DEGREES & CERTIFICATES

ENGINEERING TECHNOLOGY ASSOCIATE OF SCIENCE (AS)

About the Program
The Associate of Science in Engineering Technology program at Las Positas College is designed for those who want a hands-on engineering career with a focus on mechanical technology in an applied setting. The emphasis is on Mechanical Engineering applications and developing an understanding of how engineering, technology and manufacturing principles are applied in practice. The program provides students with foundational knowledge in mathematics, critical thinking, problem solving, and engineering design, as well as skills in manufacturing, fabrication, and welding so that students are able to adapt to the ever-changing modern industrial workplace. Students may also choose to continue their education towards a degree in a related engineering discipline.

Program Goals and Objectives
The Associate of Science in Engineering Technology program at Las Positas College is designed for those who want a hands-on engineering career with a focus on mechanical technology in an applied setting. Students receive foundational training in engineering, mathematics, physics, and welding, and develop skills in manufacturing and fabrication, problem-solving, and critical thinking.

Career Opportunities
Graduates of the program may find employment as mechanical technicians, mechanical technologists, stationary engineers, or in other applied engineering fields and may collaborate with scientists, engineers, designers, and manufacturing professionals.

Program Outcomes

- Upon completion of the AS in Engineering Technology, students are able to set up appropriate laboratory equipment, collect and analyze data, draw conclusions, and clearly communicate results.
- Upon completion of the AS in Engineering, students are able to use a variety of technological tools to solve engineering problems.
- Upon completion of the Certificate of Achievement in Engineering Technology, students are able to use a variety of technological tools to solve software engineering problems.

Required Core: (27 Units)
ENGR 1 Introduction to Engineering....2
ENGR 23 Engineering Graphics....3
ENGR 37 Applied Statics and Materials....3
MATH 39 Trigonometry....4
MATH 30 College Algebra for STEM....4
PHYS 10 Descriptive Physics....3
PHYS 10L Descriptive Physics Laboratory....1
WLDT 10 Machining for the Metal Trades....4
WLDT 62A Beginning GTAW and GMAW Theory....1
WLDT 62AL Beginning GTAW and GMAW Skills Lab....2

List A: Select One Group (4 Units)
ENGR 50 Introduction to Electronic Systems and Measurements....4
WLDT 63 Welding Layout and Fitting....2
WLDT 79 Manufacturing Processes....2

List B: Select One (3 Units)
WRKX 94 Occupational Work Experience/Internship....1 - 8
WRKX 95 General Work Experience....1 - 6

Total Units for the Major....34

Program-Based GE: (3 Units)
CMST 1 Fundamentals of Public Speaking....3
CMST 10 Interpersonal Communication....3

Additional General Education and Elective Units....23