particular case, the dataset contains variables pertaining to students and courses.
- *Classification*: A collection of codes and their value labels used by categorical or grouping variables, commonly referred to as lookups or classification codes.
- *Record*: A collection of variables brought together to store data in a dataset, or in general terms, a collection of variables pertaining to one student.
- *Variable*: Used generically and a synonym for data element, spreadsheet column, or database table field. Technically, characteristics, number, or quantity that can be measured or counted.

Abbreviations

ACES	Admitted Class Evaluation Service (ACES) ™
AI	Attending institution (College Board high school code)
AP	Advanced Placement®
CIP	Classification of Instructional Programs
CLEP	College Level Examination Program®
CSV	Comma-separated value text file format
DI	Designated institution (College Board postsecondary institution code)
GPA	Grade point average (at the postsecondary level)
HESO	Higher Education System Office
HSGPA	High school grade point average
ISO	International Standards Organization
NORC	NORC at the University of Chicago
SAS	Statistical Analysis System software
STEM	Science, technology, engineering, and mathematics

Getting Started

The overall purpose of this guide is to help you compile a high-quality data file of student and course-level information to support your use of the ACES system. For processing and analysis purposes, your incoming data must be transformable into a standardized structure. The better it is aligned on the specifications, the easier and faster the submission process will be (ideally, just a few minutes). Templates are available to facilitate this process and ensure a smooth submission. It is recommended that you use the data templates designed for each particular study. Data templates can be found here: https://aces.collegeboard.org/resources/data-layout-templates.

Quick Start

Don't have time to read this guide?

- Visit the ACES website at https://aces.collegeboard.org.
- Determine which study you would like to conduct and familiarize yourself with the requirements.
- Download the Excel data submission templates from the ACES website and select the one relevant to your study.
- Consult the Training Guide appropriate for your study https://aces.collegeboard.org/resources/study-use-guides.
- Register an account with the ACES portal at https://acesportal.collegeboard.org.
- Request a study (see steps below).
    - Create a new study.
    - Review the study design options to inform what you will want to include in your data file.
    - Add a data submission (see data requirements below).
        - Upload your data file.
        - Describe your data elements.
        - Run data quality assurance and consult the data quality reports.
        - Confirm your data are ready.
    - Complete the study design options.
- Submit for processing.

Which Steps Do I Need to Take to Submit a Study?

Once you have decided which study you want to conduct and understand the various design options available, it is easy to complete the process by following the steps outlined in this section.

Keep in mind that at any time, you can contact us for assistance:

- Email aces-collegeboard@norc.org or call the ACES support number: 1-800-439-8309.
- Use the Discussions feature in the ACES portal.

Prepare your data

The initial step is preparing the data file holding the student and course information necessary to support the study. This is typically an Excel file, and we highly recommend using our available templates whenever possible as a starting point.

The purpose of this document is specifically to guide you through this process (see next section), which is performed outside of the ACES portal. Subsequent steps are all taken within the ACES portal environment.

Upload your data[1]

After you have registered an account with the ACES portal and logged in, the home page dashboard is available to create a new study, edit or follow studies in progress, and retrieve reports and files. After a study has been created, you will typically associate it with a newly created "data submission."

In the data submission page, the initial step is to "upload" your data file. At this point, the system will ensure it can properly read your data and extract some basic information to support the following steps. Depending on the format, you may need to provide additional information. For example, if you upload an Excel spreadsheet containing multiple sheets, you will need to specify which one holds the actual data (the others will be ignored).

Note that if data corrections or adjustments are needed, you will always have the option to re-submit a new data file up until the point the file is accepted and your study "in process" in the system.

Describe your data

Once your data file has been uploaded, the next step is to capture information about its structure and content, to be able to perform quality assurance and load in the ACES system.

ACES will, as much as possible, attempt to automatically infer the information it needs, but will typically require a bit of assistance and your review. This is particularly true the first time you upload a data file (your choices will be remembered in subsequent submissions).

What this step aims to collect includes:

[1] A Year-over-Year Study submission is not accompanied by a data upload. Instead you select from previously processed studies (for the National Validity Study or routine Admission Validity Studies) and the data from the earlier studies are used to produce the Year-over-Year Study report.

- The correspondence between your data file variable names and the standard College Board ACES system names that are described throughout this guide. If you use the ACES templates or the same names, then this will be done automatically. Otherwise you will need to indicate how they "map" to each other (e.g., gender→sex, lname→last_name).
- How your course grades relate to a numeric and/or standard 4-point scale. Your institutional grading policy will be associated with your user profile and will be reused.
- How you format your academic terms (e.g., Fall 2024, SP25). If you do adopt the encoding system described in this guide, this will be automatic. Otherwise, your version will be saved as a reusable policy.
- The meaning of your custom predictors or subgroups, which may be provided for certain studies.
- For categorical variables or custom subgroups, how various options are coded (e.g., 1=Male, 2=Female).
- Collecting other necessary information to fully understand and process your data submission.

Once this is completed, the quality assurance process will begin. Note that we understand that this step may be intimidating for a first-time user. Do remember that help is an email or click away by using the Discussions feature in the ACES portal.

Perform quality assurance

This step is an automated process that will examine your data to ensure, as much as possible, that it meets expectations. This includes reviewing the content for the presence of required fields and data values, verifying codes, ensuring integrity, and checking for duplicate students or courses.

At the end of the process, data quality assurance reports will be produced and made available for download. The quality assurance package holds one report for the student data and one for the course data (if course data are submitted for the study).

It is recommended that you consult these documents as they contain valuable summary information about your data. This includes:

- *Errors*: Data elements and/or values that do not meet requirements and must be adjusted before proceeding beyond this step (e.g., correct and upload a new data file).
- *Warnings*: Non-critical issues that have been detected. These do not preclude the data from being accepted, but should be reviewed.
- *Updates*: Small corrections and cleansing that have been automatically applied to your data to make it comply with the specifications (e.g., trimming extra spaces, formatting, etc.). These should be reviewed and potentially corrected in future submissions.
- *Statistics*: Summary statistics (ranges, missing values, min/max, etc.) and frequencies (counts) that summarize the content of your data.

Confirm data submission

If no significant issues or errors are detected and you are satisfied with the overall quality, at this stage you have the option to complete your data submission. This step is also necessary to allow for the study design to be finalized.

Complete study design

Once your data submission is completed, you can finalize your study design. Note that some design options are driven by the content of your data (e.g., selecting which course to analyze or GPA to use), which is why it is important to load your data first.

Review and processing

Your data submission and study requests will also be manually reviewed by the analytical team. Note that this includes second-level manual validation and, if applicable, matching your students with the ACES cohort database. If any issues are detected at this stage, you will be contacted directly via email or phone for clarification and, if necessary, may be asked to adjust the data.

Assuming all is well, your study request will proceed to the analysis phase.

Delivery

Once your study is complete, you will be notified via email when your report files are ready. You will be directed to the ACES portal to download your reports files.

What Do I Need to Include in My Data File?

Most data submissions only use a subset of the variables described in this document, with the requirements depending on:

- The study[2] for which the data are being submitted (The National SAT Validity Study, Admission Validity Study, SAT Placement Validity Study, AP Placement Validity Study, ACCUPLACER Placement Validity Study, CLEP Placement Validity Study, Retention Study, or Completion Study).
- Specific study parameters, options, custom predictors, or subgroups.
- Whether you are an institutional user (associated with a single academic institution) or a Higher Education System Office (HESO) user (such as a state system).
- Whether you are submitting data spanning multiple academic years or institutions.

The Excel templates we have available contain the set of variables relevant for each study type. It is highly recommended that you use these templates for your data submission.

[2] As noted earlier, a Year-over-Year Study submission is not accompanied by a data upload, but utilizes data uploaded from previously processed National SAT Validity Studies or from routine Admission Validity Studies.

Student identification

All files need to contain information about your students, which at a minimum consists of a university assigned **student identifier** (student_id).

If your agency submits data on behalf of other or multiple institutions (e.g., a HESO), you will also need to include the students' **designated institution** code (di_code) to indicate the particular postsecondary institution within the educational system the student attends.

Cohort matching

The Admission Validity Study, Retention, Completion, SAT Placement, AP Placement, and Year-over-Year studies require linking your students with the College Board cohort database for analysis.

The following variables are used for such purpose and must be included in your data submission:

- The student's **name** (first_name, middle_name, last_name), with the understanding that the middle name/initial may be blank or missing.
- The student's **date of birth** (dob) and **sex** (sex).
- The student's **high school attending institution code** (hs_ai_code), and/or alternatively the student's **home address** (lines, city, zip, state, country). Four-year institutions are expected to provide the high school attending institution code, while 2-year community colleges are to provide the address. Submitting both is highly recommended if available, and at a minimum, the zip code should always be present.

Student course information

All studies, with the exceptions of the routine SAT Admission Validity, Retention, Completion, and Year-over-Year studies need course-level information, which consists of the following variables:

- The **course code** (course_code), excluding the section suffix as this is typically not relevant to a study (e.g., ENG 101, CHEM 207).
- The **course title or name** (course_title).
- The **term** the course was taken (course_term), which is expressed as a combination of "period" and "year." This can be encoded by either using the College Board recommended coding (e.g., 2024-S1; see Data Dictionary section for details) or your own coding system (e.g., Fall 2024, Spring 25, SU 202425). Term is not required for ACCUPLACER or SAT Placement studies.
- The **course grade** (course_grade), which can be expressed in alpha or numerical format. Note that your grading policy will be documented the first time you submit data and then stored in the system.

The National SAT Validity Study (NVS) in addition requires:

- A **student retention flag** (retention_flag): indicating whether or not the student returned as an undergraduate to begin the new academic year (corresponding to the academic year for which the file is being submitted to the ACES system; so returning in Fall 2025 in data submitted for the 2025 NVS).
- If the study includes the 4th academic year data for the student cohort (e.g., for 2025 NVS, the students in the cohort first enrolled in Fall 2021 would have fourth-year data submitted), a **student completion flag** (completion_flag) indicating whether the student completed the bachelors' (four year) degree, and for those who completed their degree, the **student completion date** (completion date). Note that for 1st through 3rd academic year submissions, the completion fields are optional, but should be included if any students in the study did complete a bachelors' degree.
- The number of **course credits/hours** that are provided as credits **attempted** (course_credits_attempted).
- A **course section** code can be optionally included but is not required (course_section).

Custom subgroups and predictors

Various studies offer the option to include custom predictors (e.g., SAT Admission Validity, SAT Placement, ACCUPLACER, Retention and Completion) or subgroups (e.g., SAT Admission Validity Study, Retention and Completion) to support your specific analytic needs. If such choices are made in your study design, corresponding variables will need to be included in your data.

Other study variables

In addition to the above, the following information may need to be present in your data:

- **High school GPA** (hs_gpa): This needs to be provided for the National SAT Validity Study and routine SAT Admission Validity studies if you do not select to have this supplied by ACES data (option in your study design).
- **College GPA**: The *cumulative GPA* (cum_gpa) is required for the National SAT Validity Study and for routine SAT Admission Validity studies. One exception is within a routine SAT Admission Validity Study if you are interested in examining an *alternate GPA* (gpa_oth)—such as STEM coursework GPA or 2nd year non-cumulative GPA as your study criterion. Students for which GPA is missing will be excluded from the analysis.
- **Race/ethnicity** (race_ethnicity): Can be included in the CLEP Placement Study if it is to be used as a subgroup.
- **Other credit pathway indicator** (course_other_pathway_flag): The AP and CLEP Placement studies provide the option to include a third type/group of entry into the subsequent course for comparison, such as dual enrollment, IB, or some other form of credit. You will need to identify those students as "other" by creating a flag. This flag should be unique to the course you are studying. In other words, a student flagged as "other" for English Composition should not also be flagged as "other" for their Calculus course, unless the student belongs to an "other" group for each of the two courses. Note that if you use this variable in a study, you should be using it for one particular type of

"other" credit type per course (e.g., only dual enrollment and not a mixture of credit sources within a course).

- **ACCUPLACER scores** (accu_*): Must be provided for relevant tests based on your study design.
- **CLEP scores** (clep_*): Must be provided for relevant tests based on your study design.
- **Retention Flag** (retention_flag): Must be provided in Retention studies.
- **Completion Flag, Completion Date** (completion_flag, completion_date): Must be provided in Completion studies.
- **ACT Scores** (act_composite, act_english, act_reading, act_math); Optional variables in Retention and Completion Studies that, if included, are converted (concorded) to SAT scores to be used in analyses for those students who did not take the SATs.

Pass-through variables

Note that any number of additional variables (not mapped to the standard variables) can be included in your data. These will need to be categorized as **"pass-through,"** in which case they will not be used for analysis.

Summary

The table below provides a summary of variable requirements per study type, using the following legend:

- R : Required
- E : Encouraged/Recommended
- O: May be required depending on the study design options
- X: Do not include in your data (the information is already linked to your institution's registration profile or is a selection within the ACES submission when needed)
- R(F): Required, can exist in the data or can be provided as a fixed value for the whole file
- - : Not applicable (not used for the study). Do not include or categorize as pass-through.

The table is a high-level view[3]. You can locate the type of study you are planning to conduct and follow that column down to learn which variables to include in your file. Consult the detailed specifications provided in this document for variable-specific information when preparing your data.

[3] The Year-over-Year Study does not appear in this table since it uses data from National Validity Studies and routine Admission Validity Studies previously processed, so no additional data are submitted.

Section	Variable	CB National SAT Validity Study	SAT Admission Validity	Placement				Reten.	Compl.
				SAT	AP	CLEP	ACCU		
Student Identification	di_code[1]	X/R	X/R	X/R	X/R	X/R	X/R	X/R	X/R
	student_id	R	R	R	R	R	R	R	R
Student Information	First Name (first_name)	R	R	R	R	-	-	R	R
	Middle Name (middle_name)	R	R	R	R	-	-	R	R
	Last Name (last_name)	R	R	R	R	-	-	R	R
	sex	R	R	R	R	O	-	R	R
	Date of Birth (dob)	R	R	R	R	-	-	R	R
	race_ethnicity	-	-	-	-	O	-	-	-
	High School Attending Institution Code (hs_ai_code)[2]	R	R	R	R	-	-	R	R
	hs_gpa	O	O	-	-	-	-	O	O
	address_(full address)[2]	E/R	E/R	E/R	E/R	-	-	E/R	E/R
	address_zip	R	R	R	R	-	-	R	R
	cohort_year	X	X	R(F)	R(F)	-	-	X	X
Student Academics	gpa_cum	R	R[3]	-	-	-	-	O	O
	gpa_oth	-	O[3]	-	-	-	-	O	O
	Retention Flag[4]	R	-	-	-	-	-	R	-
	Completion Flag[5]	R/O	-	-	-	-	-	-	R
	Completion Date[6]	O/R	-	-	-	-	-	-	R
	College major area of study (college_major) [7]	O	-	-	-	-	-	-	-
	College major CIP (college_major_cip) [7]	O	-	-	-	-	-	-	-
	2nd College major area of study (college_major_2) [8]	O	-	-	-	-	-	-	-
	2nd College major CIP (college_major_2_cip) [8]	O	-	-	-	-	-	-	-

Section	Variable	CB National SAT Validity Study	SAT Admission Validity	Placement				Reten.	Compl.
				SAT	AP	CLEP	ACCU		
	ACT Composite	-	-	-	-	-	-	O	O
	ACT English	-	-	-	-	-	-	O	O
	ACT Reading	-	-	-	-	-	-	O	O
	ACT Math	-	-	-	-	-	-	O	O
Custom	predictor1..5	O	O	O	-	-	O	O	O
	subgroup1..3	O	O	-	-	-	-	O	O
College Coursework	course_code	R	-	R	R	R	R	-	-
	course_section	O	-	-	-	-	-	-	-
	course_title	R	-	R	R	R	R	-	-
	course_term	R	-	-	R	R	-	-	-
	course_credits_attempted	R	-	-	-	-	-	-	-
	course_grade	R	-	R	R	R	R	-	-
	course_other_pathway_flag	-	-	-	O	O	-	-	-
Institutional Exams/Tests	clep_*	-	-	-	-	R	-	-	-
	accu_*	-	-	-	-	-	R	-	-

(1) Required for non-institutional data submission (e.g., Higher Education System Office).
(2) Address information is required in National SAT Validity Study if high school attending institution code is not available.
(3) The gpa_cum is not required in instances where you choose to use a different GPA criterion in your study. In that case, the gpa_oth would be required.
(4) Required for National Validity Study submission.
(5) Required for National Validity Study submission of students in their fourth academic year. Requested for National Validity Study submission of students in their first through third academic years for any students who completed their bachelor's degree.
(6) Completion Date is only required for students who completed their bachelor's degree as indicated by the Completion Flag field.
(7) Requested for National Validity Study submission. 2020 and 2010 CIP codes are accepted.
(8) Requested for National Validity Study submission for students with dual majors. 2020 and 2010 CIP codes are accepted.

File Specifications

Your data are composed of a collection of variables (i.e., data elements, columns, fields) whose content and characteristics are described in detail in the Data Dictionary section of this document.

This section describes:

- How your data should be organized (vertical/long or horizontal/wide format).
- Which file formats are supported.
- How to use our standard templates.
- How to name your variable or encode your data values.

Data Organization

The ACES system expects your data to be packaged in a *single file* or single sheet in a spreadsheet.

When compiling your data, two options are available in terms of organizing your information:

1. Vertical or long layout, whereby each row contains information for a *single course*.
2. Horizontal or wide layout, whereby each row contains information for a *single student* and all their associated courses.

Vertical/long

In a vertical layout, the data contains *one record per course,* and the student information is repeated for every entry as illustrated below:

student #1 data	course #1 data
student #1 data	course #2 data
student #1 data	course #3 data
student #2 data	course #1 data
student #2 data	course #2 data
student #3 data	course #1 data
...	...

Note that, in this case, it is critical for the student information to be *exactly* the same for each corresponding course, otherwise it would introduce inconsistencies/discrepancies in the data. In the vertical/long layout, every record should contain information about a course (i.e., there should be no records with empty course data).

Horizontal/wide

In a horizontal layout, the data contain *one record per "student,"* and sets/groups of variables are repeated for each course as illustrated below:

student #1 data	course #1 data	course #2 data	course #3 data	...
student #2 data	course #1 data	course #2 data		...
student #3 data	course #1 data			
...	...	...	...	...

Note that, in this case, the total number of variables in the file is driven by the student(s) with the highest number of courses. For example, if one student has 20 courses, you will need 20 sets of course variables. As a consequence, many variable sets may not have any data (particularly for students with a small number of courses).

It is highly recommended for the course variable names to follow a pattern to facilitate matching and mapping (e.g., course_code_01, course_term_01, course_grade_01, ..., course_code_02, course_term_02, course_grade_02, ... , course_code_nn, course_term_nn, course_grade_nn).

Which layout to use?

While either layout can be used, from a preparation and submission perspective, the vertical layout is typically easier to compile and upload as 1) it more naturally resembles how the information should be organized in a database system (one student has many courses) and 2) the number of variables to "map" is fewer than in the horizontal layout (though the portal interface facilitates this process).

Your choice, however, will likely be driven by your available data source and systems used by your institution.

File Formats

The following formats are supported by the system:

- Microsoft Excel (.xlsx/.xls)
- Comma-separated value (CSV)[4] ASCII text files
- SAS transport (.xpt)
- Tab delimited

[4] https://en.wikipedia.org/wiki/Comma-separated_values

Microsoft Excel

Excel is expected to be the most commonly used format for data submission. We highly recommend using our available Excel templates as a starting point, in which case most of the aspects described below will be taken care of automatically.

If you do prepare/produce your own Excel files, it is important to take the following into consideration:

- Most versions of Microsoft Excel are supported (e.g., .xlsx, .xls).[5]
- Your spreadsheet may contain multiple sheets, but only one will be used for loading data.
    - You will need to specify which sheet contains the data when uploading a file with multiple work sheets.
- The sheet holding the data must have one (and only one) header row holding your column/variable names.
    - We highly recommend using the variable names provided in this document.
    - If using custom variable names, they should be short and concise, with no spaces or other special characters.
    - No long sentences or "instructions" should be part of the row header cell value. If necessary, guidance can be provided as cell-level notes, or simply in a separate sheet or document.
- Columns with a blank or empty first row cell value are ignored.
- Hidden columns are ignored.

Excel header row examples

Recommended

	A	B	C	D	E	F
1	student_id	first_name	middle_name	last_name	dob	sex

Supported

	A	B	C	D	E	F	G
1	ID	SCHOOL_LNAME	SCHOOL_FNAME	SCHOOL_M	SCHOOL_DOB	SCHOOL_GENDER	HS_GPA

Not recommended

	A	B	C	D	E	F
1	Last Name	First Name	Middle Initial leave blank if you don't have)	DOB (format optional)	Gender	HSGPA or Rank (optional)

[5] We use the open source Apache POI package for reading. For further technical information, see https://poi.apache.org/spreadsheet/index.html.

Excel caveat: Zero-padded values

Be aware that in Excel the automatic text to numeric conversion causes leading or trailing zeros to be lost (e.g., 012.3400 becomes numeric value 12.34). For certain coded variables to be valid, such "0" characters must be preserved. For example:

- The ZIP code for Acton, Maine is 04001, not 4001.
- The DI code for Landmark College is 0081, not 81.
- The CIP 2020 code for Pre-Architecture Studies is 04.0200, not 4.02.

Such automated conversion can transparently occur—for example, when typing values or pasting into a cell, or when importing data from CSV. Various techniques can be used to prevent this, including:

- When typing, prefix the value with a quote character (e.g., '0123).
- Making the column type "text" (Format->Cell->Category=text).

Refer to Excel user guides for further information. Note that, for some variables, we do have mechanisms in place to auto-correct such situations when possible. For example, a 4.1 value for a CIP 2020 code will be converted to 04.1000 (such actions will be included in the quality assurance report).

Tip: Leveraging formulas in vertical files

When preparing your data in a vertical/long layout, it is essential for the student-level information to be exactly the same for each individual (which is repeated for each course). An easy way to ensure this is to enter the student data only once for the first course, and then use a formula to carry over the student-level data in subsequent records.

Student-level data: Showing data values

B	C	D	E	F	G
student_id	first_name	middle_name	last_name	sex	dob
ST001273	Patricia	J.	Jarboe	F	8/18/97
ST001273	Patricia	J.	Jarboe	F	8/18/97
ST007281	William	C.	Gafford	M	7/11/97
ST007281	William	C.	Gafford	M	7/11/97
ST007281	William	C.	Gafford	M	7/11/97

Student-level data: Showing cell formula to carry over

B	C	D	E	F	G
student_id	first_name	middle_name	last_name	sex	dob
ST001273	Patricia	J.	Jarboe	F	35660
=B2	=C2	=D2	=E2	=F2	=G2
ST007281	William	C.	Gafford	M	35622
=B4	=C4	=D4	=E4	=F4	=G4
=B5	=C5	=D5	=E5	=F5	=G5

Comma-separated value (CSV)

The ASCII text CSV format is supported as an alternative format for data submission. As with an Excel format, the first row in the data file must hold the variable names. Refer to this guide for naming conventions.

Generally accepted CSV specifications and formatting rules apply.[6]

SAS transport (XPORT)

The SAS transport format, version 5 or 6, is supported as an alternate file format for data submission.[7] Variable names are embedded in the file. Refer to the above guidelines for naming conventions.

Tab delimited

A tab delimited (.txt) file is also supported.

Supported Date Format

Some variables in the system are meant to capture a date value (e.g., dob) which can potentially be expressed in many different ways. While supporting all possible variations would be challenging, the system is flexible and supports the formats listed below. Text values that cannot be parsed/converted into a valid date will result in an error being raised.

Note that these formatting requirements do not apply to cell values in Excel files or variables in SAS that are explicitly formatted as a "date."

Format	Example(s)
`mm/dd/yyyy`	01/23/2004
`MMM-dd-yyyy`	JAN-23-2004
`mmddyy`	0123904 *(*) Note that year value greater than the current year plus 5 will translate in a 1900 date (e.g., if current year were 2025 then 01→2001, 24→2024, 29→1929)*
`mm-dd-yyyy`	01-23-2004
`dd-MMM-yyyy`	23-Jan-2004
`dd MMM yyyy`	23 Jan 2004 *(Assumes English month abbreviations)*
`dd MMMM yyyy`	23 January 2004 *(Assumes English month names)*
`dd-MMM-yyyy`	23-Jan-2004

[6] See for example https://en.wikipedia.org/wiki/Comma-separated_values. We use the open source Apache Commons CSV reader for parsing (https://commons.apache.org/proper/commons-csv/).
[7] We use our own SAS reader based on specifications published at https://support.sas.com/techsup/technote/ts140.pdf and https://www.loc.gov/preservation/digital/formats/fdd/fdd000464.shtml.

Format	Example(s)
`yyyy-MM-dd`	2004-01-23
`yyyy/MM/dd`	2004/01/23, 2004/1/23, 2004/1/2
`yyyyMMdd`	20040123

Using Excel Templates

While you always have the option to design your own data files, we strongly encourage you to use our Excel templates to prepare your information or as a starting point. The templates ensure that the variable names and other aspects are aligned on specifications described in this document, in turn facilitating the data preparation and submission process.

There are several things you can take advantage of with Excel:

- Manually enter data.
- Copy/paste data from other spreadsheets.
- Add your own data validation procedures.
- Include instructions for other users preparing the data.
- Connect to databases to extract data.

Static templates for the different studies are available for download here: https://aces.collegeboard.org/resources/data-layout-templates

Contact us should you need assistance on using the templates. Email aces-collegeboard@norc.org or call the ACES support number: 1-800-439-8309.

Data Dictionary

This section provides detailed information and requirements for the variables that may be present in the ACES student and course-level information data records.

Student Identification

Uniquely identifying a student within your data set is critical for processing and analytical purposes. Three base variables are used for such purposes: submission_id, di_code, and student_id.

The submission_id is automatically inserted into your data set by the system. The di_code is only necessary for a higher education system (HESO) submitting data for a single institution or spanning multiple institutions. If you (an institution user) are submitting data for a single institution, your corresponding di_code will automatically be assigned by the system.

submission_id

Description	Identifies the data submission
Data Type	String
Preparation	All users: Do not include. This is automatically assigned by the system and inserted in your data file.
Validation	Value must be constant for all records.

di_code

Description	The College Board's four-digit designated institution (DI) code
Data Type	Code string
Preparation	Institution users: There is no need to include this in your data file. This is automatically assigned by the system based on the information in your user profile. HESO users: This must be included in your data file. Contact us if you do not know the DI code for an institution. Tip(s): Ensure the code is properly zero padded (e.g., 0012, not 12), particularly in Excel.
Cleansing	If the value is "1" to "999," it will automatically be zero padded (e.g., 97 → 0097).
Validation	Value is required; must be a valid 4-digit College Board DI code.
Example(s)	0051, 0999, 1337

student_id

Description	The student unique identifier within its institution; institution-assigned student ID
Data Type	String
Preparation	All users: This value is specific to your institution and is expected to remain consistent over time.
Validation	Value is required, up to 100 characters in length.

Student Information

first_name

Description	The student's first name
Data Type	String
Preparation	All users: Self-explanatory.
Validation	Value is required, up to 100 characters in length.
Example(s)	Jack, Lucia, Cynthia

middle_name

Description	The student's middle name(s) or initial(s)
Data Type	String
Preparation	All users: Self-explanatory.
Validation	Value is optional, up to 100 characters in length.
Example(s)	William, Louis Georges, L.G.A

last_name

Description	The student's last name
Data Type	String
Preparation	All users: Self-explanatory.
Validation	Value is required, up to 100 characters in length.
Example(s)	Doe, Smith, López de Ayala, Smith-Dorrien

sex

Description	The student’s biological sex
Data Type	Code string

Preparation	All users: Self-explanatory.
Validation	Value is required; an error will be raised if not a valid code.
Classification	The following code list is recommended: F : Female M : Male U : Unknown

dob

Description	The student's date of birth
Data Type	Date string
Preparation	All users: Self-explanatory.
Validation	Value is required; must be formatted into a valid date. See Supported Date Formats in File Specifications section. A message will be generated if the inferred student age in years is outside the 12-75 range, and an error will be raised if outside the 5-90 range.

race_ethnicity

Description	The student's race/ethnicity code
Data Type	String
Preparation	This optional variable is for CLEP study users only: This is the race/ethnicity code used by your institution. Note that you will be asked to provide meaning/labels for these codes when you submit your data through the ACES portal.
Validation	Value is optional, up to 20 characters in length.

cohort_year

Description	The entering cohort year for the students in the file
Data Type	Integer
Preparation	All users: For studies that allow only a single cohort to be analyzed, this is assigned by the system as needed based on the information you provide in your study submission form. If the study allows for multiple cohort years and requires matching your institution's data to the ACES system data, then a value must be provided. If all students are from the same entering cohort year, you can omit this from your data file and provide a fixed value in the data submission user interface. If students are from different entering cohorts, then it should be included in your data file.
Validation	If provided in the data file, the value must be a valid year based on the cohorts available in the system. If this is assigned by the system or is provided as a fixed value, validation is not applicable.

	Note that this variable will not be needed for CLEP, ACCUPLACER or Year-over-Year study submissions.
Example(s)	2021, 2024

Student Address

While encouraged, the student address is optional for most data submissions.

Given that student addresses can be in the United States or abroad, a fairly generic set of variables is used.

The address information should be as comprehensive and accurate as possible. To be considered "valid," it should contain at least one address line, a city name, zip code, and country. The zip code can in some cases be blank for foreign addresses.

address_line_1 and address_line_2

Description	The student's home street address or local equivalent
Data Type	String
Preparation	All users: Self-explanatory.
Validation	See overview above; up to 100 characters in length.

address_city

Description	The student's home city, town, or local equivalent
Data Type	String
Preparation	All users: Self-explanatory.
Validation	See overview above; up to 100 characters in length.

address_state

Description	The student's home state, province, territory, or local equivalent
Data Type	String
Preparation	All users: Self-explanatory.
Validation	See overview above; up to 100 characters in length.
Example(s)	USA: NY, DC Canada: AB, QC Others: Alicante, Mito, Badakhshan

address_zip

Description	The student's home zip/postal code or local equivalent
Data Type	String
Preparation	All users: Self-explanatory.
Validation	See overview above; up to 20 characters in length.

address_country

Description	The student's home country
Data Type	String
Preparation	All users: Self-explanatory. If not specified, this will be assumed to be United States.
Validation	See overview above; up to 50 characters in length.

Student High School Information

This set of variables captures information on the student's high school academic performance.

hs_ai_code

Description	The student's high school attending institution (AI) code
Data Type	Code String
Preparation	All users: Must be a valid 6-digit code. Make sure to zero pad (e.g., 000781, not 781).
Validation	Value is highly recommended. An error will be raised if it is specified and is not a valid College Board AI code. See https://collegereadiness.collegeboard.org/k-12-school-code-search.
Example(s)	470795 = Meridian High School, Falls Church, VA 431127 = Webb School of Knoxville 970000 = home school 000003 = unknown HS (domestic) 000004 = unknown HS (international)

hs_gpa

Description	The student's high school grade point average (HSGPA)
Data Type	String
Preparation	All users: Self-explanatory. Zero (0) should not be used for missing HSGPA (e.g., GED, Home School). If HSGPA is unknown, no value should be entered.

Validation	Value is optional as institutions can choose to use the self-reported HSGPA from SAT Questionnaire data in the ACES system. While typically in the 0-5 range, many variations have been observed. A warning will be generated if a value is > 5, and an error will be raised if outside the 0-160 range.
Example(s)	3.87, 4, 4.33, 75

Student College Information

This set of variables captures information on the student's college academic performance and gpa_cum

gpa_cum

Description	The student's college cumulative grade point average (GPA)
Data Type	Numeric
Preparation	All users: This is the cumulative GPA to be used for analysis. For a year 1 student, it can be 1st semester (if provided before April 30th of that academic year) or end of year cumulative GPA. For 2nd year and later, normally cumulative end-of-year value (thus 2nd year cumulative GPA includes 1st and 2nd year courses)
Validation	Value is required for certain studies. Value must be >= 0 and is typically <=5. A warning will be generated if higher than 5. An error will be raised if the value is >12 (which is the highest known/observed value to date).
Example(s)	3.87, 4, 4.33

gpa_oth

Description	An alternative GPA value to be used as an outcome measure in an SAT Admission Validity study
Data Type	Numeric
Preparation	All users: A GPA such as STEM coursework GPA, or 2nd year non-cumulative GPA. You will be asked to briefly describe the nature of this value during the data submission process.
Validation	Value is optional; follows the same rules as gpa_cum.
Example(s)	3.87, 4, 4.33

college_major

Description	Major area of study at college
Data Type	String

Preparation	All users: College major for students who have declared a major (may be undeclared)
Validation	Value is optional.
Example(s)	Psychology, Education, Undeclared

college_major2

Description	Second major area of study at college (if dual major)
Data Type	String
Preparation	All users: College major for students who have declared a second major (may be blank)
Validation	Value is optional.
Example(s)	Psychology, Education, [blank if no second major]

college_major_cip

Description	Major area of study at college Classification of Instructional Program (CIP) code (2010 or 2020)
Data Type	Numeric
Preparation	All users: CIP code (2010 or 2020) associated with major area of study for students. Same as codes supplied to IPEDS (Integrated Postsecondary Education Data System). A two-digit code followed by a period and a 4-digit subcode. 2010 and 2020 CIP code values are supported. For a reference to CIP codes see https://nces.ed.gov/ipeds/cipcode/default.aspx?y=56.
Validation	Value is optional.
Example(s)	42.0101, 40.0808, 24.0102

college_major2_cip

Description	Second major area of study at college Classification of Instructional Program for students with dual majors (CIP) code (2010 or 2020)
Data Type	Numeric
Preparation	All users: CIP code (2010 or 2020) associated with second major area of study for students with dual majors. Same as codes supplied to IPEDS (Integrated Postsecondary Education Data System). A two-digit code followed by a period and a 4-digit subcode. 2010 and 2020 CIP code values are supported. For a reference to CIP codes see https://nces.ed.gov/ipeds/cipcode/default.aspx?y=56.
Validation	Value is optional.
Example(s)	42.0101, 40.0808, 24.0102, [blank if no second major]

Retention / Completion

This set of variables captures information on the student's college outcome (undergraduate retention or graduation/completion), along with ACT score information if you elect to concord ACT test scores to SAT test scores for students without SAT test scores.

retention_flag

Description	The retention flag
Data Type	Boolean
Preparation	All users: Should be coded so that "1" identifies a returning student (as an undergraduate) and "0" identifies a non-returning student.
Validation	Value is required for Retention Study and National Validity Study.
Example(s)	0, 1

completion_flag

Description	The completion flag
Data Type	Boolean
Preparation	All users: Should be coded so that "1" identifies a student who completed a 4-year undergraduate degree and "0" identifies a student who has not completed the degree.
Validation	Value is required for completion studies and National Validity Study fourth academic year submissions. Optional for National Validity Study first, second, and third academic year submissions, but should be populated for any students awarded bachelor's degrees.
Example(s)	0, 1

completion_date

Description	The completion date
Data Type	Date
Preparation	All users: Self-explanatory. Graduation date for students who have graduated (completed 4-year undergraduate degree).
Validation	Value is required in Completion and National Validity studies for students who graduated (4-year degree); must be formatted into a valid date. See Supported Date Formats in File Specifications section.
Example(s)	05/15/2025

act_composite

Description	The ACT Composite score

Data Type	Numeric
Preparation	All users: ACT Composite score provided by the institution if you elect to concord ACT Composite scores to SAT Total scores for students with ACT scores but no SAT scores.
Validation	Value is optional in Retention and Completion studies. Value must be >= 1 and <= 36. An error will be raised if the value is >36 (which is the highest possible value).
Example(s)	28, 32, 11

act_english

Description	The ACT English score
Data Type	Numeric
Preparation	All users: ACT English score provided by the institution if you elect to concord ACT English and ACT Reading scores to SAT RW Section scores for students with ACT scores but no SAT scores.
Validation	Value is optional in Retention and Completion studies. Value must be >= 1 and <= 36. An error will be raised if the value is >36 (36 is highest possible value).
Example(s)	28, 32, 11

act_reading

Description	The ACT Reading score
Data Type	Numeric
Preparation	All users: ACT Reading score provided by the institution if you elect to concord ACT English and ACT Reading scores to SAT RW Section scores for students with ACT scores but no SAT scores.
Validation	Value is optional in Retention and Completion studies. Value must be >= 1 and <= 36. An error will be raised if the value is >36 (36 is the highest possible value).
Example(s)	28, 32, 11

act_math

Description	The ACT Math score
Data Type	Numeric

Preparation	All users: ACT Math score provided by the institution if you elect to concord ACT Math scores to SAT Math Section scores for students with ACT scores but no SAT scores.
Validation	Value is optional in Retention and Completion studies. Value must be >= 1 and <= 36. An error will be raised if the value is >36 (36 is the highest possible value).
Example(s)	28, 32, 11

Subgroups

Subgroups are custom categorical variables[8] that can be included in your data file to support your particular study by providing subgroup analyses. A categorical variable contains coded values indicating membership in one of several possible categories. Examples include the college attended within a university (e.g., ASC = Arts & Sciences, AGR =Agriculture, ARCH = Architecture, etc.) or First Generation (yes/no), Pell Eligible (yes/no), etc.

When submitting your data, you will be prompted to provide the label/description of the code values presented in your data (e.g., 1=Yes, 2=No).

Up to three such variables (which each include multiple levels) can be specified in SAT Admission, Retention, and Completion studies, with the following standardized names being used:

- Subgroup1
- Subgroup2
- Subgroup3

Description	A student's custom subgroup
Data Type	String
Preparation	All SAT Admission Validity, Retention, and Completion Study users: Formally define codes and labels for each of the desired subgroups. The labels do not need to be included in your data file as they will be captured during the data submission process.
Validation	Value is optional. As we do not typically expect many categories to be defined, a warning will be reported if the count of distinct codes is higher than 20.

[8] https://en.wikipedia.org/wiki/Categorical_variable

Predictors

Predictors are custom variables that can be included in your data file to support your particular SAT Admission, SAT Placement, ACCUPLACER, Retention, or Completion study. Unlike subgroups, they should not be categorical, but continuous or dichotomous (e.g., coded 0 and 1 for absence or presence of a characteristic), and can take any *numeric* value. You will have the option to label and describe these variables. A study can have up to five custom predictors.

Description	A student's custom predictor
Data Type	Numeric
Preparation	All users: The predictor value.
Validation	Value is optional.

Courses

The course-level variables describe a student's coursework. A student can be associated with zero or more courses in your data file. Note that coursework is not required for a routine Admission Validity Study.

In a vertical/long file, there will be as many entries/records/rows as there are courses per student, and the student information will be repeated for each entry.

In a horizontal/wide file, there will be as many entries/records/rows as there are students. The set of course variables will be repeated for as many times as necessary for the student(s) with the highest number of courses. As the columns/variable names need to be unique, they will typically carry a numeric suffix like course_code_01, course_title_01, … course_code_02, course_title_02, …, course_code_*nn*, course_title_*nn*.

course_code

Description	A course code, commonly composed of a subject abbreviation and a level typically indicated by a number
Data Type	String
Preparation	All users: Your institution course code/name. Note that it is critical for a particular course code value to be the same across all records. Any variation in separator, suffix/prefix, and other decorations will result in these entries being treated as different courses (e.g., ENG101 <> ENG 101 <> ENG-101 <> eng 101 <> ENGL101). This code must not include the course "section." Course code represents a course unit of analysis for the ACES studies.
Validation	Value is required.

Example(s)	ENG 101, CHEM-3030, ACCT240, HIST210

course_section

Description	The course section
Data Type	String
Preparation	All users: Your institution course section code/name (trailing the course code).
Validation	Value is optional.
Example(s)	S001, S002, R01, R02, A, B, C

course_title

Description	The course title
Data Type	String
Preparation	All users: Your institution course title.
Validation	Value is required. An error will be generated if not consistent (exact same value); expected to be consistent per course code and optional section.
Example(s)	Precalculus, American Literature, World History, History of Jazz

course_term

The course term is critical to determine the time period of a course.

Description	The course term
Data Type	String
Preparation	All users: The course term. Ideally use the preferred encoding specifications below. If using institutional term nomenclature, stay consistent over data submissions, and in general, recommend including both the period and the year in the value.
Validation	Value is required. For National Validity Study submissions, data must be provided for the primary terms (e.g., first and second semesters or the first three quarters).
Example(s)	• 2024-S1, 2024-S2, 2024-Q3, 2024-Q2.1, 2024-S0.2 • FA 2024, FA24, SP2025 • 202425FA, 202425SP, 202425SU • 0,1,2,3,4

recommended course term coding

We use the coding system described below as a generic specification to code course terms. This takes into account the most common variations in academic calendar systems (semester, quarters), summer terms that start or end the academic calendar year, sessions, or partial terms (e.g., Summer sessions 1 and 2), and mini-terms (e.g., December terms, Maymesters). We welcome your feedback and suggestions for continuous improvement, in particular if you have a term system that does not fit cleanly into this system.

Key objectives of this coding system are to:

- Properly sequence a student coursework over time, potentially across multiple data submissions.
- Infer the academic year associated with a course and its related student information.
- Properly capture the approximate length of the term.

If you use your own academic term coding, which is often the case, the data submission form in the ACES portal will allow you to describe your specific term policy. You will only need to do this the first time you submit data. The system will remember your academic terms in your subsequent submissions. The purpose is to understand how your terms are formatted in your data and how they relate to your academic calendar.

The standard term expression is composed as follows:

YYYY-CT[H]

where:

- **YYYY** : Represents the academic year *start* (e.g., the 2024-2025 academic year would use 2024).
    - Note that your data may use the actual calendar year for terms that start after January. For example, in the 2024-2025 academic calendar year your data may express your Spring term which goes from January 2025 through May 2025 as "Spring 2025." The ACES portal refers to 2025 in this case as the "calendar year" as opposed to the "academic year."

      You may also designate your year as the range of the academic calendar years. For example, "Fall 2024" "Spring 2024." The ACES portal refers to this as "academic start and end years."

      Whatever the format you use for years in your data, it is important that you make the proper distinction when you describe your calendar system in the ACES portal.
- **-** : Separator character (we prefer to use this as it aligns a bit with ISO 8601 notations).
- **C** : The calendar system; only one value should be used. Possible values for this are:
    - "S" for semesters – this is used for academic calendars that are made up of two main terms that most students typically enroll in (e.g., Fall and Spring).

        - The terms are typically around 16 weeks in length.
        - A third term (e.g., Summer) may/may not be offered and/or broken out into shorter sessions.
        - Sessions (e.g., courses given over the first or last 8 weeks of a term) are supported.
        - The calendar may contain mini-terms in between the main terms (e.g., a 4-week term in May after Spring term and before Summer term).
    - "Q" for quarters or trimesters – this is used for academic calendars that are made up of three main terms that most students typically enroll in (e.g., Fall, Winter, and Spring).
        - The terms are typically around 12 weeks in length.
        - A fourth term (e.g., Summer) may/may not be offered and/or broken out into shorter sessions.
        - Sessions (e.g., courses given over the first or last 6 weeks of a term) are supported.
        - The calendar may contain mini-terms in between the main terms (e.g., a 4-week term in December after the Fall term and before the Winter term).
    - "T" for generic terms – this is used for any academic calendar that does not approximately conform to the above options and should be used sparingly; with the support for sessions and mini-terms, most calendar systems should be supported using the "S" or "Q."
- **T** : An integer value from 0-9 (depending on the calendar system) that denotes the term sequence in the academic year.
    - This assumes "1" is always "Fall", "2" is the next term, and so on.
    - If a "Summer" term is considered *before* "Fall" in your academic calendar, it will have a value of "0"; otherwise it will follow the normal sequence. Only one of the options (0 or the last term in the sequence) should be used.
    - Semester values will range from 1-3 on most calendars that start with a Fall term or 0-2 when the academic calendar year starts with a Summer term.
    - Quarter values will range from 1-4 on most calendars that start with a Fall term or 0-3 when the academic calendar year starts with a Summer term.
    - Generic term values will range from 1-9.
- **H** : An optional indicator for sessions or mini-terms.
    - Sessions support courses that are offered during a full term for only a portion of the term (e.g., 8 of the 16 weeks for a full semester).
        - These are expressed using the notation **".H"** where H is a value from 1-9 that indicates the session number (sequential based on the start of the session).
    - Mini-terms support courses that are offered in between the main terms of the calendars (e.g., a 4-week course offered in December after the end of the Fall term in late November and before the Winter term in early January).

- These are expressed using the notation **"_H"** where H is a value from 1-9 that indicates the mini-term number (sequential based on the start of the mini-term); typically there is only one mini-term between primary terms.

Below is a set of examples showing how terms using an institution-specific format would be mapped to a standard term expression:

Academic Year	Description	Institution Format	Standardized Term Format
Semester	Summer semester of 2024-2025 *(summer before fall 2024 term)*	Summer 2024	2024-S0
	Fall semester of 2024-2025	Fall 2024/FA 2024	2024-S1
	Spring semester of 2024-2025	Spring 2025/SP 2025	2024-S2
	Summer semester of 2024-2025 *(summer end of academic calendar)*	Summer 2025	2025-S3
	First Summer of 2024-2025	Summer I 2025	2024-S3.1
	Second Summer of 2024-2025	Summer II 2025	*2024-S3.2*
Quarter	Fall quarter of 2024-2025	Fall 24	2024-Q1
	December mini-term (*after Fall/and before Winter)*	24-25 Winter	2024-Q1_1
	Winter quarter 2024-2025 Session 1 of Winter quarter Session 2 of Winter quarter	Winter 24/W24 *Winter I 2025* *Winter II 2025*	2024-Q2 *2024-Q2.1* *2024-Q2.2*
	Spring quarter of 2024-2025	Spring 25	2024-Q3
	Summer of 2025	Summer 25	2024-Q4

course_credits_attempted

Description	The number of credit hours associated with this course
Data Type	Numeric
Preparation	All users: Self-explanatory.
Validation	Value is *required*. A *warning* will be generated if > 5. An *error* will be raised if is not between 0 and 25 (highest observed value is 21).
Example(s)	2,3,4,6,0.5,0

course_grade

A course grade can be expressed as an alpha or numeric value, and each institution can use different grading policies. During the data submission process, the ACES portal will ask you to describe your institutional *grading policy* and to map the possible grade values into a numeric equivalent that will be used for analytical purposes. This exercise will typically only need to be completed once (e.g., first time you submit data), with possible adjustments when changes are made over time.

Note that if your data file holds both alpha and numeric grade fields, one will need to be chosen as the preferred option in your study analysis. The other variable will need to be designated as a "pass-through variable" in the system and will not be used for analysis.

The course grade variable is used to compute two derived variables:

- course_grade_num: The numeric equivalent for the grade. This will be the same as your incoming data if not alpha.
- course_grade_cb: A normalized 4-point scale numeric equivalent grade.

Description	The student's grade for this course
Data Type	String
Preparation	All users: Self-explanatory.
Validation	Value is required. If alpha: expected to start with a letter and only contain characters A through Z, +, -, *, /, or ^. Should not contain spaces. If numeric: must be >=0 or blank. Note that even if an alpha grade does not have a corresponding numeric value, you should still include that grade in your file (e.g., W, I, P). You will have an opportunity within the system to indicate that the grade should not be calculated into the study analyses (map to “No Value”)
Example(s)	A, A+, B-, F, D+, IC+, NG. P, WF 2.5, 4.0, 5

course_other_pathway_flag

Description	Indicator of students entering course via other credit pathway. AP and CLEP studies provide the option to include a third type/group of entry into the placed course for comparison, such as dual enrollment, IB, or some other form of credit. You will need to identify those students as "other" by creating a flag. This flag should be unique to the course you are studying. In other words, a student flagged as "other" for English Composition should not be flagged as "other" for their Calculus course unless the student belongs to the "other" group in both course analyses. Note that if you use this variable in a study, you should be using it for one particular type of "other" credit type per course (e.g., only dual enrollment and not a mixture of credit sources within a course).
Data Type	String
Preparation	All users: Study-specific (AP and CLEP), guidelines.
Validation	Value is *optional*.
Example(s)	1,0, x, yes, no

ACCUPLACER Scores

The variables listed below are used to capture the students' ACCUPLACER scores, which are required to conduct an ACCUPLACER Placement Validity study. All variables follow the same specifications. In order to conduct an ACCUPLACER Validity Study you will need to include scores for at least one ACCUPLACER exam in the file.

accu_*

Description	The ACCUPLACER test/exam score
Data Type	Integer
Preparation	All users: Self-explanatory. Note the Classic ACCUPLACER tests are not supported in this system.
Validation	Value is *required for variables present in the data (at least one must be provided)*. An *error* will be raised if a score value is out of the specific test range. Score ranges are: 1-8 for the WritePlacer (Written Essay) test and 1-6 for the WritePlacer (ESL) test, 20-120 for English as a Second Language (ESL) tests, and 200-300 for Next Generation tests.

ESL	
accu_esl_reading	ACCUPLACER ESL Reading Skills
accu_esl_sentence	ACCUPLACER ESL Sentence Meaning
accu_esl_use	ACCUPLACER ESL Language Use

accu_esl_listen	ACCUPLACER ESL Listening
Writeplacer	
accu_writeplacer	WritePlacer
accu_writeplacer_esl	WritePlacer ESL
Next-Generation	
accu_nextgen_reading	ACCUPLACER Next-Generation Reading
accu_nextgen_writing	ACCUPLACER Next-Generation Writing
accu_nextgen_arithmetic	ACCUPLACER Next-Generation Arithmetic
accu_nextgen_qas	ACCUPLACER Next-Generation Quantitative Reasoning, Algebra, & Statistics (QAS)
accu_nextgen_aaf	ACCUPLACER Next-Generation Advanced Algebra & Functions (AAF)

CLEP Scores

The variables listed below are used to capture the students' CLEP scores, which are required to conduct a CLEP Placement Validity study. All variables follow the same specifications.

clep_*

Description	The CLEP test score
Data Type	Integer
Preparation	All users: Self-explanatory.
Validation	Value is *required for variables present in the data (at least one must be provided)*. An *error* will be raised if not an integer value between 20-80.

History And Social Sciences	
clep_americ_gov	American Government
clep_us_hist_1	History of the United States I
clep_us_hist_2	History of the United States II
clep_human_growth_dev	Human Growth and Development
clep_intro_educ_psycho	Introduction to Educational Psychology
clep_intro_psycho	Introductory Psychology
clep_intro_socio	Introductory Sociology
clep_princip_macroeco	Principles of Macroeconomics

clep_princip_microeco	Principles of Microeconomics
clep_socsci_and_history	Social Sciences and History
clep_west_civil_1	Western Civilization I: Ancient Near East to 1648
clep_west_civil_2	Western Civilization II: 1648 to the Present
Composition and Literature	
clep_americ_literat	American Literature
clep_anal_interp_literat	Analyzing and Interpreting Literature
clep_college_compo	College Composition
clep_college_compo_mod	College Composition Modular
clep_english_literat	English Literature
clep_humanities	Humanities
Science and Mathematics	
clep_biology	Biology
clep_calculus	Calculus
clep_chemistry	Chemistry
clep_coll_algebra	College Algebra
clep_coll_math	College Mathematics
clep_coll_nat_sci	Natural Sciences
clep_precalculus	Precalculus
Business	
clep_finan_account	Financial Accounting
clep_info_systems	Information Systems
clep_intro_bus_law	Introductory Business Law
clep_princip_manage	Principles of Management
clep_princip_marketing	Principles of Marketing
World Languages	
clep_french	French Language
clep_german	German Language
clep_spanish	Spanish Language
clep_spanish_writing	Spanish with Writing Levels 1 and 2