

Using uAchieve Data for Operations, Planning & Analysis

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#collegesource2022



Agenda

Background

Data Asset Examples

Data Flow & Model

Encoding Mindset

Outcomes and Future

Facts



UW-Madison from the sky



33,500 undergrads (++)
459 DPROGs in uAchieve 4.5.4.2
PeopleSoft 9.2

8 schools and colleges
125 majors
7,700 undergrad degrees

Goals



Policy analysis

Student outcomes reporting

Program assessment

Degree Clearance automation

Student services

Self-Service Data Assets



Why uAchieve?



Quantifies the curriculum

Stores exception data

Analyzes student & curriculum data

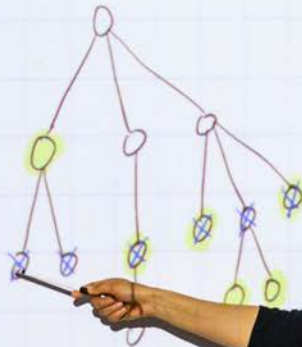
Stores audit data (JOB_QUEUE)

Data Assets



Chawla Shuchi teaching COMP SCI 577

Independent Set in a graph: a subset of vertices such
that no pair is connected by
an edge.



Goal: Find an IS of maximum

$MIS(v)$ = size of max IS in G

Demo: Course Data



Year at UW when Requirement Completed, Current Requirements



Select Degr. Award Acad. Yr.
2014 2022

Select Matriculation Admit Type
(All)

Select Award School/College
College of Letters and Science

Select Major
Computer Sciences

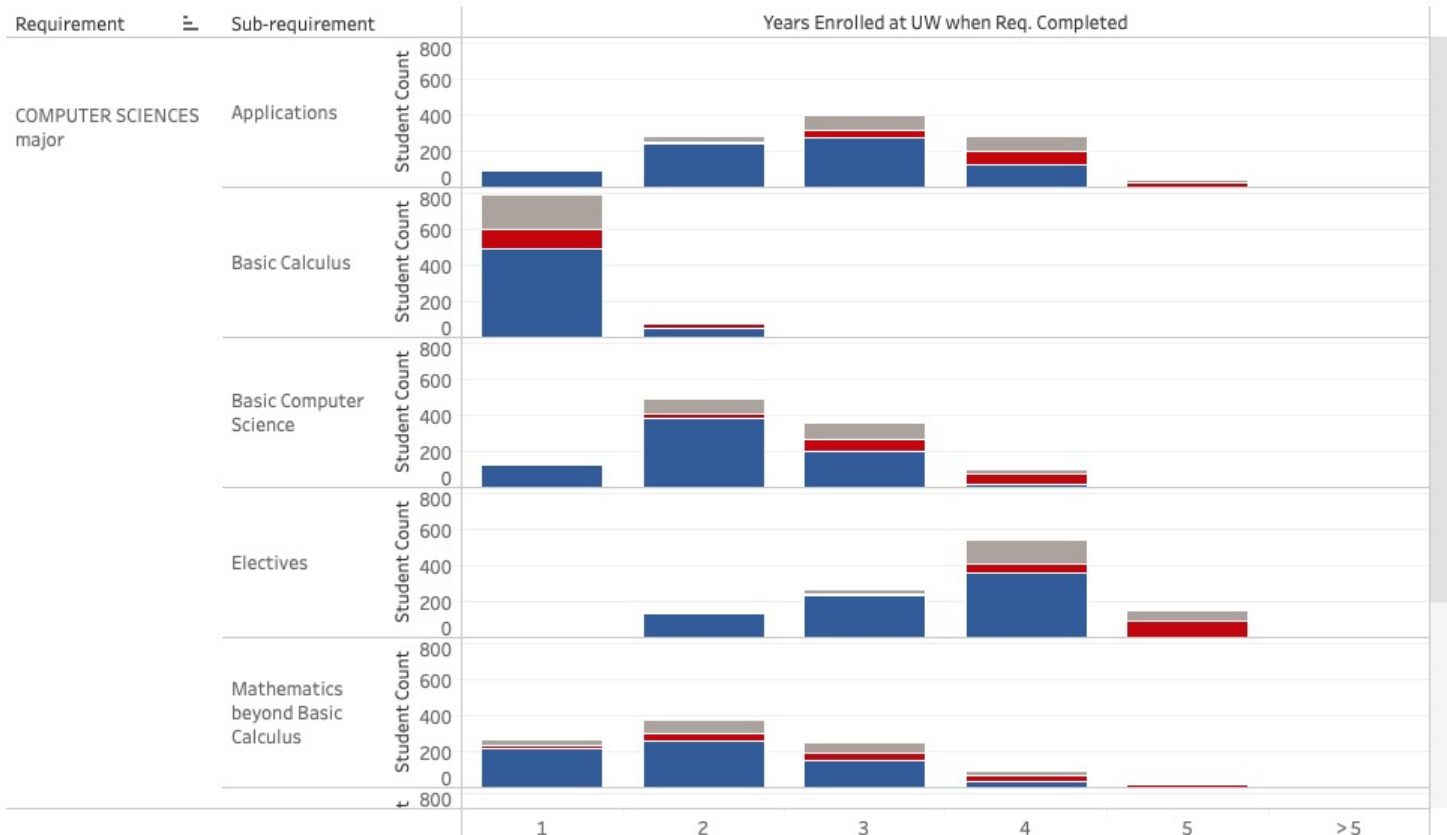
Select Plan Code
(All)

Select Major Named Option

Time to Degree

- NA (AMAJ)
- > 4 years
- <= 4 Years

Major: Computer Sciences



Demo: Exceptions per Award



Exception Count and Exceptions per Award



Select Award School/College
College of Letters and Science

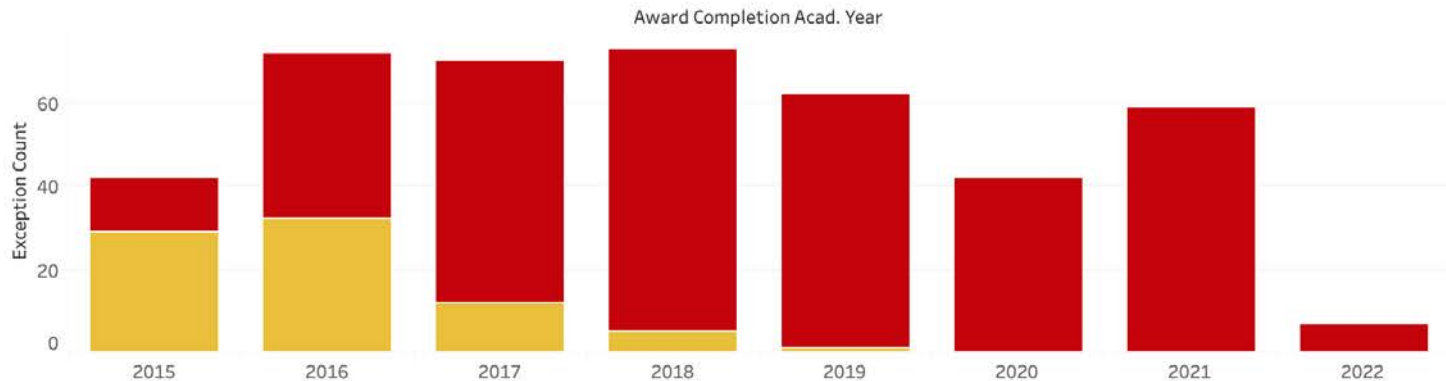
Select Major
Political Science

Select Plan Code
(All)

Select Named Option

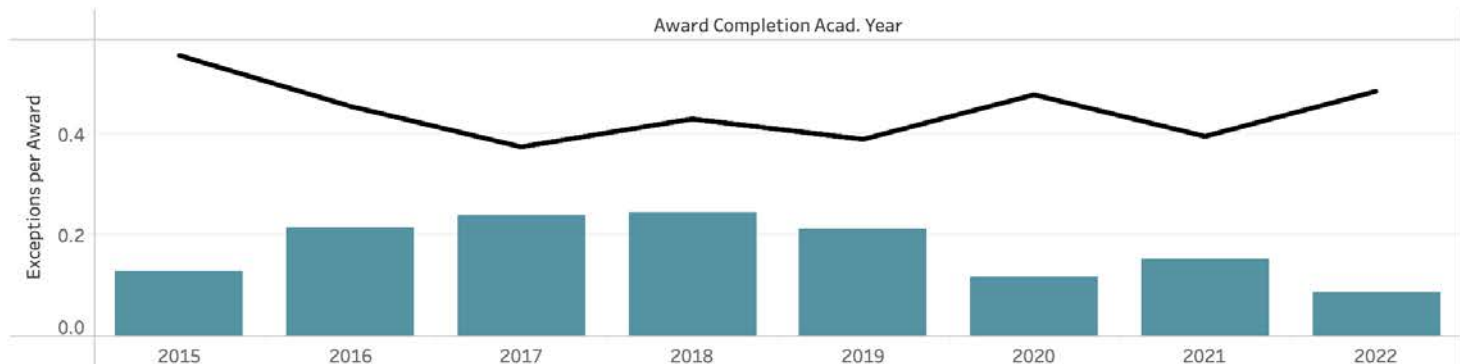
Major Version
■ Current
■ Previous

Total Exception Count by Major Version of Student



Exceptions per Award

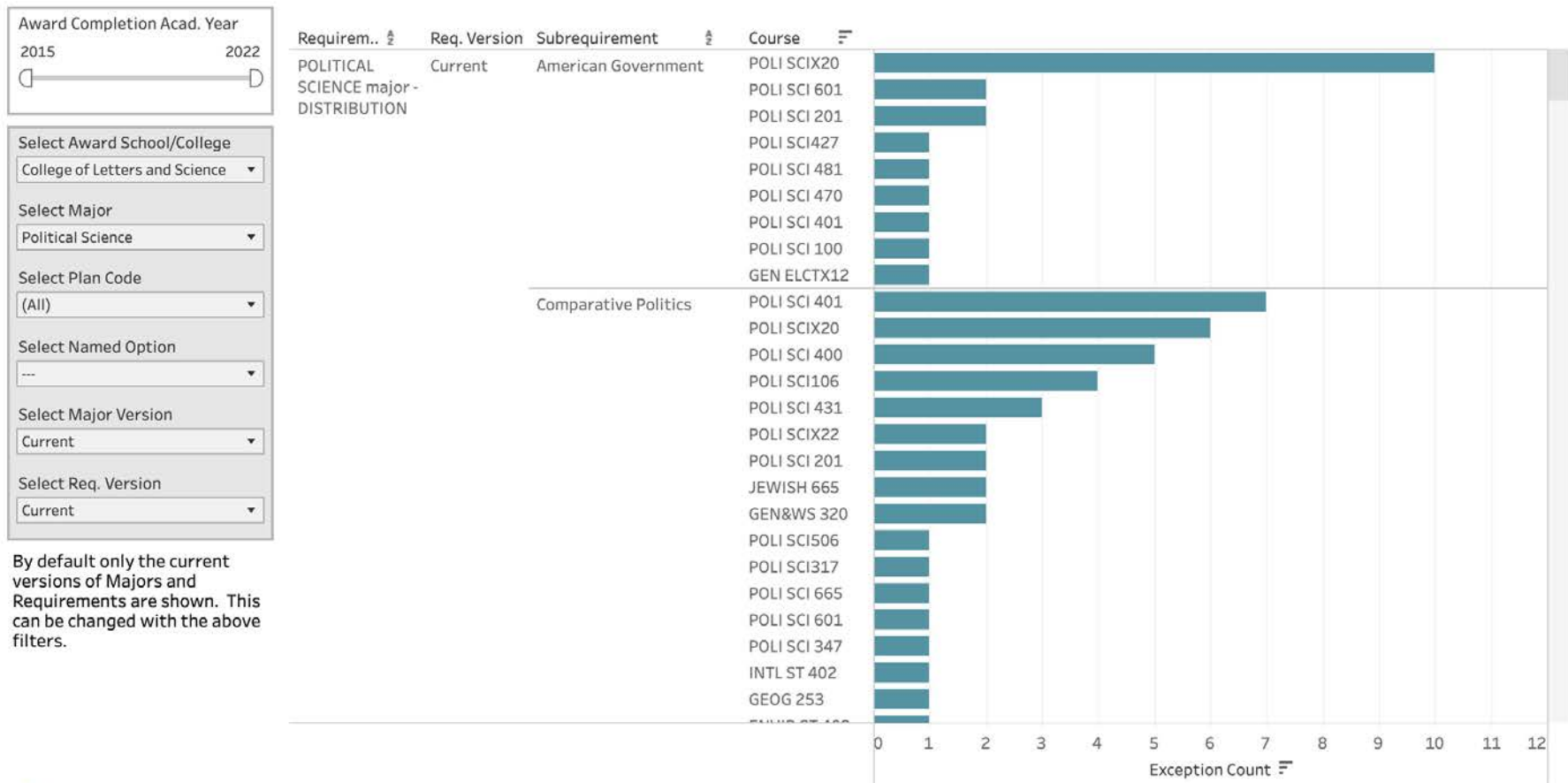
Line is average for Field of Study in School/College



Demo: Exceptions by Course



Exception Count by Substituted Course



Demo: Degree Clearance Data



L&S Undergraduate Degree Clearance Deficiency Report

What's Inside

- ➔ Pre-Clearance Deficiencies
- ➔ Degree Clearance Deficiencies
- ➔ Unresolved Grades
- i Technical Notes
- ? Tips on Using Tableau

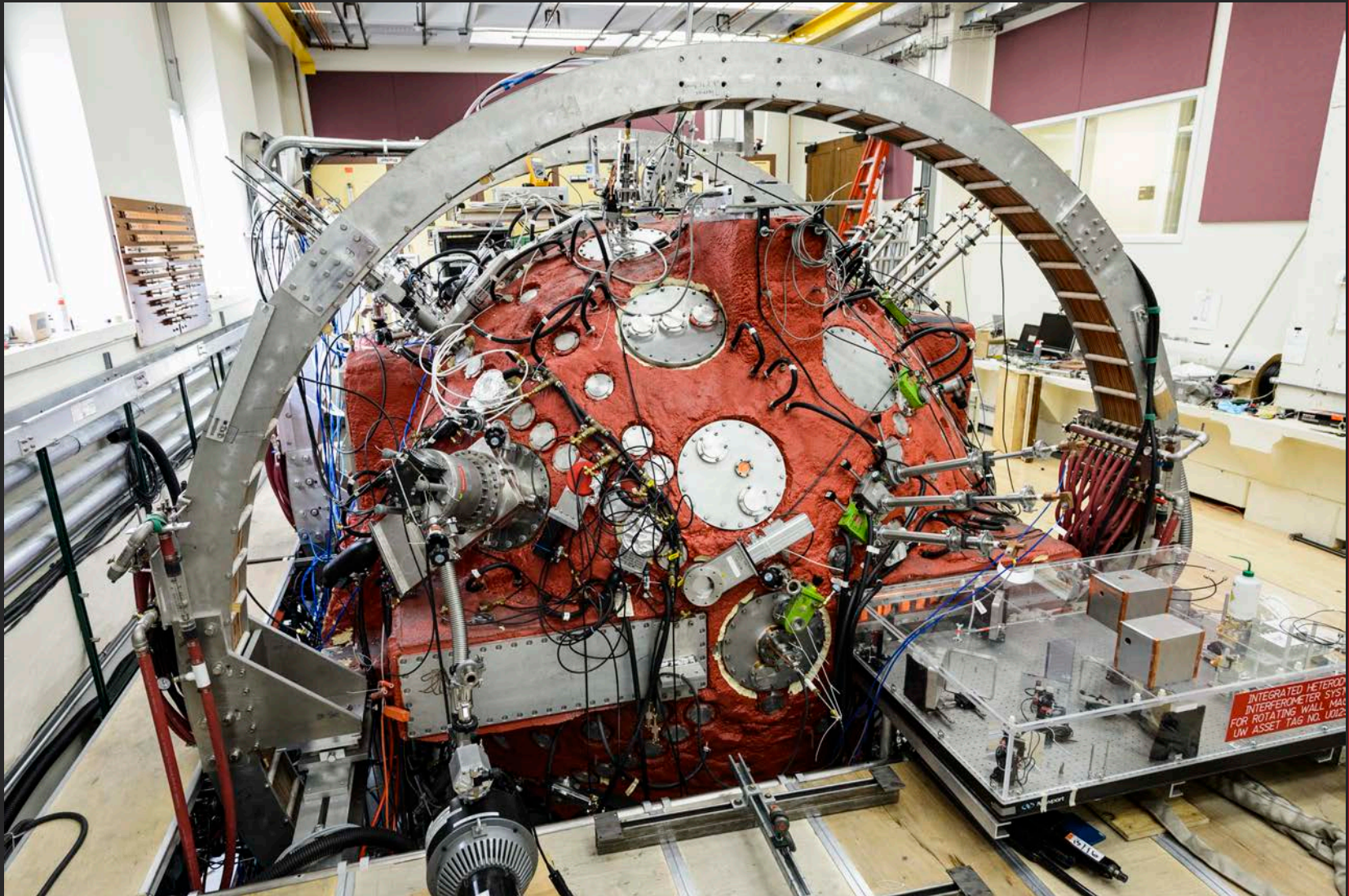
This report provides information about College of Letters and Science Undergraduate students who have applied for graduation in a particular term but who are either not on track to graduate with in-progress work (Pre-Clearance Deficiencies) or were not cleared for graduation during the degree clearance process (Degree Clearance Deficiencies). It also provides information about unresolved grades of audited students.

The DARS data in this report is regularly purged, and therefore it will sometimes show no data.

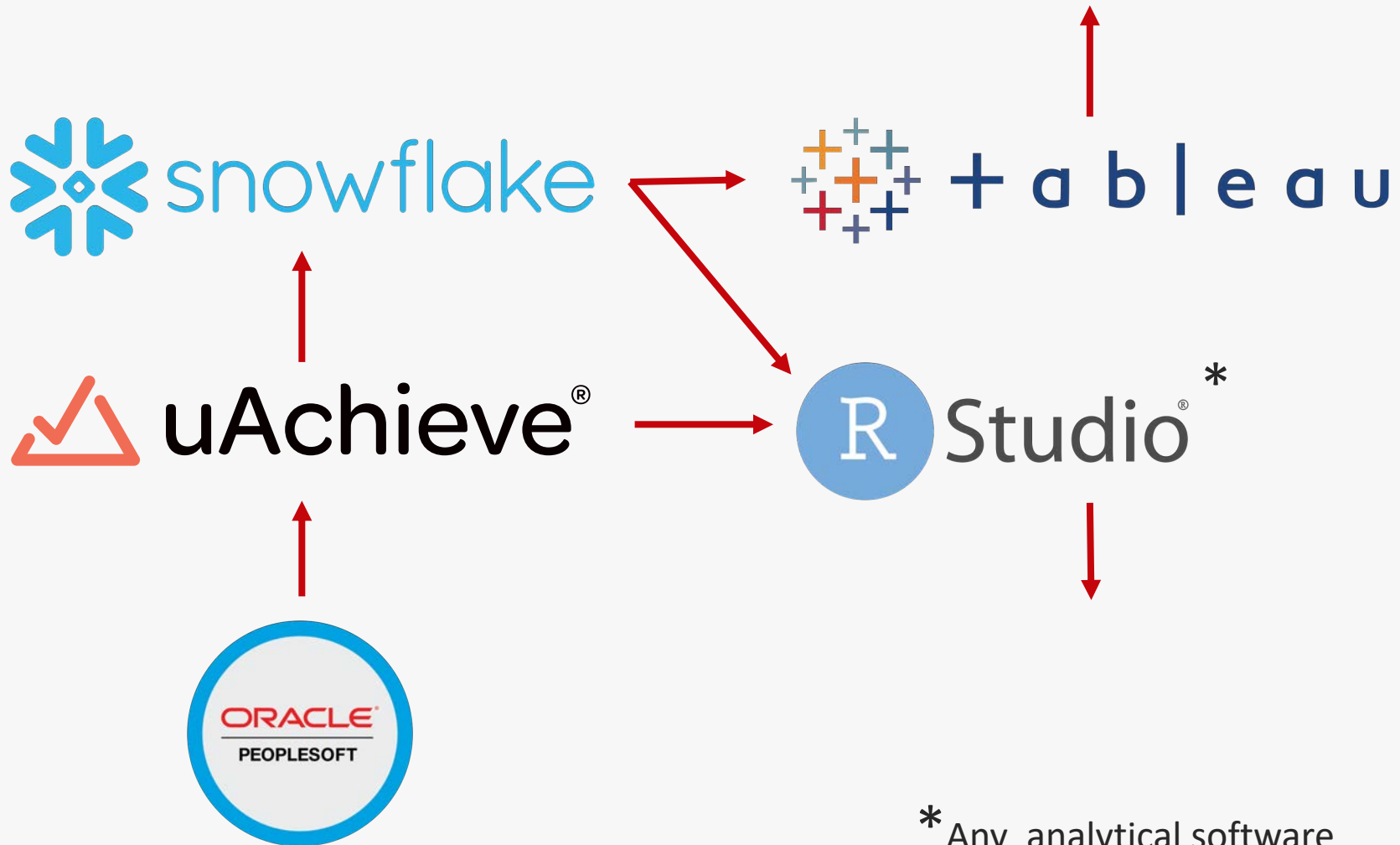
To download this data first apply the desired filters, double click somewhere in the displayed data, then select "Download" -> "Data", and finally click the "Download all rows as text file" hyperlink. This will download a .csv file that can be opened in Excel.

Data Flow & Model

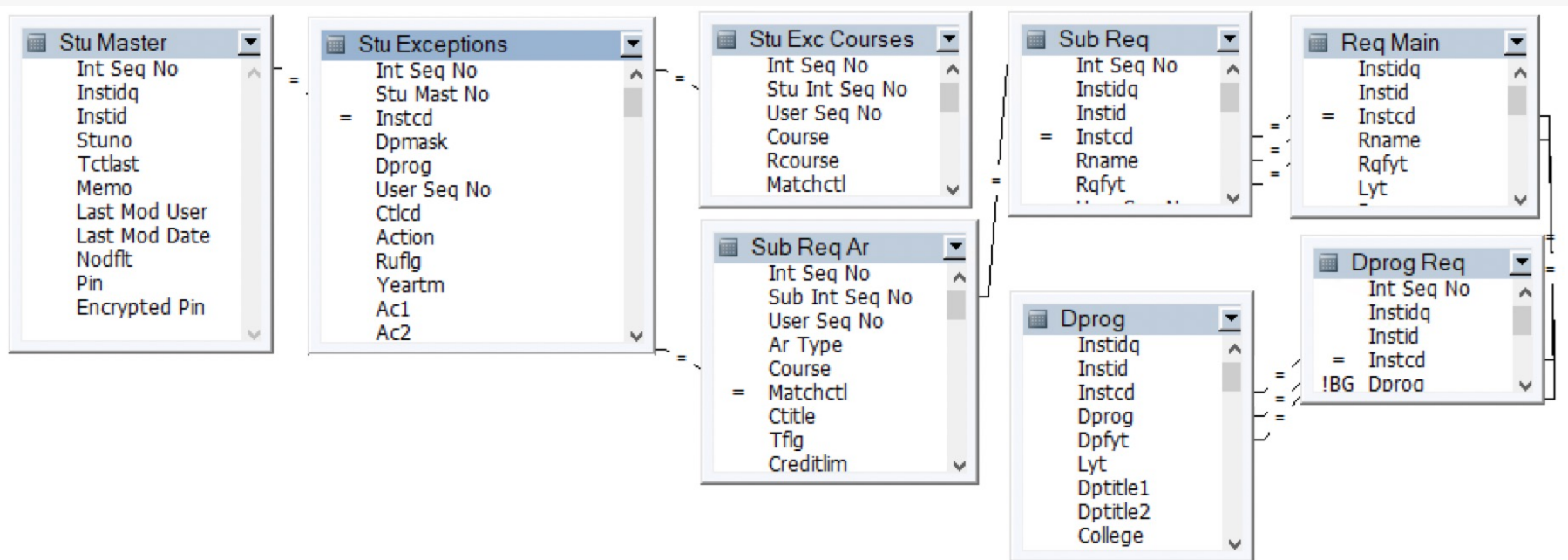
Big Red Plasma Ball



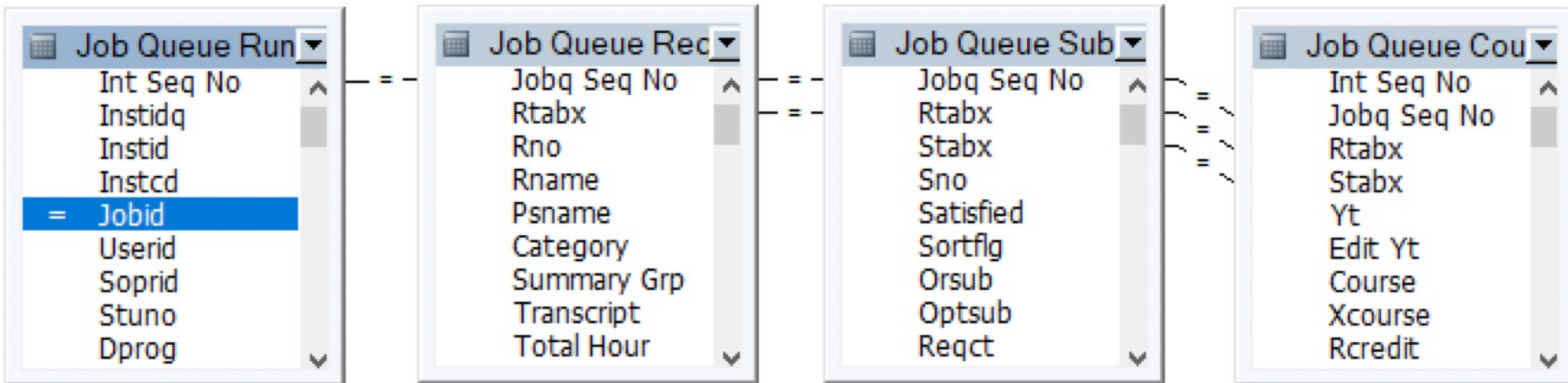
Data Flow



Stu_Exceptions Tables



Job_Queue Tables



Queuing up Job_Queue

Batch audits produce
data that is then
warehoused in
Snowlake



Batch Request: Faculty/Staff

Campus IDs:

Paste or type Campus IDs.

	5
	6
	7
	8
	7
	4
	1
	5
	1
	8

Batch name:

An optional name you may use to keep track of this batch. Max. 100 characters.

Example: 'May Grads - future courses'

122 [redacted] _A

Processing Start Time:

- ☒ Overnight processing (5000 max. IDs.)
- ☐ When started by DARS administrator
- ☐ Immediately after submitting (200 IDs max. during bus. hrs., 5000 max. night/weekend.)

Output Options:

- ☐ Degree Audit Text (DARS View Audits page lists a maximum of 1100 audits)
- ☒ Analysis tables

Other Options:

School, College or Population:	Letters & Science, College of	▼
To run with default values, do not modify the following options.		
Degree Plan Name:		Selection Help
Catalog Year/Term:		(e.g. 19973)
AltCatYr1:		(e.g. 19973)
Honors Options:	Keep current status	▼
Include Courses From:	Previous terms.	▼



Queuing up Tableau

Tableau looks for a set of coded Batch names to add audit data to the views

Batch name:

*An optional name you may use to keep track of this batch. Max. 100 characters.
Example: 'May Grads - future courses'*



Encoding Mindset

Memorial Union Terrace on a summer night



Challenges

uAchieve data structure

Complex encoding = complex data

Legacy encoding

Resources

1	R	832BIOPSY-R	\$	
2	A	832BIOL	L	
3	A	DARSX	\$	
4	A	832BIOPSY-A	\$	
5	A	ADVISORX	\$	SORT:0375



Strategies



Use what the audit produces

Input *clean* data for good output

Balance the various uses of the audit

Degree auditing

Academic Advising

NCAA eligibility

Veteran Affairs

Analysis



Encoding Decisions

Encode to create data structure

Naming convention

Think of audit text as data

L-832
832ADMIT
832DECL
832FND
832BIO
832BRDTH
832DEPTH
832CAP
832ELE
832TOTAL
832HIM
832 n

Requirement Name: 832.0 FYT: 2
Title: PSYCHOLOGY major RESIDENCE &

A POLI SCI 373	
A DARSX	\$
A 805RSRCH-A	\$
A ADVISORX	\$

Embrace Minimalism

Redirect to the catalog

▼ **BIOLOGY INTERMEDIATE/ADVANCED LAB REQUIREMENT**

options, requirements, and approved courses are in [GUIDE](#)

Take Opportunities

A warm winter day on Lake Mendota



"Perfection is achieved incrementally"

- Jack Southard

Outcomes

Commencement, 2022





Positive Impacts



Automated degree clearance

Informed policy and planning

Standard metrics for assessment

Fewer exceptions needed

Higher ROI on uAchieve



Campus Partners



Registrar

Data Management & Analytic Services

Academic Planning & Institutional Research

School/Colleges

IT

Many more!

Forward!

Course Need/Demand Projections

Degree Audit Updater

Encoding data to Snowflake

API Development



Questions? **Using uAchieve Data for Operations, Planning and Analysis**

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