

Action Item

California Postsecondary Education Commission

Commission Review of New Academic Programs Proposed
by the California Community Colleges, the California State University,
and the University of California, Academic Year 2002 to May 2004

California Postsecondary Education Commission is statutorily responsible for reviewing and commenting on the need for new degree and certificate programs proposed by the public higher education systems. Among other important considerations, the review process is intended to safeguard the state against inefficiencies in the allocation of program resources. This report summarizes the results of reviews conducted during the period 2002 to May 2004. The long-range academic plans of the systems are also discussed.

Recommended Action: Commission approval and adoption of the report for appropriate action.

Presenter: Stacy Wilson.

Commission Review of New Academic Programs Proposed by the California Community Colleges, the California State University and the University of California

Academic Year 2002 to May 2004

*A Report of the California
Postsecondary Education Commission*



CALIFORNIA POSTSECONDARY EDUCATION COMMISSION
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Commission Review of New Academic Programs Proposed by the California Community Colleges, the California State University and the University of California, Academic Year 2002 to May 2004

Background

Although each public higher education system in California has a unique mission and social purpose, the systems are united in a most common and fundamental way: each aims to enhance the intellectual, technical, and creative capacity of its student learners. Because advanced knowledge--*Scientific, technical, and procedural*—tends to be organized by fields of study, and delivered to students through specific programs, the ultimate success and benefit of the state's higher education enterprise rest with the quality and breadth of institutional degree and certificate programs.

The California Postsecondary Education Commission is responsible statutorily for reviewing and commenting on the need for new degree and certificate programs proposed by the public higher education systems. The review process is intended to (1) safeguard the state against inefficiencies in the allocation of program resources, (2) help ensure that new programs will meet student and societal needs, and (3) ensure that programs are well conceived and that they will have desired educational and social consequences. Recent enhancements to the Commission's review process include greater emphasis placed on the long-range plans of the systems so that staff can consider prospective programs five years in advance of implementation. This has enabled the Commission to alert the systems of potential planning concerns early in the review process before formal proposals are submitted.

The guidelines used by Commission staff in reviewing new undergraduate and graduate programs are presented in Appendix A. They include the following seven criteria:

- ◆ Student Demand
- ◆ Societal Needs
- ◆ Appropriateness to the Institutional and System Mission
- ◆ Number of Existing and Proposed Programs in the Field
- ◆ Total Costs of the Program
- ◆ Maintenance and Improvement of Quality
- ◆ Advancement of Knowledge

This report summarizes the results of reviews conducted during the academic year 2002-03 to May 2004. During this period, the Commission reviewed and commented on over 100 program proposals, the majority of which were submitted by the California community colleges. The University of California submits fewer proposals because, by agreement, the Commission reviews plans for new UC graduate programs only, many of which are potentially costly. Such reviews might include, for example, the need for a new costly medical school or law program. The higher education systems acknowledge that the concerns and issues raised by Commission staff have continued to enhance their program planning process.

To maintain maximum efficiency in the Commission's review process, the California State University is not required to submit proposals for new academic programs if five criteria are met, including the following three important considerations:

- ◆ Either the campus will not have to acquire significant resources for the program to reach a cost-effective level of operation, or there is demonstrated capacity to fund the program on a self- support basis.
- ◆ The program has been subject to a thorough campus and system review and approval process.
- ◆ The program can be housed adequately without a major capital outlay project.

**The California
Community
Colleges**

The California Community College System is the largest postsecondary system in the world that serves approximately 1.7 million students. Students enroll in a community college to fulfill various educational goals, such as degree/certificate attainment, job training, skill development, life-long learning, or completion of lower division coursework to transfer to a four-year university. As the economic conditions of the state improve, the Commission forecasts that enrollment demand for this system will gradually climb to 2.18 million students by year 2013. The system currently offers 321 academic and vocational programs, and it awards about 90,000 degrees and certificates annually. A complete listing of approved programs is shown in Appendix B. Between 2002 and May 2004, Commission staff reviewed over 80 proposals for new community college academic and occupational programs.

Display 1 shows that the first three instructional areas accounted for slightly over half (52%) of the community college programs reviewed by Commission staff. The high volume was in response to growing occupational and industry training needs in *computer information systems*, *engineering*, and *health sciences*. A number of the proposals reflected novel and innovative approaches to instructional planning in anticipation of prolonged labor shortages in some geographical areas. For example, one community college proposed to offer a certificate program in *school health clerking* that would qualify graduates of the program to perform

and deliver many of the health services currently provided by school nurses.

Approximately 14 percent of the proposals were submitted by community colleges that sought to offer an Associate of Art's Degree (AA) in traditional academic fields, such as psychology, geology, philosophy, English, and physics. Students who complete those programs would be qualified to transfer to a four-year institution to further their studies.

New programs in the instructional areas of communications, physical education, and nutrition accounted collectively for about a quarter of the proposals received. They covered a wide range of program offerings, from a Culinary Arts Management program at Mendocino College, to a Fitness Specialist program at Glendale Community College, to a Digital Post-Productions program at Saddleback Community College. The remaining proposals were in the instructional areas of Agriculture, Creative Arts, Education, Social Welfare, and Child Development.

<i>DISPLAY 1 New Instructional Programs of the California Community Colleges Reviewed by the Commission between Academic Year 2002 and May 2004</i>			
Instructional Area	Sample of Specific Programs within Instructional Area	Percent of Total	Number
Computer Information Systems	WEB Programming Graphic Information System (GIS) Computer Networks	17.9	15
Engineering/Drafting/Automotive	Electrical Technology Advanced Transportation Tech. Water Technology Heavy Equipment Automotive Tech	17.9	15
Health Professions	School Health Clerks Nursing Surgical Technology	16.7	14
Traditional Academic Programs Transferable to UC/CSU	Psychology, Chemistry, Physics, Geology, English, Philosophy	14.3	12
Journalism/Communications/Cinema	Photo-Journalism, Media Studies, Digital Cinema Productions	10.7	9
Physical Education	Fitness Instructor, Sports Injury Care, Coach	8.3	7
Nutrition/Food/Hospitality	Culinary Arts & Baking, Online Dietetic Tech	5.9	5
<u>Other</u> : Ag Tech, Arts, Education, Social Welfare, Child Development	Turf Management, Child Development, Musical Theatre	8.3	7

The California State University

With the exception of a proposal for a new Public Policy Program at CSU San Luis Obispo, with which the Commission concurred, none of the other master's and baccalaureate programs that the State University added over the reporting period required Commission review. The proposals were submitted to the Commission solely for information purposes. Those programs were exempt from Commission review because they met each of five essential criteria shown below.

- ◆ The campus did not have to acquire significant resources for the program to reach a cost-effective level of operation, or there was demonstrated capacity to fund the program on a self-support basis.
- ◆ The program could be housed adequately with a major capital outlay project.
- ◆ The program is consistent with all existing state and federal laws and trustee policy
- ◆ The program is a bachelor's or master's degree program
- ◆ The program was reviewed thoroughly by the campus and CSU Chancellor's office

<i>DISPLAY 2 California State University Programs Planned through 2009, by Discipline Area and Degree Level</i>			
Discipline Area	Degree Level		
	B.A/B.S	Master's	Joint Doctorate
Professional	2	21	14
Engineering and Computer Sciences	13	13	0
Mathematics and Sciences	6	7	1
Social Sciences	7	3	0
Arts & Humanities	3	4	1
Totals	31	48	16

In March 2004, the CSU Board of Trustees granted *planning authorization* for nearly 100 academic programs that its campuses seek to add between 2004 and 2009. Display 2 provides an overview of discipline areas in which new programs are being proposed. Many will require Commission review.

One striking observation within the professional area is that the State University is proposing to greatly increase the number of doctoral programs with various partnering institutions. Those programs include several Ph.D. programs that are in addition to joint education doctoral proposals. The remainder of the professional area calls for additional programs in business administration, public administration, public health, and social work.

Proposed programs in engineering and computer science include manufacturing systems and engineering, software engineering, civil engineering, electrical engineering, and computer engineering. Appendix C presents a complete list of CSU graduate programs proposed between 2004 and 2009. The specific titles for the proposed doctoral programs are shown in Display 3.

Program Title	Partnering Institutions	Degree Level		
		Ed.D	Ph.D.	Other Doctorate
Educational Leadership	CSU Dominguez Hills, CSU Long Beach, CSU Los Angeles, UC Riverside, CSU San Bernardino	X		
Collaborative Leadership and Learning	CSU Monterey Bay, CSU San Jose, UC Santa Cruz	X		
Educational Leadership	CSU Sacramento, CSU Sonoma, UC Davis	X		
Educational Leadership	CSU San Diego, CSU San Marco, UC San Diego	X		
Education Leadership	CSU Bakersfield, UC	X		
Criminal Justice Science	CSU Fresno, UC Davis		X	
Public Policy/Higher Education	CSU Sacramento, USC		X	
Psychology	CSU San Bernardino, Loma Linda University		X	
Evolutionary Biology	CSU San Diego, UC Berkeley		X	
Communication	CSU San Diego, Fielding Grad. Institute		X	
Hearing Science	CSU San Diego, UC San Diego		X	
Social Work	CSU San Diego, USC		X	
Earth Science/Geophysics	CSU San Diego, UC San Diego		X	
Special Education	CSU San Diego, UC San Diego	X		
Physical Therapy	CSU San Francisco, UC			X

University of California

California, like most high-technology states, relies to a great extent on *research* and *innovation* to drive economic success, prosperity, and global competitiveness. Research and innovation are also the hallmark of graduate-level training. In that regard, University long-range plans anticipate new graduate programs in engineering and computer science and, to a lesser extent, the life sciences, to meet growing needs in the pharmaceutical and biotechnology industries. Given that California's high-tech economy also spurs workforce demand in non-science areas, the University anticipates some program expansion in the social sciences, humanities, and selected professional areas to meet emerging social and business needs of California and the nation.

DISPLAY 4 New Graduate Programs of the University of California Reviewed by the Commission between Academic Year 2002 and May 2004			
Program Area	Program Title	Degree Level	PCT
Humanities	Religious Studies	M.A./Ph.D.	33.3
	Film Studies	M.A./ Ph.D.	
	Musical Arts	Doctorate	
	Visual Arts	Masters	
	Digital Arts/New Media	Masters	
Social Science	Social Documentation	Masters	20.0
	Archaeological/ Ethnographic Materials	Masters	
	Linguistics	Ph.D.	
Education	Teaching and Learning	Doctorate	20.0
	Administration and Leadership	Doctorate	
	Change from <i>Ed Division</i> to <i>School of Education</i>	Ed.D./ Ph.D.	
Professional	Maternal and Child Nutrition	Masters	13.3
	Management	Masters	
Science	Marine Biodiversity and Conservation	Masters	13.3
	Joint Doctorate, Audiology	Doctorate	

During the reporting period, Commission staff reviewed proposals for 15 new UC graduate programs. The total excludes Joint Education Doctoral programs with the California State University discussed later. Display 4 shows that the humanities and the social sciences accounted for about half of the proposals, many of which are unique. For example, a UC Santa Cruz program in *Social Documentation* is the first of its kind in the UC system. It will focus on new perspectives of contemporary issues that are not likely to be covered by the mainstream media. The Santa Cruz program also is unique in that its emphasis will be placed on social scientific analysis and methodology.

The education field (excluding Joint Education Doctorates) accounted for three new programs, while the professional programs and the sciences each accounted for two new UC programs. Display 5 reveals that 172 UC graduate programs are being proposed through year 2009. The majority of those programs are in the early planning stage, which will allow Commission staff sufficient time to provide preliminary comments and suggestions.

DISPLAY 5 University of California Graduate Programs Planned through 2009 by Discipline Area and Degree Level			
Discipline Area	Degree Level		
	Masters	Doctorate	Masters/ Doctorate
Engineering and Computer Sciences	14	2	18
Professional Programs	22	10	4
Arts and Humanities	13	16	3
Medical and Health Sciences	4	12	2
Physical Sciences and Mathematics*	4	3	9
Social Sciences	7	8	4
Interdisciplinary Studies	4	7	6
Totals	68	58	46
* This area also includes a credential program in Mathematics.			

Of the total programs planned (Display 5 above), 40 are in the engineering and computer science fields. The Berkeley, Irvine, and San Diego campuses are anticipated to account for the greatest number of new programs in those fields. Proposed new programs at UC Berkeley include:

- ◆ Bioengineering
- ◆ Communications and Networking
- ◆ Internet-based Design/Manufacturing & Commerce
- ◆ Management of Technology & Entrepreneurship
- ◆ Microelectromechanical Systems

At the Irvine campus, proposed new graduate programs in engineering and computer science include:

- ◆ Computer Science & Engineering
- ◆ Computer Science
- ◆ Engineering Design Software
- ◆ Informatics

The San Francisco and San Diego campuses are expected to add the greatest number of graduate programs in the Medical and Health Sciences. The UC San Francisco proposed programs include:

- ♦ Developmental Biology
- ♦ Global Health Sciences
- ♦ Health Psychology and Behavior Neurosciences
- ♦ Doctor of Pharmacy

The Riverside campus is proposing medical and health programs in:

- ♦ Clinical Psychology
- ♦ Health Law
- ♦ Pharmacy
- ♦ Public Health

The majority of the programs in the professional program area are being planned at the master’s level. Generally, the State receives more immediate benefit from master-level programs because its graduates enter the workforce sooner than students pursuing doctoral studies. Nine proposed programs are in education, several of which will be administered jointly with the State University, and five new programs are in business. Several campuses also are considering programs in environmental planning. Appendix D contains a complete list of UC graduate programs proposed between 2004 and 2009. Display 6 shows several of the math-and-science-based programs UC Merced is proposing to offer within its first two years of operation.

<i>DISPLAY 6 Selected Math and Science Programs Proposed for UC Merced by Discipline Area and Degree Level, 2005 to 2006</i>		
Program Area	Program Title	Degree Level
Biological Sciences	Quantitative Systems Biology	M.S./ Ph.D.
Engineering & Computer Sciences	Bioengineering	M.S./ Ph.D.
	Chemical Engineering	M.S./ Ph.D.
	Civil Engineering	M.S./ Ph.D.
	Computer & Information Systems	M.S./ Ph.D.
	Molecular Science & Engineering	M.S./ Ph.D.
Medical & Health Sciences	Cognitive Science	M.S./ Ph.D.
	Human Biology	M.A./ Ph.D.
Physical Sciences	Applied Math & Physics	M.S./ Ph.D.
	Environmental Systems	M.S./ Ph.D.
	Molecular Science & Engineering	M.S./ Ph.D.

**The Special Case
of Joint Education
Doctorates**

Unlike most UC graduate programs, which have a statewide and national focus, joint educational doctoral programs are developed to address specific regional needs. In considering *regional need*, the Commission has sought to relate the myriad challenges facing public schools in a geographic region to the particular aims and purposes of a proposed regional doctoral program. During the reporting period, two joint doctoral proposals were reviewed: one proposed to address the educational leadership needs of the San Francisco Bay Area and another was intended to enhance administrative leadership skills of public school officials of the greater San Diego/Imperial Valley region.

Although the Commission is aware of an agreement between the University of California and the California State University to increase the number of Joint Ed.D. Programs in the state, the proposals received by the Commission generally have not demonstrated nor established a compelling regional need for a particular joint program. More specifically, the proposals have provided little empirical information describing the quality of K-12 student learning outcomes and the challenges facing local school districts that require administrators with a terminal degree. This has made it difficult for staff to consider how a proposed doctoral program might support other reform efforts in enhancing school performance in a given region. Performance data are readily available electronically on a county and individual school basis

Over the next five years, the University of California and the State University are proposing five additional Joint Ed.D. programs. The Commission, in collaboration with the systems, intends to develop a set of program review guidelines that are specific to Joint Education Doctoral programs to clarify better the type of data and information that would be most helpful in considering the merit of regional joint doctoral programs.

Appendix A Commission's Program Review Guidelines

The California Postsecondary Education Commission is responsible statutorily for reviewing and commenting on the need for new degree and certificate programs proposed by the public higher education systems. The review process is intended to:

- (1) Safeguard the state against inefficiencies in the allocation of program resources
- (2) Help ensure that new programs will meet student and societal needs
- (3) Ensure that programs are well conceived and that they will have desired educational and social consequences

Recent enhancements to the Commission's review process include greater emphasis placed on the long-range plans of the systems so that staff can consider prospective programs five years in advance of implementation. This has enabled the Commission to alert the systems of potential planning concerns early in the review process before formal proposals are submitted.

As defined in statute, the Commission's role in the review process is mostly advisory. However, in the case of Joint Doctoral Programs involving public and private institutions, the Commission has approval authority. The Commission's review process is guided by the following seven criteria.

1. Student Demand

Within reasonable limits, students should have the opportunity to enroll in programs of study in which they are interested and for which they are qualified. Therefore, student demand for programs, indicated primarily by current and projected enrollments, is an important consideration in determining the need for a program.

2. Societal Needs

Postsecondary education institutions bear a responsibility to fulfill societal needs for trained manpower and for an informed citizenry. Even though projecting manpower needs is far from an exact science, such projections are necessary because they serve as one indication of the need for an existing or proposed program. As a general rule, employment prospects constitute a more important consideration for programs oriented toward specialized occupational fields. Further, the local employment market tends to dictate more the need for specific certificate and associate degree programs. Although achieving and maintaining a perfect balance between manpower supply and demand in any given career field is nearly impossible, it is important nevertheless that the number of persons trained in a field and the number of job openings remain in reasonable balance.

3. Appropriateness to Institutional and Segmental Mission

Programs offered by public institution within a given system must comply with the delineation of function for that system, as set forth in the California Master Plan. Proposed new programs must also be consistent with the institution's own statement of mission and must be approved by the system's statewide governing body.

4. The Number of Existing and Proposed Programs in the Field

An inventory of existing and proposed programs, compiled by the Commission staff from the plans of all systems of postsecondary education, provides the initial indication of apparent duplication or undue proliferation of programs, both within and among the systems. However, the number of programs alone cannot be regarded as an indication of unnecessary duplication. This is because (a) programs with similar titles may have varying course objectives or content, (b) there may be a demonstrated need for the program in a particular region of the state, or (c) the program may be needed for an institution to achieve academic comparability within a given system.

5. Total Costs of the Program

The relative costs of a program, when compared with other programs in the same or different program areas, constitute another criterion in the program review process. Included in the consideration of costs are the number of new faculty required and the student/faculty ratios, as well as costs associated with equipment, library resources, and facilities necessary to deliver the program. For a new program, it is necessary to know the source of the funds required for its support, both initially and in the long run.

6. The Maintenance and Improvement of Quality

Protecting the public interest and trust requires that educational programs at all levels be high quality. Although the primary responsibility for the quality of programs rests with the institution and its system, the Commission, for its part, considers pertinent information to verify that high standards have been established for the operation and evaluation of the program. In the process, it is necessary to recognize that a proper emphasis on quality may require more than a minimal expenditure of resources.

7. The Advancement of Knowledge

The program review process encourages the growth and development of intellectual and creative scholarship. When the advancement of knowledge seems to require the continuation of existing programs or the establishment of programs in new disciplines or in new combinations of existing disciplines, such considerations as costs, student demand, or employment opportunities may become secondary.



Appendix B California Community College Approved Degree and Certificate Programs

Accounting	Business Management
Administration of Justice	Cardiovascular Technician
Adult Basic Ed (Grades 1-8)	Carpentry
Advanced Transportation Technology	Ceramics
Advertising	Certified Nurse Assistant
Aeronautical & Aviation Technology	Chemical Technology
African (Nonsemitic)	Chemistry Gen
Ag Pest Control Adviser/Operator	Child Development
Agricultural Power Equipment Te	Chinese
Agriculture Business, Sales & S	Citizenship
Agriculture Technology & Science	Civil & Construction Mgmt Technology
Aircraft Electronics	Classics
Alcohol & Controlled Substances	College Level ESL
Algebra Geometry & Trigonometry	Commercial Art
Animal Health Technician (License)	Commercial Music
Animal Science	Commercial Photography
Anthropology	Commercial Pilot
Appliance Repair	Communication Skills
Applied Design	"Communications, General"
Applied Photography	"Community Services, General"
Arabic	Comparative Literature
Archaeology	Composition & Theory
Architectural Model Building	Computational Skills
Architectural Technology	Computer & Information Science
Art	Computer Graphics
Artificial Inseminator (License)	Computer Programming
Asian Languages	Computer Systems Analysis
Astronomy	Construction Crafts Technology
Athletic Trainer	Construction Inspection
Atmospheric Sciences	Consumer Education and Home Economics
Audio/Visual Technician	Corrections
Automotive Collision Repair	Cosmetology
Automotive Technology	Court Reporting
Aviation Airframe Mechanics	Creative Writing
Aviation Power plant Mechanics	"Culinary Arts (Chef, Catering, Food Server)"
Bacteriology	Custodial Services
Banking and Finance	Dance
Barbering	Data Processing - Operations
Biological & Physical Science	Dental Assistant
Biology	Dental Hygienist
Biotechnology & Biomedical Tech	Dental Technician
Biotechnology Instrumentation	Diagnostic Medical Sonography
Botany Gen	Diesel Technology
"Business and Commerce, General"	Dietetics
Business Machine Maintenance	Display

Appendix B (Continued)

Diving and Underwater Safety
Drafting & Design Technology
Drafting Technology
Dramatic Arts
Drycleaning
Drywall and Insulation
Ecology
Economics
Education Aide (Classroom Asst)
"Education, General"
Electrical
Electrical Maintenance
Electrical/Power Distribution
Electrical/Power Transmission
Electro-Diagnostic Technology
Electro-Mechanical/Robotics Tec
Electron Microscopy
Electronics & Electric Technology
Emergency Medical Technology
Energy Conversion Systems Technology
Engineering Technology and Libe
"Engineering Technology, General"
"Engineering, General"
English
English As A Second Language
Environ Hazardous Material Cont
Environmental Control Technology
Environmental Studies
Ethnic Studies
Exceptional Child
Fashion
Fashion Design
Fashion Merchandising
Fashion Production
Filipino
"Fine Arts, General"
Fire Academy
Fire Control Technology
Flight Attendant
Floriculture /Floristry
Food & Equipment Demonstration
"Foreign Languages, General"
Forestry
French
General Studies
Geography
Geology
German
Gerontology
Glazing
Graphic Arts
Greek (Classical)
Guidance
Health Education
Health Information Technology
"Health Professions, Core Curric"
"Health Professions, General"
Heavy Equipment Maintenance
Heavy Equipment Operation
Hebrew & Semitic
High School Diploma Prog./Ged
History
Home Health Aide
Hospital & Health Care Administ
Hospital Central Service Techn
Hospital Staff Development
Hospital Ward Clerk
Hospitality
Human Services
Humanities
Humanities & Fine Arts
Humanities & Social Sciences
Industrial Arts
Industrial Electronics
Industrial Quality Control
Industrial Safety Technology
Industrial Security
Industrial/Manufacturing Techno
Instrumentation Technology
Insurance
Intercollegiate Athletics
"Interiors Environ, Design & Mer"
International Trade
Interpersonal Skills
Italian
Japanese
Jewelry
Job Seeking/Changing Skills
Journalism
Labor and Industrial Relations
Laboratory Science Technology
Landscape Design & Maintenance
Laser Techy
Latin
"Law, General"
Learning Skills-Handicapped
Legal Secretary/Administrative
"Liberal Arts and Science, Gener"
"Library Science, General"
Library Technician (Aide)
Life Management
"Lifespan (Child Dev, Family St,"
Living Skills-Handicapped
Logistics
Lrng. Skills-Lrng. Disabled
Lrng. Skills-Speech-Impaired

Appendix B (Continued)

Machine Tool/Machine Shop
Management Development & Superv
Marine Techy
Marketing & Distribution
Marketing including Sales & Sal
"Masonry, Tile, Cement, Lath and"
Mathematics Gen For Nonmajors
"Mathematics, General"
"Mechanical Technology, General"
Medical Assistant/Office Techni
Medical Laboratory Technology
Medical Secretary/Admin Assista
"Medicine, General"
Military Science
Mill & Cabinet Work
Mortuary Science
"Motorcycle, Outboard & Small En"
Music
Musical Instrument Repair
Nanny Training
"Natural (Life) Science, General"
Natural Resources
Nuclear Therapy Techn
Nursing L.V.N.
"Nursing, R.N."
Nutrition and Food
"Nutrition, Health & Fitness"
Occupational Therapy Technology
Ocean Technology
Oceanography
Optical Technology
Optics
Ornamental Horticulture
Orthopedic Assistant
Other Agriculture & Natural Resources
Other Architecture & Environ Design
Other Biological Science
Other Business
Other Commercial Services
Other Communications
Other Computer & Information Science
Other Consumer Education & Home
Economics
Other Education
Other Engineering & Related Industrial Techy
Other Fine & Applied Arts
Other Foreign Language
Other Health Occupations
Other Humanities
Other Interdisciplinary Studies
Other Law
Other Library Science
Other Mathematics
Other Military Studies
Other Physical Sciences
Other Psychology
Other Public Affairs & Services
Other Social Sciences
Painting & Decorating
Painting & Drawing
Paralegal
Parks and Recreation
Physical Education
Performance (Choral Band Etc)
Petroleum Technology
Pharmacy Technician
Philosophy
Photography
Photography Laboratory Technici
Physical Education
Physical Fitness & Body Moveme
"Physical Sciences, General"
Physical Therapy
Physical Therapy Assistant
Physicians Assistant
Physics Gen
Physiology (Incl. Anatomy)
Plant Science
Plastics
"Plumbing, Pipefitting and Stream"
Police Academy
Political Science
Portuguese (Classical)
Pre-Algebra (Basic Math/Arith)
Printing and Lithography
Probation & Parole
Psychiatric Technician
"Psychology, General"
Public Administration
Public Relations
Purchasing
Radiation Techy (Non-Medical)
"Radio, Motion Picture and Telev"
Radiological Technology
Reading Skills
Real Estate
Recreation Assistant
Recreation Therapy
Religious Studies
Respiratory Care/Therapy
Restaurant & Food Service Manag
Roofing
Russian
Sanitation & Public Health Tech
School Health Aide
Sculpture

Appendix B (Continued)

Secretary/Administrative Assist
Sheet Metal
Ski Patrol Techn
Skill Development
"Social Sciences, General"
Social Work & Helping Services
Sociology
Spanish
Special Education Gen
Special Education Service/Aide
Speech Debate & Foren Sci
Speech (Oral)
Speech Pathology And Audiology
Speed Reading
Student Government
Supervised Tutoring
Surgical Technician/O.R. Nursing
Surveying
Survival Esl
Swimming & Life Saving
Technical Illustration
Technical Math
Technical Theater
Technical Writing
Tool and Machine Design Technol
Transportation & Materials Movi
Travel Services & Tourism
Upholstery Repair - Automotive
Vacuum Techy
Vocational ESL
Volunteer Prog Mgmt
Welding & Cutting
Women's Studies
Writing
Zoology Gen

Appendix C Proposed Academic Programs of the
California State University, 2004 to 2009

**THE ACADEMIC PLANS:
Summary of Projected Programs and Requests
2003-2004 through 2012-2013**

BAKERSFIELD

2005	MA	Economics
	MS	Biology
	MS	Computer Science
	EdD	Educational Leadership (with UC)
2007	BS	Computer Engineering
	BS	Electrical Engineering
	BS	Engineering

CHANNEL ISLANDS

2004	BA	History
	MA	Education
	MBA	Business Administration
	MS	Bioinformatics
2005	BA	Anthropology
	BA	Chemistry
	BA	Economics
	BS	Chemistry
	MPA	Public Administration

CHICO

2004	MS	Mathematics Education
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DOMINGUEZ HILLS

2004	MS	Computer Science
	EdD	Leadership for Education (with UC Riverside and other CSU campuses)
2005	BS	Criminal Justice*
	MOT	Occupational Therapy
2006	MPH	Public Health*
	MSW	Social Work*

FRESNO

2004	PhD	Criminal Justice Sciences (with UC Davis)
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FULLERTON

None

HAYWARD

None

HUMBOLDT

2004	MSW	Social Work
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LONG BEACH

2004	EdD	Leadership for Education (with UC Riverside and other CSU campuses)
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LOS ANGELES

2004	BS	Aviation Administration
	EdD	Leadership for Education (with UC Riverside and other CSU campuses)
2005	MFA	Film, Television, and Theatre
	MS	Technology
2006	BS	Exercise Science*
	BS	Food Science and Technology
	BS	Forensic Science
2008	MS	Environmental Science*

MARITIME ACADEMY

None

MONTEREY BAY

2004	BA	Music
	MS	Earth Systems Science and Policy
	EdD	Collaborative Leadership for Teaching and Learning (with UC Santa Cruz, San José State)
2005	MBA	Business Administration
2007	MS	Computer Science and Information Technology

NORTHRIDGE

2004	BA	Science
	BS	Construction Management Technology
	MS	Computer Engineering
	MS	Manufacturing Systems Engineering
	MS	Materials Engineering
	MS	Mechanical Engineering
	MSW	Social Work
2005	MS	Software Engineering
	MS	Structural Engineering

**Newly proposed for Trustees “planning authorization.” Implementation subject to approval
by the Chancellor.**

POMONA

2005 MA Psychology
 MS Accountancy
 MS Food Industry Management

SACRAMENTO

2004 MA Vocational Education
 MS Health Care Administration
 EdD Educational Leadership
 (with UC Davis and
 Sonoma State University)
 PhD Public Policy/Higher Education
 (with USC)

SAN BERNARDINO

2004 MA Spanish
 MA Theatre Arts
 MPH Public Health
 MS Accountancy
 EdD Leadership for Education
 (with UC Riverside and
 other CSU campuses)
 PhD Psychology (with
 Loma Linda University)
 2005 BS Computer Engineering
 BS Information Systems
 MA Child Development
 MA Music
 2006 BS Civil Engineering
 BS Electrical Engineering
 BS Mechanical Engineering
 MS Special Education
 2007 MS Kinesiology

SAN DIEGO

2004 BS Construction Engineering
 EdD Educational Leadership
 (with UC San Diego and
 CSU San Marcos)
 2005 MA **Chicana and Chicano
 Transborder Studies***
 PhD Evolutionary Biology
 (with UC Berkeley)
 2006 PhD Communication (with
 Fielding Graduate Institute)
 PhD Hearing Science
 (with UC San Diego)
 PhD Social Work (with USC)
 2007 EdD Special Education
 (with UC San Diego)
 PhD Earth Sciences (Geophysics)
 (with UC San Diego)

SAN FRANCISCO

2004 DPT Physical Therapy*

SAN JOSE

2004 BA Global Studies*
 BS Software Engineering*
 EdD Collaborative Leadership for
 Teaching and Learning
 (with UC Santa Cruz, CSU
 Monterey Bay)
 2005 BA Foreign Language and
 International Economics*
 BS Psychology*
 MA Applied Anthropology*
 MS Software Engineering*

SAN LUIS OBISPO

None

SAN MARCOS

2004 BA Kinesiology
 EdD Educational Leadership
 (with UC San Diego and
 San Diego State)
 2005 BA Mass Communication
 BS Biotechnology*
 2006 MS Chemistry
 2007 MPA Public Administration

SONOMA

2004 BS Engineering Science*
 EdD Educational Leadership
 (with UC Davis and
 CSU Sacramento)

STANISLAUS

None

Newly proposed for Trustees “planning authorization.” Implementation subject to approval by the Chancellor.

UNIVERSITY OF CALIFORNIA
Campus Five-Year Perspectives
Graduate Degrees
2004 - 2009
Arts and Humanities

Campus	Proposed Program	Degree	Status
Proposals added since March 2003 are shown in BOLD			
DAVIS	Applied Humanities	M.A.	1
	Liberal Arts	M.A.S	1
	Linguistics	Ph.D.	1
IRVINE	Arts and Digital Media	M.F.A.	2
	Latin or Greek or Classics	M.A.	1
	Linguistics	Ph.D.	2
	Comparative Literature (various emphases)	Ph.D.	1
	History & Historical Writing Beyond the Academy	Ph.D.	1
	Humanities & Information Technology	Ph.D.	1
	International Studies	M.A.	1
	Music	M.M.	1
	Music	M.F.A.	discontinuance planned
	Religious Studies	M.A./Ph.D.	1
LOS ANGELES	Design Media Studies	Ph.D.	1
MERCED	World Cultures	M.A./Ph.D.	2006-07
RIVERSIDE	Arts Management	M.A.	2
	Digital Arts	Ph.D.	2
	Linguistics	Ph.D.	1
	Media & Performance	M.A./Ph.D.	1
	Performance Studies	Ph.D.	1
SAN DIEGO	Theatre: specialization in Theatre Technology and Production	M.F.A.	1
	Visual Arts (specialization in Art Practice)	Ph.D.	1
	Visual Arts (specialization in Public Culture)	M.F.A., Ph.D.	1
	Writing	M.F.A.	3
SANTA BARBARA	Art	M.A.	1
	Dance	M.F.A.	2
	French	Ph.D.	1
	Media Arts & Technology	M.F.A./Ph.D.	1
	Medieval Studies	M.A.	1
	Writing for Performance	M.F.A.	1
	Writing Program	M.A.S.	1
SANTA CRUZ	Comparative U.S. Studies	Ph.D.	1
	Performance Practice	M.F.A.	2
	Public Humanities	M.A.	1
	Visual Art	M.F.A.	2
	Visual Culture	Ph.D.	1

Status of proposal: 1 suggested for 5-year list; 2 undergoing department review; 3 undergoing campus review; 4 undergoing CCGA/CPEC review

UNIVERSITY OF CALIFORNIA
Campus Five-Year Perspectives
Graduate Degrees
2004 - 2009
Biological Sciences

Campus	Proposed Program	Degree	Status
Proposals added since March 2003 are shown in BOLD			
BERKELEY	Evolutionary Biology (w/ San Diego State)	Ph.D.	2
	Microbial Biology	M.S./Ph.D.	2
DAVIS	Animal Science and Biology	Ph.D.	1
	Plant Ecology (joint graduate group w/ CSU Chico)	Ph.D.	1
MERCED	Quantitative Systems Biology	M.S./Ph.D.	2005-06
SAN DIEGO	Biostatistics Interdisciplinary Program	Ph.D.	1
	Biotechnology	M.S.	1
SAN FRANCISCO	Biological and Medical Informatics (see Medical & Health Sciences)	M.S./PharmD	on hold
SANTA BARBARA	Biotechnology and Pharmacology (see Medical & Health Sciences)	M.S. (integrated w/BS)	1
	Evolution & Paleobiology	M.S./Ph.D.	2
	Microbiology	M.S.	1
SANTA CRUZ	Biomolecular Engineering (see Engineering)	M.S./Ph.D.	1

Status of proposal: 1 suggested for 5-year list; 2 undergoing department review; 3 undergoing campus review; 4 undergoing CCGA/CPEC review

UNIVERSITY OF CALIFORNIA
Campus Five-Year Perspectives
Graduate Degrees
2004 - 2009

Engineering and Computer Sciences

Campus	Proposed Program	Degree	Status
Proposals added since March 2003 are shown in BOLD			
BERKELEY	Bioengineering	M.Bioenr. D.Bioenr.	1
	Bioengineering (w/ UCSF)	M.Bioenr. D.Bioenr.	1
	Communications & Networking	M.Engr.	1
	Internet Based Design, Manufacturing & Commerce	M.Engr.	1
	Management of Technology & Entrepreneurship	M.Engr.	1
	Microelectromechanical Systems.	M.Engr.	1
	Ocean Engineering	M.Engr.	discontinuance planned
IRVINE	Computer Science & Engineering	M.S./Ph.D.	1
	Computer Science	M.S./Ph.D.	1
	Engineering Design Software	M.S./Ph.D.	1
	Environmental Engineering	M.S./Ph.D.	1
	Informatics	M.S./Ph.D.	1
	Software Engineering	M.S./Ph.D.	1
LOS ANGELES	Technology Management	M.Engr.	withdrawn
MERCED	Bioengineering	M.S./Ph.D.	2005-06
	Chemical Engineering	M.S./Ph.D.	2008-09
	Civil Engineering	M.S./Ph.D.	2009-10
	Computer & Information Systems	M.S./Ph.D.	2005-06
	Electrical Engineering	M.S./Ph.D.	2007-08
	Industrial & Systems Engineering	M.S./Ph.D.	2009-10
	Materials Engineering	M.S./Ph.D.	2008-09
	Mechanical Engineering	M.S./Ph.D.	2007-08
	Molecular Science & Engineering	M.S./Ph.D.	2005-06
RIVERSIDE	Bioengineering	M.S./Ph.D.	1
	Engineering Management	M.A.S.	1
	Engineering Management	M.S.	1
	Materials Science & Engineering	M.S./Ph.D.	2
SAN DIEGO	Biostatistics Interdisciplinary Program	Ph.D.	1
	Computational Sciences	M.S./Ph.D.	2
	Computer Science & Engineering	M.Eng.	1
	Engineering - additional specializations	M.Eng.	1
	Information Technology Innovation	M.Eng., Ph.D.	1
	Mechanical & Aerospace Engineering	M.Eng.	2
SAN FRANCISCO	Bioengineering (w/ UCB)	M.S./D. of Bioenr	1
SANTA BARBARA	Bioengineering & Biomaterials	M.S./Ph.D.	1
	Biomolecular Science and Engineering (see Biological Sciences)	M.S./Ph.D.	2
	Technology Management & Commercialization	M.S.	1
SANTA CRUZ	Biomolecular Engineering (see Biological Sciences)	M.S./Ph.D.	1
	Engineering Management	M.S./Ph.D.	1
	Information Systems & Technology Management	M.S./Ph.D.	1
	Software Engineering	M.S./Ph.D.	1
	Web & Internet Engineering	M.A.S	1

Status of proposal: 1 suggested for 5-year list; 2 undergoing department review; 3 undergoing campus review; 4 undergoing CCGA/CPEC review

UNIVERSITY OF CALIFORNIA
 Campus Five-Year Perspectives
 Graduate Degrees
 2004 - 2009
Interdisciplinary Studies

Campus	Proposed Program	Degree	Status
Proposals added since March 2003 are shown in BOLD			
BERKELEY	Comparative Metropolitan Studies	Designated Emphasis	1
	New Media	Designated Emphasis	1
	Women's Studies	Ph.D.	1
IRVINE	Arts, Computation & Engineering (joint program)	M.A./Ph.D.	1
	Asian American Studies	M.A.	1
	Environmental Health, Science and Policy	M.D./M.S.	1
	Theory & Culture (interdisciplinary school-wide program)	Ph.D.	1
LOS ANGELES	Chicana/Chicano Studies	M.A./Ph.D.	2
	Communication Studies	Ph.D.	2
MERCED	Cognitive Science	M.S./Ph.D.	2006-07
RIVERSIDE	Ethnic Studies	M.A.	2
	Native American Studies	M.A./Ph.D.	1
	Southeast Asian Studies	M.A.	2
	Women's Studies	M.A.	1
SAN DIEGO	Biostatistics Interdisciplinary Program	Ph.D.	1
	Latin American Studies (Gender Studies, History, International Migration & Sociology)	M.A.	3
SANTA BARBARA	Asian American Studies	M.A./Ph.D.	2
	Black Studies	M.A./Ph.D.	2
	East Asian Languages & Cultural Studies	Ph.D.	2
	Marine Science (Interdepartmental program)	M.A.	2
	Media Arts & Technology	M.F.A./Ph.D.	1
	Women's Studies	Ph.D.	2
SANTA CRUZ	Feminist Studies	Ph.D.	1
	Visual Culture	Ph.D.	1

Status of proposal: 1 suggested for 5-year list; 2 undergoing department review; 3 undergoing campus review; 4 undergoing CCGA/CPEC review

UNIVERSITY OF CALIFORNIA
Campus Five-Year Perspectives
Graduate Degrees
2004 - 2009
Medical and Health Sciences

Campus	Proposed Program	Degree	Status
Proposals added since March 2003 are shown in BOLD			
BERKELEY	Health Psychology and Behavior Neurosciences (w/ UCB)	Ph.D.	1
DAVIS	Infant Development	M.A.S	1
	Nursing (non-Clinical) w/ UCSF	Ph.D.	1
	Neuroscience	M.S.	1
IRVINE	Cognitive Neuroscience	Ph.D.	1
	Environmental Health, Science and Policy	M.D./M.S.	1
LOS ANGELES	Health Economics	Ph.D.	3
	Medical Informatics	M.S./Ph.D.	1
	Nursing (non-clinical)	M.S.	1
MERCED	Cognitive Science	M.S./Ph.D.	2006-07
	Human Biology	M.A./Ph.D.	2006-07
SAN DIEGO	Clinical Psychology (w/ San Diego State U)	MA.	2
	Health Law (w/ UC Extension & Case Western School of Law)	M.A.S.	2
	Human Development	Ph.D.	1
	Pharmacy	D. Pharm.	1
	Public Health concentration in Health Behavior (w/ San Diego State)	Ph.D.	3
SAN FRANCISCO	Biological and Medical Informatics	M.S./Pharm.D	on hold
	Cancer Pharmacogenomics	Pharm.D.	on hold
	Clinical Informatics & Modeling of Complex Systems	Pharm.D.	on hold
	Dental Hygiene	M.S.	1
	Developmental Biology	Ph.D.	2
	Global Health Sciences	M.S./Ph.D.	1
	Health Psychology and Behavior Neurosciences (w/ UCB)	Ph.D.	1
	Health Psychology and Behavior Neurosciences	Ph.D.	on hold
	Post Baccalaureate Doctor of Pharmacy	PharmD	on hold
	Nursing (non-Clinical) w/ UCD	Ph.D.	1
SANTA BARBARA	Biotechnology and Pharmacology	M.S. (integrated w/BS)	1
SANTA CRUZ	Biomolecular Engineering (see Engineering)	M.S./Ph.D.	1

Status of proposal: 1 suggested for 5-year list; 2 undergoing department review; 3 undergoing campus review; 4 undergoing CCGA/CPEC review

UNIVERSITY OF CALIFORNIA
 Campus Five-Year Perspectives
 Graduate Degrees
 2004 - 2009
**Physical Sciences and
 Mathematics**

Campus	Proposed Program	Degree	Status
Proposals added since March 2003 are shown in BOLD			
BERKELEY	Wood Science & Technology	discontinuance planned	3
DAVIS	Mathematics	Credential (Co-terminal B.S.)	1
IRVINE	Statistics	M.S./Ph.D.	1
LOS ANGELES	Geographical Information Systems	M.S.G.I.S.	2
MERCED	Applied Mathematics & Physics	M.S./Ph.D.	2006-07
	Environmental Systems	M.S./Ph.D.	2005-06
	Molecular Science & Engineering	M.S./Ph.D.	2005-06
SAN DIEGO	Earth Sciences:Geophysics (w/ San Diego State University)	Ph.D.	1
SANTA BARBARA	Earth Surface Sciences	M.S./Ph.D.	1
	Environmental Science & Management	M.E.S.M.	1
	Environmental Studies	M.A./Ph.D.	1
	Geophysics	M.S./Ph.D.	1
SANTA CRUZ	Applied Mathematics & Statistics	M.S./Ph.D.	1
	Coastal & Marine Policy	M.S./Ph.D.	1

Status of proposal: 1suggested for 5-year list; 2 undergoing department review; 3 undergoing campus review; 4 undergoing CCGA/CPEC review

UNIVERSITY OF CALIFORNIA
Campus Five-Year Perspectives
2004 - 2009
Professional Programs

Campus	Proposed Program	Degree	Status
Proposals added since March 2003 are shown in BOLD			
BERKELEY	Environmental Planning	M.S.	1
	Environmental Science & Management	M.E.S.M.	2
	Executive M.B.A.	M.B.A.	2
	Financial Engineering (w/UCLA)	M.F.E.	2
	Hi - Tech Production	M.S.	1
	M.B.A.& M.F.E. -- Concurrent	M.B.A./M.F.E	1
	M.B.A. & Dr. P.H. -- Concurrent	M.B.A./Dr. PH	1
	Product Development & Entrepreneurship	M.S.	1
DAVIS	Criminal Justice (w/ CSU campuses)	Jt. Ph.D.	2
	Clinical Studies	M.A.S.	1
	Education	M.A. w/ credential	1
	Educational Leadership (w/CSU Sacramento, Sonoma State)	Ed.D.	3
	Horticulture and Agronomy	Ph.D.	1
	Landscape Architecture	Ph.D.	2
IRVINE	Computer Science & Business Administration	M.B.A./M.S.	1
	Education	Ph.D.	1
	Public Policy	M.P.P.	1
	Second Language Acquisition	M.A.	1
LOS ANGELES	Financial Engineering (w/UCB)	M.F.E.	2
MERCED	Program in Program Evaluation	M.A.	2006-07
	Public Policy	M.A./Ph.D.	2006-07
RIVERSIDE	Dispute Resolution and Negotiation	M.A.S	1
	Educational Leadership (w/ several CSU campuses)	Ed.D.	2
	Executive Master of Business Administration	Executive M.B.A.	1
	Family and Child Studies	M.A.S.	2
	Management	M.S./Ph.D.	1
	Public Policy	M.A./Ph.D.	1
SAN DIEGO	Educational Leadership (w/San Diego State)	Ed.D.	3
	Health Law w/ UC Extension & Case Western School of Law	M.A.S	2
	Management/Business Education	M.B.A./Ph.D.	3
	Special Education w/ San Diego State	Ed.D.	2
SANTA BARBARA	Environmental Studies	M.A./Ph.D.	1
	Education: Teaching & Learning Emphasis (w/ CSU Northridge)	Ed.D.	1
	Mathematics and Empirical Finance	M.S./Ph.D.	1
SANTA CRUZ	Education	Ph.D.	3
	Education	M.A.S	1
	Education (w/ San Jose State University & CSU Monterey Bay)	Ed.D.	1
	Web & Internet Engineering	M.A.S	1

Status of proposal: 1 suggested for 5-year list; 2 undergoing department review; 3 undergoing campus review; 4 undergoing CCGA/CPEC review

UNIVERSITY OF CALIFORNIA
Campus Five-Year Perspectives
Graduate Degrees
2004 - 2009
Social Sciences

Campus	Proposed Program	Degree	Status
Proposals added since March 2003 are shown in BOLD			
DAVIS	Community Studies and Development	Ph.D.	1
	Communication	Ph.D.	1
	International Relations	M.A./Ph.D.	1
IRVINE	Application of Psychological Science	M.A.	1
	Sociology/Criminology, Law & Society	Ph.D.	1
	Statistics	M.S./Ph.D.	1
LOS ANGELES	Communication Studies	Ph.D.	2
MERCED	Social & Behavioral Sciences	MS/Ph.D.	2005-06
	Public Policy	M.A./Ph.D.	2006-07
SAN DIEGO	Clinical Psychology (w/ San Diego State University)	M.A.	2
	Human Development	Ph.D.	1
	International Studies	M.A.	1
SANTA BARBARA	Applied Linguistics	M.A.	1
SANTA CRUZ	Comparative U.S. Studies	Ph.D.	1
	Social Policy & Public Advocacy	M.A.	1

Status of proposal: 1 suggested for 5-year list; 2 undergoing department review; 3 undergoing campus review; 4 undergoing CCGA/CPEC review