



Shankersinh Vaghela Bapu Institute of Technology
Department of Civil Engineering

**“ADVANCE BUILDING INFORMATION
MODELLING (BIM) USING AUTODESK REVIT”**

UNDER

**Centre for Continuing Education
Gujarat Technological University**

In collaboration with

Shankersinh Vaghela Bapu Institute of Technology

About Gujarat Technological University

Gujarat Technological University is a premier academic and research institution which has driven new ways of thinking since its 2007 founding, established by the Government of Gujarat vide Gujarat Act No. 20 of 2007. Today, GTU is an intellectual destination that draws inspired scholars to its campus, keeping GTU at the nexus of ideas that challenge and change the world.

GTU is a State University with 486 affiliated colleges in its fold operating across the state of Gujarat through its SIX zones at Ahmedabad, Gandhinagar, Vallabh Vidyanagar, Rajkot, Surat and Bhuj . The University caters to the fields of Engineering, Architecture, Management, Pharmacy and Computer Science. The University has about 2,25,000 students enrolled in a large number of Diploma, Under Graduate, Post Graduate programs along with the robust Doctoral Program.

About Proposer Institute

The Bapu Gujarat Knowledge Village (Bapu GKV) established in 2009 to promote professional education in Gujarat and particularly in and around Ahmedabad-Gandhinagar region. The trust and educational institute under the umbrella of Bapu GKV managed and promoted under the guidance of Chairman Shri.Shankersinh Vaghela Bapu, a popular leader known for his pioneering efforts for social development.

The Bapu Gujarat Knowledge Village, spread across 40 acres land at Vasan, Gandhinagar with its all Red brick architecture, lush verdant woods and landscaped gardens, provides an ideal environment for the students to engage in academic activities. The Institutes here have world class infrastructure that facilitates excellence in teaching, research, consulting and other professional activities. Located in Gujarat's high-tech capital, Bapu GKV is close proximity to some of the leading corporate houses in the country, ranging from information technology to consumer product companies, giving in the added advantage of integrating classroom knowledge with practical experience. Institute strives to achieve excellence through partnership with industries and leading academic institutions in Gujarat.

Established with the institutes of Engineering and Pharmacy, Science, Commerce and Law institutes were commenced in consecutive years. Introduction of General hospital with Ayurveda clinic giving free consultation and medicines to the patients was an audacious step towards the opening into the medical field. Moreover in the next year introduction of nursing courses in ANM & B.Sc made the campus extend beyond into the para-medical sciences.

All in All, Bapu GKV's mission is to build leaders through holistic, transformative and innovative education

ABOUT COURSE

Course	“Advance Building Information Modelling (BIM) Using Autodesk Revit”
Coordinators	1. Prof. Mittal Patel - Assistant Professor in Civil 2 Prof. Khalid Siddiqui – Assistant Professor in Mechanical
Course Duration	50 Hours (01/08/2022 to 30/09/2022)
Eligibility	Diploma Pursuing or Completed Degree Pursuing or Completed (Civil Or Architectural)
FEES	7000

REVIT SIGNIFICANT OBJECTIVES

Revit software brings tools to support architectural designers, MEP engineers, structural engineers, and constructors. Revit is specially designed for BIM (Building Information Modeling) to design, build, and maintain higher-quality, and energy-efficient building designs. Complete features make this tool an ideal solution for the whole building project team. By learning Revit, one as a design and construction expert, will be able to make ideas from concept to construction with a synchronized and steady model-based approach.

- Parametric Modelling
- Automation
- Collaboration
- Co-ordination
- Scheduling
- Huge Ready Library
- Energy Analytics
- Rendering Presentation
- Construction Documentation
- Drawing Sheet Set up
- Cloud bases access

OUTCOMES OF COURSE

- Student will learn to develop higher-quality, more accurate architectural designs; use tools specifically built to support Building Information Modelling workflows.
- Students will learn to capture and analyse concepts, and maintain your vision through design, documentation, and construction.
- Students will learn to create/manage the structural analytical model, automatically update your model with analysis results and improve BIM-based building performance workflows.
- Student 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.
- Student will learn to create Architectural Elevations along with Floor plans, Structural Design with reinforcement and 3D Rendering with realistic textures.

RESOURCE PERSON PROFILE

Harshil Shah

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+919998683316

Summary

Do you required some creative Product Design Or Engineering Design Solutions ? If Yes then I can help you.

- ✓#Training

We are an Engineering Innovative Design Institute for CAD-CAM-CAE & GRAPHIC DESIGN Training. We provide training to engineering students, professionals and also to corporate clients. We at Symmetric Solution completely understand the potential of various Engineering areas like, Mechanical Engineering, Automobile Engineering, Production engineering and Civil Engineering. We are expert in AutoCAD, PTC Creo, SolidWorks, Catia, SketchUP, Ansys, Revit and many other advance software.\

- ✓#Services

We provide CAD-CAM-CAE & 3D Printing services to a variety of industries including Machinery, Heavy Equipment, Consumer goods, Automotive, Aerospace, Packaging, Green energy, Transportation, etc. We possess deep domain skills in basic design, detail engineering, 3D modelling, Analysis and the project management to create distinct and enduring synergies with our client's business mission & goals. We add value to every aspect of an organization's existence, by taking a creative view of business model conception, market

evaluation through to new product development & customer relationships. We have successfully executed projects for several well-known multinational & leading Indian corporate. Our award winning team of professional have received International recognition for their work and for value added assistance to several multinational companies as well as start-ups in a wide range of areas.

- #Specialties:
- # System & Product Design
- # Additive Manufacturing (3D Printing)

Reverse Engineering

Technical Publication & Illustration Development Service

Engineering Drawing Service

2D to 3D Conversion

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- # Paper To Electronic Conversion
 - # CAD to CAD
 - # 3D Printing (RPT)
 - # Engineering Animation

 - # Fabrication Detail Engineering
 - # Finite Element Analysis (Structural & Thermal)
 - # Computational Fluid Dynamic Analysis
 - # 3D Architectural Design
 - # Rendering Service
 - # Graphic Design

Experience



Design Technologist

Symmetric CAD Solutions Pvt Ltd
Jul 2013 - Present (9 years 1 month +)

- Business Development
- Recruitment Process
- Social Media Marketing
- Technical Guide
- Engineering Designing
- Software Training
- Corporate Training
- Customer Relationship

- Managed all phases of the design process for a multitude of products, components, parts, assemblies and subassemblies, including drafting, dimensioning, tolerancing, prototyping and documenting results with PDM/PLM. Known for quality excellence and a “do-it-right-the-first-time” design standard.
- Designed innovative component/module replacements for existing machinery that improved functioning and extended the life of equipment thought to be obsolete for a fraction of the total replacement cost.
- Became the go-to expert on evaluating design models for ISO, DFM and form-fit-function compliance. Saved thousands of dollars in costly rework through careful design review that identified flaws in new subassembly and parts models prior to production.
- Taught and guided junior employees to perform tasks such as simulation, analysis, manufacturing drawing, material selection, and cost estimation.
- Documented technical reports and design activities to maintain records of the current projects and kept the system efficient and information organized.

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- Collaborated well with team members to carry out daily assignments and achieve team targets
 - Communicated with customers to understand the actual need providing solutions/improvement to their existing machine or developing the new one.
 - liaised between electrical and IT team for automation & control to develop SPM-Special Purpose
 -
 - **Machine**
 - Had taken customer validation at each stage of product development from a concept to the actual prototype development.
 - Performance of simulation, optimization and analysis on CAD models, Verifying the drawings as per ISO standards with proper tolerance and GD&T and standardization of components.
 - Responsible for cost estimation, optimization of machine/components and proper material selection.

Design & Drafting Technologist

Optimizt Technologies

Jun 2010 - Jul 2013 (3 years 2 months) CAD/CAE Software Training

Product Design

Business Development

- Produced detailed technical drawings, schematics and assembly of mechanical designs.
- Estimated costs for design and manufacturing of special-purpose machines and developed prototypes.
- Investigated failures in equipment operation to diagnose issues and make proactive design changes.
- Maintained and updated files and records to support efficient systems and organized operations.
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Handled corporate training on CAD & CAE software.

- Satisfied customers by delivering speedy and expert service for all design needs.
- Lead teams through routine operations and unexpected challenges with strong decision-making skills and expert industrial design knowledge.

Engineer Intern

Landmark Honda Pvt. Ltd.

Jul 2009 - Mar 2010 (9 months) Warranty Incharge

Customer Relation Car Service Service Adviser

Education

Sardar Patel University

Bachelor of Engineering, Automobile Engineering

Jul 2005 - Apr 2010

Studied Automobile & Mechanical Design from A. D. Patel Institute of Technology.

Licenses & Certifications



PTC Authorized Instructor - Creo For Design Engineer - PTC



PTC Authorized Instructor - Creo For Industrial Designer - PTC



PTC Authorized Instructor - Creo For Analyst - PT



**Certified Advance Sheetmetal Professional InSolidworks (CSWAP-SM) -
Dassault Systèmes**

C-A7DPT95XFK



**Certified Advance Drawing Tools Professional InSolidworks (CSWAP-DT) -
Dassault Systèmes**

C-YEMBKXLJD3



Certified Mechanical Design Professional InSolidworks (CSWP) - Dassault

Systèmes C-WKL4GAXBQC



PTC Creo Parametric 6.0 - PTC  IGIS CAD - Scanpoint Geomatics Ltd



Certified Mechanical Design Associate InSolidworks (CSWA) - Dassault

Systèmes C-HS9ENWU8XV



Verified International Academic Qualifications - World Education Services

5201453IMM



Certified Weldments Professional InSolidworks (CSWPA - Weldments) - Dassault

Systèmes C-Y8NGTH9RB2

kills

Product design • Finite Element Analysis • Computer-Aided Design (CAD) • CFD •
Graphic Design • Engineering • Manufacturing • Computer-Aided Design (CAD) •
Product Development • Mechanical Engineering

DATE AND SESSION WISE COURSE CONTENT **DELIVERED**

Sr. No.	Topics	Theory/Practical	Hours	DATE
1	<ul style="list-style-type: none"> • Introduction • Working Environment 	Theory	2	26/9/2022
2	<ul style="list-style-type: none"> • Architecture Design • Level & Grid Creation • Sketching Tools 	Theory	2	27/9/2022
3	<ul style="list-style-type: none"> • Practice Session 	Practical	2	28/9/2022
4	<ul style="list-style-type: none"> • Model Line & Modification Tools 	Theory	2	29/9/2022
5	<ul style="list-style-type: none"> • Wall Creation 	Theory	2	30/9/2022
6	<ul style="list-style-type: none"> • Floor & Slab Creation • Roof Creation 	Theory	2	6/10/2022
7	<ul style="list-style-type: none"> • Practice Session 	Practical	2	10/10/2022
8	<ul style="list-style-type: none"> • Creating Opening • Ceiling, Furniture Layout & Group • Creation Of Railing & Ramp 	Theory	2	11/10/2022
9	<ul style="list-style-type: none"> • Creation Of Stair • Annotations In Revit Project • Area & Rooms 	Theory	2	14/11/2022
10	<ul style="list-style-type: none"> • Project for Practice 	Practical	2	15/11/2022
11	<ul style="list-style-type: none"> • Components • Furniture Layout • Model in place (Family Creation) 	Theory	2	16/11/2022
12	<ul style="list-style-type: none"> • Model in place (Family Creation) • Family 	Theory	2	17/11/2022
13	<ul style="list-style-type: none"> • Elevation Design Practice 	Practical	2	18/11/2022
14	<ul style="list-style-type: none"> • Import, Export & Linking Files 	Theory	2	21/11/2022

	<ul style="list-style-type: none"> • Massing & Sites 			
15	<ul style="list-style-type: none"> • Structure Design • Columns • Slab • Foundation 	Theory	2	22/11/2022
16	<ul style="list-style-type: none"> • Beam • Trusses • Reinforcement (Rebars & All) • Steel 	Theory	2	23/11/2022
17	<ul style="list-style-type: none"> • Project for Practice 	Practical	2	24/11/2022
18	<ul style="list-style-type: none"> • Section Plans • Callout Views • Area Plan • Remain All View Details 	Theory	2	25/11/2022
19	<ul style="list-style-type: none"> • Costing & Scheduling • Quantities • Legends 	Theory	2	28/11/2022
20	<ul style="list-style-type: none"> • Practice 	Practical	2	29/11/2022
21	<ul style="list-style-type: none"> • Material, Texture & Paints 	Theory	2	30/11/2022
22	<ul style="list-style-type: none"> • Rendering in Revit 	Theory	2	1/12/2022
23	<ul style="list-style-type: none"> • Sheets Layout & Export 	Theory	2	2/12/2022
24	<ul style="list-style-type: none"> • Practice Session 	Practical	2	5/12/2022
25	<ul style="list-style-type: none"> • Final Project Case Study 	Theory	2	6/12/2022
26	<ul style="list-style-type: none"> • Evaluation Examination 	Practical / Theory	2	9/12/2022
TOTAL HOURS			52	



LIST OF PARTICIPANTS

Serial no.	Enrollment Number	Name of Participant
1	CCE01060001	Acharya Pratham
2	CCE01060002	Barvaliya Chintan
3	CCE01060003	Bhil Nilesh
4	CCE01060004	Chandradhari gautam
5	CCE01060005	Chauhan Jaimitji
6	CCE01060006	Chauhan Mahipalsinh
7	CCE01060007	Dharmishtha Chauhan
8	CCE01060008	GAURANK VARMA SHREERAM BHAI
9	CCE01060009	HARSHIL KHALAS
10	CCE01060010	Kadiya Manan Nareshbhai
11	CCE01060011	KEVIN NAKRANI
12	CCE01060012	Meetkumar Nileshbhai Patel
13	CCE01060013	Mohammadhajim Kutbuddin Shaikh
14	CCE01060014	Nishang Manishkumar Solanki
15	CCE01060015	PATEL MAYANK J.
16	CCE01060016	PATEL MAYUR ROHITBHAI
17	CCE01060017	Patel Shubh Bharatbhai
18	CCE01060018	Prajapati Achal Nareshbhai
19	CCE01060019	Prajapati Bankim D.
20	CCE01060020	Prajapati Bhargavkumar
21	CCE01060021	Prajapati Raj Pravinbhai
22	CCE01060022	SATHAVARA PREETKUMAR M.
23	CCE01060023	Shrutik Sanjaybhai Kadiya
24	CCE01060024	Sneha Ashish Parmar
25	CCE01060025	VAGHELA YASHKUMAR VINODKUMAR

EVALUTION METHODOLOGY

INTERNAL MARKS	EXTERNAL MARKS
40	60
BASE ON VIVA	PRACTICAL

ESULT AFTER EVALUATION

Gujarat Technological University			
Centre for Continuing Education			
Marks of Learners (Internal & External)			
Course Name: Advance Building Information Modelling (BIM) using Autodesk Revit (Batch 1)		Exam Date: 23/12/2022	Internal Examiner: Prof. Mittal Patel Assistant Professor Shankersinh Vaghela Bapu Institute of Technology
Course Code: CCE0106		Exam Centre: Shankersinh Vaghela Bapu Institute of Technology	External Examiner: Mr. Karan Upadhyay Sr. Architect- Nirman Associates
Enrollment Number	Name of Learner	Obtained Internal Marks (out of 40)	Obtained External Marks (out of 60)
CCE01060001	Acharya Pratham	35	52
CCE01060002	Barvaliya Chintan	36	51
CCE01060003	Bhil Nilesh	37	49
CCE01060004	Chandradhari gautam	36	50
CCE01060005	Chauhan Jaimitji	38	53
CCE01060006	Chauhan Mahipalsinh	35	51
CCE01060007	Dhamishtha Chauhan	35	52
CCE01060008	GAURANK VARMA SHREERAM	37	49
CCE01060009	HARSHIL KHALAS	36	55
CCE01060010	Kadiya Manan Nareshbhai	35	52
CCE01060011	KEVIN NAKRANI	36	50
CCE01060012	Meetkumar Nileshbhai Patel	20	30
CCE01060013	Mohammadhajim Kutbuddin Shaikh	38	55
CCE01060014	Nishang Manishkumar Solanki	33	50
CCE01060015	PATEL MAYANK J.	34	52
CCE01060016	PATEL MAYUR ROHITBHAI	36	49
CCE01060017	Patel Shubh Bharatbhai	33	48
CCE01060018	Prajapati Achal Nareshbhai	36	50
CCE01060019	Prajapati Bankim D.	39	52
CCE01060020	Prajapati Bhargavkumar	39	55
CCE01060021	Prajapati Raj Pravinbhai	38	51
CCE01060022	SATHAVARA PREETKUMAR M.	39	56
CCE01060023	Shrutik Sanjaybhai Kadiya	30	40
CCE01060024	Sneha Ashish Parmar	37	54
CCE01060025	VAGHELA YASHKUMAR VINODKUMAR	36	51
Signature: _____			
Name:		Prof. Mittal Patel	Mr. Karan Upadhyay

FEEDBACK FORM PARTICIPANTS

Full Name	College Enrollment No.	Email	Expert Trainer Quality	Was this Training helpful in your career?	Training Content Quality	Did you get appropriate knowledge about	Provided soft copy Material Quality	Any comment or suggestion
Patel mayank j	200750106501	mayankjipatel8@gmail.com	Excellent	Very much	Good	Yes	Good	
Mohammadhajim kutbuddin shaik	209650306006	209650306006@bapugkv.ac.in	Excellent	Very much	Excellent	Yes	Excellent	
Vaghela yash	219650306006	vyash51621@gmail.com	Good	Very much	Good	Yes	Good	
Harshil khalas	219650306015	harshikhallas@gmail.com	Good	Very much	Excellent	Yes	Good	
Patel Mayur Rohit bhai	219650306014	patelmayur47727@email.com	Excellent	Very much	Excellent	Yes	Good	
Nishang M Solanki	209650306008	nishang1242001@gmail.com	Excellent	Very much	Excellent	Yes	Excellent	
Acharya pratham hiteshkumar	210750106505	Prathamacharya0792@gmail.com	Excellent	Very much	Excellent	Yes	Excellent	
CHANDRADHARI GAUTAM	200750106513	gautamb.cv@gmail.com	Excellent	Very much	Excellent	Yes	Excellent	Yeah it's good that we got knowledge more than what we expected. But In my experience if we increase the limit of practical session, it will be beneficiary more.
Bankim Prajapati	200750106503	prajapatibankim123@gmail.com	Excellent	Very much	Excellent	Yes	Excellent	it was a great course. an expert trainer is excellent skills in learning Revit. I recommend to other students for this course. I was able to learn this course better with the help of sir. Thank you GTU for launch this course.
Kevin nakrani	189650306505	kdrk2306@gmail.com	Excellent	Very much	Excellent	Yes	Excellent	Keep it up
Manan NKadiya	200750106509	manankadiya98@gmail.com	Excellent	Very much	Excellent	Yes	Excellent	
Kadiya shrutik sanjay bhai	209650306005	bapu@gkv.ac.in	Good	Very much	Excellent	Yes	Good	
Kadiyashrutik Sanjay bhai	209650306005	shrutik909@gamil.com	Excellent	Very much	Excellent	Yes	Excellent	
AVARA PREETKUMAR MUKESH	200750106506	preetsathavara2002@gmail.com	Good	Very much	Good	Yes	Good	
Bhil Nilesh sureshbhai	210750106508	nileshbhil7272@gmail.com	Good	Very much	Good	Yes	Good	
Gorank varma	219630506011	gorankverma805@gmail.com	Good	Very much	Good	Yes	Excellent	It's software is very helpful because my diploma runing this softw are my better my skills thanks my college and thanks my sir
CHAUHAN JAIMITJI DHANUJI	210750106504	aimitsinhchauhan2002@gmail.com	Excellent	Very much	Excellent	Yes	Excellent	-
Raj prajapati	190750106007	rajprajapati6010@gmail.com	Excellent	Very much	Excellent	Yes	Excellent	
Barvaliya chintan g	210750106501	chintanpatel34371@gmail.com	Excellent	Very much	Excellent	Yes	Excellent	

FEW PHOTOGRAPHS OF COURSE CONTENT DELIVERY







