



Gujarat Technological University (GTU)

Nr. VGEC, Visat - Gandhinagar Highway, Chandkheda,
Ahmedabad – 382424 - Gujarat - India.

• Tel.: 079-23267527 • Fax: 23267580 • www.gtu.ac.in

Skilling India Mission

and

D. Voc. and B. Voc. Programs

at GTU



GTU
Student Start-up
Support System (S4)



GTU
Open Source Technologies Club
(OSTC)



GTU
Innovation Council
(GIC)



GTU
Mobile and Wireless
Technologies Club (MWTC)

CiC3

GTU
Community Innovation &
Co-Creation Centre

November • 2014

© Gujarat Technological University

November, 2014.



Gujarat Technological University

Main Campus, Nr. Vishwakarma Government Engineering College,
Nr. Visat Three Roads, Visat - Gandhinagar Highway, Chandkheda, Ahmedabad – 382424 - Gujarat
• Email: pstovc@gtu.edu.in • Phone: 079-23267527/079-23267622 • Fax: 079-23267564

ABOUT GTU: Gujarat Technological University (GTU): a relatively new technology University established by Government of Gujarat, which opened its doors to students in 2008; GTU is state's most comprehensive intellectual resource today. GTU at its current pace is in the process / making of becoming India's fastest growing international innovative University and aims to be leading national research university with a global impact.

GTU at a Glance:

- 500,000 plus students
- 500 affiliated colleges and 17,000 faculties.
- Catering to entire field of Engineering, Pharmacy, Management, Computer Application, and Architecture.
- 67 Master's programs and a robust doctoral program.
- 87 Majors – Academic powerhouse of Gujarat State.
- Fourteen PG Research Centers and Schools in the advanced fields of Technology, Policy and Skills.
- India's most intensive and extensive Internationalization program with 62 Professors from North America and Europe as Adjunct Professors at GTU
- India's largest sensitization and support programs in IPR, Innovation, Start-ups, and Co Creation activities.
- Syllabi: permeated with Design Thinking; spine of Design Engg. in 6 semesters of UG Engineering.
- Industry orientation - 100,000 plus students visiting industries to identify industry problem and then take up challenge to solve it.

We hope that GTU's graduates will build a new India, which may stand for a more harmonious and more humane world, with a better quality of life for all.

Introduction

This report presents the Pedagogical inputs and interventions, which have created the right environment for Skill Development mission at GTU.

FIRST EFFORT: The first effort for developing facilities and programs for Skill Development projects will become operational at GTU's Ahmedabad campus and at its Gandhinagar campus by 31st January 2015. GTU, therefore, should be able to begin adding to the skilled work-force of the State and begin a systematic effort for training the young, who could not complete their schooling.

REMOVING SHORTAGES OF HIGHLY TRAINED WORKMEN IN GUJARAT: GTU is encouraging all its Colleges to begin vocational programs leading to D. Voc. and B. Voc. programs in the Colleges. While the Colleges are expected to take up the challenge in a big way only after its financial viability is proved, GTU will establish, at 95 places in the State, high quality Skill Development Centers, provided it is able to obtain the necessary support. This will start providing 34,000 highly trained work-men, who would have been trained at world-class training and research facilities. The availability of such a work-force will add to the attraction of Gujarat as a place for investment and it will make the industries in Gujarat more competitive.

The success of the Centers will unleash entrepreneurial spirits of the educational entrepreneurs, associated with GTU. They have no less than 2,000 workshops, which can be upgraded to provide the necessary D. Voc and B. Voc programs. Working jointly with them, GTU will be able to remove all shortage of trained work-men, due to which the industries in the State are not able to work optimally. Jointly with these edu-preneurs, GTU will be able to provide 7,00,000 work-men every year to the small and big industries of Gujarat.

RESEARCH IN TECHNOLOGIES: GTU's financial model for the first 95 Skill Development Centers has been developed such that it will include not only setting up today's world-class training facilities for work-men, each of the Centers would be associated with research in the respective technologies so that India may be able to develop new technologies on its own, rather than continuously remaining a big purchaser of such technologies, whenever any new development in the technologies takes place in the developed world or in China. However the research in technologies does not happen at no cost. Hence it has been stated that the establishment of the first 95 Skill Development Centers will require adequate support.

PRACTICE-ORIENTATION IN ENGINEERING EDUCATION: During the last four years, GTU has made sustained efforts to bring practice-orientation strongly into its engineering education, through modification in syllabi and by changing the examination procedures.

During 2010-11, GTU had set up a robust system for promoting industry-institute inter-action. The concept was to bring the leadership of MSMEs closer to the engineering educators all over the State. For managing these systems, GTU set up a GTU Innovation Council (GIC). GIC organized 25 GTU Innovation Sankuls¹. Each of the Sankuls brought together Principals/ Directors of about 20 Colleges and the leaders of the industrial estates in the area.

During 2010-11, GTU set up the Board for Green Technologies and Environmental Studies and it has been setting up Open Source Technology Clubs (OSTCs) in Colleges. Today 77 OSTCs are functioning. To manage these Clubs and to extend these activities to more Colleges, Nodal Centers at 22 out of 25 Sankuls are in operation.

Another Board set up during 2010-11 was the Board for Mobile and Wireless Technologies. The Board has succeeded in putting into operation 30 Mobile and Wireless Technologies Clubs (MWTCs) in Colleges. In addition GTU is encouraging Colleges to actively participate in the activities of professional associations like ASME, IEEE, IE(India), CSI etc. It is also promoting an active participation in technology competitions like Baha automobile competitions, robotic competitions through up-gradation of the required laboratories and through forming study groups at GTU.

GTU has put in place facilities for developing hard-core engineering products. It has set up a new laboratory on the pattern of the well-known Tinkering Lab of Cornell, the Fab Lab of MIT and the SINE lab of IIT Mumbai. Such a Lab is called a Community-innovation-CoCreation Center (C-i-C3). Each of these laboratories will also be associated with a facility for Skill Development in a technological area.

GTU proposes to set up one such Lab at each of the 25 Sankuls in the State. In principal, the department of industries of Government of Gujarat has already agreed to support five such Skill Development facilities, costing about ₹ 5 crores. Each of the Skill Development facilities will be associated with one of the C-i-C3s. Every C-i-C3 will include the Nodal Centers of S4, OSTC and MWTC.

The last step would be to upgrade each of the C-i-C3 Labs into full-fledged incubators.

As new enterprises, based on new technologies, start growing and becoming successful, all over Gujarat, engineering students will start demanding access to modern workshops and laboratories. Putting in place world-class Skill Development facilities and research in new technologies will satisfy this need of the new enterprises. Moreover if shortage of skilled work-force persist, skilled workers will be grabbed by the larger industries, thus creating a handicap for the growth of new enterprises. Hence setting up facilities for large-scale training of skilled work-force is required, even as new enterprises are groomed through incubators. In fact engineering students will not be able to visualize design and production of new products if they are not aware of today's technologies of production. So setting up modern Skill Development facilities, which are accessible to engineering students, will make it possible for engineering students to become successful techno-entrepreneurs.

Thus Skill Development, Practice Orientation and Techno-Entrepreneurship at GTU are mutually dependent.

¹ Sankul is a Gujarati word. It means a community.

Executive Summary

In all the branches of Engineering, GTU has developed a program of studies which focuses on developing 'competence in design' and 'strength in skill development' at the under-graduate level.

GTU's student start-up policy, called CUBE, has been formulated to cover three **axes**:

Interventions: Pedagogical, Co-curricular, Social;

Intensities: Culture Development, Infrastructure/funding & resource based Special/dedicated support initiatives for start-up spin-offs and

Implementation Scope: Campus Level, Local Community (Virtual) Level and University Level.

By integrating the ideas of design and entrepreneurship, the pedagogical and co-curricular inputs are designed to create a self-motivation and probably a hunger for learning about both – today's skills and innovations in their field. Based on our experience of the last four years and the remarkable successes, it can be said that such an environment would both motivate the students to learn about technical skills of today and would create a need for skilled work-force.

The first Skill Development Centers at GTU's Gandhinagar campus and at the Ahmedabad campus will become operational by 31st January 2015. However GTU is planning to develop the Skill Development Centers in four different and innovative ways. It is also planning to have Centers of Excellence as places, which show-case the kind of systems, the technologies being learnt by the new skilled work-force, could produce.

GTU's POLICIES for IMPLEMENTATION of SKILLING INDIA MISSION at GTU

Gujarat Technological University (GTU) is probably the only technological university in our country, which has been making continuous need—based interventions to make our engineering curriculum both practice-oriented and design-based, while involving industries actively in the process. It has been working for the development of high-level skills as a part of the educational process.

It has an active Intellectual Property program, under which till now more than 4,400 Faculty Members have participated in Faculty Development Programs on IP during the last two years. At GTU, every student project is started with a study of the relevant patents in the area of the proposed project. It has developed and implemented, during the last four years, a Start-up Policy¹ for the University and its 500 Colleges. It is only this type of sustained work that can make our students innovative and our student-start-ups develop interesting new technological products, as is being done by the young at the universities in the rest of the world.

An engineer, without any awareness of modern technological skills, cannot hope to design a product which is marketable. Moreover it is found that when a student becomes involved in entrepreneurial activities for developing an engineering product, he becomes highly motivated to acquire knowledge about modern skills. Therefore at universities, where incubators are active, students take greater interest in their own skill development. Hence it is necessary for GTU to develop skill development facilities, as its start-up activities are gathering momentum.

GTU is working to build first rate Skill Development Facilities for use by its own students. These facilities will also be used for skill development of workers, as required by the National Skill Development Programs of the Honourable Prime Minister of India.

Background:

Since independence, India has set up many institutions for offering quality technical education at every level. But the quality of education in the rest of world has galloped so far ahead that in relative terms, our best higher educational institution was ranked at 226 in QS rankings of 2013.

We have set up large national laboratories, which have many successes to their credit. Many large industries have been set up and some of our businesses are working at world-class levels of productivity and quality. But while China has become the workshop of the world and South Korea and many East Asian countries produce industrial goods for the whole of the world, we have a continuous problem of not being able to export enough to cover the cost of our imports. Besides software services, we are able to export unprocessed iron ore or other low quality or low technology products only.

There are many persons of Indian origin, who are working as successful engineers in the developed world. But the whole of our large country is not able to design and produce, with high quality and at a competitive price, engineering products in any significant volume.

There are some large business houses, which have set up large-sized enterprises with imported technologies and there are some young entrepreneurs, who have used available technologies to develop large e-commerce businesses. But there are hardly any enterprises, which use indigenously developed hard technologies even though we have thousands of engineering colleges, there are more than 700 Universities, Department of Science and Technology has been conducting large entrepreneurship programs since early 1980s and we have a good number of incubators, being supported by the National Science & Technology Entrepreneurship Development Board (NSTEDB) for many decades.

Need for Development of Skilled Manpower and Technologies:

Every large industry has not only to purchase new technology from the developed world or from China, we do not have either the skilled manpower to operate the new technological tools optimally or competence to be able to develop new technologies. India's large companies purchase new technologies every year from all over the world. But fast technological developments continue to push us back. As an example, new developments in technology in 2014, have led to a situation, where if a sophisticated welding job is completed in ten dollars in UK, in China it would cost 35 dollars, in India it would cost 45 dollars, even though per capita income in UK is 26.1 times that of India and per capita income of China is 4.61 times that of India (IMF data of 2013). China has established volumes of production, which have today made the world dependent upon it. Thus more than 80% of refrigerators in the world are manufactured in China. Thus a new technology, which reduces the cost of welding in UK, cannot upset the relative production volumes of refrigerators in China vs UK. But such things can affect the decisions to locate production units in India, as our nation works for it energetically, under the Honourable Prime-Minister's 'Make in India' campaign.

During the next 20 years, 33% of India's population will be in the main stream workforce. India needs to create 10 lac jobs per month for the next 20 years. This cannot be done without providing today's technological skills to our young. Moreover our start-ups and even large industries cannot compete in the market places of the world if the issue of acute shortage of skilled workforce is not adequately addressed.

GTU's Strategy:

GTU is setting up 121 workshops with technologies, which are at the frontiers of technology. These workshops will also have researchers, who will not only be abreast of new developments in the area but also develop new technologies. It is also establishing Centers of Excellence in today's technologies, where research in complete systems, used in today's industries can be conducted. During 2015, GTU will be establishing 5 such centers for electro-mechanical automation systems.

Besides GTU has instituted D. Voc. and B. Voc. degrees and it is encouraging all its Colleges, spread out all across the State, to start the new programs.

The Skill Development programs are being set up on the basis of pedagogical innovations, which GTU has initiated for strengthening technological education through practice orientation, a close inter-action with industries and through project-based and design-oriented learning systems.

1.0 Pedagogical Inputs & Interventions: GTU has implemented five-pronged pedagogical steps for bringing back practice into engineering education and for fostering innovation:

- 1.1 Strengthening practice-orientation in the entire syllabi and the examination process.
- 1.2 Establishing industry-institute inter-action by instituting on 2nd August 2010 GTU Innovation Council (GIC)

Today GIC is one of the most active University Innovation entities.

Under GIC, twenty-five GTU Innovation Sankuls have been established between 2nd August 2010 and 14th February 2011. The Principal/ Director of every College, affiliated with GTU, is a Member of the Sankul Committee in its area. Leaders of the industries in the area are also on the Committee. The Sankuls are being run successfully since 14th February 2011. In April 2011, every College was asked to establish a GTU Innovation Club so that Faculty Members and students could take advantage of their Sankul. The Clubs helped them develop a close inter-action with industries through the Sankul Committees.

More than 70% projects are based on problems obtained from SMEs every year since 2011-12.

1.3 Permeating Design-orientation in the degree engineering syllabi of all branches of engineering:

1.3.1 GTU's integration of pedagogical work in design and skill-building with the Final Year projects is designed to create the facilities and environment which will be able to nurture and develop the creativity of GTU's students and GTU's alumni.

1.3.2 GTU started developing Design-oriented syllabi on Feb 2, 2012 and implemented it from August 2013; The Learning Systems at GTU seamlessly integrate the processes of design in the development and implementation of the Final Year project.

Improvements in Project work by Students:

1.4 Avoiding repetitive projects by making it mandatory for every student to study five patents relating to his/ her area of the project and to include the Patent Study & Analysis Report (PSAR) as a part of the term-work of their Project:

223 patent applications and 208 copyright applications for the projects by students/ faculty members/ colleges/ industries, where the students completed the project;

1.4.1 In 2013, GTU honoured 15 informal level technologists from all over the State as Honorary Professors at GTU. Thus they have been brought into the class-rooms of our Colleges for mutual benefit. Moreover by establishing a close inter-action with SMEs through GTU's Sankul movement, GTU will be able to help not only students and alumni, it would be able to move its innovation movement into the whole of the society in the State.

Hub & Spoke model for Entrepreneurship Development & Startup Support:

1.5 Establishing student start-up activities on a hub and spoke model at the University and at Colleges: Creating Co-Working Spaces at GTU:

Development of the Hub:

1.5.1 Established GTU's Student Start-up Support System (S4) on 25th February 2012

Today S4 is the most active start-up system out of such systems at universities, with Boot-camps, policy discussions, meetings with mentors and venture capitalists etc being a regular event every day of the week;

1.5.2 The S4 Co-Creation Center (S4-C3) along with a common seminar room facility, was established on May 1, 2013 at GTU in more than 7,500 square feet of space.

1.5.3 Additional space of 6,000 square feet for providing offices to budding enterprises in S4-C3 in being prepared.

1.5.4 On 1st May 2013, a common laboratory, where students and alumni can work to develop their own products, was also established in a 1,650 sq ft of space adjoining S4-C3; The Lab is available after-hours and on holidays; It has a stream of mentors and geeks from the local community; The Lab is called Community-innovation-Co-Creation Center (C-i-C3); C-i-C3 is designed to have the facilities like those in the tinkering lab of Cornell University plus the Fab lab of MIT.

Development of the Spokes:

1.5.5 Creating Co-Working Spaces at Sankuls:

1.5.5.1 Open Source Technology Clubs have been established in 77 Colleges across the State. In 22 out of 25 Sankuls, Nodal Centers for the Open Source movement have been set up. Mobile and Wireless Technology Clubs have also been established in 30 Colleges.

1.5.5.2 S4 Extension Centers are being established in all the Colleges.

3.1 Trade 1: Site Engineer/ Quality testing Engineer/ Supervisor: These curriculums have been developed by the Glass Academy through a Committee comprising experts from Industry and professors from premier institutions. These job-oriented curricula have been designed for 120 hours of core, foundation & soft skills for the Civil & Mechanical students. These will be delivered through a structured skill development program – gaining first-hand knowledge by working on field demonstration tools, visits to construction sites & manufacturing plants etc.

3.2 Trade 2: Fitter for Glass Façade for entry level semi-skilled workers

The equipment for training has arrived and the trainers are being recruited. The project is to admit students from February 2015.

4.0 Skill Development Centers at C-i-C3:

With each C-i-C3 will be associated one technological Skill Development Center (SDC). These will train Skilled workers according to the prescribed syllabi, prepared by National Skill Development Corporation. Since the SDCs have modern equipment, the like of which is not available at engineering colleges, at week-ends, the SDCs will provide training to engineering students of Colleges, affiliated with GTU, in batches of 30 students. Thus we propose to keep the SDC Center busy for all the seven days.

5.0 Skill Development Centers at Workshops:

In Engineering Colleges, the following workshops are required:

- i. Machining: Introduction to Machine Tools, Machine Shop, Different Metal Joining Processes
- ii. Sheet Metal Fabrication and Brazing,
- iii. Carpentry & Painting
- iv. Smithy/Black Smithy Shop
- v. Fitting (Metal)
- vi. Fitting and Plumbing Shop
- vii. Welding,
- viii. Foundry,
- ix. Automobiles,
- x. EME (IC engines, boilers, engines, gas turbines and steam turbines),
- xi. Refrigeration & AC,
- xii. CNCs,
- xiii. Robotics,
- xiv. PLCs & Sensors
- xv. Electrical wiring and Electric Shop
- xvi. Electronic Shop and PCB Lab
- xvii. Hardware and Networking
- xviii. Injection moulding process
- xix. Masonry

However these workshops are usually of elementary nature. GTU proposes to establish five Skill Development Centers (SDC) in each of the trades, which are a part of the engineering curriculum. Thus GTU may establish as many as 95 SDCs by upgrading the workshops of some of the Polytechnics and Engineering Colleges.

5.1 Functions of the Skill Development Centers at Workshops:

Each of the SDCs will train skilled workers, Moreover these will provide training to students of engineering, Lastly these SDCs will be manned by technician trainers as well as professors, who will do research in these technologies. Thus if GTU has ten professors in the five zonal SDCs in the area of welding, they will study the technologies of welding and will work to develop new technologies indigenously.

6.0 Institution of D. Voc. and B. Voc. programs:

National Vocational Education Qualifications Framework:

AICTE has launched National Skills Qualification Framework² (NSQF) to provide multiple pathways into formal education, job market and vocational education streams. The Central Government has established National Vocational Educational Qualifications Framework³ (NVEQF) to facilitate nationally standardized qualifications from secondary to doctorate level which should be comparable to similar international qualifications. On 26th September 2013, GTU organized a seminar⁴ to encourage all its affiliated colleges to institute vocational programs at institutions all across the State.

The training and research facilities, established as described in sections 3.0 to 5.0, will help in building capacity and standards so that NVEQF can be implemented in Colleges properly. This will also help in ensuring that research in these technologies at GTU workshops starts contributing to developing new knowledge in these fields of direct application.

7.0 Center of Excellence in Industrial Automation:

GTU is planning to establish Centres of Excellence (CoE) at frontiers of today's technology in all fields. The centres will be called GTU-Centres of Excellence (CoE) and will be located at one of the engineering colleges, affiliated with GTU. The primary objective is to bridge technology gaps between industry and academia in the training of students. The Centres will provide facilities for hands on experience on today's technologies and help develop new pedagogical methods. The CoEs will also provide training to new industries, which may be planning to upgrade their technologies.

The objective is to have one such centre in every zone of GTU.

During this academic year, GTU is beginning with establishing CoE in the field of industrial automation in collaboration with Bosch-Rexroth technologies. GTU has signed an MoU for setting up five Centres of Excellence with Bosch-Rexroth on 18th May, 2013 at Paryavaran Mandir in Ahmedabad.

Complete laboratories with integrated classrooms in the fields of Hydraulics, Pneumatics, Electric Drives and Controls, Mechatronics and Sensor Technology, with the following equipment and kits are a part of CoE:

- Hydraulics Training systems
- Proportional/Closed loop Hydraulic kits
- Electro Pneumatic kits with Proportional kits and easy to combine units
- PLC's with Universal simulators
- Advanced Sensorics
- Integrated Motion Logic kit with Servo drives, Servo Motors and HMI's
- CNC with HMI, Drives and motors
- Modern Mechatronics system
- Robotic Training system

Short and long duration courses (1 day to 24 weeks) will be offered by GTU Faculty Members for the students of GTU affiliated colleges. At the same time these centres will be open for GTU's alumni and others, who may be wanting to start their careers in automation sector.

It is proposed to offer a Master 's level program in Automation on completion of 2 years of operation of the centre. In addition to running skill development courses, these center will be used to develop and analyze Masters and Doctoral level projects. GTU has recruited faculties of Electrical, Mechanical, Electronics & Communication and Instrumentation & Control disciplines who will be focusing on research in addition to providing training.

References:

¹http://files.gtu.ac.in/circulars/14DEC/05122014_02.pdf

²<http://www.aicte-india.org/nsqf.php>

³http://www.gtu.ac.in/circulars/13Sept/Delegate_Invitatio.pdf

⁴http://www.gtu.ac.in/circulars/13Oct/14102013_01.pdf

Conclusion

As India succeeds in the Honourable Prime Minister's 'Make in India' campaign, as the Vibrant Gujarat 2015 succeeds in bringing huge new investments into manufacturing, Gujarat will require not only well-trained technologists, it would also require skilled workforce.

GTU is working among four different pathways for Skilling Development, as described in sections 3 to 6. This will ensure that the shortage of skilled manpower is alleviated to a great extent.

Moreover GTU proposes not only a Skill Development program in new technologies, it also proposes to develop research programs in each of the technologies, so that India is an equal partner with the rest of the world when the present technologies are up-graded or when disruptive new technologies are developed. The world is becoming inter-dependent and GTU's program in developing new technologies will ensure that while we may have to import some new technologies, we shall also be able to contribute to the world of new developments in an equal measure.

At GTU, the entire program of fostering student start-ups, bringing practice-orientation in a big way into engineering education, permeating all of the syllabi with design thinking as also the Skill Development program are parts of a holistic vision. The implementation of this vision, in a small part has started igniting the innovative spirits of the youth at GTU. The need is to equip the youth with the necessary knowledge and skills and to facilitate the progress of thousands of their dreams. This is the kind of vision, which in ten years will make India a significant player in the fields of new technologies and new products and processes for ushering a smarter and more equitable world.

Skills Councils and Post-Graduate Research Centers

GTU is a relatively new University. It started its Master's programs in 2009. The first cohort of doctoral students was admitted on 30th September 2011.

A. SKILLS COUNCILS:

On 25th June 2011, GTU set up the following three Skills Councils:

- GTU – Financial Services Skills Council (GTU-FSSC)
- GTU – Council for Human Resource Studies and Organizational Structures (GTU-CHRSOS)
- GTU – Skills Council for Marketing (GTU-SCM)

The three Councils have 10, 8 and 7 Sectorial Panels respectively. The purpose is that all the Colleges may use the Skills Councils to provide immersion studies to the MBA students, if they do not have their own active connectivity with industries and businesses.

B. POST-GRADUATE RESEARCH CENTERS:

During the academic year 2012-13, GTU has established 14 Post-graduate Research Centres (More such Centres may be established in the next academic year.):

1. Centre for Environmental and Green Technologies
(A Board for Environmental and Green Technologies was set up on 22nd December 2010.)
2. Centre for Mobile Computing and Wireless Technologies
(A Board for Mobile Computing and Wireless Technologies was set up on 6th February 2011.)
3. Centre for Cyber Security
4. Centre for Environment & Energy Efficiency Tools (CE3T)
5. Centre for Infrastructure, Transportation and Water Management (CITWM)
6. Centre for Technology Education, Public Policy and Universities of the 21st Century
7. Center/ School for Global Business Studies
 - a. Indo-German Study Center
 - b. Indo-Canadian Study Center
8. Centre for Business Ethics and CSR
9. Centre for Financial Services
10. Centre for Marketing Excellence
11. Centre for Governance Systems in Businesses, Industries, Universities, Hospitals, NGOs and Governments
12. Centre for Pharmaceutical Studies and Drug Delivery Technologies
13. Centre for Industrial Design/ Open School for
14. Centre for Project Management in Chemical Engineering



Gujarat Technological University



Gujarat Technological University – **Main Campus**, Nr.Vishwakarma Government Engineering College,
Nr.Visat Three Roads, Visat - Gandhinagar Highway, Chandkheda, Ahmedabad – 382424 - Gujarat
• Email: info@gtu.ac.in • Phone: 079-23267527/079-23267622 • Fax: 079-23267564



Gujarat Technological University – **Gandhinagar Campus**
Nr. Government Polytechnic, K-6 Circle, E-4 Electronic Estate G.I.D.C, Sector - 26,
Gandhinagar-382028- Gujarat • Phone: (079) 23267800 • Fax: 079-2630 1500



Gujarat Technological University- **Ahmedabad Campus**
ACPC Building, LDCE Complex, Navarangpura, Ahmedabad -380 015
• Phone: 07926300499/599/699 • Fax: 079-2630 1500