

# Data Sources

ERIN KEITH



# Goals

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1. Return to Design
2. Consider “real-world” Data

# Process Overview

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- Define software system goal
  - Find examples
- Group data by dynamics
  - Static / infrequent changes
    - inserted into table at creation, rarely updated
  - Frequent changes
    - inserted, modified, or deleted as the system is running
- Identify data sources
  - Collect, examine, and clean initial data
    - Download, scrape, etc.
- Design database schema
- Create database and tables
  - Import static data

# College Rankings

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- Define software system goal
- Find examples
- <https://www.usnews.com/education/best-global-universities/neuroscience-behavior>
- <https://www.bestcolleges.com/psychology/graduate-schools-for-clinical-psychology/>

# College Rankings

- Group data by dynamics
- Static / infrequent changes
  - <https://collegescorecard.ed.gov/>
  - <https://nces.ed.gov/ipeds>

IES

NCES

National Center for Education Statistics

MENU

Search

IPEDS

Integrated Postsecondary Education Data System

Data Tools | Help Desk 1 866-558-0658

Start over

Save session

Help

MAIN MENU

Complete Data Files

Data Release Info

Years & Surveys

2022

All Surveys

Continue

Data files are available in ZIP format.

Year	Survey	Title	Data File	Stata Data File	Programs	Dictionary
2022	Institutional Characteristics	Directory information	<a href="#">HD2022</a>	<a href="#">HD2022_STATA</a>	<a href="#">SPSS</a> , <a href="#">SAS</a> , <a href="#">STATA</a>	<a href="#">Dictionary</a>
2022	Institutional Characteristics	Educational offerings, organization, services and athletic associations	<a href="#">IC2022</a>	<a href="#">IC2022_STATA</a>	<a href="#">SPSS</a> , <a href="#">SAS</a> , <a href="#">STATA</a>	<a href="#">Dictionary</a>
2022	Institutional Characteristics	Student charges for academic year programs	<a href="#">IC2022_AY</a>	<a href="#">IC2022_AY_STATA</a>	<a href="#">SPSS</a> , <a href="#">SAS</a> , <a href="#">STATA</a>	<a href="#">Dictionary</a>
2022	Institutional Characteristics	Student charges by program (vocational programs)	<a href="#">IC2022_PY</a>	<a href="#">IC2022_PY_STATA</a>	<a href="#">SPSS</a> , <a href="#">SAS</a> , <a href="#">STATA</a>	<a href="#">Dictionary</a>
2022	Institutional Characteristics	Response status for all survey components	<a href="#">FLAGS2022</a>	<a href="#">FLAGS2022_STATA</a>	<a href="#">SPSS</a> , <a href="#">SAS</a> , <a href="#">STATA</a>	<a href="#">Dictionary</a>
2022	12-Month Enrollment	12-month unduplicated headcount by race/ethnicity, gender and level of student: 2021-22	<a href="#">EFFY2022</a>	<a href="#">EFFY2022_STATA</a>	<a href="#">SPSS</a> , <a href="#">SAS</a> , <a href="#">STATA</a>	<a href="#">Dictionary</a>
2022	12-Month Enrollment	12-month unduplicated headcount by distance education status and student level: 2021-22	<a href="#">EFFY2022_DIST</a>	<a href="#">EFFY2022_DIST_STATA</a>	<a href="#">SPSS</a> , <a href="#">SAS</a> , <a href="#">STATA</a>	<a href="#">Dictionary</a>
2022	12-Month Enrollment	12-month instructional activity: 2021-22	<a href="#">EFIA2022</a>	<a href="#">EFIA2022_STATA</a>	<a href="#">SPSS</a> , <a href="#">SAS</a> , <a href="#">STATA</a>	<a href="#">Dictionary</a>
2022	12-Month Enrollment	Response status all survey components	<a href="#">FLAGS2022</a>	<a href="#">FLAGS2022_STATA</a>	<a href="#">SPSS</a> , <a href="#">SAS</a> , <a href="#">STATA</a>	<a href="#">Dictionary</a>

# College Rankings

- Identify data sources
- Collect**, examine, and clean initial data

#	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI
1	UNITID	INSTNM	ALIAS	ADDR	CITY	STABBR	ZIP	FIPS	OBBEREG	CHFM	CHFTITL	GENTL	EIN	UEIS	OPEID	OPEFLA	WEBADR	ADMINU	FAIDURL	APPLURL	NPRICU	VFURL	ATHURL	DISAURL	SECTOR	ICLEVEL	CONTRC	HLOFFER	UGOFFER	GROFFER	HDEGOF	DEGGR	HBCU	HOSPITA	MED
2	100654	Alabama	AAMU	4900 Mer	Normal	AL	35762	1	5	Dr. Danie	Presiden	3E+09	6E+08	JDVGS6	100200	1	www.aam	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	1	1	1	9	1	12	1	1	2	
3	100663	University	UAB	Administr	Birmingh	AL	35294-0	1	5	Ray L. W.	Presiden	2E+09	6E+08	YND4PL	105200	1	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	1	1	1	9	1	11	1	2	1	
4	100690	Amridge I	Southern	1200 Tay	Montgom	AL	36117-3E	1	5	Michael C	Presiden	3E+13	2E+08	RB27FR	3E+06	1	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	2	1	2	9	1	12	1	2	2		
5	100706	University	UAH Univ	3015 Spar	Huntsville	AL	35899	1	5	Chuck K.	Presiden	3E+09	6E+08	HB6KNG	105500	1	www.uah	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	1	1	1	9	1	11	1	2	2		
6	100724	Alabama	915 S Jac	Montgom	AL	36104-0	1	5	Quinton	Presiden	3E+09	6E+08	DLJWLM	100500	1	www.alas	www.alas	www.alas	www.alas	www.alas	www.alas	https://lvs	https://lvs	https://lvs	1	1	1	9	1	11	1	1	2		
7	100733	University	500 Univ	Tuscaloc	AL	35401	1	5	Finis St.	Chancell	2E+09	6E+08	800400	100000	2	www.uas	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	0	1	1	9	1	11	1	2	-2		
8	100751	Central A	739 Univ	Tuscaloc	AL	35487-0	1	5	Dr. Stuart	Presiden	2E+09	6E+08	RCNJEH	105100	1	www.ua	gobama.	financial	apply.ua	financial	https://lvs	registr	ods.ua	https://lvs	1	1	1	9	1	11	1	2	2		
9	100760	The Univ	1675 Che	Alexande	AL	35010	1	5	Jeff Lynn	Presiden	3E+09	6E+08	GIC3X4	100700	1	www.cao	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	4	2	1	3	1	2	40	1	2	-2	
10	100812	Athens S	300 N Be	Athens	AL	35611	1	5	Dr. Cath	Interim Pr	3E+09	6E+08	GFZJMK	100800	1	www.ath	www.ath	www.ath	www.ath	www.ath	www.ath	www.ath	www.ath	https://lvs	1	1	1	7	1	20	1	2	2		
11	100830	Auburn L	AUMJ[Au	7440 Eas	Montgom	AL	36117-3E	1	5	Carl A. St	Chancell	3E+09	6E+08	SZY7SM	831000	1	www.aum	www.aum	www.aum	www.aum	www.aum	www.aum	www.aum	www.aum	https://lvs	1	1	1	9	1	11	1	2	2	
12	100858	Auburn L	Auburn	AL	36849	1	5	Chris Rob	Presiden	3E+09	6E+08	DMQNDJ	100900	1	www.aub	www.aub	www.aub	www.aub	www.aub	https://lvs	veterans	https://lvs	https://lvs	https://lvs	1	1	1	9	1	11	1	2	2		
13	100937	Birmingham	BSC	900 Ark	Birmingh	AL	35254	1	5	Mr. Danie	Presiden	2E+09	6E+08	L9NKL7	101200	1	www.bsc	www.bsc	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	2	1	2	5	1	2	30	1	2	2
14	101028	Chattahc	CVCC	2602 Col	Phenix C	AL	36869	1	5	Jacquelin	Presiden	3E+09	6E+08	MEKHNS	1E+06	1	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	4	2	1	3	1	2	40	1	2	-2	
15	101116	South Ur	5355 Vax	Montgom	AL	36116	1	5	Kandis R	Dean of A	3E+09	6E+08	YJAH2L	1E+06	1	www.sou	www.sou	www.sou	www.sou	www.sou	www.sou	www.sou	www.sou	https://lvs	3	1	3	9	1	13	1	2	2		
16	101143	Enterprise	Enterprise	600 Plaz	Enterprise	AL	36330-1	1	5	Danny L	Presiden	3E+09	6E+08	CDVSG3	101500	1	www.eso	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	4	2	1	3	1	2	40	1	2	-2	
17	101161	Coastal A	1900 U S	Bay Mine	AL	36507-2	1	5	Craig Poi	Presiden	3E+09	6E+08	JK48KB	106000	1	www.coa	www.coa	www.coa	www.coa	www.coa	www.coa	www.coa	www.coa	https://lvs	4	2	1	3	1	2	40	1	2	-2	
18	101189	Faulkner	Faulkner	5305 Ark	Montgom	AL	36109-3	1	5	Mitch Hei	Presiden	3E+09	6E+08	X4N7WE	100300	1	www.faul	www.faul	www.faul	applanow	www.faul	www.faul	https://lvs	https://lvs	2	1	2	9	1	11	1	2	2		
19	101240	Gadsden	GSCC	1001 Geo	Gadsden	AL	35903	1	5	Dr. Kath	Presiden	3E+09	6E+08	F52PBS	101700	1	www.gad	www.gad	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	4	2	1	3	1	2	40	1	1	-2	
20	101277	New Beg	421 Marti	Albertville	AL	35951	1	5	Amanda	DIRECTC	3E+09	2E+08	4E+06	100000	1	www.nbc	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	9	3	3	2	1	2	0	2	2	-2	
21	101286	George C	WALLAC	1141 Wall	Dothan	AL	36303-9	1	5	Linda C Y	Presiden	3E+09	6E+08	R5MDG7	101800	1	www.wall	www.wall	www.wall	www.wall	www.wall	www.wall	www.wall	www.wall	https://lvs	4	2	1	3	1	2	40	1	2	-2
22	101295	George C	Wallace	1801 Main	Hancevill	AL	35077-2	1	5	Vicki P. K	Presiden	3E+09	6E+08	W3MSJD	787100	1	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	4	2	1	3	1	2	40	1	2	-2
23	101301	George C	Wallace	3000 Ear	Selma	AL	36702-2	1	5	Dr. Jame	Presiden	3E+09	6E+08	JCYJLCF	563900	1	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	4	2	1	3	1	2	40	1	2	-2
24	101365	Hercing L	280 West	Birmingh	AL	35209	1	5	Sarah H	Presiden	2E+09	3E+08	JDF5MP	962107	1	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	2	1	2	6	1	1	20	1	2	2	
25	101435	Huntingd	1500 Eas	Montgom	AL	36106-2	1	5	J. Camer	Presiden	3E+09	6E+08	MACKQ4	101900	1	www.hun	www.hun	www.hun	www.hun	www.hun	www.hun	www.hun	www.hun	https://lvs	2	1	2	7	1	1	20	1	2	2	
26	101453	Heritage	3625 Hel	Florence	AL	35630-9	1	5	W. Kirk B	Presiden	3E+09	2E+08	MYJFHU	2E+06	1	www.hou	www.hou	www.hou	www.hou	www.hou	www.hou	www.hou	www.hou	https://lvs	2	1	2	7	1	1	20	1	2	2	
27	101462	J. F. Drake	Drake St	3421 Mer	Huntsville	AL	35811	1	5	Dr. Patric	Presiden	3E+09	6E+08	Y6RMVY	526000	1	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	4	2	1	3	1	2	40	1	1	-2	
28	101471	J.F. Ingrar	ISTC	5375 Ingr	Deatsville	AL	36022	1	5	Annette F	Presiden	3E+13	6E+08	3E+06	100000	1	www.isto	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	4	2	1	3	1	2	40	1	2	-2	
29	101480	Jackson	700 Pelh	Jackson	AL	36265	1	5	Don Killin	Presiden	3E+09	6E+08	D7N5GM	102000	1	www.jsu	www.jsu	www.jsu	www.jsu	www.jsu	www.jsu	www.jsu	www.jsu	https://lvs	1	1	1	9	1	1	11	1	2	2	
30	101505	Jefferson	Jeff State	2601 Car	Birmingh	AL	35215-3	1	5	Keith Bro	Presiden	2E+09	6E+08	V5LPAH	102200	1	www.jeff	www.jeff	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	4	2	1	3	1	2	40	1	2	-2
31	101514	John C C	Calhoun	6250 U S	Tanner	AL	35671	1	5	Dr. Jimm	Presiden	3E+09	6E+08	2VHWKI	101300	1	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	4	2	1	3	1	2	40	1	2	-2
32	101569	Lawson E	3060 W	Birmingh	AL	35221-17	1	5	Dr. Cynth	Presiden	2E+09	6E+08	NM8WLI	105900	1	www.laws	www.laws	www.laws	www.laws	www.laws	www.laws	www.laws	www.laws	https://lvs	4	2	1	3	1	2	40	1	1	-2	
33	101587	University	UWA	Station C	Livingsto	AL	35470	1	5	Dr. Ken T	Presiden	2E+09	6E+08	NYQJMS	102400	1	www.uwa	www.uwa	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	1	1	1	9	1	1	12	1	2	2
34	101602	Lurleen E	Lurleen E	1000 Dar	Andalus	AL	36420-1	1	5	Brook Ke	Presiden	3E+09	6E+08	NHJF3	898800	1	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	4	2	1	3	1	2	40	1	2	-2
35	101648	Marion M	1101 Wasl	Marion	AL	36756-3	1	5	Col Davic	Presiden	8E+09	6E+08	N9B8NC	102600	1	www.mar	www.mar	marionmi	marionmi	marionmi	https://lvs	https://lvs	https://lvs	https://lvs	4	2	1	3	1	2	40	1	2	-2	
36	101675	Miles Coll	5500 Myr	Fairfield	AL	35064-2	1	5	Bobbie K	Presiden	2E+13	6E+08	MNKCC	102800	1	www.mile	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	2	1	2	5	1	2	30	1	1	2	
37	101693	University	University	5735 Col	Mobile	AL	36613-2	1	5	Dr. Lonni	Presiden	3E+09	6E+08	102900	100000	1	www.umc	umobile	umobile	umobile	umobile	umobile	umobile	umobile	https://lvs	2	1	2	9	1	1	12	1	2	2
38	101709	University	Station 6	Monteval	AL	35115-6	1	5	John W. S	Presiden	2E+09	6E+08	EKIMGM	100400	1	www.mor	www.mor	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	1	1	1	8	1	1	20	1	2	2
39	101736	Northwe	800 Geor	Muscle S	AL	35681	1	5	Jeff Goo	Presiden	3E+09	6E+08	563700	100000	1	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	4	2	1	3	1	2	40	1	2	-2	
40	101879	University	UNA	One Har	Florence	AL	35632-0	1	5	Kenneth	Presiden	3E+09	6E+08	MEMEJH	101600	1	www.una	www.una	una	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	1	1	1	9	1	1	12	1	2	2
41	101897	Northweas	Northweas	138 High	Rainsville	AL	35386	1	5	J. David C	Presiden	3E+13	6E+08	XDK6BB	103100	1	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	4	2	1	3	1	2	40	1	2	-2
42	101912	Oakwood	DU	7000 Ad	Huntsville	AL	35896	1	5	Leslie Po	Presiden	3E+09	6E+08	Z1ZGHV	103300	1	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	2	1	2	6	1	1	20	1	1	2
43	101994	David P	7000 Ad	Huntsville	AL	35896	1	5	Dr. Paul	Presiden	3E+09	6E+08	VEJMHV	569900	1	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	https://lvs	4	2	1	3	1	2	40	1	2	-2

hd2022

# College Rankings

- Identify data sources
- Collect, **examine**, and clean initial data

varnumber	varname	DataType	Fieldwidth	format	imputationvar	varTitle
1	UNITID	N	6	Cont		Unique identification number of the institution
10001	INSTNM	A	120	Alpha		Institution (entity) name
16081	IALIAS	A	2000	Alpha		Institution name alias
10006	ADDR	A	100	Alpha		Street address or post office box
10011	CITY	A	30	Alpha		City location of institution
10016	STABBR	A	2	Disc		State abbreviation
10021	ZIP	A	10	Alpha		ZIP code
10026	FIPS	N	2	Disc		FIPS state code
10031	OBEREG	N	2	Disc		Bureau of Economic Analysis (BEA) regions
10036	CHFNM	A	50	Alpha		Name of chief administrator
10041	CHFTITLE	A	50	Alpha		Title of chief administrator
10046	GENTELE	A	15	Alpha		General information telephone number
10061	EIN	A	9	Cont		Employer Identification Number
10069	UEIS	A	2000	Cont		Unique Entity Identifier (UEI) Numbers
10071	OPEID	A	8	Cont		Office of Postsecondary Education (OPE) ID Number
10076	OPEFLAG	N	1	Disc		OPE Title IV eligibility indicator code
10081	WEBADDR	A	150	Alpha		Institution's internet website address
10058	ADMINURL	A	200	Alpha		Admissions office web address
10053	FAIDURL	A	200	Alpha		Financial aid office web address
10059	APPLURL	A	200	Alpha		Online application web address
10083	NPRICURL	A	200	Alpha		Net price calculator web address
16131	VETURL	A	200	Alpha		Veterans and Military Servicemembers tuition policies web address
80081	ATHURL	A	150	Alpha		Student-Right-to-Know student athlete graduation rate web address
10060	DISAURL	A	200	Alpha		Disability Services Web Address
10086	SECTOR	N	2	Disc		Sector of institution
10091	ICLEVEL	N	2	Disc		Level of institution
10096	CONTROL	N	2	Disc		Control of institution
10101	HLOFFER	N	2	Disc		Highest level of offering
10106	UGOFFER	N	2	Disc		Undergraduate offering
10111	GROFFER	N	2	Disc		Graduate offering
10122	HDEGOFR1	N	2	Disc		Highest degree offered
10126	DEGGRANT	N	2	Disc		Degree-granting status
10151	HBCU	N	2	Disc		Historically Black College or University
10156	HOSPITAL	N	2	Disc		Institution has hospital
10161	MEDICAL	N	2	Disc		Institution grants a medical degree
10166	TRIBAL	N	2	Disc		Tribal college

# College Rankings

- Identify data sources
- Collect, examine, and **clean** initial data

UNITID	INSTNM	ALIAS	ADDR	CITY	STABBR	ZIP	FIPS	OBREG	CHFNAM	CHFTITLE	GENTELE	EIN	UEIS	OPEID	OPEFLAG	WEBADDR	ADMINUR	FAIDURL	APPLURL	NPRICURL	VETURL	ATHURL	DISAURL	SE
100654	Alabama A&M		4900 Meri	Normal	AL	35762	1	5	Dr. Daniel	President	2.56E+09	6.36E+08	JDVGS67V	100200	1	www.aam	https://w	https://w	https://w	https://w	www.aam		https://w	
100663	University UAB		Administr	Birmingham	AL	35294-011	1	5	Ray L. Wal	President	2.06E+09	6.36E+08	YND4PLM	105200	1	https://w	https://w	https://w	https://w	https://w	https://w	https://w	https://w	https://w
100690	Amridge U Southern		1200 Tayl	Montgom	AL	36117-355	1	5	Michael C	President	3.34E+13	2.37E+08	RB27R4GL	2503400	1	https://w	https://w	https://w	https://w	https://w	https://w	https://w	https://w	https://w
100706	University UAH Univ		301 Spark	Huntsville	AL	35899	1	5	Chuck Kar	President	2.57E+09	6.31E+08	HB6KNGV	105500	1	www.uah	https://w	finaid.uah	register.u	finaid.uah	www.uah	www.uah	www.uah	www.uah
100724	Alabama S		915 S Jack	Montgom	AL	36104-027	1	5	Quinton T	President	3.34E+09	6.36E+08	DLJWLSM	100500	1	www.alas	www.alas	www.alas	www.alas	www.alas	www.alas	https://w	www.alas	
100733	University		500 Unive	Tuscaloos	AL	35401	1	5	Finis St. Jc	Chancellor	2.05E+09	6.36E+08		800400	2	www.uas						www.uas		
100751	The Unive		739 Unive	Tuscaloos	AL	35487-010	1	5	Dr. Stuart	President	2.05E+09	6.36E+08	RCNJEH28	105100	1	www.ua.e	gobama.u	financiala	apply.ua.e	financiala	https://ve	registrar.u	ods.ua.ed	
100760	Central Al		1675 Cher	Alexander	AL	35010	1	5	Jeff Lynn	President	2.56E+09	6.31E+08	G1C3X4AM	100700	1	www.cacc	https://w	https://w	https://w	https://w	https://w	https://w	https://w	https://w
100812	Athens St.		300 N Bea	Athens	AL	35611	1	5	Dr. Cather	Interim Pr	2.56E+09	6.31E+08	GFZJMKW	100800	1	www.athe	www.athe	www.athe	www.athe				www.athe	
100830	Auburn Un AUM   Au		7440 East	Montgom	AL	36117-359	1	5	Carl A. Stc	Chancellor	3.34E+09	6.36E+08	S2Y7SMV2	831000	1	www.aum	www.aum	www.aum	www.aum	www.aum	www.aum	www.aum	www.aum	www.aum
100858	Auburn Un			Auburn	AL	36849	1	5	Chris Rob	President	3.35E+09	6.36E+08	DMQNDJC	100900	1	www.aub	www.aub	www.aub	www.aub	https://w	veterans.e	https://au	cws.aubur	
100937	Birmingham BSC		900 Arkad	Birmingham	AL	35254	1	5	Mr. Danie	President	2.05E+09	6.31E+08	L9NKL7V8	101200	1	www.bsc	www.bsc	https://w	https://w	www.bsc	https://w	https://w	https://w	https://w
101028	Chattahoc CVCC		2602 Colle	Phenix Cit	AL	36869	1	5	Jacquelin	President	3.34E+09	6.31E+08	MEKHNSC	1218200	1	https://w	https://w	https://w	https://w	https://ch	https://ex	https://w	https://w	https://w
101116	South Uni		5355 Vaug	Montgom	AL	36116	1	5	Kandis R.	Dean of A	3.34E+09	6.3E+08	YJAH2LJ7	1303906	1	www.sou	www.sou	www.sou	www.sou	www.sou	www.sou	www.sou	www.sou	www.sou
101143	Enterprise Enterprise		600 Plaza	Enterprise	AL	36330-130	1	5	Danny Lor	President	3.34E+09	6.31E+08	CDVSG3N	101500	1	www.escc	https://w	www.escc	https://w	https://w	https://w	www.escc	www.escc	www.escc
101161	Coastal Al		1900 U S H	Bay Minet	AL	36507-269	1	5	Craig Pour	President	2.52E+09	6.31E+08	JK46KBHM	106000	1	www.coas	www.coas	www.coas	www.coas	www.coas	www.coas	www.coas	www.coas	www.coas
101189	Faulkner U Faulkner		5345 Atlar	Montgom	AL	36109-339	1	5	Mitch Her	President	3.34E+09	6.3E+08	X4N7WED	100300	1	www.faul	www.faul	www.faul	applynow	www.faul	www.faul	https://w	https://w	https://w
101240	Gadsden S GSCC   Ga		1001 Geor	Gadsden	AL	35903	1	5	Dr. Kathy	President	2.57E+09	6.31E+08	F52PB51Z	101700	1	www.gad	www.gad	www.gad	https://w	www.gad	www.gad	https://w	www.gad	https://w
101277	New Begin		421 Marti	Albertvill	AL	35951	1	5	Amanda B	DIRECTOR	2.57E+09	2.03E+08		4187200	1	www.nbc				nbcosme			www.nbc	
101286	George C Wallace		1141 Wall	Dothan	AL	36303-923	1	5	Linda C Yo	President	3.35E+09	6.31E+08	RSMGDHC	101800	1	www.wall	www.wall	www.wall	www.wall	www.wall	www.wall	www.wall	www.wall	www.wall
101295	George C Wallace S		801 Main	Hanceville	AL	35077-200	1	5	Vicki P. Ka	President	2.56E+09	6.3E+08	WM9JND4	787100	1	https://w	https://w	https://w	https://w	https://w	https://w	https://w	https://w	https://w
101301	George C Wallace C		3000 Earl	Selma	AL	36702-280	1	5	Dr. James	President	3.35E+09	6.31E+08	JEYJLCR37	569900	1	https://w	https://w	https://w	https://w	https://w	https://w	https://w	https://w	https://w
101365	Herzing Un		280 West	Birmingham	AL	35209	1	5	Sarah Hig	President	2.06E+09	2.72E+08	JDF5MPY3	962107	1	https://w	https://w	https://w	https://w	https://w	https://w	https://w	https://w	https://w
101435	Huntingdo		1500 East	Montgom	AL	36106-214	1	5	J. Camero	President	3.35E+09	6.3E+08	MACKQAF	101900	1	www.hun	www.hun	www.hun	www.hun	www.hun	www.hun	www.hun	www.hun	www.hun
101453	Heritage C		3625 Helc	Florence	AL	35630-997	1	5	W. Kirk Br	President	2.57E+09	2.37E+08	MYJFHUU	2199700	1	www.hcu	www.hcu	www.hcu	www.hcu	www.hcu	www.hcu	www.hcu	www.hcu	www.hcu
101462	J. F. Drake Drake Stat		3421 Meri	Huntsville	AL	35811	1	5	Dr. Patrici	President	2.57E+09	6.3E+08	Y6RMRVL	526000	1	https://w	https://w	https://w	https://w	https://dr	https://w	https://w	https://w	https://w
101471	J F Ingram ISTC		5375 Ingra	Deatsville	AL	36022	1	5	Annette F	President	3.34E+13	6.31E+08		3002500	1	www.istc				istc.edu/n			www.istc	
101480	Jacksonvil		700 Pelhai	Jacksonvil	AL	36265	1	5	Don Killin	President	2.57E+09	6.36E+08	D7N5GMC	102000	1	www.jsu	www.jsu	www.jsu	www.jsu	www.jsu	www.jsu	www.jsu	www.jsu	www.jsu



# College Rankings

- Group data by dynamics
- Frequent changes

#1 The Best Graduate Schools for Clinical Psychology Programs

[Brenau University](#)

📍 Gainesville, GA • 4 years • Online + Campus

Programmatic Accreditation: [Masters in Psychology and Counseling Accreditation Council...](#)

▼ More Details

Average Undergrad Tuition	
In-state	\$30,000
Out-of-state	\$30,000

Average Graduate Tuition	
In-state	\$13,356
Out-of-state	\$13,356

★Sponsored 📍 California, USA • 4 year • Online + Campus

[Psychology@Pepperdine](#)

Pepperdine University's online psychology master's program prepares students for meaningful careers in psychology, human services, and related fields through a values-based curriculum. Prepare for counseling licensure in as few as 27 months wit...

▼ More Details

Explore Program ↗

#2 The Best Graduate Schools for Clinical Psychology Programs

[Indiana University-Purdue University-Indianapolis](#)

📍 Indianapolis, IN • 4 years • Online + Campus

Programmatic Accreditation: [American Psychological Association](#)

...

Average Undergrad Tuition	
In-state	\$8,795
Out-of-state	\$30,477

Average Graduate Tuition	
In-state	\$9,090
Out-of-state	\$24,864

# College Rankings

- Group data by dynamics
- Static / infrequent changes
  - <https://collegescorecard.ed.gov/>
  - <https://nces.ed.gov/ipeds>

2022	12-Month Enrollment	12-month unduplicated headcount by race/ethnicity, gender and level of student: 2021-22	<a href="#">EFFY2022</a>	<a href="#">EFFY2022_STATA</a>	<a href="#">SPSS, SAS, STATA</a>	<a href="#">Dictionary</a>
2022	12-Month Enrollment	12-month unduplicated headcount by distance education status and student level: 2021-22	<a href="#">EFFY2022_DIST</a>	<a href="#">EFFY2022_DIST_STATA</a>	<a href="#">SPSS, SAS, STATA</a>	<a href="#">Dictionary</a>
2022	12-Month Enrollment	12-month instructional activity: 2021-22	<a href="#">EFIA2022</a>	<a href="#">EFIA2022_STATA</a>	<a href="#">SPSS, SAS, STATA</a>	<a href="#">Dictionary</a>
2022	12-Month Enrollment	Response status all survey components	<a href="#">FLAGS2022</a>	<a href="#">FLAGS2022_STATA</a>	<a href="#">SPSS, SAS, STATA</a>	<a href="#">Dictionary</a>
2022	Completions	Awards/degrees conferred by program (6-digit CIP code), award level, race/ethnicity, and gender: July 1, 2021 to June 30, 2022	<a href="#">C2022_A</a>	<a href="#">C2022_A_STATA</a>	<a href="#">SPSS, SAS, STATA</a>	<a href="#">Dictionary</a>
2022	Completions	Number of students receiving awards/degrees, by race/ethnicity and gender: July 1, 2021 to June 30, 2022	<a href="#">C2022_B</a>	<a href="#">C2022_B_STATA</a>	<a href="#">SPSS, SAS, STATA</a>	<a href="#">Dictionary</a>
2022	Completions	Number of students receiving awards/degrees, by award level and by gender, race/ethnicity and age categories: July 1, 2021 to June 30, 2022	<a href="#">C2022_C</a>	<a href="#">C2022_C_STATA</a>	<a href="#">SPSS, SAS, STATA</a>	<a href="#">Dictionary</a>
2022	Completions	Number of programs offered and number of programs offered via distance education, by award level: July 1, 2021 to June 30, 2022	<a href="#">C2022DEP</a>	<a href="#">C2022DEP_STATA</a>	<a href="#">SPSS, SAS, STATA</a>	<a href="#">Dictionary</a>
2022	Completions	Response status for all survey components	<a href="#">FLAGS2022</a>	<a href="#">FLAGS2022_STATA</a>	<a href="#">SPSS, SAS, STATA</a>	<a href="#">Dictionary</a>

# College Rankings

- Identify data sources
- Collect, examine, and clean initial data

CIPFamily	CIPCode	Action	TextChange	CIPTitle	CIPDefinition	CrossRef	Examples								
01	01	No substa	yes	AGRICULT	Instructional programs that focus on agriculture, animal, plant, veterinary, and related sciences and that prepare students for employment in these fields.										
01	01.00	No substa	no	Agricultur	Instructional content is defined in code 01.0000.										
01	01.0000	No substa	no	Agricultur	A program	14.0301	- Agricultural Engineering.								
01	01.01	No substa	no	Agricultur	Instructional content for this group of programs is defined in codes 01.0101 - 01.0199.										
01	01.0101	No substa	no	Agricultur	A general program that focuses on modern business and economic principles involved in the organization, operation, and management of agricultural enterprises.										
01	01.0102	No substa	no	Agribusin	A program that prepares individuals to manage agricultural businesses and agriculturally related operations.										
01	01.0103	No substa	no	Agricultur	A program	03.0204	- Examples: - Agroecomics								
01	01.0104	No substa	no	Farm/Farr	A program that prepares individuals to manage farms, ranches, and similar enterprises. Includes instruction in the operation and management of these enterprises.										
01	01.0105	No substa	no	Agricultur	A program	52.1803	- Retailing and Retail Operations., 52.1901 - Auctioneering., 52.0202 - Purchasing, Procurement Operations.								
01	01.0106	No substa	yes	Agricultur	A program that prepares individuals to perform specialized support functions related to agricultural business operations.										
01	01.0199	No substa	no	Agricultur	Any instructional program in agricultural business and management not listed above.										
01	01.02	No substa	no	Agricultur	Instructional content for this group of programs is defined in codes 01.0201 - 01.0299.										
01	01.0201	No substa	no	Agricultur	A program that generally prepares individuals to sell, select, and service agricultural or agribusiness technical equipment.										
01	01.0204	No substa	no	Agricultur	A program	49.0202	- Examples: - Farm Equipment Operator								
01	01.0205	No substa	yes	Agricultur	A program that prep	Examples: - Agricultural Equipment Mechanic, - Agricultural Equipment Technician, - Agricultural Equipment Repairer.									
01	01.0207	New	no	Irrigation	A program that prepares individuals for employment in the field of agricultural technology and irrigation. Includes instruction in the operation and management of these enterprises.										
01	01.0299	No substa	no	Agricultur	Any instructional program in agricultural mechanization not listed above.										
01	01.03	No substa	no	Agricultur	Instructional content for this group of programs is defined in codes 01.0301 - 01.0399.										
01	01.0301	No substa	no	Agricultur	A program that focuses on the general planning, economics, and use of facilities, natural resources, equipment, and personnel in the management of agricultural enterprises.										
01	01.0302	No substa	no	Animal/Li	A program that prepares individuals to select, breed, care for, process, and market livestock and small farm animals.										

# College Rankings

- Identify data sources

- Collect, examine, and clean initial data

UNITID	CIPCODE	MAJORNU	AWLEVEL	XCTOTAL	CTOTAL	XCTOTALM	CTOTALM	XCTOT
100654	1.0999	1	5 R		9 R		3 R	
100654	1.1001	1	5 R		7 R		3 R	
100654	1.1001	1	7 R		7 R		1 R	
100654	1.1001	1	17 R		3 R		1 R	
100654	1.9999	1	5 R		1 R		1 Z	
100654	1.9999	1	7 R		8 R		2 R	
100654	1.9999	1	17 R		3 R		2 R	
100654	3.0599	1	5 R		8 R		6 R	
100654	4.0301	1	5 R		3 R		2 R	
100654	4.0301	1	7 R		12 R		4 R	
100654	9.0199	1	7 R		11 R		3 R	
100654	10.0202	1	5 R		17 R		10 R	
100654	11.0101	1	5 R		41 R		23 R	
100654	11.0101	1	7 R		16 R		9 R	
100654	13.0101	1	8 R		0 R		0 Z	
100654	13.0401	1	7 R		1 R		1 Z	
100654	13.1001	1	5 R		3 R		2 R	
100654	13.1001	1	7 R		1 Z		0 R	
100654	13.1012	1	5 R		8 Z		0 R	
100654	13.1202	1	5 R		6 Z		0 R	
100654	13.1202	1	7 R		1 R		1 R	
100654	13.1205	1	7 R		4 R		1 R	
100654	13.121	1	5 R		1 Z		0 R	

# College Rankings

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- Design database schema
  - Entity Relationship Diagram (ERD)
- Create database and tables
  - Import static data

# Importing to PostgreSQL

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<https://www.postgresqltutorial.com/postgresql-tutorial/import-csv-file-into-posgresql-table/>

# Split into groups (3 – 5)

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Consider a system for reviewing dorms

- Define software system goal
  - Find 2+ examples
- Group data by dynamics
  - Static / infrequent changes
  - Frequent changes
- Identify data sources
  - Find 2+ sources
  - Examine the data
    - Do you need to change anything?

# Next Class

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Module:

Week 9: Data Sources

Topic:

**APIs and ETLs**

