## **Autodesk Fusion 360**

## Overview

Fusion 360 is a cloud-based CAD/CAM tool for collaborative product development. The tools in Fusion enable exploration and iteration on product ideas and collaboration within a product development team.

Fusion 360 enables fast and easy exploration of design ideas with an integrated concept to production toolset. Fusion lets you focus on the form, function, and fabrication of your products. Use the sculpting tools to explore form and the modeling tools to create finishing features. These tools let you quickly iterate on design ideas. Once you have settled on a design, you can create assemblies to validate fit and motion in your design or create photo-realistic renderings to verify the appearance. Finally, you need to fabricate your design. Use the 3D print workflows to create a rapid prototype or the CAM workspace to create toolpaths to machine your components.

Simulation for Fusion 360 brings powerful simulation tools to every designer and engineer. Now you can make the right design decisions, improve your product functionality, and identify critical areas in your design. Here students will discover how to setup simulation, create loads and supports, analyze results and share it on the cloud. Students can learn how to analyze their model using Linear Static Stress, Modal analysis and Thermal Stress Analysis.

Fusion 360 also helps bring design teams together for collaborative product development. All your designs are stored in the cloud, which means you and your team can always access the latest data. Fusion also tracks versions of your design as you work. You can use Autodesk A360 to view each version in your web browser and promote an older version to the current version. Finally, use Fusion and A360 to share your designs and track design activity. You can even provide controlled access to your designs without requiring an Autodesk ID.

Fusion 360 uses a hybrid environment that harnesses the power of the cloud when necessary and uses local and cloud resources. For example, your design data is stored on the cloud and renders amazing images every time you save a new version of your design. This happens parallelly while you create and edit designs local on your machine. This allows you to harness the power of your computer and the power of the cloud at the same time. Throughout this course, you will explore these areas of Fusion 360. This course will get you started on designing with Fusion and help you understand how it can improve your design process.

## AUTODESK® FUSION 360



Design, Validate, Fabricate

End-to-end product development in one single, integrated experience. The world's latest technologies for 3D design, simulation and manufacturing.



Work Anywhere

Get what you need, when you need it, as you need it. All your information, always up to date, securely accessed, virtually anytime, anywhere.



Collaborate with Anyone

Collaboration is proving the fastest way to bring new products to market. Access product information, tools and people for the collaborative economy.

Native on Windows 64 bit OS & Mac