



JANUARY -2023

*BUILTCON*

# BUILTCON

## Dreams of Construction

### OUR DEPARTMENT 'S...

#### VISION

To develop dynamic learning environment in the field of civil engineering to congregate the professional skills and innovative needs of the society.

#### MISSION

- To impart quality technical education by dedicated faculty using innovative learning techniques.
- To bridge the gap between professionals and academic institute.
- To inculcate moral and ethical values among the students.
- To create awareness and thirst for lifelong learning keeping in mind sustainable issues, technological trends and entrepreneurship.
- To emerge as a reliable knowledge hub for the industry, academia and society.



**CIVIL ENGINEERING DEPARTMENT**

**GOVERNMENT POLYTECHNIC FOR GIRLS**

**OPP. PRL, GUJARAT UNIVERSITY ROAD, NAVARANGPURA, AHMEDABAD – 380 015**



## Acknowledgment

Civil Engineering Department of Government Polytechnic for Girls, Ahmedabad feels concrete to present its genuine stakeholders "BUILTCON" a semester with newsletter. This newsletter "BUILTCON" started with an objective of knowledge sharing and spreading divergent activities of Civil Engineering Department. Civil Engineering Department would also like to focus on new technology in construction field, latest ongoing and upcoming trends and events, previous month's news and events.

Civil Engineering Department consider this newsletter "BUILTCON" as a best place to appreciate the students, faculty members and stake holders for their achievements. Civil Engineering Department hope, this newsletter provides necessary motivation to the stake holders as well as also very much helpful to update our knowledge of fast-growing Civil Engineering and construction field.

Finally, Civil Engineering Department would like to extend our deepest gratitude to all members who directly or indirectly involved and give their valuable support for making this newsletter "BUILTCON". We know that without grace of all mighty GOD this thing is not possible. So, here by we are presenting Eighth Volume of "BUILTCON".

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## Message from Principal's Desk



**Mr. B. J. Iyer**

**“Technology is the Gift of God. After the gift of life it is perhaps the greatest God’s gifts. It is the mother of civilization, of arts and of sciences.”**

**Freeman Dyson**

Government Polytechnic for Girls - Ahmedabad (GPGA), a premier diploma engineering institute was established in the year 1968 with the aim to provide technical education to girls in the heritage city of Ahmedabad. It is located right opposite to PRL and adjacent to ATIRA, in the throbbing educational hub within the heart of the city and in the vicinity of reputed institutes like L.D.College of Engg., Gujarat University, L.M.College of Pharmacy and the world renowned CEPT University. It is endowed with a beautiful green campus which has its own flora and fauna.

At present, GPGA offers 3 year diplomas in 6 programmes under Commissionerate of Technical Education and is affiliated with Gujarat Technological University (GTU). These are Diplomas in Architecture Assistantship (DAA), Biomedical Engineering (DBE), Computer Aided Costume Design and Dress Making (DCACDDM), Civil Engineering (DCE), Computer Engineering (DCoE), Electronics and Communication Engineering (DEC) and Information Technology Engineering (ITE).

GPGA has a tradition of imparting quality technical knowledge and ethical values to the students. No wonder GPGA is ranked among top 10 government diploma engineering colleges in Gujarat consistently over the last five years.

For years, the institute’s major focus and concern have been our students and our institution strive to impart the best knowledge in respective fields for promoting and pursuing multidisciplinary diploma engineering in the most disciplined manner. Every student of the



institute has been among some of the best talents of the vibrant state of Gujarat. Many of GPGA's alumnae have established themselves as entrepreneurs while some have continued higher studies with well-known engineering institutes of India as well as abroad. Thus they have carved a niche for themselves in various technical fields throughout the state, our nation and even abroad.

The institute has an excellent track record of placements in past few years and students of GPGA have proved their mettle in industry, academics, and administration over the last many years. This glory has been due to the synergetic efforts of management, learned faculty, dedicated staff and sincere students over these years. I urge everyone, including staff and students, to make excellent careers by availing the unique opportunity that GPGA provides through classroom teaching, laboratory instructions, industrial trainings and participation in sports, cultural and other extra-curricular activities of interest. Recently, formation of GPGA's Alumnae Association has also been undertaken.

During the current academic year, three programmes of GPGA i.e. DCACDDM, DCE and DCoE have initiated the process of application for Accreditation with NBA. For the faculty and administrators, accreditation promotes ongoing self-evaluation and continuous improvement and provides an effective system for accountability. For the institute or programme, accreditation enhances its national reputation and represents peer recognition. Thus to further the institute's aim towards excellence, accreditation process has been undertaken. I extend my best wishes to all staff members and students of these programmes for getting accredited in the year 2021.

I express my sincere gratitude to all our stakeholders for their continued support, cooperation and active involvement to make GPGA a citadel of Technical Learning, which sets its own benchmark.

## *Message from HOD's Desk*



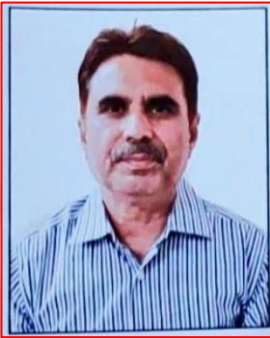
**Mr. H. S. PATEL  
(I/C HOD)**

Dear Students,

Skill development is the only way to self-reliance. You are the root of development. Put your efforts to achieve good grades by understanding, learning and inculcating skills under your faculty's able guidance. I assure you our whole hearted support and dedication at every stage of your learning have to make your dream a reality.

With best wishes.....

## Faculties information of Civil Engineering Department



Mr. H. S. Patel  
(M.E, WRM)



Mr. M. M. Savarkundlawala  
(M.E, WRM)



Mr. D. H. Dalal  
(M.E, WRM)



Mrs. F. P. Ambalia  
(M. Tech., Town Planning)



Dr. Nilesh Jha (PhD)



Ms. I. M. Upadhyay  
(M.E, WRM)



Ms. B. H. Dave  
(M.E, Infrastructure)



Ms. T. R. Agrawal  
(M.E, Structure)



Mr. K. M. Vora  
(M.E Structure)



Ms. R. C. Dave  
(M.E Geo Tech.)

## Scope of Civil Engineering :

This question may be asked by most of the Civil Engineering Graduates during the studies or after the graduation.

Studying Civil engineering is the dream of every second aspirant due to a number of reasons – growth, job opportunities, salary range and continuous industry growth.

The major driving force for the present-day Construction Technology revolution is the development in Civil Engineering. The advancements in construction technology, analog new techniques for construction have resulted in developing maximum safety, economic and environment friendly structure for society.

The basic principles and performance of new construction technics are introduced in the course. Design and analysis of different civil structure are considered in detail.

The huge career scope of civil engineers is worldwide - as according to research report by Global Marketing Insights, Inc, the market size of civil engineering is expected to grow up USD 11.72 trillion by 2025.

Best Career Options After Engineering. 1) Higher Studies. 2) Public Service Undertakings. 3) Management. 4) Entrepreneurship. 5) Campus Placements. 6) Become an Expert. 7) Civil Services. 8) Look for internships. 9) Enter the private sector. 10) Chartered valuer. 11) Join the Indian Armed Forces.

The most exciting new technologies used in civil engineering is building integrated photovoltaic (BIP) glazing, which can help buildings to generate their own electricity, by turning the whole building envelope into a solar panel.

Modern construction methods are methods that are developed in construction industry with proper planning and design so that each project reduces the construction time, cost and maintain overall sustainability.

The course also covers the study of different subjects like

- Environmental and Water Resources Engineering.
- Geotechnical Engineering.
- Structural Engineering and Materials.
- Transportation Infrastructure and Systems Engineering.
- Construction Engineering and Management.

## Core companies offer internships and jobs



Although there are numerous startups/small firms offering internships on specific domains, there are quite a lot of private/public sector companies that too offer internship opportunities for engineering students.

### Some of the top private sector companies are:

- Ambuja cement pvt.ltd
- Ultratech
- KCT Consulting service
- PSP Projects
- Adani Infra (India) Limited
- Reliance Infra structure
- CAD CENTER
- L&T
- R. B. Construction Co. (RBC)
- P.C. Snehal Construction Company – P.C. Snehal Engineers Private Limited
- Cube Construction Engineering Limited
- SCC Infrastructure Pvt. Ltd. (Formerly, Shashin Construction Company)
- Nila Infrastructures Limited
- Bridge & Roof Co (India) Limited
- Coastal Projects Pvt Ltd (CPPL)

### Some of the public sector companies are:

- R&B
- Irrigation
- Municipal Corporation
- GWSSB
- Urban development authority
- Town Planning Department
- Education Department
- IRCOL
- EIL
- ONGC
- ISRO
- AAI
- UGVCL



- Torrent
- DEFENCE SERVICE (Level Architect)

### New Technologies:



These new Technologies will become mainstream in nearest future hence one can make their proper career planning and prepare themselves as per the need of that field.

- Building Information Modelling (BIM)
- Cloud and Mobile Technology
- Drones or Unmanned Aerial Vehicles (UAVs)
- Virtual Reality
- Augmented Reality
- 3D Printing
- Artificial Intelligence
- Robotics
- Exoskeletons
- The Connected Jobsite
- Autonomous Vehicles
- Advanced Materials
- The Intelligent Built Environment
- Machine Learning
- Prefabrications
- Predictive Analytics
- Construction Software and Data Ecosystem
- Self-Healing Concrete
- Advance Uses Of GPS
- New Effective Scanning Solutions
- Timber Constructions
- Wearable Technology
- Smart Building
- Modular Construction And 3D Printed Dwellings
- Smart Buildings
- Connected Homes
- Home Analytics

Term date:

6th semester:  
END OF JANUARY 2023

Upcoming Events:

❖ Site visits:



- Water structure visit at Vasana Barrage, vasana, Ahmedabad.
- Soil testing Laboratory Visit at KCT Consultancy Service, Gota, Ahmedabad .
- Bridge Construction Site at PSP Project, SP Ring road, Ahmedabad.
- Dam site at Santsarovar, Indroda gaam, Gandhinagar.
- Sabarmati River front, Paldi, Ahmedabad
- Iconic Shyamal, Ahmedabad.
- Sabarmati Railway Station, Sabarmati, Ahmedabad.

❖ Seminar/Webinar/Expert  
Lecture



- Seminar/Webinar on different subjects of Civil Engineering has to be prepared by group of students in various subjects of final year.
- Seminar/Webinar on different subjects of Civil Engineering has to arrange for the students for enhancing their knowledge by civil delegates.
- Arrange Expert Lectures in the various fields of Civil Engineering.

## ❖ Project



- Contour Survey Project for 4rd semester Students.
- Curve Project for 4rd semester Students.

### Previous semester Events:

Sr No.	Event Name	Event Expert	Event Date
1	221_cad Seminar	Jatin Patel ( Khodiyar Cad Centre)	18-Nov-22
2	221_act_site Visit	SITE ENGINEER	15-Nov-22
3	221_orientation Programm	CIVIL ENGINEERING DEPARTMENT	23-Sep-22
4	221_seminar_itroduction To Autocad	RCAD consultant	05-Sep-22
5	221_seminar_google Sketch Up	SOPAN consultant	03-Sep-22
6	221_waste Water Treatment Plant Site Visit	SITE ENGINEER	01-Sep-22
7	221_water Treatment Plant Site Visit	SITE ENGINEER	24-Aug-22
8	221_site Visit_steel Roof Truss_dss	FACULTY	23-Aug-22



## ❖ Orientation Program

For 1st year civil Engineering student's department organized orientation Program Online as well as Offline on 23th september,2022 to give brief knowledge about their upcoming three years of diploma civil engineering journey.

## ❖ Celebration of Teacher's Day





❖ 221 waste Water Treatment Plant Site Visit



Our main purpose for this visit was to give the practical knowledge about water treatment plant process. By this visit students can be familiar with industrial environment and get knowledge of different units of waste water treatment plant. Also in 5 semester subject like Water and waste water Engineering requires knowledge about how components of sewage plant are constructed, so it is very much convenient to see all the practical and components in Real time work environment.

❖ 221 water Treatment Plant Site Visit



Our main purpose for this visit was to give the practical knowledge about how raw water is treated and how water is distributed in different areas. By this visit students can be familiar with industrial environment and get knowledge of different units of water treatment plant.

❖ 221 site Visit steel Roof Truss dss



Visit of Steel roof truss for the subject Design of steel structure . They have learnt from various components n nature of forces exists in it. which is useful in analysis n design of different roof truss.



❖ 221 cad Seminar



❖ 221 seminar itroduction To AutoCAD

Student will be able to learn about basics of AutoCAD



❖ 221 act site visit



❖ 221 seminar google Sketch Up

Student will be able to learn about google sketch up





❖ Take oath for the preamble of constitution

Students will be able to learn about RMC plant, diaphragm wall and new trends in civil engineering field.

❖ Survey Project



❖ Shining Star of Civil

GTU Results

2nd semester Result				
RANK	ENROLL.NO.	NAME	SPI	CPI
1	216140306003	PRAJAPATI KAVYA DIPAKBHAI	8.18	8.1
2	216140306028	GAJJAR URJA VIJAYKUMAR	8.18	8.31
3	216140306018	KUSHWAHA ANKITAKUMARI N.	7.64	6.48

4th semester Result				
RANK	ENROLL.NO.	NAME	SPI	CPI
1	206140306016	Manushree Ketan Trivedi	9.85	9.75
2	206140306008	MEGHNATHI RADHIKABEN PREMGAR	9.7	9.48
3	206140306009	SIMRAN KAKA	8.52	8.98

6th semester Result				
RANK	ENROLL.NO.	NAME	SPI	CPI
1	176140306060	MOKANI RADHIKA HIMATBHAI	9.64	8.6
2	196140306089	PRAJAPATI ANJALI	9.64	9.26
3	196140306115	VAGHELA NANDINIBA PARAKRAMSINH	9.48	8.87



❖ Retirement celebration of our HOD Manisha Desai mam



Shot on OnePlus  
By sarjanaba



## OUR INSTITUTE'S

### VISION

To carve a brighter prospect for the nation through excellence in technical education to foster skills, ethical values and environmental consciousness among girls while undertaking existing and forthcoming challenges.

### MISSION

- To nurture technical and creative skills through quality education.
- To strengthen industries interaction.
- To impart real-life problem-solving skills.
- To foster care for sustainability of environment and importance social responsibility among girls' students.

*Address: Government Polytechnic for Girls, Ahmedabad  
Opp. Physical Research Laboratory,  
Near ATIRA, Gujarat University Road,  
Navarangpura, Ahmedabad-380 015.*

*Website: <http://www.ggpa.cteguj.in>  
<https://ggpahmedabad.in/>*

*Phone no: 079 - 2630 1581*

Contact for Query or Suggestions:  
Civil Engineering Department,  
Government Polytechnic for Girls, Ahmedabad

e-mail us: [civilgpg2021@gmail.com](mailto:civilgpg2021@gmail.com)

Our blog: <https://civilengineeringggpa.blogspot.com/>

### **Team behind Eighth Edition**

**Idea-** H. S. PATEL

**Content-** M. M. SAVARKUNDALAWALA

**Editing-** F. P. AMBALIA

**Data Collection-** Editorial Team

**Title and Logo-** B. H. DAVE

**Proof reading-** D. H. DALAL

**Designing-** I. M. UPADHYAY

**Support-** K. M. VORA

**Over all Convener Now onwards:**