

LASER TECHNOLOGY - CERTIFICATE OF ACHIEVEMENT LEVEL 3

Lasers are now the enabling devices of choice for many industries that range from medicine, entertainment, telecommunications, and aesthetics, to quality control. Their ubiquity has resulted in the sky-rocketing demand for personnel who are well-versed in laser technology for both technical and non-technical positions. We therefore give our students both theoretical and hands-on competencies needed to tackle most common problems and issues encountered in the laser/laser system environments through regular course and industry internships.

Students must satisfactorily complete all major and certificate courses with a grade of "C" or better and at least four courses must be completed at San José City College.

Program Learning Outcomes

- Comply with ANSI and OSHA laser safety standards.
- Verify the quality of laser parts and sub-assemblies, applying appropriate standards.
- Build lasers/laser systems following prescribed procedures.
- Write and/or follow procedures for lasers/laser systems testing and operation.
- Verify a laser/laser system's reliability and compliance to performance specifications.
- Maintain and troubleshoot lasers/laser systems.

Certificate Requirements

Course	Title	Credits
FMT 105	Introduction to Industrial Electronics and Controls	2.5
LASER 100	Laser Fundamentals and Performance Tests	4
LASER 101	Rapid Laser Opto-Mechanics 3-D Prototyping	4
LASER 102	Intermediate Laser Technology	4
LASER 103	Advanced Laser Technology	4
LASER 104	Fiber Laser Technology	4
PHYS 002A	Algebra/Trigonometry-Based Physics I	4
MATH 013	Intermediate Algebra	5
Total Units		31.5