



ProEngineer

80 Contact Hours CAD Certification

The ProEngineer program is focused on the technical professional who will be creating new products for multiple industries. This certificate represents the successful completion of all the key skills required to develop complex products in major industries.

Prerequisite:	Design or Engineering experience
Curriculum Leader:	Daryl Patrishkoff, PMP, CEO of the Center for Professional Studies Bachelors and Masters Degrees 30 years in product engineering and management of global operations
Targeted Participants:	Executives, Directors, Managers, Supervisors, Product Engineers, CAE Analysts, CAD Designers, Technicians, Sales Professionals
Targeted Industries:	Automotive, Transportation, Specialty Vehicles, On-Highway, Off-Highway, Military, Aerospace, Energy, Ecology, Alternative Fuel Products, Medical Device Products, Consumer Products
Targeted Positions:	Product Designing Engineers in multiple industries who develop multiple types of products for production
Objective:	Well rounded curriculum that addresses specific job skills, tools and techniques that a Product Designing Engineer relies on to develop their specific product. These standards apply to multiple industries, giving the participant a broad skill set to perform multiple tasks in their current position or improve their marketability.
Core Courses:	Pro Engineer Advanced Pro Engineer



Why employers need certified Pro Engineer Designing Engineers

- Companies in all industries employ technical personnel to create new products to be launched into the market in a timely fashion that meet the customer demand
- These products must have robust engineering specifications that meet the functional, quality and governmental requirements for the products' complete product lifecycle
- As the product is being developed; all aspects of the design, engineering specifications, manufacture, assemble, service must be input into the early stages of development
- The Pro Engineer Designing Engineer is a single individual who is completely responsible for leading the product development from original concept through development, validation, pilot, production launch and eventually to ramp down and close out
- Technology tools have grown in complexity, contribution and play a key role in combining multiple technical functions into one individual
 - Computer Aided Design (CAD): Catia, Unigraphics, Pro Engineer, etc.
 - Computer Aided Engineering (CAE): Nastran, Patran, Adams, Hypermesh, Mechanica, Virtual Lab, etc.
- There have been many attempts to build a common certification for this specific group of technical personnel with no success by academic and industry organizations
- A realistic approach to certifying these personnel is by targeted training in specific tools, techniques and methodologies with hands-on application of the software tools
- A certification must address multiple industries and utilize globally recognized standardized tools, techniques and methodologies



Value of being a certified Pro Engineer Designing Engineer practitioner

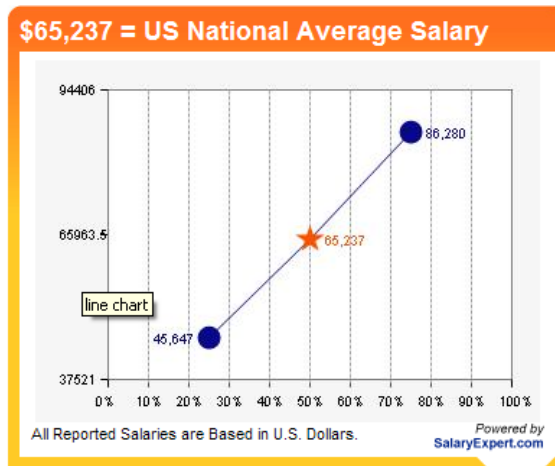
- Many new Pro Engineer Designing Engineer positions are listed regularly on multiple website used to find positions for employment throughout Michigan and the United States
- Recent search of current open positions for Pro Engineer Designing Engineer

<u>Job Board</u>	<u>Michigan</u>	<u>National</u>
Michigan Talent Bank	250	N/A
Monster	15	640
Career Builder	32	951

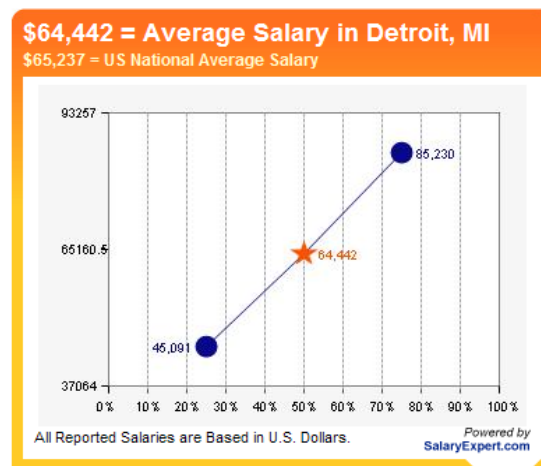
- These multifunctional highly talented personnel are key to efficiencies throughout the product development process and ensure all aspects of the products business case are delivered in the product as it is presented to the market

Career Builder Salary Surveys for the United States and Michigan

Design Engineer



Design Engineer Salary



Why choose The Center for Professional Studies

- CPS has been training professionals as a hands-on State of Michigan licensed school since 1993 in the business environment which produces real project deliverables that improve operations
- The course curriculum is fast paced, not long term semester based, with real life experienced practitioners teaching application of the subject matter for multiple industries
- The Center for Professional Studies has put together such a portfolio of fast paced hands on learning and certification of the specific tools, techniques and methodologies that lead to a complete Designing Engineer certification



Competitive Comparison of Pro Engineer Designing Engineer certificate programs

CPS	The Center for Professional Studies
OCC	Oakland Community College
MCC	Macomb Community College
LTU	Lawrence Technology University
OU	Oakland University

Courses	CPS	OCC	MCC	LTU	OU
Technical Communication	Yes	-	-	-	-
Program Management	Yes	-	-	Yes	Yes
Dimensional Analysis	Yes	Yes	Yes	-	-
Test to Failure	Yes	-	-	-	-
Pro Engineer	Yes	Yes	-	-	-
Advanced Pro Engineer	Yes	-	-	-	-
Catia V5	Yes	-	-	-	-
Advanced Catia V5	Yes	-	-	-	-
Unigraphics NX7	Yes	-	-	-	-
Advanced Unigraphics NX7	Yes	-	-	-	-
PMP Exam Prep	Yes	-	-	Yes	-
Total Quality Management	Yes	-	-	-	-
Alternative Energy	Yes	-	-	Yes	-
Lean Manufacturing	Yes	-	-	Yes	-
Root Cause Analysis	Yes	-	-	-	-
APQP, FMEA & PPAP	Yes	-	-	-	-
Computer Aided Engineering	Yes	-	-	Yes	Yes
Digital Signal Processing	Yes	-	-	-	-
Experimental Modal Analysis	Yes	-	-	-	-
Additional Features					
Fast paced courses	Yes	-	-	-	-
Partnering Companies	Yes	-	-	-	-
Real Industry Examples	Yes	-	-	-	-
Hands-On Industry Projects	Yes	-	-	-	-
Face to Face Instruction					
Application Expert Instructors	Yes	-	-	-	-
Program Contact Hours	80	n/a	n/a	n/a	n/a
Price per Contact Hour	\$62	\$28	\$72	\$58	\$66
Provided Technology Tools During and After Classes					
Free Elective Course for NWLB	Yes	-	-	-	-
CAD Software	Yes	-	-	-	-
Text Books and Work Books	Yes	-	-	-	-

*Note: All software is student edition versions for student's personal learning use only
Free elective course is given to student after all program requirements are met*