

# KIIT UNIVERSITY- CADD LEARNING CENTER, SME

## 3D EXPERIENCE IN PRODUCT LIFECYCLE MANAGEMENT BOOT CAMP – PLMBC

*12 Days 90\* Hours Intensive Certified Internship  
Exclusively on  
CATIA V5, ANSYS, PLM Application tool with Project*

### **Main Areas of Study:**

#### **CAD/CAM (CATIA)**

**Introduction to CATIA Mechanical Design Solutions & Sketcher Fundamentals:** Introduction to CATIA Sketcher, Sketching Simple Profiles, Sketching Pre-Defined Profiles, Editing Profiles, Operations on Profiles, Setting Constraints, Managing Sketches, Introduction to CATIA V5, Sketch Based Features, Dressing-Up Features, Modifying the Part

**Part Design Advanced:** 3D Wireframe Elements and Sketch Based Features, Dressing Up Features, Surface Based Features, 3D Constraints Transformations, Part Management, Annotation

**Wireframe & Surface Design Fundamentals:** Introduction to CATIA Sketcher, Modifying the Geometry Using Tools, Introduction to CATIA Sketcher, Sketching Simple Profiles, Sketching Pre-Defined Profiles, Editing Profiles, Operations on Profiles, Setting Constraints, Managing Sketches, Performing Operations on the Geometry, Completing the Geometry in Part Design, Modifying the Geometry

**Assembly Design Fundamentals:** Introduction to Assembly Design, Connector Assembly: Presentation, Assembling Components, Positioning Components Using Constraints, Analyzing Assembly, Editing Parts in an Assembly, Working with Components

**Generative Drafting Fundamentals (ANSI):** Introduction to Generative Drafting, Starting the Drawing & Views Generation, Additional Views Generation, Editing Views Layout and Properties, Dimensioning a Part, Finalizing the Drawing & Printing

**NC Manufacturing:** Prismatic Machining Fundamentals, Surface Machining. Defining 2.5 Axis Milling Operations, Defining Axial Operations, Tool Path Verification, Tool Management, Generating Auxiliary Operations in the Part Operation Generating Outputs, Creating a Milling Feature, Creating a 3-Axis Machining Operation, Creating an Axial Operation, Verifying Tool Path, Managing Tools, Creating an Auxiliary Operation, Generating Output Files

## **COMPUTER AIDED ANALYSIS (CAA) ANSYS**

**Introduction to CAA;** Theoretical Finite element Analysis (FEA); Practical Application of FEA Failure Analysis; Future of Finite element Analysis, Linear Static Analysis; Non Linear Static Analysis; Dynamic Analysis; Thermal Analysis; Crash Analysis; Multibody Dynamics; Vibration Modal, Harmonic frequency response analysis; Computational Fluid Dynamics.

**Introduction to Meshing,** Material Properties and Boundary conditions, Material Classification; Material Properties; Boundary conditions; How to apply constraint.

**Introduction to Linear Analysis;** Essential steps to solve Linear Analysis problems Exercises and case study; Hands on exposure to Analysis software

**Introduction to Non Linear static Analysis;** Essential steps to solve Linear Analysis problems; Solution techniques for solving Nonlinear Analysis problems; Exercises and case study; Hands on exposure to Analysis software (ANSYS)

**Dynamic Analysis;** Static Analysis vs. Dynamic Analysis; Solution techniques for solving Dynamic Analysis problems; Exercises and case study; Hands on exposure to Analysis software

**Introduction to Thermal Analysis;** Conduction, convection and Radiation problems; Solution techniques for solving Thermal Analysis problems; Exercises and case study; Hands on exposure to Analysis software (ANSYS Thermal Module)

**Introduction to Crash Analysis;** What do we solve in structural crash worthiness; Typical Applications of crash worthiness simulations in various industries; Hands on exposure to crash Analysis software

### **Multi body Dynamics**

**Introduction to CFD;** Typical Applications of CFD in various industries; Hands on exposure to CFD software (ANSYS FLUENT and ANSYS CFX)

\*no of hours mentioned are calculated by both class room training & the time student spend to do their project work.

**The course Fees is INR 6000.00 (Six Thousand only) and should be submitted to the Central Training & Placement Department, Campus -2 in the form of Demand Draft (in favour of 'KIIT L and D' Payable at Bhubaneswar) on or before the last date of the registration. The cost of Global Certifications shall be extra & decided on case-basis.**

**The Last Date for the Registration is 20th April 2016.**