

Specialization Combinations

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Which table are we talking about?

STUDENT_TEST.SPECIALIZATION_COMBINATIONS

The screenshot shows the SAP HANA configuration interface. It is divided into three main sections: Connections, Schema, and Table. The 'Connections' section shows a single connection named 'hana.uky.edu' with 'SAP HANA' as the driver. The 'Schema' section has a dropdown menu set to 'STUDENT_TEST'. The 'Table' section features a search input field with the placeholder text 'Enter table name', a search icon, and a plus sign. Below the search field are three radio buttons: 'Exact', 'Contains' (which is selected), and 'Starts with'. There is also a checkbox for 'Check permissions' which is currently unchecked. At the bottom, a list of tables is displayed, with the first entry, 'SPECIALIZATION_COMBINATIONS (STUDENT_TEST.SPECIALIZATION_COMBINATIONS)', highlighted by a blue rectangular border.

Connections Add

hana.uky.edu
SAP HANA

Schema

STUDENT_TEST

Table

Enter table name 🔍 +

Exact Contains Starts with

Check permissions

📄 SPECIALIZATION_COMBINATIONS (STUDENT_TEST.SPECIALIZATION_COMBINATIONS)

📄 SPECIALIZATION_RETENTION (STUDENT_TEST.SPECIALIZATION_RETENTION)

Why use this table?

- View all majors or minors a student has on record
- View students' options and specialties for a certain major or minor
- View student majors for a particular minor or option
- View students without options or specialties on record but who have majors that require them

How do I use this table?

- Functions very similarly to STUDENT.CLASS_PAIRS
- Each field (with a few exceptions like Academic Term) has 1 and 2
- Using filters, Set [Field] 1 to the limit you want to place and then apply limits for [Field(s)] 2

Example: How many current Theatre Majors are also English Majors?

Step 1 - Limit Specialization 1 to “Theatre” and Specialization Level 1 to “Major” and Academic Term to “Spring 2017” and Effective Time Point to “Census Date”

The screenshot shows a data visualization interface with a left sidebar for filters and a main table area. The filters are: Academic Term: Spring 2017, Specialization 1: Theatre, Specialization Level 1: Major, and Effective Time Point: Census Date. The main table is titled 'Theatre & English' and has columns for Specialization 1, Specialization Level 1, and Academic Term. The data row shows 'Theatre' for Specialization 1, 'Major' for Specialization Level 1, and 'Spring 2017' for Academic Term. There is also a small 'Abc' label in the bottom right of the table area.

Specialization 1	Specialization Level 1	Academic Term
Theatre	Major	Spring 2017

Example: How many current Theatre Majors are also English Majors?

Step 2 - Limit Specialization 2 to “English” and Specialization Level 2 to “Major”

The screenshot shows a data visualization interface with a left sidebar for filters and a main table area. The filters sidebar includes: Academic Term: Spring 2017, Specialization 1: Theatre, Specialization Level 1: Major, Effective Time Point: Census Date, Specialization 2: English, and Specialization Level 2: Major. The main table area is titled "Theatre & English" and has columns for Specialization 1, Specialization Level 1, Specialization 2, Specialization Level 2, and Academic Term. The data row shows Theatre, Major, English, Major, and Spring 2017. A small "Abc" label is visible in the bottom right corner of the table.

Specialization 1	Specialization Level 1	Specialization 2	Specialization Level 2	Academic Term
Theatre	Major	English	Major	Spring 2017

Example: How many current Theatre Majors are also English Majors?

Step 3 - Distinct count of “Student Id” to see how many students match the filters

A screenshot of a data tool's field list on the left and a marks card on the right. The field list includes 'Specialization Colleg...', 'Specialization Combo', 'Specialization Depart...', 'Specialization End D...', 'Specialization Id 1', 'Specialization Id 2', 'Specialization Level 1', 'Specialization Level 2', 'Specialization Prior...', 'Specialization Short 1', 'Specialization Short 2', 'Student Id', 'Study Id 1', 'Study Id 2', and 'Measure Names'. The 'Student Id' field is highlighted with a blue bar. The marks card shows 'Automatic' as the aggregation, with 'Color', 'Size', and 'Text' as mark types. There are also 'Detail' and 'Tooltip' options.



A screenshot of a data tool's visualization configuration and resulting table. The configuration shows 'Columns' as 'Academic Term', 'Rows' as 'Specialization 1', 'Specialization Level 1', 'Specialization 2', and 'Specialization Level 2'. The filters include 'Academic Term: Spring 2017', 'Specialization 1: Theatre', 'Specialization Level 1: Major', 'Effective Time Point: Census Date', 'Specialization 2: English', and 'Specialization Level 2: Major'. The marks card shows 'Automatic' as the aggregation, with 'Color', 'Size', and 'Text' as mark types. There are also 'Detail' and 'Tooltip' options. The resulting table is titled 'Theatre & English' and shows a distinct count of 5 for 'Academic Term: Spring 2017'.

Specialization 1	Specialization Level 1	Specialization 2	Specialization Level 2	Academic Term
Theatre	Major	English	Major	Spring 2017
				5

Example: How many current Theatre Majors are also English Majors?

Be sure to use a distinct count of students and not the Number of Records measure to count the students using this table.

A sum of Number of Records will return a value of 10 for this example, instead of the true number of 5 students, because there is one record for the Theatre major and one record for the English major.

Example: International Studies Options & Specialties

Step 1 - Limit Specialization 1 to “International Studies” and Specialization Level 1 to “Major” and Academic Term to “Spring 2017” and Effective Time Point to “Census Date”

The screenshot shows a data visualization interface with a sidebar on the left and a main table area on the right. The sidebar contains a 'Filters' section with four blue buttons: 'Specialization 1: International Studies', 'Specialization Level 1: Major', 'Academic Term: Spring 2017', and 'Effective Time Point: Census Date'. The main area has a 'Columns' section with a blue button for 'Academic Term' and a 'Rows' section with blue buttons for 'Specialization 1' and 'Specialization Level 1'. Below this is a table titled 'International Studies'.

International Studies		Academic Term
Specialization 1	Specialization Level 1	Spring 2017
International Studies	Major	Abc

Example: International Studies Options & Specialties

Step 2 - Limit Specialization Level 2 to “Option” and “Specialties”

The screenshot shows a data visualization tool interface. On the left, there is a 'Filters' panel with several active filters: 'Specialization 1: International Studies', 'Specialization Level 1: Major', 'Academic Term: Spring 2017', 'Effective Time Point: Census Date', and 'Specialization Level 2'. A context menu is open over the 'Specialization Level 2' filter, showing options like 'Show Filter', 'Sort...', and 'Dimension'. The main area displays a table titled 'International Studies' with columns for 'Specialization 1', 'Specialization Level 1', 'Specialization Level 2', and 'Academic Term'. The table contains two rows of data. On the right, there is a 'Specialization Level 2' filter panel with checkboxes for '(All)', 'Null', 'Major', 'Minor', 'Option', 'Specialties', and 'Subspecialties'. The 'Option' and 'Specialties' checkboxes are checked.

Pages

Columns: Academic Term

Rows: Specialization 1, Specialization Level 1, Specialization Level 2

Filters:

- Specialization 1: International Studies
- Specialization Level 1: Major
- Academic Term: Spring 2017
- Effective Time Point: Census Date
- Specialization Level 2

International Studies

Specialization 1	Specialization Level 1	Specialization Level 2	Academic Term
International Studies	Major	Option	Spring 2017
		Specialties	Abc

Specialization Level 2

- (All)
- Null
- Major
- Minor
- Option
- Specialties
- Subspecialties

Context Menu:

- ✓ Show Filter
- Show Highlighter
- Clear Filter
- Add to Context
- Apply to Worksheets
- Sort...
- Create Set...
- Dimension
- Attribute
- Measure
- Remove

Example: International Studies Options & Specialties

Step 3 - Drag Specialization 2 pill to Rows to populate list of specializations

iii Columns Academic Term

Rows Specialization 1 Specialization Level 1 Specialization Level 2 Specialization 2

Sheet 2

Specialization 1	Specialization Level 1	Specialization Level 2	Specialization 2	Academic Term
International Studies	Major	Option	Arabic and Islamic Studies	Abc
			Chinese	Abc
			Chinese Studies	Abc
			Classics	Abc
			Comparative Politics & Societies	Abc
			Culture and the Arts	Abc
			Economics	Abc
			Folklore & Mythology	Abc
			French and Francophone Studies	Abc
			Frgn Lang & International Eco - Spanish	Abc
			German Studies	Abc
			Global Development	Abc
			Human Communication	Abc
			Human Rights and Social Movements	Abc
			Imaginative Writing	Abc
			International Development	Abc
			International Relations	Abc
			Islamic Studies	Abc
			Italian	Abc
			Japan Studies	Abc
			Print Multimedia	Abc
			Russian Studies	Abc
			Spanish (General)	Abc
			Spanish Language & Linguistics	Abc
			Spanish Literature & Culture	Abc
		Specialties	Africa and the Middle East	Abc
			East, South and Southeast Asia	Abc
			Europe	Abc
			Latin America	Abc
			Russia and Eurasia	Abc

Example: International Studies Options & Specialties

Step 4 - To limit Specialization 2 to only those in International Studies, filter Specialization Department 2 to “International Studies”

The screenshot shows a data visualization tool interface. On the left, there are three panels: 'Pages', 'Filters', and 'Marks'. The 'Filters' panel contains several active filters: 'Specialization 1: International Studies', 'Specialization Level 1: Major', 'Academic Term: Spring 2017', 'Effective Time Point: Census Date', 'Specialization Level 2', and 'Specialization Department 2: Internati..'. The 'Columns' section at the top shows 'Academic Term' selected. The 'Rows' section shows 'Specialization 1', 'Specialization Level 1', 'Specialization Level 2', and 'Specialization 2' selected. The main table is titled 'International Studies' and has the following structure:

Specialization 1	Specialization Level 1	Specialization Level 2	Specialization 2	Academic Term
International Studies	Major	Option	Comparative Politics & Societies	Abc
			Culture and the Arts	Abc
			Frgn Lang & International Eco - Spanish	Abc
			Global Development	Abc
			Human Rights and Social Movements	Abc
			International Development	Abc
			International Relations	Abc
		Specialties	Africa and the Middle East	Abc
			East, South and Southeast Asia	Abc
			Europe	Abc
			Latin America	Abc
			Russia and Eurasia	Abc

Example: International Studies Options & Specialties

Step 5 - Distinct count of “Student Id” to see how many students match the filters

A screenshot of the Tableau interface showing the Marks card. The 'Student Id' field is highlighted in blue in the Dimension shelf. The Marks card is currently set to 'Automatic'.



A screenshot of the Tableau interface showing the Columns and Rows shelves. The Columns shelf contains 'Academic Term' and the Rows shelf contains 'Specialization 1', 'Specialization Level 1', 'Specialization Level 2', and 'Specialization 2'. The Filters shelf contains 'Specialization 1: International Studies', 'Specialization Level 1: Major', 'Academic Term: Spring 2017', 'Effective Time Point: Census Date', 'Specialization Level 2', and 'Specialization Department 2: Internati...'. The Marks card is set to 'Automatic' and the visualization is a table view showing the distinct count of 'Student Id' for each combination of filters.

Specialization 1	Specialization Level 1	Specialization Level 2	Specialization 2	Academic Term
International Studies	Major	Option	Comparative Politics & Societies	Spring 2017
			Culture and the Arts	23
			Frng Lang & International Eco - Spanish	1
			Global Development	47
			Human Rights and Social Movements	1
			International Development	2
			International Relations	3
		Specialties	Africa and the Middle East	44
			East, South and Southeast Asia	27
			Europe	32
			Latin America	35
			Russia and Eurasia	7

Example: International Studies Options & Specialties

This is a good table to use to check for data errors.

On the previous slide, we see one student with a “Frgn Lang & International Eco - Spanish” option. This is an option code that is no longer used, so this option should be corrected in SAP to the correct option code for students pursuing a Spanish option in the Foreign Languages and International Economics major (which moved departments from International Studies to Modern and Classical Languages Literatures and Cultures).

Look for options and specialties with only one or two students. This may indicate a data error, but could also be due to an option or specialty being less popular than others (as is the case with International Development, International Relations and Human Rights and Social Movements).

Example: International Studies Options & Specialties

Also note that Specializations with no students in them will not populate in Tableau.

International Studies also offers International Commerce and Global Environment as options, but there are no students enrolled in these programs for the Spring 2017 semester (as of the Effective Time Point of the Census Date).

Workbooks with Visualizations

<https://analytics.uky.edu/#/workbooks?tag=SpecializationsCombo>

Hispanic Studies Dashboards is available in Analytics Community of Practice folder as an example.

Questions?

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