

## Photonics Technician Jobs in the United States

### *A 2009 Industry Survey of Current and Future Demand for Education and Training Programs*

A national survey of U.S. employers, conducted at the University of North Texas Survey Research Center, has identified more than 2,100 current jobs for photonics techs that need to be filled this year. This need will increase by 5,900 more new jobs over the next five years. Employers polled for this study early this year - in the height of the current recession - said that jobs for photonics techs were available and not being filled. The average starting salary exceeds \$39,000. Salaries for two-year AAS college graduates (the preferred degree) are higher.

The 2009 study, commissioned by OP-TEC, the National Center for Optics and Photonics Education, surveyed 3,989 U.S. employers; a sample of 636 responded, resulting in the projections with a margin of error of  $\pm 3.48$  percent. A copy of the complete report is available from OP-TEC. OP-TEC is a National Science Foundation Center of Excellence for Advanced Technology Education, headquartered in Waco, Texas.

Photonics technicians, educated and trained at U.S. community colleges, are proficient in the scientific principles of optics, fiber-optics and lasers, and the processes and equipment incorporating these devices in electronic and electro-optics systems used for manufacturing, defense, homeland security, medical equipment, telecommunications, environmental monitoring, lighting, displays and entertainment.

Major Findings	
1	The number of photonics technicians currently employed in the United States is estimated to be 19,785.
2	There is an estimated need for 2,194 additional photonics technicians over the next year.
3	Across the photonics industry, the greatest need for photonics technicians is in the areas of (a) research and development and (b) production and manufacturing.
4	Currently 33% of respondents employ photonics technicians who have earned high school diplomas or less. Less than 30% of respondents employ photonics technicians who have associate degrees, and 38% of respondents employ photonics technicians who have bachelor's degrees.
5	Nearly half of respondents would prefer to hire photonics technicians with associate degrees, 30% of respondents would prefer to hire photonics technicians with bachelor's degrees, and less than 20% of respondents would prefer to hire photonics technicians with high school diplomas only.
6	The average annual salary of entry-level photonics technicians is estimated to be \$39,082.
7	The number of Precision Optics Technicians (another career) in the workforce is estimated to be 6,188 with a five-year demand of 3,100 additional technicians.

The twenty eight, two-year colleges with photonics programs (in the U.S.) graduate less than 250 techs per year (less than 15% of the demand.) OP-TEC's goal is to help colleges meet this employment demand by starting new programs and increasing the enrollments at colleges where photonics education is currently offered.

For more information about OP-TEC or the industry survey results, please visit [www.op-tec.org](http://www.op-tec.org).

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