



# GVU DATA SUMMIT

## Making Better Program Decisions Using Gray Decision Intelligence (Gray DI) Software

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**GVU** DIGITAL  
TRANSFORMATION

# Access to Gray DI

- A Record of Internal Data Sharing Agreement was developed in alignment with UVU Policy 445.
- Access was granted by role.
- UVU's Data Governance Committee approved this agreement.

Title	Role (Justification)	System Roles/Functions			
		Admin	Read	Write	Privileged Access to Faculty Table, Faculty Analysis, and Instructor Workloads
Registrar, FERPA Officer	Data Steward	N	Y	N	N
Sr. Director – Budget Office	Data Steward	N	Y	N	Y
Vice President of Finance and Auxiliary Services	Data Owner, Executive	N	Y	N	Y
Associate Vice President Finance/GRAMA	Data Trustee, Executive	N	Y	N	N
Controller – Finance/Business Services	Data Steward	N	Y	N	N
Sr. Director HRIS/Records	Data Steward	N	Y	N	N
Provost and Sr. VP for Academic Affairs	Data Owner, Executive	N	Y	N	Y
Sr. Associate Provost for Academic Programs, Assessment, & Accreditation	Data Trustee, Executive	N	Y	N	Y
Sr. Director for Academic Planning and Effectiveness	Data Steward, Academic Planning and Program Review	N	Y	N	Y
Director for Office of Accreditation and Academic Assessment	Academic Planning and Program Review	N	Y	N	Y
Academic Dean	Academic Planning and Program Review	N	Y	N	Y
Academic Associate Dean	Academic Planning and Program Review	N	Y	N	Y
College/School Assistant to the Dean	Assistant to the Dean; Budget Support	N	Y	N	Y
Director – Business Intelligence and Research Services, Data Privacy Officer	Data validation and support	N	Y	N	Y



# Information we need

*Market Area* – National, Western U.S., Utah, 80 miles from Campus, 40 miles from Campus, Service Region, Online?

*Student Demand* – What students graduate in, enroll in, and search for?

*Employment Demand* – CIPs and SOCs, Crosswalks, what graduates really do, are there jobs, how much do they pay?

*Competitive Intensity* – How much competition is there, who are my competitors, are we a drop in the ocean or a battleship, how much will it cost to attract students?

*Degree Fit* – Is the program at the right degree level, what are the opportunities for scaffolding?

*Mission* – Is it within our mission?



# Every vendor uses the same data sources

- Publicly available

- IPEDS
- BLS
- ACS
- State Workforce Data
- Google Search Volume
- Google Competitive Index
- Google Cost per Click

- Proprietary

- National Student Clearinghouse
- Benchmark Data
- Employer Career Websites
- Indeed.com
- Coursera
- Udemy
- StudyPortals.com
- UVU data




## Terms

- Gross Revenue = What a student pays us (tuition).
- Discount = Scholarships and grants (waivers) a student receives directly from UVU.
- Net Revenue = Gross Revenue – Discount
- Instructional Costs = Instructor Salary + Benefits
- Contribution = Net Revenue – Instructional Costs
- SCH = Student Credit Hours



# Methodology

- Everything happens at the section level and rolls up.
- Professor X has a section with 10 students. The class is worth 3 Credit Units. Professor X gets credit for providing 30 SCH of instruction.
- Each student has paid for 3 SCH of instruction for the course.



**UVU**  
**DATA**  
**SUMMIT**



**Questions the Data Can Answer**



# What New Program Should We Offer?

Tool: Markets

Tab: Prog. x Market

Rubric: <Select>

Market Area: <Select>

Award Level: <Select>

The screenshot shows the GRAY DI Scorecard interface. The top navigation bar includes 'Getting Started', 'Scoring', 'Program Rank', 'Summary', 'Scorecard', 'Prog. x Market', 'Competitors', 'Data Table', and 'Work'. Below the navigation, there are tabs for 'Scorecard Award Level' (Masters and Grad Certs) and 'Scorecard Campus' (National). The main content area has three filter boxes: 'CIP', 'Award Level', and 'Market'. Below these filters is a legend for the 'Market' filter with color-coded boxes for '<4...', '40...', '70...', '90...', '95...', '98...', and 'Percentile'. The 'Program x Market Matrix' table is displayed below, showing a list of CIP codes and their scores. The table has a search icon in the header.

CIP	Q	National
11.0701 Computer Science		69
11.0103 Information Technology		69
51.3805 Family Practice Nurse/Nursing		67
30.7101 Data Analytics and/or Data Science		67
51.3801 Registered Nursing		66
51.0912 Physician Assistant		65
14.1001 Electrical/Electronics Engin'g		63
30.7102 Business Analytics		61
11.1003 Cyber Security/ Info. Assurance		61
52.0201 Business Admin. and Mgmt, General		60
52.0301 Accounting		57



CIP Award Level Market

<4... 40... 70... 90... 95... 98... Percentile

Program x Market Matrix

CIP	Q	National
11.0701 Computer Science		69
11.0103 Information Technology		69
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30.7101 Data Analytics and/or Data Science		67
51.3801 Registered Nursing		66
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CIP

Award Level

Market



### Program x Market Matrix

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# Scorecard

GRAY DI Getting Started Scoring Program Rank Summary Scorecard Prog. x Market Competitors Data Table Workplace Req't Crosswalks Definitions Rubric Scorecard

CIP: 14.1001 Electrical/Electronics Engin'g Award Level: Masters and Grad C... Market: Utah Select Program Group Export PDF AI Report Support View Definit...

CIP: 14.1001 Electrical/Electronics Engin'g Award Level: Masters and Grad Certs Market: Utah Total Score: 68 Percentile

**Student Demand**  
 Score: 31 Percentile: 99

Category	Pctl	Criterion	Value	Score
Size	96	Google Search Volume (12 Months)*	15,210	4
	0	International Page Views (12 Months)	0	NS
	98	New Student Enrollment Volume (12 Mo.)	115	6
	98	On-ground Completions at In-Market Institutions	45	4
	97	Online Completions by In-Market Students	10	3
97	Sum of On-ground and Online Completions	55	3	
Growth	96	Google Search YoY Change (Units)*	2,110	2
	99	New Student Enrollment Vol. YoY Change (Units)	26	2
	98	Completion Volume YoY Change (Units)	14	2
	89	Google Search YoY Change (%)*	16%	2
	75	New Student Enrollment Vol. YoY Change (%)	29%	1
83	Completion Volume YoY Change (%)	33%	2	

**Employment**  
 Score: 28 Percentile: 99

Category	Pctl	Criterion	Value	Score
Size: Entry Jobs	98	Job Postings Total (12 Months)	80	4
	99	BLS Current Employment	1,011	1
	98	BLS Annual Job Openings	84	1
Underemployed	4	Underemployed Percent of Graduates**	18%	3
Growth: Entry Jobs	95	BLS 1-Year Historical Growth	12.3%	2
	92	BLS 3-Year Historic Growth (CAGR)	10.3%	1
	78	BLS 10-Year Future Growth (CAGR)	1.6%	0
Saturation: Entry Jobs	54	Job Postings per Graduate	1.5	0
	61	BLS Job Openings per Graduate	1.5	0
Weighted-Avg BLS Wages	99	Entry 25th Percentile	\$88,397	8
	99	Post Entry Median	\$113,849	8
		Post Entry w/Associates Median	NA	NS
		Post Entry w/Bachelors Median	NA	NS
	99	Post Entry w/Masters Median	\$112,164	NS
99	Post Entry w/Doctoral Median	\$127,063	NS	
National American Community Survey Bachelor's Degree Outcomes*	57	% with Any Graduate Degree*	44%	NS
	88	% with Masters*	36%	NS
	53	% with Doct/Prof Degree*	8%	NS
	65	% Unemp. (Age <30)**	3%	NS
87	% in Direct Prep Jobs*	31%	NS	

**Degree Fit**  
 Score: 0 Percentile: 50

Category	Pctl	Criterion	Value	Score
Benchmarking**	59	Average Cost per SCH Index**	1.02	NS
	82	Median Cost per SCH Index**	1.40	NS

**Competitive Intensity**  
 Score: 9 Percentile: 98

Category	Pctl	Criterion	Value	Score
Volume of In-Market Competition	99	Campuses with Graduates**	3	0
	97	Campuses with Grads YoY Change (Units)**	0	NS
	97	Institutions with Online In-Market Students**	3	2
In-Market Program Sizes	79	Average Program Completions	15	0
	81	Median Program Completions	15	1
	95	YoY Median Prog. Compl. Change (Units)	10	1
In-Market Saturation	93	YoY Median Prog. Compl. Change (%)	2	2
	77	Google Search * Cost per Click**	\$11	1
National Online Competition	53	Google Competition Index**	0.13	2
	97	National Online Institutions (Units)**	57	NS
	59	Nat'l Online % of Institutions	23%	NS
47	Nat'l Online % of Completions	18%	NS	

**IPEDS Demographics (Not Scored)**

Category	Pctl	Criterion	This Program In-Market	All Programs In-Market
IPEDS Gender	9	Female	9%	62%
	90	Male	91%	38%
IPEDS Ethnicity	0	American Indian or Alaska Native	0	0%
	70	Asian	2%	4%
	0	Black or African American	0	5%
	49	Hispanic or Latino	2%	8%
	0	Native Hawaiian or Other Pacific Islander	0	0%
	41	White	73%	66%
87	International	18%	3%	
54	Other/Unknown	6%	12%	

**National Completions by Level**  
 Score: 0

Award Level	Completions (National)	Completions (Market)	Enrollment (Market)	BLS Educ Attainr
No College				4%
Some College				8%
Certificate	0%	0%	0%	
Associates	1%	3%	0%	8%
Bachelors	65%	62%	43%	48%
Postbaccalaureate Certificate	0%	0%	0%	
Masters	25%	24%	45%	26%
Post-masters Certificate	0%	0%	0%	
Doctoral	8%	10%	12%	7%

**National Workforce Ed. Attainm**  
 Score: 0

**CIP Description:**  
 A program that prepares individuals to apply mathematical and scientific principles to the design, development and operational evaluation of electrical and electronic systems and their component including electrical power generation systems; and the analysis of problems such as superconduc propagation, energy storage and retrieval, and reception and amplification.

**Total Percentile** 0 20+ 40+ 70+ 90+ 95+ 98+

<b>Total Score</b>	-19	-16	1	12	25	32	45
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**Percentile (Reverse)** <02 02+ 05+ 10+ 30+ 60+

\*\* - Google search do not filter by award level.  
 \*\* - Color scale in reverse.  
 NA - No data available/not currently tracked.  
 NS - Not Scored in Rubrics (values = 0).  
 PCTL - Percentile



# Report

The academic program in Utah excels with high student demand and employment outcomes but faces intense competition.

## Overview

National Completions at 6,497 rank in the 98th percentile, while the Sum of On-ground and Online Completions in Utah is at 55, placing in the 97th percentile. The program's greatest strength lies in its robust Student Demand, evidenced by a Google Search Volume of 15,210 (96th percentile), and strong Employment prospects with an Entry Level Salary at \$88,397 (99th percentile). However, Competitive Intensity is high with three Campuses with Graduates (99th percentile), indicating a challenging market environment.

## Student Demand

The program's Student Demand is notably strong, with a Google Search Volume of 15,210 ranking it in the 96th percentile among all programs. Additionally, the Google Search YoY Unit Change shows a significant increase of 2,110 (96th percentile), suggesting growing interest. The New Student Enrollment Volume stands at 115, placing it in the top tier at the 98th percentile. This upward trend is further supported by a New Student Enrollment Volume YoY Percentage Change of 29%, which ranks in the 75th percentile. However, while these figures are promising, they must be balanced against the competitive landscape and job market saturation to ensure sustainable growth.

## Employment

Employment prospects for graduates are exceptional with an Entry Level Salary valued at \$88,397 and ranking in the highest echelon at the 99th percentile. Advancement opportunities also appear favorable as indicated by a Post Entry Level Median Salary of \$113,849 (99th percentile). The Job Postings per Graduate ratio is moderate at 1.5 (54th percentile), suggesting a balanced job market. Growth projections are positive with BLS data showing a one-year historical growth rate of 12% (95th percentile) and a three-year rate of 10% (92nd percentile). However, there is room for improvement as indicated by an Underemployed Percent of Graduates at 18%, which unfortunately ranks lower at the fourth percentile.

# How Is My Program Performing, Compared to Others?

GRAY DI | Portfolio | Program Review | Data Tables | Portfolio Table

Filter - Market: Market: Utah

Program	Evaluation Status	Detail	PES Markets							Utah Valley: Academic Year 2022-23											
			Market Sort	Google % Change	New Enrollment	New Enroll % Change	Median Program Size	Median Program Size % Change	Enrollment	%	D/F/W Rate*	Graduates	%	Discount Rate*	Contribution	Contribution % Change	Cost per SCH*	Cost SCH Actual - Benchmark			
Social Work (Bachelor's)	-	Go	291	-1%	148	-14%	68	-7%	395	182	85%	10%	40	-13	-25%	15%	\$1,078,643	143%	\$88	-\$69	
Architecture (Bachelor's)	-	Go	281	1%	102	57%	38	36%	247	73	42%	11%	0	0	-	15%	\$515,916	120%	\$124	-	
Business Management - Online (Bachelor's)	-	Go	281	1%	1,576	-16%	68	-4%	316	85	37%	14%	24	14	140%	7%	\$934,459	41%	\$83	-\$96	
Art and Design (Associate)	-	Go	279	-32%	135	-3%	60	-32%	480	91	23%	13%	15	1	7%	15%	\$1,018,466	38%	\$111	-	
Applied Communication (Bachelor's)	-	Go	277	-33%	4	-81%	37	-100%	411	75	22%	10%	55	3	6%	23%	\$996,967	17%	\$105	-	
Criminal Justice (Associate)	-	Go	277	-13%	325	-9%	36	44%	159	55	53%	16%	3	2	200%	15%	\$516,368	110%	\$75	-	
Nursing (Bachelor's)	-	Go	275	17%	562	-8%	104	57%	511	65	15%	1%	90	-3	-3%	11%	\$413,951	22%	\$205	\$34	
Finance (Bachelor's)	-	Go	273	19%	177	-21%	69	8%	841	55	7%	11%	95	-17	-15%	13%	\$2,507,844	6%	\$109	-\$69	
Software Development (Bachelor's)	-	Go	272	-11%	103	-42%	16	12%	146	52	55%	14%	7	0	0%	9%	\$368,480	63%	\$92	-\$61	
Health Care Administration (Bachelor's)	-	Go	271	-4%	74	40%	7	383%	154	43	39%	8%	21	14	200%	11%	\$479,855	37%	\$97	-\$35	
Public Health (Bachelor's)	-	Go	270	8%	163	-18%	16	6%	166	45	37%	5%	26	10	63%	19%	\$451,091	30%	\$98	-\$100	
Professional Pilot (Bachelor's)	-	Go	270	6%	33	32%	105	36%	501	43	9%	13%	49	-11	-18%	5%	\$7,199,157	-2%	\$131	-	
Mechanical Engineering (Bachelor's)	-	Go	268	40%	472	2%	38	-7%	522	39	8%	13%	49	11	29%	14%	\$1,136,245	11%	\$131	-\$109	
University Studies - Online (Associate)	-	Go	267	31%	6,854	-8%	728	67%	93	40	75%	17%	13	13	-	10%	\$173,603	79%	\$72	-\$31	
Psychology (Bachelor's)	-	Go	266	-6%	598	-10%	104	12%	2,419	37	2%	11%	319	-11	-3%	15%	\$7,529,981	2%	\$78	-\$84	
Aviation Science (Associate)	-	Go	265	6%	169	19%	64	29%	356	35	11%	18%	3	-4	-57%	11%	\$1,407,622	8%	\$89	-	
Criminal Justice - Online (Bachelor's)	-	Go	265	-13%	171	-26%	67	86%	138	38	38%	13%	10	-2	-17%	5%	\$380,531	31%	\$86	-	
PR and Strategic Communication (Bachelor's)	-	Go	265	-24%	13	-7%	22	-	352	38	12%	10%	78	37	90%	19%	\$864,075	0%	\$109	-	
Software Engineering (Bachelor's)	-	Go	261	46%	98	34%	24	9%	291	29	11%	15%	22	-1	-4%	10%	\$810,340	16%	\$95	-	
Automation & Electrical Technology (Associate)	-	Go	260	-	23	77%	23	-4%	84	31	58%	16%	7	7	-	10%	-\$91,260	-173%	\$270	-	
Operations Management (Bachelor's)	-	Go	257	-26%	27	13%	1	-	66	31	89%	6%	5	5	-	11%	\$166,099	88%	\$124	-\$33	
Emergency Services Administration (Bachelor's)	-	Go	257	-25%	26	18%	43	72%	405	22	6%	10%	65	9	16%	10%	\$785,156	9%	\$125	-	
Physician Assistant Studies (Master's)	-	Go	256	20%	173	21%	56	2%	58	28	93%	0%	0	0	-	1%	\$1,420,487	174%	\$217	\$25	

Market Color Key: Percentile Range <40 40+ 70+ 90+ 95+ 98+

Client Color Key: Percentile Range (\*Reverse Color-Coding) <10 10+ 50+ 90+

# Can I Get a Quick Overview of My Program?

Change Program ▾

## French Education (Bachelor's)

Program Review Status

**Pending Evaluation**

CIP Code: 13.1325 French Language Teacher Education

Review Year: 2024 ▾

**Size**

Year	Enrollment	In-Yr Completions	All Degrees
2021	3	0	0
2022	4	1	1
2023	3	0	0

**Demographics**

Gender	Percentage
F	67%
M	33%

**Review Cycle Information**

Reviewed By	Initials and Date

**Mission**

Category	Program Fit
Mission	
Academic Focus	
Students Served	
Community Impact	
Highlights	

**Markets**
Below Average

Overall Percentile: 58%

Market: Utah ▾ Rubric: Bachelor's ▾

Student Demand

Employment

Competitive Intensity

**Goals and Actions for Continuous Improvement**

Current Goals	Completed Goals

**Academics**
Attention Needed

Academic Percentile: 14%

Category	Metric	20-21	21-22	22-23	YoY Change
Program Profile	# of Students	3	4	3	-25% ↓
	# of SCH Taught	78	89	56	-37% ↓
	FTE Students	3	3	2	-37% ↓
	% SCH in Online Courses	63%	35%	32%	-8% ↓
Student Progress	% SCH Taught by FT Faculty	86%	90%	86%	-5% ↓
	Withdraw/D/F Rate	3%	11%	5%	-55% ↓
	# Students Enrolled 2+ Terms	2	4	3	-25% ↓
Outcomes	# Students Return from Prior Yr	0	2	2	0% =
	# of In-Year Completions	0	1	0	-100% ↓
	Median Years to Complete	NA	NA	NA	NA
	Median Earnings 2-Yrs Post-Grad.	NA	NA	NA	NA

Gender:  F  M  N

Pell Status:  Y  N

IPEDS Race/Ethnicity:  Asian  Black  Haw/Pac  Hispanic  Ntv. Am  UNKN  White

**Margins**
Below Average

Contribution SCH Pct: 41%

Total ▾ SCH ▾ YR: 2023 ▾ Term: All ▾

Category	Value	YoY Change
Gross Rev.	\$14,733	
Discounts	\$0	
Net Revenue	\$14,733	-30%
Costs	(\$8,972)	-17%
Contribution	\$5,761	-44%

# Can I Get a Quick Overview of My Program?

Change Program ▼ ← →

## Social Work (Bachelor's)

**Program Review Status**

Pending Evaluation

CIP Code: 44.0701 Social Work

Review Year: 2024 ▼

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**Size**

▲ Enrollment    ● In-Yr Completions    ● All Degrees

Year	Enrollment	In-Yr Completions	All Degrees
2021	138	53	40
2022	213	53	40
2023	395	53	40

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**Demographics**

■ F    ■ M

Demographic	F (%)	M (%)
White	49%	59%
UNKN	24%	33%
Hispanic	6%	
Haw/Pac	1%	
Black	1%	

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**Review Cycle Information**

Reviewed By	Initials and Date

**Mission**

Category	Program Fit
Mission	
Academic Focus	
Students Served	
Community Impact	
Highlights	

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**Markets** High Opportunity  
Overall Percentile: 97%

Market: Utah    Rubric: Bachelor's

Metric	Student Demand	Employment	Competitive Intensity
Total	10	81%	87%
Size	10	79%	92%
Growth	7%	83%	0%

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**Goals and Actions for Continuous Improvement**

Current Goals	Completed Goals

**Academics** Satisfactory  
Academic Percentile: 76%

Category	Metric	20-21	21-22	22-23	YoY Change
Program Profile	# of Students	138	213	395	85% ↑
	# of SCH Taught	3,658	4,230	7,548	78% ↑
	FTE Students	122	141	252	78% ↑
	% SCH in Online Courses	85%	78%	55%	-30% ↓
	% SCH Taught by FT Faculty	79%	80%	73%	-9% ↓
Student Progress	Withdraw/D/F Rate	4%	7%	10%	50% ↑
	# Students Enrolled 2+ Terms	110	105	250	138% ↑
	# Students Return from Prior Yr	0	78	123	58% ↑
Outcomes	# of In-Year Completions	55	53	40	-25% ↓
	Median Years to Complete	NA	NA	NA	NA
	Median Earnings 2-Yrs Post-Grad.	NA	NA	NA	NA

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Gender:  F  M  N    Pell Status:  Y  N    IPEDS Race/Ethnicity:  Asian  Black  Haw/P...  Hispanic  Ntv. Am.  UNKN  White

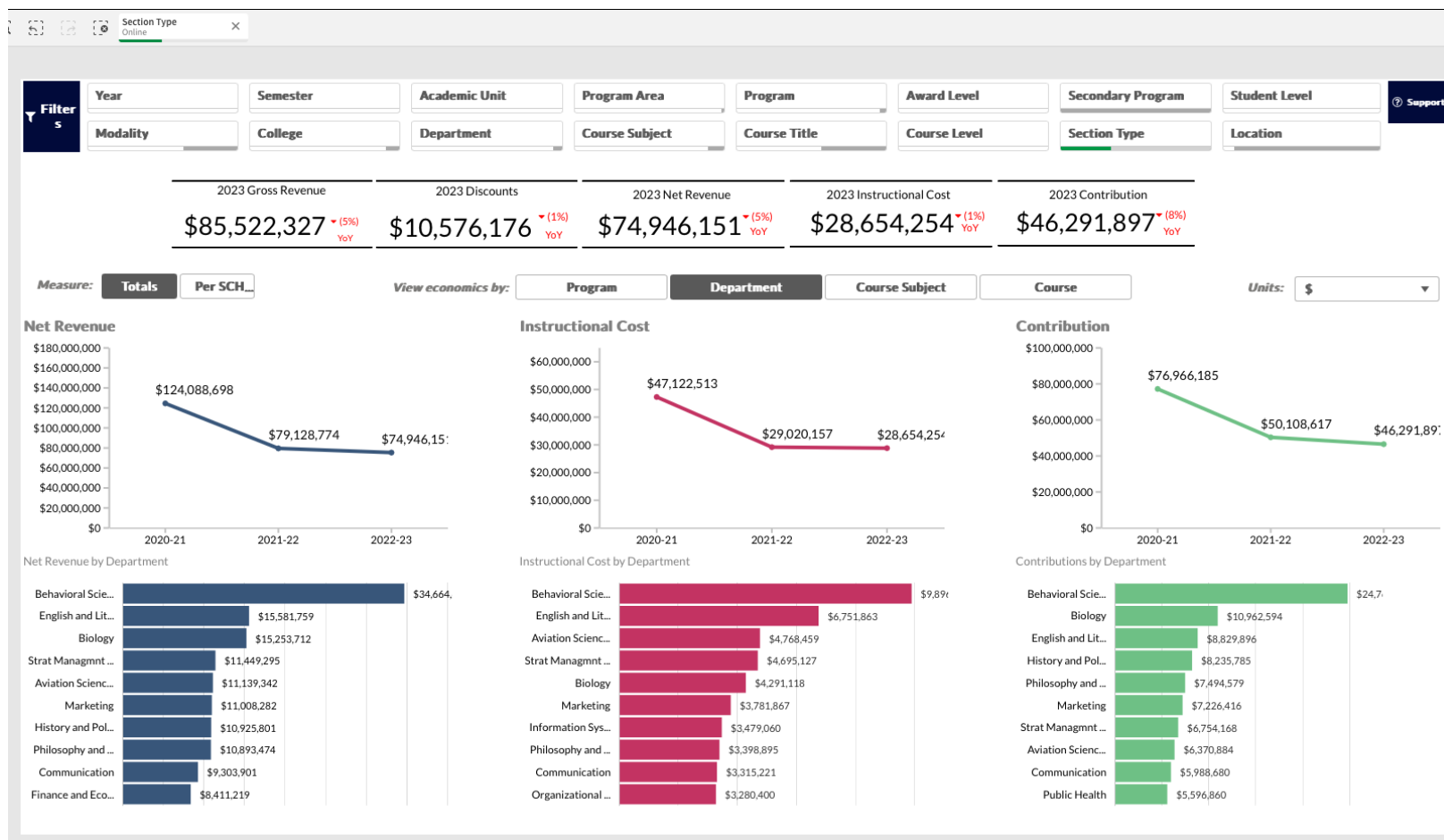
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**Margins** Satisfactory  
Contribution SCH Pct: 82%

Total    SCH    YR: 2023    Term: All

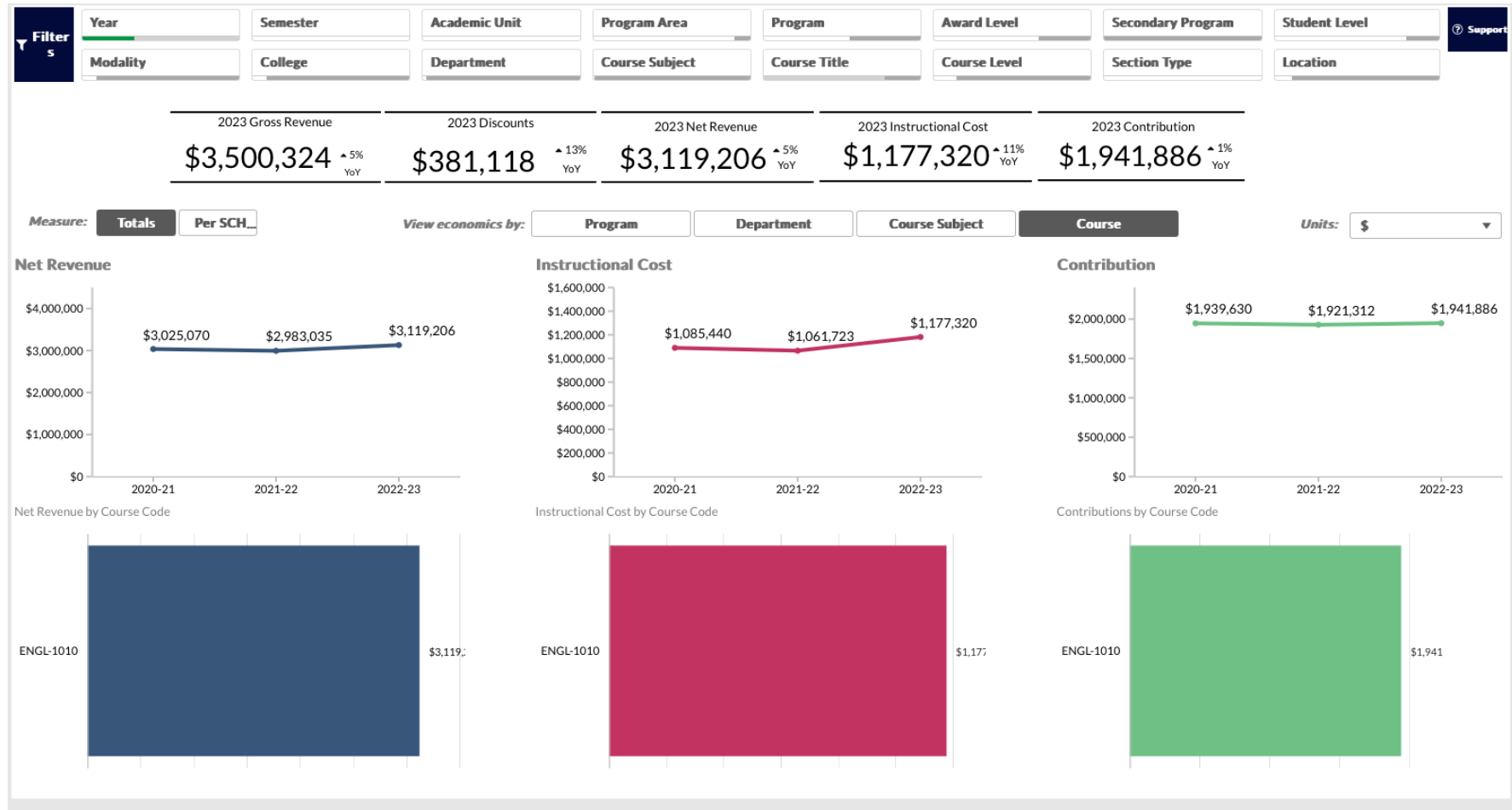
Metric	Value	Change YoY
Gross Rev.	\$2,050,949	
Discounts	(\$306,702)	
Net Revenue	\$1,744,247	114%
Costs	(\$665,604)	80%
Contribution	\$1,078,643	143%

# How Much Does Online Instruction Contribute to the University?





# How Much Did ENGL 1010 Contribute to the University in Academic Year 2022-2023?





# Summary

- What question are you trying to answer?
- GrayDI has a lot of data. It maybe overwhelming if only consulted occasionally
- Data can be exported from GrayDI
- Office of Accreditation and Academic Assessment is available to provide group training, one-on-one consultations, custom reports, Power BI Dashboards



# For Help or Questions

Contact: Dr. Quinn Koller or Dr. Sam Gedeberg  
Academic Programs, Assessment, and Accreditation