



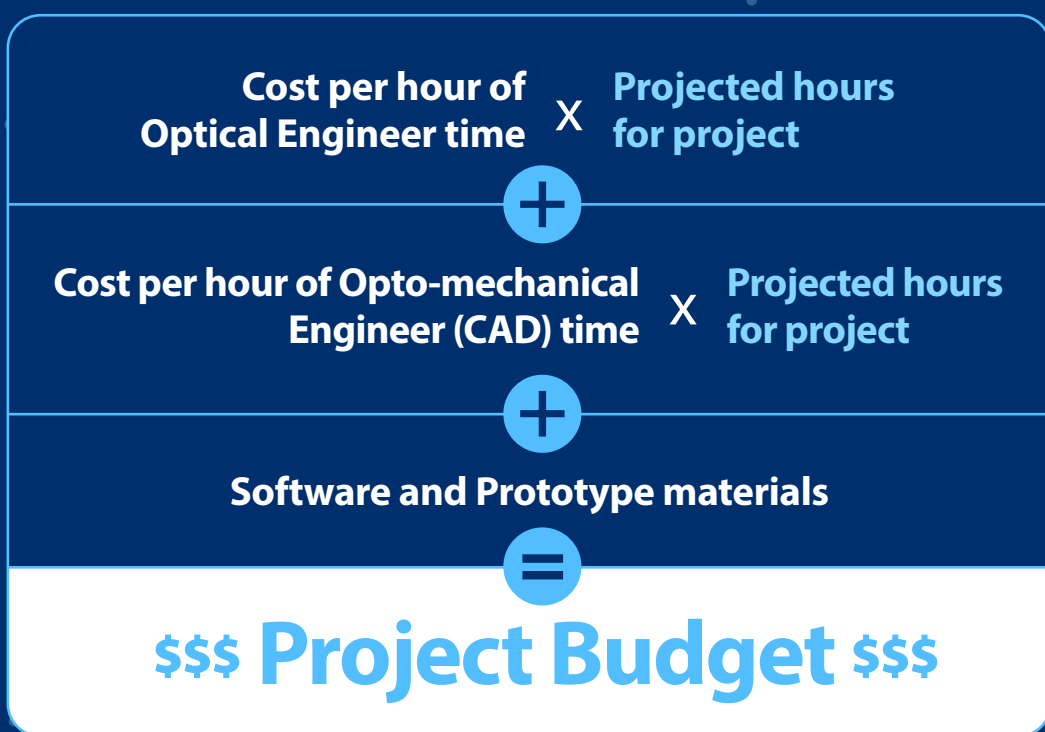
The Hidden Cost of CAD Time

Why do projects run over time and over budget?

The answer might surprise you. Sometimes you have to look under the surface to see what's lying underneath.

Start with what you know

Your budget usually starts with expected costs—something like this:



What's hiding underneath the surface?

Unexpected Extra Costs

REDUNDANT WORK

CAD user has to recreate a lens geometry from scratch. (Even though the optical engineer has already done it in their software)

ERRORS

The result of manual entry and educated guesses. (Files don't convert from optics software to CAD software)

MULTIPLE ITERATIONS

To assess whether designs can be manufactured at cost. (CAD user cannot check beam clipping, image contamination, and changes to spot size, so must go back to optical engineer)

REPEATED INTERRUPTIONS

Unplanned conversations to clarify specifications, evaluate designs, and check performance. (Back and forth and back and forth)

MULTIPLE PHYSICAL PROTOTYPES

To check the viability of designs. (Can it actually be manufactured? Create, fix and create again... this is expensive)



It doesn't take an engineer to do the math



Without the right tools, CAD time can blow your budget

Zemax OpticsBuilder streamlines optical workflow:

- Lower your costs and add predictability
- Remove the need for prototype iterations
- Analyze and securely share optical product designs between OpticStudio and SOLIDWORKS or Creo Parametric
- Create automatic drawings for a clear path to manufacturing

Get to market faster and stay on budget with OpticsBuilder.