

Ahmet Palazoglu

Chair, Assembly of the Academic Senate Faculty Representative,

UC Board of Regents

Academic Senate

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Katherine S. Newman

Provost and Executive Vice President, Academic Affairs

Re: Academic Council's Recommendations on CSU Doctoral Program

Proposals

Dear Provost Newman,

On behalf of the Academic Council, I am forwarding the attached recommendations regarding seven proposed doctoral programs submitted by the California State University under California <u>Assembly Bill (AB) 656</u> (2023).

Per AB 656, the Coordinating Committee on Graduate Affairs (CCGA) conducted the Senate's review to assess whether the CSU proposals duplicate existing or planned UC doctoral programs. The committee voted unanimously to approve two proposals (the EdD in Educational Technology at CSU Fullerton and the DEng in Human Factors at San José State University) and to decline five others it found substantially duplicative of UC programs.

The Academic Council endorsed CCGA's findings and recommendations at its November 17 meeting. The Council's vote was 17 in favor and 1 opposed. CCGA's full reviews are attached.

Please let me know if you have any questions.

Sincerely,

Ahmet Palazoglu

Chair, Academic Council

cc: Academic Council

CCGA

Director of Academic Planning and Policy Corona

Institutional Research and Academic Planning Analyst Procello

Senate Division Executive Directors

Senate Executive Director Lin



Academic Senate

COORDINATING COMMITTEE ON GRADUATE AFFAIRS
Partho Ghosh, Chair
pghosh@ucsd.edu

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November 10, 2025

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Ahmet Palazoglu

Chair, Academic Senate

Dear Chair Palazoglu,

Last academic year, the state legislature passed AB 656, which allows CSU to offer "professional or applied doctoral degrees statewide that do not duplicate University of California doctoral degrees and satisfy certain requirements." This includes "UC doctoral degree programs that are offered or under review by the UC." At the November 5 CCGA meeting, the committee reviewed seven CSU proposals. The Council of Graduate Deans also reviewed the proposals and submitted its report to CCGA prior to the meeting.

CCGA found that five of the seven proposals were substantially duplicative of UC programs that are offered or under review (e.g., in 5-Year Planning Perspectives) and voted unanimously not to approve them. Two proposals were unanimously approved. I have attached the scoring rubrics, reviews, and CSU proposals to this letter, and I am summarizing them in the table on the following page.

| CSU | Degree | Vote | Page |
|-----------|-------------------------------|----------|---------|
| Campus | | Outcome | |
| Fullerton | EdD in Educational Technology | Approved | 1-11 |
| San Jose | Deng in Human Factors | Approved | 12-36 |
| Long | DTI in Translation and | Declined | 37-50 |
| Beach | Interpreting | | |
| San Diego | DSc in Applied Science of | Declined | 51-73 |
| | Human Experience | | |
| San Diego | PsyD in Counseling | Declined | 74-99 |
| | Psychology and School | | |
| | Psychology | | |
| San Diego | DSc in Chemical | Declined | 100-123 |
| | Biotechnology and | | |
| | Biopharmaceutical Science | | |
| Long | PsyD in Counseling | Declined | 124-142 |
| Beach | Psychology | | |
| COGD | | | 143-144 |
| Review | | | |

CCGA is indebted to the seven members who undertook this review process. It also would like to thank IRAP staff Chris Procello, Carmen Corona, and Todd Greenspan for their assistance with this new undertaking.

Please let me know if I can answer any questions for you regarding this matter.

Sincerely,

Partho Ghosh Chair, CCGA

cc: Academic Senate Vice Chair Scott

Academic Senate Executive Director Lin

Academic Senate Assistant Director LaBriola

CCGA Members

Academic Planning and Research Analyst Procello

Director of Academic Planning and Policy Corona

Executive Advisor, Academic Planning and Policy Greenspan

UC/CSU Program Duplication Review Rubric

Campus: CSU _Fullerton_- Ed. D. in Educational Technology

Reviewer:_IreneeBeattie_

Date: __10/21/25_____

| | Little to No Duplication (more dissimilar than not) | Some Duplication (warrants closer review) | Nearly Total /Total Duplication (much more alike than different) |
|----------------------|--|---|--|
| | | | |
| Title of Projected | X | | |
| Doctoral Degree | | | |
| Degree Designation | X | | |
| (e.g. EdD) | | | |
| Program Description | | X | |
| Program Learning | | X | |
| Outcomes | | | |
| External Program | n/a | | |
| Accreditation (where | | | |
| applicable) | | | |
| Required | Χ | | |
| Coursework/Program | | | |
| Structure | | | |
| Cumulating | Χ | | |
| Experience/Research | | | |
| Orientation | | | |
| Overall Assessment | Χ | | |
| | | | |
| | | | |

Relevant UC Campuses/Programs (please list):

UC Berkeley – Ph.D. in Education: Learning Sciences & Human Development

UC Irvine - Ph.D. in Education

UC Davis - Ph.D. in Education

UC Santa Barbara - Ph.D. in Education

UC San Diego - Ph.D. in Education Studies

Comments regarding program similarities:

The CSU Fullerton Ed.D. in Educational Technology overlaps conceptually with UC Education Ph.D. programs in its emphasis on digital learning, instructional design, and innovation in teaching. However, it diverges substantially in structure and purpose. The CSU degree is a professional doctorate focused on applied leadership and technology implementation, offered fully online for mid-career practitioners. In contrast, UC Ph.D. programs are research-intensive, residential, and oriented toward theoretical and empirical scholarship. Overlap is thematic rather than structural, with different degree purposes, modalities, and intended student populations.

To: CCGA Members

From: Irenee Beattie, Lead Reviewer

Re: CSU Fullerton – Doctor of Education (Ed.D.) in Educational Technology

Date: October 2025

Overview of Proposal

CSU Fullerton proposes a fully online, practice-oriented Doctor of Education (Ed.D.) in Educational Technology designed to prepare K–12 and postsecondary leaders to integrate, evaluate, and lead technology-based innovation in education. The program emphasizes design thinking, instructional design, systemic change, and applied research through a culminating "Problem of Practice" dissertation. Admission requires a master's degree and relevant professional experience.

UC Comparison and Duplication Assessment

Across UC campuses—Berkeley, Irvine, Davis, Santa Barbara, and San Diego—Ph.D. programs in Education include research clusters in learning sciences, instructional design, digital pedagogy, and technology-mediated learning. These UC programs are research doctorates emphasizing theoretical advancement and methodological training, typically requiring multiple researchmethods courses, qualifying examinations, and a traditional dissertation.

The CSU Fullerton Ed.D. covers similar intellectual terrain but within a professional and applied framework. Coursework centers on leadership, design thinking, and applied use of educational technology; research expectations focus on practical inquiry addressing real-world organizational challenges. The CSU program's online, part-time design targets mid-career professionals, while UC's residential Ph.D.s prepare academic researchers.

Program learning outcomes at CSU Fullerton emphasize technology leadership, change management, and applied problem-solving, whereas UC doctoral outcomes focus on theory building and empirical research. Overall, the overlap is moderate and thematic rather than structural.

Process Observation

This proposal is part of the first cohort of CSU doctoral programs reviewed under the new UC–CSU duplication process (2025–26). Because UC research doctorates and CSU professional doctorates differ in purpose and structure, shared topical focus should not be interpreted as duplication. Future guidance might clarify distinctions between overlap in subject matter and duplication in degree purpose.

Recommendation

I recommend that CCGA register **no formal objection**. The CSU Fullerton Ed.D. in Educational Technology presents some thematic overlap but no structural duplication with UC doctoral offerings in Education.

UC Comparison Programs (for reference):

UC Berkeley - https://gse.berkeley.edu/learning-sciences-and-human-development

UC Irvine - https://education.uci.edu/phd-overview.html

UC Davis - https://education.ucdavis.edu/graduate/phd-education

UC Santa Barbara - https://education.ucsb.edu/graduate/phd-education

UC San Diego – https://eds.ucsd.edu/graduate/phd-program.html

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DOCTORAL DEGREE PLANNING RESOURCES

CONCEPTUAL PROPOSAL FOR UC REVIEW OF CSU PROFESSIONAL AND APPLIED DOCTORAL PROGRAMS

CSU Proposed Degree Information, Campus Information, and Contact Information

| Title of Projected Doctoral Degree | Educational Technology |
|---------------------------------------|--|
| Degree Designation (e.g., EdD) | EdD |
| Proposed CIP Code | 13.0501 |
| Projected Implementation Date | Fall 2027 |
| (1st Cohort Enrolled) | |
| Campus | Fullerton |
| College | College of Education |
| Department | Elementary and Bilingual Education |
| Contact Name(s) and Email(s) | Tim Green, tgreen@fullerton.edu; Loretta Donovan, Idonovan@fullerton.edu |

Curricular and Academic Elements

1. Provide a summary of the purpose for and a description of the proposed doctoral degree, including targeted audience(s).

Our Ed.D. in Educational Technology meets the need to develop educational leaders who can solve real-world challenges in teaching and learning contexts through implementing research-based best practices that focus on educational technology. The program will primarily target professionals in PK-12. However, professionals in higher education, nonprofit, and corporate training sectors will also find value in the degree.

2. Describe how the proposed doctoral curriculum is advanced beyond a master's degree to justify a new professional and/or applied doctorate, distinct from a UC doctoral program.

Our proposed Ed.D. in Educational Technology extends beyond the master's level by emphasizing advanced leadership, applied research, and change management skills essential for effectively leading and supporting technology use in teaching and learning (particularly in PK-12 settings). While UC doctoral programs typically focus on theory and academic research, our professional doctorate is

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intentionally practice-based. It will prepare graduates to design, implement, and support research-based solutions to problems of practice across diverse educational contexts. Our graduates will be equipped to lead the integration of educational technology in ways that support innovation, drive learning improvement, and ensure equitable access to learning opportunities.

- 3. Describe the admission criteria for the proposed doctoral degree (including undergraduate preparation).
 - Master's degree in education or related field
 - Minimum GPA of 3.0
 - Professional experience in educational technology or three years of teaching experience
 - Statement of Problem of Practice
 - Two letters of recommendation (academic and professional)
 - Interview
- 4. List the proposed doctoral program course and culminating doctoral project descriptions including, as appropriate, a description of qualifying and/or comprehensive exams, professional and/or clinical experiences, practicums, projects, and research.

There are no specific qualifying and/or comprehensive exams or professional and/or clinical experiences. Candidates must have completed all coursework with a grade of B or better to be eligible to advance to candidacy. Integral to these courses is developing a Problem of Practice statement, which will be the dissertation's focus.

The final culminating doctoral project (the dissertation) courses are described below.

Dissertation Research I

Engage in dissertation research, gather data, and begin data analysis. Participate in monthly seminars, present research progress, gain insights from guest speakers, and refine your study through feedback.

Dissertation Research II

Complete dissertation research by finalizing data analysis, findings, and implications. Prepare for and conduct dissertation defense. Engage in seminars, present findings, receive expert feedback, and refine your work to contribute meaningful insights to educational technology and leadership.



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5. Describe the proposed culminating doctoral experience (doctoral dissertation, doctoral project, or doctoral capstone).

Our proposed culminating experience will be a doctoral dissertation. The dissertation will focus on a real-world Problem of Practice (PoP) in educational technology that a candidate has identified from their professional context. Candidates will apply research-based methods to explore the PoP and determine a solution that will be implemented to address the PoP.

6. List the program learning outcomes for the proposed doctoral degree.

Graduates of the Ed.D. in Educational Technology will be able to:

- 1. Develop research-based solutions for real-world problems of practice in educational technology.
- Conduct original research in educational technology that contributes to the field's body of knowledge.
- 3. Apply change theory to bring about lasting improvements in educational environments.
- 4. Strategically integrate emerging technologies to improve instructional experiences and learning outcomes.
- Apply design thinking principles to innovative solutions for educational challenges.
- 6. Evaluate ethical and legal considerations in educational technology integration.
- 7. Demonstrate leadership skills in managing educational technology projects and initiatives.
- 8. Implement technology-enhanced activities promoting effective collaborative learning experiences.
- Advocate for accessible and inclusive educational technologies that address the diverse learning needs of all students.

7. Describe the infrastructure required for this proposed doctoral program.

The program will leverage existing campus resources, including the CSUF Pollak Library's professional journal subscriptions, CSUF IT's infrastructure (LMS/Canvas, CEDA/devices, faculty devices, software, and hardware), CSUF Academic Affairs' Faculty Development Center and academic technology support, a data analyst from the College, and the Department coordinator. Additionally, the College will need to provide:

- A 3 or 6-unit course release for the program director (dependent on enrollment data)
- A dedicated program support staff member
- At least one tenure-track faculty line
- Support for course development through stipends or course releases

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Appendix A

 Doctoral Program Roadmap. Provide a doctoral program roadmap serving as a visual representation of the pathway by term of program requirements, including the sequence of completing courses and any offsite, internship, and/or culminating requirements, and the total units per term and total overall units for the program.

All courses are facilitated 100% online. All courses will have asynchronous and synchronous components.

Year 1

Semester 1 (Fall)

- Introduction to Ed.D. Program (2 units).
- Foundations of Educational Leadership and Change (3 units)
- Principles of Educational Technology and Learning Science (3 units)

Semester 2 (Spring)

- Educational Policy and Advocacy in a Digital Age (3 units)
- Foundations of Educational Inquiry (3 units)
- Refining a Problem of Practice (2 units)

Semester 3 (Summer)

- Design Thinking and Innovation in Education (3 units)
- Trends and Issues in Educational Technology (3 units)

Milestone 1 à Problem of Practice Presentation

Year 2

Semester 4 (Fall)

- Instructional Design and Learning Technologies (3 units)
- Leading Systemic Change in Educational Technology (3 units)
- Addressing a Problem of Practice (2 units)

Semester 5 (Spring)

- Professional Development and Coaching in Educational Technology (3 units)
- Qualitative and Quantitative Research Methods (3 units)
- Dissertation Seminar: Proposal Development (2 units)

Semester 6 (Summer)

- Program Evaluation and Assessment in Educational Settings (3 units)
- Dissertation Seminar: Proposal Development Part 2 (3 units)

Milestone 2 à Dissertation Proposal Defense

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Year 3

Semester 7 (Fall)

Dissertation Research 1 (8 units)

Semester 8 (Spring)

Dissertation Research 2 (8 units)

Milestone 3 à Dissertation Defense

2. Postgraduate Professional Job Objectives

a. Describe relevant statewide workforce demands for the proposed doctoral program.

Educational technology is increasingly embedded in PK-12, higher education, and corporate environments. This has created a demand for leaders who can guide the effective use of educational technology. Beyond technical proficiency, schools and other organizations need individuals who can lead change, support innovation adoption, and align educational technology with teaching and learning goals. According to the Occupational Outlook Handbook from the U.S. Bureau of Labor Statistics, the roles related to instructional coordination and training and development are projected to grow by 7–10% through 2032. This growth signals a continued change in how schools and organizations deliver teaching and learning (through increased use of digital tools) and how they approach professional development, instructional design, and leadership. In California, which has the largest public education system in the nation, this need is especially urgent as districts, colleges, and training providers look for leaders who can turn innovation (especially related to educational technology) into meaningful, equitable, and lasting improvements to teaching and learning.

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Describe employment opportunities for the proposed doctoral program.

Graduates from our EdD in Educational Technology Program will be prepared for various roles that integrate educational technology. Most will find opportunities in PK-12 leadership as they leverage technology to bring about innovation and change to enhance and improve teaching and learning. These jobs include (but are not limited to) Director of Technology, Program Coordinator, and Assistant Superintendent of Instructional Services. Other graduates may find opportunities in higher education, non-profit, and corporate sectors or as consultants to design and develop technology-mediated instruction (e.g., training, courses, instructional materials) and to lead technology-focused initiatives to facilitate professional development and training.

c. If applicable, describe the national or state-wide professional accreditation/certified licensure(s) and how the accreditation/licensure(s) will be aligned to the proposed doctoral degree title.

There are no licensure requirements. As such, this is not applicable for the Ed.D. in Educational Technology.

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3. Analysis of potential UC duplicate doctoral degree programs. Complete the table below.

Title of CSU Proposed Doctoral Program: EdD in Educational Technology

| UC Campus | Degree Duplication | UC Degree Title and Designation | UC Website(s) reviewed and date accessed |
|------------------|-----------------------|--|--|
| | (Yes/Potential/No) | Designation | ALL sites accessed July 18, 2025 |
| Berkeley | No | PhD in Education | https://bse.berkeley.edu/what-we-do/maphd-program |
| Davis | No | PhD in Learning & Mind Sciences | https://education.ucdavis.edu/phd-education |
| Irvine | No | PhD in Education (Learning, Cognition, & Development) | https://education.uci.edu/phd-overview.html |
| Los Angeles | No | EdD in Educational Leadership | https://seis.ucla.edu/academics/department-of-education/professional-degrees/educational-leadership-program-elp/ |
| Merced | No | n/a | https://www.ucmerced.edu/academics/graduate- programs |
| Riverside | No | PhD in Education | https://education.ucr.edu/doctoral/education-policy- analysis-and-leadership |
| Santa Barbara | No | PhD in Education | https://education.ucsb.edu/academic-programs/dept- of-education/phd-program |
| Santa Cruz | No | PhD in Education | https://education.ucsc.edu/academics/phd-program-designated-emphasis/ |
| San Diego | No | EdD in Ed Leadership & PhD in Education: Transforming Education in a Diverse Society | https://eds.ucsd.edu/graduate/doctoral/phd/index.html |
| San Francisco | No | n/a | https://graduate.ucsf.edu/admission/programs |

Provide a summary of your analysis. If there is a potential for duplication, please contact app@calstate.edu for advice.

A review of the 10 UC's School/Colleges of Education shows that the UC system doctorate programs primarily focus on educational leadership, policy, and teacher education. A small number of the UC Doctorate programs include a STEM or technology focuses, including UC Berkeley, Davis, Irvine, UCLA, San Diego, and Santa Barbara, where research areas span digital learning, computational thinking, and STEM equity. UC Riverside and Santa Cruz have limited or have no specialized focus on STEM or educational technology within their doctoral education programs. The proposed CSUF program is more specific about technology innovation,



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leadership, and integration. The program outcomes and target population are not in conflict with UC Doctoral programs.

Deadline to submit to the CSU Chancellor's Office: **August 1**Deadline to submit to the UC Office of President: **September 15 (submitted by CSUCO)**

Submit completed proposal package using the Smartsheet submission form:

https://app.smartsheet.com/b/form/f44c90ae00524cf6848fbf15a105b9b9

Academic Programs, Innovation and Faculty Development

CSU Office of the Chancellor 401 Golden Shore, 6th Floor Long Beach, CA 90802-4210

Contact Us

Academic Programs, Innovation and Faculty Development Caron Inouye, Ph.D.
Interim State University Dean, Academic Programs
Phone (562) 951-4154
cinouye@calstate.edu

Academic Programs, Innovation and Faculty Development is on the Web: http://www.calstate.edu/APP/

UC/CSU Program Duplication Review Rubric

| Campus: CSU | _San Jose State University_ D.Eng in Human Factors |
|-------------|--|
| Reviewer: | _Joe McFadden |
| Date: | 27 Oct 2025_ |

| | Little to No | Some Duplication | Nearly Total /Total |
|----------------------|------------------|------------------|---------------------|
| | Duplication | (warrants closer | Duplication |
| | (more dissimilar | review) | (much more alike |
| | than not) | | than different) |
| | | | |
| Title of Projected | Χ | | |
| Doctoral Degree | | | |
| Degree Designation | | X | |
| (e.g. EdD) | | (UCB-Biomech) | |
| Program Description | Χ | | |
| Program Learning | | X | |
| Outcomes | | (UCSD) | |
| External Program | Χ | | |
| Accreditation (where | | | |
| applicable) | | | |
| Required | Χ | | |
| Coursework/Program | | | |
| Structure | | | |
| Cumulating | Χ | | |
| Experience/Research | | | |
| Orientation | | | |
| Overall Assessment | Х | | |
| | | | |
| | | | |

Relevant UC Campuses/Programs (please list):

Berkeley/Ph.D. in biomechanics and public health

Berkeley/Ph.D. in Information Management & Systems in Human-computer Interaction

Davis/Ph.D. in Mechanical & Aerospace Engineering

San Diego/Ph.D. in Cognitive Science or Computer Science/Engineering (Design Lab collaboration)

Comments regarding program similarities:

<u>UC Berkeley</u>— Biomechanics and Public Health in the <u>Department of Mechanical Engineering</u> offers a Ph.D. as well as a D.Eng, the latter of which is the same degree designation proposed for the CSU San Jose program. However, the Berkeley program is focused on mechanical engineering (in most cases in fields not covered in the CSU proposal, such as Fluids, Dynamics, Materials, Robotics) in preparation for a professional engineer credential. In contrast, the CSU proposal is oriented toward applied training in human factors and ergonomics.

UCSD— Ph.D. in Cognitive Science or Computer Science/Engineering has some overlap in program learning outcomes. However, the UCSD program (Design Lab) is much more interdisciplinary and includes significant theory content. In contrast, the proposed CSU San Jose program is has a techiques orientation and is limited to applications and professional work in industry.

<u>The proposed CIP code</u> 14.2701 (title: Systems Engineering) is in a distinct category/subcategory compared to those of the most closely related CIP codes in UC programs (Berkeley- Ph.D. in Biomechanical Engineering: CIP 14.0501 title: Bioengineering and Biomedical Engineering) and UC Davis – Ph.D. in Mechanical & Aerospace Engineering: CIP 14.1901 – Mechanical Engineering).

*** DRAFT ***

To: CCGA Members

From: Joe McFadden, Lead Reviewer

Re: San Jose State University – Doctor of Engineering (D.Eng.) in Human Factors

Date: October 27, 2025

Overview of Proposal

San Jose State University currently offers an MS in Human Factors and Ergonomics, which includes a user experience (UX) concentration. The proposal states that employers and alumni have expressed interest in a practice-oriented doctorate in Human Factors Engineering that would fill the gap between professionally oriented master's degrees such as their own and research-driven Ph.D. programs.

The proposed D. Eng. degree program would culminate in an Applied Doctoral Research Project (15 units) conducted in partnership with an industry or governmental sponsor. The project must be large-scale enough to warrant doctoral credit and centered in Human Factors Engineering competencies defined by the Human Factors and Ergonomics Society (HFES). A final evaluation would include a comprehensive quantitative and qualitative analysis, a publishable technical report, and a formal defense emphasizing the project's practical contributions and professional impact. In addition, the program would require Graduate Curricular Practical Training (6 units) consisting of two supervised industry placements in industry or government labs, where students apply HF/E methods to real-world projects.

UC Comparison and Duplication Assessment

The CIP code (14.2701: Systems Engineering) of the proposed program falls into a distinct category/subcategory compared to those of the most closely related CIP codes of UC programs, which includes Berkeley Ph.D. in Biomechanical Engineering (CIP 14.0501: Bioengineering and Biomedical Engineering) and UC Davis Ph.D. in Mechanical and Aerospace Engineering (CIP 14.1901: Mechanical Engineering).

The proposed program would offer a degree designation of D. Eng., which is also offered at UC Berkeley in Biomechanics and Public Health. However, the Berkeley program is focused on mechanical engineering (in most cases in fields not covered in the CSU proposal, such as Fluids, Dynamics, Materials, Robotics) in preparation for a professional engineer credential. In contrast, the CSU proposal is oriented toward applied training in human factors and ergonomics. Despite the same D. Eng. degree designation, there is not a significant amount of overlap between the

proposed SJSU degree program and the UC Berkeley degree program in Biomechanics and Public Health.

The proposed program has some overlap of program learning outcomes with the UCSD Ph.D. in Cognitive Science or Computer Science/Engineering. However, the UCSD program (Design Lab) is much more interdisciplinary and includes significant theory content. In contrast, the proposed CSU San Jose program is has a technical orientation and is limited to applications and professional work in industry, and otherwise there is not a significant amount of overlap between the two programs.

Recommendation

In summary, the proposed degree program does not significantly duplicate an existing doctoral degree program in the UC system, and I recommend that CCGA register **no formal objection**.

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DOCTORAL DEGREE PLANNING RESOURCES

CONCEPTUAL PROPOSAL FOR UC REVIEW OF CSU PROFESSIONAL AND APPLIED DOCTORAL PROGRAMS

CSU Proposed Degree Information, Campus Information, and Contact Information

| Title of Projected Doctoral Degree | Doctor of Engineering (D.Eng.) in Human Factors |
|---------------------------------------|---|
| Degree Designation (e.g., EdD) | D.Eng. |
| Proposed CIP Code | 14.2701 (title: Systems Engineering) |
| Projected Implementation Date | Fall 2027 (August 2027) |
| (1st Cohort Enrolled) | |
| Campus | San José State University |
| College | Charles W. Davidson College of Engineering |
| Department | Industrial & Systems Engineering (ISE) |
| Contact Name(s) and Email(s) | Dr. Gaojian Huang – Assistant Professor; gaojian.huang@sjsu.edu |
| | Dr. Yasser Dessouky – Professor & Chair; yasser.dessouky@sjsu.edu |
| | Dr. Dan Nathan-Roberts – Associate Professor; dan.nathan-roberts@sjsu.edu |
| | Dr. Evan Palmer – Professor; evan.palmer@sjsu.edu |

Curricular and Academic Elements

1. Provide a summary of the purpose for and a description of the proposed doctoral degree, including targeted audience(s).

The proposed Doctor of Engineering (D.Eng.) in Human Factors is designed to address a growing need for industry and government for leaders who possess both deep technical expertise in human factors/ergonomics (HF/E) and the ability to apply that knowledge directly to complex, real-world systems. While the Industrial and Systems Engineering (ISE) department at San José State University already offers a nationally recognized MS in Human Factors & Ergonomics (with a popular user experience (UX) concentration), employers and alumni have expressed that a practice-oriented doctorate in Human Factors Engineering would fill a gap between research-driven Ph.D. programs and professionally oriented master's tracks. Recent statewide workforce analyses (see

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the Postgraduate Professional Job Objectives section in Appendix A) show ~16 % projected job growth in California for HF/E roles and survey data indicating 67 % of alumni believe an applied doctorate is needed to meet Silicon Valley demand—evidence of the gap this program addresses. Targeted audiences include recent MS HF/E graduates, mid-career HF/E professionals seeking advancement, Silicon Valley engineers aiming for leadership roles, and SJSU alumni in industry or government laboratories. The D.Eng. will graduate professionals who can both drive innovation and lead multidisciplinary teams in Silicon Valley and beyond through combined advanced coursework in cognitive and physical ergonomics, data analytics and tools (including AI tools), user interface/user experience, system integration, and engineering leadership with hands-on industry projects and internships.

2. Describe how the proposed doctoral curriculum is advanced beyond a master's degree to justify a new professional and/or applied doctorate, distinct from a UC doctoral program.

The proposed Doctor of Engineering (D.Eng.) in Human Factors Engineering curriculum (see Appendix A) advances beyond the existing MS program by introducing a total of 60 post-baccalaureate units, including 36 units of 500-level doctoral courses (ISE 501 Doctoral Seminar, ISE 502 Research Methods & Proposal Development, ISE 503 Applied Research Project, and ISE 597 Special Topics) with two three-unit Industry Practicum Experience sessions (ISE 595C), and professional-practice milestones. Specifically, it expands methodological rigor of the existing master's program through additional advanced courses such as Mixed Methods Research in HF/E, Math Foundations for Decision & Data Sciences, Analytics for Systems Engineering, Al Tools & Practice for Systems Engineering, and Human–Automation Systems & UX Seminar, moving beyond applied statistics and usability testing taught at the master's level.

Based on stakeholder feedback from our survey of industry recruiters, alumni, and students (Appendix B), the highly applied program embeds two culminating six-unit practicum sessions (6 units total; ISE 595C) in industry companies, including a formal practicum report and sponsor evaluation, directly connecting students to applied, industry-focused experience, an emphasis that contrasts with the theory-driven orientation of many UC research Ph.D. programs. Further differentiating itself from traditional UC doctorates, this D.Eng. features defined professional milestones: a formal qualifying examination (with executive-summary component), candidacy advancement, research project proposal defense, a structured midterm review, and research project final evaluation, along with the culminating 15-unit Doctoral Applied Research Project (ISE 503), a three-phase experience that explicitly addresses practical industry or governmental problems under joint faculty and industry mentorship. The project emphasizes emerging, industry-aligned research areas such as advanced analytics and applied Al tools, to prepare graduates for leadership roles in applied human factors and engineering practice.

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3. Describe the admission criteria for the proposed doctoral degree (including undergraduate preparation).

This doctoral program builds directly on the SJSU MS in Human Factors & Ergonomics curriculum, extending graduates' technical and applied expertise. It requires a strong STEM foundation, demonstrated mastery of human-centered methods, and at least two years of HF/UX-related professional experience (or equivalent research assistantship) prior to matriculation.

Specifically, applicants must satisfy all of the following:

Educational Requirements:

- (1) A regionally accredited bachelor's degree in engineering, psychology, cognitive science, design, or a closely related STEM discipline with a cumulative GPA ≥ 3.0; And
- (2) a master's degree in Human Factors & Ergonomics (or an equivalent HF engineering-focused program) with a cumulative GPA \geq 3.5.

Prerequisite Preparation:

All candidates must have completed undergraduate coursework in statistics; foundations of decision and data sciences; human-centered design methods; and programming or prototyping fundamentals.

Prerequisite Coursework: Completion of ISE 210 (Human Factors / Ergonomics), ISE 211 (Experiment Design for Human Factors Engr), ISE 212 (Human Factors Experiments), and PSYC 273(Seminar in Human Factors) (or departmental approval of equivalent courses).

Professional Experience:

A minimum of two years of HF/UX-related industry or research assistantship experience, to be documented on the CV/resume that will be completed prior to starting the applied doctoral program.

Supporting Materials:

- Resume detailing required professional experience
- Statement of purpose (maximum: 800 words) outlining career goals and intended project interests
- Two letters of recommendation (one academic, one professional)
- Sample of technical or research writing



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4. List the proposed doctoral program course and culminating doctoral project descriptions including, as appropriate, a description of qualifying and/or comprehensive exams, professional and/or clinical experiences, practicums, projects, and research.

<u>Doctoral Course Descriptions:</u>

The program integrates a rigorous sequence of assessments and applied experiences: a written qualifying exam at the end of Year 1 to establish candidacy; two supervised industry practica (ISE 595C) providing real-world application of HF/E methods; and a three-phase culminating applied research project (ISE 503) supported by advanced methods training (ISE 502) and continuous professional development via the Doctoral Seminar (ISE 501). Overall, the 500-level sequence (ISE 501–503, 595C, and 597) forms the practice-oriented spine of the doctorate.

ISE 501 Doctoral Seminar (6 units): supporting ongoing research, literature review, scholarly communication, industry-focused proposal preparation, and development of professional materials such as executive summaries, technical presentations, and pitch decks tailored for industry audiences.

ISE 502 Doctoral Research Methods & Proposal Development (6 units): This independent study course, advised by faculty across the university, teaches advanced doctoral research methods emphasizing industry-relevant research techniques and proposal development. Students prepare formal doctoral project proposals, including comprehensive research plans, industry-targeted executive summaries, market analysis, feasibility evaluations, and professional presentation materials suitable for industry partners.

ISE 503 Doctoral Applied Research Project (15 units): A coordinated sequence conducting a substantial, applied research project, ideally in partnership with industry or governmental sponsors. Students implement and iteratively test practical, human-centered solutions, presenting interim deliverables through technical reports, executive summaries, and presentations tailored to professional audiences. The sequence culminates in a final evaluation that includes a comprehensive quantitative and qualitative analysis, a publishable technical report, and a formal defense emphasizing the project's practical contributions and professional impact.

ISE 595C Graduate Curricular Practical Training (6 units): Two supervised industry placements in industry or government labs, where students apply HF/E methods to real-world projects.



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ISE 597 Special Topics in Human-Centered Design/Engineering (3 units): Advanced coursework covering human-centered design/engineering principles, ethical considerations, evaluation methodologies, and case studies. Students explore tools (including AI) and frameworks within HF/E contexts and develop applied prototypes.

ISE 200-Level Course Descriptions:

ISE 201 Math Foundations for Decision & Data Sciences (3 units): Linear algebra and matrix operations in statistics, optimization and artificial intelligence. Statistical concepts and techniques important for decision and data sciences, with motivation by real-world examples. Basic optimization techniques useful for statistics, classification and neural networks.

ISE 215 Usability Evaluation & Testing (3 units): Seminar is designed to provide students with a comprehensive overview of usability testing methods, as applied to systems products and software-web applications. Course will address testing methods, processes and marketing justification for usability testing.

ISE 217 Human-Computer Interaction (3 units): Human performance characteristics, computational tools, and HCI applications. How to access/evaluate HCI requirements, to design HCI requirements, to assess the impact of design on performance, and to generalize the design implication to system function.

ISE 221 Mixed Methods Research in HF/E (3 units): Students will learn the fundamental principles and practical applications of mixed methods research (MMR) within the field of human factors/ergonomics. Students will learn how to design and conduct high quality MMR that integrate methodologies and methods in the human factors domain.

ISE 224 Human-Automation Systems & User Research (3 units): Students will learn advanced topics related to using human automation and human-centered artificial intelligence (AI) systems in today's data-rich environments. Topics include data acquisition, processing, and interpretation, as well as methods for improving system performance based on user feedback and behavior.

ISE 240 Analytics for Systems Engineering (3 units): Application of data analysis, predictive and prescriptive (optimization) modeling techniques to analyze, model, and optimize real-world industrial and systems engineering problems using computer programming languages.

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ISE 244 AI Tools & Practice for Systems Engineering (3 units): Artificial Intelligence software tools useful for industrial and systems engineering. Emphasis on clear understanding of the mathematics behind them, what tools to use in which conditions, and how to interpret and use the results.

Describe the proposed culminating doctoral experience (doctoral dissertation, doctoral project, or doctoral capstone).

Instead of a traditional dissertation, D.Eng. candidates complete a cumulative 15-unit Applied Doctoral Research Project (ISE 503) conducted in partnership with an industry or governmental sponsor. The project must be large-scale enough to warrant doctoral credit and centered in Human Factors Engineering competencies defined by the Human Factors and Ergonomics Society (HFES).

Scope and Significance:

- Addresses a mission-critical HF/E problem with clear relevance to industry or public agencies
- Shows mastery of a topic essential to industry
- Demonstrates how their work fits into the larger sociotechnical system
- Produces measurable business, regulatory, or societal impact (e.g., safety improvement, cost savings, or performance gains)
- Demonstrates leadership in multidisciplinary collaboration
- Provides a reproducible framework, toolkit, or prototype that other practitioners can adopt

Doctoral-Level Requirements:

Phase I — Project Scoping & Proposal (3 units). Students conduct a small-scale pilot to validate methods and test initial design hypotheses, generating interim deliverables such as a pilot test report, revised design specifications, and an updated executive summary.

Phase II — Design & Implementation (6 units). Candidates design, prototype, and iteratively test an evidence-based solution, e.g., a next-generation car interface or cognitive-ergonomics analytics tool using mixed methods, human-centered AI, and rapid usability cycles.

Phase III — Evaluation & Defense (6 units). Candidates conduct a rigorous quantitative/qualitative evaluation, compile a publishable technical report, and prepare an executive summary, financial-impact analysis, and investor-style pitch deck. The work is then defended in a public presentation before a faculty—industry committee.

Professional Deliverables. Required deliverables include (a) a peer-review-ready manuscript, (b) an executive summary, (c) a complete technical appendix or software/prototype repository, and (d) a pitch deck translating findings into actionable recommendations for stakeholders.

Multidisciplinary Leadership. Throughout both phases, students demonstrate leadership by coordinating engineers, designers, and domain experts, and by weighing the trade-offs inherent in applied projects (e.g., cost, usability, safety).

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Example applied doctoral research project

A candidate partners with an automotive manufacturer to develop an Al-assisted cockpit alerting system. Phase I delivers a functional prototype and iterative lab/driving-sim tests. Phase II validates the system in operational trials, confirming a 30% reduction in driver workload and documenting a cost-benefit ratio acceptable to regulators. Results are packaged in a publishable HF/E journal article, an executive summary for automotive stakeholders, and a pitch deck for corporate leadership.

6. List the program learning outcomes for the proposed doctoral degree.

Graduates will be able to:

- 1) Integrate physical, cognitive, and macro-ergonomic principles with human-centered AI tools to enhance the usability, safety, and performance of complex socio-technical systems.
- 2) Design and execute mixed-methods HF/UX and Al-enabled studies.
- 3) Lead cross-functional engineering, design, and data science teams, applying project-management and ethical decision-making skills.
- 4) Apply human-centered (including AI) tools and analytics responsibly to enhance system usability, performance, and safety.

7. Describe the infrastructure required for this proposed doctoral program.

To deliver the D.Eng. in Human Factors, the program will use existing SJSU resources and add a few targeted enhancements to support doctoral-level education and industry engagement.

Existing Infrastructure (no or minimal expansion needed):

- 1) The Existing Laboratories: A usability suite with eye tracking, motion capture, and extended reality equipment; an ergonomics lab with wearable sensors for workstation and posture evaluation; and a human-automation simulation studio. These facilities already exist within the SJSU ISE Department and meet all program needs.
- 2) Industry Partnerships: Ongoing collaborations with Silicon Valley technology firms, NASA Ames, and regional hospitals secure practicum placements and project sponsorship.
- 3) Faculty and Staff: Core HF/E faculty across colleges, adjunct industry mentors, and a dedicated doctoral program coordinator who also manages all ISE-500-level Applied Project courses.
- 4) Library & Data Resources: Access to IEEE, HFES, ACM Digital Library, and advanced analytics software (R, Python, MATLAB, SPSS).
- 5) Dedicated Space: Allocated doctoral student offices and collaboration rooms in the Engineering building, equipped with advanced prototyping workstations and secure data-storage servers.
- 6) An Industry Advisory Board, a board to ensure the program stays connected to industry needs. We already have several industry colleagues who are willing to serve as members.

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Appendix A

1. Doctoral Program Roadmap. Provide a doctoral program roadmap serving as a visual representation of the pathway by term of program requirements, including the sequence of completing courses and any offsite, internship, and/or culminating requirements, and the total units per term and total overall units for the program.

The proposed Doctor of Engineering in Human Factors spans three years after completion of the MS (five years total post-bachelor's), integrating core courses from the SJSU MS in Human Factors/Ergonomics and advanced doctoral components.

Table 1 below outlines a term-by-term sequence of the courses, applied experience, and the doctoral project, with estimated units per term. Prerequisites for entry are completion of ISE 210, ISE 211, ISE 212, and PSYC 273; our MS HFE graduates automatically satisfy these, and external applicants may petition for course waivers upon demonstration of equivalent coursework. This accelerated pathway will be individually planned with faculty advisors, mirroring the successful structure of SJSU's Spartan Accelerated Graduate Education (SAGE) Scholars programs.

Table 1. A sample sequence of courses, practical experience, and the culminating doctoral project

| Term | Courses & Activities | Units | Milestone |
|-----------------|--|-------|--|
| Year 1 - Fall | ISE 201 Math Foundations for Decision & Data Sciences (3) ISE 217: Human-Computer Interaction (3) ISE 224: Human-Automation Systems & User Research (3) ISE 501: Doctoral Seminar (1) | 10 | _ |
| Year 1 - Spring | ISE 221: Mixed Methods Research in HF/E (3) ISE 215 Usability Evaluation & Testing (3) ISE 240 Analytics for Systems Eng. (3) ISE 501: Doctoral Seminar (1) | 10 | End of Spring Qualifying Exam (Written) → Candidacy Eligibility |
| Year 1 – Summer | ISE 595C: Graduate Curricular Practical Training (3) | 3 | Practicum Completion |
| Year 2 – Fall | ISE 244: Al Tools & Practice for Systems Engineering (3) ISE 502: Doctoral Research Methods & Proposal Development (6) ISE 501: Doctoral Seminar (1) | 10 | MS Project Proposal Prep Project Proposal Defense → Doctoral Candidacy |
| Year 2 - Spring | ISE 503: Doctoral Applied Research Project (3) ISE 597: Special Topics (3) Electives* (3) ISE 501: Doctoral Seminar (1) | 10 | Project |
| Year 2 – Summer | ISE 595C: Graduate Curricular Practical Training (3) | 3 | _ |
| Year 3 – Fall | ISE 503: Doctoral Applied Research Project (6)ISE 501: Doctoral Seminar (1) | 7 | D. Eng. Project Midterm Review |
| Year 3 – Spring | ISE 503: Doctoral Applied Research Project (6) ISE 501: Doctoral Seminar (1) | 7 | Final D. Eng. Project Defense → Graduation |
| Totals | | =60 | |

Note: Some departmental courses may be replaced with Statistics, Psychology, or other similar courses that may better fit the individual student's projects.

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Total Units = 60 credits. Students must maintain a minimum 3.0 GPA in all letter-graded coursework. Research units (ISE 503) may be taken Satisfactory/Unsatisfactory.

This curriculum meets all four CSU requirements (Policy ID: 17685310) by:

- 1) This D.Eng. program has 60 semester units earned in graduate standing.
- 2) At least 60% of the units (i.e., 36 units in total with all 5-level courses) required for the degree are in courses organized primarily for doctoral students, and the remaining required units (i.e., 24 units) are in courses organized primarily for master's and doctoral students.
- 3) At least 70% of the units required for the degree will be completed in residence at the campus.
- 4) No more than 15 semester units required for the degree for the culminating experience (i.e., doctoral dissertation and doctoral project) ISE 503 has in total of 15 credit units.

* Electives:

Electives need to be approved by the committee and be central to the completion of the candidate's specific doctorate.

Year 1 begins with ISE 201 Math Foundations for Decision & Data Sciences, ISE 217 Human—Computer Interaction, ISE 224 Human—Automation Systems & User Research, and the recurring ISE 501 Doctoral Seminar. Spring adds ISE 221 Mixed Methods Research, ISE 215 Usability Evaluation & Testing, and ISE 240 Analytics for Systems Engineering. The written Qualifying Exam, including an executive-summary component, is taken at the end of Spring. A three-unit summer practicum (ISE 595C) then provides real-world industry experience and a faculty-reviewed reflection.

Year 2 deepens practice with ISE 244 AI Tools & Practice for Systems Engineering and the six-unit ISE 502 Doctoral Research Methods & Proposal Development, leading to the Applied Research Project Proposal Defense and formal advancement to candidacy. In Spring, students begin their applied work with an initial three-unit project registration (ISE 503), choose two advisor-approved electives aligned to their project, select a special topic under the new doctoral course – ISE 597, and continue the ISE 501 seminar. A second summer practicum (ISE 595C) further strengthens industry engagement.

Year 3 is fully devoted to the two-phase Applied Doctoral Project: ISE 503 Applied Research Project (6 units) in Fall, culminating in a mid-project review, and ISE 503 Applied Research Project (6 units) in Spring, ending with the Final Defense. The defense before a faculty/industry partner committee confirms scholarly rigor, practical impact, and professional communication through a publishable report, executive summary, and pitch deck.

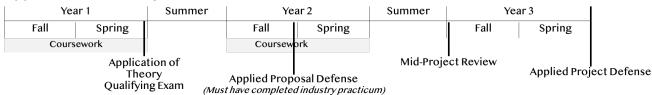


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Program Milestones and Applied Project:

Applied Doctoral Program Milestones



Throughout the three-year D.Eng. journey, students progress through four key milestones that blend rigorous theory and hands-on practice. First, the Application of Theory Qualification Exam assesses foundational knowledge and applied case-study skills, including executive-summary writing. Next, the Applied Research Project Proposal Defense requires students to present and defend a detailed, industry-focused research plan, complete with executive summaries and pitch materials, to a faculty-industry panel. Midway through implementation, the Mid-Project Review brings a structured presentation of preliminary findings. Finally, the Applied Research Project Defense culminates in a comprehensive oral and written evaluation of the completed Applied Doctoral Project, demonstrating scholarly rigor, practical impact, and professional communication through a publishable report and pitch deck.

Specifically:

Application of Theory Qualification Exam: This two-day exam includes a day of theory-based classroom knowledge tests and a day of applied case studies that culminates in an evaluated presentation to an industry/academia committee.

Applied Research Project Proposal defense: An oral and written defense in front of a faculty-industry panel. Deliverables include a detailed research plan, executive summary, pitch deck, and a brief report on the Industry Practicum explaining how that experience shapes the proposed project.

Mid-Project Review: A structured oral presentation and written progress report submitted to the committee and project sponsors. The review highlights preliminary data, confirms milestones, and updates the timeline for successful project completion.

Applied Research Project Defense: A final oral and written defense of the completed Applied Doctoral Research Project. Required materials include a publishable technical report, executive

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summary, financial-impact analysis, and an investor-style pitch deck demonstrating scholarly rigor and practical industry impact.

2. Postgraduate Professional Job Objectives

a. Describe relevant statewide workforce demands for the proposed doctoral program.

There is strong and growing demand in California and nationwide for professionals with advanced expertise in human factors and ergonomics. A recent survey conducted among 46 current and former SJSU HFE students revealed that 67 % agreed that a doctoral program in Human Factors/User Experience would address an unmet regional need (see Appendix B for summarized results). The rapid expansion of technology and increasing focus on user experience, particularly evident in Silicon Valley, has resulted in a "dearth of industry-focused" HF/UX doctoral programs to meet this demand.

California employs the largest number of human factors/ergonomics professionals in the U.S., with recent estimates of over 25,000 specialists (source: O*NET Program: the nation's primary source of occupational information). Employment projections indicate approximately 16% growth in California from 2022 to 2032 (from ~24,500 to 28,300 positions), significantly exceeding the national average growth rate of 12%. This robust growth reflects increased recognition of human factors in technology development, product design, workplace safety, and systems engineering.

Respondents to the SJSU survey (Appendix B) indicated substantial representation in key sectors, with 52% in technology and 28% in healthcare or medical technology. These sectors consistently require advanced human factors expertise to enhance product safety, effectiveness, and user satisfaction. Moreover, California's aerospace, automotive, entertainment/gaming, and healthcare technology sectors increasingly seek human factors professionals. The Human Factors and Ergonomics Society highlights opportunities spanning aerospace, software/hardware design, communications, healthcare technology, virtual reality, and workplace safety - areas significantly represented in California's economy. In summary, the statewide workforce demand for doctoral-level human-factors and user-experience experts is high and rising. Survey respondents overwhelmingly cited deeper technical mastery (83%) and solving real industry problems (72%) as their top motivations, further validating the applied orientation of the proposed Doctor of Engineering in Human Factors. The proposed program will meet this demand by producing graduates with advanced skills in human-factors engineering, cognitive ergonomics, and user experience.

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Furthermore, 93% of survey respondents emphasized industry collaborations as an important program feature, indicating alignment between employer expectations and the program's applied orientation. Overall, the statewide workforce demand for doctoral-level human factors and user-experience experts is substantial and expected to rise, validating the establishment of the proposed Doctor of Engineering in Human Factors.

b. Describe employment opportunities for the proposed doctoral program.

Graduates of the D.Eng. in Human Factors will be prepared for a diverse range of high-level employment opportunities across industry, government, and academia. The program's blend of engineering, psychology, and design equips doctoral recipients to take on leadership roles in any setting where optimizing human performance, safety, and user experience is key.

Our SJSU survey (Appendix B) evidence indicates broad employment opportunities and career advancement potential: 74% of respondents expressed high likelihood of enrollment, driven by motivations including deeper technical mastery (83%), solving real industry problems (72%), career advancement (67%), and leadership aspirations (65%). These aspirations align closely with positions available in sectors dominating California employment - technology firms, healthcare and medical technology, aerospace, defense, automotive, and entertainment industries. Specifically, graduates will be qualified for senior roles such as Senior UX Researcher, Human Factors Team Lead, and Principal Ergonomist, particularly within Silicon Valley tech companies, aerospace and defense contractors, and medical device manufacturers. Government agencies and research laboratories such as NASA Ames and Department of Defense labs also actively recruit doctorate-level HF specialists for aviation, autonomous-system development, and safety projects.

Additionally, academia represents a growing employment market. CSU campuses and other practice-oriented universities continue to expand human-centered engineering programs, and are hiring more faculty with industry experience, not only recruiting academics from their research-intensive counterparts. The proposed D.Eng. will thus align with this trend and effectively prepare graduates with industry-relevant experience for entering and excelling in senior, rapidly growing roles across California's innovation-driven economy.

c. If applicable, describe the national or state-wide professional accreditation/certified licensure(s) and how the accreditation/licensure(s) will be aligned to the proposed doctoral degree title.

Licensure is not required for human-factors or ergonomics practice, yet the program will align with recognized quality benchmarks. SJSU's M.S. in HFE already holds HFES accreditation, and the proposed D.Eng. will map its curriculum to the same core competencies, then pursue HFES review

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when eligible. ABET accreditation at the graduate level remains optional; it will be considered if it strengthens the engineering identity of the degree. Graduates will be encouraged to obtain Board of Certification in Professional Ergonomics (BCPE) credentials, including Certified Professional Ergonomist (CPE), Certified Human Factors Professional (CHFP), and Certified User Experience Professional (CUXP), for which the doctoral coursework provides full knowledge coverage.

3. Analysis of potential UC duplicate doctoral degree programs. Complete the table below.

Title of CSU Proposed Doctoral Program: San José State University Doctor of Engineering (D.Eng.) in Human Factors

| UC Campus | Degree Duplication (Yes/Potential/ No) | UC Degree Title and Designation | UC Website(s) reviewed and date accessed |
|------------------|---|---|---|
| Berkeley | Potentially | Center for Occupational and Environmental Health | https://www.coeh.berkeley.edu May 1st, 2025 |
| | Potentially | Ph.D. in biomechanics and public health | https://me.berkeley.edu/research-areas-and- major-fields/biomechanical-engineering/ May 1st, 2025 |
| | Potentially | Ph.D. in Information Management & Systems in Human-computer Interaction (HCI) | https://www.ischool.berkeley.edu/programs/phd May 1st, 2025 |
| | No | Vision Science Graduate Program | https://vision.berkeley.edu/about-us/vision- science-program June 23rd, 2025 |
| Davis | Potential | Ph.D. in Mechanical & Aerospace Engineering | https://mae.ucdavis.edu/graduate/doctoral- degree May 1st, 2025 |
| Irvine | No | Ph.D. in Informatics – Donald Bren School | https://www.informatics.uci.edu/grad/phd- informatics/?utm_source May 1st, 2025 |
| Los Angeles | No | No doctoral programs in human factors engineering or closely related disciplines. | |
| Merced | No | No doctoral programs in human factors engineering or closely related disciplines. | |
| Riverside | No | No doctoral programs in human factors engineering or closely related disciplines. | |
| Santa Barbara | No | No doctoral programs in human factors engineering or closely related disciplines. | |
| Santa Cruz | No | Ph.D. in Computational Media – Baskin School, focused on game & interactive-media design | https://grad.engineering.ucsc.edu/computationa l-media/ May 1st, 2025 |
| San Diego | Potential | Ph.D. in Cognitive Science or Computer Science/Engineering (Design Lab collaboration) | https://designlab.ucsd.edu/education/graduate/ index.html May 1st, 2025 |
| San Francisco | No | No HF doctoral programs (health/biomedical focus; any HF via joint UCB ergonomics program) | |



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Provide a summary of your analysis. If there is a potential for duplication, please contact app@calstate.edu for advice.

To prepare this doctoral proposal we reviewed 163 university programs across 149 universities including all of the University of California related doctoral programs, all of the California State University programs, the top 23 private universities in California, and San José State University's peer institutions nationwide. Although several UC campuses offer research doctorates in related areas, none provide a professional-practice Doctor of Engineering in Human Factors. Our proposed CIP code 14.2701 (Systems Engineering) is distinct from those used by any UC program, ensuring no duplication in classification. The proposed SJSU Doctor of Engineering in Human Factors is therefore a unique applied-practice degree, integrating physical ergonomics, cognitive methods, human-centered AI, UX design, industry internships, and a multi-phase Applied Doctoral Project, filling a clear industry need without duplicating existing UC offerings.

<u>University of California, Berkeley | School of Public Health hosts the Center for Occupational and</u> Environmental Health

The center is a NIOSH funded Education and Research Center that offers a Ph.D. degree in ergonomics that works with several departments at UC Berkeley and UCSF. The program is listed as "Potentially" degree duplicating and is likely the closest degree to the applied, industry-focused degree program SJSU is proposing to upskill engineers for Silicon Valley tech companies.

University of California, Berkeley — Ph.D. in Biomechanics and Public Health
The Department of Mechanical Engineering offers a Ph.D. as well as a D.Eng focusing on
Biomechanical Engineering, Fluids, Dynamics, Materials, Robotics, and other Mechanical Engineering
topics. The biomechanical research areas include molecular cell biomechanics, medical polymers
(such as tissues), and biological fluid flow. This program is listed as "potentially" in the degree
duplication table because they do offer a D.Eng, and because they have a doctoral research lab
focusing on robotic exoskeletons. This was listed as "potentially" out of an abundance of caution
because the D.Eng degree is appears to be focused on Professional Engineering (certified/accredited
engineers) (see the bottom paragraph) and the robotic exoskeleton research and other areas of
research of the program seem to be focused on the mechanical engineering, not the cognitive
ergonomic aspects of the research and are not as focused as working directly embedded in industry.

<u>University of California, Berkeley School of Information — Ph.D. in Information Management & Systems in Human-computer Interaction (HCI)</u>

The <u>UC Berkeley School of Information</u> offers a <u>research oriented Ph.D. program</u> on information management with research areas that are related to this program. This program was listed as potentially having degree duplication because it includes research areas on <u>Human Computer Interaction</u>, <u>User Experience</u>, <u>and Design</u> (as well as less-related research areas). Although listed as "Potentially" having degree duplication, this program is not an engineering degree. The way these research areas are approached appears to be through the lens of Information Science, with an emphasis on data and information management and analysis from a <u>digital humanities and</u>



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<u>information policy perspective</u>, not from a systems engineering background which is where our D.Eng would be housed and the coursework would be based on.

<u>University of California, Berkeley — Ph.D. Vision Science</u>

The Herbert Wertheim School of Optometry & Vision science offers a Ph.D. The <u>research topics</u> <u>include</u> "biomedical optics, perception and visual cognition, molecular and cell biology, neuroscience, computational vision, genetics, immunology, microbiology, and clinical science." This program is not listed as a potential duplicate degree because of it's <u>clinical focus</u>, which are outside of the cognitive ergonomics focus of this program and do not appear to be engineering focused.

<u>University of California, Davis – Ph.D. in Mechanical & Aerospace Engineering</u>

UC Davis houses a <u>Human-Systems Engineering research group</u> within <u>Mechanical & Aerospace</u> <u>Engineering</u>. Projects span assistive robotics, human/automation integration, and performance augmentation. Although the work touches human-machine topics, the degree remains a research-oriented Ph.D. in mechanical engineering, not an applied Doctor of Engineering embedded in industry settings. We therefore list it as "Potential" duplication out of caution, noting its emphasis is mechatronics and prosthetics rather than full-spectrum cognitive ergonomics and UX practice.

<u>University of California, Irvine — Ph.D. in Informatics</u>

The Donald Bren School offers a research <u>Ph.D. in Informatics</u> with tracks in <u>Human-Computer Interaction</u> and UX. Coursework centers on socio-technical theory, design ethnography, and information policy—not systems engineering. Because the degree is scholarly, data-centric, and non-engineering, we mark "No" duplication with our applied D.Eng.

<u>University of California, Los Angeles – Psychology Ph.D. Programs</u>

UCLA offers Ph.D. programs in Psychology. None provide engineering depth, industry practicum, or ergonomics laboratories. Consequently, there is "No" degree duplication.

<u>University of California, Merced – Engineering Ph.D. Programs</u>

UC Merced's <u>School of Engineering</u> lists broad doctoral tracks (e.g., Electrical, Mechanical, Environmental) but no human-factors or UX concentrations, nor industry-embedded doctorates. We classify this as "No" duplication.

University of California, Riverside

UCR does not offer doctoral programs in human factors engineering or closely related disciplines. Thus, duplication is No.

University of California, Santa Barbara

UCR does not offer doctoral programs in human factors engineering or closely related disciplines. Thus, duplication is No.

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<u>University of California, Santa Cruz – Ph.D. in Computational Media</u>

<u>The Baskin School's Computational Media Ph.D.</u> explores games, interactive storytelling, and HCI from a creative-media lens. Because it is design-centric and not an engineering practice doctorate, we label "No" duplication.

<u>University of California, San Diego — Ph.D. in Cognitive Science or Computer Science/Engineering UCSD's Design Lab</u> collaborates with Cognitive Science and Computer Science & Engineering doctorates on human-centered design research. While the Design Lab fosters cutting-edge HCl and human-centered design scholarship, the program does not include a structured industry practicum or a multi-phase applied-project sequence. As a non-engineering doctorate emphasizing scholarly inquiry over professional practice, it represents only a potential overlap with SJSU's applied D.Eng. in Human Factors.

University of California, San Francisco

UCR does not offer doctoral programs in human factors engineering or closely related disciplines. Thus, duplication is No.

CIP Code Classification of Related UC Doctoral Programs (none matching the proposed CIP Code: 14.2701 Systems Engineering):

| University (Program) | CIP Code (Classification) | Official Source |
|--|---------------------------------------|---|
| UC Berkeley – Ph.D. (Environmental Health Sciences) Center for Occupational & Environmental Health | 51.2202 – Environmental Health | IPEDS program listing (UC Berkeley) |
| UC Berkeley - Ph.D. in | 14.0501 – Bioengineering and | IPEDS program listing (UC |
| Biomechanical Engineering | Biomedical Engineering | Berkeley) |
| UC Berkeley - Ph.D. in | | |
| Information Management & | 11.0401 – Information | UC Berkeley I-School STEM |
| Systems * (HCI focus within | Science/Studies | designation |
| School of Information)* | | |
| UC Berkeley - Ph.D. in Vision | 26.0909 – Vision | IPEDS program listing (UC |
| Science | Science/Physiological Optics | Berkeley) |
| UC Davis - Ph.D. in Mechanical & Aerospace Engineering | 14.1901 – Mechanical Engineering | IPEDS program listing (UC Davis) |
| UC Irvine - Ph.D. in Informatics | 11.0104 – Informatics | IPEDS program listing (UC Irvine) |
| UC Santa Cruz - Ph.D. in | 11.0199 – Computer and | UCSC program inventory (STEM |
| Computational Media | Information Sciences, Other | OPT list) |
| UC San Diego - Ph.D. in Cognitive | 30.2501 – Cognitive Science, | WSCUC accreditor program profile |
| Science | General | (UCSD) |
| UC San Diego - Ph.D. in Computer Science & Engineering * (Design Lab-related focus)* | 11.0701 – Computer Science | WSCUC accreditor program profile (UCSD) |

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Appendix B

Survey Results

Executive Summary

The survey received 46 respondents, and it indicates strong latent demand for an applied doctoral pathway in Human Factors (HF) at San José State University. A substantial majority judge such a program as socially useful, personally attractive, and professionally advantageous, yet they flag three structural barriers, time, cost, and return-on-investment, as decisive. Preference patterns converge on a hybrid, accelerated, industry-embedded design.

1. Respondent profile (n = 46)

| Attribute | Key findings |
|-------------------------|---|
| Affiliation with SJSU | Alumni > 5 yr 37%; Alumni ≤ 5 yr 30%; Current MS students 30%; Faculty 2% |
| Highest degree | Master's in HF or UX 83%; Bachelor's 15%; Doctorate 2% |
| Sector | Technology 52%; Healthcare/Med-tech 28%; Academia 7% |
| Professional experience | 0−2 yr 22%; 3−10 yr 50%; ≥ 11 yr 22% |

The sample (n = 46) displays a professional profile that aligns well with the anticipated market for an applied doctorate. Alumni constitute roughly two-thirds of respondents, suggesting that program marketing can leverage established SJSU networks. Nearly all respondents already possess a master's degree in Human Factors or a closely related field; consequently, the envisioned doctorate should articulate seamlessly with prior graduate coursework rather than revisit foundational content. Sectoral representation is dominated by technology and health-technology, mirroring the regional employer ecosystem. Experience levels reveal two concentrations: early-career professionals who are still consolidating domain expertise, and a sizable mid-career group seeking advanced credentials for leadership or specialized research roles.

2. Attitudinal Overview

| Statement (5-point Likert) | Agree (4 + 5) | Neutral (3) | Disagree (1 + 2) | Mean |
|---|---------------|-------------|------------------|------|
| Industry demand for advanced HF expertise is increasing | 48% | 26% | 26% | 3.4 |
| A D.Eng. in HF/UX would fill an unmet need | 67% | 17% | 15% | 3.9 |

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| Employers value doctoral-level, application-oriented HF credentials | 63% | 22% | 15% | 3.8 |
|---|-----|-----|-----|-----|
| Industry/applied collaborations are important in a doctorate | 93% | 2% | 4% | 4.7 |
| Likelihood of personal enrollment | 74% | 13% | 13% | 4.0 |
| Cost matters in the decision to enroll | 76% | 11% | 13% | 4.0 |
| Perceived employer support for doctoral study | 24% | 46% | 30% | 2.8 |
| Doctorate's positive career impact | 70% | 24% | 7% | 4.0 |

Respondents perceive a clear market gap for advanced HF expertise: two-thirds agree that a doctoral pathway would address an unmet regional need. Confidence in employer recognition of an applied doctorate is also high, although expectations of direct financial sponsorship remain guarded; fewer than one-quarter anticipate substantive employer support. Nearly everyone views structured industry collaboration as a core component of doctoral training, reflected in the table's highest mean score (4.7). Personal enrollment intent is strong (mean = 4.0), yet parallel concern about tuition indicates that pricing strategy will be pivotal.

3. Program Design Preferences

To clarify and streamline the design implications, preferences are organized below into discrete domains. Each subsection integrates quantitative results with qualitative comments.

3.1 Delivery Format

Hybrid instruction leads with 48% of first-choice votes, followed by fully online (13%) and part-time on-campus (13%). Traditional full-time residence appeals to only 4%. Respondents value periodic face-to-face engagement for mentoring and cohort cohesion, yet place equal weight on geographic flexibility. A hybrid design with concentrated campus residencies (e.g., three intensives per year) would satisfy both needs.

3.2 Pathway Length

Preferred duration: An accelerated 2–3 year post-master's track receives 63% support; a 4–5 year traditional timeline attracts just one respondent. Time-to-degree has emerged as the single most important feasibility filter. Designing milestone-based progression, including transfer credit for prior master's work, could shorten completion time without compromising scholarly depth.

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3.3 Specialization Themes

| Rank | Focus area selected | Proportion of respondents |
|------|--------------------------------------|---------------------------|
| 1 | User-experience research and design | 46% |
| 2 | Human-systems/ergonomics | 28% |
| 3 | Product design strategy | 9% |
| 4 | Al and analytics for HF | 9% |
| 5 | Other (accessibility, healthcare HF) | 8% |

UX-centric topics dominate but are complemented by interest in classical ergonomics and emerging analytics. Structuring the curriculum around a common core plus three elective clusters (UX/interaction, physical HF/ergonomics, data-driven HF) would accommodate divergent interests without diluting brand identity.

3.4 Motivational Appeals

| Motivator (multi-select) | % selecting |
|--|-------------|
| Deeper technical/research mastery | 83% |
| Solving industry problems through research | 72% |
| Career advancement/promotion | 67% |
| Transition to leadership roles | 65% |
| Academic or teaching career | 24% |

The strongest drivers are intrinsic, desire for mastery and applied problem-solving, rather than purely credentials. Program marketing should foreground authentic research engagements with corporate or community partners and publicize demonstrable impact on product or system outcomes.

3.5 Perceived Barriers

| Barrier (multi-select) | % selecting |
|------------------------------------|-------------|
| Managing time across work and life | 83% |
| Uncertain return on investment | 63% |
| Tuition cost | 61% |

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| Limited program flexibility | 52% |
|-----------------------------|-----|
| Employer reluctance | 37% |

While tuition predictably appears, time management outweighs cost as the primary obstacle. Modular scheduling, asynchronous content, and applied projects that double as workplace deliverables would mitigate this concern. Uncertainty about whether the program is worth the cost can be reduced by providing clear information on how graduates' salaries progress over time and sharing testimonials from alumni.

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Deadline to submit to the CSU Chancellor's Office: **August 1**Deadline to submit to the UC Office of President: **September 15 (submitted by CSUCO)**

Submit completed proposal package using the Smartsheet submission form: https://app.smartsheet.com/b/form/f44c90ae00524cf6848fbf15a105b9b9

Academic Programs, Innovation and Faculty Development CSU Office of the Chancellor 401 Golden Shore, 6th Floor Long Beach, CA 90802-4210

Contact Us

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UC/CSU Program Duplication Review Rubric

| Campus: CSULong Beach DTI in Translation and Interpreting | | | |
|---|--------------------|--|--|
| Reviewer: | Dorota M Dabrowska | | |
| Date: | November 7, 2025 | | |

| | Little to No Duplication (more dissimilar than not) | Some Duplication (warrants closer review) | Nearly Total /Total Duplication (much more alike than |
|---|---|--|---|
| | | | different) |
| Title of Projected Doctoral Degree | Doctor in Translation and Interpreting | | |
| Degree Designation (e.g. EdD) | DTI | | |
| Program Description | | | X |
| Program Learning Outcomes | | | X |
| External Program Accreditation (where applicable) | | | |
| Required Coursework/Program Structure | Х | | |
| Cumulating Experience/Research Orientation | | | х |
| Overall Assessment | | | Х |

Relevant UC Campuses/Programs (please list):

UCI: Department of Comparative Literature, Department of Language Science

UCR: Department of Comparative Literature, Interdisciplinary Series

UCSD: Department of Linguistics

UCB: Interdepartmental PhD Program in Romance Languages and Literatures (Linguistics track), Department of

Slavic Languages and Literatures, Department of German

UCD: Department of Linguistics

Comments regarding program similarities: attached

To: CCGA member

From: Dorota M. Dabrowska, Lead Reviewer

Re: CSU Long Beach – Doctor in Translation and Interpreting (DTI)

Date: November 6, 2025.

CSU LB proposes establishing a doctoral program for translators and interpreters in non-literary areas. The text of the conceptual proposal as well as the supporting letters emphasize applied research. While law, medicine, cognitive language science, and access services are mentioned, there is no information about discipline-specific training for dissertations, projects and internships in these areas. More generally, professional translators and interpreters work across all areas of humanities, science and service sectors, and there is a demand for subject-matter experts with foreign languages fluency.

UC does not offer a program dedicated to translation and interpreting studies. Nevertheless, CSU LB proposal leads to duplication UC's PhD programs of comparative and language departments as well as linguistics departments.

Since early 2000, UC comparative literature and language departments have adopted a broad interdisciplinary design of their doctoral programs. They offer individualized doctoral programs and/or doctorates with designated emphases (DEs) in areas not related to literature. Tools for translators and interpreters are primarily covered by linguistics departments in separate courses focused e.g. on phonetics, morphology, semantics, and syntax. Furthermore, UC linguistics departments (especially UCB, UCLA and UCSB) have been developing for decades linguistic corpora used for both research and training of translators and interpreters. The UC corpora are very well known and our students participate in their continued development. Linguistics departments also provide training in a wide range of subfields of the cognitive language science which is listed in the CSU LB's proposal. Special areas of focus include second language acquisition, bi- and multilingualism studies, psycho- and neurolinguistics, AI and computational linguistics. Several departments offer special programs dedicated to hearing-speech-language pathology.

Among departments which are in close vicinity to Long Beach, the conceptual proposal of CSU- LB duplicates the following programs.

<u>UCI: Department of Comparative Literature.</u> PhD students can use any graduate course on campus towards fulfillment of departmental course requirements. The Department offers doctorates with DEs among others in Critical Theory, Visual Studies, Latin American Studies, and Translation Studies. The DE in Translation Studies requires five courses in translation methods and practice and one graduate course specific to the field and literature of choice.

<u>UCR:</u> Department of Comparative Literature. The Interdisciplinary Studies track of this department admits students with background in areas other than literature and in this respect is similar to the SUNY Binghamton doctoral program in Translation and Instruction. Students have an option to work with faculty in other departments such as Media and Cultural Studies, Anthropology, Art History, and others.

<u>UCSD</u>: <u>Department of Linguistics</u> has interdisciplinary program spanning across several departments including cognitive science, psychology, anthropology, and communication. In addition, UCSD and SDSU also offer a joint doctoral program in Language and Communicative Disorders.

<u>UCI: Department of Language Science</u> provides_interdisciplinary_ graduate training in areas such linguistics, cognitive science, psychology, neuroscience, computer science, philosophy, logic, anthropology, education, engineering, speech, and hearing disorders. Graduate students participate in both research and practical applications of these areas.

Among more distant campuses, there is duplication of the linguistics track of the UCB's Interdepartmental PhD program in Romance Languages and Literatures. The program prepares students for both academic and language industry careers, and offers DEs in a number of areas. Among them Applied Data Science is particularly relevant to translation studies. UCB's Department of Slavic Languages and Literatures, and German Department are similarly focused on both academic and industry career paths.

<u>UCD's Linguistics Department</u> allows for specialization in general linguistics, as well as second language acquisition, multilingualism studies or experimental and quantitative approaches to language research and practice. The students participate in both research and practical applications of these areas.

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DOCTORAL DEGREE PLANNING RESOURCES

CONCEPTUAL PROPOSAL FOR UC REVIEW OF CSU PROFESSIONAL AND APPLIED DOCTORAL PROGRAMS

CSU Proposed Degree Information, Campus Information, and Contact Information

| Title of Projected Doctoral Degree | Doctor in Translation and Interpreting |
|---|---|
| Degree Designation (e.g., EdD) | DTI |
| Proposed CIP Code | 16.0103 (Title: Language Interpretation and Translation) |
| Projected Implementation Date (1st Cohort Enrolled) | Fall 2028 |
| Campus | California State University, Long Beach |
| College | College of Liberal Arts |
| Department | Department of Romance, German, Russian Languages and Literatures (RGRLL) |
| Contact Name(s) and Email(s) | Pei-Fang Hung (Pei-Fang.Hung@csulb.edu) Robert Moushon (Robert.Moushon@csulb.edu) Clorinda Donato (Clorinda.Donato@csulb.edu) |

Curricular and Academic Elements

1. Provide a summary of the purpose for and a description of the proposed doctoral degree, including targeted audience(s).

Program characteristics include:

- A cohort-based doctoral program, with degree completion expected in the fourth year of study;
- Financial support through scholarships for selected doctoral students, with additional funding available
 via teaching assignments, making the program accessible to a broad and diverse pool of qualified
 applicants;
- Professionally oriented internship opportunities that inform dissertations or projects and reflect the wide range of career paths in translation, interpreting, and related language services fields;
- A focus on integrating applied research with professional practice, preparing graduates for leadership
 roles in the language services industry and other related fields;

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- Emphasis on autonomous, self-directed learning, developed in and outside of class through peer collaboration and faculty mentorship;
- Programmatic assessments that strengthen research and writing skills for applied research, complex analytical tasks, and professional communication tailored to diverse audiences and contexts;
- A curriculum that challenges students—particularly experienced language professionals and educators—to advance the discipline by expanding theoretical frameworks and applying them through original research and scholarly dissemination.
- 2. Describe how the proposed doctoral curriculum is advanced beyond a master's degree to justify a new professional and/or applied doctorate, distinct from a UC doctoral program.

The proposed doctoral curriculum is designed to advance beyond the scope of a master's degree by emphasizing applied, practice-based research that prepares graduates for a wide variety of professional applications. Unlike a few UC doctoral programs that include coursework on literary translation in departments of comparative literature (see the review of those departmental offerings on Page 8-11), CSULB's program is designed as a professional doctorate that equips students with applied research skills, technological fluency, and competencies aligned with the language services industry's need for translators, interpreters, and future leaders.

The doctoral coursework offers candidates a real-world context for the development of applied research in a wide range of specialized areas including but not limited to audiovisual translation, access services, localization, medical and legal translation, consecutive and simultaneous interpreting, cognitive language science, language data visualization, and terminology management. Students will be guided in the application of the most current uses of technology including AI interfaces in the realization of their dissertation/project goals. The generous funding from which the program benefits makes site licenses of the best platforms in the industry available to all doctoral students.

The CSULB Doctor in Translation and Interpreting program culminates in an applied dissertation or project, complemented by professional milestones such as conference presentations and scholarly publications. These milestones reflect the candidate's growing expertise in both research and professional practice. While the UC Comparative Literature doctoral programs with coursework in literary translation primarily prepare graduates for academic careers, CSULB's applied doctorate responds to documented workforce demand by training professionals for leadership roles in the many areas of specialization outlined above. This distinction ensures that the program is not duplicative of UC offerings but instead fulfills a critical gap in California's higher education ecosystem by integrating academic rigor with industry relevance.

- 3. Describe the admission criteria for the proposed doctoral degree (including undergraduate preparation).
 - Master's degree in translation, a world language and literature, computational linguistics, or in any other relevant discipline
 - Prior experience or training in translation or interpreting (2 years minimum)
 - 3.0 minimum GPA at the master's level
 - Official transcript(s) (undergraduate and graduate programs)

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- Advanced proficiency in one world language (C1 or C2 level) and intermediate proficiency in another world language (B1 or B2 level)
- All international students must provide proof of English language proficiency in accordance with CSULB Graduate Studies admission requirements
- Personal statement
- A brief (500 words) statement of research interests
- Three letters of recommendation (a combination of academic and professional is desirable)
- 4. List the proposed doctoral program course and culminating doctoral project descriptions including, as appropriate, a description of qualifying and/or comprehensive exams, professional and/or clinical experiences, practicums, projects, and research.

The required number of units for a Doctor in Translation and Interpreting (DTI) is 60 units.

| | 60 Units | | | |
|-----------------------------------|---|--|--|--|
| Core Courses (18 ur | nits) | | | |
| 3 units | Research paper analysis and bibliographical search | | | |
| 3 units | Academic writing | | | |
| 3 units | Technology for research | | | |
| 3 units | The language industry | | | |
| 3 units | Empirical methods, quantitative and qualitative analysis, surveys | | | |
| 3 units | Conference paper preparation | | | |
| Electives Courses (9 | Electives Courses (9 units) | | | |
| 3 units | Translation pedagogy | | | |
| 3 units | Translation and cognition | | | |
| 3 units | Corpora in translation | | | |
| 3 units | Independent study | | | |
| 3 units | Internship | | | |
| Culminating Activities (33 units) | | | | |
| 9 units | Preparation for comprehensive exams | | | |
| 9 units | Research for dissertation/project prospectus | | | |
| 15 units | Dissertation/project | | | |

Describe the proposed culminating doctoral experience (doctoral dissertation, doctoral project, or doctoral capstone).

The program's culminating experience will consist of a doctoral dissertation or project, and will demonstrate the candidate's ability to conduct systematic, rigorous research that addresses significant professional challenges in the fields of translation or interpreting. The culminating work must reflect an original contribution to the profession.

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Both the dissertation and the project will be applied in nature and grounded in evidence-based practice. However, the dissertation will emphasize systematic research grounded in relevant theories, while the project will focus on designing and implementing practical solutions to real-world problems. Alternatively, the project may consist of a translated product, such as a video game, supported by quantitative and qualitative data that reflects appropriate marketplace trends and projections.

Per Article 5 of the CSU Applied and Professional Doctoral Programs Policy, the written product of the dissertation or project will include the following core components:

- 1. A clear articulation of the research problem or purpose, framed by relevant theoretical perspectives.
- 2. A discussion of the significance of the topic in both scholarly and professional contexts.
- 3. A comprehensive review of relevant scholarly and professional literature.
- 4. A detailed description of the research methodology and data analysis process.
- 5. A presentation of findings, arguments, and evidence-based conclusions or recommendations.
- 6. A succinct abstract summarizing the purpose, significance, methods, and key conclusions of the work.

The culminating experience will explore new ideas and approaches in the fields of translation and interpreting and will offer innovative solutions to real-world challenges in the language services industry. Following the completion of the written component, the candidate will participate in an oral defense of the dissertation or project administered by their doctoral committee. This presentation will allow the candidate to further articulate the rationale, methods, findings, and implications of their work and to engage in scholarly dialogue with committee members. Unanimous approval by the committee is required for the award of the doctoral degree.

6. List the program learning outcomes for the proposed doctoral degree.

Upon completion of the Doctor in Translation and Interpreting, graduates will be able to:

- Demonstrate expertise in their working languages in the practice of translation at the Superior level on the American Council on the Teaching of Foreign Languages (ACTFL) scale or C2 level on the Common European Framework of Reference for Languages (CEFR) scale in their first language (L1); and at the Advanced-Mid to Advanced High on the ACTFL scale or B2/C1 on the CEFR scale in their second language (L2). (Linguistic Proficiency)
- Demonstrate in-depth knowledge of the cultures of each of their working languages, including social, artistic, historical, legal, economic, and geopolitical aspects. (Cultural and Intercultural Competency)
- Situate theories, approaches, and methodologies in their socio-cultural and historical contexts, evaluate them critically in relation to their practice of translation. (Theory)
- Demonstrate in-depth understanding of the practice of translation across cultures, media, and genre, taking into account questions of agency, power, and ethics. (Language and Theory)
- Utilize translation tools (including translation memories and other computer assisted translation tools) appropriately and effectively. (Technology)
- Utilize advanced bibliographical techniques (including text based and media documentation) and identify appropriate tools, techniques, and resources for theoretical, documentary, or terminological

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research. (Research Tools)

- Define a research problem; situate it in the field of translation, interpretation, or translation studies; create and realize original research using a scientific approach, rigorous methodology, and theory-informed application in the field of translation, interpretation, or translation studies. (Research / Thesis)
- Apply the legal frameworks and ethical principles governing the translation profession, paying particular attention to questions of confidentiality. (Professional Ethics)
- Independently put in place methods and opportunities to improve their knowledge and skills as part of a program of continuing education / development in order to keep abreast of developments in the field of translation studies and technology. (Lifelong Learning)

7. Describe the infrastructure required for this proposed doctoral program.

Thanks to donor support, the Translation Studies Program at CSULB already possesses the essential infrastructure for the proposed Doctor in Translation and Interpreting. This infrastructure includes a translation and interpreting lab with twenty computer stations and four soundproof booths for simultaneous interpreting, and a smaller eight-station production lab conceived as a place where students can work on translation projects outside of class. Licenses for media localization platforms and computer assisted translation (CAT) tools will be covered by the Donato Center endowment which contains ample funds for purchasing licenses for a growing doctoral student population.

Appendix A

1. **Doctoral Program Roadmap.** Provide a doctoral program roadmap serving as a visual representation of the pathway by term of program requirements, including the sequence of completing courses and any offsite, internship, and/or culminating requirements, and the total units per term and total overall units for the program.

| Year | Term | Courses / Milestones | Units |
|------|--------|--|-------|
| 1 | Fall | Research paper analysis and bibliographical search Academic writing Elective 1 | 9 |
| | Spring | Technology for researchThe language industryElective 2 | 9 |
| 2 | Fall | Empirical methodsConference paper preparationElective 3 | 9 |

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| | Spring | Preparation for comprehensive examsDoctoral qualifying exam (milestone) | 9 |
|---|--------|---|-----------|
| 3 | Fall | Advancement to candidacy (milestone)Research for dissertation/project prospectus | 9 |
| | Spring | Dissertation/project proposal and defense (milestone)Dissertation/project | 6 |
| 4 | Fall | Dissertation/project | 6 |
| | Spring | Dissertation/project Dissertation/project submitted and oral defense (milestone) | 3 |
| | | | Total: 60 |

2. Postgraduate Professional Job Objectives

a. Describe relevant statewide workforce demands for the proposed doctoral program.

Leaders in the fields of finance, AI, and translation and interpreting have all made the case for training professionals at the doctoral level in the State of California for the future of the growing and evolving language services industry and for the research needs of the State in this sector. Their letters were included in our request to the State of California to proceed with the development of doctoral degrees and they are worth revisiting by the committees evaluating this proposal (see Appendix B). These letter-writers underscore the need to harness the expert research output of faculty in the field of translation and interpreting to train doctoral students in the interest of providing the State of California with a stable of skilled research and industry-oriented professionals in a field that is increasingly diversifying and relevant in civic, social, entertainment, technological, and trade domains.

b. Describe employment opportunities for the proposed doctoral program.

According to Statista, the U.S. language services industry has experienced rapid growth over the last several years and continues to play a key role in facilitating communication across the globe and in linguistically diverse communities here at home. This industry encompasses a wide range of activities, including translation, interpretation, localization, transcription, and subtitling, just to name a few. The global industry was valued at nearly \$60 billion in 2022, with increasing wages for translators and interpreters in the U.S. since 2015. California leads the nation in both employment in language services and the proportion of residents who speak a language other than English at home. These trends all point to a growing demand for language professionals with the specialized skillset that this doctoral program would provide.

c. If applicable, describe the national or state-wide professional accreditation/certified licensure(s) and how the accreditation/licensure(s) will be aligned to the proposed doctoral degree title. Not applicable

¹ https://www-statista-com.csulb.idm.oclc.org/topics/2152/language-services-industry-in-the-us/.

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3. Analysis of potential UC duplicate doctoral degree programs. Complete the table below.

Title of CSU Proposed Doctoral Program: Doctor in Translation and Interpreting

| UC Campus | Degree Duplication | UC Degree Title and Designation | UC Website(s) reviewed | |
|---------------|--------------------|---|--|--|
| | (Yes/Potential/No) | | and date accessed | |
| Berkeley | No | No relevant degrees, but a project called the Berkeley Translation Initiative | Berkeley Translation Initiative Website (date accessed: 09/05/25) | |
| Davis | No | English/Literature, Ph.D., Literature Emphasis with Translation Topics Graduate Studies Second Language Acquisition Program | UCD Literature Website UCD Graduate Studies Second Language Acquisition (date accessed: 09/05/25) | |
| Irvine | No | Comparative Literature, Ph.D. Language Sciences, Ph.D. | UCI Comparative Literature Website UCI Language Science | |
| Los Angeles | No | Comparative Literature, Ph.D. Ph.D. degrees (French and Francophone Studies, Germanic, Italian) in Department of European Languages and Transcultural Studies (ELTS) | Department of Comparative Literature Website ELTS Website (date accessed: 09/05/25) | |
| Merced | No | No relevant degrees | Academic Programs (Grad Division) (date accessed: 09/05/25) | |
| Riverside | No | Spanish/English Professional Interpretation and Translation Certificate in School of Professional Studies | UCR Translation Program (date accessed: 09/05/25) | |
| Santa Barbara | No | Ph.D. in Comparative Literature, Emphasis in Translation studies | UCSB Comparative <u>Literature</u> (date accessed: 08/28/25) | |

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| Santa Cruz | No | Ph.D. in Literature | • UCSC Literature Website (date accessed: 09/05/25) |
|---------------|----|---|---|
| San Diego | No | Translation and Interpretation (Spanish/English) Certificate | • Certificate Website (Extension) (date accessed: 09/05/25) |
| San Francisco | No | No relevant degrees | • Graduate Programs Website (date accessed: 09/05/25) |

Provide a summary of your analysis. If there is a potential for duplication, please contact app@calstate.edu for advice.

THE CSULB PROPOSAL FOR THE DOCTOR IN TRANSLATION AND INTERPRETING IN COMPARISON WITH PROGRAMS OFFERINGS AT UNIVERSITY OF CALIFORNIA CAMPUSES

The CSULB Proposal outlined above is positioned to prepare future leaders in the multifaceted field of Translation and Interpreting, with a significant emphasis on the technologies driving work across every sector of the industry.

No University of California (UC) campus currently offers degree programs or courses that mirror the scope or orientation of this proposal. Translation-related offerings at UC doctoral programs are limited to Departments of Comparative Literature at UCSB, and, at UCLA, to the Departments of Comparative Literature and European Languages and Transcultural Studies (ELTS). Only a limited number of courses include the term "translation" in their titles, and those that do are focused exclusively on literature translation.

To make this comparison as transparent as possible, translation offerings at UC campuses are reviewed below, presented on a campus-by-campus basis in order of relevance:

University of California, Santa Barbara (UCSB)

Comparative Literature

The only program explicitly referencing translation studies is an "emphasis" in the Comparative Literature PhD at UCSB. However, the emphasis contains only one course with the term translation in its title; the rest of the emphasis is made up of unspecified courses as indicated below (this wording comes from the UCSB website):

"Completion of 16 units, to include Comparative Literature 260: Literary Translation: Theory and Practice, which is offered at least every other year, or an equivalent course covering some aspect of translation

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theory and practice approved by the Translation Studies faculty advisor in consultation with the advisory committee.

The four courses (16 units) may be fulfilled in a number of ways:

- Students must take at least two courses which cover some aspect of critical, theoretical and/or historical approaches to translation.
- At least one of the four courses should be taken outside the student's home department.

At least four of the 16 units can be taken as an independent study/practicum, in the event a course does not have a sister graduate-level course."

We wish to underscore the limited scope of coursework formally designated as "Translation Studies" beyond *Comparative Literature 260*, as well as the irregularity of its offerings and the vague language used to describe other courses that may count toward the emphasis (e.g., "some aspect"). Reliance on independent study and coursework outside of the department reflects the limited availability of designated courses. While the emphasis highlights literary translation, knowledge that is useful for a doctoral candidate in Comparative Literature, its ultimate aim is to prepare future professors of Comparative Literature, not professionals working as interpreters, audiovisual translators, localization managers, educational, legal, or medical terminologists, translators, interpreters, or adaptive specialists.

University of California, Los Angeles (UCLA)

Comparative Literature

The UCLA Comparative Literature Department offers the following two classes:

284. Theories of Translation

Units: 4.0

Seminar, three hours. Examination of various approaches to concept of translation and to its significance for literary studies. Readings include authors such as Matthew Arnold, Walter Benjamin, George Steiner, and Susan Bassnett. S/U or letter grading.

285. Translation Workshop

Units: 4.0

Seminar, three hours. Preparation: solid reading knowledge of at least one foreign language. Open to qualified undergraduates with proper language preparation. Introduction to principles of literary translation heuristically, that is, on basis of texts participating students translate, and presentation of student work for discussion. Opportunity for students to determine whether they have desire and talent to pursue literary translation as part of their professional lives. S/U or letter grading.

The UCLA European Languages and Transcultural Studies Department (ELTS) offers one class in literary translation:

204. Studies in Translation: Theory, Method, Practice

Units: 4.0

Seminar, three hours. Introduction to principles of literary translation and techniques of literary analysis; practice of translation (to and from English); readings and research in translation studies,

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philology, linguistics, cultural studies, media, and technology. Taught in English. May be repeated for credit. S/U or letter grading.

All three of these courses offered by UCLA are focused on literary translation.

University of California, Davis (UCD)

The UC Davis Comparative Literature Department has taught one class related to literary translation over the past five years.

University of California, Berkeley (UC Berkeley)

There is no graduate coursework but there is a gathering of those interested in translation called the Berkeley Translation Initiative, listed as follows on the <u>UC Berkeley Website</u>:

"The Berkeley Translation Initiative brings together students, faculty, and researchers who are interested in the study, practice, and theory of translation. In our modern globalized and technologically interconnected world, translation is at once ubiquitous and invisible. The initiative therefore seeks to visibilize translation as at once a practice and an object of intellectual inquiry at UC Berkeley. It brings together scholars from across fields and disciplines to further understanding of translation in its broadest possible sense as the movement of written, spoken, or multimodal texts between different languages, varieties, codes, media, and cultures."

University of California, Irvine (UCI)

UCI contains the following Center, but does not offer coursework:

International Center for Writing & Translation

UCI's International Center for Writing and Translation, founded in 2002, has for more than 20 years served as an important space for the promotion of literary, creative, linguistic, and philosophical translation. We believe that translation is capable of forging new bonds and awakening new understandings; it is also capable of inciting critical social change. Join us in celebrating the promise of writing and thinking across languages. We encourage you to learn more about the ICWT's various initiatives, events, and fellowship opportunities.

University of California, Riverside (UCR)

UCR offers a certificate program in Translation Studies through Extension

University of California, San Diego (UCSD)

UCSD offers a certificate program in Spanish-English translation and interpreting through Extension

In sum, our review of UC coursework confirms that no UC campus offers a doctoral degree in translation and interpreting comparable to the one we are proposing. Notably, there is no coursework in interpreting, and the translation coursework at the doctoral level are limited to the literary domain, serving primarily to enhance students' skills in literary analysis.



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With regard to language technologies, a limited number of courses exist within UCI's doctoral program in Language Science and UC Santa Cruz's Department of Natural Language Processing. However, these programs are oriented toward linguistics theory and computational method rather than the preparation of leaders in the field of translation and interpreting.

The CSULB proposal directly addresses this gap by integrating interpreting, applied translation across professional domains, and language technologies, positioning the program as the first in the region to prepare graduates for leadership in today's rapidly evolving translation and interpreting industry.

Deadline to submit to the CSU Chancellor's Office: **August 1**Deadline to submit to the UC Office of President: **September 15 (submitted by CSUCO)**

Submit completed proposal package using the Smartsheet submission form: https://app.smartsheet.com/b/form/f44c90ae00524cf6848fbf15a105b9b9

Academic Programs, Innovation and Faculty Development CSU Office of the Chancellor 401 Golden Shore, 6th Floor

Long Beach, CA 90802-4210

Contact Us

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UC/CSU Program Duplication Review Rubric

Campus: SDSU San Diego — D.Sc. in Applied Science of Human Experience

Reviewer: Baolin Wu

Date: 10/27/25

| | Little to No | Some Duplication | Nearly Total /Total |
|----------------------|------------------|------------------|---------------------|
| | Duplication | (warrants closer | Duplication |
| | (more dissimilar | review) | (much more alike |
| | than not) | | than different) |
| | | | |
| Title of Projected | | Х | |
| Doctoral Degree | | | |
| Degree Designation | Х | | |
| (e.g. EdD) | | | |
| Program Description | | | Х |
| Program Learning | | | Х |
| Outcomes | | | |
| External Program | х | | |
| Accreditation (where | | | |
| applicable) | | | |
| Required | | | Х |
| Coursework/Program | | | |
| Structure | | | |
| Cumulating | | | Х |
| Experience/Research | | | |
| Orientation | | | |
| Overall Assessment | | | X |
| | | | |
| | | | |

Relevant UC Campuses/Programs (please list):

Berkeley, Davis, Irvine, UCLA, Riverside, Santa Barbara, Santa Cruz, San Diego: PhD in Anthropology; academically focused, conventional PhD programs in anthropology that are primarily research-oriented.

San Francisco: PhD in Medical Anthropology (joint program with Berkeley); focuses on theoretical studies of emerging anthropological issues in medical science.

Merced: Substantial duplication with proposed MA/PhD degree in Anthropology and Heritage Studies, currently under campus review.

Comments regarding program similarities:

The proposed degree emphasizes the applied aspects of anthropology with a primarily industry-oriented focus, in contrast to the theoretically focused studies offered in traditional PhD anthropology programs at UC campuses. While UC programs incorporate theory, empirical approaches, field training, and other elements that are valuable in applied settings, they are not exclusively industry-focused. However, it is arguable that many components of UC programs could find application in industry contexts.

Additionally, UC Merced has provided a new evaluation regarding potential duplication with its Proposal for a Program of Graduate Studies in Anthropology and Heritage Studies (MA and PhD degrees), which is currently under campus review. The evaluation concludes that the SDSU degree substantially duplicates UC Merced's proposed program in terms of conceptual foundations, curricular structure, target student audience, and intended learning outcomes. Specifically, SDSU's proposal replicates core features of UC Merced's proposed program. The duplication is extensive enough that the SDSU program would occupy the same academic and professional niche envisioned by UC Merced.

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DOCTORAL DEGREE PLANNING RESOURCES

CONCEPTUAL PROPOSAL FOR UC REVIEW OF CSU PROFESSIONAL AND APPLIED DOCTORAL PROGRAMS

Deadline to the CSU Chancellor's Office: August 1

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Deadline to the UC Office of President: September 15 (submitted by CO)

CSU Proposed Degree Information, Campus Information, and Contact Information

| Title of Projected | Applied Science of Human Experience, D.Sc. | |
|-----------------------|--|--|
| Doctoral Degree | | |
| Degree Designation | D.Sc. | |
| (e.g., EdD) | | |
| Proposed CIP Code | Anthropology – General 450201 – A program that focuses on the systematic study of human beings, their antecedents and related primates, and their cultural behavior and institutions, in comparative perspective. Includes instruction in biological/physical anthropology, primatology, human paleontology and prehistoric archaeology, hominid evolution, anthropological linguistics, ethnography, ethnology, ethnohistory, socio-cultural anthropology, psychological anthropology, research methods and applications to areas such as medicine, forensic pathology, museum studies and international affairs. | |
| Projected | Academic year commencing Fall 2028 | |
| Implementation Date | (in accordance with the external and SDSU review process timeline) | |
| (1st Cohort Enrolled) | | |
| Campus | SDSU, Campanile Drive, San Diego | |
| College | College of Arts and Letters | |
| Department | Anthropology | |
| Contact Name(s) | Prof, Dr. Amanda Kearney (IDP proposal committee) <u>ajkearney@sdsu.edu</u> | |
| and Email(s) | Prof, Dr. Matthew Lauer (Chair of Department) <u>mlauer@sdsu.edu</u> | |

Curricular and Academic Elements

1. Provide a summary of the purpose for and a description of the proposed doctoral degree, including targeted audience(s).

Uniquely distinct in not only title but substance, the proposed Applied Science of Human Experience, D.Sc. has been designed to meet the increasing demand for sophisticated thinkers who effectively combine applied research insights, technical expertise, and deep cultural knowledge to address human predicaments. Unlike a conventional PhD in Anthropology, which centers on theory and foundational research, our D.Sc. degree—the first of its kind in the U.S—reframes anthropology as a scientific, technical, and action-oriented discipline directly responsive to current and emerging workforce needs.



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Purpose and Description

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The Applied Science of Human Experience D.Sc. will provide practice-based training in the core aspects of human experience which distinguish an applied anthropological approach. We liberate out from the 4-subfield model and position anthropology as the original applied science of human experience. Our Doctoral program capitalizes on anthropology's unique science and skills, taught through a future focused attention to human challenges and methods that are advanced in their style, delivery and impact. Program relevance goes above and beyond scholarly-only training, to incorporate training to address 'cross-sector' needs, specifically those in cultural resource management and public archaeology, health, emerging technology and environmental sustainability.

Our D.Sc. candidates will build their career while doing the doctoral program through in-built opportunities for work-integrated learning, gaining unique skills in the five pillars of an applied anthropology: praxis, ethics, reflexivity, diplomacy and creativity.

From admission to completion our D.Sc. candidates will interface with an academic supervisory team and industry partners who seek critical insight on matters of 'human experience'. In partnership we will deliver mentoring through structured and professionally oriented coursework, individual mentoring, internships as work integrated learning, advanced methods and professionally based special topics. The Program will generate a professionalized workforce with aptitude in the art of external engagement and translational knowledge exchange for greater social and cross-cultural impact.

D.Sc. candidates will be given training that develops skills – drawn from "synthetic thinking"—the ability to assess cultural/human centric situations from different (even incompatible – industry and scholarly) perspectives and combine them, actualizing new possibilities.

Targeted Audiences

Broadly speaking, the targeted audiences for the Applied Science of Human Experience D.Sc. include,

- Mid-Career Professionals: People already working in the fields of cultural resource management and public archaeology, public health, urban planning, social services, environmental justice, nonprofits and community development who want to deepen their expertise with anthropological tools and theory to enhance their impact.
- Candidates with Regional Ties: Individuals from or committed to Southern California, the U.S.–Mexico border region, Imperial Valley, or Indigenous lands in the area. First-generation college students or members of underrepresented groups seeking advanced degrees focused on social equity and local engagement.
- **Applied Researchers and Change Agents**: Those interested in community-based participatory research, ethnographic fieldwork, policy analysis, or evaluative research.
- Community College or State University Educators: Lecturers or instructors at California Community Colleges or CSU campuses seeking to advance their credentials while keeping a community-oriented focus.
- 2. Describe how the proposed doctoral curriculum is advanced beyond a master's degree to justify a new professional and/or applied doctorate, distinct from a UC doctoral program.

We distinguish the Applied Science of Human Experience D.Sc. as a significant advancement beyond applied and mainstream MA programs in Anthropology, on the following terms:

MA programs in Applied Anthropology are generally designed to deepen career-oriented knowledge and skills.
 The D.Sc. program at SDSU will remain committed to a similar objective, however, will augment this with a

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greater emphasis on nimble and responsive research methods and applications, relative to a diverse audience of non-academic research consumers. This will involve candidates gaining experience through work integrated learning, industry linkages and the design and distinction of impact measures inclusive of but also beyond academic achievement. The D.Sc. program will address knowledge gaps and build skills among the graduate community that are critical to self-determining career pathways and networks to support the launch of a career in conjunction with and during the doctoral training. Our doctoral candidates will play a direct role in identifying and brokering their own industry linkages and work integrated learning opportunities. These opportunities are built into the Program design from the first year and expertise is fine-tuned throughout cumulative experiences in each year, until completion.

- The D.Sc. program scales up the commitment to internships and independent study programs. This allows
 candidates to develop skills beyond conventional course work expectations and to develop these on a selfdetermining basis, which encourages them to invest in building relationships within their home department and
 beyond with their community partners and/or relevant industry linkages across sectors. Such outreach is
 designed to develop leadership skills in the graduate cohort, and create a professionally minded research
 environment.
- MA programs tend to be focused on breadth of content and apprenticeship style mentoring models, however the D.Sc. will be heavily curated in relation to individual candidate need and focus. This is achievable based on the modelled smaller cohort size befitting budget. Course work will include academic instruction, to address conventional disciplinary theories and methods, but will emphasize the importance of specific training in post-conventional and advanced professionalized anthropological skills and orientations. This will involve mentoring doctoral candidates in the art of advanced methods and rapid and/or evaluative research, identifying audiences, establishing the situational contexts for their research, determining realms of influence and developing modes of communication befitting wider engagement. Impact measures will also be established through coursework, along with instruction on how to commercialize and monetize anthropological skillsets. We will adopt an approach of 'mentoring the researcher, not just the research'. D.Sc. candidates will also be expected to have high levels of self-direction and self-motivation, which are key attributes we will be looking for throughout the application and admission process, as such skills are necessary for the degree of outward facing networking and a broader vision for research that will distinguish the SDSU D.Sc. program from its inception.
- D.Sc. mentoring and supervision will go above and beyond the mentorship provided at the MA level and involve
 - a. Structure
 - b. Support
 - c. Networking opportunities
 - d. Advocating and career promotion
 - e. Group mentorship and peer mentorship where doctoral candidates operate as a small cohort and provide intentional support, intellectual and professional guidance for one another. This is mentoring from a social network perspective and is based on evidence that doctoral candidates report overwhelming issues around isolation and loneliness throughout the course of their candidature. We will build a scientific community working together to advance the applied science of human experience.

A final important advancement beyond the MA degree experience for the Applied Science of Human Experience D.Sc. program is that candidates will be seeking intellectual growth relative to a specific problem-based issue, in combination with identifying and taking the steps to facilitate access to a workforce community to secure a job or crafting and/or a freelance/consulting profile.



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3. Describe the admission criteria for the proposed doctoral degree (including undergraduate preparation).

Applicants must hold a bachelor's degree in anthropology and a master's qualification in anthropology or a closely aligned discipline¹. Admission to the program is competitive and requires demonstrable applied expertise, either through professional experience or substantive engagement with relevant industries.

A minimum 3.5 GPA accompanied by:

- Demonstrable professional experience
- Strong letters of recommendation from academic and industry experts

Candidates must also clearly articulate:

- A defined, problem-based approach to their intended research or practice
- The target audience and professional sector(s) their work aims to impact
- Capacity and motivation to establish and sustain external partnerships

This program is designed for individuals who bring a combination of disciplinary grounding and real-world insight to the applied study of human experience.

4. List the proposed doctoral program course and culminating doctoral project descriptions including, as appropriate, a description of qualifying and/or comprehensive exams, professional and/or clinical experiences, practicums, projects, and research.

D.Sc. Program Requirements

- 60 Units of Credit Coursework (36 UOC at Doctoral or MA/Doc level)
- 42 UOC completed in residence
- Qualifying exam
- 15 UOC for doctoral dissertation/project research
- Dissertation, Portfolio of Impact & Engagement, Presentation of research and impact to public audience
- No less than 9 units of transfer
- Timeline to completion 4 years
- There is no required linguistic competency program as part of the D.Sc. Candidate suitability for intake will be determined by alignment of existing skills with proposed project.

Coursework specific to the D.Sc. will include:

42UOC in 800 level doctoral designed courses specific to the Applied Science of Human Experience, D.Sc. 18UOC in 600/700 level electives curated from the Anthropology Program and other aligned course offerings at SDSU

¹ The determination of close alignment is shaped by academic trends over the last decade to diversify language around 'anthropological' offerings, while retaining a close pedagogical commitment to relevant theory and methods. We would anticipate close alignment as MA training in Archaeology, Linguistics, Ethnic Studies, Indigenous Studies, Development Studies, or Environmental Humanities. The Departmental application review committee will have clear guidelines by which any determination of 'close alignment' is reached.



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YEAR ONE

Semester 1 (12 Units)

ANTH800 Future Focus on Human Experience (3 units)

This course explores the relevance and potential of anthropology in navigating and shaping the future of human experience. Positioned at the intersection of interdisciplinary critique, activism, ethics, and innovation, it challenges students to reconceptualize anthropology not as a static academic discipline, but as a dynamic, future-oriented practice. Delivery mode: Synchronously online.

ANTH 801 Professionalization & Advanced Methods (3 units)

This course is a primer for career development and professional practice. Over the course of the semester, we will survey a broad range of contexts in which anthropologists now work and examine the particularities of introducing anthropological concepts and findings across key sectors. So too we will explore the realities of professional practice and pay attention to the mechanics of working well, working ethically and ensuring impact through the uptake of established and novel anthropological methods for the applied study of human experience. Delivery mode: Synchronously online.

- ANTH or Aligned Elective (3 units)
- ANTH or Aligned Elective (3 units)

Semester 2 (12 Units)

ANTH802 Anthropology in Action: Decoding problems (3 units)

Drawing on ethnographic approaches, systems thinking, and interdisciplinary dialogue, students will explore how anthropologists identify, analyze, and address social issues—ranging from cultural heritage and development, environmental conservation, health disparities, cultural displacement, crisis and disaster management, digital inclusion and housing justice. Emphasis is placed on developing students' capacity to *translate anthropological insight into action*. The course centers on real-world case studies, collaborative diagnostics, and experimental field strategies that foreground cultural nuance, and stakeholder engagement. Delivery mode: Synchronously online.

ANTH 896 Advanced Professional Special Topics A (3 units)

This course (parts A and B over 2 semesters) provides students with an extended opportunity to design and undertake a self-directed study, in conjunction with their faculty-based mentor. It is intended to give graduate students the chance to evaluate a 'problem' within their field of research and to present the results of their research and reflection to fellow students and instructors. Delivery mode: One-to-One mentoring + Work Integrated Learning.

- ANTH or Aligned Elective (3 units)
- ANTH or Aligned Elective (3 units)

YEAR TWO

Semester 3 (12 Units)

ANTH 895 Internship (3 units) Work Integrated Learning - Off Campus

The internship becomes the scoping opportunity for industry partnership to support the D.Sc. candidate, who is supported in identifying linkages within their field of expertise and realm of influence. Assistance will be provided by the Director of the Doctoral Program and the primary faculty mentor throughout this process. Delivery mode: Off campus - Work Integrated Learning.

ANTH 898 Independent Study A (3 units)

This course (parts A and B over 2 semesters) offers students a sustained individual study program directed toward developing skills in project evaluation and project scoping. The course is taught on a one-to-one basis as a student/faculty mentor arrangement. Project evaluation will support the student in their own project scoping exercise, intended to launch the process of applied literacy in engaging with industry partners, and connecting with wider



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Fmail app@calstate.edu audiences for the purposes of their doctoral project. ANTH898 provides the context for students to deepen their

relationships with industry partners. Delivery mode: One-to-One mentoring + Work Integrated Learning.

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ANTH 896 Advanced Professional Special Topics B (3 units)

This course (parts A and B over 2 semesters) provides students with an extended opportunity to design and undertake a self-directed study, in conjunction with their faculty-based mentor. It is intended to give graduate students the chance to evaluate a 'problem' within their field of research and to present the results of their research and reflection to fellow students and instructors. Content will vary on the basis that students choose to investigate their own advanced professional special topic in the applied science of human experience. Delivery mode: One-to-One mentoring + Work Integrated Learning.

ANTH or Aligned Elective (3 units)

Semester 4 (9 Units)

ANTH 810 Proposal Design (3 units)

This doctoral level seminar course focuses on the design of research for the applied science of human experience and the development of proposals to support it. The goal of the seminar is for students to learn how to elevate their research ideas and translate these into a clear and convincing plan for applied research. Each student will develop and discuss their ideas with the class on a weekly basis, and craft a research proposal which scopes their research question, problem-based commitment, methods & methodology, alignment with industry, clarity on audience and design of outputs for impact. Students will receive instruction in how to develop their portfolio for impact. Delivery mode: Synchronously online.

ANTH 898 Independent Study B (3 units) Work Integrated Learning Off Campus

This course (parts A and B over 2 semesters) offers students a sustained individual study program directed toward developing skills in project evaluation and project scoping. The course is taught on a one-to-one basis as a student/faculty mentor arrangement. Project evaluation will support the student in their own project scoping exercise, intended to launch the process of applied literacy in engaging with industry partners, and connecting with wider audiences for the purposes of their doctoral project. ANTH898 provides the context for students to deepen their relationships and time spent with industry partners. Delivery mode: One-to-One mentoring + Work Integrated Learning.

ANTH or Aligned Elective (3 units)

Before progression into Year 3 of the Doctoral Program candidates must have successfully completed a qualifying exam

To be eligible to sit for the Qualifying Exam, candidates must have successfully completed:

All required coursework in Year One and Year Two (minimum 45 Units).

Written Portfolio (submitted)

Candidates will compile a curated portfolio that includes:

- A critical reflection on their evolving identity as a scholar-practitioner
- A summary of insights gained from ANTH800, ANTH801, and ANTH802
- Two applied case study analyses (from coursework or internship), showcasing stakeholder engagement, ethical considerations, and transdisciplinary thinking
- A research proposal including Research question, Problem statement, Anticipated societal or sectoral impact, Evidence of alignment with industry or public sector

Oral Examination

Candidates will be asked to

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- Respond to questions based on their research proposal and on the relationship between their work and broader societal challenges
- Articulate their anticipated contribution to the field

YEARS THREE & FOUR (to completion)

ANTH899 Dissertation Research (15 units)

In conjunction with an Extended Industry Placement (EIP) as work integrated learning. Industry placement in our applied program is a paid, professional assignment that allows students to apply their disciplinary training to solve real-world problems in non-academic settings.

Culminating Experience Milestones: Dissertation, Portfolio of Impact, Public Presentation See further details on Culminating Experience at Q.6

ANTHROPOLOGY ELECTIVES

ANTH700: Anthropological Approaches to the Human Experience

ANTH601: Seminar in Biological Anthropology

ANTH602: Seminar in Archaeology

ANTH603: Seminar in Sociocultural Anthropology

ANTH604: Seminar in Linguistics

NON-ANTHROPOLOGY ELECTIVES

BA700: Business in the Global Environment

COMM771: Seminar: Intercultural Communication

COMM705: Seminar: Performance Studies

ED841: Critical and Decolonizing Theories in Educational Research

GEOG760: Seminar in Behavioral and Social Geography

GEOG740: Seminar in Human Geography

GEOG770: Seminar in Environmental Conservation GEOG780: Seminar in Techniques of Spatial Analysis

MGT724: Entrepreneurship

PH700: Seminar in Public Health

PH700D: Seminar in Public Health: Environment

PH700E: Seminary in Public Health: Health Management

PH700F: Seminar in Public Health: Health Promotion and Behavioral Science

SOC700: Seminar in Social Theory

SOC730: Seminar in Social Institutions

SOC743: Seminar in Criminology and Criminal Justice Theory

5. Describe the proposed culminating doctoral experience (doctoral dissertation, doctoral project, or doctoral capstone).

The Culminating Experience includes,

- Dissertation 80,000 words
- Portfolio of Impact & Engagement (see details below)
- Public Presentation of Research Findings and Impact

Beyond a dissertation, candidates must complete a Portfolio of Impact & Engagement —a curated collection of applied outputs (e.g., grant applications, reports, policy referrals, published work, creative or public-facing content) that reflects their career development and professional contributions during the life of the D.Sc. program. This portfolio serves as a

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critical tool for demonstrating real-world impact and enhances during-and-after candidature employability.

The portfolio will include the following, in a manner that best reflects each candidate's journey:

- 1. CV
- 2. Statement of purpose for the portfolio and advice on 'how to read' the portfolio.
- 3. Non dissertation applied outputs: Reports and other written documents that support the practical undertaking of the Applied Science of Human Experience D.Sc.

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- 4. Creative Works: For those with research commitments which lend themselves to creative reporting and outputs, the portfolio may include fictional writing, popular writing for public interest, details and accounts of performances, artworks, short films, or design projects. These creative endeavors will highlight the fusion of theory and creative practice for knowledge translation.
- 5. Professional Contributions: A portfolio recognizes the value of practical experience. Candidates can include evaluations, reports, recommendations, policy contributions, professional workshop and training delivery, or other evidence of their impact in professional settings. This bridges the gap between academia and the industry practice.
- 6. Reflective Essay: Portfolios can also include a reflective essay. These introspective narratives provide context, explain the significance of the work, and showcase critical thinking as well as illustrate the Doctoral candidate's ability to navigate challenges through problem solving and management skills. Accounting for the challenges that come with applied research and those aspects of research which did not go well is a valuable part of the reflective inclusion for a portfolio.
- 7. Letters of support or commentary on impact from community and industry partners and/or other audiences.

The portfolio complements applied research, in the following ways:

Flexibility: The portfolio is a more flexible mode of expression to the dissertation. It can showcase skills often undervalued in the doctoral learning process, namely the 5 pillars of an applied approach: Praxis, Reflexivity, Diplomacy, Ethics and Creativity.

<u>Holistic Assessment</u>: The portfolio will be examined alongside the dissertation, thus allowing for recognition of diverse talents, contributions and impact.

Real-World Relevance: By emphasizing practical impact, the portfolio of impact and engagement aligns well with the needs of industries, organizations, and communities.

<u>Career Enhancement</u>: The D.Sc. graduates will emerge with a rich portfolio to share with employers, grant committees, and collaborators. Building a portfolio of impact and engagement will assist with career advancement.

Assessment Criteria: There will be established criteria for evaluating portfolios. Assessment will be based on:

- Evidence of quantity
- Evidence of quality
- Meaning and impact
- Alignment with dissertation and overarching research agenda



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6. List the program learning outcomes for the proposed doctoral degree.

The learning outcomes for the Applied Science of Human Experience D.Sc. are:

Research Design & Methods

 Demonstrate mastery of anthropological research technologies, methodologies, and data analysis techniques through advanced coursework and dissertation research.

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- Design and execute an original and innovative research project that contributes meaningfully to a broader social contract identified by the doctoral candidate.
- Collaborate effectively with faculty mentors and industry partners to refine project design, delivery and dissemination for impact,

Novel Merging of Theory & Application

- Critically evaluate and apply theory, along with advanced and rapid-fire methods to real-world problems across
 diverse contexts.
- Synthesize complex information and engage with applied challenges.
- Exercise sound judgment, diplomacy, scholarly rigor, and ethical responsibility when navigating research relative to real-world constraints.
- Adapt theoretical frameworks to applied settings, being nimble and customizing solutions for specific social, political, and cultural environments.

Professionalization

- Learn and apply best practices in professional, and field-based settings.
- Demonstrate leadership and project management skills in applied research, including grant writing, contract preparation, and report development.
- Communicate effectively with diverse communities, clients, and stakeholders through professional writing, public presentations, and culturally responsive engagement.
- Design, implement, and assess rapid evaluations and abbreviated research encounters tailored to varied organizational and community needs.
- Develop reflexive and diplomatic strategies for identifying audiences and customizing anthropological methods to emerging contexts and domains of influence.

7. Describe the infrastructure required for this proposed doctoral program.

SDSU currently has and will have the resources necessary to implement this program, including:

Academic Infrastructure

- Core Faculty: research-active anthropologists with applied expertise
- Affiliated Faculty: across public health, education, business, design, geography, sociology, etc., to support interdisciplinary coursework and advising
- **Graduate Advisory Committees**: Faculty triads/panels with mentoring capacity in academic and applied pathways
- Curriculum Committee: To ensure ongoing alignment with learning outcomes and sector relevance

Research Infrastructure

- Research Labs
- Access to Field Sites/Communities: MOUs and partnerships with NGOs, public agencies, and corporate
 entities to support internship placements and fieldwork.
- Ethics Review Infrastructure: Streamlined IRB/HREC processes sensitive to applied and participatory research

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Professional/Industry Linkages

• **Community Engagement and Industry Partnerships**: Relationships with CRM firms, Indigenous organizations, advocacy groups, health services, education providers, etc.

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• Advisory Board: Composed of non-academic stakeholders who provide feedback on relevance, placement needs, and societal impact.

Learning Infrastructure

- Flexible Learning Spaces and Online Learning Tools
- Portfolio Platform: A digital repository where doctoral candidates curate their work for assessment, stakeholder engagement, and career preparation.
- Methods Technology: Access to NVivo, Dedoose, Atlas.ti, R, ArcGIS, etc.

Doctoral Candidate Support Services

Writing and Research Support: Clinics and writing camps for proposal and publication development.

Administrative and Governance

- **Doctoral Program Director** (see Doctoral Director role statement below)
- Data and Impact Tracking: Tools to monitor alumni outcomes, research impact, and policy/practice uptake.

Doctoral Program Director

The Director will be an existing department faculty member. They will work directly with faculty, administrative personnel, students and industry partners to ensure that the program complies with the CSU/SDSU expectations and California Code of Regulations, which governs the California State University network. They will also work closely with the MA program graduate advisor in the Department of Anthropology, and administrators in Graduate Studies, providing an important link between the department and the university. The role will include oversight at all points, including, admissions, program delivery, information management, teaching, partnership building, doctoral candidate support, progression and annual reviews, doctoral candidate work experience & internship placements, coordinate mechanisms for soliciting input from D.Sc. candidates on the ongoing design of the doctoral program, and annual reporting on academic year updates.

<u>Appendix A:</u> Provide a doctoral program roadmap serving as a visual representation of the pathway by term of program requirements, including the sequence of completing courses and any offsite, internship, and/or culminating requirements; and the total units per term and total overall units for the program.

See over page



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Program Roadmap

Applied Science of Human Experience D.Sc. Program Roadmap, Department of Anthropology, SDSU



A Powerhouse First Year



Identify unique strengths and grow networks



Mentor the researcher & the research



Semester 1

ANTH800

Future Focus on Human Experience

(3 units)

ANTH 801 Professionalization & Advanced Methods

(3 units)

2 x ANTH or Aligned Electives

(6 units)

Semester 2 ANTH802

Anthropology in Action: Decoding problems

(3 units)

ANTH 896

Advanced Professional Special Topics A (3 units)

S. AMERICAN SEC. 15

2 x ANTH or Aligned Electives (6 units)

Semester 3

ANTH 795 Internship (Work Integrated Learning)

(3 units)

ANTH 898

Independent Study A (3 units)

9

ANTH 896

Advanced Professional Special Topics

B (3 units)

ANTH or Aligned Elective

(3 units)

Semester 4

ANTH 810

Proposal Design (3 units)

ANTH 898

Independent Study B

(3 units)

ANTH or Aligned Elective (3 units)

Years 3 & 4 ANTH 899 Dissertation Research (15 units)



Through mentoring and industry engagement the program transitions the candidate from student to independent practitioner



at 45 UOC Qualifying Exam

 $\stackrel{\textstyle \square}{\Longrightarrow}$ Synchronous online & campus-based mentoring $\stackrel{\textstyle \bullet}{\Longrightarrow}$ Off campus industry learning



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Analysis of potential UC duplicate doctoral degree programs. Complete the table below.

<u>Title of CSU Proposed Doctoral Program:</u> Applied Science of Human Experience D.Sc.

| UC Campus | Degree Duplication (Yes/Potential/No) | Degree Title and Designation | Website(s) reviewed and date accessed |
|-----------|---------------------------------------|---------------------------------|--|
| Berkeley | No | PhD in Anthropology | https://anthropology.berkeley.edu/graduate- program |
| | | | https://anthropology.berkeley.edu/graduate- program/anthropology-phd |
| | | | https://anthropology.berkeley.edu/sites/default/files/archphdhandbook2022.pdf |
| | | | https://anthropology.berkeley.edu/sites/default/files/2024_med_anthro_hdbk_addendum_final.pdf |
| | | | https://anthropology.berkeley.edu/graduate- program/anthropology-phd/sociocultural- anthropology |
| | | | https://grad.berkeley.edu/program/anthropology/ |
| | | | https://anthropology.berkeley.edu/people |
| | | | Google AI & SDSU Open AI's ChatGPT Edu |
| | | | Several Reddit chat chains from applicants/current students |
| | | | Searches: Sept 8, 2023; Sept 12, 2024; June 3, 2025 |
| Davis | No | PhD in Anthropology | https://anthropology.ucdavis.edu/graduate |
| | | | https://grad.ucdavis.edu/programs/gant |
| | | | https://programs.gs.ucdavis.edu/api/doc/4512 |
| | | | https://anthropology.ucdavis.edu/person- type/graduate-students |
| | | | https://anthropology.ucdavis.edu/people-sp |
| | | | https://ucdavis.app.box.com/s/mjmbgyuyxd11lwkk xtuyjg1g4xe3v37j |
| | | | Google AI & SDSU Open AI's ChatGPT Edu |
| | | | Several Reddit chat chains from applicants/current |

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|--------------------|----|--|---|
| | | | Searches: Sept 8, 2023; Sept 12, 2024; June 3, 2025 |
| Irvine | No | PhD in Anthropology | https://www.anthropology.uci.edu/grad/phd/index.php |
| | | | https://www.anthropology.uci.edu/grad/ |
| | | | https://catalogue.uci.edu/schoolofsocialsciences/cepartmentofanthropology/anthropology_phd/ |
| | | | https://www.anthropology.uci.edu/grad/phd/curren_php |
| | | | https://www.anthropology.uci.edu/people/faculty.php |
| | | | Google AI & SDSU Open AI's ChatGPT Edu |
| | | | Several Reddit chat chains from applicants/current students |
| Los Angeles | No | PhD in Anthropology | Searches: Sept 8, 2023; Sept 12, 2024; June 3, 2025 https://anthro.ucla.edu/academics/graduate/ph-d- |
| | | | degree/ |
| | | | https://anthro.ucla.edu/academics/graduate/ |
| | | | https://anthro.ucla.edu/people/ |
| | | | https://anthro.ucla.edu/subfields/archaeology/ |
| | | | https://anthro.ucla.edu/about/ |
| | | | Google AI & SDSU Open AI's ChatGPT Edu |
| | | | Searches: Sept 8, 2023; Sept 12, 2024; June 3, 2025 |
| Merced | NA | No graduate degrees in anthropology, or heritage studies | No websites to report other than general departmental page. |
| Riverside | No | PhD in Anthropology | https://anthropology.ucr.edu/prospective-graduate- students-information |
| | | | https://anthropology.ucr.edu/ |
| | | | https://anthropology.ucr.edu/graduate-students |
| | | | https://anthropology.ucr.edu/sites/default/files/202 |
| | | | <u>07/ANTHROPOLOGY%20GRADUATE%20STUDENT%</u> 20HANDBOOK.pdf |



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| www.calstate.edu/app | 2 | | |
|----------------------|----|---------------------|--|
| www.oaiotate.eda/ap/ | | | https://anthropology.ucr.edu/sites/default/files/202 |
| | | | 1-03/2021-03_Qualifying_Exams_Guidelines.pdf |
| | | | https://anthropology.ucsd.edu/graduate- |
| | | | studies/current-students/Copy-of-Student- Handbook_Updated-September-2021.pdf |
| | | | THATTADOON_OPAULEA GEPTETTIBET 2021.put |
| | | | Google AI & SDSU Open AI's ChatGPT Edu |
| | | | Searches: Sept 8, 2023; Sept 12, 2024; June 3, 2025 |
| Santa Barbara | No | PhD in Anthropology | https://www.graddiv.ucsb.edu/graduate- |
| | | | programs/departments/anthropology |
| | | | https://www.anth.ucsb.edu/graduate |
| | | | https://www.anth.ucsb.edu/research |
| | | | https://www.anth.ucsb.edu/people |
| | | | https://www.anth.ucsb.edu/sites/default/files/sitefiles/graduate/handbook/2024- |
| | | | 2025%20Archaeology%20MA_PhD%20Program%20 |
| | | | Guidelines.pdf |
| | | | https://www.anth.ucsb.edu/sites/default/files/sitefi |
| | | | les/graduate/handbook/2024- |
| | | | 2025%20IAS%20MA_PhD%20Program%20Guideline s.pdf |
| | | | https://www.anth.uach.adu/aitas/dafault/files/aitafi |
| | | | https://www.anth.ucsb.edu/sites/default/files/sitefiles/graduate/handbook/2024- |
| | | | 2025%20Sociocultural%20MA_PhD%20Program%20 |
| | | | <u>Guidelines.pdf</u> |
| | | | Google AI & SDSU Open AI's ChatGPT Edu |
| | | | Searches: Sept 8, 2023; Sept 12, 2024; June 3, 2025 |
| Santa Cruz | No | PhD in Anthropology | https://anthro.ucsc.edu/graduate/index.html |
| | | | https://anthro.ucsc.edu/graduate/prospective- students/index.html |
| | | | https://anthro.ucco.adu/graduata/phd.raciniant |
| | | | https://anthro.ucsc.edu/graduate/phd-recipient- dissertations1.html |
| | | | https://catalog.ucsc.edu/en/current/general- |
| | | | catalog/academic-units/social-sciences- |
| | | | division/anthropology/anthropology-phd/ |
| | | | https://anthro.ucsc.edu/about/sub-fields/anthro- archeaology.html |
| | | | https://anthro.ucsc.edu/about/index.html |



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| | | | |
| | | | https://anthro.ucsc.edu/faculty/index.php |
| | | | Google AI & SDSU Open AI's ChatGPT Edu |
| | | | Several Reddit chat chains from applicants/current students |
| | | | Searches: Sept 8, 2023; Sept 12, 2024; June 3, 2025 |
| San Diego | No | PhD in Anthropology | |
| | | | https://anthropology.ucsd.edu/ |
| | | | https://anthropology.ucsd.edu/graduate- studies/current-students/Student- Handbook_final1.pdf |
| | | | https://anthropology.ucsd.edu/people/faculty/index.html |
| | | | https://socialwork.sdsu.edu/_resources/files/irsu/s tudent-handbook-irsu-mar-2024.pdf |
| | | | Google AI & SDSU Open AI's ChatGPT Edu |
| | | | Several Reddit chat chains from applicants/current students |
| | | | Searches: Sept 8, 2023; Sept 12, 2024; June 3, 2025 |
| San Francisco | No | PhD in Medical anthropology with UC Berkeley | https://graduate.ucsf.edu/academics/phd- |
| | | Derkeley | https://graduate.ucsf.edu/admission/graduate- program-statistics |
| | | | https://humsci.ucsf.edu/medical-anthropology/ |
| | | | Google AI & SDSU Open AI's ChatGPT Edu |
| | | | Searches: Sept 8, 2023; Sept 12, 2024; June 3, 2025 |

Provide a summary of your analysis. If there is a potential for duplication, please contact app@calstate.edu for advice.

Since its inception, we have envisioned SDSU's Applied Science of Human Experience D.Sc. as an educational and training-based offering that is distinct from academically focused and conventional PhD Programs in Anthropology across the UC network.

Meeting current and emerging workforce needs has resulted in our creation of a true D.Sc. that possesses the following nationally distinctive features:

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- 1. Application Process: Admission will require candidates possess an applied skillset and relevant prior experience in a career capacity or through industry knowledge, access and engagement. Furthermore, candidates must be able to identify a). their problem-based approach, b). their audience and industry, and c). capacity and drive necessary to build external partnerships.
- **2. Curriculum:** To teach a scientific method, and technical expertise and to scale up skills in outreach and partnership building, the DSc includes a series of new graduate courses, including:

ANTH800 Future Focus on Human Experience

ANTH801 Professionalization & Advanced Methods

ANTH802 Anthropology in Action: Decoding Problems

- **3. Supervision & Mentoring Model:** D.Sc. candidates will be supported by a supervision team including SDSU faculty and an external industry or community mentor, ensuring guidance from multi-stakeholder and applied perspectives.
- **4. Cumulative Experience Portfolio of Impact & Engagement:** Beyond the dissertation, candidates must complete a Portfolio of Impact & Engagement—a curated collection of applied outputs (e.g., grant applications, reports, published work, creative or public-facing content) that reflects their career development and professional contributions during the life of the D.Sc. program. This portfolio serves as a critical tool for demonstrating real-world impact and enhances during-and-after candidature employability. This is an entirely novel and unique offering, not currently required by any UC Anthropology graduate program.

Specific details of analysis of UC doctoral degree programs in Anthropology, and case for non-duplication. Core Focus on Theory and Research:

- The UC programs, including those at UC Berkeley, UCLA, and UC Riverside, emphasize traditional academic and
 research pursuits. Their programs are deeply rooted in exploring anthropological history, foundations and theory,
 conducting empirical research, and engaging in intellectual inquiry. For instance, UC Berkeley's emphasis on
 critical inquiry aligns with the discipline's academic core but doesn't explicitly extend to industry or multi sector
 applications.
- Programs such as UC Santa Cruz's "Emerging Worlds" focus are particularly geared towards reshaping anthropological inquiry and engaging with broad social and scientific dilemmas, which aligns with a scholarly rather than an applied, industry-focused path.

Applied Anthropology as a Peripheral Component:

- Some UC programs incorporate applied aspects, such as UC Riverside's commitment to applying
 anthropological insights in promoting social and environmental justice, and UCSD's acknowledgment of
 anthropology's relevance to contemporary problems. However, these are often framed within the context of
 public service or academic contributions rather than structured industry placements.
- UC Santa Barbara, for example, emphasizes research that spans a global context but remains centered on academic outputs and advancing theoretical understandings rather than direct applications in business or industry settings.
- There is an absence of terminology such as 'applied', 'professional', 'praxis based', and 'vocational training' in all UC PhD program descriptions.

Community Engagement and Public Anthropology:

UC Berkeley's strong emphasis on community values, inclusion, and addressing social challenges reflects a
commitment to public anthropology. However, while there is a call for engagement and leadership on pressing
societal issues, the orientation remains predominantly within academic and civic spaces rather than commercial
or industrial sectors.



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Lack of Structured Industry Placement Pathways:

• None of the UC anthropology programs explicitly prioritize or require industry placements as a core component of their PhD training. Industry engagement, where it exists, is often ad-hoc or pursued through individual student initiatives rather than through structured programmatic pathways.

Conclusion:

While there is thematic overlap in terms of the commitment to societal engagement (a core business of all anthropology by design), a program focusing explicitly on applied anthropology, professionalization training, and industry placement would be distinct from the current UC offerings. It would fill a gap for students seeking to directly translate anthropological insights into industry and practice, and those seeking commercial opportunities and careers.

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Postgraduate Professional Job Objectives

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1. Describe relevant statewide workforce demands for the proposed doctoral program.

The state of California is a clear front-runner in employment for anthropologists and archaeologists, ranking highest for employment level (see Fig.1). It is worth noting that of the 1800 jobs identified in the state of California, by the US Bureau, these do not include self-employed workers. Consultancy and freelance practice are leading forms of employment predicted for those undertaking an applied career pathway. Of the ten top Metropolitan areas with the highest employment level in Anthropologists and Archaeologists, the state of California hosts four, including Los Angeles/Long Beach/Anaheim; Sacramento/Roseville/Arden-Arcade; San Francisco/Oakland/Hayward; and San Diego/Carlsbad (USBLS).

| State | Employment (1) | Employment per thousand jobs | Location quotient (9) | Hourly mean wage | Annual mean wage (2) |
|-----------------|----------------|------------------------------------|-----------------------|------------------|-------------------------|
| California | 1,800 | 0.10 | 2.06 | \$ 36.29 | \$ 75,480 |
| <u>Arizona</u> | 450 | 0.15 | 2.98 | \$ 29.72 | \$ 61,820 |
| <u>Maryland</u> | 320 | 0.12 | 2.45 | \$ 28.79 | \$ 59,880 |
| New Mexico | 320 | 0.39 | 7.85 | \$ 27.82 | \$ 57,870 |
| Florida | 300 | 0.03 | 0.66 | \$ 30.32 | \$ 63,070 |

Fig.1. States with highest employment level in anthropologists and archaeologists, as of May 2022 (USBLS).

In the state of California, the following sectors represent the strongest markets where an applied-science doctorate in Anthropology provides a clear competitive advantage:

Cultural Resource Management (CRM) & Environmental Compliance Senior UX & Human Factors Research Museum Curation & Public Humanities Environmental Justice & Policy Advising

Private and government employers regularly report unfilled anthropology/archeology openings, with especially persistent vacancies occurring at State Parks and CRM firms owing to few graduate-level anthropologists being trained in both field survey and regulatory compliance roles. California statutes (SB 1000, SB 535) have created hundreds of environmental justice-planner, community engagement, and equity analyst roles within CalEPA, CARB, and regional agencies. Many of these roles specify Doctoral-level expertise in participatory methods, and impact evaluation, yet few if any programs currently produce practitioners with California-specific technical and partnership-building training.

SDSU has long-standing expertise in delivering precisely such in-demand professional education. By way of a baseline measure for demand in anthropological training and expertise, a 2019 study of 155 SDSU Anthropology alumni (graduating with an MA in Anthropology), showed that only 25 had pursued academic careers. The majority secured employment in the non-profit, private, and public sectors. The US Bureau of Labor Statistics confirms that "Employment of anthropologists and archaeologists is projected to grow 4.2 percent from 2022 to 2032" (USBLS). The average growth rate for all other occupations is currently 3 percent. Around "700 openings for anthropologists and archaeologists are projected each year, on average, over the decade" (USBLS). These indicators follow global patterns in Anthropology graduate career opportunities both at the MA and Doctoral level. A major employer of anthropologists nationally, is the Cultural Resource Management sector. Altschul and Klein (2022) report, that in the CRM sector alone,

In the next 10 years, the US cultural resource management (CRM) industry will grow in terms of monies spent on CRM activities and the size of the CRM labor force. Between US fiscal years 2022 and 2031, annual spending on



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CRM will increase from about \$1.46 to \$1.85 billion, due in part to growth in the US economy but also to an added \$1 billion of CRM activities conducted in response to the newly passed infrastructure bill. The increased spending will lead to the creation of about 11,000 new full-time positions in all CRM fields. Archaeologists will be required to fill more than 8,000 positions, and of these, about 70% will require advanced degrees. Based on current graduation rates, there will be a significant MA/PhD-level job deficit.

A leading study of Anthropology MA graduate career pathways, initiated by NAPA (National Association for Practicing Anthropologists) and the AAA (American Anthropological Association) (2019), provides compelling insights into MA graduate career opportunities, and identified educational needs to support career success among professional anthropologists (drawing on data from 850 respondents). Results indicate,

• 49% of graduates found jobs within 6 months of graduation, 13% found jobs between 6 and 12 months and 13% found jobs over 12 months after graduation (NAPA).

This indicates a healthy expectation of employment post award of graduate (MA) qualification and would be expected to increase relative to an additional prestige-based qualification (D.Sc.). In addition to increased employability doctoral qualified persons on average command higher starting salaries. Industries, such as CRM remain dominant in the state-based economy as major employers of anthropology graduates. In the past a MA qualification was the standard for launching a successful career in CRM, however this has changed over time. A 2023 report by Succinct Research (a company dedicated to research and reporting on CRM, and heritage conservation services) notes that with a Doctoral qualification in Anthropology, a CRM "career will have no upper limit. Most of the archaeologist at the highest levels in government agencies have PhDs. For example, state archaeologists have PhDs. Lead archaeologists with the NPS have PhDs. Many of the highest supervisors in CRM companies have PhDs". Knowing how to leverage a doctoral qualification for career impact is crucial as they remain a rarity in CRM. Having a Doctorate and being able to demonstrate value in this qualification to companies is considered crucial to reaching the "top of the CRM food chain" (Succinct Research).

The NAPA/AAA 2019 study highlights a distinction in skills development identified as necessary for the contemporary anthropological workforce, and demand for such skills has accelerated. These skills include:

- <u>Praxis based skills</u> in research design and methodology (qualitative (71%) & quantitative skills (60%).
- Workplace Preparation and Applied Skills in project design, development, and management ranked highest (72%). Presentation skills (66%) and technical writing (65%) were also cited as valuable.
- <u>Networking skills</u> Job seeking skills and industry linkages ranked as 10% more important to students in 2019, than they did in 2009. 40% of PhD graduates have not lined up a job by graduation, thus building the D.Sc. around a platform of industry partnership, and work integrated learning is crucial to career building pre-award.

The SDSU Applied Science of Human Experience D.Sc. is distinguished by training that aligns with identified needs in praxis, workplace preparation and networking skills. These are expanded to also provide training in legal aspects of applied practice, diplomacy, professional and market-based assessments. The latter is designed to ensure a financial acumen and market-based intelligence among graduates, as to their application and commercializing of anthropological skills. This will address a significant gender pay gap which has been identified within the applied anthropology sector.

A 2023 publication, reporting on doctoral program size and rates of anthropology faculty job placements, offers sobering insight into job placement trends in higher education at US institutions. Mackie and Rockwell (2023) describe the situation of *academic job futures* as "bleak", clarifying that "[w]within anthropology and other social science disciplines this problem appears to be particularly pronounced". The contraction of career opportunities in higher education forms a central pillar for the design of our proposed Applied Science of Human Experience D.Sc. The second pillar is applying innovative anthropological understandings of the human condition to the world's most pressing predicaments.

References

Altschul, J., & T. Klein. 2022. Forecast for the US CRM industry and job market, 2022-2031. Advances in Archaeological Practice 10(4): 355-370.



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Speakman, R., C. Hadden, M. Colvin, I. Cramb, T. Jones et al. 2018. Market share and recent hiring trends in anthropology faculty positions. *PLoSONE*13(9) https://doi.org/10.1371/journal.pone.0202528

Succinct Research. 2023. Practical Cultural Resource Management Tips. <a href="https://www.succinctresearch.com/should-you-get-a-phd-to-do-you-get-a-phd-to-you-get-a-phd-to-you-get-a-phd-to-you-get-a-phd-to-you-get-a-phd-to-yo

archaeology/#:~:text=Many%20of%20the%20highest%20supervisors,and%20do%20a%20better%20job.

US Bureau of Labor Statistics (USBLS). Occupational Employment and Wages, May 2022, 19-3091 Anthropologists and Archeologists. Available at: https://www.bls.gov/oes/current/oes193091.htm#st

US News, 'Best Science Jobs'. Available at: https://money.usnews.com/careers/best-jobs/rankings/best-science-jobs

2. Describe employment opportunities for the proposed doctoral program.

The following are California-focused career areas where a DSc in Anthropology would be a clear prerequisite and give a decisive edge,

- Cultural Resource Management (CRM) & Environmental Compliance: California's CEQA/NEPA regulations require 'Qualified Archaeologists/Anthropologists' for cultural site surveys and Indigenous engagement—roles often posted by Caltrans, CalEPA, and CRM firms. A Master's or Doctorate is typically required.
- Senior UX & Human Factors Research: In Silicon Valley and beyond, leading UX research teams at Apple, Google, Meta, and other innovators frequently seek Doctoral-level social scientists for senior UX roles. Doctorates in anthropology, or related fields are routinely listed as prerequisites.
- Museum Curation & Public Humanities: Major California museums (e.g., LACMA, SFMOMA, LA County Natural History) and university extension programs favor doctoral-trained anthropologists for curatorial, outreach, and teaching roles.
- Environmental Justice & Policy Advising: State agencies (CA EPA, Air Resources Board, regional water quality boards) and NGOs prioritize candidates with doctoral expertise in community-based research and participatory methods—skills deeply embedded in the D.Sc. curriculum.

Turning also to the specific local contexts of Mission Valley and Imperial Valley, where SDSU has established direct links as a major educational, research, and community partner the D.Sc. program will serve both regions in critically important workforce terms, including:

Imperial Valley has a large Latinx population, deep agricultural roots, and significant migrant communities. The D.Sc. candidates can contribute to:

- Community health initiatives
- Migrant worker advocacy
- Bilingual/bicultural education reform
- Cross-border policy analysis with Mexico



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Imperial Valley is also heavily agricultural, with complex water rights, land use, and labor issues. Our D.Sc. candidates can work with:

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- Agricultural sustainability projects
- Tribal and local stakeholders on water policy
- Community-based environmental justice efforts

Mission Valley, will benefit from the skills and focus of our D.Sc. candidates through the following,

- Indigenous land use consultation (e.g., Kumeyaay heritage)
- Urban planning that respects diverse cultural viewpoints
- · Equity-driven housing and transportation studies

Other areas of investment for our D.Sc. Industry Linkages and Partnerships include,

Public health and healthcare services

- Both regions face health disparities, particularly for:
 - Low-income communities
 - o Immigrant and Indigenous populations
- Applied anthropologists can contribute to:
 - o Culturally responsive healthcare models
 - Participatory health research
 - o Policy recommendations grounded in lived experience

Education and youth development services

- Especially valuable in Imperial Valley, where college readiness and retention rates are lower.
- Applied anthropologists can inform:
 - Inclusive curricula that reflect local cultures
 - Interventions for first-generation students
 - o Culturally grounded STEM/STEAM outreach
- 3. If applicable, describe the national or state-wide professional accreditation/certified licensure(s) and how the accreditation/licensure(s) will be aligned to the proposed doctoral degree title.

In California, and more broadly in the United States, there is no formal state-level licensure or certification required to practice as an anthropologist in general.

UC/CSU Program Duplication Review Rubric

Campus: San Diego State University PsyD in Counseling Psychology and School

Psychology

Reviewer: Wayne Steward

Date: 10/28/25

| | Little to No | Some Duplication | Nearly Total /Total |
|----------------------|------------------|------------------|---------------------|
| | Duplication | (warrants closer | Duplication |
| | (more dissimilar | review) | (much more alike |
| | than not) | | than different) |
| | | | |
| Title of Projected | | X | |
| Doctoral Degree | | | |
| Degree Designation | Χ | | |
| (e.g. EdD) | | | |
| Program Description | | X | |
| Program Learning | | Х | |
| Outcomes | | | |
| External Program | | | |
| Accreditation (where | | | X |
| applicable) | | | |
| Required | | X | |
| Coursework/Program | | | |
| Structure | | | |
| Cumulating | | X | |
| Experience/Research | | | |
| Orientation | | | |
| Overall Assessment | | Х | |
| | | | |
| | | | |

Relevant UC Campuses/Programs (please list):

- UC Berkeley School of Education, School Psychology PhD
- UC Santa Barbara, The Gervitz School. PhDs in both <u>School Psychology</u> and <u>Counseling/Clinical Psychology</u>.
- UC Riverside <u>School Psychology PhD</u>

- UC Irvine <u>Clinical Psychology PhD</u> (this program describes itself as producing graduates who practice psychology and/or conduct research. There would be some overlap with the counseling psychology skills and job market of the proposed CSU degree.)
- UCSD-SDSU Joint PhD Program in Clinical Psychology (this program was flagged as
 having potential overlap by the Council of Graduate Deans. I am somewhat less
 convinced about the overlap as the joint program lists its major areas of study as
 behavioral medicine, experimental psychopathology, and neuropsychology. The
 joint program is clearly orienting its graduates toward different subfields within
 psychology. However, there remains a possibility that a graduate of the joint program
 seeking to practice as a psychologist might still compete for some of the same jobs
 as graduates of the proposed program.)

Comments regarding program similarities:

Assessing overlap for the proposed program is tricky because it involves a set of overlapping Venn Diagram circles. The program will combine training to equip graduates to be licensure-eligible in both counseling psychology and school psychology. This specific combination is not available through any program in the UC system and is rare nationwide. UC has three PhD programs in school psychology (UCB, UCSB, UCR), one PhD program that combines counseling and clinical psychology (UCSB), a clinical psychology PhD program (UCI) that describes itself as producing graduates who practice psychology in addition to conducting research, and a joint clinical psychology PhD program with the CSU system (specifically UCSD and SDSU).¹

The materials provided by the proposed SDSU program in counseling and school psychology place a major emphasis on how the combination of the two sub-fields would make the degree unique. The application also notes that the program will feature some training in public policy to equip its graduates for policy-oriented jobs.² However, because programs that combine training in counseling and school psychology are rare, graduates of the program would still be expected to fill many jobs that require expertise in either counseling (or counseling/clinical) psychology or in school psychology, not the combination of the two.

¹ There is also a PhD in clinical psychology at UCLA. I have not listed this program as being one with potential overlap, as it is moving to be accredited in clinical science, not the more standard APA clinical psychology accreditation, suggesting the focus is more exclusively on training researchers. Similarly, UCB's PhD in clinical science is clearly oriented toward producing researchers and is accredited in clinical science.

² Plausibly, the training in public policy could lead to competition with graduates of UC programs in policy-related degrees. I have not listed them above because policy is clearly not the primary focal point of the proposed program.

The proposed program places a heavy emphasis in its description on multicultural and multilingual psychology training. After completing the program coursework, individuals would only need to take one additional course to receive an Advanced Certificate in Bilingual School Psychology. This would suggest that its graduates may ultimately work in communities that currently are underserved by the available market of school or counseling psychologists.

The proposed program also emphasizes that its degree is a PsyD, not a PhD. The UC PhD programs all state that their primary goal is training researchers, as would be expected for that degree, but then note that many of their graduates also work as practitioners. A PhD who chooses to practice psychology will compete for similar jobs with PsyD graduates. The proposed PsyD training has a reduced emphasis on research training, which is in line with it being a professional, not an academic, degree. But there remains much in common with a PhD curriculum. For example, the proposed PsyD program still requires training in psychometrics, statistics, research, and evaluation, along with the clinical training and practicum experience that are prerequisites for license. Students also have to complete a dissertation that involves evaluation of a program.

Recommendation to CCGA: I agree with the recommendation of the Council of Graduate Deans not to move this program forward at this point. Further study of the potential overlap would be beneficial. The proposed program's distinction hinges on two characteristics: (1) the combined training in two subfields of psychology and (2) the fostering of expertise in serving multiethnic and multilingual communities. It remains difficult at this point to say whether those distinctions sufficiently differentiate the proposal from existing programs. The combination of training in counseling psychology and school psychology will clearly give graduates a broad set of skills. But whether that meaningfully translates into the kind of work they might do (which will be influenced by the kinds of professional opportunities that are available) is more questionable, given that combined counseling/school psychology degrees are extremely rare. The emphasis on multiethnic/multilingual expertise would equip graduates to serve individuals and populations known to face disadvantages in California and the nation. I think there is more potential for this focus to be a true distinguishing feature. But the distinction here is likely to have more to do with addressing gaps in California's psychology workforce than it will with overlap in degree requirements. There are limits to just how different the curricula across programs can be, given that any PsyD or PhD candidate hoping to practice psychology will need to meet common external licensure requirements. At this point, there isn't enough information to assess whether the potential to address deficiencies in the workforce outweigh the substantive overlap in degree requirements necessitated by the mandates for licensure.



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DOCTORAL DEGREE PLANNING RESOURCES

CONCEPTUAL PROPOSAL FOR UC REVIEW OF CSU PROFESSIONAL AND APPLIED DOCTORAL PROGRAMS

Deadline to the CSU Chancellor's Office: August 1

Deadline to the UC Office of President: September 15 (submitted by CO)

| Title of Projected Doctoral Degree | PsyD in Counseling Psychology and School Psychology |
|---|--|
| Degree Designation (e.g., EdD) | PsyD, Doctor of Psychology |
| Proposed CIP Code | 42.2899 |
| Projected Implementation Date (1st Cohort Enrolled) | Fall 2027 |
| Campus | SDSU |
| College | Education |
| Department | Counseling and School Psychology |
| Contact Name(s) and Email(s) | Samuel Song, PhD, <u>ssong4@sdsu.edu</u> Y. Barry Chung, PhD, Dean, ybchung@sdsu.edu |



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Curricular and Academic Elements

1. Provide a summary of the purpose for and a description of the proposed doctoral degree, including targeted audience(s).

Building on over three-decades of leadership and success by the SDSU Department of Counseling and School Psychology in multi-cultural and multi-lingual training, the proposed PsyD in Counseling Psychology and School Psychology is a unique, one-of-a-kind program with three interrelated distinctives:

- combined and integrated training in the specialties of <u>counseling psychology</u> and <u>school psychology</u>;
- b) commitment to training diverse, multicultural, and multilingual psychologists within a scientist-practitioner-advocate model; and,
- c) commitment to graduating leader-advocates (e.g., policy analysts) for the well-being of diverse multilingual children, youth, adults, families, and communities through their applied scholarship, practice, and service.

The proposed doctorate is within the discipline of psychology; and more specifically, in applied professional psychology that is concerned with the training of Health Service Psychologists (HSPs; i.e., licensed to practice psychology independently within their specialty areas such as Counseling, and School Psychologists). The proposed PsyD is in the combined and integrated specialties of Counseling Psychology and School Psychology, as identified and regulated by the American Psychological Association (APA). Graduates apply psychological, social, cultural, and educational foundations to create and engender a vision of equity in the community and public schools. Graduates of the doctoral program will be license-eligible as: (a) health service psychologists (HSPs) who can practice professional psychology independently in the combined specialties of counseling psychology and school psychology, (b) school psychologists in California (PPS Credential) with an Advanced Certificate in Bilingual School Psychology, and (c) Nationally Certified School Psychologists (NCSP). The purpose of the PsyD program is to prepare HSPs with (a) ecological and systems perspectives by which to consider problem situations in communities and schools, (b) the cultural and linguistic competencies to serve the multicultural populations of communities and schools, (c) the knowledge and skills to serve adults and children including students (general and special education populations), and (d) the competencies to function as



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data-based change agents/advocates and mental health leaders in communities and schools, providing a broad range of culturally-appropriate assessment-intervention/therapeutic services and advocacy (i.e., policy analysis). A scientist-practitioner-advocacy training model and social justice framework guide the preparation of these data-driven problem-solvers who will be prepared to serve as HSPs in the community and public schools.

The targeted audience for this degree are students with a strong interest in multicultural and multilingual practice with a bachelor's degree in psychology or education, or related fields; and, students with a master's or educational specialist (EdS) degrees in psychology, counseling psychology, school psychology, special education, education, or related fields.

2. Describe how the proposed doctoral curriculum is advanced beyond a master's degree to justify a new professional and/or applied doctorate, distinct from a UC doctoral program.

The PsyD is significantly advanced beyond a master's degree in several ways. First, the PsyD requires a completion of an integrated sequence of coursework, supervised field experiences, and research across a minimum of five years of full-time study (118 total credits of which 70 credits are at the 800-level); whereas, a master's degree is typically around 30-40 credits, which can be accomplished in two years or less. The program is organized and aligned with the standards of accreditation of the American Psychological Association (APA) and National Association of School Psychologists (NASP). During the first three semesters, students complete the requirements for the Master of Science degree in counseling with a concentration in school psychology. At the end of the fourth full-time year, students stand for review and recommendation for internship in their fifth year. In the final year of the program, students must complete a 1,600-hour internship at a community mental health agency, medical center, and/or public schools, and engage in the development of a culminating professional portfolio.

Second, a doctoral qualifying examination (dissertation proposal defense) by the end of year 4; a written product of the culminating experience (dissertation); and an oral defense of the culminating experience are required. In contrast, a masters degree does not require research training to this degree.

The PsyD is distinct in CA and compared to other UC programs. First, the PsyD and its balanced focus on applied scholarship and practice is unique whereas UC programs have research-oriented PhDs focused on basic research aims rather than practice-ready scholarly aims. Second, the proposed PsyD degree will be the only doctorate (PsyD or PhD) in CA that trains in the combined specialties of Counseling Psychology and School Psychology. Third, the proposed PsyD is unique with its focus on training diverse, multilingual practitioners. Finally, the PsyD is unique with its



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training model of scientist-practitioner-advocate compared to the scientist-practitioner model by the PhDs in UCs.

According to the American Psychological Association (APA), by definition, specialties in professional psychology are unique, with specific training requirements and competencies. Therefore, the proposed doctoral degree in the combined and integrated specialties of counseling psychology and school psychology is unique and sets itself apart from programs that train in only one psychological specialty (i.e., counseling or school psychology). For example, a doctoral degree in Counseling Psychology alone or School Psychology alone is not the same as a degree earned from a program that trains in both specialties in a combined and integrated nature (i.e., the curriculum is fundamentally different due to the integration of specialties). Indeed, only four accredited doctoral programs in the country train in the combined specialties of counseling psychology and school psychology, and none in CA. Thus, the proposed doctoral degree program will be the only one in CA and only one of five nationwide.

Psychological specialties are regulated and supported by the Commission for the Recognition of Specialties and Subspecialties in Professional Psychology (CRSSPP) of the American Psychological Association (APA), The Council of Specialties in Professional Psychology (CoS), and the American Board of Professional Psychology (ABPP). Graduates will be leaders and advocates in the mental health field, practicing in diverse school and community settings. The training philosophy emphasizes a cultural eco-systemic perspective and the integration of science, practice, and advocacy (scientist-practitioner-advocate model). The CSP Department has a strong history of training diverse, multilingual mental health practitioners who serve diverse and minoritized communities advocating with them to flourish.

3. Describe the admission criteria for the proposed doctoral degree (including undergraduate preparation).

Applicants complete a program application and provide supporting materials with their application. Each application is reviewed by faculty members, who will rate the candidate in four areas of readiness: academic, cross-cultural, interpersonal, and professional. Required application materials include a completed program application checklist; three letters of recommendation; a personal statement; an academic writing sample; a curriculum vitae or resume; and supplemental material (e.g., course papers or projects, an evaluation from work). Essays require applicants to demonstrate experience and competencies consistent with the program's emphasis on cross-cultural and multilingual training. Applicants whose grade point averages fall below the program standard of 3.00 in the last 60 semester units or in the major must supply additional data in support of their academic readiness.



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The California Basic Educational Skills Test (CBEST) is required by the State of California prior to consideration for the award of a credential and must be passed by the third year of the program. Students may meet this requirement via a waiver under the basic skills requirement (BSR) and must show evidence of meeting the BSR requirement in their transcripts. The program does not require passing the CBEST for admission.

Admission is a two-phase process: (1) completion of the online application portfolio and (2) individual and small group interviews using authentic assessment activities. Successful applicants will demonstrate academic, professional, interpersonal, and cross-cultural readiness for this demanding graduate-professional program. Importantly, factors reviewed for the cross-cultural readiness category include: depth and/or breadth of cultural knowledge or experiences; culture-focused or multicultural courses; proficiency in a language in addition to English; cultural immersions, or international study; understanding of systematic racism in educational settings; and focus on Anti-Racist/Anti-Blackness work in the schools.

It is strongly recommended that applicants have an undergraduate major or substantial coursework in behavioral sciences (e.g., psychology, sociology, social work), education (or liberal studies), child development, multi-cultural -lingual studies, and/or ethnic studies prior to entering the program. The following courses are especially recommended: general psychology, developmental psychology, research and statistics in behavioral sciences, learning or cognition, social psychology or sociology, multi-cultural and -lingual or culture-focused studies, and psychological or educational testing and measurement. Applicants with a masters degree may also apply; although it is recommended that the degree is in a related field (e.g., psychology, education), it is not required for admission.

4. List the proposed doctoral program course and culminating doctoral project descriptions including, as appropriate, a description of qualifying and/or comprehensive exams, professional and/or clinical experiences, practicums, projects, and research.

The PsyD requires the completion of an integrated sequence of coursework, supervised field experiences, and applied research/evaluation across a minimum of five years of full-time study (118 total credits, of which 70 credits are at the 800-level, or 60% of total credits). The curriculum comprises five domains that contain sequential coursework that builds on prior learning throughout the program. The applied research/evaluation sequence contains seven courses on



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applied research and evaluation methods used in schools and communities to evaluate psychological services. Second, the foundational psychology sequence contains courses that lay the foundation of knowledge in psychology and professional identity. Next, the assessment sequence contains courses on psychological and educational assessment strategies with children and adults. The intervention sequence includes courses on the psychological and educational intervention strategies used in counseling psychology and school psychology. Finally, the professional psychology sequence contains courses on fieldwork (i.e., practica, externship, and internship) in counseling psychology and school psychology. The courses are listed below in Table 1 and the program sequence of study is shown in Table 2.

Importantly, multi-cultural and -lingual psychology training is integrated within all coursework in the program and particularly emphasized in these courses:

- 1) CSP 619: Foundations in Ecosystemic Thinking in School Psychology
- 2) CSP 726: School Psychology Models and Practices in Family-School Collaboration
- 3) CSP 750: Assessment and Instructional Support for CLD Learners
- 4) CSP 680: SP Theory/Process Consultation
- 5) CSP 784: Advanced Consultation and Systems Change for Social Justice in Schools
- 6) CSP 723 School-Based Mental Health Interventions
- 7) CSP 733 Ethics & Law for Educators
- 8) CSP 730: SP Fieldwork with Seminar (supervised fieldwork/practicum)
- 9) CSP 752: Seminar & Advanced Practicum in SP (supervised fieldwork/practicum)
- 10) CSP 811: Externship in Health Service Psychology (supervised fieldwork/practicum)

The <u>Advanced Certificate in Bilingual School Psychology</u> may also be earned by taking one additional course. The certificate meets the competencies identified by the California Consortium of Bilingual School Psychology (Sánchez Lizardi et al., 2024), which was developed in part by the leadership of SDSU's core faculty. The certificate builds on the specialization work in bilingual school psychology supported at SDSU for more than twenty years (i.e., federally funded grants by OSEP and OELA) and on the school psychology program's multicultural and ecosystemic curriculum.

During the first three semesters, students complete the requirements for the Master of Science degree in counseling with a concentration in school psychology. These requirements include 46-units of approved coursework, a 3.0 GPA, and a completion of a masters project approved by program faculty. Students will graduate with a MS the winter of their second year in the program (see Appendix).



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At the end of the fourth full-time year, students stand for review and recommendation for internship in their fifth year. In the last year of the program, students must complete a 1,600-hour internship in the community mental health agency, medical center, and/or public schools and engage in the development of a culminating professional portfolio. Finally, a doctoral qualifying examination (dissertation proposal defense) by the end of year 4; a written product of the culminating experience (dissertation); and an oral defense of the culminating experience are required.

Table 1. PsyD courses

| # | Proposed Course # | Proposed Course Name | # Units | |
|--------------------------------------|-------------------|---|---------|--|
| Applied Research/Evaluation Sequence | | | | |
| 1 | CSP 690 | Methods of Inquiry | 3 | |
| 2 | CSP 710 A | Pro Sem: Evaluating Educ & Psych Interventions | 3 | |
| 3 | CSP 710 B | Advanced Research and Evaluation in Psychology | 3 | |
| 4 | CSP 886 | Psychometrics & Statistics for Health Service Psychologists | 3 | |
| 5 | CSP 887 | Doctoral Seminar | 4 | |
| 6 | CSP 888 | Dissertation Proposal | 3 | |
| 7 | CSP 899 | Dissertation | 9 | |
| | Foundatio | nal Psychology Sequence | | |
| 8 | CSP 619 | Foundations in Health Service Psychology: History & Systems, Ecosystems, Counseling and School Psychology | 3 | |
| 9 | CSP 800 | Integrated Psychological Foundations: Social & Cultural | 3 | |



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| 10 | CSP 801 | Integrated Psychological Foundations: Cognition & Affective | 3 |
|----|-----------|--|---|
| 11 | CSP 864 | Integrated Psychological Foundations: Life Span Development & Biological Foundations | 3 |
| 12 | CSP 833 | Law & Ethics in Schools, Special Ed, & Community Setting | 3 |
| | As | sessment Sequence | |
| 13 | CSP 663 | RTI: Assessment-Intervention for Learning I | 3 |
| 14 | CSP 623 | Ecobehavioral Assessment- Intervention | 3 |
| 15 | CSP 664 | Cognitive Assessment/ Assessment of Intelligence for Children and Adults | 3 |
| 16 | CSP 750 | RTI: Assess & Instruct Support for Culturally Linguistically Diverse Learners | 3 |
| 17 | CSP 751 | RTI: Advanced Assessment and Early Intervention of Special Populations | 3 |
| 18 | CSP 823A | Mental Health and Well-Being: Psychodiagnostic Assessment | 3 |
| | Int | ervention Sequence | |
| 19 | CSP 815 | Seminar in Advocacy & Multicultural Dimensions in Psychology, Counseling Psychology, & School Psychology | 3 |
| 20 | CSP 600/L | Cross-Cultural Counseling Communication w/Lab | 3 |



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| 21 | CSP 662B | Counseling Theory, Interventions with Child and Adolescents | 3 |
|----|----------|---|----|
| 22 | CSP 810 | Vocational & Advanced Counseling | 3 |
| 23 | CSP 880 | Theory & Models of Consultation & Supervision | 3 |
| 24 | CSP 884 | Advanced Consultation, Advocacy, and Leadership in Diverse Schools | 3 |
| 25 | CSP 762 | Prevention, Crisis Intervention, & Conflict Resolution | 3 |
| 26 | CSP 823B | Mental Health and Well-Being: Interventions for Schools and Communities | 3 |
| | Professi | onal Psychology Sequence | |
| 27 | CSP 730 | School Psychology Fieldwork with Seminar | 6 |
| 28 | CSP 752 | Seminar & Advanced Practicum in SP | 6 |
| 29 | CSP 811 | Externship in Health Service Psychology | 12 |
| 30 | CSP 812 | Supervision, Leadership, & Advocacy Practicum | 3 |
| 31 | CSP 813 | Doctoral Internship in Health Service Psychology | 6 |
| | | | |



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5. Describe the proposed culminating doctoral experience (doctoral dissertation, doctoral project, or doctoral capstone).

The doctoral dissertation for the PsyD in Counseling Psychology and School Psychology is an original, applied intervention evaluation project that contributes to the applied intervention evaluation literature in counseling psychology and school psychology. This is distinct from an original research project for a PhD degree. By the end of the fourth year, the student will propose a dissertation project and defend it to a faculty committee. Upon successful completion of this proposal (i.e., defense approved by committee), the student will be a doctoral candidate. The dissertation project will be completed, written, and successfully defended to a faculty committee to complete the degree.

6. List the program learning outcomes for the proposed doctoral degree.

PsyD graduates will:

- Identify as health service psychologists with a combined specialty in counseling psychology and school psychology who are leader-advocates for equitable mental health services in various settings;
- ii. Provide ethical psychological services, informed by culture, multilingualism, and social justice frameworks, that promote the well-being of diverse individuals in various school and community settings; and,
- iii. Critically consume, produce, and disseminate scholarship that advances multicultural and social justice psychology

7. Describe the infrastructure required for this proposed doctoral program.

The infrastructure needed is office space for faculty, a GA office, and administrative support; all of which, the program already has as part of the current School Psychology EdS program and CSP Department. The budget also includes library services,

<u>Appendix A:</u> Provide a doctoral program roadmap serving as a visual representation of the pathway by term of program requirements, including the sequence of completing courses and any offsite, internship, and/or culminating requirements; and the total units per term and total overall units for the program.

See attached Appendix A.



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Analysis of potential UC duplicate doctoral degree programs.

Complete the table below.

Title of CSU Proposed Doctoral Program:

| UC Campus | Degree Duplication (Yes/Potential/N o) | Degree Title and Designation | Website(s) reviewed and date accessed |
|------------------|--|---------------------------------|---|
| Berkeley | No | PhD in School Psychology | https://bse.berkeley.edu/professional- programs/school-psychology 4/15/25; 7/14/25 |
| Davis | NA | | |
| Irvine | NA | | |
| Los Angeles | NA | | |
| Merced | NA | | |
| Riversid e | No | PhD in School Psychology | https://education.ucr.edu/doctoral/sch ool-psychology |
| | | | 4/15/25; 7/14/25 |
| Santa Barbara | No | PhD in School Psychology PhD in | https://education.ucsb.edu/academic- programs/dept-of-counseling-clinical- school-psychology/grad- programs/school-psychology%20-phd- program |



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| | | Clinical/Counselin g Psychology | https://education.ucsb.edu/academic-programs/dept-of-counseling-clinical-school-psychology/grad-programs/counseling-clinical-phd-program 4/15/25; 7/14/25 |
|----------------------|----|------------------------------------|--|
| Santa Cruz | NA | | |
| San Diego | NA | | |
| San Francisc o | NA | | |



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Provide a summary of your analysis. If there is a potential for duplication, please contact app@calstate.edu for advice.

*It is important to note that only programs in Counseling Psychology or School Psychology were included, i.e., programs in Clinical Psychology are not included in the analysis because that is a different specialty per APA's Commission on Accreditation discussed previously.

Distinctiveness: PsyD in Counseling Psychology and School Psychology:

The proposed SDSU PsyD in Counseling Psychology and School Psychology is a unique, one-of-a-kind program with three interrelated distinctives:

- combined and integrated training in the specialties of counseling psychology and school psychology;
- 2. commitment to training diverse, multicultural, and multilingual psychologists within a scientist-practitioner-advocate model; and,
- 3. commitment to training graduates who will be leader-advocates (e.g., policy analysts) for the well-being of diverse multilingual children, youth, adults, families, and communities through their applied scholarship, practice, and service.

These three program distinctives—together—form the SDSU PsyD brand that sets itself apart from any related programs in the country. In CA, there are zero psychology doctoral programs in counseling psychology; and, zero in the combined and integrated specialties of counseling psychology and school psychology. Finally, while there are only four combined counseling and school psychology programs in the country, none offer the SDSU brand (i.e., with the three distinctives described above).

SDSU graduates will have unique competencies to provide broad mental health services, counseling, and advocacy that span early childhood (pre-K) to adulthood (college and beyond), focuses on counseling psychology strengths (life transitions, relationships, vocational/career concerns, and enhance overall well-being) and the strengths of school psychology (children/youth with disabilities and school mental health practice).

According to the American Psychological Association (APA), by definition, specialties in professional psychology are unique, with specific training requirements and competencies. Therefore, the proposed doctoral degree in the combined and integrated specialties of counseling psychology and school psychology is unique and sets itself apart from programs that train in only one psychological specialty (i.e., counseling or school psychology alone). For example, a doctoral degree in Counseling Psychology alone or School Psychology alone is not the same as a degree



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earned from a program that trains in both specialties in a combined and integrated nature (i.e., the curriculum is fundamentally different due to the integration of specialties).

Comparison to Related UC Programs:

There are zero similar programs offered at the UCs. There are three that are somewhat related, however, which may be confusing to those unfamiliar with professional psychology training. Table 2 below depicts major comparisons with related UC programs.

The first significant difference is the degree obtained. SDSU will offer a PsyD (Doctor of Psychology), which is an applied practice-doctorate similar to a PharmD or DDS. The major training emphasis is practice, not research. Graduates with a PsyD will not be competitive for tenure-track academic positions, rather, they may be more likely to obtain practice-oriented jobs in academia, such as clinic director or field experience director. These positions typically require a licensed individual who has specialized training in both counseling psychology and school psychology (i.e., holds a PPS credential) to enable them to work in school settings (which is a unique feature of our program). In sharp contrast, UC programs are all PhDs offering original research training and graduates who can compete for tenure-track positions in academia.

Second, the SDSU PsyD training and brand is one-of-a-kind in CA and the country. To clarify potential confusion, UCSB does have a combined Clinical and Counseling Psychology PhD program. However, the competencies that their graduates will have contrast sharply with the proposed SDSU PsyD program. For example, their graduates will not have a school focus and could not get a job in the school as a school psychologist, nor will they be trained to be policy analysts like SDSU graduates. It is important to note that despite what it says on their website, they discontinued their combined program in counseling, clinical, and school psychology in 2022 (see p. 7 of their Handbook).

Three UCs do have a School Psychology only PhD (UCSB, Berkeley, and Riverside). However, the competencies that their graduates will possess contrast sharply with those of the proposed SDSU PsyD program. For example, their graduates will not have a counseling psychology focus and would not be able to get a job providing mental health services and counseling (vocational, adjustment, transition, or diagnostic services) in schools and in the community, such as community wellness programs, community college counseling centers. Nor could they obtain jobs as policy analysts like SDSU graduates.

Finally, the three UCs that have a school psychology only PhD (UCSB, Berkeley, and Riverside) do not provide the multicultural, multilingual, and advocacy training (distinctives A and B above) that is offered by the SDSU PsyD brand. The SDSU School Psychology EdS program and the Department of Counseling and School Psychology have been graduating multicultural, multilingual counselors



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and school psychologists for decades, with an average of 90% of graduates being from diverse backgrounds. In sharp contrast, the UC programs continue to primarily graduate White/European American women. Moreover, the SDSU training model of scientist-practitioner-advocate with the goal of being leader-advocates, such as a policy analyst, is unique in CA compared to the UC programs and compared to the four other combined programs in other states, nationally. (Of note, the existing School Psychology program at CSU LA recently launched a new EdS in School Psychology track, which now presents as competition for our current EdS program, thereby making our proposed combined PsyD program more critical for SDSU.)

<u>Grants.</u> It is essential to note that the PsyD program will not compete for the same funding that the UCs seek. The PsyD program will pursue grants that focus on multicultural-lingual practitioner training rather than the development of researchers, scientists, or professors.

Table 2. Shows Uniqueness of Relevant Doctorates in CA.

| University | Proposed SDSU Degree | <u>UC Berkeley</u> | <u>UCSB</u> | <u>UCR</u> |
|-----------------------|--|----------------------------|---|----------------------------|
| Degree | PsyD | PhD | PhD | PhD |
| Specialty training | Counseling Psychology and School Psychology | School Psychology | *no longer has combined program that includes school psychology. Other program is clinical and counseling. (p. 7, Handbook) | School Psychology |
| Training model | Scientist-Practitioner- Advocate | Scientist- Practitioner | Scientist- Practitioner | Scientist- Practitioner |



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| leaders and advocates in psychology and mental health professors, practitioners practitioners practitioners practitioners | Primary aims | . , , , , , , , , , , , , , , , , , , , | Researchers, professors, practitioners | Researchers, professors, practitioners | Researchers, professors, practitioners |
|---|-----------------|---|--|--|--|
|---|-----------------|---|--|--|--|

Postgraduate Professional Job Objectives

1. Describe relevant statewide workforce demands for the proposed doctoral program.

The workforce needs for graduates of the PsyD program are significant and diverse. Due to the combined specialty training in Counseling Psychology and School Psychology, graduates will earn several licenses that enable them to work in settings that hire Health Service Psychologists (HSPs, or licensed psychologists for independent practice) with a specialty in counseling and school psychology, traditional school psychologists who work in K-12 schools, researchers and evaluators, and mental health leaders in various settings.

State needs: Counseling psychology was found to have especially high demand in the state of California (RAND, 2023). Counseling psychology jobs grew by 49% since 2017 in California. The growth rate in California is 2x faster compared to the growth in counseling psychology jobs at the national level, highlighting that there is significant concentrated demand in the state. Moreover, counseling psychology jobs grew at a rate that is 16.3x faster than the rate for all jobs in the state. Occupational employment in counseling psychology within California is projected to grow by 63% compared to its levels in 2017. At the regional and local level, Health Service Psychologists (e.g., Counseling and School Psychologists) have been identified as the Largest Growing Occupations by entry level degrees (New Jobs and Replacements) with 850 jobs, according to the Employment Development Department of CA (EDD)'s report, 2014-2024 Projection Highlights San Diego-Carlsbad Metropolitan Statistical Area.

At the national level, there is healthy demand for counseling psychology due to national growth in occupational employment and job postings in target occupations. Counseling psychology jobs grew by 25% in the US labor market relative to their level in 2017. In addition, counseling psychology jobs grew at a rate that is 12.5x faster relative to the rate of growth for all occupations nationwide. Counseling psychology jobs are projected to grow by 37% in 2027 relative to their 2017 levels. This projected growth rate is 4x faster relative to the projected growth rate for all jobs.



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Graduates of the proposed PsyD program may also work as traditional school psychologists in K-12 schools. According to the Bureau of Labors Statistics 2024 report, the job market for school psychologists is currently positive with an estimated 207,500 jobs in 2023, with projected growth of 7%, which exceeds the national average for all occupations. Growth projections are estimated between 6% by 2031 and 10% by 2030 suggesting an overall trend towards a growing demand for school psychologists.

2. Describe employment opportunities for the proposed doctoral program.

Employment opportunities for graduates of the PsyD program are significant and diverse. Due to the combined specialty training in Counseling Psychology and School Psychology, graduates will earn several licenses that enable them to work in settings that hire Health Service Psychologists (HSPs, or licensed psychologists for independent practice) with a specialty in counseling and school psychology, traditional school psychologists who work in K-12 schools, evaluators, and mental health leaders and advocates in various settings (e.g., policy analyst).

Moreover, there is a significant gap and need in the mental health workforce in CA and nationally, especially for practicing, non-research, psychologists with SDSU's PsyD brand evidenced by the recent federally funded OSEP grant awarded to the SDSU program to create this exact PsyD program (due to space limitations, we are happy to share more details upon request).

Still, there may be some degree of overlap in the workforce, (zero overlap in the workforce is impossible), as some job announcements in the field of psychology are intentionally broad to attract a wider application pool given the shortages in mental health service providers. These longstanding shortages of mental health practitioners across multiple service sectors (government agencies, education, college campuses, community agencies, hospitals, etc) necessitate that universities respond and prepare a qualified workforce to address these growing needs. For example, the Department of Defense recently reported a significant need for mental health practitioners to serve the military and their families, citing 43% of mental health jobs were unfilled. Psychologists with competencies in counseling and school psychology, multicultural and multilingual services, and leadership and advocacy skills—such as those who will graduate from the SDSU PsyD program—will be uniquely positioned to fill this gap.

3. If applicable, describe the national or state-wide professional accreditation/certified licensure(s) and how the accreditation/licensure(s) will be aligned to the proposed doctoral degree title.

The proposed PsyD program is organized and aligned with the standards of accreditation of the American Psychological Association (APA) and National Association of School Psychologists (NASP), and California PPS credentialing standards. Therefore, graduates of the doctoral program



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will be license-eligible as health service psychologists (HSPs) who can practice professional psychology independently in the combined specialties of counseling psychology and school psychology, as certified school psychologists in California (PPS Credential), and as Nationally Certified School Psychologists (NCSP). The program curriculum has been carefully designed to meet all three credentialing/accreditation standards (APA, NASP, PPS) as students complete the program.

APPENDIX:

PsyD in Counseling Psychology and School Psychology Sequence of Study

YEAR 1 Themes: Ecosystemic Thinking, Multicultural Communication, Advocacy, Data-Based Decision Making for Intervention Summer Fall **Spring** ED 690: Methods of Inquiry (3) CSP 815: Seminar in Advocacy & CSP 886: Psychometrics & Statistics for Health Service Psychologists (3) Multicultural Dimensions in Psychology, Counseling Psychology, & School Psychology (3) CSP 619: Foundations in CSP 600L: Cross-Cultural Counseling CSP 662B: Counseling Theory, Interventions Health Service Psychology: Communication w/Lab (3) with Child and Adolescents (3) History & Systems, Ecosystems, Counseling and School Psychology (3) CSP 663 RTI: Assessment-Intervention for CSP 664 RTI: Assessment-Intervention for Learning I (3) Learning II: Cognitive Functioning for Children and Adults (3) CSP 730: SP Fieldwork with Seminar (3) CSP 730: SP Fieldwork with Seminar (3) CSP 887: Doctoral Seminar (1) CSP 887: Doctoral Seminar (1) Units 6 13 13 32 total in **Y1**

YEAR 2 Themes: Individual & Small Group: Consultation, Intervention & Evaluation within an MTSS Framework

| | Summer | Fall | Spring | |
|-------|--|--|---|-------------------|
| | CSP 864: Integrated Psychological Foundations: Life Span Development & Biological Foundations (3) | CSP 750: RTI: Assess & Instruct Support for CLD Learners (3) | CSP 751: RTI: Adv Assessment-Intervention: Early Intervention of Spec Pops (3) | |
| | CSP 880: Theory & Models of Consultation & Supervision (3) | CSP 710A: Pro Sem: Evaluating Educ & Psych Interventions (3) | CSP 710B: Pro Sem: Advanced Research & Eval in Psychology (3) | |
| | | CSP 762: Prevention, Crisis Intervention, & Conflict Res (3) | CSP 623: Ecobehavioral Assessment Intervention (3) | |
| | | CSP 752: Seminar & Advanced Practicum in SP (3) | CSP 752: Seminar & Advanced Practicum in SP (3) | |
| | | CSP 887: Doctoral Seminar (1) | CSP 887: Doctoral Seminar (1) | |
| | | Masters Degree is Awarded end of fall term | | |
| Units | 6 | 13 | 13 | 32 total in Y2 |

YEAR 3 Themes: Advanced Individual, Systems Level Interventions, & Counseling Psychology Fall **Spring** Summer CSP 801: Integrated CSP 823 A: Mental Health and Well-Being: CSP 823 B: Mental Health and Well-Being: Psychodiagnostic Assessment (3) Interventions for Schools and Communities (3) Psychological Foundations: Cognition & Affective (3) CSP 833: Law & Ethics in Schools, Special CSP 884: Advanced Consultation, Advocacy, Ed, & Community Settings (3) and Leadership in Diverse Schools (3) CSP 811: Externship in Health Service CSP 811: Externship in Health Service Psychology (3) Psychology (3) CSP 800: Integrated Psychological CSP 888: Dissertation Proposal (3) Foundations: Social & Cultural (3) Dissertation Proposal Defense: Candidacy Exam School Psychology Internship Credential Option

| Units | 3 | 12 | 12 | 27 total in Y3 |
|-------|---|----|----|----------------|
| | | | | |

| | YEAR 4 Themes: Advanced Individual, Systems Level Interventions, & Counseling Psychology | | | |
|-------|--|--|---|----------------------|
| | Summer | Fall | Spring | |
| | | CSP 811: Externship in Health Service Psychology (3) | CSP 811: Externship in Health Service Psychology (3) | |
| | | CSP 812: Supervision, Leadership, & Advocacy Practicum (3) | CSP 810: Vocational and Advanced Counseling (3) | |
| | | CSP 899: Dissertation (3) | CSP 899: Dissertation (3) | |
| | | | Internship Readiness Assessment | |
| Units | | 9 | 9 | 18 total in Y4 |

| | YEAR 5 Themes: Integration of Multicultural School Psychology into Comprehensive Professional Practice | | | |
|-------|--|--|--|------------------|
| | | Fall | Spring | |
| | CSP 899: Dissertation (3) | CSP 813: Doctoral Internship in Health Service Psychology (3) | CSP 813: Doctoral Internship in Health Service Psychology (3) | |
| | Dissertation Defense | | HSP License Eligible: EPPP PPS Credential in School Psychology | |
| Units | 3 | 3 | 3 | 9 total in Y5 |
| | | 118 units total (70 units at 800 level) | | |

UC/CSU Program Duplication Review Rubric

| Campus: CSU | SDSU DSc in Chemical Biotechnology and Biopharmaceutical Sciences |
|-------------|---|
| Reviewer: | _Hyle Park |
| Date: | _10/23/2026 |

| | Little to No Duplication (more dissimilar than not) | Some Duplication (warrants closer review) | Nearly Total /Total Duplication (much more alike than different) |
|----------------------|---|---|--|
| | , | | , |
| Title of Projected | Х | | |
| Doctoral Degree | | | |
| Degree Designation | X | | |
| (e.g. EdD) | | | |
| Program Description | | X | |
| Program Learning | | X | |
| Outcomes | | | |
| External Program | | | |
| Accreditation (where | | | |
| applicable) | | | |
| Required | | X | |
| Coursework/Program | | | |
| Structure | | | |
| Cumulating | | X | |
| Experience/Research | | | |
| Orientation | | | |
| Overall Assessment | | Х | |
| | | | |
| | | | |

Relevant UC Campuses/Programs (please list):

The title of the proposed DSc program is 'Chemical biotechnology and biopharmaceutical sciences.'

Existing UC programs with significant overlap:

UC Davis

Listed PhD programs can work with

BioMADE (relation with industry)

Advanced Degree Program for Corporate Employees (ADP)

UCLA

Listed PhD programs in Bioscience include

Core professional skills include project management

Berkeley

PhD in Industrial Engineering and Operations Research

Other PhD programs work with

Initiative for Research in Biopharmaceutical Operations

Comments regarding program similarities:

While many of the PhD programs listed in the table provided do not mandate similar emphasis in project management or the focus on industry, at least 3 campuses do provide for clear mechanisms through which PhD students can obtain additional training in these areas as a part of their degree.

In particular, the proposed program states that it "The program is distinct from any University of California doctoral program because of its unique curriculum, its focus on applied science, its integrated academic–industrial partnerships, and its dedicated training for transversal skill development." The curriculum includes required coursework in project management and elective coursework that may topics that include "entrepreneurship and intellectual property training, research translation and commercialization courses." (Davis, UCLA, Berkeley). Doctoral research emphasizes industrial relations and processes (Davis, Berkeley).

The one truly unique feature is that thesis committees must similarly include industrial (non-academic) members.

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DOCTORAL DEGREE PLANNING RESOURCES

CONCEPTUAL PROPOSAL FOR UC REVIEW OF CSU PROFESSIONAL AND APPLIED DOCTORAL PROGRAMS

CSU Proposed Degree Information, Campus Information, and Contact Information

| Title of Projected Doctoral Degree | Chemical biotechnology and biopharmaceutical sciences |
|---------------------------------------|---|
| Degree Designation (e.g., EdD) | Doctor of Science (DSc) |
| Proposed CIP Code | Biotech: 26.1201 |
| Projected Implementation Date | 08/21/2028 |
| (1st Cohort Enrolled) | |
| Campus | San Diego State University |
| College | Sciences |
| Department | Chemistry and biochemistry, biology |
| Contact Name(s) and Email(s) | Prof. Byron Purse & Prof. Laura-Isobel McCall bpurse@sdsu.edu; Imccall@sdsu.edu |

Curricular and Academic Elements

1. Provide a summary of the purpose for and a description of the proposed doctoral degree, including targeted audience(s).

The purpose of this doctoral degree is to provide students with state-of-the-art preparation for project leadership positions in California's life sciences economic sector, which is expected to grow at a faster rate than the size of graduate program cohorts in the State over the next decade.

The target audience are individuals with a Bachelor's or Master's degree in chemistry, biochemistry, biology, and related disciplines, who are interested in scientific training that will position them for project leadership in industry. Individuals who have worked in industry for a few years in technical positions may be particularly interested in this program, which will train them to advance into project management and leadership.

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Doctoral students will receive strong training in disciplines that form the core of cross-disciplinary industrial applications of chemistry, biology and biomedical engineering, including an individualized curriculum of synthetic organic chemistry, biochemistry, cell biology, microbiology, pharmacology, toxicology, bioinformatics, and separation science, integrated with training in entrepreneurial skills and professionalization. Research projects will emphasize academic–industrial collaborations on applied chemical biotechnology and biopharmaceutical sciences, and industrial internships will be a degree requirement. The external member of each thesis committee will be a qualified, doctoral degree-holding scientist from industry. Program evaluation and milestones are intentionally designed to meet industry expectations and "soft skills" training needs. The program will be interdepartmental and interdisciplinary so as to prepare graduates to think cross-functionally while having strong foundational skills in their core discipline.

2. Describe how the proposed doctoral curriculum is advanced beyond a master's degree to justify a new professional and/or applied doctorate, distinct from a UC doctoral program.

This program focuses on project leadership training, which is a hallmark of doctoral degrees and greatly exceeds the expectations typical of Master's degrees. While both Master's and doctoral degrees provide training intended to prepare graduates for excellence in project execution, doctoral degrees entail extensive additional training on the state-of-the-art of the field and the ideation of innovative and significant new project directions to advance that state-of-the-art. Current SDSU MS degrees in Chemistry and Biochemistry and Biology provide graduate students with a clearly defined project given by their advisor, along with classroom training, and students defend the dissertation upon completion of the project. This proposed Doctor of Science (DSc) in Chemical Biotechnology and Biopharmaceutical Sciences includes many training elements distinct from and exceeding the expectations for Master's degrees. These include curriculum in project management, regulatory affairs, and science communication to complement deep training in relevant chemical and biological theory, industry-style internal pitches and project proposals in the 2nd year and candidacy exams, respectively, and industry internships with optional entrepreneurial training (NSF I-Corps) as required program elements. The level of research productivity expected of program graduates is similar to PhD degrees. but with this program's unique focus on academic-industrial collaboration and applied research. Accordingly, the program is distinct from Master's programs in its expectations for more advanced, complex, and comprehensive applied research projects along with extensive training in project ideation and leadership, project management, and associated industry business skills.

The program is distinct from any University of California doctoral program because of its unique curriculum, its focus on applied science, its integrated academic–industrial partnerships, and its dedicated training for transversal skill development (see < https://www.nature.com/articles/s41599-024-04257-x>). Traditional PhD programs package their coursework into the first year and focus on

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chemical/biochemical/biological theory. The present DSc program spreads coursework over multiple years such that training in business skills including project management and regulatory affairs can begin in the first semester and deep disciplinary training in scientific theory takes place after a lab has been selected. Further coursework includes entrepreneurship and intellectual property training, research translation and commercialization courses. Industry internships (two; NSF I-Corps or comparable entrepreneurial training can optionally substitute for the second) are core curriculum elements. Formal presentation requirements in traditional PhD programs have been replaced with presentations that prepare students for pitching new project ideas within a business setting. Unlike traditional PhD programs, all thesis committees in this program must include one industry mentor with at least 5 years of experience and holding a PhD, DSc, or comparable degree. We note that the Designated Emphasis in Biotechnology program at UC Davis is NOT a stand-alone biotechnology PhD program. It is an emphasis applied to a standard PhD program and its internship may be substituted with a variety of non-internship options (see appendix A). Other UC programs related to drug development or biotechnology (e.g. UC Irvine Biotechnology and Biotechnology Management MS, Biomedical and Translational Science M.S., M.S. Pharmacology or UCSD Drug Development and Product Management, a fully self-funded degree) are master's degree programs focused on course work rather than the novel research, critical scientific thinking and leadership training of this PhD program.

- 3. Describe the admission criteria for the proposed doctoral degree (including undergraduate preparation).
- Undergraduate degree in chemistry and biochemistry, engineering, physical or biological sciences, earned at an institutionally accredited college or university
- GPA > 3.5 in an acceptable earned baccalaureate or post-baccalaureate degree. GPA ≥ 3.0 may be accepted with strong justification. GPA < 3.0 will not be accepted
- The applicant was in good standing at the last institution of higher education attended
- 3 letters of recommendation supporting student's application
- Research experience preferred
- Statement of purpose clearly presenting motivation for this program
 - 4. List the proposed doctoral program course and culminating doctoral project descriptions including, as appropriate, a description of qualifying and/or comprehensive exams, professional and/or clinical experiences, practicums, projects, and research.

Total: 70 units

| Year / Semester | Coursework | Other Degree Activities & |
|-----------------|------------|---------------------------|
| | | Milestones |

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| Year 1 Fall | 9 units total | Selection of research group |
|---------------|---|-----------------------------|
| | 3 units of CHEM 800: Fundamentals of | 3 F |
| | scientific research | |
| | 3 units of CHEM 810: Introduction to Project | |
| | Management | |
| | 3 units of CHEM 820: Rotations | |
| Year 1 Spring | 9 units total | Begin research |
| J 27 3 | 3 units of core course relevant to the | |
| | student's research emphasis. Selected from: | |
| | CHEM 881: Advances in Bioanalytical | |
| | Chemistry | |
| | CHEM 882: Biophysical chemistry | |
| | CHEM 883: Synthetic Organic | |
| | Chemistry | |
| | CHEM 884: Separation Sciences | |
| | MBIOL 881: Advanced Topics in | |
| | Molecular and Cellular Biology | |
| | 1 | |
| | o BIOL 882: Advanced Biological Data | |
| | Analysis | |
| | o RA 881: Pharmaceutical, | |
| | Biotechnology, and Medical Device | |
| | Industries Units | |
| | o RA 882: Food and Drug Law Units | |
| | RA 883- Current Good Manufacturing | |
| | Practices - General Concepts Units | |
| | Depending on student's strength on the theory | |
| | relevant to their research project: | |
| | o 3 units supplemental / reinforcement | |
| | (filling disciplinary gaps), selected | |
| | from approved 600 or 700-level | |
| | courses in CHEM, BIOL, MBIOL, MATH, | |
| | ENG or similar | |
| | If no gaps, supervised research CHEM | |
| | 897, 3 units | |
| | 3 units of CHEM 870: Translational chemical | |
| | biology, | |
| | <i>5,.</i> | |
| Year 2 Fall | 6 units | Continue research |

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| | 3 units of electives, from classes focused on scientific theory and its applications to industry. Selected from an approved list (see list above) 3 units CHEM 830 Advanced topics in scientific project management | |
|---------------|---|--|
| Year 2 Spring | 3 units of electives, from classes focused on scientific theory and its applications to industry (list above). 1 unit CHEM 840: Second-year Exam. Appropriateness of research topic Adequacy of scientific background and preparation Format: industry "pitch" 2 units CHEM 790: Science Communication and professional interviewing 1 Finding an internship Setting up an informational interview for industry positions Interview prep for internship Patent and literature search - focused on papers by industry authors | Second-year exam for credit; see central column. Continue research |
| Year 3 Fall | 6 units ● 6 units CHEM 897: Research in Chemistry | Continue research |
| Year 3 Spring | ■ 1 unit CHEM 850: Doctoral Qualifying Examination ○ Research momentum, progress, theoretical knowledge ○ Format: formal industry internal proposal; not NSF or NIH format ● 5 units CHEM 897: Research in Chemistry | Candidacy exam for credit Continue research |
| Year 3 Summer | 2 units • CHEM 860: Internship in Industry #1 | none |

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| Year 4 Fall | 6 units ● 6 units CHEM 897: Research in Chemistry | Continue research |
|---------------|--|----------------------|
| Year 4 Spring | Ounits units CHEM 791: Science Communication and professional interviewing 2 Opanel interview preparation Opreparation for HR questions Opreparation for HR questions Opreparation for HR questions Opened Figure 1. Elevator pitch Opened Figure 1. Figure 2. Units CHEM 897: Research in Chemistry | Continue research |
| Year 4 Summer | 2 units • CHEM 861: Internship in Industry #2 | none |
| Year 5 Fall | 6 units • 6 units CHEM 897: Research in Chemistry | Continue research |
| Year 5 Spring | 6 units • 5 units CHEM 897: Research in Chemistry • 1 unit CHEM 899: Doctoral Dissertation | Dissertation defense |

5. Describe the proposed culminating doctoral experience (doctoral dissertation, doctoral project, or doctoral capstone).

The culminating doctoral experience will be a doctoral dissertation describing the original contribution of the student to their field of study, which will be defended in front of their graduate committee. This committee will include at least one external member from industry, as discussed above. While this degree focuses on applied research and preparation for project leadership positions in industry, the standards for depth and quality of graduate research and the expectation to publish will match those of other doctoral programs.

- 6. List the program learning outcomes for the proposed doctoral degree.
- 1. **Foundational & Integrative Knowledge.** Demonstrate advanced understanding of the molecular, cellular, chemical, and systems-level principles that underlie biotechnology and pharmaceutical

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- sciences, and articulate how these concepts interconnect across different domains (e.g., drug development, genetic/epigenetic engineering, disease mechanisms, biomarkers).
- Research Design & Methodological Proficiency. Independently design and conduct rigorous, reproducible research using state-of-the-art experimental and/or computational approaches appropriate to their area of specialization. Demonstrate highly skilled proficiency in the implementation of these techniques, grounded in a strong understanding of their theoretical foundation, while demonstrating awareness of complementary methodologies across the fields.
- 3. **Quantitative & Analytical Reasoning.** Apply quantitative analysis, statistical reasoning, and computational or modeling approaches to interpret complex data and generate valid conclusions that advance biotechnological or pharmaceutical knowledge.
- 4. Knowledge of workflows and processes in chemical biotechnology and biopharmaceutical sciences industries. Through collaborations and industry internships, understand the professional and conceptual foundations underlying work in these industries. Understand workforce hiring and professional needs. Demonstrate an ability to adapt research focus and professional skills to fit industry expectations and needs. Be prepared for formal and informal industry professional interactions.
- 5. **Translational & Application Awareness.** Critically evaluate how discoveries in biotechnology and pharmaceutical sciences can be translated into real-world applications such as therapeutics, diagnostics, or enabling technologies, with consideration of feasibility, scalability, and impact.
- Ethics, Integrity & Responsibility. Uphold the highest standards of ethical conduct in research, including responsible data management, reproducibility, biosafety, human/animal subject protections, and awareness of societal implications of biotechnological and pharmaceutical innovations.
- 7. **Scholarly Communication**. Communicate research effectively to diverse audiences through peer-reviewed publications, conference presentations, project proposals, and stakeholder engagement, demonstrating clarity, precision, and disciplinary rigor.
- 8. **Leadership & Collaboration.** Work effectively in interdisciplinary and cross-sector teams, demonstrating leadership, project management, and collaborative skills necessary to advance complex problems in biotechnology and pharmaceutical sciences.
- Independent Contribution & Impact. Conceive, execute, and defend an original body of scholarly research that makes a substantive and independent contribution to advancing biotechnology and/or pharmaceutical sciences, with demonstrable potential for scientific, clinical, or societal impact.

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7. Describe the infrastructure required for this proposed doctoral program.

No additional infrastructure needed - will use existing classrooms and research facilities. This program will also benefit from existing infrastructure investments, including the new SDSU biology building and the Mission Valley Innovation District.

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Appendix A

1. **Doctoral Program Roadmap.** Provide a doctoral program roadmap serving as a visual representation of the pathway by term of program requirements, including the sequence of completing courses and any offsite, internship, and/or culminating requirements, and the total units per term and total overall units for the program.

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| | scientific foundation | scientific inquiry | transversal skill development |
|--------------------------|---|--|--|
| Fall Year 1 | | CHEM 820 Rotations, 3 units | CHEM 800 Fundamentals of scientific research, 3 units CHEM 810 Introduction to project management, 3 units |
| 18 units Spring | | nervised research, 3 ts supplemental on courses | CHEM 870: Translational chemical biology, 3 units |
| Fall Year 2 | 3 units electives relevant to the student's research emphasis (selected from approved list) | | CHEM 830 Advanced topics in scientific project management 3 units |
| 12 units Spring | 3 units electives relevant to the student's research emphasis (selected from approved list) | • CHEM 840 Second | CHEM 790: Science communication and professional interviewing 1 (2 units) -year exam 1 unit |
| Fall Year 3 | | CHEM 897 Research 6 units | varional (a) in initial province and a series and a series and |
| 14 units Spring & Summer | | CHEM 897 Research 5 units CHEM 860 Interns CHEM 850 Doctor examination 1 uni | al qualifying |
| Fall Year 4 | ****** | CHEM 897 Research 6 units | |
| 14 units Spring & Summer | | CHEM 897 Research 4 units CHEM 861 | CHEM 791: Science communication and professional interviewing 2 (2 units) Internship #2, 2 units |
| Fall Year 5 | (************************************** | CHEM 897 Research 6 units | |
| 12 units Spring | | CHEM 899 Doctoral dissertation 6 units | |

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2. Postgraduate Professional Job Objectives

a. Describe relevant statewide workforce demands for the proposed doctoral program.

Between 2019 and 2023, the life sciences sector in San Diego grew by over 10,000 jobs. California overall growth in the life sciences was 7% in 2020-2021. The employment development department of the state of California predicts a 17.4% increase in the number of people employed as chemists between 2020 and 2030, 23.7% for biochemists, and 21.3% for biological scientists (https://edd.ca.gov/).

In contrast, the number of doctoral degrees (PhD) granted in the life sciences has decreased by 4.7% between 2017 and 2021 (source: CA Life Sciences Association). Even more worryingly, the number of admissions and new enrollees to PhD programs in life sciences admissions in the entire University of California system was the lowest in 2023 compared to every year starting from 2016. A similar pattern was observed for admissions to chemistry PhD degrees. This indicates a critical gap between growing workforce needs and student training that is insufficiently being filled by the University of California system (source: UC doctoral program statistics. Updated June 2024. https://www.universityofcalifornia.edu/about-us/information-center/doctoral-program). These trends have worsened in 2025: for example, the UCSD biological science program has shrunk by 30% compared to previous years (source: https://www.the-scientist.com/us-universities-reduce-phdadmissions-in-response-to-federal-funding-cuts-72734 https://fortune.com/2025/03/06/university-elon-musk-doge-cuts-rescind-genz-graduate-schooloffers/). This has left a large number of highly qualified and motivated students without an opportunity to attend graduate school (e.g. https://www.amestrib.com/story/news/education/2025/03/10/whyis-iowa-state-university-pulling-some-graduate-student-offers/82224877007/ https://www.boston.com/news/health/2025/03/14/umass-chan-medical-school-rescinds-dozens-ofoffers-amid-funding-uncertainty/). These students would benefit from the availability of an additional graduate program in the state of California. Such a program would also be an opportunity to retain highly promising undergraduates in our state.

Furthermore, an acknowledged limitation of the current PhD program offerings is that they were designed to prepare students for an academic career. Existing programs were also designed decades or even almost a century ago, and thus do not reflect current workforce needs. Specifically, the UC PhD experience survey noted that only 11% of life sciences PhD trainees and 10% of physical sciences trainees had participated in entrepreneurship training. Likewise, only 19-23% of life sciences PhD trainees and physical sciences trainees had received project management training. In contrast, over 40% have received teaching preparation training and 35% of life science PhD candidates have received grant writing training, highlighting how existing doctoral programs in California are still heavily skewed



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towards preparation for academic careers. Likewise, only 47-52% of physical science and life science PhD program members thought that their advisor was knowledgeable about careers outside of academia. University of California PhD students in life sciences and physical sciences tend to find academic careers very desirable or extremely desirable over industry careers by 13-19 percentage points (source: https://www.universityofcalifornia.edu/about-us/information-center/doctoral-experience-survey). In contrast, this program will be intentionally designed to meet workforce needs, not only with regards to course material and practical training, but also with regards to structuring program milestones and student evaluations in ways that facilitate professionalization and align with industry practices.

Support letters included in our proposal package, which we have received from prospective industry partners that include leading biotech and pharma companies, support this justification. Jirong Liu, PhD, Senior Vice President, Biotechnology Research at Eli Lilly and Company writes, "Existing traditional PhD programs are not sufficient to fill this workforce need." Nicole Servant, PhD, Business Management Leader, LeadHunter Services at Eurofins DiscoverX write, "Eurofins DiscoverX and other local employers consistently seek candidates with advanced training, practical research experience, and an understanding of translational science. The proposed program's emphasis on applied research, academic–industry partnerships, and workforce development aligns perfectly with these needs." Paul Richardson, PhD, Director, Analytical and Synthetic Technologies, Pfizer-La Jolla writes of the need for doctoral-level students trained in translational science, "The proposed program's emphasis on applied research, academic–industry partnerships, and workforce development is distinct from a traditional Ph.D. program and aligns well with these needs."

b. Describe employment opportunities for the proposed doctoral program.

We anticipate that program graduates will fill key roles in the biotechnology and pharmaceutical sciences fields in California, for example initially as Scientist I or Scientist II, with strong preparation for subsequent promotion to Senior Scientist, group leader, head of research and development, chief scientific officer, etc. Several graduates may do so in their own start-up company, developed through the skills acquired in this program.

c. If applicable, describe the national or state-wide professional accreditation/certified licensure(s) and how the accreditation/licensure(s) will be aligned to the proposed doctoral degree title.

Not applicable, no such licensures for Doctor of Science.

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3. Analysis of potential UC duplicate doctoral degree programs. Complete the table below.

Title of CSU Proposed Doctoral Program: Chemical biotechnology and biopharmaceutical sciences

| UC Campus | Degree Duplication (Yes/Potential/No) | UC Degree Title and Designation | UC Website(s) reviewed and date accessed |
|-----------|---|---|--|
| Berkeley | No | Existing PhDs in: | https://grad.berkeley.edu/ad |
| _ | | Applied Science & | missions/our- |
| | | Technology | programs/?degrees=doctora |
| | | Chemical and | <u>l-phd</u> (full list) |
| | | Biomolecular | |
| | | Engineering | https://ast.berkeley.edu/sa |
| | | Chemistry | mple-programs/ |
| | | Chemical Biology | |
| | | Computational Biology | https://chemistry.berkeley.e |
| | | | du/grad/cbe/phd |
| | | Infectious Diseases & | |
| | | Immunity | https://chemistry.berkeley.e |
| | | Metabolic Biology | du/grad/chem/ and |
| | | Plant Biology and | https://guide.berkeley.edu/g |
| | | Microbiology | raduate/degree- |
| | | Molecular & Cell | programs/chemistry/#docto |
| | | Biology | raldegreerequirementstext |
| | | | https://chembio.berkeley.ed u/ |
| | | | <u> </u> |
| | | | https://ccb.berkeley.edu/ac |
| | | | ademics/computational- |
| | | | <u>biology-phd/phd-</u> |
| | | | <u>requirements</u> |
| | | | https://publichealth.berkeley |
| | | | <u>.edu/academics/programs/i</u> |
| | | | nfectious-diseases-and- |
| | | | immunity-phd/current- |
| | | | <u>students</u> |

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| | | | https://nst.berkeley.edu/site s/nst.berkeley.edu/files/MB Handbook%2020-21_0.pdf https://plantandmicrobiolog y.berkeley.edu/graduate- programs/microbial-biology https://mcb.berkeley.edu/gr ad/academic-milestones |
|-------|----|---|---|
| | | | |
| Davis | No | Existing PhDs in: Biochemistry, Molecular, Cellular and Developmental Biology Chemistry and Chemical Biology Immunology Microbiology Pharmaceutical chemistry (MS only) Pharmacology & Toxicology In addition, students can add a "Designated Emphasis in Biotechnology" Or in Translational Research | https://www.ucdavis.edu/ac ademics/graduate (full list) and https://grad.ucdavis.edu/de signated-emphases and https://gradstudies.ucdavis. edu/programs/designated- emphases/gdtr https://programs.gs.ucdavis .edu/api/doc/3613 https://programs.gs.ucdavis .edu/api/doc/4377 https://programs.gs.ucdavis .edu/api/doc/4257 https://programs.gs.ucdavis .edu/api/doc/3635 https://programs.gs.ucdavis .edu/api/doc/3622 https://gradstudies.ucdavis. edu/programs/designated- |

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| | | emphases/gdtr and https://programs.gs.ucdavis .edu/api/doc/3609 |
|-------------|---|---|
| Irvine | Existing PhDs in: • Cellular & Molecular Biosciences Gateway • Mathematical, Computational and Systems Biology • Pharmacological Sciences • Chemistry There are also Biotechnology and Biotechnology Management MS, Biomedical and Translational Science M.S., M.S. Pharmacology | https://grad.uci.edu/admissions/degree-programs/ (full list) https://cmb.uci.edu/wp-content/uploads/sites/2/2023/09/CMB-handbook-2023-2024.pdf https://ccbs.uci.edu/wp-content/uploads/sites/3/securepdfs/2024/09/2024-2025-Graduate-Student-Handbook-v2.pdf https://pharmsci.uci.edu/degrees-programs/doctoral-programs/phd-pharmacological-sciences/curriculum/ https://www.chem.uci.edu/graduate/current-students/phd-requirements |
| Los Angeles | Existing PhDs in: • Biochemistry, Molecular and Structural Biology • Bioinformatics • Biology • Chemistry • Environmental and Molecular Toxicology | https://grad.ucla.edu/ (full list) https://grad.ucla.edu/progra |

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|----------------------|--|--|
| •• | | |
| | Molecular & Medical Pharmacology | https://grad.ucla.edu/progra |
| | Molecular Biology | |
| | Molecular, Cell, & | <u>m-</u> requirements/?major=025F& |
| | | academicyear= and |
| | Developmental | https://bioinformatics.ucla.e |
| | Biology | • |
| | | du/phd-graduate-courses/ |
| | | https://grad.ucla.edu/progra |
| | | ms/life-sciences/ecology- |
| | | and-evolutionary-biology- |
| | | department/biology/ |
| | | https://grad.ucla.edu/progra |
| | | ms/physical- |
| | | sciences/chemistry-and- |
| | | <u>biochemistry-</u> |
| | | department/chemistry/ |
| | | https://grad.ucla.edu/progra |
| | | ms/school-of-public- |
| | | health/environmental-and- |
| | | molecular-toxicology/ and |
| | | https://moltox.ph.ucla.edu/c |
| | | urriculum.html |
| | | |
| | | https://grad.ucla.edu/progra |
| | | ms/david-geffen-school-of- |
| | | medicine/molecular-and- |
| | | medical-pharmacology/ |
| | | https://grad.ucla.edu/progra |
| | | ms/life-sciences/molecular- |
| | | biology/ and |
| | | https://sites.lifesci.ucla.edu |

/mbi-home/wpcontent/uploads/sites/191/ 2024/09/MBIDP-Handbook-2024-10.pdf



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| Merced | No | Existing PhDs in: • Chemistry and Biochemistry • Quantitative and Systems Biology | https://grad.ucla.edu/programs/life-sciences/molecular-cell-developmental-biology/ https://www.ucmerced.edu/academics/graduate-programs (full list) https://uc-merced.foleon.com/grad-division/cbc/graduate-studies and https://graduatedivision.ucmerced.edu/sites/graduatedivision.ucmerced.edu/files/documents/2023.05.04_chemistry_and_biochemistry_policiesandprocedures_clean.pdf https://graduatedivision.ucmerced.edu/sites/graduatedivision.ucmerced.edu/files/documents/2022.04.19_qsb_policiesandprocedures_cleann.pdf |
|-----------|----|---|--|
| Riverside | No | Existing PhDs in: | https://graduate.ucr.edu/programs (full list) and https://biomed.ucr.edu/designated-emphasis https://chem.ucr.edu/applying-graduate-program/phd-program https://microbiology.ucr.edu/curriculum |

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| | | | https://microplantpath.ucr.e du/department- programs/plant-pathology- graduate-program#phd-in- plant-pathology https://cmdb.ucr.edu/ and https://cmdb.ucr.edu/progra ms/phd-degree https://biochem.ucr.edu/bio chemistry-and-molecular- biology-graduate-program https://biomed.ucr.edu/phd- program |
|---------------|----|--|--|
| Santa Barbara | No | Existing PhDs in: • Biochemistry/Molecula r Biology • Interdisciplinary Program in Quantitative Biosciences / Biomolecular Science and Engineering • Chemistry • Molecular, Cellular, & Develop. Biology | https://catalog.ucsb.edu/pr ograms?type=Doctorate&pa ge=1&pq= (full list) https://catalog.ucsb.edu/pr ograms/PHDBMB https://catalog.ucsb.edu/de partments/BMSE/overview and https://www.bmse.ucsb.edu /courses https://catalog.ucsb.edu/pr ograms/PHDCHEM https://catalog.ucsb.edu/pr ograms/PHDMCDB and https://www.mcdb.ucsb.edu /academics/graduate |
| Santa Cruz | No | Existing PhDs in: • Chemistry | https://www.gradadmission s.ucsc.edu/graduate-studies |

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| | Microbiology & | (full list) and |
| | Environmental | https://catalog.ucsc.edu/en |
| | Toxicology | /current/general- |
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| | Science and | programs/designated- |
| | Engineering (PBSE), | <u>emphases/</u> |
| | has subsections in | letter of the sign of the tale |
| | Molecular, Cell and | https://science.ucsc.edu/de |
| | Developmental | partment/chemistry/graduat |
| | Biology (MCD), Biomolecular | <u>e-programs/</u> |
| | | https://science.ucsc.edu/de |
| | Engineering and Bioinformatics | partment/metx/graduate- |
| | (BMEB), Chemical | programs/#grad-prog- |
| | Biology, Biochemistry | anchor |
| | and Biophysics (CB3), | <u>anonor</u> |
| | Microbial Biology and | https://mcd.ucsc.edu/acade |
| | Pathogenesis | mics/graduate/mcd- |
| | (MICRO) | handbook/index.html |
| | (Micho) | Harrason, macx.mm |
| | | https://pbse.ucsc.edu/bmeb |
| | | /bmeb-courses.html |
| | | |
| | | https://pbse.ucsc.edu/cb3/ |
| | | CB3%20Courses.html and |
| | | https://pbse.ucsc.edu/cb3/ |
| | | CB3%20Handbook.html |
| | | |
| | | https://pbse.ucsc.edu/micro |
| | | /micro-courses.html |
| | | |
| | | |
| San Diego | Existing PhDs in: | https://grad.ucsd.edu/admi |
| | Bioinformatics & | ssions/programs.html#all- |
| | Systems Biology | <u>programs</u> (full list) |
| | Biology Biomardian Cainnean | hada a tilata ta fa constitue |
| | Biomedical Sciences Malagular | https://bioinformatics.ucsd. |
| | Molecular Marmacalar | edu/grad/curriculum/curricu |
| | pharmacolog | <u>lum-overview</u> |
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| | and Drug | https://biology.ucsd.edu/ed |
| | discovery | ucation/grad/phd/curricular- |
| | Chemistry & | requirements/course- |
| | Biochemistry | <u>requirements-and-</u> |
| | The section of the se | specializations/index.html# |
| | There is also an MSc in | specialization-in- |
| | Drug Development and | immunology |
| | Product Management | |
| | <u>Product Management</u> | https://biomedsci.ucsd.edu/ |
| | | curriculum/index.html AND |
| | | https://pharmacology.ucsd. |
| | | <u>edu/graduate-</u> |
| | | studies/molecular- |
| | | pharmacology-training- |
| | | <u>program.html</u> |
| | | |
| | | https://chemistry.ucsd.edu/ |
| | | graduate-program/doctoral- |
| | | program/index.html |
| | | |
| San Francisco | Existing PhDs in: | https://graduate.ucsf.edu/a |
| | Biochemistry and | dmission/programs (full list) |
| | Molecular Biology | |
| | (Tetrad) | https://totrad.ucef.odu/curri |
| | | https://tetrad.ucsf.edu/curri |
| | Biomedical Sciences | <u>culum</u> |
| | Cell Biology (Tetrad) | <u>culum</u> |
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| | Cell Biology (Tetrad) Chemistry and Chemical Biology Pharmaceutical | culum https://bms.ucsf.edu/cours e-list |
| | Cell Biology (Tetrad) Chemistry and Chemical Biology Pharmaceutical Sciences and Pharmacogenomics | culum https://bms.ucsf.edu/cours e-list https://ccb.ucsf.edu/degree- program/courses |
| | Cell Biology (Tetrad) Chemistry and Chemical Biology Pharmaceutical Sciences and Pharmacogenomics Designated emphasis in | culum https://bms.ucsf.edu/cours e-list https://ccb.ucsf.edu/degree- program/courses https://pspg.ucsf.edu/degre |
| | Cell Biology (Tetrad) Chemistry and Chemical Biology Pharmaceutical Sciences and Pharmacogenomics | culum https://bms.ucsf.edu/cours e-list https://ccb.ucsf.edu/degree- program/courses |
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| | Cell Biology (Tetrad) Chemistry and Chemical Biology Pharmaceutical Sciences and Pharmacogenomics Designated emphasis in | culum https://bms.ucsf.edu/cours e-list https://ccb.ucsf.edu/degree- program/courses https://pspg.ucsf.edu/degre e-program/curriculum |

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Provide a summary of your analysis. If there is a potential for duplication, please contact app@calstate.edu for advice.

This is the first DSc program to have been intentionally designed from scratch to meet biotechnology workforce needs of the 21st century. All other doctoral programs reviewed, including more recently developed ones, fit a traditional flow of courses in the first year, qualifying exams designed in the style of NIH or NSF grant applications, and seminars that meet expectations of formal faculty seminars. The need for such a program as we propose was recently highlighted by Nature (06/22/2025, https://www.nature.com/articles/d41586-025-01855-w). This means that current programs remain inadequate to fill this gap. Example quotes from this article: "We need to make doctoral education more meaningful, more sustainable and better aligned with the diverse societal and labour-market needs"; "Many researchers are calling for a re-evaluation of what a PhD is for — and for reforms in higher-education systems to adapt to the changing career landscape for doctorate holders." "Nevertheless, many students still say that universities are not doing enough to help them prepare for non-academic jobs." ""We need to change doctoral education to prepare doctors for all walks of life," Sarrico says. "Their skills are needed — innovation, critical thinking, analytical thinking — all of this is in demand in the labour market.""

UC Davis: Designated Emphasis in Biotechnology (DEB) 282 - Professional Internships (https://deb.ucdavis.edu/internships)

"The majority of DEB students take an internship with a biotech company, though students may propose cross-college research experiences, college teaching experiences, policy-related work and other biotech-related professional internships to the DEB executive committee for review and approval.". This program also allows as a substitute DEB Science Communication Internship where they blog (specifically designed to allow distance learning). As discussed above, the DEB is an emphasis applied to a standard PhD program, with an optional internship. It does not re-imagine curriculum to align with preparation for industry careers as we propose, detailed above.

Although several UCs offer biotechnology or biopharmaceutical sciences-related Master's degrees (e.g UCSD, UCI), we did not include them in this comparison since they are not PhD degrees and as such do not present the same expectation or outcomes.

Deadline to submit to the CSU Chancellor's Office: **August 1**Deadline to submit to the UC Office of President: **September 15 (submitted by CSUCO)**

Submit completed proposal package using the Smartsheet submission form: https://app.smartsheet.com/b/form/f44c90ae00524cf6848fbf15a105b9b9

Academic Programs, Innovation and Faculty Development

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CSU Office of the Chancellor 401 Golden Shore, 6th Floor Long Beach, CA 90802-4210

Contact Us

Academic Programs, Innovation and Faculty Development Caron Inouye, Ph.D. Interim State University Dean, Academic Programs Phone (562) 951-4154 cinouye@calstate.edu

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UC/CSU Program Duplication Review Rubric

Campus: CSU Long Beach-- (PsyD) in Counseling Psychology

Reviewer: Neil Gilbert

Date: 10/25/25

| | Little to No | Some Duplication | Nearly Total /Total |
|----------------------|------------------|------------------|---------------------|
| | Duplication | (warrants closer | Duplication |
| | (more dissimilar | review) | (much more alike |
| | than not) | | than different) |
| | | | |
| Title of Projected | | X | |
| Doctoral Degree | | | |
| Degree Designation | Χ | | |
| (e.g. EdD) | | | |
| Program Description | | X | |
| Program Learning | | X | |
| Outcomes | | | |
| External Program | | X | |
| Accreditation (where | | | |
| applicable) | | | |
| Required | | Х | |
| Coursework/Program | | | |
| Structure | | | |
| Cumulating | | X | |
| Experience/Research | | | |
| Orientation | | | |
| Overall Assessment | | Х | |
| | | | |
| | | | |

Relevant UC Campuses/Programs (please list):

Berkeley - Concentration in Clinical Science- emphasis is on "science" rather than clinical practice; the training prepares students for future roles as researchers and teachers in university and medical settings, and as leaders in the provision of clinical services

Davis - Psychology Department at UC Davis does not offer training in the areas of clinical or counseling psychology.

Irvine – Clinical psychology, mainly research oriented.

UCLA - Clinical psychology, primarily research oriented

Merced – Clinical concentration aimed at producing faculty, researchers, and leaders in clinical science.

Riverside – Does not provide training in Clinical, Counseling Psychology.

Santa Cruz - Does not provide training in Clinical, Counseling Psychology

Santa Barbara – Psychology department offers a "scientist practitioner" oriented counseling/clinical doctoral program, the objectives of which overlap with the CSULB program.

UC San Diego - San Diego State and UC San Diego offer a joint doctoral in Clinical Psychology, which emphasizes the integration of research and practice in training, activities and experience. It sounds practitioner oriented. "Clinical activities, integrated with more formal instruction at all levels, increase in responsibility and independence in the later years of the program as students acquire greater clinical proficiency."

UCSF - Does not provide doctoral education in Clinical, Counseling Psychology Comments regarding program similarities:

The CSU Long Beach Counseling Psychology (Psy.D) proposal notes that although it has some similarities with the UCSB Ph.D. program in Counseling/Clinical Psychology, they differ in that "the UCSB program prepares students to enter research and academic professions" while the "CSU Long Beach program has a practitioner-oriented focus with a strong emphasis on clinical competencies and professional engagement, particularly aligned with APA standards." While this is largely correct, the UCSB program claims that although its primary goal is to train students interested in academic and research positions; "a secondary goal is to prepare *psychological service providers*." The UCSB program is also aligned with APA standards. The UCSB website opens with the practitioner oriented statements:

Counseling psychologists have traditionally focused on life-adjustment problems and career development and have worked primarily in university counseling centers, Veterans Administration hospitals, and community agencies.

Clinical psychologists have traditionally focused on the evaluation and treatment of clients with acute or chronic mental disorders and have worked in mental health centers, mental hospitals, and psychiatric units of general hospitals.

This raises some questions about the CUSLB claim:

In sum, the two programs address different needs in the state: UCSB's PhD advances psychological science and academic training, whereas CSU Long Beach's PsyD uniquely expands the pipeline of licensed clinical practitioners prepared to deliver direct mental health services, which is an area not covered by UC doctoral programs.

The Berkeley Ph.D. concentration in clinical science indicates that it prepares students for future roles including leadership in the provision of clinical services.

Finally, the joint doctoral in Clinical Psychology offered by San Diego State and UC San Diego has a concentration in behavioral medicine that focuses on "developing and integrating knowledge and techniques in behavioral/biomedical science and applying psychological knowledge to health and illness, including prevention, diagnosis, treatment, survivorship, and rehabilitation" – which sounds like it might be somewhat practitioner oriented.

I wonder about the extent to which the UC clinical psychology doctoral programs would agree that the CSU Long Beach proposal for training clinical practitioners is an area not covered by the existing UC programs.



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DOCTORAL DEGREE PLANNING RESOURCES

CONCEPTUAL PROPOSAL FOR UC REVIEW OF CSU PROFESSIONAL AND APPLIED DOCTORAL PROGRAMS

CSU Proposed Degree Information, Campus Information, and Contact Information

| Title of Projected Doctoral Degree | Counseling Psychology | |
|------------------------------------|--|--|
| Degree Designation (e.g., EdD) | Doctor of Psychology (PsyD) | |
| Proposed CIP Code | 42.2803 | |
| Projected Implementation Date | Fall 2027 | |
| (1st Cohort Enrolled) | | |
| Campus | California State University, Long Beach | |
| College | College of Education | |
| Department | Advanced Studies in Education and Counseling | |
| Contact Name(s) and Email(s) | Pei-Fang Hung (Pei-Fang.Hung@csulb.edu) | |
| | Robert Moushon (Robert.Moushon@csulb.edu) | |
| | Bita Ghafoori (Bita.Ghafoori@csulb.edu) | |

Curricular and Academic Elements

1. Provide a summary of the purpose for and a description of the proposed doctoral degree, including targeted audience(s).

<u>CSULB PsyD in Counseling Psychology Program Purpose</u>:

The proposed PsyD in Counseling Psychology at CSULB aims to develop highly skilled counseling professionals prepared to contribute to the field of mental health through research, education, and practice. The program will consist of comprehensive training that integrates scientific research with practical applications to prepare students for roles in academia, clinical practice, and community settings. The program will emphasize four key objectives:

- a. Research competence. Students will gain the skills to conduct high-quality, original research that contributes to the field of counseling psychology. The training focuses on quantitative and qualitative research methods, data analysis, and scholarly writing. This foundational set of skills ensures that students become competent researchers capable of adding to our current understanding of topics relevant to the field of counseling psychology.
- b. Clinical competence. Students will undergo extensive clinical training to ensure they are prepared to



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deliver evidence-based counseling psychology services. This practical training involves supervised practicum experiences and internships across various settings. Students will gain the knowledge

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handle diverse clinical scenarios upon graduation.
Multicultural competence. The program integrates multicultural awareness throughout the curriculum. This focus ensures students become culturally competent in their professional activities—research, teaching, or clinical practice. By understanding and valuing diverse perspectives, students will be better prepared to work with and effectively support diverse populations, acknowledging and addressing the socio-cultural factors that influence mental health.

and experience needed to transition from theoretical learning to skilled practice, allowing them to

d. Ethical competence. Ethical practice is emphasized across all segments of the program. Students will understand the importance of adhering to ethical standards in their professional activities—research, teaching, or clinical practice. Training includes ethical decision-making and strict adherence to the American Psychological Association's (APA) ethical guidelines, which prepare students to maintain professional integrity and accountability.

By integrating these key objectives into the CSULB Counseling Psychology PsyD curriculum, the program aims to produce well-prepared doctoral level counseling psychology professionals to lead in a diverse and constantly changing world.

CSULB PsyD in Counseling Psychology Program Characteristics and Target Audience:

The proposed PsyD program in Counseling Psychology at CSULB has several distinguishing features, each intended to enhance the educational experience and better prepare students for their careers.

- First, students will participate in research projects guided by seasoned faculty members. The
 specific research areas reflect current faculty areas of specialization, allowing faculty to mentor
 students as they develop the necessary skills to contribute to the counseling psychology literature.
 This hands-on research experience is crucial for students interested in engaging in scholarly
 contributions throughout their careers.
- In addition, the program will significantly emphasize clinical training. This training evolves from skill
 acquisition to foundational practicum experience and builds to a full-time, year-long internship.
 Students develop essential practical assessment, diagnosis, and intervention skills throughout this
 progression. A rigorous clinical training ensures students are theoretically proficient and competent
 clinicians.
- The program will also offer two pathways for clinical practice, a multicultural track and a trauma
 track, allowing students to tailor their education to their specific interests and career goals. By
 offering these pathways, the program ensures that graduates are well-prepared to meet the
 diverse needs of the communities they serve and contribute to advancing the field of counseling
 psychology.
- Lastly, the program will adopt a cohort model, where students progress through their studies with
 the same group of peers. Many APA-accredited counseling psychology doctoral programs employ a
 cohort model, which can significantly shape students' educational and professional development



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experience. This model fosters a supportive learning environment and facilitates collaborative learning experiences. The cohort system builds strong professional networks and peer support systems.

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Target audience: Combining research opportunities, clinical training, specializations, and a cohort model, the proposed PsyD in Counseling Psychology at CSULB is intended for a student population of future counseling psychologists ready to meet the challenges and demands of the counseling field with sound research skills, clinical expertise, and competence.

Describe how the proposed doctoral curriculum is advanced beyond a master's degree to justify a new professional and/or applied doctorate, distinct from a UC doctoral program.

The proposed PsyD degree in Counseling Psychology is a doctoral degree focused on preparing practitioner-scholars who apply psychological science directly in clinical setting to meet the growing mental health needs of California's diverse communities. The program is distinct from the master's degree in counseling psychology due to having additional coursework that satisfies the academic requirements for eligibility to take the Examination for Professional Practice in Psychology (EPPP), which is a national exam required for licensure as a doctoral-level psychologist in the United States. Licensure as a counseling psychologist in California is monitored by the Board of Psychology (BOP). The State of California requires satisfactory completion of academic requirements, supervised post-doctoral hours of clinical training, successful passing of the EPPP, and successful passing of the California Psychology Law and Ethics Examination (CPLEE). Importantly, no University of California campus currently offers a PsyD in Counseling Psychology. While UC institutions offer PhD programs in psychology, those programs emphasize research and the preparation of future faculty and scientists. In contrast, the PsyD emphasizes applied clinical training and professional practice, directly addressing a critical statewide workforce gap by preparing more licensed psychologists who can provide culturally responsive mental health care across California.

3. Describe the admission criteria for the proposed doctoral degree (including undergraduate preparation).

Applicants for the PsyD program must possess a master's degree in psychology or a closely related field that reflects a graduate-level foundation of knowledge in the following domains: biological aspects of behavior, cognitive and affective aspects of behavior, social aspects of behavior; psychological measurement, research methodology, and techniques of data analysis.

The PsyD Admissions Committee takes into consideration the breadth and depth of an applicant's foundation of general knowledge of psychology, and clinical and research experience in granting admission. A review of undergraduate and graduate transcripts will provide an assessment of an



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applicant's academic preparation and performance. The profession of counseling psychology requires individual and interpersonal competencies in addition to academic preparation. Interpersonal attributes and skills are therefore taken into consideration in assessing an individual's qualification for admission.

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To apply for this program, the following is required:

- Application form
- Bachelor & master's degrees (should be in psychology or a related discipline)
- Transcripts
- 2 letters of recommendation
- Personal statement
- CV/resume
- Clinical and research experience form
- Master's degree course descriptions (optional)
- Interview
- 4. List the proposed doctoral program course and culminating doctoral project descriptions including, as appropriate, a description of qualifying and/or comprehensive exams, professional and/or clinical experiences, practicums, projects, and research.

| Counseling Core Classes (all of the following courses are required) |
|---|
| Intro to the Profession of Counseling Psychology (3 units) |
| Ethical Issues in Counseling Psychology (3 units) |
| Advanced Psychopathology (3 units) |
| Intellectual & Personality Assessment (3 units) |
| Advanced Psychotherapy Theories (3 units) |
| Seminar in Supervision and Consultation (3 units) |
| Multicultural Counseling (3 units) |
| Doctoral Practicum in Psychotherapy (5 units) |
| Doctoral Therapy and Assessment or Combined Externship (6 units) |
| Dissertation Courses (13 units) |
| Research & Methodology Core |
| APA Discipline-Specific Knowledge (DSK) Areas: History and Systems of Psychology + Research |
| Methods, Statistical Analysis, and Psychometrics) (all of the following courses are required) |
| History and Systems of Psychology (3 units) |
| Intellectual and Personality Assessment (3 units) |



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Research Methods in Psychology (3 units)

Advanced Statistics (3 units)

Multivariate Statistics (3 units)

Scientific Psychology Core APA Discipline-Specific Knowledge (DSK) Areas: Affective Aspects of Behavior (all of the following

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Neuropsychology (3 units)

Advanced Psychopathology (3 units) (Note: does not fulfill category by itself)

Scientific Psychology Core
APA Discipline-Specific Knowledge (DSK) Areas: Biological Aspects of Behavior (all of the following courses are required)

Neuropsychology (3 units)

Advanced Psychopathology (3 units) (Note: does not fulfill category by itself)

Psychopharmacology (3 units) (Note: does not fulfill category by itself)

APA Discipline-Specific Knowledge (DSK) Areas: Cognitive Aspects of Behavior

Cognitive Neuroscience (3 units)

Scientific Psychology Core

APA Discipline-Specific Knowledge (DSK) Areas: Social Aspects of Behavior (take one of the following

Social Psychological Theory (3 units)

Group Dynamics (3 units) (Note: cannot just be group counseling)

Scientific Psychology Core

APA Discipline-Specific Knowledge (DSK) Areas: Developmental Aspects of Behavior

Psychological Development Theory (3 units)

APA Discipline-Specific Knowledge (DSK) Areas: Advanced Integrative Knowledge In Scientific Psychology (take one of the following)

Cognitive Neuroscience (Cognitive/Biological) (3 units)

Trauma Assessment (3 units)

Evidence Based Trauma Treatment (3 units)

Counseling Children and Adolescents (3 units)

Child and Spousal/Partner Abuse? (1 unit)

At least one externship has to have a trauma focus

ulticultural Track (course requirements for the track, also considered electives

Human Sexuality Counseling? (3 units)

Prevention, Outreach, and Social Advocacy (3 units)

Race and Psychology (3 units)



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At least one externship has to have a community mental health focus

Other Electives (if not specializing in a specific track, take at least 15 units of the following courses):

Psychopharmacology (3 units)

Cognitive Behavior Therapy (3 units)

Family Systems Therapy (3 units)

Gestalt Therapy (3 units)

Emotionally Focused Therapy (3 units)

Counseling the Alcohol/Chemically Dependent Person? (2 units)

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Aging and Long-Term Care? (3 units)

Career Development and Counseling (3 units)

Qualitative Methods and Analysis (3 units)

Psychodynamic Psychotherapy (2 units)

Psychology of Immigration (2 units)

5. Describe the proposed culminating doctoral experience (doctoral dissertation, doctoral project, or doctoral capstone).

The culminating doctoral experience in the CSULB PsyD in Counseling Psychology program will be a doctoral dissertation. An essential feature of a university-based doctoral program is a commitment to scholarship. CSULB's PsyD program will be committed to a practitioner-scholar model that affirms the importance of evidence-based practice. The demonstration of research competence is a critical area of professional competence required for degree completion. Students demonstrate research competence, in part, through the completion of a counseling psychology dissertation, which provides an opportunity to closely examine the literature on a clinically relevant topic and to meaningfully contribute to the profession through the production of a rigorous piece of scholarly work.

Students take courses during their first and second years to guide the development of their dissertation proposal. Students work closely with their dissertation instructor and their dissertation chairperson throughout the process. The PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines, accepted by the scientific community as the standard for the conduct of systematic literature reviews, informs the dissertation process. Consistent with supervised clinical practice and other professional activities, students are required to comply with ethical and professional standards for the conduct of research and scholarship.

6. List the program learning outcomes for the proposed doctoral degree.

The American Psychological Association (APA) outlines various learning objectives for doctoral level counseling psychology programs to ensure that they provide a comprehensive education that meets the profession's high standards. These objectives prepare students thoroughly for clinical, academic, and



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research roles in psychology. Below are some key learning objectives typically associated with APA-accredited counseling psychology programs:

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Research Competence:

- Develop the ability to design, conduct, and interpret research studies.
- Gain skills in both quantitative and qualitative research methodologies.
- Produce original research contributing to the knowledge base of counseling psychology.
- Present research findings at professional conferences and publish in peer-reviewed journals.

Ethical and Legal Standards:

- Understand and adhere to ethical principles and legal standards in psychological practice and research
- Apply ethical decision-making processes to real-world professional situations.

Individual and Cultural Diversity:

- Increase awareness and understanding of cultural and individual diversity.
- Develop competencies to work effectively with diverse populations.
- Integrate multicultural perspectives into research, teaching, and clinical practice.

Professional Values, Attitudes, and Behaviors:

- Foster a professional identity committed to lifelong learning and continuous professional development.
- Exhibit professional behavior and attitudes aligned with the values of the discipline.

Communication and Interpersonal Skills:

- Enhance communication skills for effective interactions with clients, peers, supervisors, and other professionals.
- Develop interpersonal skills necessary for successful therapeutic relationships and professional collaborations.

Assessment:

- Acquire proficiency in psychological assessment techniques.
- Conduct comprehensive assessments integrating multiple data sources to inform diagnosis and treatment planning.

Intervention:

- Gain expertise in evidence-based intervention strategies.
- Implement therapeutic interventions tailored to the specific needs of clients.

Supervision:

- Learn the principles and practices of effective supervision.
- Gain experience in supervising trainees and providing constructive feedback.

Consultation and Interprofessional/Interdisciplinary Skills:

- Develop skills in consulting with other professionals and agencies.
- Work effectively as part of interdisciplinary teams in various settings.



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Each of these objectives is to ensure students are knowledgeable, ethical, think critically, communicate effectively, and contribute to the field of counseling psychology.

7. Describe the infrastructure required for this proposed doctoral program.

As a Counseling Psychology PsyD program, we would seek accreditation by the American Psychological Association's (APA) Commission on Accreditation (CoA). The CoA "reviews doctoral programs in psychology that provide broad and general training in scientific psychology and in the foundations of practice in health service psychology. Practice areas include clinical psychology, counseling psychology, school psychology, and other developed practice areas." Consistent with the Standards of Accreditation for Health Service Psychology, there are minimum expectations for the program context and resources. CSULB has the program administration, faculty with appropriate education and credentials, research opportunities, training materials and equipment, and physical facilities for the doctoral program.

Phase 1 (Initiation (Spring 2026 - Summer 2027)

The initiation phase is intended to begin the program using existing resources, without the need for substantial permanent resource commitments.

- Spring 2026: The assigned faculty from CSULB work collaboratively to produce a full proposal; the
 faculty, program Chairs, Deans, and Vice Provosts at CSULB approve all aspects of the full
 proposals.
- Spring 2026: The approved proposal is sent to the Executive Vice Chancellor and Chief Academic
 Officer at the CSU Office of the Chancellor office for final approval. The complete proposal is
 submitted through local university administrative channels to the Chancellor of the California State
 University for final approval.
- Spring 2026: CCGA conducts a preliminary review to determine whether or not to move forward
 with a full review of the proposal or whether the Committee wishes to obtain additional
 information. If CCGA agrees to move forward with a full review and the CSU Office of the
 Chancellor concurs, the proposal summary will be sent to CPEC.
- Spring 2026: CSU will need to request approval for a new program at the doctoral level from the
 regional accrediting agency, the Western Association of Schools and Colleges (WASC). The campus
 Accreditation Liaison Office will submit a one-page application to the Substantive Change
 Committee of WASC as soon as the program proposal is submitted CCGA and CPEC.
- Summer 2026: Once CCGA, CSU, and CPEC have completed their reviews and approved the PsyD in Counseling Psychology, they notify the system offices, and the proposal is forwarded to the CSU/UC Joint Graduate Board for review. After approval by the Joint Graduate Board, the recommendation to implement the program goes to the Chancellor of the CSU, who notify the campus.

Commented [IC1]: This section should be condensed/streamlined and emphasize the LB has the capacity to implement this program. While the planning and deliberation involved are appreciated from our perspective, the current level of detail on infrastructure may shift the UC's attention away from duplication and instead open the door to criticism regarding whether the campus has the necessary resources to run the program.

Commented [BG2R1]: I condensed this section considerably. I left the timeline- please feel free to remove as appropriate.



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• Fall 2026: The program will be publicly announced; the steering committee will be set up; the program Director will be determined; the web page will go online; Faculty will get curriculum approvals; prospective students are allowed to apply to the program; the program will have a "kick off" conference which will generate publicity for the program.

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 Spring 2027: Application for new graduate students will be reviewed and new graduate students will be admitted for the 2027/2028 academic year.

Phase 2: Expansion (Fall 2027 - Summer 2032)

The expansion phase is intended to grow the program significantly to make it a truly outstanding program and allow it to achieve prominence among other top-rated national Counseling Psychology PsyD programs. This phase will be entered only if the program has successfully received accreditation by the American Psychological Association (APA) and the Psychological Clinical Science Accreditation System (PCSAS).

We expect to be able to admit new incoming students into the program starting in Fall 2027 at a rate of approximately 15 students annually.

Phase 3: Consolidation (Fall 2032 onwards)

In its fifth year, the program will enter the consolidation phase, which will ensure that it remains at the forefront of research, clinical services, and education in Counseling Psychology. Since the details of this phase depend on a large number of factors (including program success, review suggestions, the overall economic conditions of the universities, and other) it is not possible to make any particular predictions at this time.

Program Administration

- 1. Program Director- tenured professor of Counseling Psychology (or closely-related discipline), half-time.
- 2. Advisory/Steering Committee composed of program faculty, program director, college dean, graduate dean, members of the local field of practice. The main responsibilities of the Steering Committee would be to: (a) assist the faculty members from each institution committed to significant research collaboration and willing to serve as advisors of PsyD students, (b) review admissions process to ensure admissions standards are maintained, (c) review the academic progress of each student on a biannual basis and verify that minimum requirements for continuation in the program are maintained, (e) maintain detailed written description of the PsyD rules and regulations as well as the timing and sequence of all major steps in the program, (f) promote the organized exchange of best practices, (g) promote research collaboration amongst faculty through seminars, research proposals, retreats, and active participation of the PsyD students in the program, (h) ensure that all students know where to seek help and to help coordinate bureaucratic issues that may arise.
- 3. Clinical Fieldwork Coordinator- member of the Counseling Psychology faculty whom oversees all elements of clinical practice including internship year placement. One quarter time appointment.
- 4. Program Faculty- Based on the formula above and my calculations, we will need 7.93 FTE faculty



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members for 10 graduate students in order to be in compliance with APA Accreditation standards.

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- 5. Program Coordinator- full-time staff member to coordinate administrative and student-related functions.
- Start-Up Funds- to cover Program Director time prior to admission of the first class and other administrative needs such as the program coordinator one year prior to admission of the first class and costs associated with student recruitment.

Phase 1 Resource Requirements

Most notably, the PsyD program in Counseling Psychology can be started with existing resources in terms of participating faculty, existing courses, and existing student support mechanisms. CSULB already has a growing number of faculty with expertise and active research programs in Counseling Psychology. Hence, there will be a sufficient number of potential research advisors available to supervise new PsyD students in Counseling Psychology for the first few years. Since we only expect to admit 10 graduate students into the program initially, only minimal initial time commitments are expected for the Steering Committee members during Phase 1. Moreover, 16 new core courses, 4 new track-specific courses, and 3 new electives will be required. As a result, the graduate program will share faculty from existing programs and also strengthen existing graduate programs by providing new courses and research opportunities.

Phase 2 Resource Requirements

The expansion phase will be characterized by substantive program growth based on new permanently committed resources, including teaching assistantships and administrative support given directly to the program, and additional faculty lines given to participating departments. We are also requesting 1 full time program coordinator to support the program Director with the growing program and student advising functions. Moreover, it will be likely be necessary to strengthen and complement existing research by hiring new counseling psychology faculty. In this phase, the individual departments and colleges will significantly benefit from the new resources of the Counseling Psychology Doctoral Program.

APA accreditation (please see: https://accreditation.apa.org/fees)
Other operating costs – full-time time admin asst.

Appendix A

 Doctoral Program Roadmap. Provide a doctoral program roadmap serving as a visual representation of the pathway by term of program requirements, including the sequence of completing courses and any offsite, internship, and/or culminating requirements, and the total units per term and total overall units for the program.



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| | Fall | Spring | Summer |
|-------------|--|--|--|
| First Year | Intro to the Profession of Counseling Psych (3 units) | Advanced Statistics (3 units) | Elective (3 units) |
| | Ethical Issues in Counseling Psychology (3 units) | Research Methods in Psychology (3 units) | Dissertation intensive (1 unit) |
| | Advanced Psychopathology (3 units) | Advanced Psychotherapy Theories & Techniques (3 units) | Doctoral practicum: Clinical skills intensive (1 unit) |
| | Intellectual & Personality Assessment (3 units) | History and Systems of Psychology (3 units) | |
| | Doctoral Practicum in Psychotherapy (2 units) | Doctoral Practicum in Psychotherapy (2 units) | |
| | Fall | Spring | Summer |
| Second Year | Multivariate Statistics (3 units) | Multicultural Counseling (3 units) | Elective (3 units) |
| | Psychological Development Theory (3 units) | Social Psychological Theory or Group Dynamics (3 units) | Dissertation project (1 unit) |
| | Seminar in Supervision and Consultation (3 units) | Elective (3 units) | Doctoral Therapy Externship (1 unit) |
| | Doctoral Therapy Externship (1 unit) | Doctoral Therapy Externship (1 unit) | Clinical Qualifying Exam |
| | Dissertation project (1 unit) | Dissertation project (1 unit) | |
| | Fall | Spring | Summer |
| Third Year | Neuropsychology (3 units) | Cognitive Neuroscience (3 units) | Dissertation project (1 unit) |
| | Elective (3 units) | Elective (3 units) | Doctoral Assessment or Combined Externship (1 unit) |
| | Doctoral Assessment or Combined Externship (1 unit) | Doctoral Assessment or Combined Externship (1 unit) | |
| | Dissertation project (1 unit) | Dissertation project (1 unit) | |
| | | Clinical Competence Examination (May) | |
| | Fall | Spring | Summer |
| Fourth Year | Dissertation (2 units) | Dissertation (2 units) | Dissertation (2 units) |
| | APA-Accredited Internship (0 units) | APA-Accredited Internship (0 units) | APA-Accredited Internship (0 units) |



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2. Postgraduate Professional Job Objectives

a. Describe relevant statewide workforce demands for the proposed doctoral program.

Counseling Psychology is a generalist health service psychology (HSP) area in professional psychology that uses a broad range of culturally sensitive mental health practices to alleviate mental health concerns, improve well-being, resolve crises, and increase functioning in life. It focuses on life-span development, prevention, education, and treatment of distress in individuals and the systems or contexts in which they function.

Counseling Psychologists made a median salary of \$92,740.00 in 2023 according to the U.S. Bureau of Labor Statistics. In California, counseling psychologists make an annual mean wage of \$132,410.00.

Mental health care is in high demand (see: https://www.apa.org/monitor/2024/01/trends-pathways-access-mental-health-care). According to the APA Psychologist Workforce Projections: Report on Addressing Supply and Demand from 2015-30, "psychologist supply is insufficient to meet demand in the racial/ethnic equivalence scenario or address the unmet need for psychological services." Broadly, this data suggests that 25,080 new psychologists would be needed to meet racial/ethnic equivalence by 2030, and an additional 20,220 psychologists would be needed to address unmet need. Furthermore, data about California's Workforce in Behavioral Health Occupations suggests that over 20% of the workforce is over 60 years old and near retirement age among psychiatrists, clinical and counseling psychologists, and marriage and family therapists (please see: https://hcai.ca.gov/wp-content/uploads/2022/07/Agenda-Item-9-HCAI-HWET-Council-07-12-2022_Final-ADA-Accessible.pdf). Counseling and Clinical psychologists are usually hired within 3 months of their terminal degree, and the US Department of Labor Statistics reports that this profession has the highest rate of growth in the US compared to all other professions.

b. Describe employment opportunities for the proposed doctoral program.

The total number of estimated job openings from 2018-2028 is 15,310. The evidence for need for counseling psychologists is from the following occupational statistics that suggests the job outlook for counseling psychologists nationwide is set to grow 6% (faster than the average for all occupations), and that the California labor market estimates a need for counseling psychologists and 13.2% estimated employment growth (2018-2028):

- https://www.bls.gov/ooh/life-physical-and-social-science/psychologists.htm
- https://labormarketinfo.edd.ca.gov/cgi/databrowsing/occExplorerQSDetails.asp?soccode=193031
- c. If applicable, describe the national or state-wide professional accreditation/certified licensure(s) and how the accreditation/licensure(s) will be aligned to the proposed doctoral degree title.



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As a Counseling Psychology PsyD program, we would seek accreditation by the American Psychological Association's (APA) Commission on Accreditation (CoA). The CoA "reviews doctoral programs in psychology that provide broad and general training in scientific psychology and in the foundations of practice in health service psychology. Practice areas include clinical psychology, counseling psychology, school psychology, and other developed practice areas." Consistent with the Standards of Accreditation for Health Service Psychology, there are minimum expectations for the program context and resources for doctoral programs listed below.

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Program Administration and Faculty

- The program must have consistent and stable leadership with a designated leader who is a
 doctoral-level psychologist. This program leader's credentials and expertise must be in an area
 covered by HSP accreditation.
- The program must have designated procedures and administrative personnel responsible for
 making decisions about the program, including curriculum, student selection and evaluation, and
 program maintenance and improvement. These personnel would also be responsible for
 maintaining alumni engagement and recording keeping post-graduation.
 - Program coordinators would be required to assist with course scheduling and other logistics.
 - Advisory committees would be required to provide guidance on curriculum development and program improvements.
- The program must have an identifiable core faculty responsible for the program's activities,
 educational offerings, and quality. There must be a sufficient number of faculty for their academic
 and professional responsibilities. They should have theoretical perspectives, academic and applied
 experiences, substantial competence and credentials appropriate to the program's aims.
 - o Core faculty must be composed of individuals whose primary professional employment (50% or more) is within the institution in which the program is housed. At least 50% of core faculty professional time must be devoted to program-related activities.
 - Activities expected of core faculty include: program-related teaching, research, scholarship, and/or professional activities; supervision of students' research, dissertations, and teaching activities; mentoring students' professional development; providing clinical supervision; monitoring student outcomes; teaching in a master's degree program that is an integral part of the doctoral program; and developing, evaluating, and maintaining the program.
 - Of note, activities that are deemed "not directly related to the doctoral program and not seen as aspects of the core faculty role" include undergraduate teaching; teaching and related activities in terminal master's or other graduate programs; and clinical work or independent practice not directly associated with training.
 - At least one member of the core faculty must have professional licensure as a psychologist in California.



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 Changes in student-faculty ratio must not exceed 1.26, which is calculated by: (number of students at time 2/number of core faculty at time 2) / (number of students at time 1/number of core faculty at time 1)

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- Adjunct faculty are hired on an ad hoc basis to teach courses, provide supervision, etc. They are not
 centrally involved in program development but often make substantial contributions to the
 program.
- There are general expectations for program faculty.
 - Programs that confer the PsyD must have a substantial proportion of faculty who conduct empirical research in the discipline (or related discipline and fields) and a substantial proportion of faculty to have been trained for the practice of psychology.
 - o Program faculty are expected to be accessible to students and provide them with guidance and supervision.
 - Program faculty must be engaged in activities demonstrating the skills they are endeavoring to teach their students (e.g., delivering psychological services, conducting psychological research).
 - Thus, additional release time will be required for faculty to achieve these expectations.
 Based on the 2021 CCPTP Training Programs Survey, faculty from other APA-accredited counseling psychology programs have gotten release time for teaching/supervising students' clinical practicum training, advising doctoral students, and chairing theses/dissertations.

3. Analysis of potential UC duplicate doctoral degree programs. Complete the table below.

Title of CSU Proposed Doctoral Program: Doctor of Psychology (PsyD) in Counseling Psychology

| UC Campus | Degree Duplication (Yes/Potential/No) | UC Degree Title and Designation | UC Website(s) reviewed and date accessed |
|-------------|---------------------------------------|---|--|
| Berkeley | No | Psychology, Ph.D. | UCB Psychology PhD Website 8/28/25 |
| Davis | No | Psychology, Ph.D. | UCD Psychology Graduate Studies Overview8/28/25 |
| Irvine | No | Psychology, Ph.D., Clinical Psychology Concentration | UCI Clinical Psychology Doctoral Overview8/28/25 |
| Los Angeles | No | Psychology, Ph.D. | UCLA Psychology Graduate Overview Page8/28/25 |
| Merced | No | Psychological Sciences, Ph.D. | UCM Psychological Sciences Website 8/28/25 |



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| Riverside | No | Psychology, Ph.D. | URC Psychology – |
|---------------|----|---------------------------------|-----------------------------------|
| | | | Graduate/Doctoral Offerings |
| | | | Overview 8/28/25 |
| Santa Barbara | No | Counseling/Clinical Psychology, | UCSB Counseling, Clinical, School |
| | | Ph.D. | Psych Website8/28/25 |
| Santa Cruz | No | Psychology, Ph.D. | UCSC Psychology PhD |
| | | | Website 8/28/25 |
| San Diego | No | Clinical Psychology, Ph.D. | UCSD Clinical Psychology |
| | | | Website 8/28/25 |
| San Francisco | No | No relevant degrees | Graduate Programs Website (date |
| | | | accessed: 09/09/25) |

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Provide a summary of your analysis. If there is a potential for duplication, please contact app@calstate.edu for advice.

The proposed CSU Long Beach PsyD program in Counseling Psychology may have some similarities with the UCSB Ph.D. program in Counseling/Clinical Psychology; however, the two programs lead to different degrees and have a different focus for students. The CSU Long Beach program has a practitioner-oriented focus with a strong emphasis on clinical competencies and professional engagement, particularly aligned with APA standards. The CSU Long Beach program is focused on application of psychological theories for the treatment of mental health disorders and prepares students to become mental health practitioners. The UCSB program offers a broader interdisciplinary training across counseling and clinical psychology, with additional focus on teaching, mentoring, and systems-level interventions. The UCSB program prepares students to enter research and academic professions.

In sum, the two programs address different needs in the state: UCSB's PhD advances psychological science and academic training, whereas CSU Long Beach's PsyD uniquely expands the pipeline of licensed clinical practitioners prepared to deliver direct mental health services, which is an area not covered by UC doctoral programs.

Deadline to submit to the CSU Chancellor's Office: **August 1**Deadline to submit to the UC Office of President: **September 15 (submitted by CSUCO)**



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Submit completed proposal package using the Smartsheet submission form:

https://app.smartsheet.com/b/form/f44c90ae00524cf6848fbf15a105b9b9

Academic Programs, Innovation and Faculty Development

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UNIVERSITY OF CALIFORNIA

Date: October 24, 2025

To: Coordinating Committee on Graduate Affairs

From: Council of Graduate Deans

Subject: Review of California State University Doctoral Degree Program Proposals

Thank you for inviting our feedback. We have evaluated the materials and considered the following three questions:

- 1. Does each CSU proposal fully address the elements in the conceptual proposal?
- 2. Are there any responses to the elements that raised problematic questions and if so, why?
- 3. Which responses to the elements, if any, make the case for duplication/rejection?

Overall, we are receptive to the possibility of professional doctoral degrees offered by Cal State campuses. Such degrees may meet demands within and outside of California in areas separate from those covered by the UC campuses. In some cases, the link between applied practice and scholarly grounding could be made more explicit and overlaps with existing UC programs are not fully addressed. Nonetheless, the submissions are generally coherent, and we offer the following feedback on each proposal.

Doctor of Education (EdD) in Educational Technology at Fullerton

No concerns. We recommend that this proposal move forward to the next step.

Doctor in Translation and Interpreting (DTI) at Long Beach

No concerns. We recommend that this proposal move forward to the next step.

Doctor of Psychology (PsyD) in Counseling Psychology at Long Beach

This proposed degree as well as the PsyD in Counseling Psychology and School Psychology at San Diego (below) potentially duplicate some of the training for the UC San Diego-SDSU PhD in Clinical Psychology Joint Doctoral Program (JDP). In particular, both programs (PsyD and existing JDP PhD) emphasize the combination of research + clinical work. This overlap between the PsyD at Long Beach and the JDP is not addressed. **We do not recommend moving this proposal to the next step because more analysis and comparisons should be presented.**

Doctor of Engineering (DEng) in Human Factors at San Jose

No concerns. We recommend that this proposal move forward to the next step.

Doctor of Science (DSc) in Applied Science of Human Experience at San Diego

This proposal emphasizes how it differs from, say, UC Anthropology, but does not adequately describe what it actually is. It does not satisfactorily outline learning outcomes or placement opportunities that would differentiate it from existing Anthropology programs across the country and in the UC system. A goal of this proposal seems to be to develop advocates who, based on

research, guide and lead change in the emerging workforce. While admirable, this type of goal is not typically an explicit learning objective or outcome expected from UC Anthropology. Additionally, this proposal does much more to distinguish itself from a master's program (Section 2, p 2-3) than it does to distinguish itself from a PhD program. Yet even at the master's level, it lacks identifiable distinctions from Anthropology programs already in existence. The analysis of potential duplication of UC doctoral programs (p 16-17) is not very compelling. It seems that UC programs have theory, empirical approaches, field training, and other elements that would be very useful in an applied setting. While the UC programs are not exclusively industry-focused, it is arguable that all of them could find application in an industry context. We do not recommend moving this proposal to the next step because more analysis and comparisons should be presented.

<u>Doctor of Science (DSc) in Chemical Biotechnology and Biopharmaceutical Sciences at San</u> Diego

This proposal discusses "research" and not "applied research". However, it also emphasizes entrepreneurial and business aspects. This combination likely reflects the targeted compromise between research and application. However, this balance opens the door for overlaps with a UC PhD in chemistry and other fields, such as biochemistry, biology, bioengineering, and biomedical sciences. Additionally, there are already JDPs between UC San Diego and San Diego State University (SDSU) for Chemistry, Biology, and Engineering Sciences (Bioengineering). The current proposal does not adequately distinguish itself from these potentially overlapping programs (the table in Section 3 "Analysis of potential UC duplicate doctoral degree programs" seems incomplete, i.e., it is not clear if there is degree duplication with some campuses/programs). We note that numerous required and elective courses are primarily offered through CHEM and there appears to be a strong emphasis on research. We do not recommend moving this proposal to the next step because more analysis and comparisons should be presented.

Doctor of Psychology (PsyD) in Counseling Psychology and School Psychology at San Diego. This proposed degree as well as the PsyD in Counseling Psychology at Long Beach (above) potentially duplicate some of the training for the UC San Diego-SDSU PhD in Clinical Psychology JDP. Both programs (PsyD and JDP PhD) emphasize the combination of research + clinical work. This proposed PsyD at SDSU has an emphasis on School Psychology, which does distinguish itself and will likely target a separate population of prospective students compared to the existing Clinical Psychology JDP PhD. Nonetheless, given the potential overlaps, we do not recommend moving this proposal to the next step because more analysis and comparisons should be presented.

Please let us know if you have any questions.