

# AUTODESK PROPOSAL FOR ENGINEERING STUDENT WEBINARS

For Third year BE students



*Autodesk, Inc., is a leader in 3D design, engineering and entertainment software. Since its introduction of AutoCAD software in 1982, Autodesk continues to develop the broadest portfolio of 3D software for global markets.*

*Customers across the manufacturing, architecture, building, construction, and media and entertainment industries—including the last 19 Academy Award winners for Best Visual Effects—use Autodesk software to design, visualize, and simulate their ideas before they're ever built or created. From blockbuster visual effects and buildings that create their own energy, to electric cars and the batteries that power them, the work of our 3D software customers is everywhere you look.*

## OVERVIEW

Autodesk is extending all co-operation to Kamaraj College of Engineering and Technology to formulate an extensive and suitable curriculum based on Autodesk's experience in the field of Design & Manufacturing. Autodesk is pleased to submit this proposal for supporting & achieving. It will also be improving student's satisfaction by providing online free training and certificates to the students. We have already partnered with Kamaraj College of Engineering and Technology for conducting faculty development workshop & committed to improve the faculty and student's knowledge and skill through FDP's and student boot camps.

## The Objective



*Conduct online webinar series to Third Year BE students and train them on cloud-based Fusion platform to earn the Autodesk certificate and support the course outcomes of CAD/CAM LAB.*

- Need #1: Engage the students with cloud-based platform during COVID Scenario
- Need #2: Improve the students' knowledge and skill on Industry specific course

## The Opportunity

- Goal #1: Train all students within 1 week by conducting webinar Series on "Design and Make with Autodesk Fusion 360"
- Goal #2: Integrate the Autodesk Certificate with the online training to all the students
- Goal #3: Monitor the course outcome by generating attendance, engagement reports for all students
- Goal #4: Adopt distance learning strategy on cloud platform to complete students project as outcome

## The Solution

**i** Kamaraj College of Engineering and Technology will share the teaching learning strategy for the Engineer SE , TE students

- Kamaraj College of Engineering and Technology sends the e circulars and WhatsApp messages to all students for registration and attendance
- Kamaraj College of Engineering and Technology & Autodesk will conduct e meeting with all concerned faculty and address the challenges
- Schedule & Share the Webinar series to all students to works on the actual platform
- All the learning resources like step by Video, step guide, data files etc. will be shared by the Autodesk
- All the faculties will join as panelist during the webinar to address the questions from students

## Resources

**i** Autodesk Engagement Specialist, Fusion Catalyst, Autodesk Learning resources and Live Webinar series

### Topic: Design and Make with Autodesk Fusion 360

Design and Manufacturing are the processes of designing parts, components, or products with the understanding surrounding design requirements for a specific manufacturing method. In this online course, students will practice each step of the design thinking process by completing a series of hands-on activities. Webinar series will introduce the mindsets and exercises used by leading designers around the world.

By the end of this lesson, Students will be able to:

- Describe the purpose of CAD/CAM in Industry
- Understand and communicate the purpose and importance of prototyping and user testing in the design process.
- Demonstrate Modeling skills to create a physical prototype for Manufacturing purpose
- Demonstrate knowledge and skills in Fusion 360 applying design and manufacturing workflows to take digital parts to physical prototypes.

## Webinar Schedule with Lesson plan (90 minutes Each)

Following is a complete list of all project deliverables:

Deliverable	Description
30 <sup>th</sup> April 2021	Introduction to Webinar Series Objective, Plan and Preparation, Account Creations and File Management. Fusion 360 Overview
3 <sup>rd</sup> May 2021	Sketching/ Constraining/ Basic Modeling with Live Examples/ Assembly Modeling with Top Down and Bottom Up Approaches. Using As Built and Joint options.
4 <sup>th</sup> May 2021	Continuing with Assembly Modeling of Complex Assembly and performing Motion Link and Motion Study/ Adding Animations and Publishing as in video format
5 <sup>th</sup> May 2021	Introduction to CAM workspace/ Milling operations with Basic Examples/ Exploring Inch and Metric Tools/ Exporting tool library/ Simulating live toolpaths/ Generating G Codes/ Generating customizable setup sheets
6 <sup>th</sup> May 2021	Exploring Milling Operations with live examples with Machine Vise/ Facing/ 2D Contour/ Adaptive Clearing/ Slot Clearing/ Drilling/ Spot Drilling/ Simulating toolpaths/ Generating GCodes for the toolpaths
7 <sup>th</sup> May 2021	2D Cutting Operation with Water Jet Machining/ Turning of a standard Mechanical Component/ toolpath simulation/ GCode Generation. Live quiz/ Online certifications

### Timeline for Execution



*Will effectively start from last week of April 2021*

## CONCLUSION

We look forward to working and supporting Kamaraj College of Engineering and Technology, Third year BE student and faculties, Integrated Autodesk Certification for the students. We are confident that we can meet the COVID challenges ahead and stand ready to partner with you in delivering a Webinar series with certification.