Early Career Professional salaries in optics and photonics: Solving complex technical challenges in your first five years on the job

Excitement and curiosity inspire Early Career Professionals (ECPs) in optical engineering, electrical engineering, physics, and other light-focused fields.

What are the most popular engineering degrees for ECPs?

- 24% Optical
- 22% Electrical
- 12% Mechanical
- 10% Biomedical
- 6% Computer
- 6% Materials
- 3% Chemical

Median salaries by engineering degree

- Optical: $55,710
- Electrical: $59,807
- Mechanical: $63,702
- Biomedical: $59,567
- Computer: $50,000
- Materials: $61,019
- Chemical: $76,598

Where do early career professionals work?

- 47% For-profit companies
- 37% Academic Institutions
- 16% Government/Military

What inspires Early Career Professionals, and how do their salaries break down across countries?

How do countries compare?

- United States: $84,806
- Germany: $88,495
- Japan: $53,675
- Canada: $51,573
- United Kingdom: $48,079
- South Korea: $38,943
- Taiwan: $36,809
- Italy: $29,861
- Peoples Republic of China: $21,759
- India: $9,192
- Russia: $11,271

Median salaries by country

Average ECP salary

- Average Salary: $62,243
- 25th Percentile: $28,999
- Median: $54,197
- 75th Percentile: $81,876

Half of early career professionals earn over $54,000 per year, with the top 25% earning over $81,000.

Quotes

- “I love my current job in optics and can’t wait to pursue a career in it!”
- “My work-life balance isn’t terrible but isn’t great either.”
- “A career in optics and photonics is challenging but still has a lot of fun.”

Early Career Professionals are defined by SPIE as post-secondary graduates within five years of graduating with what they anticipate to be their highest degree.


Full report and methodology: spie.org/2020salaryreport