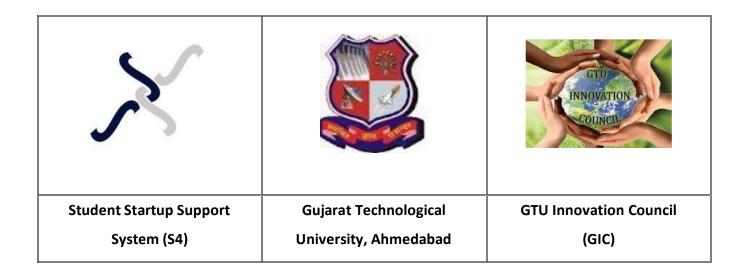
### www.gtuinnovationcouncil.ac.in



Α

## **Report on**

"Project Fair-2017 at Mahavir Swami College of Engineering and Technology"

**Date:** 3<sup>rd</sup> April 2017 **Time:** 09:00 am onwards

Venue: Mahavir Swami College Of Engineering & Technology, Surat.

## www.gtuinnovationcouncil.ac.in

## **INDEX**

SR. NO.	CONTENT	PAGE NO.
1	Preface	3
2	Program schedule	3
3	Computer Department	4
4	Civil Department	6
5	Electrical Department	9
6	Mechanical Department	11
7	Automobile Department	13
8	Photographs of Event	15
9	Key Insights	19

#### www.gtuinnovationcouncil.ac.in

#### **PREFACE**

Our college has always taken unique initiative for the betterment of students. As per the GTU curriculum final year students have to do their projects under the title of IDP/UDP. Students work on different challenges faced by industries or society, they try to solve that challenges as a part of their project work.

With the blessings and vision of **Dr. S.V. Patil**, support and encouragement of All Head of Department we, at Mahavir Swami College had organized a project fair on **3<sup>rd</sup> April**, **2017**. The project fair has provided platform for the students to display the innovative projects.

We have arranged a project fair of the final year students, as a Part of GTU innovation council program. In which total **98** groups of the students had participated actively and shown their innovative ideas by working model. Project fair gives platform for the students to show their skills so that they can get inspiration and also positive interacts from Indusial expert, internal faculties, HODs and Principal. Student explained their project to their juniors. Total **387** students visited event. Industry Expert visited the fair and devotes their valuable time. Participants give their best to explain their project among all experts.

### **Program Schedule of Project Fair**

Sr. No.	Time	Particular	Venue
1	09:00 AM to 10:00 AM	Welcoming of Industry Experts	Seminar Hall
2	10:00 AM to 12:00 NOON	Evaluation and Display of Projects	Department Project Lab
3	12:00 NOON to 03:30 PM	Result Prize Distribution Ending Ceremony	Seminar Hall

#### www.gtuinnovationcouncil.ac.in

### **COMPUTER DEPARTMENT**

#### **INTRODUCTION**

Number of projects: 17

Number of students: 63

In the Computer Department students had prepared their projects on following topics:

- 1. World Organ Donors
- 2. Game In Unity
- 3. Smart Abode
- 4. Doctor Hub
- 5. Sensor Bases Air Pollution Elements Measuring With SMS
- 6. D-Web
- 7. Expert RTO
- 8. Secret Nation
- 9. Foot prints
- 10. Family Expenses Tracker
- 11. Speak SMS with Auto Responder
- 12. My College Chat book(MC2)
- 13. MOB VIEWER
- 14. College Notifier
- 15. WOW(World Of Women)
- 16. SMART BRTS
- 17. Emergency Vehicle Location Assistant and Traffic Signal Controller

#### www.gtuinnovationcouncil.ac.in

We have evaluated out student's project by expert during this exhibition. The following table shows the best three projects from all departments.

### **TOP THREE PROJECTS**

SR.NO.	PROJECT TITLE	STUDENT NAME	<b>GUIDE NAME</b>
1	MOB VIEWER	Patel Happy	Mr. Mitul Patel
2	Foot prints	Patel Anjali	Mr.Bhavesh Nakum
3	Expert RTO	Gohel Anjali	Mr.Rajnik Katariya

## **EVALUATION COMMITTE**

#### FROM INSTITUTE:

- 1. Mr.Rajnik Katariya,
- 2. Ms.Hardi Desai.
- 3. HOD: Ms.Bhavika Patel

#### **EXTERNAL**:

#### **INDUSTRY**:

1. Mr. Jimi Desai (Air link, Surat)

#### **INSTITUTE:**

- 1. Mr.Krunal Patel (BMCET,Surat)
- 2. Mr.Kavindra Patel(BMCET,surat)

#### www.gtuinnovationcouncil.ac.in

## **CIVIL DEPARTMENT**

#### **INTRODUCTION**

Number of projects: 28

Number of students: 122

In the Civil Department students had prepared their projects on following topics:

- 1. Sustainable Road-Slope Stabilization And Erosion Control
- 2. Optimize The Cost Of Rcc Building By Using Gfrp Bar With Replacement Of Tmt Bar"
- 3. A Study On Traffic Problems And Remedial Traffic Operation And Control Measures At Kapodara Intersection On Varachha-Kamarejcoridor, Surat
- 4. Comparative Study Of Multi Story Steel Building By Change In Column Orientation
- 5. Comparison Of R.C.C. Flat Slab With Drop And Without Drop By Using Etab Software
- 6. Design Of Rural Water Supply Network
- 7. Developement Of Dumas
- 8. Development Of Bungar Colony, Gothan Village, Surat
- 9. Development Of Rural Area
- 10. Development Of Unlined Canal
- 11. Effect Of Coarse Aggregate Size On Compressive Strength Of Concrete
- 12. Fiber Reinforced Concrete
- 13. Improvement In Ready Mixed Concrete Plant And Ready Mixed
- 14. Concrete Materials
- 15. Improving Strength In Concrete By Using Steel Slag Waste
- 16. Increasing The Compressive Strength Of Portland Cement Concrete Using Flat Glass Powder
- 17. Influence Of Bacillus Pasteurii Bacteria On Plain Cement Concrete With Respect To Strength Parameters

- 18. Light Weight Concrete Using Eps
- 19. Planing And Designing Of Low Cost School Building
- 20. Recycle Of Construction Waste
- 21. Repair And Rehabilitation Of Structure
- 22. Seasonal Variation In Tapti River
- 23. Smart City-Surat
- 24. Solid Waste Management In Surat City
- 25. Strength Of Fiber Reinforced Concrete Containing Waste Glass Powder As Partial Replacement Of Cement
- 26. Structural Configuration And Optimization Of Multistorey Building By Optimum Position Of Shear Wall Using STAAD PRO.
- 27. SURAT SOLID WASTE MANAGEMENT
- 28. Transit Oriented Development Based On Outer Ring Road Of Surat City Covering Landuse Planning
- 29. Zero Energy Building

### www.gtuinnovationcouncil.ac.in

We have evaluated out student's project by expert during this exhibition. The following table shows the best three projects from Civil Departments.

## **TOP THREE PROJECTS**

SR.NO.	PROJECT TITLE	STUDENT NAME	GUIDE NAME
1	Transit Oriented Development	Patel Harsh	Mr. Bhavin Zaveri
	Based On Outer Ring Road Of		
	Surat City Covering Landuse		
	Planning		
2	Influence Of Bacillus Pasteurii	Solanki Kosha	Mr. Mehul Mojidra
	Bacteria On Plain Cement		
	Concrete With Respect To		
	Strength Parameters		
3	Development Of Bungar Colony,	Vekariya Mitul	Mr. Bhavin Zaveri
	Gothan Village, Surat		

## **EVALUTION COMMITTE**

#### **FROM INSTITUTE:**

1. Mr. Prakash Devagniya

2. HOD: Assistant Professor Maulik Kakadiya

#### **EXTERNAL:**

### **INSTITUTE**

1. Miss. Devangini Sailor (SSIT, Gandhinagar)

#### www.gtuinnovationcouncil.ac.in

### **ELECTRICAL DEPARTMENT**

#### **INTRODUCTION**

Number of projects: <u>17</u>

Number of students: 62

In the Electrical Department students had prepared their projects on following topics:

- 1. Substation Monitoring And Control Using 8051 & Gsm
- 2. Power Quality Improvement Using Dvr
- 3. Static Phase Converter
- 4. Smart Helmet
- 5. Implementation Of Modified Cascaded H-Bridge Multilevel Inverter
- 6. Cng/Lpg Gas Accident Prevent With Gsm Alert
- 7. Live Monitoring And Controling Of Multi Dc Motor
- 8. Smart Automation System Using Microcontroller
- 9. Statcom Using Modified Inverter For Reactive Power Compensation
- 10. Power Factor Controller Using Ardunio
- 11. Advance Traffic Control System
- 12. Auto Changeover System Of Induction Motor Through Plc & Scada
- 13. Industrial Power Supply Parameter Monitoring & Controlling Using Lab
- 14. Advance Traffic Control System
- 15. Secured & Maintenance Free Data Transmission Using Plcc
- 16. High Voltage Distribution And Energy Conservation

#### www.gtuinnovationcouncil.ac.in

We have evaluated out student's project by expert during this exhibition. The following table shows the best three projects from all departments.

### **TOP THREE PROJECTS**

SR.NO.	PROJECT TITLE	STUDENT NAME	<b>GUIDE NAME</b>
1	SMART HELMET	PRAJAPATI KAUTIK	Mr. Vivek Patel
2	IMPLEMANTATION OF MODIFIED CASCADED H-BRIDGE MULTILEVEL INVERTER	JARIWALA PRAKASHCHANDRA	Mr. Vivek Patel
3	STATCOM USING MODIFIED INVERTER FOR REACTIVE POWER COMPENSATION	CHAPADIYA MONTY J.	Mrs. Manisha Patel

## **EVALUTION COMMITTE**

### **FROM INSTITUTE:**

1. Mr. Jackson Prajapati

2. HOD: Mrs. Manisha Patel

#### **EXTERNAL:**

#### **INDUSTRY**

1. Mr. Prakash Tanna (Torrent Power)

#### **INSTITUTE**

1. Mr. Viral Makwana (BMCET, Surat)

2. Mr. Satish Kedar (BMCET, Surat)

#### www.gtuinnovationcouncil.ac.in

### **MECHANICAL DEPARTMENT**

#### **INTRODUCTION**

Number of projects: 19

Number of students: 72

In the Mechanical Department students had prepared their projects on following topics:

- 1. Shock Absorption Power Generation System
- 2. 3d Modelling And Analysis Of Connecting Rod And Comparison With Composite Material By Optimization Technique
- 3. Experimental Study On Heat Transfer Enhancement Of Double Pipe Heat Exchanger
- 4. Design And Modification Of Power Generating Speed Breaker
- 5. Maximum Capability Increase In Drum Winder Machine
- 6. Design Of Steam Line And Condenser Line Of Process Thermal Power Plant
- 7. 360 Degree Rotating Pneumatic Jet Trolley
- 8. Experimental Study on triple concentric pipe heat exchanger
- 9. Solar Dryers With Phase Change Material
- 10. Replica of Oil Collector from Sea
- 11. Wind Power Generation Using Shrouded Wind Turbine For High Power Output
- 12. Advanced EPS Vehicle (Electrical Pedal Solar)
- 13. Polygon Turning Machine
- 14. Study And Modification In Existing CNC Machine
- 15. Energy Regeneration By Flywheel
- 16. Automobile A/C System Using Waste Heat From The I.C Engine
- 17. Provide automation to manual slotting cutter Re-grinding machine
- 18. Size based object detection and sorting by conveyor belt
- 19. GDL Production Machine

#### www.gtuinnovationcouncil.ac.in

We have evaluated out student's project by expert during this exhibition. The following table shows the best three projects from all departments.

## **TOP THREE PROJECTS**

SR.NO.	PROJECT TITLE	STUDENT NAME	<b>GUIDE NAME</b>
1	Provide automation to manual slotting cutter Re-grinding machine	Ramani Kushik	Mr. Gopal Jetani
2	Size based object detection and sorting by conveyor belt	Siddhardth Chveli	Mr. Gopal Jetani
3	3d Modelling And Analysis Of Connecting Rod And Comparison With Composite Material By Optimization Technique	Hiren Puvar	Mr. Nilesh Rana

## **EVALUTION COMMITTEE**

#### **FROM INSTITUTE:**

1. Mr. Himanshu Prajapati

2. HOD: Mr. Sandip Patel

#### **EXTERNAL:**

#### **INSTITUTE**

Mr. Jignesh Patel (BMCET, Surat)

Mr. Chetan Panchal (BMCET, Surat)

#### www.gtuinnovationcouncil.ac.in

## **AUTOMOBILE DEPARTMENT**

#### **INTRODUCTION**

Number of projects: 17

Number of students: 68

In the Automobile Department students had prepared their projects on following topics:

- 1. An Electromagnetic Engine
- 2. An Experiment On IC Engine By Using Calcium Carbide
- 3. Automatic Hand Brake Release
- 4. Automatic Pneumatic Bumper With Braking System
- 5. Compressed Air Engine Using Solenoid Valve
- 6. Crab Steering System
- 7. Electronic Assisted Hydraulic Braking System
- 8. Experimental Study On Diesel Engine Using "Used Cooking Oil".
- 9. I-Box (Immortal Box)
- 10.Intelligent Braking System
- 11.Multi Purpose E-Crafter
- 12. Performance Analysis Of Diesel Engine Coolant By Using Al2O3
- 13. Power Generation From Speed-Breaker
- 14. Power Operated Screw Jack In Car
- 15. Regenerating Electromagnetic Braking System
- 16.Speed Liquefaction
- 17. Three Wheel Segway

#### www.gtuinnovationcouncil.ac.in

We have evaluated out student's project by expert during this exhibition. The following table shows the best three projects from all departments.

## **TOP THREE PROJECTS**

SR.NO.	PROJECT TITLE	STUDENT NAME	<b>GUIDE NAME</b>
1	I-Box (Immortal Box)	Patel Pranavkumar Bhikhubhai	Mr. Happy Patel
	Multi Durnasa F Craftar	Patel Falgunkumar	Mr. Dhruv
	Multi Purpose E-Crafter	Rameshchandra	Solanki
2	Automatic Hand Break Release	Sabhadiya Hardik	Mr. Kanaya
	Automatic Hand Break Release	Rajubhai	Marathe
3	Experimental Study On Diesel Engine Using "Used Cooking Oil".	Jain Vaibhav Sampatlal	Miss Falguni Tandel

## **EVALUTION COMMITTEE**

#### **FROM INSTITUTE:**

1. Mr. Dhaval Chaudhri

2. HOD: Mr. Gaurav Tandel

#### **EXTERNAL:**

#### **INSTITUTE**

1. Mr. Chetan Panchal (BMCET, Surat)

www.gtuinnovationcouncil.ac.in

## **PHOTOGRAPHS OF EVENT**





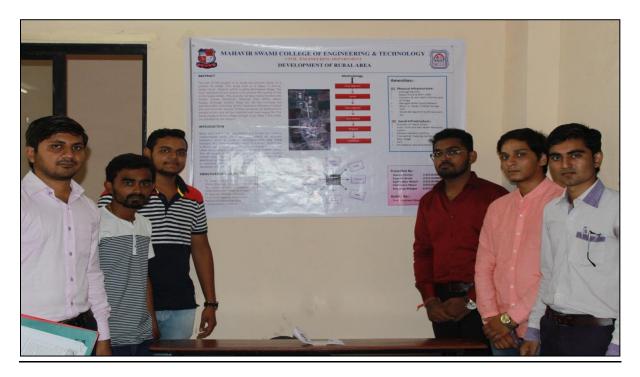
| Gujarat Technological University (http://www.gtu.ac.in/) |

Contact: gtu innovation council@gtu.edu.in | Tel: +91-79-2631 6001;











#### www.gtuinnovationcouncil.ac.in

### **KEY INSIGHTS**

- This kind of fair helps to build confidence of the students.
- Students feel pride that their work is appreciated by others.
- By suggestions from other than their guide will help them for future projects.
- They are getting able to develop their project by good explanation.
- Will help to bring industry ready professional, by bridging the gap between academics and industry.
- Overall from this academic project fair students knew the application implementation of designing in the project.
- They got motivation towards technology for future business.

### **Report By:**

Mahavir Swami College of Engineering & Technology

### **Report Edited By:**

Juned Shaikh

**GTU Innovation Council**