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***About Us***

Apex Global Tech Solutions is an ISO 9001:2008 certified multi services organization with a vision to offer innovative technology services and training.

Apex Global Tech Solutions is recognized as a leader in training for engineers and technical professionals. Our specialist courses are tailored to the needs of industry professionals and combine academic rigor with applications to real-world situations.

We provide educational opportunities covering numerous engineering and technical disciplines and offer them in many different ways (platforms). Our trainers are experts in their fields with some of them having even authored the codes and standards that they teach.

An organization that enables collaboration, knowledge sharing, career enrichment, and skills development across all engineering disciplines, toward a goal of helping the global engineering community develop solutions to benefit lives and livelihoods.

From college students and early-career engineers to project managers, corporate executives, researchers and academic leaders, Apex’s members are as diverse as the engineering community itself. ApexGlobal.Tech serves this wide-ranging technical community through quality programs in continuing education, training and professional development, codes and standards, research, conferences and publications, government relations and other forms of outreach.

At ApexGlobal.Tech, we offer wide range of training programs and engineering services for students and professionals from Mechanical/ Automobile/ Industrial/ Electrical/ Civil/ Aeronautical Engineering professionals.

***Mission***

ApexGlobal.Tech’s mission is to serve diverse global communities by advancing, disseminating and applying engineering knowledge for improving the quality of life; and communicating the excitement of engineering.

***Vision***

ApexGlobal.Tech aims to be the essential resource for mechanical, civil engineers and other technical professionals throughout the world for solutions that benefit humankind.

***Core Values***

In performing its mission, ApexGlobal.Tech adheres to these core values:

* Embrace integrity and ethical conduct
* Embrace diversity and respect the dignity and culture of all people
* Nurture and treasure the environment and our natural and man-made resources
* Facilitate the development, dissemination and application of engineering knowledge
* Promote the benefits of continuing education and of engineering education
* Respect and document engineering history while continually embracing change
* Promote the technical and societal contribution of engineers

***ApexGlobal.Tech’s Credo***

Setting the Standard…

* In Engineering Excellence
* In Knowledge, Community & Advocacy
* For the benefit of humanity

***Courses & Placements***

***Technical Courses***

* ***Mechanical***
* ***AutoCad***

AutoCAD is the standard design software used in the engineering, architecture, interior design and construction industries. Designers and drafters use it to create two-dimensional (2D) and three-dimensional (3D) computer drawings. Students interested in learning how to use this software can complete coursework to earn a certificate or degree or take individual non-credit classes at a higher education institution.

Courses that earn continuing education units toward professional development and training are available at Autodesk-authorized training centers, some of which are private organizations. Some of these training options can prepare students for professional certification through Autodesk. Graduates of these programs may find employment with architectural and design firms, construction businesses or engineering companies.

The following are some of the most common topics covered in AutoCAD design courses:

* *Curves*
* *3D modeling*
* *Multiple Lines*
* *Geometric Shapes*
* *Isometric drawings*
* *Linear Dimensions*
* *Polar Arrays*
* *Layers and Line Types*

**List of Common Courses**

***Introduction to AutoCAD Course***

Introductory courses provide students with a basic knowledge of AutoCAD's interface, menu options, toolbars and operational commands. Courses often include the opportunity for students to observe the execution of professional drafting projects and learn to create their own 2D designs. Basic skills include drawing, editing, layering and plotting.

***Intermediate AutoCAD Course***

After completing prerequisite introductory instruction in AutoCAD, students often receive training in intermediate level AutoCAD skills. These can include hatching, dimensioning, cross-references, tables and block attributes. Students can also be introduced to 3D designs and related drafting skills in preparation for advanced AutoCAD training.

***Advanced AutoCAD Course***

Advanced AutoCAD courses focus on 3D designs, as well as the required navigation and modeling tools used to create 3D drawings. Students learn to use concepts such as lighting, mapping and solid-model creation. Courses can also include practice in importing and scanning images into 3D models.

***Creating Graphics in AutoCAD Course***

A course in graphics production demonstrates how AutoCAD can be used in illustration and Web design projects. Students learn to use AutoCAD in conjunction with Adobe Photoshop, Adobe Illustrator and Autodesk Impression software. Skills include correcting photographs, manipulating depth of field and creating special effects.

* ***Catia***

CATIA lets users to design shapes and reach high levels of surface sophistication with its 3D sketching, visualizatoin features. With CATIA product developers can take an integrated systems engineering approach. They can do requirements engineering, systems architecture definition, detailed modeling and simulation to manage the complex development process.

***Overview***

CATIA course introduces the user to CATIA, one of the world's leading parametric solid modeling packages. This course emphasizes on the solid modeling techniques that enhance the productivity and efficiency of the user.   
  
This course is structured in a pedagogical sequence, covering the Part, Assembly, Drafting, Wireframe & Surfaces and Generative Sheetmetal Design workbenches of CATIA. Every session provides with detailed explanation of the commands and tools in CATIA. This approach allows the user to understand and use the tool in an efficient manner.

***Learning Objectives:***  
At ApexGlobal.Tech, we help you master the following capabilities of CATIA: **Parametric solid modeling,** free-form surface modeling, reverse engineering, styling, and computer aided industrial design, engineering drawing and drafting, product and manufacturing information, reporting and analytics, verification and validation, knowledge based engineering, reuse, sheet metal design, assembly modeling, digital mockups, simulation, stress analysis, finite element method, kinematics, complete fluid dynamics, thermal analysis.

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| https://www.caddcentre.com/img/catia/web_images/parametric_3.png | https://www.caddcentre.com/img/catia/web_images/3d_annotation_5.png | https://www.caddcentre.com/img/catia/web_images/kinematics_3.png |

***Learning Outcome:***

* You will learn advanced solutions for conceptual design, 3D modeling, and documentation
* You will learn to do product design, industrial design and styling (optimize form, fit, function and user experience), streamline 2D design, drafting, documentation with powerful tools for layout, drawing, and 3D annotation You will do assembly design, sheet metal design, and template based design
* You will know how to perform CAE geometry editing, comprehensive meshing, fine element assembly management, multi-CAE environments
* You can carry out visual analysis and validation which will give you high quality performance insights for product decisions
* ***Unigraphics/NX-Cad***

Unigraphics/NX-Cad is an application software in which 3D modeling can be done. It comprises CAD/CAM/CAE in its package. This software is used for designing, analyzing and manufacturing purposes.

Unigraphics/NX-Cad, is a product of Siemens. It has CAD, and CAM solution. NX is used for parametric design, direct solid sheet metal and surface modeling, simulation with respect to static, thermal, dynamic analysis.

***Topics covered in our Unigraphics/NX-Cad course:***

1. Introduction to Unigraphics/NX-Cad Here we will go through CAD/CAM/CAE Product cycle, Parametric Technology, Introduction to UG Environment & Menu bar and Use of Mouse.
2. Sketcher Creating 2D geometry, Dimensioning & modifying dimensions, Sketching & selection methods, Task environment, selection filters, applying constraints, creating parametric sketches, Animation of constrained sketch, Editing sketches and Creating text in sketcher environment.
3. Solid Modeling (Part 1) Convert basic sketches to features, Extrude, Revolve, Creation of thin features, Thumb rule, rotating model in 3D space, Setting display modes, Usage of reference geometries, Understanding of CSYS, Axis, Projecting elements in sketching plane, Creation of various planes and CSYS Boolean operations.
4. Solid Modeling (Part 2) Trim between faces, Projecting external elements, creation of various models, Advance tools – Hole, Groove, Slot, Chamfer, Edge blend, Array features, Mirrors, etc. Creation of sweep, Swept, Tubes, threads, Converting solid to hollow feature, editing advance features, Rollback, Reorder features and Advance features – Creation of boss, Packets and Pad taper feature.
5. Assembly Types of assembly and approach, Uses and their relation reference, Bottom-up approach, Relation modification, Manipulating creation of patterns, Top-Down assembly, Creation of sub-assemblies, checking interference and clearance, Creation of exploded views and Replacing assembly constraints.
6. Drafting Introduction to Drafting environment, Selection of drawing sheet for different sizes, Creating projected & auxiliary views, view modifications, inserting section views, Detailed view & Revolved view, Manipulate drawing views, annotation, Placing exploded views, Creating notes, Tables and Inserting drawing sheets.
7. Surfacing surfacing basics, Creation of ruled surfaces, Creation of surface through curve & mesh, Swoop, Bounding, Transition, Creating 'N' sided surface, Extending of surfaces, Understanding various tools, Studio surface, Blend, Sweep methods, Adding thickness to surface, etc.

* ***Solid Works***

**SolidWorks** (stylized as SOLIDWORKS) is a solid modeling computer-aided design (CAD) and computer-aided engineering (CAE) computer program that runs on Microsoft Windows.

SolidWorks is a solid modeler, and utilizes a parametric feature-based approach to create models and assemblies. The software is written on Parasolid-kernel.

Parameters refer to constraints whose values determine the shape or geometry of the model or assembly. Parameters can be either numeric parameters, such as line lengths or circle diameters, or geometric parameters, such as tangent, parallel, concentric, horizontal or vertical, etc. Numeric parameters can be associated with each other through the use of relations, which allows them to capture design intent.

Design intent is how the creator of the part wants it to respond to changes and updates. For example, you would want the hole at the top of a beverage can to stay at the top surface, regardless of the height or size of the can. SolidWorks allows the user to specify that the hole is a feature on the top surface, and will then honor their design intent no matter what height they later assign to the can.

Features refer to the building blocks of the part. They are the shapes and operations that construct the part. Shape-based features typically begin with a 2D or 3D sketch of shapes such as bosses, holes, slots, etc. This shape is then extruded or cut to add or remove material from the part. Operation-based features are not sketch-based, and include features such as fillets, chamfers, shells, applying draft to the faces of a part, etc.

* ***Creo***

PTC Creo is a scalable, interoperable suite of product design software that delivers fast time to value. It helps teams create, analyze, view and leverage product designs downstream utilizing 2D CAD, 3D CAD, parametric & direct modeling.

**Why Pro E CREO?**

Autodesk inventor is a virtual mechanical 3D modeling tool, used to create Part, Assembly, sheet metal and Drafting, of all automotive and mechanical designs.

Creo is a suite of design software supporting product design for discrete manufacturers and is developed by PTC. The suite consists of apps, each delivering a distinct set of capabilities for a user role within product development.

Creo runs on Microsoft Windows and provides apps for 3D CAD parametric feature solid modeling, 3D direct modeling, 2D orthographic views, Finite Element Analysis and simulation, schematic design, technical illustrations, and viewing and visualization.

Creo Elements/ Pro and Creo Parametric compete directly with CATIA, Siemens NX/Solidedge, and Solidworks. The Creo suite of apps replace and supersede PTC’s products formerly known as Pro/ENGINEER, CoCreate, and ProductView. Creo has many different software package solutions and features.

* ***Hypermesh***

**About the software**

HyperWorks provides the most comprehensive, open-architecture CAE solution in the industry, including best-in-class modeling, analysis, visualization and data management solutions for linear, nonlinear, structural optimization, fluid-structure interaction, and multi-body dynamics applications.

The courses will help you master in Hypermesh that has some of the following core capabilities after completion of the course:

* Knowledge on FEM pre-process
* Efficiently creating nodes lines and surfaces
* Efficiently working on importing CAD geometry and extracting mid surface
* Performing geometrical cleaning up
* Generating quality 2D mesh
* ***Abaqus***

Alternatively referred to as the counting frame, an abaqus is a mechanical device used to assist a person in performing mathematical calculations and counting. Before computers, calculators, or even arithmetic using paper and pencil, the abaqus was the most advanced device for crunching numbers.

Abaqus is still used as a primary counting device or as a backup to more modern counting devices.

Learning to use the abaqus helps teach you a new way of counting and how to add and subtract using complementary numbers. By learning to solve problems in new ways, you can come up with better and often easier solutions to all sorts of problems.

* ***Ansys***

Ansys, Inc. is an engineering simulation software (computer-aided engineering, or CAE) developer headquartered south of Pittsburgh. One of its most significant products is Ansys CFD, a proprietary computational fluid dynamics (CFD) program.

ANSYS simulation software enables organizations to confidently predict how their products will operate in the real world.

***Learning Outcome:***

ApexGlobal.Tech provides a wide range of courses to help you master in Ansys that has some of the following core capabilities:

After completion of the course:

* Knowledge on FEM
* Efficiently can work on tool by solving problems
* Efficiently perform static analysis
* Efficiently perform modal analysis
* Efficiently perform dynamic analysis
* Efficiently perform thermal analysis
* Efficiently work on pre-process solve and post-process
* ***Nastran***

NASTRAN is a finite element analysis (FEA) program that was originally developed for NASA in the late 1960s. The MacNeal-Schwendler Corporation (MSC) was one of the principal and original developers of the publicly available NASTRAN code.

Our MSC Software courses are designed to provide you with exclusive product knowledge. Our course developers and instructors work with product developers to gain exposure to new product capabilities. This unique insight is shared with you through official courseware that incorporates the most useful tips and techniques.  
  
Our expert instructors know that not everyone learns in the same way. That’s why the MSC training team—engineers themselves with advanced degrees and years of industry experience—uses a variety of techniques to reinforce concepts and build proficiency. These techniques include innovative training materials and hands-on labs that enrich the learning process.

* ***HVAC***
* ***Civil***
* ***Revit Architecture***

Autodesk’s Revit Architecture is a Building Information Modeling software tool for architects, structural engineers, engineers, and contractors. It allows users to design a building and its components in 3D, annotate the model with 2D drafting elements and access building information from the building models database.

Revit comes with tools to plan and track various stages in the building's lifecycle, from concept to construction and later demolition.

Revit software delivers tools that support architectural design, MEP engineering, structural engineering, and construction. Revit is specifically built for BIM to help you design, build, and maintain higher-quality, more energy-efficient buildings. Comprehensive features make it an ideal solution for the entire building project team.

By learning Revit, you as a design and construction professional, will be able to bring ideas from concept to construction with a coordinated and consistent model-based approach.

***Learning Objectives:***

ApexGlobal.Tech provides a wide range of courses to help you master Revit Architecture that has some of the following core capabilities:

* Analysis: Building element energy analysis; Enhanced structural analytical model; Duct and pipe calculations to API; Physical materials for performance analysis
* Collaboration: Work-sharing – multiple users save their work to a central file; collaboration on shared models across a WAN; work from remote locations using a local server
* Design: More easily model, edit, and document designs of stairs and railings; parametric components - graphical system for design, form making; HVAC/electrical design room color-fill plans and communication of design intent, visually
* Visualization for creating displaced building design views; improvement of performance for visualization; capturing of design ideas in a photorealistic state, and reduction of project cost with cloud-based rendering

***Learning Outcome:***

* You will know how to develop higher-quality, more accurate architectural designs; use tools specifically built to support Building Information Modeling workflows
* You will know how to capture and analyze concepts, and maintain your vision through design, documentation, and construction
* You will know how to do building element energy analysis; use the API to perform pipe/duct calculations; perform static analysis from the cloud; create/manage the structural analytical model; automatically update your model with analysis results; and improve BIM-based building performance workflows
* You will know how to scan Revit model for collisions between elements; work with multiple users and save their work to a central file; collaborate on shared models across a WAN; streamline data management; and work from remote locations using a local server
* You will know how to dock dialogs in a single window; more easily model, edit, and document designs; place air terminal devices on duct faces; restrict angles for pipe, duct, and cable tray; cap open ends of pipe or duct content quickly; rebar placement constraints customization; gain control over rebar placement; and get more rebar options when modeling
* You will learn to crop non-rectangular model areas faster; easily manage elevation cut-line configuration; automatically display dimension values; annotate multiple elements with a single tag; define geometry and position for beams and braces; get greater control of schedule formatting; derive construction insight from design models; calculate/track detailed material quantities, display totals in current or load values, and create details from views of a 3D model
* ***3ds Max***

3ds Max from Autodesk focuses primarily on the Designing and Entertainment Media with a comprehensive 3D modeling, animation, rendering, and compositing solution for professionals in Product designing, Video Games, Film, and motion graphics industry.

The training program takes you through the essentials of imaging, modeling and animation, through a variety of powerful tools and functions. The Course provides you with the versatility and agility to move through the interface and tools to deliver the required results.

The training will provide you with sufficient skills in Designing & Production with the necessary exposure to using 3D work space, organising scenes & objects, exploring the tools in Camera, Lighting & 3D Rendering.

##### **3D MODELLING & TEXTURING**

* Surface modeling
* Texture assignment & editing
* Shading & material design
* Vector map support
* Substance procedural textures

##### **3D ANIMATION**

Character Animation, Rigging

##### **DYNAMICS & EFFECTS**

Particle Flow, Cloth simulation, Hair & Fur

##### **3D RENDERING**

Rendering systems, iray renderer

##### **UI, WORKFLOW & PIPELINE**

2D pan & zoom, Adobe After Effects, Data Transfer, pipeline/compositing integration etc

* ***Etabs***

The innovative and revolutionary new ETABS is the ultimate integrated software package for the structural analysis and design of buildings. Incorporating 40 years of continuous research and development, this latest ETABS offers unmatched 3D object based modeling and visualization tools, blazingly fast linear and nonlinear analytical power, sophisticated and comprehensive design capabilities for a wide-range of materials, and insightful graphic displays, reports, and schematic drawings that allow users to quickly and easily decipher and understand analysis and design results.

From the start of design conception through the production of schematic drawings, ETABS integrates every aspect of the engineering design process. Creation of models has never been easier - intuitive drawing commands allow for the rapid generation of floor and elevation framing. CAD drawings can be converted directly into ETABS models or used as templates onto which ETABS objects may be overlaid. The state-of-the-art SAPFire 64-bit solver allows extremely large and complex models to be rapidly analyzed, and supports nonlinear modeling techniques such as construction sequencing and time effects (e.g., creep and shrinkage).

Design of steel and concrete frames (with automated optimization), composite beams, composite columns, steel joists, and concrete and masonry shear walls is included, as is the capacity check for steel connections and base plates. Models may be realistically rendered, and all results can be shown directly on the structure. Comprehensive and customizable reports are available for all analysis and design output, and schematic construction drawings of framing plans, schedules, details, and cross-sections may be generated for concrete and steel structures.

ETABS provides an unequaled suite of tools for structural engineers designing buildings, whether they are working on one-story industrial structures or the tallest commercial high-rises. Immensely capable, yet easy-to-use, has been the hallmark of ETABS since its introduction decades ago, and this latest release continues that tradition by providing engineers with the technologically-advanced, yet intuitive, software they require to be their most productive.

***Management Courses – By Whilo India***

* ***Full-Term Courses (90 Days)***
* ***Corporate Leadership Program***

Whilo Corporate Leadership Program, the instructor led training program integrated with modern teaching pedagogy makes the learning more exciting and instrumental. Our transformative training program has built generic competency in the students that is required to excel in the workforce and sustain growth with better livelihood.

Designed as an intensive immerse course, it aims to create a fundamental transformation among students, by focusing on:

* Functional skills that are core to the industry
* Critical thinking skills & problem solving skills to produce well rounded professionals
* Soft skills such as verbal and written communication
* Development of entrepreneurial skills to encourage people to establish their own business

**Training Curriculum**

|  |  |  |
| --- | --- | --- |
| **Effcom** | | |
| Communication Skills | English Communication | 30 Hours |
|  | | |
| **Fusion** | | |
| Communication Skills | Building Confidence | 2 Hours |
| Communication Skills | Reading and Comprehension Skills | 2 Hours |
| Personality | Stage Behaviour & Presentation Skills | 3 Hours |
| Personality | Body Language | 5 Hours |
| Personality | Grooming & Dressing | 3 Hours |
|  | | |
| **Dataman** | | |
| Communication Skills | Writing Skills | 1.5 Hours |
| Communication Skills | Content Design & Management + MS Word | 4.5 Hours |
| Technical Skills | Reporting & Analysis: MS Excel | 6 Hours |
| Technical Skills | Job Search Behaviour, Internet Browsing & Email | 3 Hours |
|  | | |
| **Lead** | | |
| Technical Skills | Team /Project Management | 4 Hours |
| Technical Skills | Problem Solving | 4 Hours |
| Knowledge | Skills vs. Opportunities | 1.5 Hours |
| Communication Skills | Public Speaking Skills & Group Discussion | 4 Hours |
| Personality | Career Growth & Industry Readiness | 1.5 Hours |
|  | | |
| **Play** | | |
| Communication Skills | Resume Drafting, Interview Skills, Aptitude Tests & Mock Interview | 15 Hours |

* ***Business English Communication Skills***

Whilo Business English Communication Skills, the instructor led training program integrated with modern teaching pedagogy makes the learning & speaking in English more exciting and instrumental.

This Specialization is designed to teach you to communicate effectively in English in professional contexts. You will expand your English vocabulary, improve your ability to write and speak in English in both social and professional interactions, and learn terminology and skills that you can apply to business negotiations, telephone conversations, written reports and emails, and professional presentations.

During the course, you will begin learning vocabulary and customs related to socializing and networking in English. The goal is to enable you to interact with business contacts in person, on the phone and over email in a professional way.

**Course Learning Objectives**

* Determine whether the objectives of this Specialization align with your learning goals
* Evaluate your current level of proficiency in business English communication
* Present relevant information about yourself in a discussion forum
* Develop your networking skills
* Write short emails with appropriate formatting
* Recognize and produce formal and informal language in emails
* Develop vocabulary related to jobs and companies
* ***Spoken English Communication Skills***

This course is a **simple, fun,** and **effective** way to learn new words and expressions – and improve your ability to speak in English.

Each lesson is based on conversations on a specific topic. Reading and listening to the dialogues will help you **improve your understanding** of spoken English.

The next part of the lesson explains and expands upon the vocabulary you heard in the conversations, teaching you **new words** and showing you how to use them.

There are lots of **practice phrases** which you can listen to and repeat to improve your English speaking. **Quizzes** will help you test yourself and remember the new vocabulary

Our core class is an integrated skills class. It covers reading, writing, speaking, listening, grammar, vocabulary and critical thinking. In this class you'll improve your accuracy (how correct your English is) and fluency (how well you can communicate). We use the Communicative Approach, so you'll learn English by using English—not by listening to grammar lectures and doing worksheets. We feel strongly that this is the most effective method to acquire English that students can use in the real world.  
  
Each week you will be encouraged to consider your own development and suggest areas that will help you develop most quickly. This is what we call a ‘negotiated syllabus’ and your teacher will expect you to comment on the weekly plan which is displayed on the classroom wall. Your teacher will take your suggestions and use them with the syllabus to create lessons for your class that work for you.

On your first day you will take a language assessment, to assess your knowledge of grammar and vocabulary and how well you are able to understand and speak English. This helps us to understand the class you’ll be happiest and most successful in.

***Short-Term Courses (10 Days) – By Whilo India***

* ***Team & Project Management***
* ***Job Search & Interview Management Skills***
* ***Public Relations & Customer Management Skills***
* ***Sales & Marketing Skills***
* ***Internet Browsing & Emailing Skills***