

## ***LASER TECHNOLOGY***

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San José City College offers an Associate in Science (AS) degree and certificates in Laser Technology. 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.

Upon completion of program students will be able to:

- 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.

### **CAREER OPTIONS:**

- Manufacturing Technician/Engineer
- Laser Systems Test Technician/Engineer
- R&D Technician/Engineer
- Laser Application Engineer/Technician
- NPI Engineer
- Opto-Mechanical Technician
- Sales and Marketing
- Customer Support

**FOR ADDITIONAL INFORMATION, SEE A COUNSELOR, VISIT THE CAREER/TRANSFER CENTER, OR CONTACT:**

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## ***Laser Technology***

Awarded to those who satisfactorily complete the following major and certificate courses with a grade of "C" or better and at least 4 courses at San José City College

<b><u>CERTIFICATE OF ACHIEVEMENT - LEVEL 1:</u></b>			<b><u>UNITS</u></b>
LASER	100	Introduction to Photonics	4
LASER	101	Laser Optics	4
LASER	102	Intermediate Laser Technology	4
LASER	103	Advanced Laser Technology	4
<b>TOTAL</b>			<b>16</b>

<b><u>CERTIFICATE OF ACHIEVEMENT - LEVEL 3:</u></b>			<b><u>UNITS</u></b>
FMT	105	Introduction to Industrial Electronics and Controls	2.5
LASER	100	Introduction to Photonics	4
LASER	101	Laser Optics	4
LASER	102	Intermediate Laser Technology	4
LASER	103	Advanced Laser Technology	4
LASER	104	Fiber Laser Technology	4
MATH	013	Intermediate Algebra	5
PHYS	002A*	General Physics	4
<b>TOTAL</b>			<b>31.5</b>

\* May be used to meet science with laboratory general education requirement.

### **A.S. MAJOR REQUIREMENTS:**

COMPLETION OF THE CERTIFICATE OF ACHIEVEMENT - LEVEL 3	31.5
APPROVED MAJOR ELECTIVES	7
GENERAL EDUCATION PATTERN/GRADUATION REQUIREMENTS	24
PHYSICAL ACTIVITY COURSE	<u>1</u>
<b>TOTAL REQUIRED UNITS</b>	<b>63.5</b>

### **APPROVED MAJOR ELECTIVES**

MACH	160	Introduction to CNC Laser Applications - OR -	5
LASER	160	Introduction to CNC Laser Applications	
LASER	098	Directed Study	.5 - 9
LASER	138	Work Experience	1 - 4
PHYS	002B	General Physics	4