

Data to the People: Facilitating Data Usage Throughout the Institution

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Texas Association for Institutional Research (TAIR)
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Welcome to the Powerhouse.

UNIVERSITYof **HOUSTON**

Outline

- Introductions
- What are Reporting Tables?
- Reporting Tables Schema
- Description of Tables
- Query Training Overview
- Demonstration

University of Houston

- Flagship University of UH System
- 15 colleges
- 116 bachelors, 112 masters, 49 doctoral, and 4 professional programs
- 46,676 students
- 11,156 degrees awarded annually
- PeopleSoft School
- #1 NCAA Basketball Team



Go Coogs!!

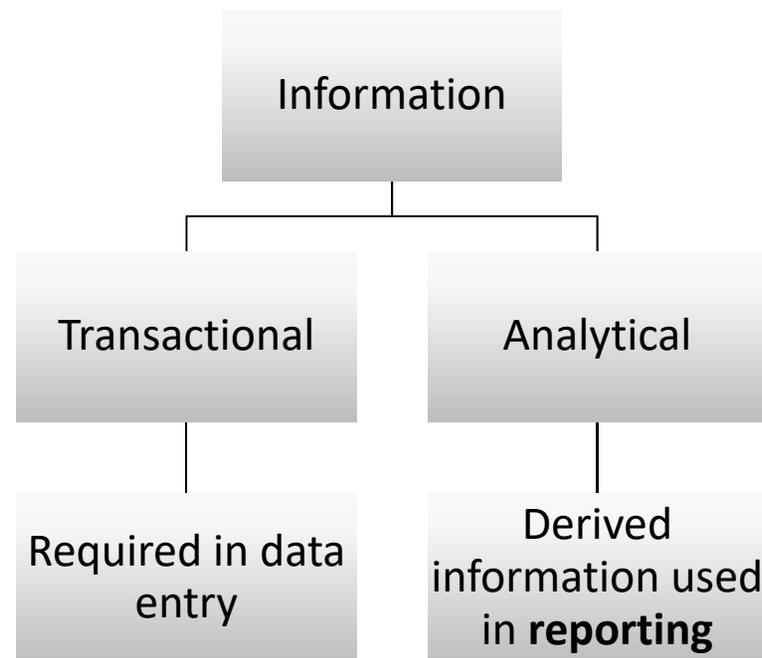
Institutional Research

- www.uh.edu/ir
- 5 staff members
- 3 research assistants



Transactional vs. Reporting Systems

Transactional System	Reporting System
Designed to run your business	Designed to manage your business
Modeled for data entry	Modeled for data analysis and dissemination
Data is constantly changing	Data reflects snapshots/points in time



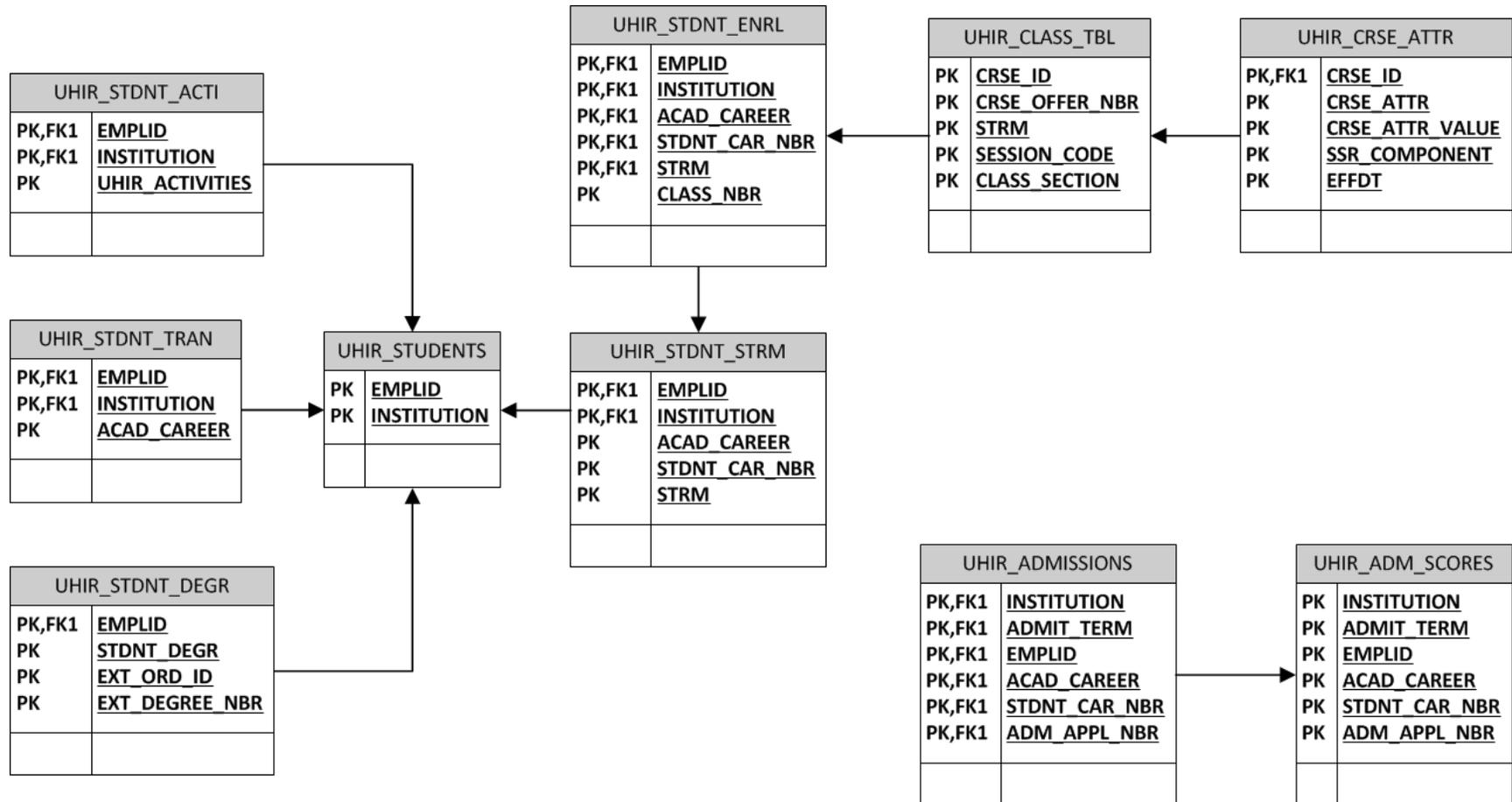
The Need for Reporting Tables

- Limiting data access historically
- Data access...
 - Opportunity to change how we make data available
 - Consolidate data from many tables into about a dozen tables
 - Facilitate development of queries

Reporting Table Logistics

- Refreshed daily overnight
- Roughly four hours to load
- Table purged and reloaded for the term being processed
- Key fields aid in query building

Reporting Tables Schema



Tables & Descriptions

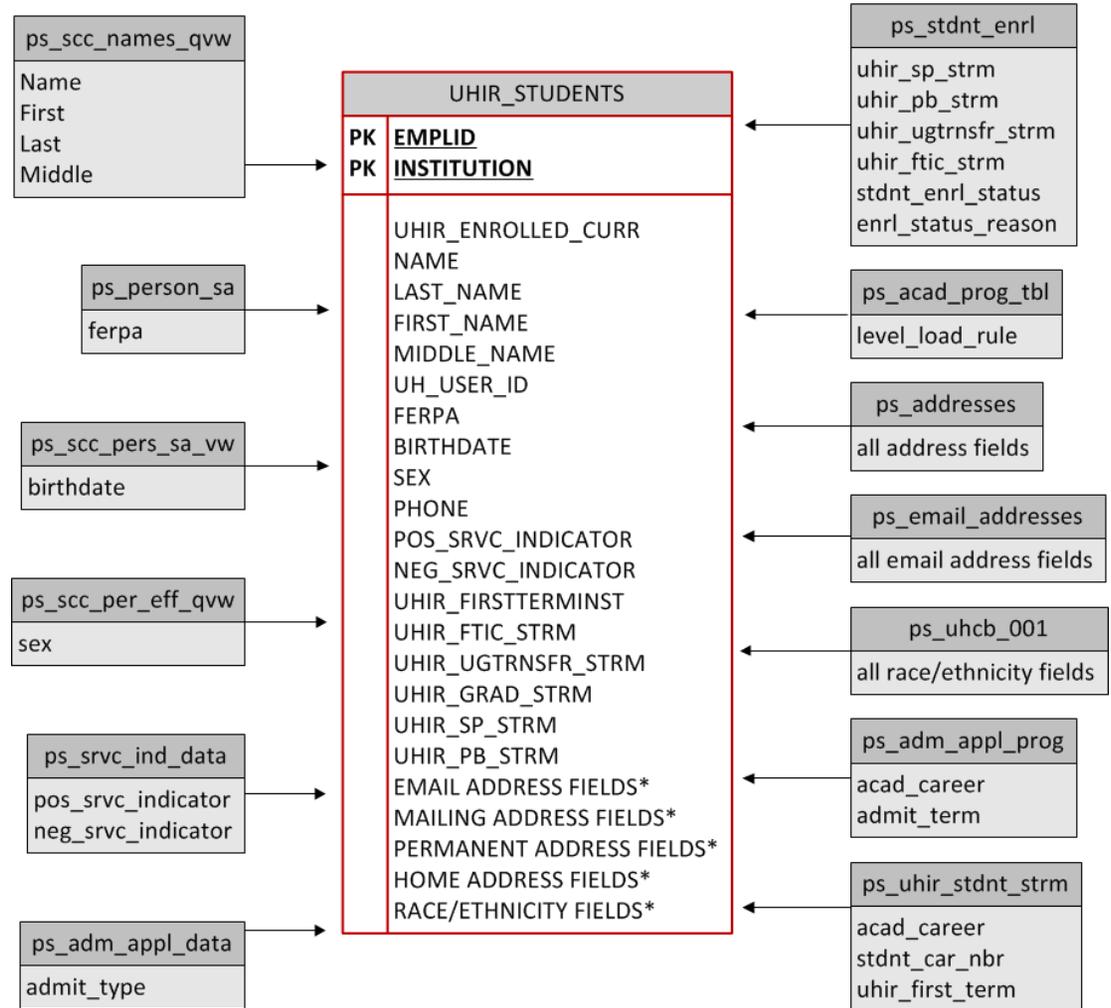
Table Name	Description
UHIR_STUDENTS	Current demographic information for students. One record per student, per institution.
UHIR_STDNT_STRM	Term-specific information for students that have been enrolled in at least one class for that term.
UHIR_STDNT_ENRL	Class enrollment data by term.
UHIR_STDNT_DEGR	Degree information.
UHIR_STDNT_TRAN	Transfer information.
UHIR_STDNT_ACTI	Combination of student attributes, extra-curricular, student activity and student group data.
UHIR_CLASS_TBL	Data related to classes offered.
UHIR_ADMISSIONS	Admission application data.
UHIR_ADM_SCORES	Admission test score information.

Tables & Descriptions (cont'd)

Table Name	Description
UHS_STDNT_LOC	Identifies the locations of all of the classes in which a student is enrolled.
UHM_ADM_FTICPOP	Key information about admitted FTICs and where they are in the onboarding process.
UHM_FTIC_COHDAT	Tracks members of FTIC cohorts as they progress through the university.
UHM_UGRD_COHORT	Identifies new undergraduate students each semester; includes FTIC/transfer and degree-seeking status.
UHIR_HOUSING	Student data from the housing system from application to booking.

Source Tables for UHIR_STUDENTS

- 13 source tables
- 71 fields
 - 62 fields pulled
 - 9 derived fields



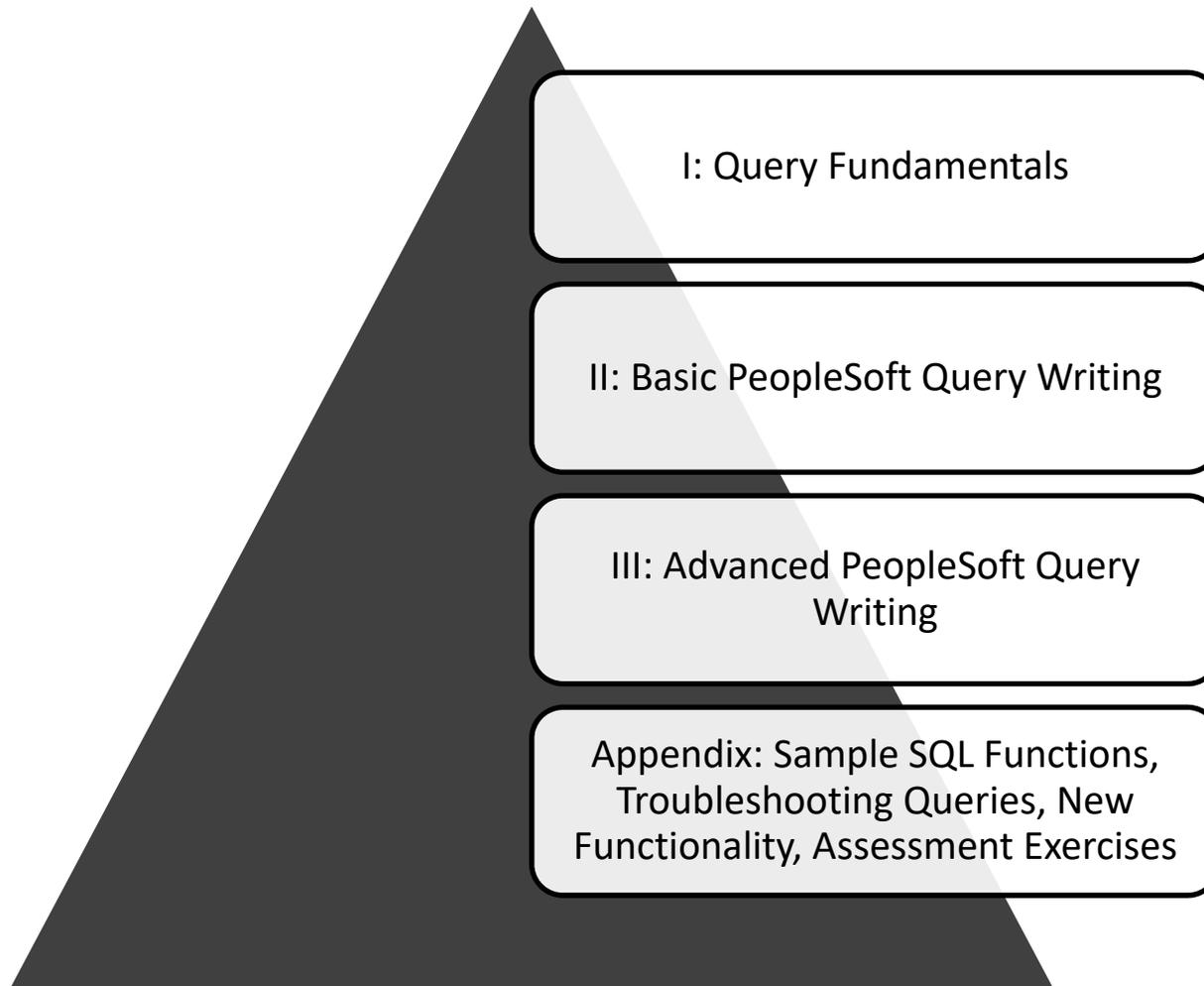
Use of Reporting Tables

- Institutional Research
 - Survey Reporting
 - Data Requests
 - GPA, Hours information
 - Enrolled students contact information
 - Profile of admitted students: Top 10, Test Scores
- Colleges/Departments/Administration
 - Class Enrollment data for students
 - International Applicants: Country/State/City
 - Veteran students, Students with FERPA flag
 - Class Locations of enrolled students

Query Training

- Class Length
 - Fifteen hours
 - 5 consecutive days, 3 hours per day
- Participants
 - Signup for training
 - Users wanting access to be able to write queries in the PeopleSoft student module
- Frequency
 - 3 times a year (spring, summer, fall)
- Uses Training Database
- Partner with Campus Solutions IT

Query Training Outline



Query Training Topics

- Overview of UHIR Reporting Tables
- Query Writing
 - Effective Date Logic
 - Query Methodology
 - Joins/Functions/Expressions
- Assessment Exercises

Query Training Assessment

- Background
 - Goal: grant access to query production data
 - Needed to ensure that users understood how to accurately query data
- Format
 - 2 exercises; 1 beginner, 1 advanced
- Grading
 - Correct tables/fields
 - Joins, Criteria
 - Output formatting
 - Expressions, functions, aggregation, etc.
 - Expected number of records returned

Example Assessment Exercise

Provide a list that displays the EMPLID and CUM_GPA for all students enrolled at the end of the term during Fall 2009 at UH if the student had a cumulative GPA of at least 3.0. If the student belonged to the Honors (R003) activity type, provide that additional information in a column (UHIR_ACTIVITY_TYPE). Also add a calculated column that combines the student's current Academic Standing code with their primary plan (with a dash in between), i.e. 'E-TELSBS'; the title of the column should be "Standing and Plan". The institution should be a run-time variable that defaults to value '00730', having a lookup against master table 'INSTITUTION_TBL' and having custom heading text that says "Enter the institution". Sort the data by activity type, then by student ID.

Tip: You should receive 18,144 rows of data.

PeopleSoft Campus Solutions Security Form

- Online form after passing assessment
- Select Query Create access
- IR queue for approval

Query Tool Demonstration



Thank you!!

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Query Manager

Enter any information you have and click Search. Leave fields blank for a list of all values.

[Find an Existing Query](#) | [Create New Query](#)

Query Name	<input type="text" value="begins with"/>	<input type="text" value="UHIR"/>
Description	<input type="text" value="begins with"/>	<input type="text"/>
Uses Record Name	<input type="text" value="begins with"/>	<input type="text"/>
Uses Field Name	<input type="text" value="begins with"/>	<input type="text"/>
Access Group Name	<input type="text" value="begins with"/>	<input type="text"/>
Folder Name	<input type="text" value="begins with"/>	<input type="text" value="UHIR"/>
Owner	=	<input type="text"/>

When using the IN or BETWEEN operators, enter comma separated values without quotes. i.e. JOB,EMPLOYEE,JRNL_LN.

[Basic Search](#)

Search Results

*Folder View

*Action

Query

Select	Query Name	Descr	Owner	Folder	Edit	Run to HTML	Run to Excel	Run to XML	Schedule	Definitional References
<input type="checkbox"/>	UHIR_ADMISSIONS_BIOE_BIOCHMB	Admissions Data By Group	Public	UHIR	Edit	HTML	Excel	XML	Schedule	Lookup References
<input type="checkbox"/>	UHIR_ADMISSIONS_BY_GROUP	Admissions Data By Group	Public	UHIR	Edit	HTML	Excel	XML	Schedule	Lookup References
<input type="checkbox"/>	UHIR_ADMISSIONS_BY_GROUPDAWDEL	Admissions Data By Group	Public	UHIR	Edit	HTML	Excel	XML	Schedule	Lookup References
<input type="checkbox"/>	UHIR_ADMISSIONS_BY_GROUP_ARL	Admissions Data By Group	Public	UHIR	Edit	HTML	Excel	XML	Schedule	Lookup References
<input type="checkbox"/>	UHIR_ADMISSIONS_BY_GROUP_BB201	Admissions Data By Group	Public	UHIR	Edit	HTML	Excel	XML	Schedule	Lookup References
<input type="checkbox"/>	UHIR_ADMISSIONS_BY_GROUP_EKA	Admissions Data By Group	Public	UHIR	Edit	HTML	Excel	XML	Schedule	Lookup References
<input type="checkbox"/>	UHIR_ADMISSIONS_BY_GROUP_FTICS	Admissions Data By Group	Public	UHIR	Edit	HTML	Excel	XML	Schedule	Lookup References
<input type="checkbox"/>	UHIR_ADMISSIONS_BY_GROUP_GRE	Gre Scores Only By Group	Public	UHIR	Edit	HTML	Excel	XML	Schedule	Lookup References
<input type="checkbox"/>	UHIR_ADMISSIONS_BY_GROUP_ID	Admissions Data By ID List	Public	UHIR	Edit	HTML	Excel	XML	Schedule	Lookup References
<input type="checkbox"/>	UHIR_ADMISSIONS_BY_GROUP_ORG	Admissions Data By Group/Org	Public	UHIR	Edit	HTML	Excel	XML	Schedule	Lookup References
<input type="checkbox"/>	UHIR_ADMISSIONS_BY_GROUP_VER2	Admissions Data By Group	Public	UHIR	Edit	HTML	Excel	XML	Schedule	Lookup References
<input type="checkbox"/>	UHIR_ADMISSIONS_BY_GRP_EKA_PRS	Admissions Data By Group	Public	UHIR	Edit	HTML	Excel	XML	Schedule	Lookup References

- Records
- Query
- Expressions
- Prompts
- Fields
- Criteria
- Having
- Transformations
- View SQL
- Run

Query Name:
 Description:
[Feed](#)

*Search By:
 begins with:

[Search](#)

[Advanced Search](#)

Search Results

Record

Recname	Add Record	Show Fields
UHIR_STDNT_ACTI - Reporting Table-Stdnt Semester	Add Record	Show Fields
UHIR_STDNT_DEGR - Reporting Table-Student Degree	Add Record	Show Fields
UHIR_STDNT_ENRL - Student Enrollment Table	Add Record	Show Fields
UHIR_STDNT_STRM - Reporting Table-Stdnt Semester	Add Record	Show Fields
UHIR_STDNT_TRAN - Reporting Table-Transfer Data	Add Record	Show Fields
UHIR_STGR_UPDLS - UHIR_STGR_UPDLS	Add Record	Show Fields
UHIR_STUDENTS - Reporting Table-Student Data	Add Record	Show Fields

[Save](#)

[Save As](#)

[New Query](#)

[Preferences](#)

[Properties](#)

[Publish as Feed](#)

[Publish as Pivot Grid](#)

[New Union](#)

Fields for record UHIR_STDNT_STRM - Reporting Table-Stdnt Semester:

Fieldname



Key	Description
Y	EMPLID - ID
Y	INSTITUTION - Academic Institution
Y	ACAD_CAREER - Academic Career
Y	STRM - Term
Y	STDNT_CAR_NBR - Student Career Nbr
	UHIR_ENROLL_CENSUS - Enrolled on Census Date
	UHIR_ENROLL_CURR - Currently Enrolled Flag
	UHIR_ENROLL_EOS - Enrolled - End of Semester
	ACAD_LEVEL_BOT - Academic Level - Term Start
	UHIR_ACAD_LEVEL - Acad Level Description
	UHIR_COLLEGE - College
	UHIR_COLLEGE_DESCR - College (Group) Description
	UHIR_PRIMARY_ORG - Primary Plan Org Owner
	PRIMARY_ORG_DESCR - Primary Org Description

- Records
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Query Name New Unsaved Query

Description

Feed ▾

Click folder next to record to show fields. Check fields to add to query. Uncheck fields to remove from query. Add additional records by clicking the records tab. When finished click the fields tab.

Chosen Records

Alias Record

A UHIR_STDNT_STRM - Reporting Table-Stdnt Semester

Hierarchy Join —

Check All

Uncheck All

Fields



1-50 of 166



View 100

- | | | | | |
|-------------------------------------|--|---|---|--|
| <input checked="" type="checkbox"/> | | EMPLID - ID | Join PEOPLE_SRCH - People Search View | |
| <input checked="" type="checkbox"/> | | INSTITUTION - Academic Institution | | |
| <input checked="" type="checkbox"/> | | ACAD_CAREER - Academic Career | Join ACAD_CAR_TBL - Academic Career Table | |
| <input type="checkbox"/> | | STRM - Term | Join TERM_VAL_TBL - Term Value Table | |
| <input type="checkbox"/> | | STDNT_CAR_NBR - Student Career Nbr | | |
| <input checked="" type="checkbox"/> | | UHIR_ENROLL_CENSUS - Enrolled on Census Date | | |
| <input type="checkbox"/> | | UHIR_ENROLL_CURR - Currently Enrolled Flag | | |
| <input type="checkbox"/> | | UHIR_ENROLL_EOS - Enrolled - End of Semester | | |
| <input type="checkbox"/> | | ACAD_LEVEL_BOT - Academic Level - Term Start | Join ACAD_LEVEL_TBL - Academic Level Table | |
| <input type="checkbox"/> | | UHIR_ACAD_LEVEL - Acad Level Description | | |
| <input type="checkbox"/> | | UHIR_COLLEGE - College | Join ACAD_GROUP_TBL - Academic Group Table | |
| <input type="checkbox"/> | | UHIR_COLLEGE_DESCR - College (Group) Description | | |
| <input type="checkbox"/> | | UHIR_PRIMARY_ORG - Primary Plan Org Owner | | |
| <input type="checkbox"/> | | PRIMARY_ORG_DESCR - Primary Org Description | | |
| <input type="checkbox"/> | | UHIR_ACAD_STANDING - Current Term Academic Standing | | |
| <input type="checkbox"/> | | UHIR_ACAD_STNDDESC - Current Acad Standing Desc | | |
| <input type="checkbox"/> | | UHIR_PRE_ACAD_STD - Pror semester academic stading | | |
| <input type="checkbox"/> | | UHIR_P_ACAD_STDESC - Prior Term Acad Stdg Descr | | |
| <input type="checkbox"/> | | UHIR_P_ACDSTD_TERM - Prior Acad Standing Term | | |
| <input type="checkbox"/> | | ACAD_PROG_PRIMARY - Primary Academic Program | Join ACAD_PROG_TBL - Academic Program Table | |

Query Name New Unsaved Query

Description

Feed

View field properties, or use field as criteria in query statement.

Reorder / Sort

Fields

Col	Record.Fieldname	Format	Ord	XLAT	Agg	Heading Text	Add Criteria	Edit	Delete
1	A.EMPLID - ID	Char11				ID		Edit	—
2	A.ACAD_CAREER - Academic Career	Char4				Career		Edit	—
3	A.UHIR_ENROLL_CENSUS - Enrolled on Census Date	Char1				Enrolled Census		Edit	—
4	A.INSTITUTION - Academic Institution	Char5				Institution		Edit	—
5	A.CUM_GPA - Cumulative GPA	Num5.3				GPA		Edit	—

[Save](#)
[Save As](#)
[New Query](#)
[Preferences](#)
[Properties](#)

[Publish as Feed](#)
[Publish as Pivot Grid](#)
[New Union](#)

- Records
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- Criteria
- Having
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- View SQL
- Run

Query Name New Unsaved Query
Description
Feed

Add Criteria

Group Criteria

Reorder Criteria

Criteria

1-3 of 3
▼

Logical	Expression1	Condition Type	Expression 2	Edit	Delete
<input type="text" value=""/>	A.INSTITUTION - Academic Institution	equal to	00730	<input type="button" value="Edit"/>	—
AND <input type="text" value=""/>	A.STRM - Term	equal to	2180	<input type="button" value="Edit"/>	—
AND <input type="text" value=""/>	A.UHIR_ENROLL_CENSUS - Enrolled on Census Date	equal to	Y	<input type="button" value="Edit"/>	—

- Save

[Save As](#)
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[New Query](#)
[Publish as Pivot Grid](#)

[Preferences](#)
[New Union](#)

[Properties](#)

- Records
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- Fields
- Criteria
- Having
- Transformations
- View SQL
- Run

Query Name: New Unsaved Query Description: Feed

*Search By: Record Name begins with

[Search](#) [Advanced Search](#)

Search Results

Record

1-7 of 7 | [View All](#)

Recname	Join Record	Show Fields
UHIR_STDNT_ACTI - Reporting Table-Stdnt Semester	Join Record	Show Fields
UHIR_STDNT_DEGR - Reporting Table-Student Degree	Join Record	Show Fields
UHIR_STDNT_ENRL - Student Enrollment Table	Join Record	Show Fields
UHIR_STDNT_STRM - Reporting Table-Stdnt Semester	Join Record	Show Fields
UHIR_STDNT_TRAN - Reporting Table-Transfer Data	Join Record	Show Fields
UHIR_STGR_UPDLS - UHIR_STGR_UPDLS	Join Record	Show Fields
UHIR_STUDENTS - Reporting Table-Student Data	Join Record	Show Fields

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- [Publish as Pivot Grid](#)
- [New Union](#)

Select join type and then record to join with UHIR_STUDENTS - Reporting Table-Student Data.

Join Type

- Join to filter and get additional fields (Standard Join)
- Join to get additional fields only (Left outer join)

Join Record

  ◀ ◀ 1-1 of 1 ▶ ▶

A = UHIR_STDNT_STRM - Reporting Table-Stdnt Semester

Auto Join Criteria

Query has detected the join conditions shown below.

Use the checkboxes to unselect the criteria that you do not want to add to the query and click add criteria when done. The criteria added can always be modified later using the criteria tab.

<input checked="" type="checkbox"/>	A.EMPLID - ID = B.EMPLID - Empl ID
<input checked="" type="checkbox"/>	A.INSTITUTION - Academic Institution = B.INSTITUTION - Academic Institution

Add Criteria

Cancel

Records

Query

Expressions

Prompts

Fields

Criteria

Having

Transformations

View SQL

Run

Query Name New Unsaved Query

Description

 Feed ▾

Click folder next to record to show fields. Check fields to add to query. Uncheck fields to remove from query. Add additional records by clicking the records tab. When finished click the fields tab.



Chosen Records

Alias	Record	
 A	UHIR_STDNT_STRM - Reporting Table-Stdnt Semester	Hierarchy Join —
 B	UHIR_STUDENTS - Reporting Table-Student Data	Hierarchy Join —

Expand All Records

Collapse All Records

Save

Save As

New Query

Preferences

Properties

Publish as Feed

Publish as Pivot Grid

New Union

Chosen Records

Alias	Record	
A	UHIR_STDNT_STRM - Reporting Table-Stdnt Semester	Hierarchy Join
B	UHIR_STUDENTS - Reporting Table-Student Data	Hierarchy Join

Fields | 1-50 of 74 | [View All](#)

<input type="checkbox"/>	EMPLID - Empl ID	Join PEOPLE_SRCH - People Search View	
<input type="checkbox"/>	INSTITUTION - Academic Institution		
<input type="checkbox"/>	UHIR_ENROLL_CURR - Currently Enrolled Flag		
<input type="checkbox"/>	NAME - Name		
<input type="checkbox"/>	LAST_NAME - Last Name		
<input type="checkbox"/>	FIRST_NAME - First Name		
<input type="checkbox"/>	MIDDLE_NAME - Middle Name		
<input type="checkbox"/>	SSN - Social Security #		
<input type="checkbox"/>	UHIR_USER_ID - User ID - U of H - Houston		
<input type="checkbox"/>	UHIR_UHASSIGNEDSSN - UH Assigned Social Security #		
<input type="checkbox"/>	FERPA - FERPA		
<input type="checkbox"/>	BIRTHDATE - Date of Birth		
<input type="checkbox"/>	SEX - Gender		
<input type="checkbox"/>	ETHNIC_GRP_CD - Ethnic Group	Join ETHNIC_GRP_TBL - Ethnic Group Table	
<input type="checkbox"/>	UHC_B_ETHNIC_ORIGIN - Ethnic Origin		
<input type="checkbox"/>	UHIR_NEW_ETHNIC_CB - IR CB New Ethnicity		
<input type="checkbox"/>	UHIR_NEW_EDESC_CB - IR CB New Ethnic Description		
<input type="checkbox"/>	EMAIL_ADDR - Email Address		
<input type="checkbox"/>	UHS_UH_EMAIL_ALIAS - UH Email Alias		
<input type="checkbox"/>	UHIR_OTHR_EMAIL - Other Email Address		
<input type="checkbox"/>	UHIR_DEST_EMAIL - Destination Email		
<input type="checkbox"/>	PHONE - Telephone		
<input type="checkbox"/>	UHIR_MAIL_ADDRESS1 - Mail Address 1		
<input type="checkbox"/>	UHIR_MAIL_ADDRESS2 - Mail Address 2		
<input type="checkbox"/>	UHIR_MAIL_ADDRESS3 - Mail Address 3		
<input type="checkbox"/>	UHIR_MAIL_ADDRESS4 - Mail Address 4		
<input checked="" type="checkbox"/>	UHIR_MAIL_CITY - Mail City		

Query Name: New Unsaved Query Description: Feed
 View field properties, or use field as criteria in query statement. Reorder / Sort

Fields

Col	Record.FieldName	Format	Ord	XLAT	Agg	Heading Text	Add Criteria	Edit	Delete
1	A.EMPLID - ID	Char11				ID		<input type="button" value="Edit"/>	—
2	A.ACAD_CAREER - Academic Career	Char4				Career		<input type="button" value="Edit"/>	—
3	A.UHIR_ENROLL_CENSUS - Enrolled on Census Date	Char1				Enrolled Census		<input type="button" value="Edit"/>	—
4	A.INSTITUTION - Academic Institution	Char5				Institution		<input type="button" value="Edit"/>	—
5	A.CUM_GPA - Cumulative GPA	Num5.3				GPA		<input type="button" value="Edit"/>	—
6	B.UHIR_MAIL_CITY - Mail City	Char30				Mail City		<input type="button" value="Edit"/>	—

Save As
New Query
Preferences
Properties
Publish as Feed
Publish as Pivot Grid
New Union

Records

Query

Expressions

Prompts

Fields

Criteria

Having

Transformations

View SQL

Run

Query Name

New Unsaved Query

Description



Add Criteria

Group Criteria

Reorder Criteria

Criteria



1-5 of 5

Logical	Expression1	Condition Type	Expression 2	Edit	Delete
<input type="text" value="AND"/>	A.INSTITUTION - Academic Institution	equal to	00730	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>
<input type="text" value="AND"/>	A.STRM - Term	equal to	2180	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>
<input type="text" value="AND"/>	A.UHIR_ENROLL_CENSUS - Enrolled on Census Date	equal to	Y	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>
<input type="text" value="AND"/>	A.EMPLID - ID	equal to	B.EMPLID - Empl ID	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>
<input type="text" value="AND"/>	A.INSTITUTION - Academic Institution	equal to	B.INSTITUTION - Academic Institution	<input type="button" value="Edit"/>	<input type="button" value="Delete"/>

Save

Save As

New Query

Preferences

Properties

Publish as Feed

Publish as Pivot Grid

New Union

Records Query Expressions Prompts Fields Criteria Having Transformations **View SQL** Run

Query Name New Unsaved Query

Description

 Feed ▾

XLAT/Related Language

Query SQL

```
SELECT A.EMPLID, A.ACAD_CAREER, A.UHIR_ENROLL_CENSUS, A.INSTITUTION, A.CUM_GPA, B.UHIR_MAIL_CITY
FROM PS_UHIR_STDNT_STRM A, PS_UHIR_STUDENTS B
WHERE (A.INSTITUTION = '00730'
AND A.STRM = '2180'
AND A.UHIR_ENROLL_CENSUS = 'Y'
AND A.EMPLID = B.EMPLID
AND A.INSTITUTION = B.INSTITUTION)
```

< Records

Enter a name to save this query as:

*Query

Description

Folder

*Query Type

*Owner

Query Definition

OK

Cancel



[View All](#) | [Rerun Query](#) | [Download to Excel](#) | [Download to XML](#)

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Row	ID	Career	Enrolled Census	Institution	GPA	Mail City
1		GRAD	Y	00730	4.000	Houston
2		UGRD	Y	00730	4.000	Nederland
3		UGRD	Y	00730	3.000	Spring
4		UGRD	Y	00730	0.486	Marble Falls
5		UGRD	Y	00730	1.585	Houston
6		UGRD	Y	00730	1.694	Houston
7		UGRD	Y	00730	3.348	League City
8		UGRD	Y	00730	3.249	Live Oak
9		UGRD	Y	00730	2.913	Houston
10		UGRD	Y	00730	2.633	Humble
11		UGRD	Y	00730	3.929	Conroe
12		GRAD	Y	00730	3.636	Sugar Land
13		UGRD	Y	00730	3.107	Spring
14		GRAD	Y	00730	3.746	Houston
15		UGRD	Y	00730	3.653	Houston
16		UGRD	Y	00730	3.334	Stafford
17		UGRD	Y	00730	0.000	Rosenberg
18		UGRD	Y	00730	3.097	Houston
19		UGRD	Y	00730	2.599	Houston