

**PROGRAM APPROVAL APPLICATION**  
**NEW or SUBSTANTIAL CHANGE or LOCALLY APPROVED**  
**(This application may not exceed 3 pages)**

**Fill In Form**

Laboratory Science Technology  
 Proposed Program Title

Fall 2016  
 Projected Program Start Date

East Los Angeles College  
 College

Los Angeles Community College District  
 District

**Contact Information**

Christopher Whiteside  
 Voting Member

Dean of Career Technical Education  
 Title

(323) 265-8640  
 Phone Number

whitescj@elac.edu  
 Email

**Goal(s) of Program (Check all that apply):**

Career Technical Education (CTE)       Transfer       Other

**Type of Program (Check all that apply):**

Certificate of Achievement 12-17 (or 17-27 quarter) units       Certificate of Achievement 18+ semester (or 27+ quarter) units  
 Associate of Science Degree       Associate of Arts Degree

**Reason for Approval Request (Check One):**

New Program       Substantial Change       Locally Approved

**Program Information**

0955.00      Recommended [Taxonomy of Program \(TOP\) Code](#)  
 N/A      Units for Major-Degree  
 N/A      Total Units for Degree  
 25      Required Units-Certificate

**Written Form**

**1. Insert the description of the program as it will appear in the catalog. (See PCAH pp. 142 and 170)**

The Laboratory Science Technology program prepares individuals seeking careers in the life sciences/biotechnology sector. The program is highly hands-on, promotes teamwork, and trains students with analytical, practical, and communication skills that parallel the industry environment, enabling them to think critically and solve on-the-job problems. Employment opportunities include positions such as biological technicians, quality control analysts, manufacturing production technicians, inspectors, and testers.

**2. Provide a brief rationale for the program.**

The Laboratory Science Technology program is designed for students who intend to enter the workforce with the least amount of time possible in school while gaining the necessary knowledge and skills to acquire immediate employment. Six courses have been developed to be completed in a 12-month period, which students will earn a Certificate of Achievement. Our industry partners support the curriculum and has identified it to align well with the life sciences/biotechnology sector. They have also agreed to offer internships and shadowing experiences. This will ensure our students become competitive applicants as they seek employment.

**3. Summarize the Labor Market Information (LMI) and employment outlook (including citation for the source of the data) for students exiting the program. (See PCAH pp. 85-88, 136, 147, 148, 165, 168, and 176)**

The Chancellor’s office of California community colleges published “Supply and Demand Analysis: Life Sciences & Biotech Middle Skills Workforce in California” in October 2014. Labor market demand data was provided by Economic Modeling Specialists Intl. (EMSI), Burning Glass Labor/Insight, and Info USA. It was identified that 31 job ready trainees, in the middle skills life sciences/biotechnology occupations, were annually supplied by community colleges in the Los Angeles, Orange, and Ventura region; however, the community colleges are under supplying workers by approximately 245 workers. A 5-year employment projection in the Los Angeles region suggests a 12% increase in jobs by 2018, since the region has approximately 250 job openings annually. In all of California, it has approximately 950 job openings annually with a 15% job growth projection by 2018. In the Los Angeles region, the median hourly wage for biological technicians is approximately \$20, while it is approximately \$29 hourly and can be as high as \$37 hourly for manufacturing production technicians. These wages are attractive as compared to the current minimum wage of \$10 hourly in California. The supply and demand data demonstrates the need to train more individuals to fill the employment gap.

**4. List similar programs at other colleges in the Los Angeles and Orange County Region which may be adversely impacted. (There is space for 10 listings, if you need more, please contact [laocrc@sccollege.edu](mailto:laocrc@sccollege.edu))**

College	Program	Who You Contacted	Outcome of Contact
Pasadena City College	Biological Technology Certificate	Dr. Pamela Eversole-Cire	Supports
LA Trade Technical College	Biotechnology A.S. & Certificate	Dr. Angela L. Gee	Supports
Citrus College	Biotechnology Certificate	Dr. Barbara Juncosa	Supports
Los Angeles Valley College	Biotechnology/Biomanufacturing Skills Certificate	Dr. Pamela B. Byrd-Williams	Supports
Santiago College	Biotechnology A.S. & Certificate	Dr. Denise Foley	Supports
Santa Ana College	Biotechnology Technician Certificate	Dr. Kathleen Takahashi	Supports

5. List all courses required for program completion, including core requirements, restricted electives and prerequisites. (There is space for 20 listings, if you need more, please contact [laocrc@rscsd.edu](mailto:laocrc@rscsd.edu)).  
 (See PCAH pp. 143 and 171)

Courses	Course Number	Course Title	Units
LST	LST 100	Foundations of Laboratory Science	4.0
LST	LST 101	Laboratory Science: Proteins	5.0
LST	LST 102	Laboratory Science: Nucleic Acids	5.0
LST	LST 103	Laboratory Science: Cell Culture	5.0
LST	LST 104	Foundations of Separation Science	4.0
LST	LST 105	The Practice of Separation Science	2.0

6. Include any other information you would like to share.