2026-27 Comprehensive Program Review

Program: Engineering (Transfer) and Engineering Technology (CTE)

Division: STEM

Writer(s): Jennifer Decker

SLO/SAO Point-Person: Jennifer Decker

Email your completed form to Karin Spirn and your dean by November 2, 2026.

Helpful Links:

- ★ Tools for Writers - with contacts and info for help with specific sections.
- ★ Program Review Glossary - defines key terms you can review when writing.
- ★ Discipline Data Packets – institutional research about disciplines and student services
- ★ Course Success Rates Dashboard – allows you to research your program's success rates

Detailed information and instructions appear at the end of this form. For help, please contact Karin Spirn at kspirn@laspositascollege.edu.

Section 1: Program Reflection and Planning

These questions appear on all Program Reviews including comprehensive and updates.

1. Please describe your program's most important **achievements** in year 25-26.

Degree and Transfer Accomplishments

- LPC Degree/Certificate Data was not available for the 2025-2026 Academic Year so it is unknown exactly how many degrees and certificates were awarded.
- From data acquired from the Engineering Technology Learning Community, it was found that 7 students received an Engineering Technology Associates Degree during the 2025-2026 Academic Year.
- LPC engineering students transferred successfully to multiple UC campuses and majors. Although official UC transfer data lags, the following data was informally collected by the Engineering Discipline Coordinator:
    - 11 students transferred to UC Berkeley, UC Davis, UC San Diego, UC Irvine, and UCLA, with concentrations in Mechanical, Electrical, Bioengineering, Structural, and Computer Engineering**.**
    - The largest groups transferred to UC Davis (3 students) and UCLA (4 students)**,** demonstrating strong preparation for competitive UC engineering programs.
- LPC engineering students also transferred successfully to multiple CSU campuses and majors, demonstrating strong program outcomes. (Data collected from Cal State Data Center)
    - A total of 34 students transferred into CSU engineering or engineering technology programs across 10 campuses. This is a 17% increase from the 2024-2025 academic year.

The largest group transferred to San José State University (16 students), primarily in Engineering Technology, Aerospace, Electrical and Computer Engineering.
    - Students entered a wide range of disciplines — Mechanical, Electrical, Civil, Chemical, Computer, Industrial, and Aerospace Engineering — reflecting the program's versatility and alignment with diverse engineering pathways.
- Two LPC students transferred to colleges outside the CA state system, one to the Georgia Institute of Technology and the other to the University of California.

Department Accomplishments

- Enrollment in all engineering courses continues to be strong.
    - ENGR 35 – Statics, which is typically only offered once a year, had a full waitlist in Fall 2025, so we were able to offer a second section in Spring 2026.
    - ENGR 44 – Circuit Analysis also had a full waitlist in Fall 2025, with additional student requests coming in via email (due to full wait list), so a double section of ENGR 44 was offered for the first time in Spring 2026. This double section also filled.
- Ten Engineering Technology students earned summer internships at the Lawrence Livermore National Lab.
- Two part-time faculty were hired to teach in the department during the 26-27 academic year.
- Provided outreach to local high school, by having Green Engineering Program from Livermore High come for an info session, tour and engineering activity.

College-Wide Accomplishments

- Las Positas College completed the third year of its National Nuclear Security Administration (NNSA) Minority Serving Institution Partnership Program (MSIPP) grant in collaboration with Lawrence Livermore National Laboratory (LLNL). Through LPC Community Education, the program offered career technical workshops in Additive Manufacturing, Welding, Vacuum Technology, Non-Destructive Evaluation (1st of its kind), and Laser Optics during the 2025–2026 academic year, serving a total of 115 students.
- Engineering Technology participated in Operation Gateway with 8 students attending a specialized tour of LLNL.
- The Robotics Club continues to be active with our Lab Technician, Will Kossow, as their advisor. Students successfully designed and built a robotic arm. They were also able to secure a leadership team for the 26-27 academic year that plans to be very active.
- Our Women in STEM club continued to be active meeting every other week throughout the year, as well as participated in college wide activities. Twelve students attended the Women in Engineering Conference at San Jose State in March 2026, which was a first time conference experience for many of them.
- The Engineering Department Coordinator was appointed faculty advisor for MESA.

2. Please describe your most important **challenges** in year 25-26

- Cheating and AI are both significant challenges in student understanding of content, especially with work completed at home. Students at this level still don't have the knowledge required to be able to use AI as a tool to help them learn/study and instead use it as a crutch. Students are more concerned with grades (which impact transfer), than with actual understanding of the content.
- The Engineering and Welding departments currently lack sufficient FTEF to fully support their native programs (Engineering Transfer and Welding) in addition to the Engineering Technology Program. To address this, the Engineering Department plans to offer ENGR 50 every other semester to ensure student completion. Students may complete the pathway through either ENGR 50 or the combination of WLDT 63 and WLDT 79. The Welding Department has been unable to offer WLDT 79 for over two years and is not consistent in offering WLDT 10, a required course.
- As enrollments in Physics continue to grow, the Engineering department has to be prepared for these students to take our courses in the near future. Our baseline FTEF must grow with demand. Last year, we turned away over 60 students in the Fall semester alone who could not be enrolled in their desired course off of the wait list.
- Scheduling courses continues to be challenging especially with the implementation of the Compressed Calendar. Because of the longer time blocks, engineering students have to be on campus often from 8am to 8pm in order to complete their required math, physics and engineering courses.
- Confusion often occurs when courses are added that don't match the original discipline plans. It is hard to keep track of where a department is within their original allotment. This created an inconsistency in the scheduling of ENGR 23 for the 26-27 academic year (i.e. 2 sections in the Fall and 1 in the Spring instead of the other way around which is typical). The timing of schedule creation and discipline plans also plays into this (required to create schedule before discipline plans are released).
- The Engineering Department continues to face challenges in recruiting and retaining qualified instructors. This is an increased challenge with the implementation of the compressed calendar. It is only the beginning of the inaugural semester and one of our long-term part-time faculty is already experiencing burn-out. Another part-time faculty also teaches in chemistry and because of the part-time load limits, cannot teach even our lowest unit course because it puts her over the limit by less than 1 CAH.
- The full-time Engineering faculty position carries an extensive workload that exceeds the current 1.0 CAH reassign time allocation. Responsibilities include coordinating both the Engineering Transfer and Engineering Technology (CTE) programs, course scheduling, teaching multiple courses across different engineering disciplines each semester, managing departmental SLO assessment and reporting, as well as additional division and college-wide responsibilities. Important activities like digging into student success data, collaborating with industry partners, developing new curriculum, establishing transfer pathways, and creating project-based learning opportunities often fall to the wayside.
- With both the challenge in finding qualified part-time instructors, as well as the increased responsibilities for the Engineering/Engineering Technology Department Coordinator, the addition of another full-time faculty member would help with the continued growth and overall potential impact that the department could make on its students and the community.

3. What are your upcoming **plans**? Please note any ways that these support student achievement and equity.

- It is hard to make new plans with the current workload, when my priority is student instruction and then any other administrative deadlines that come up at the division and college level.
- Here are some ideas if time became available:
    - Continue to optimize course scheduling, lecture and lab pacing and other challenges related to the compressed calendar. There is a lot of trial and error during the inaugural year to help students be successful with this new schedule.
    - Work with the STEM Division Dean to create a job advertisement for hiring additional engineering part-time faculty.
    - Research ways our department can work with the Association of Mechanical Engineers (ASME) to create project and/or internship opportunities for our students.
    - Collaborate with local universities (UCs, CSUs, Private) to create transfer pathways and provide opportunities for students to learn more about these colleges. Evaluate current articulation agreements to ensure our courses transfer.
    - Collaborate with other CA community college engineering departments to learn best practices when it comes to supporting students and providing equitable outcomes.
    - Evaluate whether all current degree pathways are necessary and consider consolidating for easier planning and assessment.
    - Work with MESA director to create a study skills workshop and how to use AI as a tool in studying and not as a means to cheat.

Section 2: SLOs/SAOs

This section is completed every three years as part of the Comprehensive Program Review, with brief annual check-ins on the Program Review Updates. The following resources will be useful when completing this section:

- Three-Year Assessment Template
- Aggregated and Disaggregated Data from the following sources:
    - ELumen (if saved--no longer available online)
    - CurrIQunet
    - Student Success Dashboard

1. During the 2023-2026 three-year assessment cycle that just concluded, what did your program set out to learn through your PSLO/CSLO/SAO assessments?

- For ENGR 1, ENGR 23, and ENGR 44 since they are offered every semester, we wanted look at the content and problem solving PSLOs and see if there are differences between fall and spring semesters.
- For ENGR 1, we will also assess any differences between the 1 day a week and 2 day a week sections offered in the Fall.
- For ENGR 23, there are 2 sections offered in the spring so we will assess performance between different sections.

- Since ENGR 26, ENGR 35 and ENGR 46 are offered only once a year, we plan to assess all CSLOs every semester so that we can begin to gather data.
- Note the data from the Student Success Dashboard is the most helpful in completing this analysis.

2. Based on your analysis of your PSLO/CSLO/SAO assessment data, what conclusions did you draw about student outcomes and equity in your program?

- eLumen data was not saved; Timing for when data needed to be saved coincided with a family emergency.
- Analysis is based on what was included in previous program reviews and the current CurrIQuent data that has been entered and the Student Success Dashboard. The last semester based data on the dashboard is from the 24-25 academic year.
- Using the Course Success Rate Dashboard, overall student success increased from 71% to 80% and there was also an increase in enrollment from 361 to 392.
    - There was no observable difference between the Fall and Spring success rates for ENGR 1, ENGR 23 and ENGR 44 that were offered both semesters.
    - The success rate for ENGR 23 increased from 68% to 79% for the 25-26 academic year.
        - Although no formal data was collected to determine the reason for this increase, students have created a sense of community where they can share experiences and give tips and tricks on how to approach this first engineering course that is content heavy.
    - The success rate for ENGR 37 had a significant increase from 52 to 89%.
        - Many of these students were taking this class for the second time, so they were able to better understand the content this time around. They also were prepared for the workload.
    - The success rate for ENGR 44 has maintained at about 68%.
        - This is the most challenging course in the Engineering Transfer program.

3. Explain potential plans to improve student outcomes and close equity gaps.

- Continue to recruit and find tutors for challenging courses including ENGR 37 (ENGR Tech) and ENGR 44 (ENGR transfer).
- Although success rates in engineering are strong, in general students are lacking time management and study skills. There is a thought to create workshops or information to help students in these areas. The challenge is getting students to actually use and implement the resources provided.

4. Describe any obstacles that you encountered in your assessment process and any supports that would be helpful.

- Need more consistency with part-time faculty entering SLO data.
- The switch from eLumen to CurrIQnet mid-cycle was a challenge.
- Data entry into CurrIQunet has been delayed or not completed due to know challenges during the switch. Full-time faculty did collect the required data.

Section 3: Data Discussion

This section is completed every three years as part of the Comprehensive Program Review. Workshops and office hours will be offered in Fall 2026 to support Program Review writers.

1. RPIE Data Review: Discuss any significant trends in the data provided by the Office of Research, Planning, and Institutional Effectiveness (or any other data you use for decision-making and planning).

*(**Note**: Not all Programs have RPIE data available; if your program does not have a data packet or dashboard data, you may note that in the response box and reach out to the RPIE team.)*

Data may come from:

- RPIE Data Packets
- Transfer data
- Succes Rates Dashboard (scroll down on page)
- Requested data from the Office of Research, Planning, and Institutional Effectiveness (RPIE)
- SLO/SAO data
- Data from program-created surveys or investigations
- Any other relevant source of quantitative or qualitative data

- The Engineering Department has grown substantially. Fall enrollments have increased 63% over the 5 year period, with Spring enrollments growing 148% peaking in the Spring of 2026. Fill rates and productivity have both also increased. There is higher demand than available classes that the Engineering department has to offer. There is concern that we will lose students to other local community colleges because of this.
- In Fall 2025 and Spring 2026, ENGR students were much better prepared than the college overall. Prior transfer-level math completion was 59% and 76% (versus 27% and 37% college-wide), and English completion was 58% and 72% (versus 38% and 48%).
- Continuing students dominate and are growing which shows increased persistency over the 5 year period for which data was provided.
- The primary goal for students in the department is to transfer to a 4-year university.

2. Equity: Did your data reveal any patterns of inequity? If so, please explain those patterns and any actions that should be taken at the program or college level.

- There has been a decrease in female students who are pursuing engineering. There has also always been a lack of African-American students who choose engineering as a pathway.
    - To help in these areas, more outreach needs to be done. This could include going to present at high school and alternative schools about the career options in the engineering industry, bringing in speakers to share their experiences, or present engineering opportunities to our various learning communities on campus.
    - Another factor may be the implementation of AB 1705 where students are required to sign up for the first math course listed in their major, which for engineering students is calculus.

- Looking at student success rates both at the course (DEIAB data) and Student Success Dashboard, groups with lower success rates (although vary by course) include low income students and those with disabilities. In one course (ENGR 44), students who have a parent with a BS/BA were disproportionally impacted. This was an unexpected result.
    - To help in these areas, the department can continue encouraging students to apply to join MESA. We can continue to share the variety of resources that are available to LPC students to help them achieve their educational and personal goals.

3. Course Modality (Instructional Programs Only): In reviewing your program's data packet and Succes Rates Dashboard, are there differences in success rates by modality (i.e. face-to-face, asynchronous, synchronous, hybrid, or hyflex)? If so, reflect on what might account for differences and any actions that should be taken. (Non-instructional programs may also choose to reflect on online vs. in-person services if applicable).

- Engineering courses are primarily face-to-face. No DE courses have been offered since Fall 2024, and the success rate for that course was high.

4. Program-Set Standard (Instructional Programs Only): The program-set standard is a baseline that alerts programs if their student success rates have dipped suddenly below 95% of the rolling 5-year average. There is no punishment for not meeting the standard, and many valid reasons this may occur. When a program does not meet this standard, they are asked to examine possible reasons and note any actions that should be taken, if appropriate. | Program-set standard data can be found on this page

5a. Did your program meet its program-set standard for successful course completion in AY25-26?

Yes__X__ No____

5b. If your program did not meet your program-set standard, discuss possible reasons and how this may affect program planning or resource requests. Success rates for individual courses can be found on the Success Rates Dashboard.

- Not Applicable

Section 4: Special Topics

These questions have been chosen for this year's Comprehensive Program Review to meet reporting mandates (for accreditation, Ed. Code, or other sources).

1. Mission: Describe 1-3 examples of how your program's work has aligned with the college's mission, vision, values, and/or educational master plan over the past three years. (Possibilities might include new

initiatives, resource allocation/use, program improvements, or other activities).

- Mission, Vision, and Values
- Educational Master Plan

- Las Positas College completed the third year of its National Nuclear Security Administration (NNSA) Minority Serving Institution Partnership Program (MSIPP) grant in collaboration with Lawrence Livermore National Laboratory (LLNL) where we offered 7 technical workshops through Community Education. These workshops were easily accessible to students, community members and local industry workers and allowed them to gain additional skills that met their career-technical goals and supported lifelong learning.

- Having dedicated counselors through Student Success Teams who know the intricacies of the Engineering transfer process has been integral to helping our students successfully be prepared to transfer to a 4-year college within 2-3 years.

2. Regular Substantive Interaction (Instructional Programs Only)

To meet our college, ACCJC, state, and federal standards, **all online instructors** must demonstrate "**regular and substantive interaction**" (RSI) with students. That is, we must be clearly providing instruction and interacting with our online students, just like we would in an on-campus class. The following reflection questions allow us to capture how RSI is occurring in our classes.

The following documents explain requirements and best practices for RSI:

- ACCJC Quality Continuum Rubric for Distance Education
- Regular and Substantive Interaction (RSI) requirements

2a. If your program offers DE courses, how are Regular and Substantive Interaction (RSI) requirements met in your area? Examples appear on the DE addendums of your Course Outlines of Record. Place an X next to each method used in your courses.	
	Course materials make clear to students how often and when the instructor will interact with students (e.g. syllabus/home page lists email/office hours/other ways to communicate and typical response times)
	Provides direct instruction over Zoom (e.g. regularly scheduled live online class sessions in synchronous/hybrid/hyflex courses)
	Provides direct instruction through instructor-created videos (e.g. lecture videos created using Studio in asynchronous courses)
	Provides additional information from various sources/mediums to engage students with course content (e.g. instructor-curated content in Canvas pages that help deepen students understanding of course content)
	Facilitates discussions (e.g. through Canvas discussion boards, Pronto, Studio, or Hypothesis)
	Provides feedback on students' coursework (e.g. through detailed rubrics and/or assignment

	comments in Speedgrader; note: a grade alone does not quality as RSI, nor does auto-graded feedback students may get through completing publisher content)
	Responds to students' questions (e.g. through timely responses to student messages in Canvas Inbox, discussion boards, social annotation assignments)
	Facilitates student success through ongoing outreach (e.g. posts announcements; uses "Message Students Who" to encourage struggling students to attend office hours or access free tutoring)
	Other [explain]:

2b. What challenges if any have you faced in implementing RSI? What additional training or resources might instructors in your program need to increase the quality of RSI in online courses?

- Not Applicable

Section 5: Program Review Feedback

What questions or suggestions do you have about this year's Program Review forms or process?

- Not Applicable

Detailed Instructions

Instructions

1. Send an electronic copy of this form to Program Review chair, Karin Spirn, and your Dean by Monday, November 2.
2. Please respond to questions with enough detail to present your information; it doesn't have to be long.
3. If the requested information does not apply to your program, write "Not Applicable."
4. Even if you don't have much to report, we want to hear from you, so your voice is part of the college planning process.
5. Optional/suggested: Communicate with your dean while completing this document.

Sections: There are five sections to the document:

1. Program Reflection and Planning
2. SLO/SAO Review
3. Data analysis
4. Special topics
5. Feedback on the PR template and process

Time Frame: This Program Review should reflect your program status during the 25-26 academic year. It should describe plans starting now and continuing through 2026-27. It is fine to discuss topics beyond these time frames, but please specify the time frame in your responses.

Audience: Deans, Vice Presidents of Student Services and Academic Services, All Planning and Allocation Committees. This document will be available to the public.

Uses: This Program Review will inform the audience about your program. It is also used in creating division summaries, determining college planning priorities, and determining the allocation of resources. The final use is to document the fulfillment of accreditation requirements.

Equity: Here is the LPC definition of equity, which is a guiding principle in reviewing programs: "Equity is parity in student educational outcomes. It places student success and belonging for students of color and disproportionately impacted students at the center of focus."

Please note: Program Review is NOT a vehicle for making requests. All requests should be made through appropriate processes (e.g., Instructional Equipment Request Process) or directed to your dean or supervisor.

Helpful Links:

- ★ Tools for Writers - with contacts for help with specific sections.
- ★ Program Review Glossary - defines key terms you can review when writing.
- ★ Fall 2023 Program Reviews
- ★ Program Review FAQs

For help with your program review, please contact Karin Spirn at kspirn@laspositascollege.edu