

NEW PRODUCT DEVELOPMENT: AUTOMOTIVE AFTERMARKET PRODUCT DEVELOPMENT OPTION (CERT)

or ENGT 259	Solidworks Introduction	
AUTO 100	Automotive Maintenance and Operation	4.0
Total Units		16-17

Recommended Courses

Code Number	Course Title	Units
MTT 278	Mastercam Advanced	
WELD 130	Gas Tungsten Arc Welding Fundamentals	
WMT 111L	Introduction to Woodworking Lab	

CERTIFICATE OF ACHIEVEMENT

The New Product Development (NPD) program at Cerritos College addresses the competencies needed for technicians in the fields of automotive aftermarket, and professional, scientific, and technical service companies of Southern California. Particular emphasis is either on Automotive Aftermarket Product Development and New Product Development and Fabrication. The program goals are multiple. The first goal is to provide students with the academic preparation needed for a career in the automotive aftermarket industries or other industries using similar technology. Students can do that by learning the program objectives from the set of classes that will allow them to take a virtual new product idea to market. Another goal of the program is to enable current students to get a double competency (3D inspection/NPD, Machining/NPD, Auto/NPD, Welding/NPD, Plastics/NPD, and Engineering Design/NPD). Finally the last goal of the program is to provide continuous learning opportunities for industry employees. This in turn will provide industry with a framework of classes to further employee development and/or provide validation of professional experience and a path to an AA degree for current employees.

CAREER OPPORTUNITIES: Design Modeler, Automotive Stylist, Fabrication Craftsman

Program Student Learning Outcomes

- Students take a product through the stages of new products development.
- Students create a design presentation.
- Students design products for OEM and aftermarket automotive or autobody products.
- Students evaluate the feasibility of the rapid prototyping products of their choice.
- Students produce a cost-effective plan for an automation product of choice.
- Students produce portfolio for a new design.
- Students select a plan for manufacturing and procurement.

Program Requirements

Code Number	Course Title	Units
Program Requirements		
NPD 100	Product Development in a Global Economy	3.0
NPD 101	Innovation Using Rapid Prototyping	3.0
NPD 103	Tooling and Materials for New Product Development	3.0
ENGT 137	Industrial Design and 3D Modelling in Fusion360	3.0-4.0
or ENGT 131	Design Fundamentals Including 3D Modeling	