

University of Colorado Boulder

2022 Program Review

Leeds School of Business

Academic Review and Planning Advisory Committee Report

Approved



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Process Overview

The Academic Review and Planning Advisory Committee (ARPAC) review of the Leeds School of Business was conducted in accordance with the 2022 program review guidelines. Self-study responses were prepared by the unit and checked by two ARPAC members specifically assigned as liaisons to the unit, as part of the discovery process. The ARPAC unit liaisons submitted a summary of findings derived from the self-study and from interviews and/or surveys with faculty, staff, and student unit members. An external review committee (ERC), consisting of two experts from outside of the University of Colorado Boulder, engaged in a virtual visit and submitted a report based upon review of relevant documents and meetings with faculty, staff, and student unit members and university administrators. ARPAC staff, employing web conferencing tools, facilitated the external review as a remote visit over April 4 and 5, 2022. The ARPAC reviewed and considered these materials, met with the dean, and wrote this report. Discovery process summary and external reviewer comments and recommendations are shared when relevant throughout this report.

Past Reviews

The Leeds School of Business underwent a program review in 2014 (the current review, which was originally scheduled for 2021, was delayed a year owing to the COVID pandemic). As part of that review, a number of recommendations were listed that targeted at improving the school's undergraduate and graduate programs, greater research productivity, decreasing a reliance on instructional faculty by recommending increasing the size of tenured and tenure-track (TTT) faculty to improve research productivity and TTT v. non-TTT instructional ratios and improving the culture and climate, as well as communication of expectations for promotion and tenure.

The 2014 ARPAC review also recommended refocusing the school's mission to better reflect changes impacting business schools nationwide (e.g., a decrease in MBA students), and taking steps to increase standing and visibility of the school. Since 2014, Leeds faculty have engaged in the improvement of undergraduate education programs that reflect student and industry recommendations. These included more opportunities for undergraduate students to interface with industry leaders and partners, as noted in the self-study. The School responded to recommendations by offering elements of the co-curricular components of the "Whole Student Experience" initiative, which resulted in the expansion of internship opportunities that are now expected program requirements. The continuous improvement effort resulted in measurable improvements in student retention and strong job placement metrics as documented in the most recent self-study. Communication about student placement is circulated to faculty, alumni, and other partners about student placements in a monthly newsletter.

The previous ARPAC report noted a need for Leeds to continue its efforts to recruit underrepresented¹ students and faculty to improve the gender and racial/ethnic diversity of the school. While these efforts continue and progress has been made with recruitment of women as students and faculty members, the school has more work to do to improve its racial/ethnic diversity.

Since 2014, the school has introduced new graduate offerings. Leeds faculty members, working collaboratively with other CU Boulder academic units, have developed joint master's degree programs,

¹ ARPAC notes that it can sometimes be complicated to have consistent, shared terminology for protected class identity groups. In the context of this report, we use the term "underrepresented" to refer to individuals or groups that have been historically marginalized or minoritized within U.S. higher education. Although national data sources often use the term "underrepresented minority (URM)" to combine people who are Black, Latine, and Native American, ARPAC acknowledges that the term "minority" is contested and diminishing.

added four specialized one-year MS programs, and expanded the school's professional masters degree offerings.

In addition to these recent programmatic and curricular changes, the school has raised its visibility through improved research productivity and by hosting several academic conferences such as the Colorado Finance Summit and the Colorado Summer Accounting Research Conference.

Leeds has also improved its faculty communications over the last eight years. In 2017, Leeds full professors completed a detailed presentation describing how tenure and promotion files are prepared and evaluated. This document was shared with junior and senior faculty. The document is intended to guide senior faculty writing reports and is also intended to communicate to faculty members how their tenure and promotion dossiers will be evaluated.

Unit Overview and Analysis

The campus' standardized description of the Leeds School of Business is available on the website of the Office of Data Analytics (ODA) at https://www.colorado.edu/oda/institutional-research/institutional-level-data/information-department/academic-review-and-planning. ODA updates the profile annually in the fall semester. This report cites data posted September 30, 2021, reflecting the state of the Leeds School of Business as of the academic year (AY) 2021-2022. Additional data obtained from the Office of Data Analytics and the unit's accreditation report are cited where relevant.

Disciplinary Context

Describing itself as committed to "positively transform[ing] the future of global business by inspiring and educating next generation business leaders and creating impactful knowledge," the Leeds School of Business encompasses seven academic divisions: accounting; finance; marketing; organizational leadership and information analytics; professional effectiveness; strategy, entrepreneurship and operations; and sustainability and social responsibility.

The school enjoys a strong reputation. For example, according to its self-study, Leeds was rated 20th in the most recent *US News and World Report* rankings of undergraduate business schools among public universities and offers the top-ranked MBA program in Colorado (and was ranked 22nd nationally, among public university evening/part-time MBA programs). The publication *Poets and Quants* ranked the MBA program as 4th in its list of rapidly ascending MBA programs of the decade. Leeds is also accredited by the Association to Advance Collegiate Schools of Business (AACSB), which the self-study describes as representing "the highest standard of accreditation for business schools internationally" (out of more than 16,000 business degree conferring schools, AACSB accredits fewer than 5%).

The self-study and external reviewers highlight a number of areas of particular strength and innovation, including the school's "strong reputation in specialty programs, especially around entrepreneurship and social responsibility/ethics" (self-study); an "innovative and high-quality BBA (i.re., BS in Business Administration at CU Boulder) program" (external reviewers); and "an innovative and ambitious initiative for alumni engagement through student mentoring" (external reviewers).

Research and Scholarship

As outlined in the self-study, one of Leeds has prioritized raising its research profile. For example, Leeds has gone from 67th in 2008-2010 to 36th in 2017-2020 (and from 80th to 45th for published research among faculty internationally) as surveyed by the University of Texas at Dallas. Leeds faculty members

have won, been finalists, or received honorable mentions for a number of research awards in recent years, including:

- 2020 American Accounting Association Financial Accounting and Reporting Section Best Paper Award
- 2020 Fama-DFA Prize from the Journal of Financial Economics
- Western Finance Association NASDAQ Award for the Best Paper on Asset Pricing
- 2020 John D.C. Little Best Paper Award
- 2021 Best Paper published in the Journal of Management in Engineering
- 2021 Institute for Operations Research and the Management Sciences (INFORMS) Behavioral Operations Management Best Working Paper Honorable Mention
- Academy of Management's Technology and Innovation Management Best Dissertation Award

The self-study highlights as a particular area of Leeds strength interdisciplinary research on "diversity, equity, inclusion...and the implications of these issues for business and society," along with "wealth research focused on sustainability and climate change."

Additionally, Leeds' Deming Center for Entrepreneurship has been recognized for exceptional activities in entrepreneurship across disciplines.

Leeds also places a strong emphasis on disseminating its research as public-facing scholarship, including by promoting webinars; faculty member talks in cities across the US; faculty research media coverage; email and social media campaigns; and materials produced by the school's Centers of Excellence, including newsletters, publications, and a podcast.

Collaborations

As described in Leeds' self-study report, the school is committed to fostering and leveraging "partnerships locally, nationally and globally" to achieve its mission, vision and goals. With respect to external collaboration, the self-study describes "deep partnerships with our world-class business community" (e.g., Ball Aerospace). The school's undergraduate teaching statement says that Leeds offers students "a holistic educational experience within a strong culture of high academic expectations and student engagement." The Leeds graduate studies webpage makes the school's partnerships with the business community, federal labs, and local entrepreneurs a central feature.

On campus, the Leeds School of Business is engaged in partnerships with the College of Arts and Sciences; the College of Media, Communication and Information; and the College of Engineering and Applied Science (CEAS) to develop targeted tracks for graduate degrees. In addition, a particularly noteworthy and visible campus collaboration is with the CEAS. The recently finished (January 2021) Rustandy building physically and symbolically demonstrates the ongoing joint, collaborative work in multiple degrees and curricula.

The school's collaborative ties with companies like Ball and Lockheed Martin benefit students in the form of professional learning opportunities, including internships and mentorships. As described in the Leeds' Strategic Plan Progress Report, the school's mentorship program recently engaged 700 business professionals with 600 students. Leeds also carefully tracks companies that employ its graduate students.

The Leeds' Center for Ethics and Social Responsibility (CESR) partners with the Urban Leadership Foundation of Colorado (ULFC), which primarily trains Black professionals in Denver. Leeds provides

partial scholarships to ULFC alumni and currently has six of the foundation's members enrolled in its degree programs.

One challenge area related to partnerships that was noted in the self-study was that "there is little room for entrepreneurial endeavors as our campus contracts teams have highly bureaucratic processes. Ideas for collaboration with industry and the use of data are very often denied by legal counsel. These concerns were shared with our campus controller and legal counsel."

Campus Context

The Leeds School of Business offers BS, MS, MBA and PhD degrees in programs spanning accounting, business analytics, finance, management and entrepreneurship, and marketing and real estate. As referenced above, Leeds' mission is: "To positively transform the future of global business by inspiring and educating next-generation business leaders and creating impactful knowledge."

As previously noted, partnerships with businesses are a hallmark of Leeds' undergraduate and graduate programs. The school's undergraduate teaching statement says that Leeds offers students "a holistic educational experience within a strong culture of high academic expectations and student engagement." On its graduate studies webpage for graduate studies, partnerships with the business community, federal labs, and local entrepreneurs are noted as a central feature.

On campus, as noted above, Leeds' collaborations with the College of Arts and Sciences, the College of Media, Communication and Information, Colorado Law, and the College of Engineering and Applied Science (CEAS) have led to new degree tracks. The school's collaborative ties with CEAS are particularly visible as evidenced by the recently finished (January 2021) Rustandy building that physically and symbolically connects the two academic entities as they collaborate across multiple degrees and curricula.

While the COVID-19 pandemic created modest setbacks in education experiences and recruitment, Leeds appears to have successfully weathered the challenges as evidenced by recent enrollment increases in most of their programs.

Strategic Vision and Planning

Leeds' current strategic plan covers the years 2018-2022 and emerged from an extensive planning process headed by the prior dean and informed by faculty, staff, and student surveys (see also section 3.2.4 on "Unit Culture" below); meetings and exercises involving faculty, staff, and students (including an active student committee now known as the Dean's Student Cabinet); conversations and roundtables with the business community; discussions with Leeds board members; the work of the Leeds' administrative cabinet; and presentations to campus leadership. Since the writing of the self-study, the dean has left CU Boulder, so once a new dean is named, the faculty will re-engage with strategic planning.

The 2018-2022 strategic plan connects to the mission elements outlined above in 3.1 ("Disciplinary Context") and features as goals:

- develop forward-looking leaders who make an important economic and social impact;
- create and share world-class research; and
- foster and leverage partnerships locally, nationally and globally

In turn, the goals embrace a culture of high aspirations that values:

- academic excellence,
- integrity,
- inclusion, community, and being forward-looking

These goals and values also inform the school's three strategic initiatives:

- End the Gap, which focuses on "getting more women into the business leadership pipeline by raising awareness of how a business education can prepare women to succeed in whatever sector they choose to pursue." In the years since the initiative started, the number of Leeds' undergraduate women applicants has increased from 2,609 in 2018 to 4,574 in 2021; the percentage of women in Leeds' first-year undergraduate class has increased from 35% in 2015 to 44% in 2021 (the highest percentages were 46% in 2019 and 48% in 2020); and women graduate-level applications and enrollments likewise have increased between 2017-2019 (the highest percentage was 41% in 2019) (followed by a decrease in 2020 and partial rebound in 2021).
- Business + Engineering, which promotes collaboration between Leeds and the College of Engineering and Applied Science. The highest profile result has been the previously noted Rustandy expansion.
- *Career Impact*, which prepares Leeds graduates for their post-Leeds careers. Results include curricular changes, new workshops and experiential learning opportunities, and updates to the school's mentorship program. One example is Career Impact roundtables with key business leaders, such as Platinum Employers and High-Growth Ventures (See the self-study, p. 10).

Beyond these initiatives, both the self-study and the external reviewers note that hiring TTT faculty would help meet (to quote the external reviewers) "the faculty sufficiency criteria mandated by the AACSB for continued accreditation, particularly...the 40% threshold for scholarly academics (i.e., faculty with doctoral degrees and scholarly publication record)." Per the ARPAC meeting with Leeds leadership in Fall 2022, this threshold refers to a requirement that at least 40% of its undergraduate and graduate degree-track courses be taught by faculty members classified as "scholarly academics" (meaning faculty with doctoral degrees and scholarly publication records). According to the most recent AACSB description of Leeds' faculty sufficiency and faculty qualifications, the school counts as scholarly academics faculty members with terminal degrees who either have an active and ongoing research program and/or who "sustain currency and relevancy through scholarship and activities related to the field of teaching". This means that most (but not all) of Leeds' tenure-track faculty members qualify as scholarly academics, as do some of its teaching professors (instructors). According to the self-study, Leeds is currently struggling to meet the AACSB's 40% threshold, with scholarly academics accounting for only 29.3% of degree-track teaching.

When it comes to hiring new tenure-track faculty members, neither the self-study nor the external reviewers highlight any specific research areas as meriting particular emphasis. Rather, according to the self-study, Leeds says that when tenure-track faculty lines become available, it allocates these based "on the proportion of courses taught by [tenure-track faculty members] in each of our divisions that offer degrees/areas of emphasis, consistent with accreditation expectations."

Governance

Per Leeds' by-laws, the dean is the chair of the Leeds faculty. As of October 2022, the school is led by an acting dean (the previous dean accepted a position at another university in Summer 2022); this acting dean is supported by a cabinet consisting of one interim senior associate dean, four associate deans, one assistant dean, and one executive director. Much of Leeds governance occurs by means of six

standing committees: a personnel advisory committee; an executive committee; an undergraduate curriculum and policy committee; a master's curriculum and policy committee; a doctoral curriculum and policy committee; and a faculty conduct committee.

In 2017 Leeds updated its by-laws for the first time since 2008, focusing on compliance with university policies, language clarifications, quorum requirements, the role of various committees in personnel matters, and the implementation of an expedited review process for senior instructors. Leeds also updated a number of its policy documents, including the *Guidelines for Preparing Promotion and Tenure Files, Policy on Review of Non-Reappointment Recommendations for Instructor Rank Faculty, Grievance Process for Non-Salary-Related Grievances*, and *Salary Equity Review Policy*. Per the self-study, updates to the school's annual merit review teaching criteria and instructor promotion guidelines are also underway.

In its self-study, the school notes that it is revising its *Guidelines for Preparing a Primary Unit Evaluation Committee Report for Promotion from Instructor to Senior Instructor*, updating its by-laws regarding the role of the faculty conduct committee; clarifying its reappointment, tenure and promotion criteria regarding the criterion of intellectual independence; specifying the role of the senior associate dean for faculty and research in the promotion to full professor review process; and defining the voting rights of faculty members on unpaid leave.

Inclusive Excellence

The level of diversity among faculty in the unit has increased with respect to gender since the 2014 review. Among the 75 TTT faculty in 2020-2021, 17 identified as women, comprising 22% of the total (compared to 8 women or 14% of TTT faculty in 2014). During those seven years, the percentage of international faculty also increased from two (3%) to nine (12%). However, the count of tenure-track faculty members who identify as belonging to underrepresented USA populations did not change significantly in that time, with only five faculty members (10%) identifying as belonging to an underrepresented racial/ethnic group in 2021, compared to four in 2014.

With respect to the undergraduate and graduate student population, it is worth noting that Leeds ranks first at CU Boulder among all units in the total number of undergraduate majors (4,998 in AY 2020-21) and graduate level majors (713 in AY 2020-21). As such, any demographic shifts in enrollment represent a significant number of students. The number of Leeds undergraduate students who identify as belonging to an underrepresented racial/ethnic group increased from 12% to 17% between 2014-2021. This is a noteworthy improvement in the diversity of undergraduate enrollments.

Since the 2014 review, while the number of women enrolled in Leeds undergraduate and graduate programs has increased, the percentage of women students has not. According to the most recent student census, students who identify as women comprised 36% of enrolled undergraduates in 2021-22 (they accounted for 37% in 2013-14); in graduate programs the percentage of women was 34%. These are slightly lower than the percentage of women enrolled as reported in the fall 2014 census, which was 37% for undergraduate and 39% for graduate programs.

To recruit and support women and underrepresented students, Leeds has created new scholarships and initiated outreach events focused on high school students, admitted students, and industry partners. Leeds also offers networking opportunities, such as the *Diverse Scholars Program*, as well as bridge programs and course support for first generation and other underrepresented students. Some of the more recent events include an event titled *Transforming Business: Connecting Diverse Scholars*, as well as women's leadership fora, and inclusive leadership workshops.

Unit Culture

Since 2016, Leeds undertook, or was involved in, a number of unit culture studies, including the 2017 CFI Group Workplace Climate Survey (commissioned specifically for Leeds by its then-interim dean), the 2017 CU Employee Engagement Survey, the 2020 Campus and Workplace Culture Survey, and the Fall 2021 Campus Culture Survey. These assessments suggested several follow-up focus areas, including the importance of developing clear evaluation and promotion guidelines, addressing problematic behaviors, providing opportunities for employee recognition, and more effectively integrating faculty and staff.

In each case, the school has taken concrete steps to address the findings emerging from these surveys, including (to cite several examples) town hall meetings; the development of new initiatives such as *Leeds Peer Connections, Lunch and Learns,* and *Welcome Wednesdays,* efforts and programs focused on Leeds Values, student workshops and networking opportunities, Women's Leadership Circles, the allocation of professional development funds for staff, and community-building efforts during COVID.

These efforts appear to have had a desirable impact. The external reviewers note "a positive affinity and strong morale among the faculty and staff that appears to be heavily influenced by the work of the current dean in bringing more people to the table to engage and participate. This approach contributes to the faculty and staff being proud of what the Leeds School is accomplishing." Similarly, the Fall 2021 Campus Culture Survey reported strong results for Leeds across its key measures.

Faculty and Research Personnel

According to the Office of Data Analytics (ODA) profile for AY 2020-2021, faculty and research personnel in Leeds consisted of 74 tenured and tenure-track (TTT) faculty, 62 instructor-track faculty, 38 lecturers, 8 scholars in residence, and 4 research faculty.

Leeds has seen significant growth in TTT faculty in recent years. According to its self-study, the number of TTT faculty members has grown from 58 in Fall 2016 to 72 in Fall 2021 (with 11 additional expected to start in Fall 2022). Both the self-study and external reviewers raise concerns about Leeds' ability to retain these faculty, with salaries being a key issue. The self-study states that "our salaries are below the median for our AASCB peers or below faculty at peer schools with comparable research productivity and impact" and that this challenges the school's ability to attract and retain qualified faculty. Similarly, the external reviewers express concern that "the limitations of available funding have constrained the school's ability to match competitive salaries and retain high performing faculty," and that "the campus approach to promotion and tenure [raise increments] (a flat amount versus based on a percentage) will add to salary compression."

It is worth noting that the data supplied by the self-study and the data supplied by the Office of Data Analytics tell somewhat different stories. Focusing on a comparison with other AACSB-accredited schools, the self-study states that "at present, across all disciplines, we find that we are behind in the salaries we are offering our...full professors." Leeds appears to provide its assistant and associate rank faculty higher salaries compared to other AACSB schools. By contrast, the Data Analytics-supplied numbers that compare CU Boulder business faculty with their AAU public peers, show that Leeds and average public AAU salaries for assistant, associate, and full business professors are largely on par.

As noted above, both the self-study and the external reviewers express worry that the challenges in retaining TTT faculty will put Leeds at risk of failing to meet AACSB accreditation standards. Interestingly, neither the self-study nor the external reviewers highlight any specific research or specialization areas as

meriting particular emphasis when it comes to hiring; rather, the focus is on the overall numbers needed to meet AACSB standards, with Leeds stating (as indicated above) that it prioritizes hires based on the proportion of degree-track courses taught by "scholarly academics" in each academic division (again, AACSB requires 40%).

Undergraduate Education

Leeds has two undergraduate degrees: the Bachelor of Science in Business Administration (BSBA) and the Bachelor of Science in Business (BSBU). The BSBA offers one major (in accounting) whereas the BSBA offers five majors with various optional tracks including:

- Accounting, with an option in computer science integration
- Finance with options in computer science integration and personal financial planning
- Management with options in business analytics, social responsibility and sustainability, computer science integration, information management, leadership, operations management, strategy and entrepreneurship, and talent management
- Marketing with an option in computer science integration
- Real estate with an option in computer science integration

Leeds also offers a business minor (BUSM) with six tracks:

- Accounting
- Accounting and taxation
- Finance and accounting
- Finance and taxation
- Management
- Management and telecommunications

The most recent undergraduate student profile from the Office of Data Analytics identifies 4,998 students enrolled as business majors and 1,760 students enrolled as business minors. The number of students earning business bachelor's degrees in spring 2021 was 1,543. All three of these totals are the most for any CU Boulder academic unit. During the last reporting period in 2014-15, the Leeds School of Business had 3,290 majors, 241 minors, and 745 students earning bachelor's degrees. These are respective increases of 52%, 630% and 107%. These are all remarkable increases in undergraduate enrollments and degrees earned.

The undergraduate student credit hour (SCH) production for the most recent ODA profile year was 88,944, with 14% of these completed by non-majors. The last reporting period recorded Leeds SCH production at 51,553, with 10% of those SCHs completed by non-majors. The percentage of SCH taught by different instructor categories were as follows: TTT faculty (22%), instructor-rank faculty (55%), teaching assistants and graduate part-time instructors (3%), and all others (20%).

Leeds has a relatively new honors program that it describes in its self-study:

Our Honors program was very new at the last ARPAC review. It is in a healthy steady state now. About the top 15% of the freshman class is invited to join the Honors program. Students take 13 of their 64 business credits in Honors courses. Our Honors program does not include a thesis requirement. This was a deliberate choice in the design of the program. Instead, we provide our Honors students exceptional staff support, and most are able to find impressive professional internship opportunities. In addition to the largely curricular Honors program, we also have our most selective program, Leeds Scholars. About 40-45 students join the Leeds Scholars program each year, where they join a community of similarly ambitious and high-achieving students. Two staff members support the programming for the Leeds Scholars. They take their BADM 1250 freshman seminar together and travel together internationally on their first-year global experience (FGX) trip (.

Currently, the campus does not separately track Leeds honors program enrollments. To support a better understanding of the program going forward, ARPAC recommends that Leeds work with the Office of Data Analytics and others to record honors enrollment totals.

A survey of seniors graduating in spring/summer 2021 revealed that 74% were either "satisfied" or "very satisfied" with their academic major, and approximately two thirds expressed satisfaction with the curriculum, quality of faculty and teaching assistant instruction, and employment preparation. However, only 54% of students were satisfied with opportunities for interaction with faculty, and only 60% were satisfied with the clarity of degree requirements. These are comparable satisfaction percentages to the time of the 2014 ARPAC review. Of note, satisfaction with academic advising quality showed a modest improvement: 61% of AY 2021 seniors approved, up from 52% in 2014.

The school's Career Impact strategic initiative has changed undergraduate education in Leeds. The initiative is based on a model that identifies intellectual, personal, experiential and interpersonal objectives for Leeds undergraduates. The Leeds undergraduate core curriculum and capstone experiences are to a large extent grounded in experiential learning, with 40% of students participating in a mentoring program. Career preparation is also a strong element of undergraduate learning, being embedded within the curriculum's overarching goals, expected experiences, and course activities. As Leeds proudly notes in its self-study, "Of the graduating students in an academic year who report that they looked for a job, we have placed close to, or above, 90% of the students by early August".

Leeds utilizes multiple measures with specific direct and indirect performance targets to assess undergraduate program effectiveness. These include freshman, sophomore and senior year-end exams, a marketplace simulation, the *Diverse Perspectives* survey, and a set of course artifacts that includes case studies, course papers, Excel exams, and verbal presentations. The use of multiple measures with explicit targets and performance levels is impressive for a unit that serves such a significant portion of CU Boulder undergraduate population.

Graduate Education

Leeds offers two master's graduate degrees: MS and MBA, and a PhD in Business Administration. The school's master's programs offer 13 majors between them with additional tracks or "options":

- Master of Science with majors in accounting, business administration, business analytics (including an MBA dual degree option), finance, real estate, supply chain management (including an MBA/ dual degree option), and taxation
- Master of Business Administration with a dual degree major and options in law; art history; art practice; anthropology; business analytics; computer science; Masters of the Environment (MENV); environmental studies; German; supply chain management; Technology, Cybersecurity, and Policy (CYBR); and theatre and dance
- Executive MBA major
- Professional MBA major
- Joint MBA/MS Telecommunications major

Leeds also offers graduate certificates in business analytic methods, marketing analytics, supply chain analytics, and supply chain foundations.

The most recent graduate student profile by the Office of Data Analytics identifies 679 business master's majors and 34 business doctoral majors, for a total of 713 Leeds graduate student majors (ODA). There were 454 students who earned master's degrees from Leeds in spring 2021 (the highest count among CU Boulder academic units). Six students were awarded doctoral degrees. Since the last program review in 2014-15, Leeds had 298 master's majors and 43 doctoral majors, for a total of 341 graduate majors. The number of enrollments in masters degrees programs more than doubled since the last program review and the number of doctoral students has remained somewhat similar.

The graduate student credit hour (SCH) production for the most recent ODA profile year was 12,908. This represents a 138% increase from the 5,404 graduate student credit hours recorded prior to the 2014 review. ODA counts SCH by the course subject and number of the sponsor course, not the department of the instructor. ODA does not include courses taught through Continuing Education. The percentage of SCH taught by different instructor categories were as follows: TTT faculty (41%), instructor-rank faculty (33%), and all others (25%). In checking these numbers, ARPAC noted that there is a discrepancy between the student credit hours reported by Data Analytics and those described in Leeds' self-study report. Leeds' self-study reports 16,429 masters level student credit hours alone in 2021. To clarify the discrepancy, it would be helpful for Leeds to include the source it used to assess the graduate SCHs listed in Table 6A.

The self-study describes the teaching and research opportunities for graduate students as following an apprenticeship model. Graduate students gain initial teaching experience supporting a faculty mentor, followed by teaching two sections of the same course independently. Graduate students who are teaching are expected to participate in graduate teaching workshops. Doctoral students gain hands-on research experience by completing a faculty-mentored research assistantship during their studies.

As described in their self-study, "full time MBA students have access to numerous special-interest student clubs and organizations, including student governance. Leadership roles in these clubs and organizations are also important professional development opportunities students can leverage".

Regarding recent graduate program revisions Leeds invited employers and faculty to participate in a "Career Impact Insights" focus group to consider how the school's MBA program compares to peer institutions and to recommend improvements. As a result, the MBA programs underwent a curriculum redesign that was implemented in AY 2019-20. Changes include a shift of quantitative methods coursework, a greater emphasis on ethics and on the value of diverse information in decision making, and the introduction of "teamwork and leadership," "managerial communications," and" data and decisions" courses.

Additionally, in 2021, Leeds introduced two new professional MBA options: a hybrid evening MBA (a new modality for accessing the evening curriculum) and an executive MBA (that launched with 22 enrolled students). Revisions were made to the Bachelor's-Accelerated Master's (BAM) program to give BA students greater flexibility in taking graduate courses and to the curriculum for the Business Analytics and Supply Chain Management, with a greater emphasis on programming languages and approaches to machine learning, and bi-weekly workshops hosted by industry.

The Leeds Career Management Office supports graduate students in developing their professional resumes, improving their performance in job interviews, and career counseling. Leeds employment and

placement data shows an average of 80% of graduate students being placed (this does not include students who started their own business or returned to their former employer). A high percentage of doctoral students (83%) are offered positions in academia, regulatory agencies, or industry.

As with their undergraduate programs, Leeds assesses the effectiveness of its graduate programs using multiple data sources to evaluate the extent to which performance targets are met. Measurement foci include select course assignments, individual and group presentations, and course exam performance. Leeds assesses its doctoral program across five competencies that include building an active research pipeline, presentation and interview skills, and teaching proficiency.

The recent campus culture survey indicated that Leeds graduate students expressed a generally positive experience within Leeds, with most of the responses to prompts describing a respectful and safe environment. The external review committee also noted high student satisfaction with MBA graduate placements:

The professional mentoring program in the graduate office is particularly impressive. Serving the evening and full-time MBA eligible students, about 70 to 80% of the first-year students participate. Students commended the program for its effectiveness in enhancing student learning, preparation and networking opportunities.

In student surveys and the ERC report, ARPAC found no record of graduate student recommendations with respect to improving climate, course experiences or work conditions.

Postdoctoral Training

Leeds does not have any postdoctoral fellows at the time of this writing. Per the self-study, "the Center for Research on Consumer Financial Decision Making sponsors one postdoctoral follow approximately every two years. The postdoctoral fellows work collaboratively on research under the guidance of center faculty."

Staff

According to the Office of Data Analytics profile for AY 2020-2021, staff personnel in the Leeds School of Business consisted of 125 university staff, 7 classified staff, and 278 student hourly employees. Leeds provisions its university staff by work area as follows:

Academic Services: 42 Business Services: 2 Communication: 10 External Relations: 9 Facilities, Finance and Human Resources: 7 Information Technology Services: 9 Research Services: 2 Student Services: 16 Professional Assistant: 9 Temporary Staff: 19

The largest group, focused on academic services, is divided into seven teams: Academic Advising, Career Development, Office of Diversity Affairs, First-Year and Global Programs, Honors Program and Leeds

Scholars, Recruitment, and Business Minor. These staff support over 3,900 undergraduates, a caseload of 92.8 students (assuming all 42 staff work directly with students).

Despite the workload (which includes student academic and career placement support), Leeds has the best 4-year graduation rate on campus (77% in Spring 2020), which is a significant improvement since the last ARPAC review (54% for the entering class of fall 2010). The retention rate for Leeds for undergraduate students (96% in Spring 2021) is also the highest at CU Boulder.

The Leeds self-study details concerns over the below market salaries of the school's academic and career advisors but expresses hope that the Colorado Equal Pay Act may rectify some of those differences. Recent resignations and the limited ability to offer competitive salaries compared to CU Denver may lead to turnover of experienced academic and career staff who are critical to Leeds mission and vision. Likewise, there has been turnover of Leeds technology services staff who are receiving offers that are, on average, \$35,000 greater than what Leeds can offer.

Budget

Leeds draws its funds from six sources: general funds (70.5% in 2021), reserves (13.7%), current gifts (5.4%), endowment distributions (4.1%), auxiliaries (1.6%), and net transfers (4.7%). Between 2017 and 2020, the school's operating resources grew 44.5%, with reserves being the largest area of growth (up 91% during this period, according to the self-study). The external reviewers specifically highlight this growth in reserve funds, noting that Leeds "exhibited a strong fiscal planning resulting in growth in reserves to support the Rustandy building addition." Similarly, the self-study states that "the Rustandy addition and renovation of Koelbel was the first time in CU's history that a school did not request campus or tuition dollars for infrastructure," and that "Leeds funded the majority of the project through our own fundraising efforts and using a bit of our reserves."

Leeds identifies faculty hiring and retention efforts as a key budgetary priority. Given the concerns for Leeds' continued AACSB accreditation outlined above (in sections 3.2.1 on "Strategic Vision and Planning" and 3.2.5 on "Faculty and Research Personnel") this is an appropriate prioritization.

Another issue emerging in both the self-study and the external reviewers' comments is unease and uncertainty about the new campus budget model (which had not yet been finalized and announced at that time), saying that "our biggest concern is that the campus will levy higher tax rates on Leeds tuition revenues, which would result in our having to significantly scale down our activities and programs, making Leeds uncompetitive in the business higher education markets." The external reviewers shared this concern, while also noting the challenges posed by the previous budget model: "the current incremental approach to budgeting limits the ability to plan for growth at a time when the Leeds school has significant opportunities for growth in the undergraduate and/or master's program." At a Fall 2022 meeting with ARPAC, Leeds leadership noted that the school has convened a working group to better understand the new budget model, now that that model's details have been finalized.

Space and Infrastructure

As noted above, one of the school's recently completed initiatives was the Rustandy expansion, involving the construction of a building linking Leeds with the College of Engineering and Applied Science, and that includes 38,530 square feet of new space. Leeds also renovated 31,285 square feet of its own building. That renovation added 16 team rooms, three new classrooms, four new seminar/conference rooms, three renovated classrooms, a cafe, and many new student study areas.

Support Needs

The self-study expresses a wish for how Leeds might work more effectively with other offices on campus, including the University Counsel, the Controller's Office, and the Office of Contracts and Grants, to better address obstacles to, and challenges involved in, collaborating with external partners such as with representatives of foundations, industry, and other universities.

Both the self-study and external review reports express concerns about increased centralization of campus services. The self-study focuses on the centralization of industry and foundation relations, discussing the need to continue "to not only best communicate the philanthropic goals but also the importance of engagement and reputation with the business community." The external reviewers cast a broader focus, noting that "while activities such as HR could gain efficiencies through centralization, activities related to corporate engagement and student services are particularly critical for the success and effectiveness of the business school."

The external reviewers also note the importance of Advancement to Leeds' long-term financial planning, observing with concern that the materials received during the ARPAC process "did not provide a clear picture regarding how [A]dvancement aligns with the School's strategic priorities." However, ARPAC's fall 2022 meeting with Leeds leadership left the impression that the school's relationship with advancement personnel appears to be strong.

Recommendations

The members of the Academic Review and Planning Advisory Committee address the following recommendations to the Leeds School of Business and to the offices of responsible administrators:

To the Unit:

- 1. Build on the successes of the 2018-2022 Leeds Strategic Plan to develop a new planning document after a new dean has been appointed.
- 2. Continue the process of updating Leeds' bylaws, along with other policies and procedures.
- 3. Build on the success of End the Gap by developing a more comprehensive DEI strategy that continues that initiative's work while also focusing on issues such as recruiting and retaining underrepresented and first-generation faculty and students.
- 4. Continue to address needs identified in the 2017 CFI Group Workplace Climate Survey, 2017 CU Employee Engagement Survey, 2020 Campus and Workplace Culture Survey, and Fall 2021 Campus Culture Survey, including to develop clearer evaluation and promotion guidelines, to address problematic behaviors, to provide opportunities for employee recognition, and more effective faculty and staff integration.
- 5. Develop a comprehensive curriculum and accreditation needs strategy that includes a reassessment of faculty teaching assignments (i.e., to increase teaching by tenure-track faculty), a "scholarly academic" standards definitional revision, and additional tenure-track faculty hiring, among other possibilities.
- 6. Continue to work with the provost, Office of Advancement, and other campus offices to identify and secure funds directed at retaining current faculty, both by exploring opportunities for obtaining new funding and by considering a realignment of existing Leeds resources.
- 7. Further improve staff career advancement paths in light of the Colorado Equal Pay for Equal Work Act's implementation.
- 8. Continue to work with University Counsel, the Campus Controller's Office, the Office of Contracts and Grants, and others to identify and address challenges involved in collaborating with external partners such as foundations, industry, and other universities.
- 9. Work with the Office of Data Analytics, the Office of the Registrar, and others to ensure the accurate recording of Leeds Scholars and honors program enrollments.

To the Provost:

- 10. Work with Leeds on a plan to ensure that the school possesses the scholarly academic faculty necessary to retain AACSB accreditation.
- 11. Continue to work with Leeds to develop a faculty retention strategy.

Required Follow-up

The dean of the Leeds School of Business shall submit two follow-up reports—one due on the first of April 2024 and one due on the first of April 2026. The follow-up reports are to be addressed to the provost and other central campus leadership and shall focus on the implementation of the recommendations from ARPAC detailed herein. The relevant central campus leadership and the provost will also respond to all outstanding matters under their purview arising from this review year's recommendations. Relevant central campus leaders and the provost will submit a follow-up report due on June 1, 2024, and June 1, 2026.