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Chair of the Assembly of the Academic Senate Faculty Representative to the Regents University of California 1111 Franklin Street, 12th Floor Oakland, California 94607-5200

April 28, 2021

MICHAEL T. BROWN PROVOST AND EXECUTIVE VICE PRESIDENT UNIVERSITY OF CALIFORNIA

Re: Approval of UCB Master in Analytics

Dear Michael,

Mary Gauvain

Telephone: (510) 987-0887

Email:mary.gauvain@ucop.edu

In accordance with the *Universitywide Review Processes For Academic Programs, Units, and Research Units* (the "Compendium"), and on the recommendation of CCGA, the Academic Council has approved UC Berkeley's proposal to establish a Master in Analytics self-supporting graduate and professional degree program (SSGPDP).

Because this is a new degree title, and the Assembly of the Academic Senate is not meeting within 30 days of CCGA's approval, Council must approve the program per Senate Bylaw 125.B.7.

I am enclosing CCGA's report on its review of the new program, and respectfully request that your office complete the process of obtaining the President's approval.

Sincerely,

Janvain May

Mary Gauvain, Chair Academic Council

cc: Academic Council UCB Senate Director Banaria IRAP Analyst Procello

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COORDINATING COMMITTEE ON GRADUATE AFFAIRS (CCGA) Amr El Abbadi, Chair amr@cs.ucsb.edu

ACADEMIC SENATE University of California 1111 Franklin Street, 12th Floor Oakland, California 94607-5200

April 22, 2021

ACADEMIC SENATE CHAIR MARY GAUVAIN

Dear Chair Gauvain:

At its April 7 meeting, the Coordinating Committee on Graduate Affairs (CCGA) voted 10-0-1 to approve a proposal from the Berkeley campus for a Master of Analytics program.

The Master in Analytics is a self-supporting graduate professional degree program (SSGPDP) that targets students with prior engineering and technical preparation and with an interest in business analytics in engineering and technology industries. The program aims to meet the rising demand for professionals skilled in the analytical tools for data-driven decision making to address complex business challenges across industries ranging from e-commerce to healthcare, from energy to transportation

The Department of Industrial Engineering and Operations Research (IEOR) currently runs a successful Master of Engineering (MEng) with 160 students. The proposers explained the difference between these two programs. While they overlap in the core courses (9 units of analytical methods), Master of Analytics has a strong technical component with 12 units of technical elective courses, an analytical lab and an internship. In contrast, MEng focuses on leadership training (8 units of leadership courses) and a capstone project. The proposers believe the new program would not impact the operation of MEng.

Diversity will be addressed through numerous channels, including financial aid for accessibility, outreach at national diversity conferences, participation in the GEM consortium (a partnership between industry and universities to increase the number of underrepresented students pursuing advanced degrees in engineering and science), and the enhancement of department climate and culture.

Three external reviewers, one at other UC campuses and two at other universities, agreed to review the proposal. All of the reviewers are well-established experts in the relevant fields. The reviewers were all strongly supportive of the program, and agreed that it was a rigorous, high-quality program.

As you know, CCGA's approval is the last stop of the Academic Senate side of the Systemwide review and approval process except when the new degree title must be approved by the President, under delegated authority from The Board of Regents. I submit this for your review and have enclosed the Lead Reviewer's report. Please do not hesitate to contact me if you have further questions regarding the proposal.

Sincerely,

Amr El Abbadi

Amr El Abbadi CCGA Chair

 cc: Robert Horwitz, Academic Senate Vice Chair CCGA Members
Hilary Baxter, Academic Senate Executive Director
Michael LaBriola, Academic Senate Assistant Director
Chris Procello, Academic Planning and Research Analyst
Lisa García Bedolla, UCB Dean of the Graduate Division
Jocelyn Surla Banaria, UCB Senate Executive Director
Sumei Quiggle, UCB Senate Associate Director UNIVERSITY OF CALIFORNIA, IRVINE

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Department of Physics and Astronomy School of Physical Sciences 4129 Frederick Reines Hall Irvine, CA 92697-4575 Phone (949) 824-6911

DATE: April 19, 2021

TO: Amr El Abbadi

FROM: Arvind Rajaraman

SUBJECT: CCGA Review of the Proposed Master's in Analytics at UC Berkeley

The Coordinating Committee on Graduate Affairs reviewed the proposal for a new selfsupported Master in Analytics program at UC Berkeley. After careful consideration, CCGA unanimously approved the proposal at its meeting on April 7, 2021.

The proposed program is a one-year program (2 semesters + 1 summer) 29-unit Master of Science program designed for recent graduates and early professionals. The proposed program aims to meet the rising demand for professionals skilled in the analytical tools for data-driven decision making to address complex business challenges across industries ranging from e-commerce to healthcare, from energy to transportation.

The program consists of 4 core courses, 4 elective courses, a 10-week summer internship, plus an optional 50-hour intensive Python programming bootcamp and has a total cost of \$63,000. All the courses are offered by the Department of Industrial Engineering and Operations Research (IEOR). IEOR will offer a new section in each of the three core graduate courses (these are shared with Mechanical Engineering). The new sections will be taught by regular ladder faculty as overload and a recently hired LPSOE. The program plans to use existing graduate courses in IEOR for the electives. This will be a Plan II program with a comprehensive exam at the end of the academic year

Three external reviewers, one at other UC campuses and two at other universities, agreed to review the proposal. All of the reviewers are well-established experts in the relevant fields. The reviewers were all strongly supportive of the program, and agreed that it was a rigorous, high-quality program that would enhance the core missions of the university.

CCGA agreed that this was overall an excellent proposal in a disciplinary area that is important both academically and economically, with a well-designed curriculum and with resources in place or under development to support the program well. At the April 2021 CCGA meeting, CCGA members unanimously voted that the program should be approved.

If you have any questions or any concerns about the review of this proposal, please let me know.

Arvind Rajaraman Professor and Chair of Graduate Council,

UC Irvine.