**Graduate Executive Committee**
**03/08/2024**
**Minutes**

**Attendees:**

**Voting Members:** Assma Sawani, Bob Camley, Carlos Diaz, Cerian Gibbs, Henriikka Weir, James Pearson, Jeff Ferguson, Jeremy Bono, Kara Carnes-Holt, Katie Sullivan, LaVonne Johnson, Leilani Feliciano, Mandi Elder, Pat McGuire, Steve Tragesser, Sylvia Mendez, TS Kalkur

**Non – Voting Members:** Amy Rodas, Andrew Lac, Bee Bish, Chris Beiswanger, David DuBois, Hillary Fouts, Jeff Deickman, Jessica Kirby, Jennifer Newcomb, Jose Mora, Karlye Enkler, Kim Paine, Laurel Cartwright, Lauren Harriott, Mary Rupp, Megan Rogers, Monique French, Rachel Seton, Rosey Reidl Smith, Sam Adams, Shannon Johnson, Stephanie Trujillo, Tylor Teel, Wendi Clouse, Ying Fan

Agenda Items:

- College of Business - Business Analytics Degree Program emphasis (Ying Fan and Monique French; see attached)
  GEC voted to recommend approval of the proposal for new College of Business - Business Analytics Degree Program emphasis (16 in favor, 1 against, 0 abstain)
- Adding New Programs to the State Approving Agency for VA Eligibility (Jeff Deickman)
  o Please keep in mind that students using VA benefits cannot apply these benefits toward a new degree program or emphasis until they are listed in the catalog, which is only edited once a year, and from there it can take up to 6 months after they are listed to be approved by the VA.
    ▪ Some new emphasis only need to be added to the catalog and will not take the full 6 months; please reach out to the VMA office if you have questions about what would qualify for this path.
- Plagiarism checks for theses and dissertations
  o Please make sure that graduate faculty in your department know that thesis/dissertations need to be checked for plagiarism before final submission to the graduate school.
- Waitlist Options for Graduate Applications (Chris Beiswanger)
  o If your program is interested in the possibility of adding a waitlist option to future application cycles please reach out to Chris Beiswanger or Hillary Fouts.

Informational Items:

- The College of Education has approved the following revisions to the 12-credit hour graduate certificate in Instructional Technology. Changes include:
  o **Two course title changes** (CURR 5171 is being changed from "K-12 Web-based Educational Resources" to "Foundations of Instructional Technology and Online Teaching & Learning"; CURR 5172 is being changed from "Multimedia for K-12 Educators to "Multimedia for Educators and Trainers."
  o **Two courses are being removed from the certificate**: CURR 5170 - Introduction to Technology in Education and CURR 5173 - Instructional Design

- - **Two new courses are being added to the certificate**: CURR 5174 - Artificial Intelligence for Educators and Trainers; CURR 5175 - Capstone Instructional Technology Project
- Changes in the College of Business:
  - The International Business and Services Management Emphasis has been eliminated
  - The Marketing Emphasis is moving to 100% online
  - The EDBA Program has paused new admissions indefinitely

<u>Announcements:</u>

- Graduate Student Appreciation Week is April 1-5; the Graduate School is providing free headshots for graduate student on April 2nd. See attached flyer for details.
- Mentored Doctoral Fellowship Application Deadline has been extended to March 22, 2024.

GEC Meetings for (Academic Year) all meetings are from 10:00-11:30

- Spring GEC Meetings
  - 4/12, 5/3

# Business Analytics Degree Program (MBA emphasis)

**COB Learning Outcomes**

**Our graduates are prepared to be:**

- Strategic leaders who meet the challenges of a global and dynamic business environment

- Ethical decision makers who positively impact organizations and society

- Skilled team players who communicate effectively

- Lifelong learners willing to pursue continuous growth

- Business professionals who apply state-of-the-art business knowledge and technology

**Business Analytics MBA Emphasis Learning Outcomes**

**Our graduates will be equipped with capabilities to:**

- Analyze and Strategize: Master the ability to analyze complex data sets and use these insights to develop and implement effective business strategies in a global and dynamic business environment.

- Ethically Manage Data: Practice ethical data management, emphasizing respect for privacy and understanding the societal impact of data decisions, thereby reinforcing their role as ethical decision-makers in organizations and society.

- Communicate Analytical Insights: Excel in communicating complex data and analytics concepts effectively within teams and across organizational levels, enhancing their role as skilled communicators and team players.

- Engage in Continuous Learning: Continuously adapt and learn new analytical tools and methodologies, staying abreast of evolving trends in business analytics to foster lifelong learning and growth in a rapidly changing field.

- Apply Advanced Technology: Utilize state-of-the-art business analytics tools and technologies to innovate and improve business processes, demonstrating their capability as tech-savvy business professionals.

# Business Analytics Degree Program (MBA emphasis)

**PART I**

1. Name of MBA emphasis: Business Analytics

2. Department: Business Analysis

3. College: College of Business

4. Expected start date (semester and year): Sp25

5. Number of required credit hours: 36 credit hours

6. Anticipated length of the program in semesters including summer: 2 years = 6 semesters

**PART II Description of Business Analytics Emphasis.**

    a. **Workforce Demand and Job Outlook**

EAB Market Insights: New Master's Degree Program Opportunities (Appendix I)

The EAB report identifies Business Analytics as having a strong labor market opportunity, rated at 3.00 out of 5, with a competitive opportunity also robust at 3.33 out of 5. This suggests a growing labor market for program graduates, marked by the second-highest average monthly job postings and the highest projected growth in jobs over the next decade. This score reflects the significant workforce demand and growth potential in the job market for individuals with Business Analytics skills. The combination of advanced business acumen and analytical expertise provided by an MBA in BA positions graduates favorably in a job market that highly values data-driven decision-making skills.
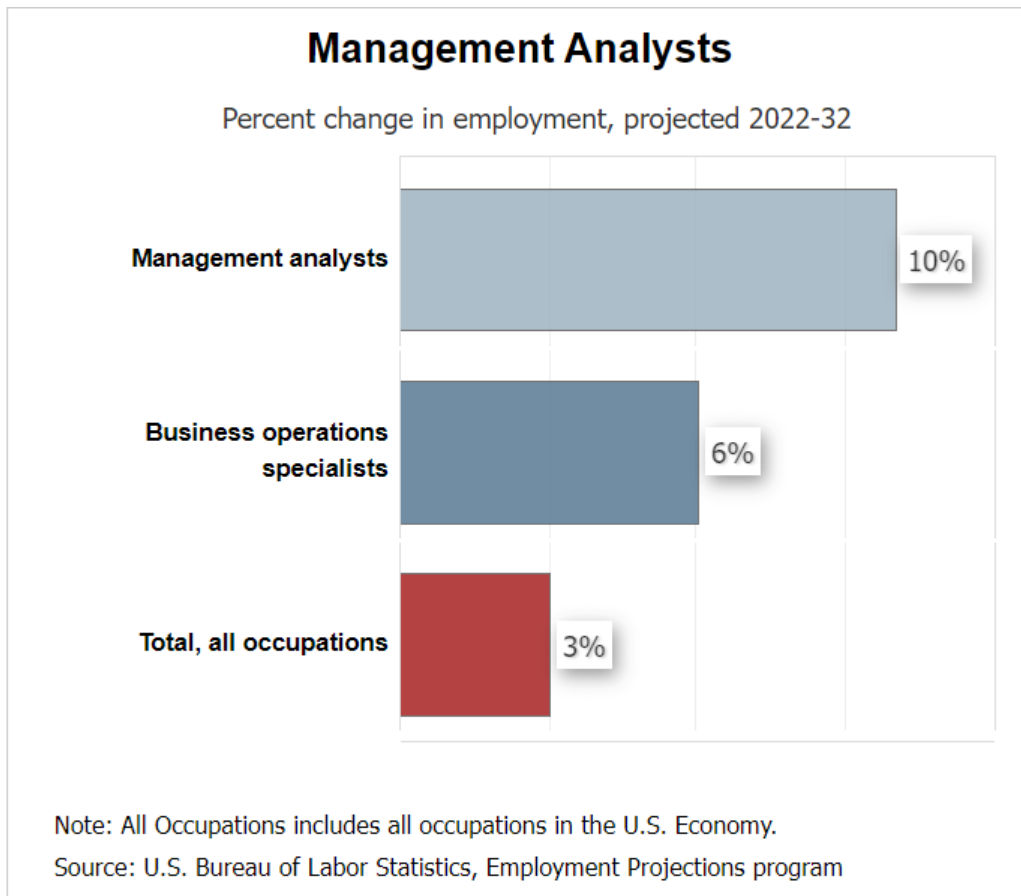
Job Outlook by Bureau of Labor Statistics (BLS)

Employment of management analysts is projected to grow 10 percent from 2022 to 2032, much faster than the average for all occupations. About 92,900 openings for management analysts are projected each year, on average, over the decade.

**Employment projections data for management analysts, 2022-32**

| Occupational Title | SOC Code | Employment, 2022 | Projected Employment, 2032 | Change, 2022-32 | |
|---|---|---|---|---|---|
| | | | | Percent | Numeric |
| Management analysts | 13-1111 | 987,600 | 1,083,300 | 10 | 95,700 |

SOURCE: U.S. Bureau of Labor Statistics, Employment Projections program

**Management Analysts**

Percent change in employment, projected 2022-32

| Occupation | Percent change |
|---|---|
| Management analysts | 10% |
| Business operations specialists | 6% |
| Total, all occupations | 3% |

Note: All Occupations includes all occupations in the U.S. Economy.
Source: U.S. Bureau of Labor Statistics, Employment Projections program

b. **Resource Requirements**

*Faculty workload***:** No new faculty resources are required as the courses required for the degree plan are part of the participating faculty's regular teaching loads. The Business Analytics emphasis is planned to replace the Operations and Supply Chain Management (OSCM) emphasis, sunsetting in Sp24. The three new BA electives will replace three electives used in the OSCM emphasis. Therefore, faculty used to teach these courses are available to teach the new BA courses as their regular loads**.**

Given that our online class capacity has increased to 40, we don't expect additional sections to be needed at the initial stage of the program.

*Staff workload***:** Start-up administration includes scheduling new courses (although replacing others), helping with sequencing, and adjusting sections offered per year to meet demand. Cobedtec assistance is needed for video production for marketing the program and new courses. We don't expect increased tech support from Cobedtec for specialized software and tools, as open-source software such Python or programs included in the textbook will be used in the new courses.

*Marketing activity and budget:* See **Table 1** for activity description and budget estimates.

*Internal efforts:* For internal marketing efforts, activities include utilizing College of Business newsletters, email campaigns to COB students and alumni, social media, articles, tabling with potential incentives, flyer distribution, digital display ads, and hosting information sessions. These efforts, mostly cost-free except for flyers and potential tabling incentives, span 1 to 4 weeks in preparation, with a notable focus on leveraging existing college resources and digital platforms for promotion.

*External efforts:* Externally, the strategy expands to include collaborations with UCCS Main Campus Marketing for broader outreach, webpage content creation, press releases, paid social media, Google ads, and advertisements in regional journals. Costs depend on the platform and campaign length, highlighting a diversified approach that blends free resources with targeted investments in paid advertising to optimize reach and engagement over a 3 to 4-month planning period.

*Budget estimates:* Marketing for the BA program may incur both minimal internal costs and external advertising expenses. Internal activities leveraging existing resources may incur minimal direct costs, potentially ranging from $500 to $1,000 for materials and incentives. External marketing efforts, including paid ads and collaborations, might average between $3,000 to $5,000, considering cost-effective digital campaigns and selective print advertisements.

c. **Enrollment trend and projections**

AACSB Analytics Hub (Appendix II): The AACSB Analytics Hub aggregates and analyzes data trends in business education, focusing on providing insights into program offerings and enrollment patterns among AACSB accredited schools.

Data shown in Appendix II shows 82% of schools reporting to the Hub offer MSc degree in Business Analytics compared to 18% for MBAs in this emphasis. This landscape, coupled with a strong rebound in student enrollment after the Pandemic, signals a ripe opportunity for our school to fill a market gap by launching the MBA BA emphasis, catering to the growing demand for business-savvy analytics professionals.

EAB Market Insights: New Master's Degree Program Opportunities (Appendix I)

EAB report (CO) highlights Business Analytics as having significant student demand, evidenced by the second-highest number of average annual conferrals at 280. The field

also exhibits an average annual student demand growth of 1.85%, while competition in the number of programs offered remained stagnant. This suggests not only a favorable environment for launching new programs in BA due to increasing student interest but also a relatively less saturated market in terms of new programs entering the field. The combination of high job growth projections and steady student demand suggest that we have a strategic opportunity to develop the BA emphasis, capitalizing on both labor market needs and student interest.

d. **Competitive analysis**

In Colorado, graduate-level business analytics education is predominantly offered through MS degrees rather than MBAs, with no universities currently providing an MBA specifically in Business Analytics. The programs vary in duration, with some as brief as 10 months and others extending over two years. The required credit hours for these analytics programs range from 12 for certificates to 58 for more comprehensive degrees. Data shows there's currently a lack of MBA offerings with a focus on Business Analytics in Colorado, which presents a unique market opportunity.

Introducing an MBA emphasis in Business Analytics is a strategic move to bridge the gap between the technically intensive MS degrees and the narrowly focused certificate programs. This could attract professionals who are looking to bolster their strategic business expertise with a solid foundation in applied analytics.

See **Table 2** for the grad Business Analytics currently offered in Colorado and beyond.

**PART III** Business Analytics Emphasis Degree Plan

The MBA with a specialized area of emphasis consists of 36 credit hours of graduate (6000-level) coursework in the College of Business. The specialized MBA course work consists of:

- 24 hours of core competency courses
- 12 credit hours of specialized business elective courses (determined by the area of emphasis/specialty)

Students who choose an emphasis in Business Analytics will take 24 semester hours of MBA core courses, 9 semester hours of Business Analytics elective courses, and 3 hours of MBA 6000-level elective courses for a total of 12 combined elective hours.

Core courses include (8 core, 24 credit hours)

*STRT 6000 - Strategic Foundations for Responsible Management*

*ACCT 6100 - Accounting for Decision Making*

*FNCE 6000 - Corporate Financial Management*

*INFS 6000 - Information Systems*

*MGMT 6000 - Leading and Managing in Changing Times*

*MKTG 6000 - Marketing Strategy*

*OPTM 6000 - Operations: Competing Through Capabilities*

*STRT 6500 - Strategic Management*

Business Analytics Electives (4 electives, 12 credit hours)

*BUAN 6100 – Visual Analytics: Principles and Applications for Business*

*BUAN 6200 - Applied Predictive Analytics for Strategic Insights*

*BUAN 6300 – Business Intelligence for Managers*

*and*

*6000-level analytics-focused elective course (We consult with other teams and recommend analytics-focused courses for students.)*

**Marketing Channels and Price Estimates**

*MBA emphasis in Business Analytics*

**INTERNAL:**

| Communication Channel | Estimated Monetary Cost | Estimated Time Cost |
|---|---|---|
| College of Business newsletters | $0 | 1 week |
| Email campaign (COB grad students, COB undergrad juniors/seniors, COB alumni) | $0 | 2-3 weeks (includes campaign run time) |
| Social media campaign | $0 | 2-3 weeks (includes campaign run time) |
| Communique article announcing program | $0 | 3 weeks |
| Tabling outreach/recruitment | Dependent on if print materials are present or if incentive is ordered (i.e. hand out donuts or other treats and flyers to students in Dwire) | 3-4 weeks (reserve space with facilities to have a table set up in lobby) |
| Flyers | About $60 for 500 one-sided flyers | 2-4 weeks (includes flyer design development and production time) |
| Digital display ads (screens in Dwire lobby and 3$^{rd}$ level) | $0 | 10 business days (for design creation) |
| Online/In-person Info Sessions (for current students, alumni, or prospective) | $0 | 1 month (includes event planning and event promotion) |

**EXTERNAL:**

| Communication Channel | Estimated Monetary Cost | Estimated Time Cost |
|---|---|---|
| UCCS Main Campus Marketing (outsource to their media conglomerates) | Able to help determine a budget. Can be anywhere from $500 – 10,000 | 3-4 weeks (does not include campaign time – just marketing strategy planning) |
| Webpage on College of Business site | $0 | 3-4 weeks (includes content building, design, and revisions) |
| Press release – sent to UCCS Main Campus press contacts | $0 | 3 weeks (can be written and submitted simultaneously with Communique article) |
| Paid social media ad campaign on major platforms such as Facebook, Instagram, LinkedIn, TikTok, etc. (video ads recommended) | Depends on length of campaign – anywhere from $25 - 700 | 2-3 weeks (does not include campaign run time) |
| Google ads | Depends on length of campaign & ad size – roughly $500 | 3-4 weeks (does not include campaign run time) |

| Digital and print ads in SoCo journals and publications (i.e. Southern CO Business Forum & Digest or business analyst-specific publications) | Depends on size of ad (print tends to be more pricey than digital)– anywhere from $100 – 1,200 | 2-3 months (includes messaging, ad design creation, strategy, contract negotiation – does not include ad run time) |
|---|---|---|
| Drip campaigns (emails through external contact lists, i.e. KOAA) | Depends on how many emails you choose to run – roughly $1,200 | 2-3 months (includes messaging, email design approvals, strategy, choosing target area, contract negotiation – does not include run time) |

**Total Anticipated time cost:** 3 – 4 months to develop plan and assets alongside COB Communications and Marketing Manager. Potential to start marketing as early as the summer, if wanting to get fall applications.

**Graduate Programs in Business Analytics**

| Name of University | Name of the College | Degree (MBA or MS) |
|---|---|---|
| University of Colorado Denver | Business School | MS (data in this row is regarding the MS degree). Also has an option for an MBA with a Business |
| University of Colorado Boulder | Leeds School of Business | MS |
| CSU Fort Collins | | No Business Analytics options |
| CSU Pueblo | | No Business Analytics options |
| University of Denver | Daniels College of Business | MS.  Also has an option of an MBA with a concentration in Business Analytics |
| Metropolitan State University of Denver | | Mentions a graduate certificate in Business Analytics, but there does not appear to be an |
| Colorado School of Mines | | Has a graduate certificate in Business Analytics |
| Colorado Mesa University | | Does not appear to have a Business Analytics program |
| Adams State University | | No Business Analytics options |
| University of Northern Colorado | | No Business Analytics options |

| | | |
|---|---|---|
| Western Colorado University | | No Business Analytics options |
| DU/University of Denver | | MS in BA, Certificate |
| Arizona State Univers | W. P. Carey School of Business | MS in Business Analytics. Also has an option for MBA with a Business Analytics concentration |
| University of Chicago | Chicago Booth School of Business | MBA |
| Michigan State University | Broad College of Business | MBA with a Business Analytics concentration. Also has an M.S. in Business Data Science and |
| Boise State University | | MBA |
| College of Charleston | | MBA |
| Oregon State University | | No Business Analytics options. They do have financial analytics, marketing insights and |
| University of Kansas | School of Business | MS |
| New Mexico State University | | No Business Analytics options |
| University of Wyoming | | No Business Analytics options |

| | | |
|---|---|---|
| Texas Tech University | | No Business Analytics options |
| University of Idaho | | No Business Analytics options |
| University of New Mexico | Anderson School of Management | MS |

| Delivery mode (on campus, online or hybrid) | Program duration | Course duration (8wk or 16 wk) | Credit hours required |
|---|---|---|---|
| Online and in person options are available | 2 years | | 36 credit hours |
| In person or online | 10 months (full time, in person) or 2 years (part time, online) | | 33 credit hours |
| | | | |
| | | | |
| | 12 months or longer | Quarters are 10 weeks long. Website is not very specific but it | 58 credit hours |
| | | | 12 credit hours (certificate only) |
| | | | |
| | | | |
| | | | |
| | | | |

| | | | |
|---|---|---|---|
| | | | 58 credit hours |
| On campus and online options | online MS-16 months. **In person MS**- 9 or 16 months depending on chosen | | **In person MS-BA**- 30-43 credit hours depending on track |

| **M.S. in Accounting and Data Analytics**- Online   **M.S. in Business Data Science and Analytics-** In person | **MBA** is 21 months. **M.S. in Accounting and Data Analytics**- 10 seven week | **M.S. in Accounting and Data Analytics**- 7 weeks | **MBA made up of 3 components**: MBA Core Curriculum: 31 credits that provide |
|---|---|---|---|
| Online | as few as 12 months when attending full time | Seven-week classes | 49 credits total.  37 general MBA credits and 12 from the business analytics emphasis |
| | Appears to be a 1 year program | | Thirty-nine (39) credits are required for graduation. Thirty (30) hours are completed |
| | 2 Semesters | | 31 credit hours |

| Online | 14 months if full time | 33 credit hours |

| Core classes | Electives for BA emphasis/specization/concentration |
|---|---|
| Statistics, Prescriptive Analytics with Optimization, Computing for Business Analytics, Time-series forecasting, Predictive analytics, Decision analysis, | Electives (12 credit hours needed)- Project management, Predictive modeling, Text data analytics, Network modeling, Data visualization, Supply chain management, VBA for business analytics |
| Core Business Analytics Courses- Survey of Business Analytics, Machine Learning in Python, Experiential Projects Class, Modern Artificial Intelligence, | Track-Specific Elective Courses: **Advertising & Marketing Analytics Track**- Market Intelligence, Digital Advertising, Customer Analytics.  **Decision Science Track**-Optimization Modeling, Supply Chain Analytics, Process |
| Core classes: Introduction to Business, Business Intelligence, Business Databases, Python, Business Statistics, Optimization, Capstone Planning , Data | |

| | |
|---|---|
| **For MBA with BA concentration**- Introduction to Enterprise Analytics, Python for Data Analysis, Data Mining I, Analytical Decision-making Tools I, | **Electives for MBA with BA concentration**- Data Mining II, Enterprise Information Security and Controls, Managing Enterprise Systems, IT Services and Project Management, Emerging Technologies, Data-driven Quality Management, |
| To complete a concentration in business analytics, you'll choose five courses in the discipline. Some options include managerial decision modeling, data | |
| The 31 credits of core courses within the MBA curriculum: Financial accounting and reporting strategy, applied data analysis for managers, leadership and | Business Analytics concentration courses (MBA)- Value chain accounting and analytics, Financial modeling simulation I, financial modeling simulation II, financial derivatives I, financial derivatives II, security analysis and |
| General MBA courses- Business Foundations, Design Thinking and Strategic Management, Marketing Strategy, People and Organizations, | For BA emphasis- Digital Marketing Management, Financial Analytics and Modeling, Data-Driven Decision Making |
| MBA core classes- Law of Corporate Governance, Accounting Issues for the Business Manager, Financial Management, Managing and Leading in | 3 courses in the BA emphasis- Business Analytics Fundamentals for Competitive Advantage, Business Analytics Applications: A Practice for Competitive Advantage, and either Marketing Research and Analysis for |
| Professional Skills Development, Data Management and Data Warehousing, Statistical Modelling, Data and Visual Analytics, Data Mining and Machine | Appears that 2 electives are needed. An elective will be offered each semester covering a range of topics. Elective topics may include courses in data security, machine learning, healthcare analytics, accounting analytics, or |

| | |
|---|---|
| Intro to Project Management, Data Driven Decision Making, Data Analytics, Information Systems Security, Database MGMT Systems, Financial Accounting | Business Analytics Track courses- Analysis Tools for Managers, Supply Chain Models and Strategy, Data Mining, Text Mining and Sentiment Analysis |

| Useful Website Links | Other Important Information |
|---|---|
| https://business.ucdenver.edu/ms/business-analytics?_gl=1*v31lrh*_ga*MTY2OTQ5NDkyNS4xNjg4 | |
| https://www.colorado.edu/business/ms-programs/masters-program-business-analytics | Five tracks to choose from: Marketing Analytics, Decision Science, Healthcare |
| https://daniels.du.edu/business-information-analytics/masters/ | |
| https://www.msudenver.edu/mba/graduate-certificate-business-analytics/ | |
| https://online.mines.edu/business-analytics-online/ | |

https://wpcarey.asu.edu/mba-programs/full-time/business-analytics-concentration

https://www.chicagobooth.edu/mba/academics/curriculum/concentrations/business-analytics

https://broad.msu.edu/masters/mba/curriculum/business-analytics-concentration/

https://www.boisestate.edu/online/mba/business-analytics/#degree-plan

https://sb.cofc.edu/academics/graduate/mba/program-overview/emphasis-areas.php

https://gradschool.oregonstate.edu/programs/2067/business-msb

https://business.ku.edu/graduate-programs/ms-business-analytics

https://business.ku.edu/gra

To get an idea of what the grad BA should look like we need to see other programs.

From ASU - -they get 6 courses in an emphasis!!
https://wpcarey.asu.edu/mba-programs/full-time/business-analytics-concentration

University of Chicago –they have 5!
https://www.chicagobooth.edu/mba/academics/curriculum/concentrations/business-analytics

Michigan State - -this ones weird!   But makes me think maybe the digital marketing class could
https://broad.msu.edu/masters/mba/curriculum/business-analytics-concentration/

Now for a lower level ….
Boise State
https://www.boisestate.edu/online/mba/business-analytics/#degree-plan

College of Charleston
https://sb.cofc.edu/academics/graduate/mba/program-overview/emphasis-areas.php

**This is an interesting site I found**

https://www.onlinemba.com/mba-careers/business-analytics/

CU Denver

CU Boulder

CSU Fort Collins

CSU Pueblo

University of Denver

Oregon State

University of Kansas

New Mexico State

d be an elective option? No clue what martin does in there

# ACCSB Analytics Hub analysis

[AACSB Analytics Hub](#)

**Master/Graduate Programs in Analytics**

# Enrollment Trends

*Data shown for cycles **2018-19** through **2022-23***

*Filtered by list(s): Master/Graduate program #BA*

**62** Programs reporting data

**54** Schools reporting data

A majority of schools (18%) offer MBA in Business Analytics, while 82% offer MSc in BA.
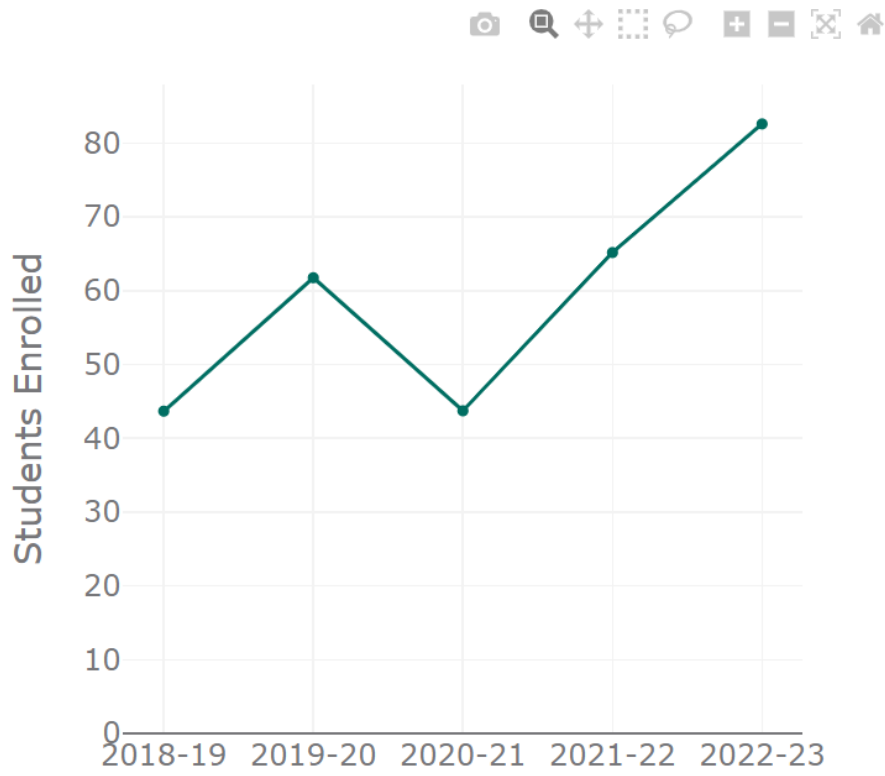
11 Business Schools offer MBA in Business Analytics.
49 Business Schools offer MSc in Business Analytics, Data Analytics, Data Science, Supply Chain Analytics, Accounting Analytics, etc.

Enrollment trend (Note: Everyone got hit hard by COVID year 2020).

## AVERAGE APPLICATIONS OVER TIME
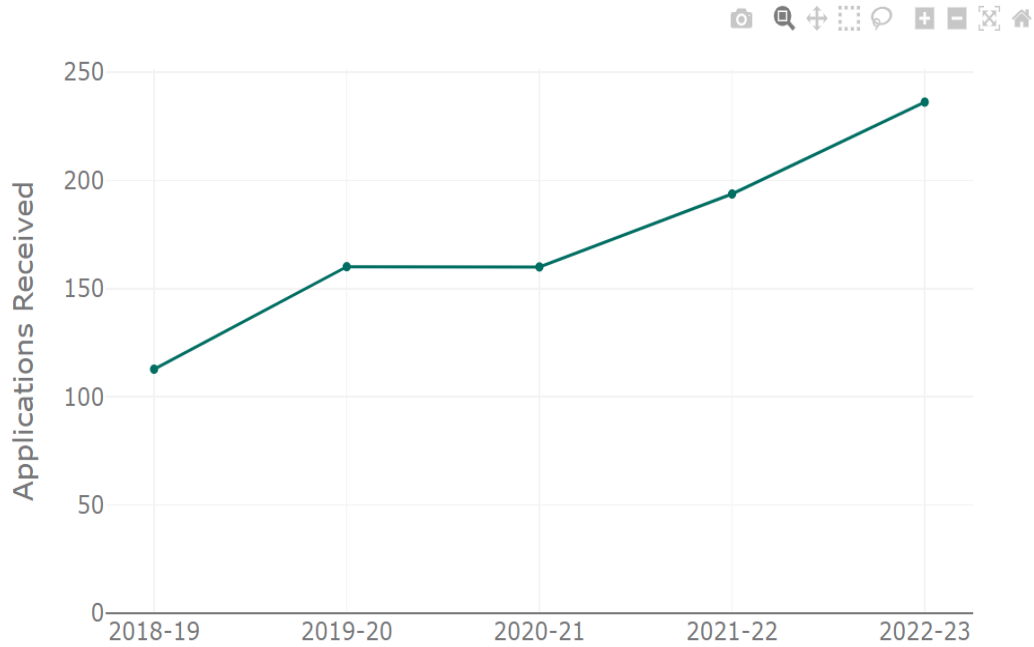


## AVERAGE ENROLLMENT OVER TIME

# New Graduate Business Degree Program Opportunities

The University of Colorado Colorado Springs
February 2024
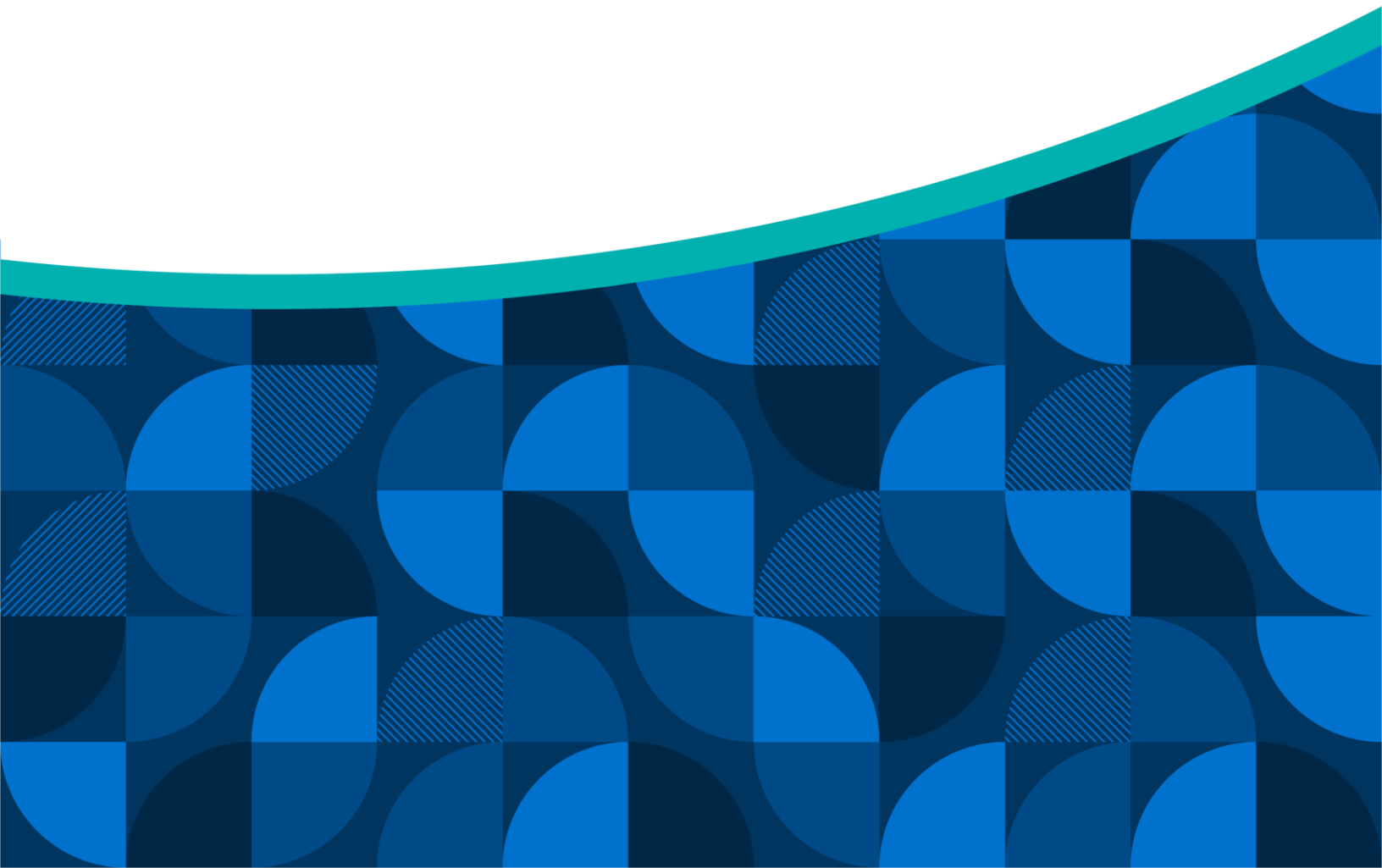
## Research Associate

Grace Licsko

## Senior Research Manager

Khalil Payne

## Director

Lizzie Brennan

# Report Introduction and Table of Contents

This report presents new opportunities for academic program development. The sections outlined below present a ranking of our recommended new program opportunities, provide the data supporting those recommendations and our underlying methodology, and explain how we can support your next steps.

*Table of Contents*

# Report Introduction (cont.)

## Project Objective: Identify New Program Opportunities

**New Program Parameters**
*Determined by the University of Colorado Colorado Springs*

Program Characteristics
- Type: Business Degree or Certificate
- Level: Graduate
- Modality: Online, Face-to-face

Region:
- Colorado

**Steps to Identify New Program Opportunities**
*Detailed methodology appears on [page 12](#).*

1. Analyze regional labor market to identify high-demand fields – *What fields best align to regional labor market needs?*
2. Assess each field's regional competitive landscape and alignment to desired program characteristics – *What fields demonstrate the most positive student trends, as well as relatively less competitive markets?*
3. Appraise national program market – *In which fields do major competitors overwhelmingly control the market? Which fields achieve only low median completions?*

Programs that present opportunity for growth based on labor market, competitive landscape, and national program outlook appear on the following page.

## How to Interpret Identified New Program Opportunities

Identified opportunity described as a program field.

Additional context including alignment with existing institutional or unit portfolio, national program context, etc.

**(1) Sample Field**

Labor Market Opportunity: Strongest (4.50/5.00)

Competitive Opportunity: Robust (3.00/5.00)

Considerations
- Relationship to existing programs
- Market concentration concerns, if any
- Cost to launch and operate, if notable

Relative rank of program opportunity, determined by combination of labor market opportunity, competitive opportunity, and qualitative considerations.

Labor Market (LM) Score for identified program field and qualitative description of score. The LM score helps quantify employer demand and employment opportunities for graduates of the proposed program field. The LM score is calculated using **historic employer demand** and **projected relevant employment**. The LM score is calculated relative to all occupations defined by the Bureau of Labor Statistics.

Scale of qualitative score descriptions:
- Strongest: >3.50
- Robust: 3.00 to 3.50
- Moderate: 2.50 to 2.90
- Challenging: <2.50

Competitive Opportunity (CO) Score for identified program field and qualitative description of score. The CO score helps quantify student demand and market saturation for the proposed program field. The CO score is calculated using **historic trends of degree conferrals**. Unlike LM Scores, CO Scores are calculated relative only to the assessed fields in this report. Programs with a low CO Score do not necessarily face low opportunity for program development but do face a more challenging competitive landscape than other identified fields (e.g., limited student demand, high competition).

# Executive Overview

## Programs with Strongest Potential for Enrollment Growth

**New Program Opportunities**

---

**1** **Human Resources**

Labor Market Opportunity: Strongest (3.88/5.00)
Competitive Opportunity: Robust (3.33/5.00)

**Considerations**

- Between January 2021 and December 2023, employers advertised a moderate-to-high number of monthly job postings across quarters (an average of 156 postings), indicating a favorable labor market. Further, the second-highest projected growth in postings between 2023 and 2033 (2,095) bodes well for program graduates.

- The highest number of average annual conferrals (286) combined with growing student demand (12.69% on average annually) outpacing competition (2.50% on average annually) between the 2019-2020 and 2021-2022 academic years suggests strong potential for program launch.

- According to the Bureau of Labor Statistics (BLS), demand for Human Resources Specialists will be driven by increasingly complex employment laws and benefit options.

- Draw on coursework and faculty from the existing Human Resources Management emphasis to lower program startup costs.

- For an example of online programming, see the Master of Science in Human Resource Management at the University of Connecticut. For an example of a face-to-face program, see the MS in Human Resource Management at Claremont Graduate University.

**2** **Finance**

Labor Market Opportunity: Robust (3.03/5.00)
Competitive Opportunity: Strongest (3.75/5.00)

**Considerations**

- Employers advertised the highest number of monthly job postings across quarters (average of 531 postings) over the analyzed period. Further, the highest projected growth in postings between 2023 and 2033 (2,717) indicates an optimistic labor market for program graduates. Administrators should note, while employers posted a high number of job postings, postings are decreasing on average per month (-1.98%), which may make for an increasingly competitive labor market.

- A high number of average annual conferrals (177) and student demand growing on average annually (1.75%) while competition decreases on average annually (-10.00%) signals a strong potential for program launch.

- Employment is projected to grow for Financial Managers as companies, particularly those with operations in foreign countries, have accumulated more cash on their balance sheets in recent years and will need expertise in cash management. Additionally, as globalization continues, this trend is likely to persist. This practice should lead to demand for financial managers, as companies will need expertise in managing revenue.

- Leverage the existing MBA Finance Emphasis and the Finance Graduate Certificate to build out a standalone degree program.

- Reference the online Master of Science in Finance at The College of William & Mary, which allows students to 'deep dive into finance more quickly and thoroughly than a typical MBA'.

- Additionally, reference the MS in Financial Management at Boston University. The program also offers two concentrations: International Finance and Investment Analysis.

# Executive Overview

## Programs with Strongest Potential for Enrollment Growth

### New Program Opportunities

**(3)** **Business Analytics**

Labor Market Opportunity:
Robust (3.00/5.00)
Competitive Opportunity:
Robust (3.33/5.00)

**Considerations**

- The second-highest average monthly job postings across quarters (301) paired with the highest projected growth in jobs across the next decade (37.41%) indicates a growing labor market for program graduates. Similar to Financial Managers, the number of job postings for Operations Research Analysts is decreasing slightly on average per month (-0.50%), which warrants caution.

- Over the last three academic years, business analytics reported the second-highest number of conferrals (280). Additionally, student demand increased 1.85% on average annually while competition remained stagnant, suggesting a favorable environment for program launch.

- According to the Bureau of Labor Statistics (BLS), as technology advances and companies and government agencies seek efficiency and cost savings, demand for Operations Research Analysis should continue to grow. In addition, increasing demand should occur for these workers in the field of analytics to improve business planning and decision-making.

- Alignment with the existing Business Analytics Minor may minimize start-up costs.

- Additionally, reference the Master's in Business Analytics from the University of Colorado Boulder. Further, reference the Business Analytics MBA Degree Concentration from Drexel University for an example of an MBA concentration.

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From the broader analysis, the programs recommended rose to the top based on growth potential and alignment with the University of Colorado Colorado Springs' existing profile. To see all programs under consideration, please see page 9.

While Tax Examiners and Collectors, and Revenue Agents and Lodging Managers received high LM scores (3.64 and 3.60, respectively) among all identified fields, EAB did not include them in the final ranking due to decreasing student demand and lack of completion data, respectively.

For labor market and competitive landscape details on all seven identified fields see pages 8-10.

# Executive Overview (cont.)

**Action Items**

*Detailed next steps and supporting EAB resources and services appear on page 15.*

**Within the University of Colorado Colorado Springs**

- Discuss identified new program opportunities with relevant leadership and faculty.

- Use additional market data to make informed decisions on identified program opportunities before launch.

- Evaluate current budget capabilities and determine resources available to invest in new program launch.

- Consider potential employer partnerships to support growth.

- Determine impact of new programs on existing portfolio.

**In Partnership with EAB**

- Request a call with EAB research team to review the report and discuss next steps.

- Request further validation of desired new program opportunities via a Program Feasibility Study.

- Evaluate existing portfolio against labor market and competitive opportunity via a Portfolio Health Check.

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# Project Analysis

## Programs Preparing for These Occupations Should Attract Adult Students

**Labor Market Data for Relevant Occupations with Labor Market Scores above 2.5**

*Regional Data*

| Occupation | Job Postings, 2021 Q1- 2023 Q4 | | | Employment, 2023 - 2033 | | |
| --- | --- | --- | --- | --- | --- | --- |
| | Avg. Monthly Job Postings Across Quarters | Avg. Monthly Growth Across Quarters (Percent) | Avg. Monthly Growth Across Quarters (Actual) | Projected Growth (Percent) | Projected Growth (Actual) | Labor Market Score (Out of a maximum of 5) |
| Human Resources Specialists | 156 | 3.67% | 2 | 11.31% | 2,095 | **3.88** |
| Tax Examiners and Collectors, and Revenue Agents | 31 | 7.81% | 1 | 16.14% | 96 | **3.64** |
| Lodging Managers | 7 | 21.87% | 0 | 14.97% | 139 | **3.60** |
| Economists | 6 | 27.10% | 0 | 18.10% | 60 | **3.59** |
| Financial Managers | 531 | -1.98% | -14 | 22.98% | 2,717 | **3.03** |
| Operations Research Analyst | 301 | -0.50% | -4 | 37.41% | 471 | **3.00** |

## Why Examine Labor Market Data?

Programs aligned to labor market needs offer the best potential to attract adult students: adults are predominantly motivated to enroll by career outcomes, ranging from upskilling in their current job to preparing for a career switch. Analyzing historic employer demand (i.e., job postings) and projected employment ensure what we know about the regional labor market determines proposed new program opportunities.

1) To understand demand trends without single-month outliers over-influencing the data, this calculation considers the average number of monthly job postings in each quarter, then provides the average value across those quarters

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# Project Analysis (cont.)

## These Programs Align with the In-Demand Occupations

**Occupational Alignment to Identified Subject Fields**

| *Occupation* | | *Field Name* | | *Associated CIP Codes* |
|---|---|---|---|---|
| **Human Resources Specialists** | → | Human Resources | → | 52.1001 (Human Resources Management/Personnel Administration, General) |
| **Tax Examiners and Collectors, and Revenue Agents** | → | Taxation | → | 52.1601 (Taxation) |
| **Lodging Managers** | → | Hospitality Management | → | • 52.0901 (Hospitality Administration/Management General)<br>• 52.0904 (Hotel/Motel Administration/Management) |
| **Economists** | → | Economics | → | • 45.0601 (Economics, General)<br>• 45.0603 (Econometrics and Quantitative Economics) |
| **Financial Managers** | → | Finance | → | 52.0801 (Finance, General) |
| **Operations Research Analysts** | → | Business Analytics | → | • 52.1302 (Business Statistics)<br>• 52.1301 (Management Science)<br>• 52.1399 (Management Sciences and Quantitative Methods, Other)<br>• 30.7102 (Business Analytics) |

# Project Analysis (cont.)

## Programs with Low or Declining Conferrals, High Competition Warrant Caution

**Competitive Opportunity Data for Market Aligned Subject Fields**

*Regional Data*

| Field | Degree Conferrals, 2020-2022 | | | Number of Competitors, 2020-2022 | | | Competitive Opportunity Score (Out of a maximum of 5) |
| | Avg. Annual Conferrals | Avg. Annual Growth (Percent) | Avg. Annual Growth (Actual) | Number of Competitors, 2022 | Avg. Annual Growth (Percent) | Avg. Annual Growth (Actual) | |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Finance** | 177 | 1.75% | 3 | 4 | -10.00% | -1 | **3.75** |
| **Human Resource Management** | 286 | 12.69% | 34 | 5 | 2.50% | 0 | **3.33** |
| **Business Analytics** | 280 | 1.85% | 3 | 5 | 0.00% | 0 | **3.33** |
| **Taxation** | 61 | -5.30% | -4 | 4 | 0.00% | 0 | **2.15** |
| **Economics** | 67 | -4.88% | -4 | 6 | 0.00% | 0 | **1.18** |
| **Hospitality Management** | 1 | N/A | N/A | N/A | N/A | N/A | **N/A[1]** |

## Why Examine Competitive Opportunity Data?

Regional degree conferrals over time and the number of institutions reporting those conferrals offer a sense of the regional landscape. Degree conferrals indicate student willingness to enroll and complete degrees, which can help surface fields with challenging recruitment despite a strong labor market. Leadership may aim to avoid launching such programs or would need to plan recruitment efforts to surmount potential student disinterest.

The number of institutions reporting conferrals communicates how competitive a market will be for a new program to enter, while changes over time can suggest institutions responding to their market (e.g., closing programs that were perhaps costly to maintain).

1) Percentage could not be calculated because of growth from zero completions

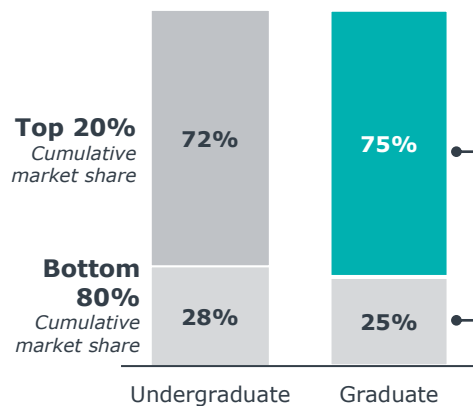eab.com

# Project Analysis (cont.)

## Programs with Low Median Conferrals Nationally, Highly Concentrated National Markets Present More Challenging Launch and Operation

### Why Consider National Market?

While regional context largely determines program opportunity, national market context limits some subjects' potential success. Fields with low median conferrals or highly concentrated markets nationally can still succeed, but leadership should leadership should develop program strategy with low median conferrals and/or high conferrals concentration nationally in mind.
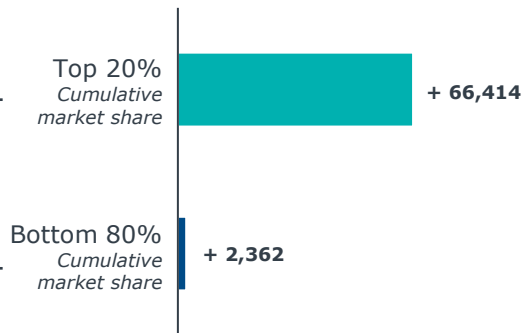
### Institutions with Highest Conferrals Control Most of the Market

*Percentage of total degrees[1] conferred by top 20% of institutions, 2018*
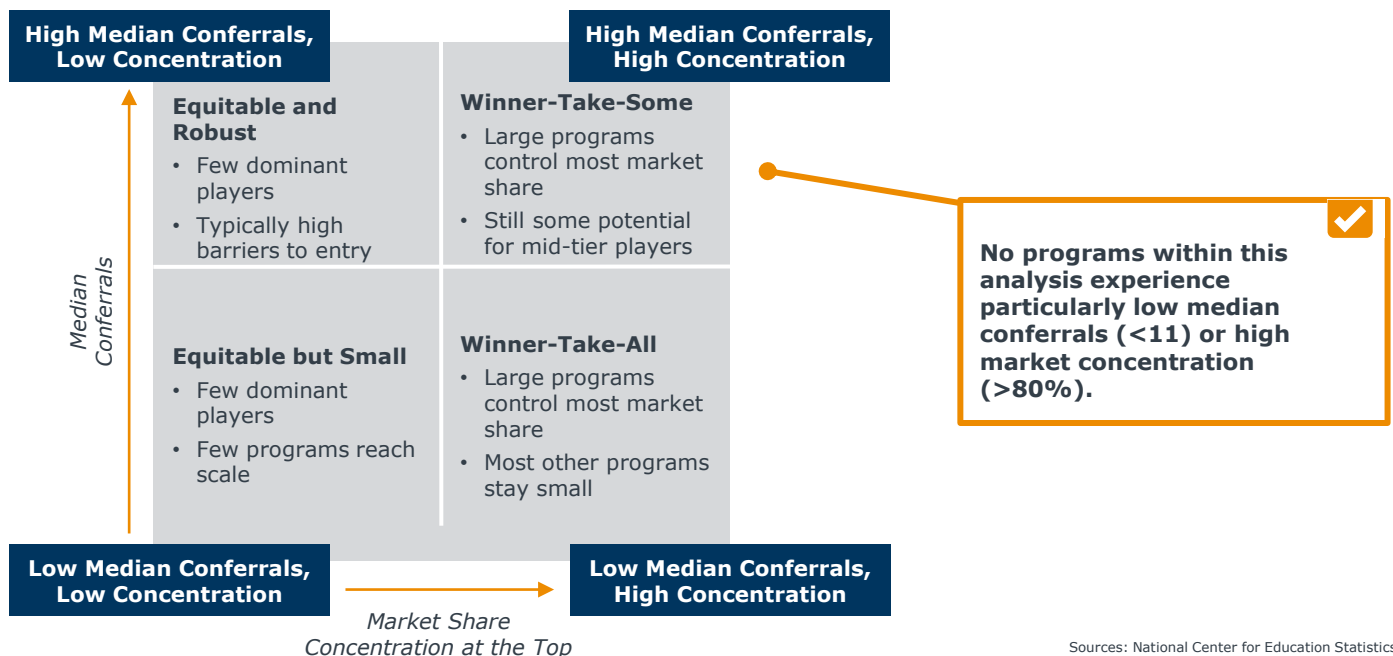
**Top 20%**
*Cumulative market share*

**Bottom 80%**
*Cumulative market share*

| | Undergraduate | Graduate |
|---|---|---|
| Top 20% | 72% | 75% |
| Bottom 80% | 28% | 25% |

### And for Graduate Degrees, the Biggest Have Only Gotten Bigger

*Net change in number of graduate degrees conferred, 2013-2018*

Top 20%
*Cumulative market share*
**+ 66,414**

Bottom 80%
*Cumulative market share*
**+ 2,362**

### Mature Markets Present Four Types of Competition

**High Median Conferrals, Low Concentration**

**High Median Conferrals, High Concentration**

**Equitable and Robust**
- Few dominant players
- Typically high barriers to entry

**Winner-Take-Some**
- Large programs control most market share
- Still some potential for mid-tier players

**Equitable but Small**
- Few dominant players
- Few programs reach scale

**Winner-Take-All**
- Large programs control most market share
- Most other programs stay small

*Median Conferrals*

**Low Median Conferrals, Low Concentration**

**Low Median Conferrals, High Concentration**

*Market Share Concentration at the Top*

**No programs within this analysis experience particularly low median conferrals (<11) or high market concentration (>80%).**

1) Master's and professional doctorate

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# Project Methodology

EAB conducted a three-step analysis to identify potential new program opportunities. All workforce demand data was collected from Lightcast, EAB's labor market intelligence partner. Competitive data was collected from the National Center for Education Statistics via the Lightcast Analyst platform.

## Step One: Labor Market Analysis

**Analyze regional labor market to identify high-demand fields**

This analysis serves as an indicator of external labor market needs. The objective is to identify occupations with strong labor market demand, which serves as a proxy for adult student demand.

The analysis includes:

• Volume and growth of job postings

• Projected growth in employment

We review the top occupations in terms of labor market demand to identify trends. We then determine program fields aligned to these labor market trends.

*Data collected and scoring methodology*

EAB analyzed labor market intelligence for the region and scored occupations (zero to five) based on growth and volume of job postings and employment.

EAB's analysis scored each occupation based on five discrete metrics:

Job Postings Data, *2021 Q1 – 2023 Q4*

• Average quarterly job postings

• Average quarterly percent growth in job postings

• Average quarterly actual growth in job postings

Employment Projections Data, *2023 - 2033:*

• Projected growth in employment (actual)

• Projected growth in employment (percent)

Each occupation received a score of zero through five for each metric, based on its performance against all occupations considered. EAB then calculated a Labor Market Score (zero through five) for each occupation based on the average score for each metric.

# Project Methodology

## Step Two: Competitive Landscape Analysis

**Assess each field's regional competitive landscape and alignment to desired program characteristics**

The volume and growth of degree conferrals serves as an indicator of student demand for each field. Data on the number of competitors informs competitive landscape saturation.

For each field, we analyze the competitive landscape in terms of:

• Number of competitors and degree conferrals

• Growth in number of competitors and degree conferrals

We also consider if each field aligns with the partner institution's provided parameters (e.g., can be delivered online).

*Data collected and scoring methodology*

EAB analyzed the competitive landscape for the region using degree conferrals data. For each field, EAB compiled a list of relevant Classification of Instructional Program codes (CIP codes), which are used to categorize degree conferral data.

The programs surfaced in this analysis may not be an exhaustive list of all competitor institutions, as some institutions may report relevant degree conferral data under other CIP codes.

EAB collected the following data for the 2019-2020 through the 2021-2022 academic years:

• Volume of degree conferrals

• Annual growth in degree conferrals

• Number of competitor institutions

• Change in number of competitors

Like the labor market analysis, EAB scored the competitive opportunity for each field (zero to five) based on growth and volume of degree conferrals and number of competitors and determined an average Competitive Opportunity Score for each program.

## Step Three: National Market Analysis

**Appraise national program market opportunity**

Based on insights from our ongoing Blueprint for Growth research into the future of graduate and adult education, we consider if identified opportunities:

• Are among programs with extremely low median degree conferrals nationwide, or

• Would enter a highly concentrated market.

While these characteristics do not necessarily preclude program launch, they do require additional attention to surmount.

# Project Methodology (cont.)

## Data Sources

### Lightcast
https://lightcast.io/

This report includes data made available through EAB's partnership with Lightcast (formerly Emsi), a labor market analytics firm serving higher education, economic development, and industry leaders in the U.S., Canada, and the United Kingdom.

Lightcast curates and maintains the most comprehensive labor market data sets available for academic program planning, providing real-time job posting data, workforce and alumni outcomes data, and traditional government sources of data. Under this partnership, EAB may use Lightcast's proprietary tools to answer partner questions about employer demand, the competitive landscape, in-demand skills, postings versus actual hires, and skills gaps between job postings and professionals in the workforce. The Lightcast tools also provide EAB with in-depth access to unsuppressed, zip-code-level government data for occupations, industries, programs, and demographics. For more complete descriptions of the Lightcast tools, visit:

- https://lightcast.io/solutions/education/analyst
- https://lightcast.io/solutions/education/alumni-pathways

To learn more about Lightcast and its software and services, please contact Bob Hieronymus, Vice President of Business Development at bob.hieronymus@lightcast.io.

### Integrated Postsecondary Education Data System (IPEDS)
https://nces.ed.gov/ipeds/

The Integrated Postsecondary Education Data System (IPEDS) is the Department of Education's National Center for Education Statistics' (NCES) core postsecondary education data collection program. Information is collected annually from all providers of postsecondary education in fundamental areas such as enrollment, program completion and graduation rates, institutional costs, student financial aid, and human resources.

Data collected through IPEDS is publicly released and can be accessed through the IPEDS Data Center by postsecondary education institutions and the general public. The IPEDS Data Center is designed as a centralized, web-based tool for the retrieval and analysis of IPEDS data, the system allows users to access and evaluate institutional data using a wide-range of analytical features that includes the ability to construct customized data sets, download full data files, and create statistical and trend analyses reports.

### EAB Research and Insights Library
https://eab.com/research-and-insights/

# Next Steps from this Market Opportunity Scan

## Follow These Steps to Act on New Program Opportunities

### Internal

Share the report with relevant leadership and faculty on campus. Use the recommended EAB resources below to guide conversations with stakeholders and make informed decisions.

**Identify most interesting opportunities for further analysis.** Consider how the report's findings match institutional goals. How do the fields surfaced in the report align with institutional strengths, available resources, and faculty priorities? See EAB's "Top-Down New Program Opportunity Analyses" toolkit to learn what internal and external data sources you should leverage to determine which new program fields to prioritize.

**Continue to use market data to make informed decisions.** Reference EAB's "Market Demand Validation Checklist" for additional guidelines on how to interpret the labor market and competitive landscape data in this report. Use this checklist to avoid underestimating competition or overestimating employer and student demand as well as to vet initial projections for new programs.

**Evaluate current budget capabilities and determine resources available to invest in new program launch.** Refer to EAB's "New Program Cost-Minimization Checklist" for ten tactics that can limit initial investment in new programs by leveraging existing resources and EAB's "New Program Budget Templates" to project costs for new program development.

**Consider potential employer partnerships to support growth.** Employer partnerships can help generate revenue to support mission-critical programs and offerings. EAB's "Toolkit to Grow Employer Partnerships" and "Critical Disciplines to Grow Employer Partnerships" research can help administrators identify potential partners and build successful, long-lasting employer relationships.

**Determine impact of new programs on institution's existing portfolio.** Leveraging resources from existing programs can help limit program launch costs. However, those financial gains are diminished if a new program attracts enrollments away from an existing degree rather than securing net new enrollments. EAB's "Portfolio Cannibalization Feedback Form" can help institutional leaders and faculty flag new programs that serve similar markets as the institution's existing portfolio and determine if a new degree will result in net positive or net negative enrollment shifts.

### In Partnership with EAB

**Request a project debrief call with EAB research team to review the report.** Meet with members of our research team to discuss the findings of the report and potential next steps.

**Validate selected new program opportunities.** Request a Program Feasibility Study to explore the market viability of an identified new program opportunity.

**Evaluate existing portfolio against labor market and competitive opportunity.** Request a Portfolio Health Check to understand how existing offerings score on labor market and competitive opportunity

## ABOUT EAB

At EAB, our mission is to make education smarter and our communities stronger. We work with thousands of institutions to drive transformative change through data-driven insights and best-in-class capabilities. From kindergarten to college to career, EAB partners with leaders and practitioners to accelerate progress and drive results across five major areas: enrollment, student success, institutional strategy, data analytics, and diversity, equity, and inclusion (DEI). We work with each partner differently, tailoring our portfolio of research, technology, and marketing and enrollment solutions to meet the unique needs of every leadership team, as well as the students and employees they serve. Learn more at eab.com.