

# Gujarat Technological University

## Graduate School of Engineering and Technology



## Student Information Booklet AY 2022-23



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**Message from Vice Chancellor**



**Prof. (Dr.) Navin Sheth,  
Vice Chancellor  
Gujarat Technological University**

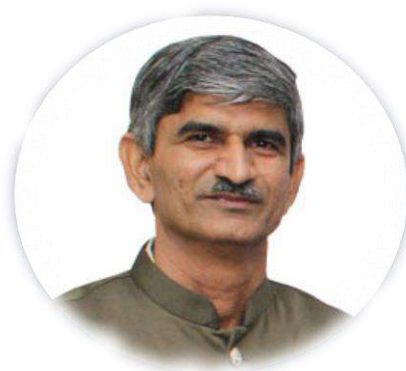
My dear students,

It gives me immense pleasure to welcome all the first-year students and extending my best wishes for joining highly specialized post-graduation and PG-diploma programs in the various emerging area of the engineering domain at GTU-Graduate School of Engineering and Technology.

Technology is rapidly changing and to cope with it, continuously need to update yourself. The Gujarat Technology University is committed to proving you the opportunities to explore new dimensions with changing technology. The GTU-GSET is having state-of-art laboratories infrastructure in the various specialized PG programs where you can sharp your technical knowledge under the guidance of highly qualified faculty members. I also assure you that outcome-based education (OBE) being implemented at GTU-GSET will help you to establish the accreditation milestone in the coming days. The University is also continuously evolving new paradigm to promote the research culture at post-graduation programs and supporting students to achieve their professional accomplishments. I assure you that, GTU-GSET will meet all your expectations and will help you to fulfil all your professional goals during your stay at GTU-GSET.

Once again, I congratulate all of you for securing admission at GTU-GSET and my best wishes for your future endowments.

**Message from Registrar**



**Dr. K N Kher,  
Registrar  
Gujarat Technological University**

My dear students,

I congratulate all of you for securing admission GTU-Graduate School of Engineering and Technology, Ahmedabad.

Gujarat Technological University is the largest technological university and committed to providing world-class education in the various professional domains. GTU-GSET is running various PG programs in the emerging engineering technology area's where you can find various opportunities to explore your career goals along with research skills. The highly qualified faculties and state-of-art laboratories infrastructure at GTU-GSET will help to prepare the skilled engineers as per the need of industry and research organizations. The prominent resources of the University like GTU-Innovation centre (GIC), Atal Incubation Centre (AIC), Design Innovation Centre (DIC), and various industrial and research organization tie-ups will help you to build your professional career during your stay at GTU-GSET.

We look forward to working with you. Once again, I welcome you on behalf of the university.

### Message from Director



**Prof. (Dr.) S D Panchal**  
**Director, GTU-GSET**

GTU-GSET is established in 2017 and currently imparting post-graduation programs in highly specialized engineering domains like Cyber Security, Internet of Things, Mobile communication and Network Technology. It is matter of proud that this year two new emerging post graduate program are going to start in Civil with specialization in Structural Engineering and Computer Engineering with specialization in Artificial Intelligence & Data Science. It also runs a one-year PG-diploma program in Data Science.

I feel greatly privileged for taking the opportunity to welcome the new batch of various PG programs and the PG-diploma program for the academic year 2022-23. GTU-GSET is committed to delivering quality outcome-based education, where students will enjoy their study and research activities during their study tenure. At present, GTU-GSET is having state-of-art laboratory facilities which are equipped with digital forensic hardware and software, Pentester cybersecurity lab access, a supercomputing facility, an Internet of Things setup, mobile communication trainer kits etc. The school is also having strategic understandings with various domain-specific industries, research organizations to promote practical skills, research culture and internship opportunities among the students. In all the post graduate program placement/intership ratio is more than 90 percentage which is proud for the Institute.

I, on behalf of GTU-GSET, assure you that, your journey at GTU-GSET will be joyful and helps you to achieve all your professional careers objectives.

<b>University Authority</b>		
<b>Sr. No.</b>	<b>Name</b>	<b>Designation</b>
1	Prof. (Dr.) Navin Sheth	Hon. Vice-Chancellor, GTU
2	Dr. K. N. Kher	Registrar, GTU
3	Prof. (Dr.) S. D. Panchal	Director, GTU-GSET

• **Staff Details**

**Teaching Staff Details**

<b>Sr. No.</b>	<b>Faculty Name</b>	<b>Designation</b>	<b>Qualification</b>	<b>Area of Research</b>
1	Prof. S.D. Panchal	Professor and Director	Ph.D.	Image Processing and Network Security
2	Prof. Rajesh Thakkar	Adjunct Professor	Ph.D.	VLSI, Image processing and Micro Electronics
3	Prof. Jignesh Amin	Professor	Ph.D.	Design of High Rise Structures Earthquake Resistant Design of Structures
3	Prof. S.K. Hadia	Associate Professor	Ph.D.	Wireless Communication, Data Communication, IoT
4	Prof. G.D. Makwana	Associate Professor	Ph.D.	Machine Learning, IoT, 5G Technology, RF and Antenna
5	Prof. K.R.Borisagar	Associate Professor	Ph.D.	Wireless Communication, Data Communication, IoT
6	Prof. P. S. Maan	Associate Professor	Ph.D.	Soft Computing, Cloud Security, WSN
7	Prof. S.B.Joshi	Assistant Professor	M.Tech.(CSIR), Ph.D. (Pursuing)	Cloud Security, Blockchain Technology, Malware Analysis
8	Prof. Mahesh Panchal	Assistant Professor	ME (CE), Ph.D. (Pursuing)	Artificial Intelligence, Blockchain Technology, Machine Learning
9	Prof. Deepak Upadhyay	Assistant Professor	ME(IT), Ph.D. (Pursuing)	Cyber Security, Machine Learning , IoT
10	Prof. Margam Suthar	Assistant Professor	ME(EC) Ph.D. (Pursuing)	Wireless Communication, Data Communication
11	Prof. Hemal Nayak	Assistant Professor	ME(EC), Ph.D. (Pursuing)	Networking, Adhoc Network and IoT
12	Prof. Vagmin Joshi	Assistant Professor	ME(EC)	Digital Design, VLSI, IoT
13	Prof. Raj Hakani	Assistant Professor	ME(EC), Ph.D. (Pursuing)	Robotics, RF and Antenna Design
14	Prof. Rutika Ghariya	Assistant Professor	ME (EC) Ph.D. (Pursuing)	Optimization and Antenna Design
15	Prof. Mridul Seth	Assistant Professor	ME ( Civil) Ph.D. (Pursuing)	Water Resource and Environment
16	Prof. Soniya Jain	Assistant Professor	ME (Computer )	Internet of Things
17	Prof. Komal Prajapati	Assistant Professor	ME (Computer )	Data Mining

**Supporting Staff Details**

<b>Sr. No.</b>	<b>Name of the Staff Member</b>	<b>Designation</b>	<b>Section</b>
1	Mr. Ranchhod Khambhala	Librarian	Library-GSET
2	Mr. Jeet Joshi	Skill Development Coordinator	GTU
3	Mr. Samik Dave	Lab Assistant	Laboratory-GSET
4	Mr. Harish Vaghela	Office Assistant	HR-GSET
5	Ms. Aditi Darji	Office Assistant	Student Section-GSET
6	Ms. Zalak Nayak	Office Assistant	Bosch CoE
7	Mr. Mehul Senma	Peon	GSET
8	Mr. Ketul Desai	Peon	GSET

### Academic Advisory Committee

Sr. No.	Name of the Member	Designation With Parent institute/Company/Organization
1	Prof. S. D. Panchal	Professor, GTU-GSET
2	Prof. Kiran Parmar	Professor, Adani Institute of Technology, Ahmedabad
3	Prof. Parvez Faruki	Head of Department, Information Technology, AVPTI, Rajkot
4	Prof. N. K. Chaudhary	Professor and Dean, School of Cyber Security, National Forensic Sciences University, Gandhinagar
5	Mr. Nilesh Ranpara	Manager, ASIC, eInfochips Ltd., Ahmedabad
6	Mr. Harish Chhib	Sophos Technology, Ahmedabad
7	Prof. Mayuri Mehta	Professor, Department of Computer Engineering, Sarvajanic College of Engineering & Technology, Surat
8	Prof. D. Janakiram	Professor, Indian Institute of Technology-Madras
9	Mr. R. Ajith Kumar	Assistant Professor, Indian Institute of Information Technology and Management- Kerala (IIITM-K)
10	Prof. Mukesh Zaveri	Professor and Head of Computer Engineering Dept. , SVNIT, Surat
11	Prof. Mehul Raval	Professor, School of Engineering and Applied Science, Ahmedabad University
12	Prof. Hiren Joshi	Professor, Department. of Computer Science, Gujarat University, Ahmedabad
13	Prof. Jignesh Amin	Professor, GTU-GSET
14	Prof. Rajesh Thakker	Adjunct Professor, GTU-GSET
15	Prof. Gautam Makwana	Associate Professor, GTU-GSET
16	Prof. Sarman K. Hadia	Associate Professor, GTU-GSET
17	Prof. Komal Borisagar	Associate Professor, GTU-GSET
18	Prof. P. S. Maan	Associate Professor, GTU-GSET
19	Prof. Seema B. Joshi	Assistant Professor, GTU-GSET
20	Prof. Mahesh H. Panchal	Assistant Professor, GTU-GSET
21	Prof. Deepak Upadhyay	Assistant Professor, GTU-GSET

## Section 1

# General Information



## 1.1 About University

Gujarat Technological University is a premier academic and research institution that has driven new ways of thinking since its 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.

- **Vision:**

To be a global university for the creation and dissemination of knowledge and Innovation in Science & Technology, Humanities and Multidisciplinary domains for sustainable development and enrichment of human life.

- **Mission:**

1. To develop centres of academic excellence at university premises and at affiliated colleges in domains of science, engineering, technology, management, and environment for imparting comprehensive education, training, and research infrastructure as per the nation's requirements.
2. To build resources, facilities, proficiencies and other related infrastructure of global standard for the development of knowledge, skills, and competencies in the various educational domains.
3. To develop research-oriented pedagogy for flourishing ideas and to nurture innovators, entrepreneurs and professionals of tomorrow.
4. To build and enhance collaborations with other academic, research, industry, and government organizations as well as NGOs across the globe so that education, training and research at university and its affiliated colleges become aligned with national and global level requirements.
5. To encourage multidisciplinary research and develop a flexible learning ecosystem.

- **Core Values:**

1. Excellence with value-based education.
2. Responsiveness to society.
3. Integrity and transparency.
4. Mutual Respect.
5. Sustainable development.

## 1.2 About GTU-GSET

Gujarat Technological University has started GTU-Graduate School of Engineering and Technology (GTU-GSET) with AICTE approved postgraduate programs. The following programs are running at the GTU-GSET.

- Postgraduate program in Computer Engineering with Specialization in Cyber Security
- Postgraduate program in Computer Engineering with Specialization in Internet of Things
- Postgraduate program in Electronics Communication with Specialization in Mobile Communication and Network Technology
- Postgraduate program in Computer Engineering with Specialization in Artificial Intelligence and Data Science
- Postgraduate program in Civil Engineering with Specialization in Structural Engineering
- Postgraduate Diploma in Data Science (1-year program)

Each of these programs has been run with the vision of giving outstanding specialized knowledge and prepare research-oriented technocrats for society.

Salient features of GTU-GSET:

- It is a university managed-govt. institute and all programs are running at GTU campus– Ahmedabad.
- Effective implementation of Outcome-Based Education (OBE)
- Students are guided and acknowledged by senior academicians and industry experts in the capacity of advisors.
- Students are facilitated to showcase their talent by arranging various student led programs.
- Easy financial support to conferences and workshops organized at the university, National and Internationally
- State of the Art Laboratories with the latest hardware and software and a Supercomputing facility.
- Collaboration with various Industries-Academia's and agencies to get the high skilled Certification like Pentester, CISCO etc.
- Opportunities to work on real-time research projects for skill based certificate course (CISCO, Pentester) in various research organizations and domain-specific industries.
- Funding opportunities to promote the research in the Institute.
- Placement and Internship opportunities with stipend provisions.
- Opportunity to interact with course-specific industry experts.
- Hostel facility for boys and girls.

### 1.3 Centres of Excellence at GTU

The various centre of excellence facilities are developed at Gujarat Technological University with objectives to provide skill-oriented teaching and learning to give the exposure to the learners as per the need of the Industry. This centre acts as a centre to transfer current technologies to students and evolve them into research and innovation activities. These centres help to improve employability and provide greater opportunities for developing entrepreneurship.

#### 1.3.1 GTU – Welding Centre of Excellence in Automation



Gujarat Technological University has established the Centre of Excellence in Welding Sector under the short-term bridge course scheme of the Center for Entrepreneurship Development (CED). The objective is to train skilled workers, moreover, these will provide training to students of engineering.

#### 1.3.2 GTU – Design Centre of Excellence (Auto Desk)

GTU Design Innovation Centre has signed MoU with Autodesk and established Design Centre of Excellence in the campus intending to train students, innovators, startups and the trainers, in the field of Design. The state-of-art computing laboratory is equipped with 30 high configuration computers with PCB Design, CAD/CAM, Fusion etc. and latest software tools.



### 1.3.3 Blockchain CoE

A Centre of Excellence (CoE) for Blockchain Technology is going to establish at Gujarat Technological University. This centre is established with financial assistance from Education Department, Government of Gujarat.

Following are the objectives of the centre:

- To facilitate in building proof of concepts for use of Blockchain Technology in various Government and Non-Government applications to bring the transparency in overall governance system.
- To imparting comprehensive education, training, and research infrastructure to the various stakeholders of the University as per the nation's requirements in the emerging area of Blockchain Technology
- To prepare the technocrats in Blockchain Technology as per the need of industries for implementing Blockchain Technology in the various applications.
- Trigger research & development in Blockchain Technology to address challenges of development, deployment, interoperability, scalability, security, and privacy.
- Evolve a roadmap for trusted digital applications, catering various challenges towards digital technology adoption.
- Create a sandbox environment for development & testing of Blockchain applications.
- Contribute towards development of standards in Blockchain Technology.

Considering the widespread applications of Blockchain Technology in Healthcare, Banking, Education, Agriculture sectors, this centre will play a vital role to provide secure and transparent services to the society and government.

### 1.3.4 GTU – BOSCH Centre of Excellence in Automation



It is built for Industry-4.0 frontiers of today's technology in the Automation field with the association with Bosch-Rexroth India Limited (BRIN) to develop the industry-institute partnership in the field of Automation, Mobile Hydraulic, Automobile, and Mobile Electronics Technologies to bridge technology gaps between industry and academia to foster research and knowledge among the students at GTU. The main goal of the centre would be to improve the technical competence, employability and entrepreneurship of UG & PG students who train at the centre and encourage students to pursue PG programs. In this CoE, Hydraulic Lab, Pneumatic Lab, Programmable logic controller, Robotic

Lab, and Sensor Laboratory equipment are available.

For more information on the course and registration procedure, please click on the link:  
<https://goo.gl/oqAuCw>

## 1.4 Academic collaboration with Industry-Educational Academy

### 1.4.1 Eduskills Academy – Skill based certificate course

Sr. No	Academy	Courses
1	Cisco Networking Academy	Cisco Certified Network Associate (CCNA)
		Cisco Certified DevNet Associate (DEVNET)
2	Amazon Web Service Academy	AWS Certified Cloud Foundation
		AWS Academy AI & ML Foundations
		AWS Solution Associate
3	Redhat Academy	Red Hat Certified System Administrator (RHCSA)
		Red Hat Certified Engineer (RHCE)
4	Palo Alto Academy	Palo alto Networks Certified Cybersecurity Entry Level Technician
		Cybersecurity Foundation
		Network Security Foundations
		Cloud Security Foundations
		Security Operations Foundations (SOC)
		Paloalto Certified Network Security Administrator (PCNSA)
		Cybersecurity Infrastructure Configuration
		Cybersecurity Prevention and Countermeasures
5	Blue Prism Academy	Blue Prism Academy Foundation
		Blue Prism Certified Developer (AD01)
6	Celonis Academy	Celonis Process Mining Fundamentals
		Celonis Process Mining Expert
7	Juniper Academy	Juniper Operating System
		Juniper Networking Cloud
		Juniper DevOps
		Juniper Mist AI

### 1.4.2 Cyber Security –Pentester Virtual Labs:

GTU-GSET has established the cyber security virtual lab facilities in association with Pentester Academy, USA. Pentester Academy provides one of the most comprehensive, hands-on and technically challenging courses as per requirement in industry. It has 40+ Courses, 1900+ Labs, 1500+ HD Videos with real-time scenarios. GTU-Graduate School of Engineering and Technology has taken subscriptions for the benefit of the students and these labs are being utilized for their enhancement of technical skills. These online courses help the students for the preparation of the internship and placement.

### 1.4.3 GTU-GSET VAPT Facility:

In the current era, data has become the most important part of human beings and its privacy & security have become the essential need of the organization, which comes under the field of cyber security. Hence this field plays an important role for companies and organizations. GTU-GSET has initiated a VAPT service facility in the domain of cyber security. It offers Web Application and Penetration Testing (WAPT), Mobile Application and Penetration Testing (MAPT), Risk Assessment and Threat Modelling, Compliance Audits, Cyber Security Training and Incident Response and Disaster Management.

## 1.5 Various Funding Resources for Research & Innovation

### 1.5.1 Atal Incubation Center

Atal Incubation Center – GTU Innovation and Startup Center Foundation (AIC-GISC) promoted by Gujarat Technological University supported by Atal Innovation Mission, NITI Aayog aims to foster the culture of innovation and entrepreneurship by supporting technology-based start-ups & developing an

ecosystem that is conducive for innovation, where start-ups and new ventures thrive. It has been created in a modest infrastructure in the GTU campus for providing the essential dedicated Lab Suites, shared Lab, co-working spaces, specialized facilities like fabrication lab, sophisticated laboratory and central instrumentation facility in the specific domain of Biotechnology, Healthcare, Pharma and Medical Devices. AIC-GISC help startups through their early development by providing business advice, resources, contacts and capital. For more details, kindly visit: <http://www.aic-gisc.gtu.ac.in/>

### **1.5.2 GTU Innovation Council (GIC)**

GTU Innovation Council is one of the elite initiatives of the GTU for cultivating a multilayer innovation ecosystem. Through the efforts for creating a culture of innovation and entrepreneurship in the last decade, an aura of developing the ecosystem across the state was conceptualized. GTU Innovation and Startup Centre (GISC) has been designed to establish close bonding between industries, entrepreneurs, faculty members and students to make research and development at the university. For more details kindly visit: <http://gtuinnovationcouncil.ac.in/>

### **1.5.3 GTU - IPR Cell**

GIC – IPR cell is working with a mission for IP literacy for faculty and students, which has started in September 2011. The cell organizes workshops for faculty and students, based on various themes. For more details, kindly visit: <https://gtuipr.gtu.ac.in/>

### **1.5.4 GTU – Seed Money Scheme**

To promote the innovative ideas of teachers and regular postgraduate students of various departments of Schools and University-approved research centres to initiate or continue their research activities, a seed money scheme is launched in 2020. Under this scheme, seed money is available to the faculties and students for their research activities.

### **1.5.5 GTU – Technology Business Incubator (TBI)**

GTU has become India's first university to have Business Incubation Centre through their GTU Innovation Council. The Department of Science & Technology, Government of India approved GTU as a nodal institute to start its own technology business incubator. The TBI is targeted for the niche segment of IoT/technology based startups. In an effort to create a culture of innovation and entrepreneurship, the university has paved the way for setting up an incubation centre namely GTU Innovation and Startup Centre (GISC), a section 8 (not-for-profit) company. GTU Innovation and Startup Centre provides support to innovators for availing grants under various schemes of the Government and also provides a rich resource pool in the form of mentors which the innovators can utilize to effectively hone their ideas and propel them to newer heights.

### **1.5.6 Design Innovation Centre**

Design Innovation Centre (DIC) is a project of the Gujarat Technological University (GTU) funded by the Ministry of Education, Government of India in May 2018 under the NIDI scheme. The Centre is to provide a platform to students, faculty members and researchers having enthusiasm for learning and creativity, and a passion to convert their ideas into design innovations. Design Innovation Centre Hub and its spokes jointly are actively working towards nurturing design, innovation, and skill development amongst school and college students. DIC has conducted 78 courses/workshops and 147 seminars/webinars according to the market needs and emerging skill requirements. DIC has also supported 91 student projects and startups financially and provides facilities for mentoring, fabrication with a full-fledged Fablab, patent support, and networking. We have also conducted 10 Bootcamps for school students to inculcate design creative thinking and problem-solving capabilities.

### 1.5.7 AICTE – IDEALab

The purpose of IDEALab is to provide all facilities under one roof, for the conversion of an idea into a prototype. The IDEALab will be equipped with tools, components and consumables to be fully functional and encourage students and faculties to take up creative work, and get training in creative thinking, problem-solving, and collaboration. The idea is to transform engineering education and expose students to create, organize training sessions, support projects and provide online learning material.

IDEA Lab provides physical and virtual environment for generating, developing and commercializing innovative students' ideas through relevant trainings and mentoring. Idea Lab will provide collaboration with start-ups and industries. The general objective of the lab is to advance employment and self-employment potential of graduates by fostering students' entrepreneurship, creation of business start-ups and open innovation approach.

Specific objectives of Idea Lab are:

- To support students to generate, develop and commercialize their own innovative Ideas through entrepreneurship and/or open innovation
- To foster student entrepreneurship and start-up creation at university by improving Infrastructure, entrepreneurial culture and skills
- To introduce and implement open innovation as a new form of partnership among key stakeholders.
- To revise and adapt curricula to include entrepreneurial skills and problem-based Learning



## Section 2

# Program Details

## **2.1 Postgraduate Program in Computer Engineering with specialization in Cyber Security**

- Year of Establishment: 2017-18
- AICTE Approved Intake Capacity: 30
- Duration: 2 Years

### **Program Outcome**

- An ability to independently carry out research /investigation and development work to solve practical problems.
- An ability to write the present substantial technical report/documents.
- Students should be able to demonstrate a degree of mastery over the area as per the specialization of the program. The mastery should be at a level higher than the requirements in the appropriate bachelor program.

### **Program Specific Outcome**

- To understand and analyse the various cyber-attacks, cyber laws, ethical hacking concepts, defending the practice of cyber security, and digital forensics techniques.
- Identify, analyze and develop software and hardware solutions for complex problems in the cyber security domain.
- Apply advanced knowledge to identify research challenges, and contribute individually or in a team to resolve Cyber Security and Digital Forensics issues.

### **Program Educational Objectives**

- To impart knowledge/skill in the areas of cyber security, digital forensics, cyber laws and related disciplines.
- To work in reputed computer and IT security, Government and Research organizations or as an entrepreneur to build a cyber-safe nation.
- To able to cope with cyber security challenges through continuing education, increased responsibility, teamwork and an ethical code of conduct.

### **Laboratory Details**

- Cyber Security and Digital Forensics Laboratory
- High-Performance Computing (HPC) Laboratory
- Network Research Laboratory \ ISEA Sponsored laboratory
- Vulnerability Assessment and Penetration Testing (VAPT) & Digital forensics Laboratory.



## Program curriculum Structure

Subject code	Category	Program Code 59: ME Computer Engg. (Cybersecurity)	Th Hrs	Tut Hrs	Pract Hrs	CR	ESE (E)	PA (M)	PA (I)	ESE (V)	Total Marks
<b>Semester -1</b>											
4715901	PC-I	Cyber Law, Policies and Compliance	3	0	2	4	70	30	20	30	150
4715902	PC-II	Computer Networks and Security	3	0	2	4	70	30	20	30	150
4715903	PE-I	Defensive Programming	3	0	2	4	70	30	20	30	150
4715904	PE-I	Artificial Intelligence in Cyber Security –I									
4715905	PE-I	Secure Software Design and Enterprise Computing									
4715906	PE-II	Operating System and Host Security	3	0	2	4	70	30	20	30	150
4715907	PE-II	Cyber Security and Cryptography: Principles and Practices									
4715908	PE-II	Introduction to IoT									
3710001	MLC	Research Methodology and IPR	1	0	2	2	0	0	20	80	100
3700004	AC-I	Value Education	2	0	0	0	50	0	0	0	50
		<b>Total</b>	<b>15</b>	<b>0</b>	<b>10</b>	<b>18</b>	<b>330</b>	<b>120</b>	<b>100</b>	<b>200</b>	<b>750</b>
<b>Semester-2</b>											
4725901	PC-III	Digital Forensics and Investigations	3	0	2	4	70	30	20	30	150
4725902	PC-IV	Malware Analysis	3	0	2	4	70	30	20	30	150
4725903	PE-III	Ethical Hacking Practices	3	0	2	4	70	30	20	30	150
4725904	PE-III	Artificial Intelligence in Cyber Security -II									
4725905	PE-III	Cloud Computing and Security									
4725906	PE-IV	Web and Database Security	3	0	2	4	70	30	20	30	150
4725907	PE-IV	Advanced Cryptography									
4725908	PE-IV	Security in IoT									
3720001	Mini-Project	Mini Project with Seminar	0	0	4	2	0	0	100	0	100
3700001	AC-II	English for Research Paper Writing	2	0	0	0	50	0	0	0	50
		<b>Total</b>	<b>14</b>	<b>0</b>	<b>12</b>	<b>18</b>	<b>330</b>	<b>120</b>	<b>180</b>	<b>120</b>	<b>750</b>
<b>Semester-3</b>											
4735901	PE-V	Industrial Control Systems (ICS) Cyber Security	3	0	2	4	70	30	20	30	150
4735902	PE-V	Incident Response and e-Discovery									
4735903	PE-V	Wireless Communication and Mobile Security									
3730005	OE -I	Business Analytics	3	0	0	3	70	30	00	00	100
3730006	OE-II	Industrial Safety									
3730007	OE-III	Cost Management of Engineering Projects									
3730002	IR-I	Internal Review-I	0	0	4	2	0	0	100	0	100
3730003	DP-I	Dissertation Phase-I	0	0	16	8	0	0	0	100	100
		<b>Total</b>	<b>6</b>	<b>0</b>	<b>22</b>	<b>17</b>	<b>140</b>	<b>60</b>	<b>120</b>	<b>130</b>	<b>450</b>
<b>Semester -4</b>											
3740001	IR-II	Internal Review-II	0	0	4	2	0	0	100	0	100
3740002	DP-II	Dissertation Phase-II	0	0	28	14	0	0	0	100	100
		<b>Total</b>	<b>0</b>	<b>0</b>	<b>32</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>100</b>	<b>200</b>

## **2.2 Postgraduate Program in Electronics & Communication With Specialization in Mobile Communication and Network Technology**

- Year of Establishment: 2018-19
- AICTE Approved Intake Capacity: 18
- Duration: 2 Years

### **Program Outcome**

- An ability to independently carry out research /investigation and development work to solve practical problems.
- An ability to write the present substantial technical report/documents.
- Students should be able to demonstrate a degree of mastery over the area as per the specialization of the program. The mastery should be at a level higher than the requirements in the appropriate bachelor program.

### **Program Specific Outcome**

- Understand, design and implement emerging technology in the field of mobile communication and network technology.
- To analyze real-time problems, design appropriate systems to provide solutions that are technically sound, cost-effective and beneficial to the society in mobile communication and network technology.
- To furnish with necessary soft skills, managerial skills, analytical skills to work in the software and hardware industry

### **Program Educational Objectives**

- Engage in the effective practice of communication and networking engineering to recognize and solve important tribulations in a diverse range of application areas.
- Involve in research with proficiency in core areas of advanced communication and networking related engineering so as to comprehend engineering trade-offs, analysis, design and technical concepts to create novel solutions for the real life problems.
- Occupy constructively in successful careers in industry, academia and attain positions of importance where they have an impact on their business, profession, and community service with ethics.
- Competent enough in any challenging and dynamic environment communicate effectively in variety of professional context and incorporate government societal and industrial need.

### **Laboratory Details**

- Wireless Communication Laboratory
- Internet on Things Laboratory
- Wireless Sensor Network Laboratory
- RF and Microwave Laboratory
- Signal Processing Laboratory

## Program curriculum Structure

Subject code	Category	Program 60: ME EC (MCNT)	Th Hrs	Tut Hrs	Pract Hrs	CR	ESE (E)	PA (M)	PA (I)	ESE (V)	Total Marks
<b>Semester-1</b>											
4716001	PC-I	Advanced Digital Communication Techniques	3	0	2	4	70	30	20	30	150
4716002	PC-II	Advanced Wireless Communication	3	0	2	4	70	30	20	30	150
4716003	PE-I	High Frequency CMOS Circuit Design	3	0	2	4	70	30	20	30	150
4716004	PE-I	Embedded System Design									
4716005	PE-I	Optical Communication and Networks									
4716006	PE-II	Artificial Intelligence in Communication	3	0	2	4	70	30	20	30	150
4716007	PE-II	Microwave Integrated Circuits Design									
4716008	PE-II	Advanced Digital Signal Processing in Communication									
3710001	MLC	Research Methodology and IPR	1	0	2	2	0	0	20	80	100
3700004	AC-I (NC)	Value Education	2	0	0	0	50	0	0	0	50
		<b>Total</b>	<b>15</b>	<b>0</b>	<b>10</b>	<b>18</b>	<b>330</b>	<b>120</b>	<b>100</b>	<b>200</b>	<b>750</b>
<b>Semester -2</b>											
4726001	PC-III	Adhoc Network Technology	3	0	2	4	70	30	20	30	150
4726002	PC-IV	Network Performance Modeling and Analysis	3	0	2	4	70	30	20	30	150
4726003	PE-III	RF System Design	3	0	2	4	70	30	20	30	150
4726004	PE-III	IoT Architecture and Applications									
4726005	PE-III	GPS and Satellite Communication									
4726006	PE-IV	Deep Learning in Communication	3	0	2	4	70	30	20	30	150
4726007	PE-IV	Smart Antenna Design									
4726008	PE-IV	Speech and Image Signal Processing									
3720001	Mini Proj	Mini Project with Seminar	0	0	4	2	0	0	100	0	100
3700001	AC-II (NC)	English for Research Paper Writing	2	0	0	0	50	0	0	0	50
		<b>Total</b>	<b>14</b>	<b>0</b>	<b>12</b>	<b>18</b>	<b>330</b>	<b>120</b>	<b>180</b>	<b>120</b>	<b>750</b>
<b>Semester -3</b>											
4736001	PE-V	High Speed Networks	3	0	2	4	70	30	20	30	150
4736002	PE-V	Wireless Network Security									
4736003	PE-V	Software Defined Radio Network									
3730005	OE-I	Business Analytics	3	0	0	3	70	30	00	00	100
3730006	OE-II	Industrial Safety									
3730007	OE-III	Cost Management of Engineering Projects									
3730002	IR-I	Internal Review-I	0	0	4	2	0	0	100	0	100
3730003	DP-I	Dissertation Phase-I	0	0	16	8	0	0	0	100	100
		<b>Total</b>	<b>6</b>	<b>0</b>	<b>22</b>	<b>17</b>	<b>140</b>	<b>60</b>	<b>120</b>	<b>130</b>	<b>450</b>
<b>Semester-4</b>											
3740001	IR-II	Internal Review-II	0	0	4	2	0	0	100	0	100
3740002	DP-II	Dissertation Phase-II	0	0	28	14	0	0	0	100	100
		<b>Total</b>	<b>0</b>	<b>0</b>	<b>32</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>100</b>	<b>200</b>

### **2.3 Postgraduate Program in Computer Engineering With Specialization in Internet of Things**

- Year of Establishment: 2021-22
- AICTE Approved Intake capacity: 18
- Duration: 2 Years

#### **Program Outcome**

- An ability to independently carry out research /investigation and development work to solve practical problems.
- An ability to write the present substantial technical report/documents.
- Students should be able to demonstrate a degree of mastery over the area as per the specialization of the program. The mastery should be at a level higher than the requirements in the appropriate bachelor program

#### **Program Specific Outcome**

- To understand various aspects of IoT system including algorithm and protocols.
- To develop /implement IoT system for real life applications using latest technology.
- To identify various challenges/problems in the domain of IoT and suggest optimum Solutions.

#### **Program Educational Objectives**

- To serve and make professional contributions in leading software/hardware multinational industries, government or research organizations.
- To explore and initiate entrepreneurship opportunities in the field of IoT.
- To apply IoT knowledge and skills in solving various societal issues.

#### **Program Educational Objectives**

- Impart knowledge/skill in the areas of IoT, AI, deep learning, cloud computing and Industry 4.0
- Work in reputed computer and IT-based multinational companies, government and research organizations or as an entrepreneur to build novel solutions of real-time issues for the nation.
- Able to cope with IoT challenges through continuing education, increased responsibility, team work and ethical code of conduct.

#### **Laboratory Details**

- Internet of Things Laboratory
- Research Laboratory

**Program curriculum Structure**

Subject code	Category	Program: 62 ME CE (Internet Of Things)	Th Hrs	Tut Hrs	Pract Hrs	CR	ESE (E)	PA (M)	PA (I)	ESE (V)	Total Marks
<b>Semester-1</b>											
1716201	PC-I	Fundamentals of IoT	3	0	2	4	70	30	20	30	150
1716202	PC-II	Design of Embedded System	3	0	2	4	70	30	20	30	150
1716203	PE-I	Gateway Design of IoT	3	0	2	4	70	30	20	30	150
1716204	PE-I	Artificial Intelligence & Soft Computing									
1716205	PE-I	High-Performance Computing									
1716206	PE-II	Sensor, Actuator and Signal Conditioning	3	0	2	4	70	30	20	30	150
1716207	PE-II	Programing Technologies									
1716208	PE-II	Mobile Application Development									
3710001	MLC	Research Methodology and IPR	1	0	2	2	0	0	20	80	100
3700004	AC-I (NC)	Value Education	2	0	0	0	50	0	0	0	50
<b>Total</b>			<b>15</b>	<b>0</b>	<b>10</b>	<b>18</b>	<b>330</b>	<b>120</b>	<b>100</b>	<b>200</b>	<b>750</b>
<b>Semester-2</b>											
1726201	PC-III	IoT OS and Device Drivers	3	0	2	4	70	30	20	30	150
1726202	PC-IV	Wireless Sensor Network	3	0	2	4	70	30	20	30	150
1726203	PE-III	Cloud Computing Technology	3	0	2	4	70	30	20	30	150
1726204	PE-III	Big Data Technologies									
1726205	PE-III	Real-Time Operating System (RTOS)									
1726206	PE-IV	Security in IoT Systems	3	0	2	4	70	30	20	30	150
1726207	PE-IV	Deep Learning									
1726208	PE-IV	Network Programming									
3720001	Mini Project	Mini Project with Seminar	0	0	4	2	0	0	100	0	100
3700001	AC-II (NC)	English for Research Paper Writing	2	0	0	0	50	0	0	0	50
<b>Total</b>			<b>14</b>	<b>0</b>	<b>12</b>	<b>18</b>	<b>330</b>	<b>120</b>	<b>180</b>	<b>120</b>	<b>750</b>
<b>Semester-3</b>											
1736201	PE-V	Real Time Data Analytics	3	0	2	4	70	30	20	30	150
1736202	PE-V	Industrial and Automotive Technologies									
1736203	PE-V	Network Oriented OS									
3730005	OE-I	Business Analytics	3	0	0	3	70	30	00	00	100
3730006	OE-II	Industrial Safety									
3730007	OE-III	Cost Management of Engineering Projects									
3730002	IR-I	Internal Review-I	0	0	4	2	0	0	100	0	100
3730003	DP-I	Dissertation Phase-I	0	0	16	8	0	0	0	100	100
<b>Total</b>			<b>6</b>	<b>0</b>	<b>22</b>	<b>17</b>	<b>140</b>	<b>60</b>	<b>120</b>	<b>130</b>	<b>450</b>
<b>Semester-4</b>											
3740001	IR-II	Internal Review-II	0	0	4	2	0	0	100	0	100
3740002	DP-II	Dissertation Phase-II	0	0	28	14	0	0	0	100	100
<b>Total</b>			<b>0</b>	<b>0</b>	<b>32</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>100</b>	<b>200</b>

## **2.4 Postgraduate Program in Computer Engineering with Artificial Intelligence and Data Science**

- Year of Establishment: 2022-23
- AICTE Approved Intake Capacity: 18
- Duration: 2 Years

### **Program Outcome**

- An ability to independently carry out research /investigation and development work to solve practical problems.
- An ability to write the present substantial technical report/documents.
- Students should be able to demonstrate a degree of mastery over the area as per the specialization of the program. The mastery should be at a level higher than the requirements in the appropriate bachelor program

### **Program Specific Outcomes**

- To understand and analyse the various statistical methods, data visualization methods, expert systems, optimization algorithms to build AI based data driven models.
- To apply the principles of AI and data science that requires problem solving, inference, perception, knowledge representation, and learning.
- To apply advanced knowledge of data science and AI algorithms to identify research challenges, and contribute individually or in a team to resolve societal real-time problems.

### **Program Educational Objectives**

- To deliver the knowledge for developing intelligent sustainable systems as per need of society.
- To work in reputed industries, Government and Research organizations or as an entrepreneur to build career in the field of data science and Artificial intelligence.
- To be able to manage the challenges in developing knowledge based systems through consistent learning, better responsibility, teamwork with an ethical code of conduct.

### **Laboratory Details**

- Data Science Laboratory
- High-Performance Computing (HPC) Laboratory
- Research Laboratory

# Program curriculum Structure

Subject code	Category	Program: ME CE (AI & DS)	Th Hrs	Tut Hrs	Pract Hrs	CR	ESE (E)	PA (M)	PA (I)	ESE (V)	Total Marks
<b>Semester-1</b>											
	PC-I	Artificial and Computational Intelligence	3	0	2	4	70	30	20	30	150
	PC-II	Foundations for Data Science	3	0	2	4	70	30	20	30	150
	PE-I	Bio-inspired Algorithms	3	0	2	4	70	30	20	30	150
	PE-I	Statistics and Exploratory Data Analysis									
	PE-I	Advanced Data Structures									
	PE-II	Real World Applications of Artificial Intelligence and Data Science	3	0	2	4	70	30	20	30	150
	PE-II	Data Visualization and Interpretation									
	PE-II	Graphs - Algorithms & Mining									
3710001	MLC	Research Methodology and IPR	1	0	2	2	0	0	20	80	100
3700004	AC-I (NC)	Value Education	2	0	0	0	50	0	0	0	50
		<b>Total</b>	<b>15</b>	<b>0</b>	<b>10</b>	<b>18</b>	<b>330</b>	<b>120</b>	<b>100</b>	<b>200</b>	<b>750</b>
<b>Semester-2</b>											
	PC-III	Deep Learning	3	0	2	4	70	30	20	30	150
	PC-IV	Big Data Systems and Analytics	3	0	2	4	70	30	20	30	150
	PE-III	Explainable Artificial Intelligence	3	0	2	4	70	30	20	30	150
	PE-III	Blockchain Technology									
	PE-III	Natural Learning Processing									
	PE-IV	IoT & Embedded Systems	3	0	2	4	70	30	20	30	150
	PE-IV	Software Testing									
	PE-IV	Human Computer Interaction									
3720001	Mini Project	Mini Project with Seminar	0	0	4	2	0	0	100	0	100
3700001	AC-II (NC)	English for Research Paper Writing	2	0	0	0	50	0	0	0	50
		<b>Total</b>	<b>14</b>	<b>0</b>	<b>12</b>	<b>18</b>	<b>330</b>	<b>120</b>	<b>180</b>	<b>120</b>	<b>750</b>
<b>Semester-3</b>											
	PE-V	Robotics	3	0	2	4	70	30	20	30	150
	PE-V	Cloud and Edge Computing									
	PE-V	Pattern Recognition									
	OE	Business Analytics	3	0	0	3	70	30	00	00	100
	OE	Industrial Safety									
	OE	Cost Management of Engineering Projects									
3730002	Dissertation	Internal Review-I	0	0	4	2	0	0	100	0	100
3730003	Dissertation	Dissertation Phase-I	0	0	16	8	0	0	0	100	100
		<b>Total</b>	<b>6</b>	<b>0</b>	<b>22</b>	<b>17</b>	<b>140</b>	<b>60</b>	<b>120</b>	<b>130</b>	<b>450</b>
<b>Semester-4</b>											
	Dissertation	Internal Review- II	0	0	4	2	0	0	100	0	100
	Dissertation	Dissertation Phase- II	0	0	28	14	0	0	0	100	100
		<b>Total</b>	<b>0</b>	<b>0</b>	<b>32</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>100</b>	<b>200</b>

## **2.5 Postgraduate Program in Civil Engineering with Specialization in Structural Engineering**

- Year of Establishment: 2022-23
- AICTE Approved Intake Capacity: 18
- Duration: 2 Years

### **Program Outcomes**

- An ability to independently carry out research /investigation and development work to solve practical problems.
- An ability to write the present substantial technical report/documents.
- Students should be able to demonstrate a degree of mastery over the area as per the specialization of the program. The mastery should be at a level higher than the requirements in the appropriate bachelor program

### **Program Specific Outcome**

- An ability to use modern engineering tools, software and equipment to critically analyze, design, perform experiments and interpret investigations to solve real time civil and structural engineering problems.
- An ability to independently carry out research and able to pursue higher education in Structural Engineering domain
- Work and communicate efficiently as an individual or part of, within multi-disciplinary domain in executing and managing Civil Engineering projects

### **Program Educational Objectives**

- To impart and develop knowledge with conceptual and analytical skills to analyze, design and build sustainable infrastructures to cater the needs of society
- To promote research activities and undertake research projects to work on the problem statements concerned to the sustainable growth of construction industry and society.
- Practice their profession with leadership, ethics and social responsibility to formulate solutions that are technically sound, economically viable, and socially acceptable.

### **Available Facilities**

- Well Configured Computer Laboratory with state-of-art analysis and design software
- Available Software are from Bentley Systems and Autodesk
- Software available such as STADD Pro, Advanced STADD, 3D Structural Analysis, PLAXIS, WaterCAD, StormCAD, MX Roads and etc.
- Remote access of software



# Program Curriculum Structure

Subject code	Category	Program 20: ME CE (Structural Engineering)	Th Hrs	Tut Hrs	Pract Hrs	CR	ESE (E)	PA (M)	PA (I)	ESE (V)	Total Marks
<b>Semester-1</b>											
3712011	PC-I	Advanced Structural Analysis	3	0	2	4	70	30	20	30	150
3712012	PC-II	Advanced Concrete Design	3	0	2	4	70	30	20	30	150
3712013	PE-I	Analytical and Numerical methods for Structural Engg.	3	0	2	4	70	30	20	30	150
3712014	PE-I	Theory and applications of cement composites									
3712015	PE-I	Theory of structural stability									
3712016	PE-II	Theory of Thin plates & shells	3	0	2	4	70	30	20	30	150
3712017	PE-II	Advanced Solid Mechanics									
3712018	PE-II	Structural Optimization									
3710001	MLC	Research Methodology and IPR	1	0	2	2	0	0	20	80	100
3700002	AC-I (NC)	Disaster Management	2	0	0	0	50	0	0	0	50
		<b>Total</b>	<b>15</b>	<b>0</b>	<b>10</b>	<b>18</b>	<b>330</b>	<b>120</b>	<b>100</b>	<b>200</b>	<b>750</b>
<b>Semester -2</b>											
3722007	PC-III	Advanced Steel Design	3	0	2	4	70	30	20	30	150
3722016	PC-IV	Structural Dynamics	3	0	2	4	70	30	20	30	150
3722023	PC	Structural Design Project	0	0	4	2	0	0	20	80	100
3722017	PE-III	Design of Formwork	3	0	2	4	70	30	20	30	150
3722018	PE-III	Design of High rise structures									
3722019	PE-III	Design of Masonry structures									
3722020	PE-IV	Structural Health Monitoring & Retrofitting of Structures	3	0	2	4	70	30	20	30	150
3722021	PE-IV	Design of Bridge Structures									
3722022	PE-IV	Soil structure interaction									
3700001	AC-II (NC)	English for Research Paper Writing	2	0	0	0	50	0	0	0	50
		<b>Total</b>	<b>14</b>	<b>0</b>	<b>12</b>	<b>18</b>	<b>330</b>	<b>120</b>	<b>100</b>	<b>200</b>	<b>750</b>
<b>Semester -3</b>											
3732006	PE-V	Design of Prestressed Concrete Structures	3	0	0	3	70	30	0	0	100
3732007	PE-V	Earthquake Resistant Design of structures									
3732008	PE-V	Advanced Design of foundations systems									
3730006	OE-I	Industrial Safety	3	0	0	3	70	30	0	0	100
3730007	OE-II	Operation Research									
3730002	IR-I	Internal Review-I	0	0	4	2	0	0	100	0	100
3730003	DP-I	Dissertation Phase-I	0	0	16	8	0	0	0	100	100
		<b>Total</b>	<b>6</b>	<b>0</b>	<b>20</b>	<b>16</b>	<b>140</b>	<b>60</b>	<b>100</b>	<b>100</b>	<b>400</b>
<b>Semester-4</b>											
3740001	IR-II	Internal Review-II	0	0	4	2	0	0	100	0	100
3740002	DP-II	Dissertation Phase-II	0	0	28	14	0	0	0	100	100
		<b>Total</b>	<b>0</b>	<b>0</b>	<b>32</b>	<b>16</b>	<b>0</b>	<b>0</b>	<b>100</b>	<b>100</b>	<b>200</b>

**2.6 Post Graduate Diploma in Data Science (1 Year Program)**

- Year of Establishment: 2020-21
- GTU Approved Intake capacity: 30
- Duration: 1 Year

**Mission of Program**

- To provide an in-depth understanding of the key technologies of data science to the learners.
- To develop state-of-art laboratory facilities with well-equipped academic infrastructure.
- To encourage the faculty members for consultancy projects in the field of data science.
- To establish strong linkages with data science companies and institutes having national importance.
- To promote innovative practices in order to produce innovators and entrepreneurs in the field of data science.

**Laboratory Details**

- High-Performance Computing (HPC) Laboratory
- Data Science Laboratory

**Program curriculum Structure**

Subject code	Category	Program: PG Diploma in Data Science	Th Hrs	Tut Hrs	Pract Hrs	CR	ESE (E)	PA (M)	PA (I)	ESE (V)	Total Marks
<b>Semester-1</b>											
1618001	PC-I	Data Structures and Algorithm	4	0	2	5	70	30	0	50	150
1618002	PC-II	Statistics and Exploratory Data Analysis	4	0	2	5	70	30	0	50	150
1618003	PC-III	Fundamentals of Machine Learning	4	0	2	5	70	30	0	50	150
1618004	PC-IV	Introduction to Python Programming	2	0	6	5	50	30	0	70	150
<b>Semester-2</b>											
1628001	PC-V	Software Tools for Data Management	0	0	6	3	0	0	30	70	100
1628002	PC-VI	Cloud Computing	4	0	2	5	70	30	0	50	150
1628003	PC-VII	Big Data Analytics	4	0	2	5	70	30	0	50	150
1628004	PC-VIII	Mini Project	0	0	4	2	0	0	30	70	100
1628005	PE-I	Blockchain Technology	4	0	2	5	70	30	0	50	150
1628006	PE-I	Deep Learning	4	0	2	5	70	30	0	50	150
1628007	PE-I	Natural Language Processing	4	0	2	5	70	30	0	50	150
1628008	PE-I	Business Analytics	4	0	2	5	70	30	0	50	150

## 2.7 Academic Calendar & Evaluation Scheme

### Academic Planning

- The whole academic term will be divided into two teaching phases i.e. Teaching phase-I and Teaching Phase-II Academic calendar along with theory/practical session time-table is circulated by academic section accordingly.
- Each student has to strictly follow it.
- Faculties/Students must be enrolled in LMS (Learning Management System) for their all teaching endowments.
- Each faculty course coordinator will declare the course lesson planning with session details on GTU-GSET Course website/LMS portal
- Students can view his/her academic progress through LMS login only
- The Overall academic term will be planned as below

	<b>Teaching Phase-I</b> (In between the term)	<b>Teaching Phase-II</b> (At the end of the term)
Course having Theory/Practical Components	<ul style="list-style-type: none"> <li>• Student Attendance review-I*</li> <li>• Course Progress Review-I</li> <li>• Continuous Evaluation –I(CET-I) – 30 Marks (CET-I)- 30 Marks (consisting of 20 marks theory and 10 marks assignment)</li> </ul>	<ul style="list-style-type: none"> <li>• Student Attendance review-II*</li> <li>• Course Progress Review- II</li> <li>• Continuous Evaluation – II (CET-II) – 30 Marks (CET-II)-30 Marks (consisting of 20 marks theory and 10 marks assignment)</li> </ul>
IR-I (Semester-3)	Internal review-I(A): 40 Marks	Internal review-I(B): 60 Marks
IR-II (Semester-4)	Internal review-II(A): 40 Marks	Internal review-II(B): 60 Marks

\* Attendance needs to be ensured as per the University norms, to grant the term.

### Evaluation Methodology

Theory		Practical		Total
ESE(E)	PA(M)	ESE (V)	PA(I)	
70#	30*	30#	20*	150

\* Internal Component, #External Component, ESE-End Semester Exam, PA-Progressive Assessment

Internal component and evaluation methodology		
Course Evaluation	PA(M) : 30	Average marks of Continuous Evaluation – I and Continuous Evaluation –II
	PA(I) : 20	Total marks obtained in practical sessions will be converted into 20 marks (10 practical*10 mark each = 100 marks/5)
IR-I (Sem-3)	IR1 (A) + IR1 (B) – Rubrics based evaluation	
IR-II(Sem-4)	IR2 (A) + IR2 (B) – Rubrics based evaluation	

## Section 3

# Rules & Regulation

### 3.1 Code of Conduct for Students (General Disciplinary Guideline):

Code of conduct describes the behavior expected from the students admitted at any of the Post Graduate Schools in terms of overall discipline, hostel residency, dress code and student section activities.

#### A) Overall Discipline:

Regulation No.	Particulars
1	<b>Definition:</b>
	<p>(a) Student: means the student admitted in any institution of the University at any level i.e. Certificate, Diploma, Under-graduate or at Post- graduate course etc.</p> <p>(b) Institution: means the Schools established under Gujarat Technological University at Under-graduate, Post Graduate, Diploma or Certificate level courses whether on campus or on off campus.</p> <p>(c) Head of the Institution/ PG School: means the Director / Principal or any other person who is heading the institute/ PG School</p> <p>(d) Hostel: means the hostel managed or recognized by the Gujarat Technological University.</p> <p>(e) Term: A portion of an academic year, normally coinciding with a semester. The words “Term and semester” are generally used synonymously.</p> <p>(f) Ragging: Any disorderly conduct whether by words spoken or written or by an act which has the effect of teasing, or handling with rudeness any other student, in rowdy or undisciplined activities which causes or is likely to cause annoyance, hardship or psychological harm or to raise fear or apprehension thereof in a fresher or a junior student or asking the students to do any act or perform something which such student will not do in the ordinary course and which has the effect of causing or generating a sense of shame or embarrassment so as to adversely affect the physique or psyche of a fresher or a junior student.</p>
2	<b>Discipline Rules to be observed by the students admitted:</b>
(1)	<p>All the students admitted under the different institutions of the University will have to observe and abide by the discipline rules prescribed by the University / Institute / PG School and he / she will submit to the disciplinary jurisdiction of the Head of the Institution / Director and other competent officers or authorities or bodies of the University as the case may be and in this respect he / she has to submit the declaration in the Performa attached herewith as Enclosure - I.</p>

	<p>Ragging' means the doing of any act which causes, or is likely to cause any physical, psychological or physiological harm of apprehension or shame or embarrassment to a student. All PG Schools will not entertain any activities of Ragging of the students. As per UGC norms, all newly admitted students have to submit Anti-Ragging Undertaking for students and their parents at the time of admission. The undertaking will be given to all the students along with admission form and the admission is confirmed only when they submit Anti-Ragging undertaking.</p> <p>The student will also be required to give an undertaking in the Performa attached herewith as Enclosure – II to be filled up and signed by the candidate and his parent/ guardian to the effect that he/ she is aware of the University's approach towards ragging and the punishment to which he/ she shall be liable, if found guilty of ragging.</p>
(2)	Rules of discipline to be observed in or outside the institute of the University:
	<ul style="list-style-type: none"> <li>(i) Every student must carry his/ her Identity Card which should be produced when demanded;</li> <li>(ii) It is mandatory for the students to attend the classes, sessions, co-curricular activities etc. on all working days from the start to the end of the term/ semester. Absence due to illness or unavoidable circumstances shall be considered only if the application is supported with medical certificate in case of illness and / or leave application form is submitted to the Head of the Institution.</li> <li>(iii) Students are expected to behave in a responsible manner and refrain from chatting amongst themselves while the class is in progress;</li> <li>(iv) Students are expected to be polite individually or as a group and show respect to the faculty/ staff of the institute/ University;</li> <li>(v) Any indiscipline or misbehaviour in class or in the campus or in the transit vehicle of GTU or even outside the campus would warrant disciplinary action against the student(s);</li> <li>(vi) The student should follow the academic calendar displayed on notice board or shared with them and complete the term work on time. If a student does not complete the required term work, his or her term will be revoked, and he or she will not be permitted to sit for the college internal examination and university examination. In the examination, students should not attempt to copy.</li> <li>(vii) As per GTU guidelines, a student would be allowed to a semester examination provided he or she has attended regularly the required classes of subject for the relevant semester and has attended not less than 75% of the total number of classes held.</li> </ul>

	<p>(viii) Students must keep their parents updated on their attendance status, academic progress and any other issues that may arise. They should also make timely payments of College &amp; hostel fees.</p> <p>(ix) Students must have a greater sense of commitment to the institute. Maintain a clean and orderly appearance, as well as a pleasant learning environment. They are not permitted to draw or write derogatory sketches on the walls, furniture, parking lots, doors, or other amenities.</p> <p>(x) When representing the college, students are expected to act appropriately both on and off campus. Any observed, undesirable behaviour inside or outside the campus is subject to disciplinary action.</p> <p>(xi) They should receive notifications from the notice board, college website, and emails on a regular basis to avoid missing essential information.</p> <p>(xii) Students are required to build positive relationships with their classmates and faculty. Their actions must demonstrate respect for faculty members and foster a sense of community and equal respect among themselves.</p> <p>(xiii) Students must maintain proper silence in the classrooms, laboratories and libraries and refrain from causing noise. They must adhere to classroom, laboratory and library schedules to avoid unnecessary annoyance and overcrowding.</p> <p>(xiv) Students must take proper care of the laboratory and library resources.</p> <p>(xv) Male students must not make derogatory remarks about female students and must treat them with respect.</p> <p>(xvi) Any action of any individual, group or a section of students, Which amounts to interference in the regular administration of institute, is prohibited. Disciplinary actions will be initiated against such student(s);</p> <p>(xvii) Causing disfiguration or damage to the property of the University or belongings of staff members or other fellow students is prohibited.</p> <p>(xviii) No student shall indulge in any activity that might be illegal or may lead to disorderliness;</p> <p>(xix) No student shall be in possession of liquor, drugs or any intoxicating materials, nor would consume such things on the premises of the university.</p> <p>(xx) Smoking cigarettes/ chewing pan or tobacco or gutkha is strictly prohibited.</p> <p>(xxi) Indecent behaviour in any form will not be tolerated.</p> <p>(xxii) Usage of mobile phone &amp; electronic gadgets in classroom is prohibited without the permission of the concern course Instructor/Faculty. Noncompliance of same will be subject to strict</p>
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	<p>disciplinary action decided by competent Authority.</p> <p>(xxiii) In Examination Hall (classroom /Lab) Usage of mobile phone &amp; electronic gadgets is completely prohibited without the permission of the concern Supervisor/course Instructor / Faculty. Possession of same will be considered as Unfair Means and accordingly actions will be initiated as per the rules of Unfair Means adopted during Examinations.</p> <p>(xxiv) Usage of mobile phone &amp; electronic gadgets on campus is allowed (except in Classroom and Examination hall) subject to compliance of discipline and not disturbing the decorum of Educational Campus.</p> <p>(xxv) Repeated violation is subject to confiscation of the gadget.</p> <p>(xxvi) Activities like video shooting, photography, playing musical instruments and listening to music or any other entertainment. are prohibited on the Campus except with the permission of the Head of the Institution.</p> <p>(xxvii) The students are expected to be in the class rooms/ Laboratory or any place of study on time prior to the commencement of the study.</p> <p>(xxviii) Use of helmets is compulsory for everyone who rides a two-wheeler to and from the campus;</p> <p>(xxix) Students should follow a decent dress code when they come to the University.</p> <p>(xxx) Any kind of ragging in the class, campus or even outside the campus is strictly prohibited.</p> <p>(xxxi) Any kind of misuse of Internet, intranet or computer software, mobile etc. is strictly prohibited.</p> <p>(xxxii) Disobeying any instructions of any kind issued by the Head of the Department or Head of the Institution will be considered as indisciplinary action on the part of the student.</p> <p>(xxxiii) Students need to be responsible towards usage of social media. No content which is objectionable or derogatory in nature for the image of GTU or any of its PG Schools has to be put up or approved in any form of social media.</p> <p>(xxxiv) All students need to strictly follow the rules for usage of library, computer laboratory or any other laboratory as decided by the concerned PG School.</p> <p>(xxxv) The items which are not covered above and which the Head of Institution considers as indisciplinary action will be dealt with, under these rules.</p>
<b>3</b>	<b>Procedure to be followed for imposing penalties:</b>
	<p>For disobeying any disciplinary rules, the competent authority will take disciplinary action against the student concerned. There shall be separate procedure for imposing minor penalty and major penalty. The following indisciplinary actions on the part of the student shall be subjected to the major penalties:</p>



	<ol style="list-style-type: none"> <li>1) Damaging the property of the University / Institutions (moveable or immovable)</li> <li>2) Involving in violence on and outside the campus including instigating the violence.</li> <li>3) Involving himself / herself in criminal act like using alcoholic beverages, drugs, gambling on or outside the campus including instigating the other students for such action.</li> <li>4) Ragging in and outside the campus.</li> <li>5) Any act which deteriorates the overall atmosphere in the campus or the institute.</li> <li>6) Theft of University property or the property of the other students, staff or any other person on the campus.</li> <li>7) Any other act which the Head of the Institution feels as gross misconduct, which are not covered under the above category.</li> </ol>
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### 3.2 RULES AND DISCIPLINE FOR STUDENTS RESIDING AT GIRLS /BOYS HOSTEL

- Admission is open to full time students of Gujarat Technological University- PG courses/GTU Foreign students. Preference will be given to out-station students.
- The application form, Anti-Ragging form and affidavit form completed in all respects should be submitted to the Administration office of the respective Graduate School in which they are going to take admission on any working day during office hours. Admission will be considered only after submitting these documents with fees.
- Student has to furnish all the necessary documents, testimonials and information as and when required by GTU. At any stage if GTU finds any sort of misinterpretation they can impose the penalty on student or expelled from the hostel.
- Admission to the Hostel will be cancelled if incomplete or false information is furnished.
- Applicants who are offered admission in the Hostel will be informed by letter/email or any other manner. They will have to take the accommodation within the time frame given, failing which his/her admission will be cancelled and the seat will be offered to other student.
- For every year the fees has to be deposit in two phases The fees duration will be from Phase 1: August to January and Phase 2: February to July . If the student takes admission in hostel then they are liable for complete hostel fee in any of two phases.If any student takes admission in between month of any phase then also he/ she has to pay complete phase fees.
- Hostel fees should be paid in university account within specified time. If fees are not paid within the specified time, the admission given is liable to be cancelled or penalized as per the decision taken by Rector/Hostel authorities.
- Admission will be valid for duration of the programme only.
- Students has to inform the Rector/Hostel authorities one month prior in case he wants to cancel his hostel admission. He has to submit an application in regards to the cancellation of hostel admission as no oral conversation will be considered as the information for cancellation of admission.
- Students are required to give their consent about continuing the Hostel facilities in the next semester in the form of application.

- Gujarat Technological University reserves its right to cancel admission of undeserving students without giving any reason.
- Gujarat Technological University and its officials will not be liable for any kind of safety/security/legal/judicial/grievance issues occurred to students inside the hostel premise at their duration of stay in hostel.
- The student in any case of withdrawal from the hostel after paying hostel fee he/ she will not be eligible for the refund of hostel fee deposited during the admission procedure. Only Hostel deposit fee will be refunded to the student.
- Gujarat Technological University reserves its right to increase the hostel fee, if necessary.
- Hostel accommodation is tentative, which depends on availability of the accommodation.
- Student residing in the Hostel managed by Gujarat Technological University shall strictly observe all the Rules and Regulations in force from time to time. Breach of rules / regulations may invite rustication / fine.
- During their stay in the Hostel they will be under the control of the Officials of Gujarat Technological University/Rector.
- Smoking, consumption of alcoholic drinks and spitting is strictly prohibited in the hostel premises and if student is found in these activities will be expelled from the hostel and that results to their cancellation of hostel admission.
- No guest or visitor of the inmate will be permitted to visit rooms. Visitors and guests should be received in the Visitors room or Reception area only between 9.00 a.m. to 9.00 p.m.
- Every student shall be in his hostel by 09:00 p.m. If he/she has to stay out after the said timing owing to any special reason, he must obtain prior permission in written from the Rector/Officials of hostel. The application for leave of absence from the hostel shall be made in writing through Rector and his/her permission shall be obtained.
- The student has to inform their parents or local guardians for their absence in the hostel.
- No students shall use the service of a hostel servant for personal work even on payment. He shall also not bring any servant from outside even temporarily.
- No functions or celebrations shall be organized except with the permission of the Officials of Hostel /Rector.
- No poster etc. should be put up anywhere, either in rooms or lobbies.
- Throwing of water, colour etc. on one another and on the walls / property of the Hostel is strictly prohibited.
- Allotment of the room, furniture etc. will be entirely at the discretion of the Officials of Hostel /Rector.
- Every student shall keep the room allotted to him/ her clean and neat. He / She shall take proper care of the furniture and fixtures handed over to him / her. The Hostel authorities have the right to enter and inspect the rooms at anytime, even in the absence of students.
- The student will be solely responsible for any disaster/financial loss in their hostel premises. GTU and its official will not be responsible at any point of time.
- Students are expected to switch off the lights and fans in their rooms every time they go out and take precautions with respect to electricity consumption in an economical way.
- Charges for any damages to the property as well as to the furniture and fixtures caused by a student negligence will be recovered from the student/students staying in the said flat / room.

- Student should not drive nails, screws etc. into the wall or doors. No repair shall be done by the students themselves. They should approach the Officials of Hostel /Rector who will arrange for repairs. Hostel is meant only for the use of bonafide students of Gujarat Technological University- UG/PG course. Visitors are not allowed to enter any room.
- Before leaving the hostel, a student must pay all dues and hand over the charges of rooms and other material in satisfactory condition to the Officials of Hostel /Rector.
- The Hostel Authorities are not responsible for the safe custody of the property of the students staying in the hostel. Students should have their own locks and should take proper care of their belongings. They should not leave the key of the room anywhere around. Gujarat Technological University will not be responsible for the loss of personal belongings of the students.
- All the facilities including additional facilities misused, shall be discontinued without giving any notice and disciplinary action will be taken against the students involved.
- If any student is found misbehaving and misconducting himself, he will be expelled from the hostel immediately and the fees paid by him will be forfeited.
- Permission must be sought and obtained, if night outs (only for local guardian and parent's house) are desired from hostel in charge, 2 days in advance.
- Any complaint (indecent behaviour/noisy) from the neighbours/society will result in severe action.
- Do not write with Pen, Pencil, Paint on walls, Doors and Windows. Do not paste Posters, Photos, on the wall/Doors. Fine will be imposed if any student is found to indulge in the above mentioned activities.
- Furniture should not be changed-exchanged with other room/other occupants without knowledge of Rector/Hostel authorities. Furniture items of the rooms should not be put outside the room/corridor.
- Refund of Hostel deposit is allowed only in the case of cancellation of admission
- Use of electrical appliances (such as burner, heater, stove, induction plate, cooler, AC etc.) Is strictly prohibited. A penalty of Rs 1000/- shall be charged to defaulters for each default.

### 3.3 Policy for Promotion of Academic Integrity and Prevention of Plagiarism

Plagiarism consists of unacknowledged use of someone else's work and attempting to pass it off as one's own. It includes the representation of work: written, visual, practical or otherwise, of any other person, including another student or anonymous web-based material, or any institution, as the candidate's own. It may take the form of:-

- Wholesale verbatim copying or insertion of multiple paragraphs of another person's work (published or unpublished and including material freely available in electronic form and including work of another student) without acknowledgement of sources.
- The close paraphrasing of another person's work by simply changing a few words or altering the order of presentation, without acknowledgement.
- Unacknowledged quotation of phrases from another person's work.
- The deliberate and detailed presentation of another person's concept as one's own.
- Ghostwriting – where a student requests another student or external body to write/produce material for them for purposes of submitting it as their own. This also includes the downloading or purchasing of essays from the Internet.
- Resubmitting one's work in its entirety (or substantial sections) that has previously been submitted for another module or programme.

## 3.4 Academic Dishonesty &amp; Punishments (Examination)

Ref. No. GTU/UFM/Notification/2013/9271 15/10/2013		Date:
<b>Notification No. 34/2013 [Revised]</b>		
<b>Gujarat Technological University</b> <b>Table Showing Proposed Punishment Details for Unfair Means(UFM) including plagiarism w.e.f. from Winter-2013 examination</b>		
Sr. No.	Unfair Means adopted by the Examinee	Type of Punishment
1	a. Doesn't follow the instructions given by the block supervisor or any competent authority b. Writes irrelevant matter in the answer book c. Deliberately reveals his identity or intentionally makes some irrelevant symbols, sketches etc. in the answer book d. Communicates with another examinee or try to pass on information even after a word of caution from block supervisor or any competent authority e. Possess any of the prohibited electronic gadgets* f. Any sort of writing on the question paper g. Any exam relevant literature found near or just beneath his seat but he/she has not copied from the said material h. Use of indecent or abusing words in the answer book i. Attempts to remove Encrypted code or any sticker on the answer book j. Indulges in writing the matter relevant to subject before commencement of k. Attempts oral communication with another examinee.	Declare the Examinee as "Fail" in respective Subject of the current semester summer/winter examination conducted by the authority
2	a. If the examinee is found in possession or snatches away of notes, chits, answer book or part thereof of any other examinee however he/she has not written from the said material in his/her answer book b. Indecent behaviour at the examination centre or in the examination hall c. Possess any sort of exam relevant material in the examination hall or even outside the examination hall like toilet, lobby etc. or tries to contact any unauthorized person during the exam timings d. Possess any sort of exam relevant material written/printed on paper chits, compass box, calculator, pad, cloth, hand kerchief, dress or any part of the body or stored in electronic-gadgets including mobile-phone. in the examination hall or even outside the examination hall like lobby etc. e. Attempts to bribe the examiner by mentioning address, contact detail, Mobile No. etc. or to contact the examiner directly or through any representative for his/her favour	Cancellation of result of all the subjects of the current semester Examination conducted by the authority

Sr. No.	Unfair Means adopted by the Examinee	Type of Punishment
3	a. Indulges in unfair practice outside the examination hall by any means	<p>Cancellation of result of all the subjects of the current semester examination and debarred to appear in all the subjects of next summer/winter all examinations to be conducted by the authority.</p> <p>#In addition to above punishment for 3N case, the following punishment will also be imposed by the committee.</p> <p>Depending upon the intensity of Mass copy reported by the examiner and same is evaluated by panel of experts as well as UFM committee, GTU will impose following penalty.</p> <p>(A) A show cause notice will be issued to those employee of exam centre and allotted the duty by the centre in-charge on behalf of the university like - Jr. supervisor, Sr. Supervisor as well as centre in-charge where mass copy is proved and also de-organization of the faculty if committee does not accept his/her explanation/clarification against show cause notice.</p> <p>(B) Financial Punishment : -</p> <p>University will also penalise financially to the institution depending upon the nature of malpractice, depending upon the no. of students found guilty of mass copy or other malpractice.</p> <p>(a) Rs. 1000 per student if caught for the first time.</p> <p>(b) Rs. 5000 per student if institute indulged second time.</p> <p>(c) Rs. 10000 per student if institute indulged more than two times.</p> <p>Note: In case it is required by the university to continue the institute as an exam centre then institute will be required to install CCTV and submission of DVD along with GTU observer after every session of Exam.</p>
	b. copied from the subject exam relevant material, Scribble on chits, compass box, calculator, pad, cloth, hand kerchief, dress or any part of the body or stored in electronic-gadgets including mobile-phone.	
	c. Indulge in exchange of answer book, supplementary with other examinee	
	d. Copied from another examinee or deliberately allows other examinee to copy from his own answer book or pass on the exam relevant material or literature in any form to another examinee in exam hall	
	e. If the examiner find some written/printed papers etc. of exam related material from the answer book of an examinee	
	f. Attempts to get rid of or to destroy any kind of exam relevant prohibited material with which he is caught or helps other in such an act	
	g. Examinee is found to throw away his answer book, supplementary, question paper, practical job or part thereof	
	h. If examinee is found to have torn the answer book, question paper, any other exam related material or part thereof of his/her own or other examinee	
	i. if the examiner reports that in the examinee's answer book is written with more than one type of hand writing	
	j. if the examiner reports about missing pages or additional pages in the answer book of examinee	
	k. If the examinee obstruct the process of conducting the examination in any way	
	l. if examinee try to destroy the evidence by chewing the chit or in any other manner, which was found in his possession during examination	
	m. If examinee attempt to bribe by way of Keeping currency notes in his/her answer book	
4	n#. if the examination committee is satisfied from the report of the examiner that the candidate have copied from one another or from any other sources or involving in mass copying during the examination	<p>Cancellation of result of all the subjects of the current semester examination and debarred to appear from next three summer/winter all examinations to be conducted by the authority.</p>
	a. if examinee obstructs/threatens or orally assault the block supervisor or any	
	b. Tries to bring duly written answer book or supplementary from outside	
	c. If the examinee carries away an answer book, supplementary or practical job or part thereof outside the exam hall	
	d. Leaves the examination hall without submitting his answer book or tries to destroy it	

Sr. No.	Unfair Means adopted by the Examinee	Type of Punishment
5	a. If person impersonates as a examinee and if this detected during or after the examination	Cancellation of result of all the subjects of the current semester examination and debarred to appear from next four summer/winter all examinations to be conducted by the authority
	b. If examinee not appearing in that particular examination but who is a candidate of other examination of the university impersonates as a examinee of particularexamination	
	c. If examinee not appearing in that particular examination but who is a candidateof other examination of the university behaves indeciplinary manner during particular examination or helps other examinee in using unfair means	
6	a. Possess Gun, Revolver, Knife or any other prohibited weapon in or around exam hall	Cancellation of result of all the subjects of the current semester examination and debarred to appear from next five five summer/winter all examinations conducted by the authority
	b. Physically assault block supervisor or any competent authority on exam duty	
	c. If an examinee for degree of ME/M.Pharm/MBA/ MCA PhD is found guilty of plagiarism of a thesis/dissertation/ project workduring the period of assessment.	Deferred submission of thesis/dissertation/ project work for a period of 3 years in case of ME /M.Pharm/ MBA/ MCA and for aperiod of 5 years in case of PhD for resubmission. The resubmission of the thesis/project work/dissertation shall be with new topic with fresh work. It may be understood that the student will have to go through allthe stages of evaluation of his/her new topic including DP1/DP2/Mid Review/ Final Dissertation/ ITD/ Project Review/Progress Review/ DPC whichever is applicable.
	d. If a Candidate who is awarded PhD from the University, is found guilty of plagiarismby the University.	The degree awarded shall be withdrawn by the University.
	e. If an examinee for ME/M.Pharm/ MBA/ MCA/PhD is found guilty of influencing supervisor or any member of adjudication committee or panel for viva voce of resorting to any malpractice.	The examination committee shall decide the penalty depending upon the nature and complexity of involvement of the concerned examinee.
7	if during the examination or afterwards any examinee is found to have indulged in unfair means other than specified in 1 to 6 as above and which has been bearing onthe examination or result of the examinee and/or any other examinee	The examination committee shall decide the penalty depending upon the nature and complexity of involvement ofthe examinee is concerned.
<p>*Final decision is to be taken by the committee based upon the type of electronic gadget and nature of offence (6c,6d,6e)- For the case of plagiarism or any misconduct, a subject expert committee consisting of three persons shall be constituted to verify the case and the committee will submit their report to the university. This report shall be put up before the UFM committee to decide the type of punishment as per the prevailing norms of the university.</p> <p><b>Note: (1) Summer Exam: May to August ;(2) Winter Exam: November to February;(3) Examination: Any component reflected in students grade cardThis notification is issued with the permission from competent authority.</b></p> <p><b>The notification is issued with the approval from competent authority dated 14-10-2013</b></p>		

## Section 4

# Infrastructure Details

## 4.1 GTU GSET Amenities

### 4.1.1 Shree Aryabhata Seminar Hall

On-campus, a very high-quality seminar hall is available to carry out different curricular and extracurricular activities with the best ICT facility.

### 4.1.2 Swami Vivekananda Conference Hall

To carry out technical short term programs, expert sessions, staff and student development programs, an expert session exclusive conference hall is available with advance audio-visual facilities.

### 4.1.3 Dispensary on Campus

In any health-related issues or emergence in the campus doctor is available from 2.00 pm to 6.00 pm at the university main building to take care of all the stakeholders of the university.

(Location: GTU main building: C wing – ground floor; Name of the Dr. Sanjay Joshi, Email: [dispensary@gtu.edu.in](mailto:dispensary@gtu.edu.in) )

### 4.1.4 Major Dhyanchand Gymnasium

To enrich health and fitness and create a healthy environment on campus the gymnasium with the latest instruments has been provided and managed by the GTU sports section. All students can go for the daily workout. (Location: Boys Hostel: Ground Floor; Sports Officer: Dr. Akash Gohil, Email: [sports@gtu.edu.in](mailto:sports@gtu.edu.in))

### 4.1.5 Girls – Boys Hostel

On-campus highly secured girls and boys hostels are available for a hostel with good quality of foodservice. The infrastructure of the hostel is very luxurious with an excellent studying environment.

(Location: On Campus-Boys Hostel; Coordinator: Prof. Deepak Upadhyay; Email: [hostel@gtu.edu.in](mailto:hostel@gtu.edu.in) )

(Location: On Campus-Girls Hostel; Coordinator: Prof. Seema Joshi; Email: [gtu\\_hostel@gtu.edu.in](mailto:gtu_hostel@gtu.edu.in))

### 4.1.6 Computer Centre

High configuration computers are available. Students can carry out their advanced research on prominent and fast technology compatible systems. To compete with recent software demand extra laboratory has been developed.

### 4.1.7 Super Computer Research Lab

The most powerful and speedy supercomputer exists at the GTU-GSET. Students can do high profile and real-time research with the help of supercomputers in the field of network security and mobile communication.

## 4.2 Library & Learning Center

GTU-GSET is determinant to provide facilities to students of a vast ocean of knowledge for the high tech human life, easy and anywhere accessible knowledge for their development. GTU-GSET has been given one remote centre to facilitate ME, students and supervisor.

### Accessible Repositories at Library

- ALCE, Presentation: Active Learning Creating Excitement (ALCE) TAB contains available Engineering Branch wise -subject wise material (in PPT format)
- IPR/Patent: IPR TAB gives guidance for patent-related activity
- ALVCOM: TAB provides NPTEL Videos link for viewing and learning purpose



- E-Project/E- Thesis/ E-Dissertation: To improve the novelty of research and innovation through students it is desirable to benchmark prior art and particularly efforts being taken before. More than 30000 projects/Thesis are being submitted to university as a part of academic requirements in UG/PG/other levels. To ensure that the new batch of students either take new projects or carry forward semi-finished projects.

#### Access Norms

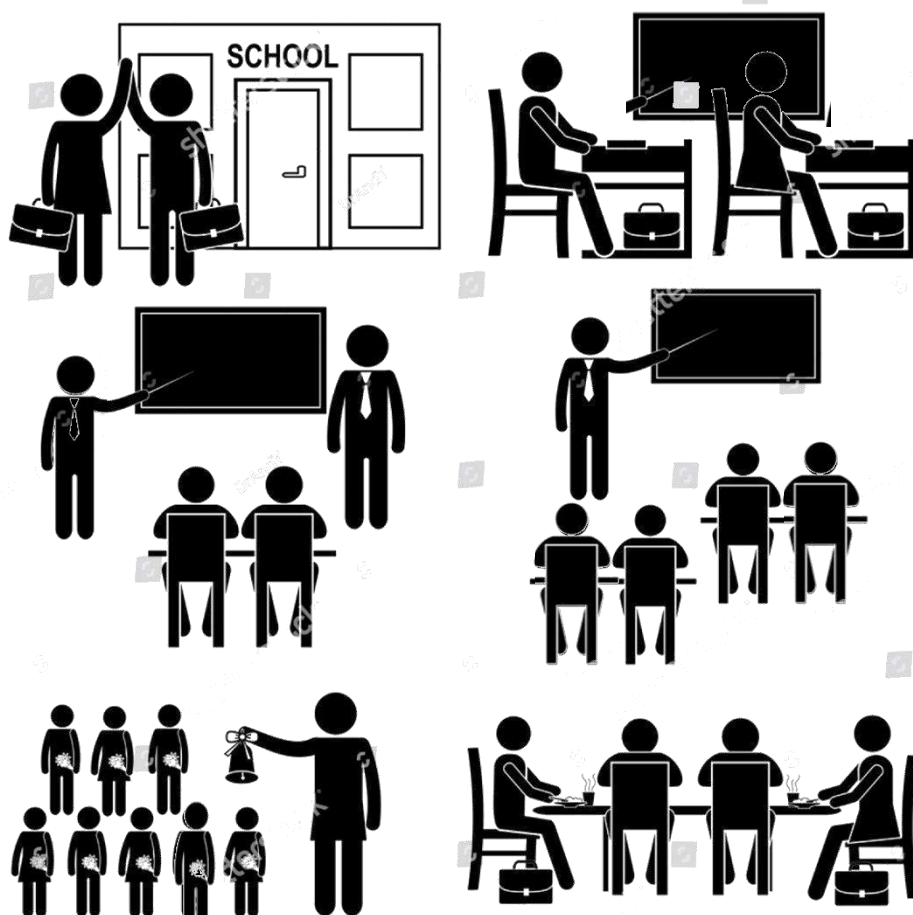
- While entering the library, except for laptops, readers are not allowed to carry their personal belongings (bags, brief-cases, parcels etc.) and eatable items (biscuits, cookies, fruits, chocolates, cold drinks, tea/coffee, etc.). Their belongings should be deposited at the security counter.
- Always carry your library membership card when you visit the library, failing so will forbid your entry to the library.
- Readers should maintain peace in the library and should not disturb other users in any way.
- Loud discussions are allowed only in the discussion area.
- Library's computing facilities and database access is meant for GSET faculty members, students, staff and registered library members only.
- The computer terminals are to be used only for searching for GSET resources.
- Users of the library should note that all e-resources subscribed are licensed materials and cannot be shared with the outside community as it may lead to copyright/license violation.
- Library's photocopying service is available on a demand basis.

### 4.3 Student Section

The operative function of the student section is to assist various activities of the institute namely, reporting, enrolment, anti-ragging, student grievance, mentoring, scholarships, student affairs, maintenance of records, and certifications from the institute and the University. All daily routine activities of the students are to be carry-out by the section. Following accomplishments are to be carried out by the section.

- To fill a joining report with required documents after an admission
- To enrol with the Gujarat Technological University (GTU)
- To sign Anti-ragging affidavits; as per AICTE rules and regulations, available @ <https://set.gtu.ac.in/wp-content/uploads/2020/09/AICTE-Ragging.pdf>
- To issue Student I-cards, Library cards, to collect semester receipts and to issue various academic certificates
- To assist students in scholarship schemes, National Scholarship Portal, Mukhyamantri Yuva Swavalamban Yojna (MYSY), AICTE, UGC, Digital Gujarat Portal (OBC, ST, SC etc), GTU Merit Scholarship as per government rules. For further information, visit <https://set.gtu.ac.in/scholarship/>
- To certify concessional pass from ST/BRTS/AMTS/ Railway public transport services.
- To assist in student grievance and student affairs
- To distribute mark sheet, NAMO e-Tablet to the students and to circulate various notices regarding student activities.

For further information, visit <https://set.gtu.ac.in/student-corner/>



## Section 5

# Important Information

## 5.1 Various Statutory Committee

### 5.1.1 (A) Department Student Grievance Redressal Committee (DSGRC)

1	Dr. S. D. Panchal, Director, GSET	Chairperson
2	Dr. Sanjay Chauhan, Professor, GSOP	Member
3	Dr. Kaushal Bhatt, Associate Professor, GSMS	Member
4	Dr. S K Hadia, Associate Professor, GSET	Member
5	Kathan Patel, Student, Cyber Security, GSET	Special Invitee
6	Pracious Wallance, Student, IoT, GSET	Special Invitee

- This committee has been formed with reference to GTU/GSET/2022/09/11 dated 07/09/2022. The DSGRC shall submit its report with recommendations (if any) to the head of the institute/ Vice Chancellor, with a copy thereof to aggrieved students within 15 days from the date of receipt of the complaint.
- Term of chairperson and members of committee shall be for period of 2 years from the date of the issue of this document, special invitees shall be continue as member for period of 2 years or till they remain as student of GSET whichever is less.

### 5.1.2 SC-ST Cell

1	Prof. A.M. Prabhakar, Principal, GEC Modasa	Chairman
2	Mr. M.N. Parmar, Accounts Officer (Grade I)	Liaison Officer (GTU Representative)
3	Prof. K.N.Kher, Registrar, GTU	Member- Secretary
4	Prof. Pankaj Rai Patel, Director GTU	Member
5	Prof. M.B. Chaudhary, Professor GEC Gandhinagar	Member (ST)
6	Prof. M.N.Charel, GP Dahod	Member
7	Prof. Umesh Pattani, HOD Civil GP Ahmedabad	Member
8	Prof. M.K.Shah Asso. Prof., VGEC Chandkheda	Member(Open)
9	DTE Member	Member
10	DTE Member	Member

- This committee has been formed with reference to GTU/SC-ST-Cell/2019 dated 16/10/2019.
- The committee has to monitor any issue related SC-ST students, counseling of students, regular meeting with the students, and arrangement for students' complaints. If any such incident comes to the notice of the authorities, action should be taken against the erring Students/ Official/ Faculties members promptly as per guidelines of UGC.

### 5.1.3 Anti-Ragging Committee

1	Prof. Jayesh Deshkar, Principal, VVP College, Rajkot	Chairman
2	Prof. K. N. Mistry Retired Principal	Member Faculty Representative
3	Mr. Ramesh Merja, Addl. Collector, Kheda	Member-Civil Admit]
4	Shri M. N. Parmar Account Officer Class 1 - GTU	Member-Non- Teaching Staff
5	Prof. U. V.Shah	Member-Parents Representative
6	Prof. Usha Neelkanthan, Prof and Head of Electronics and Communication department, L. D. College of Engineering	Member
7	Prof. Rajesh Parikh, Director - GTU	Member
8	Hemlata Varma, Legal Officer/ Consultant	Member Secretary
9	Class Representative Year on Year	Member Student Representative

- This committee has been formed with reference to GTU/Anti Ragging/ 2020/5213 dated 22/07/2020.
- The committee has to monitor incidents of ragging either as a victim or as a witness, counseling of students on ragging, regular meeting with the students, arrangement for students' complaints. If any such incident comes to the notice of the authorities, action should be taken against the erring Students/ Official/ Faculties members promptly as per guidelines of UGC.

**5.1.4 Sexual Harassment & Monitoring Committee (Internal Complaint Committee)**

1	Prof. (Dr) Ushma Anerao, Dean & Professor Faculty of Architecture	Presiding Officer
2	CA. Chitralli Parmar, Internal Auditor	Member
3	Mona Chaurasiya, Research Coordinator	Member
4	Prof. Pankajray Patel, Director	Member
5	Ms. Seema Joshi, Asst. Professor, GTU-GSET	Member
6	Prof. Kashayp Thummar, Assistant Professor	Faculty Member
7	Dr.. Sarika Srivastava, Assistant Professor	Member
8	Ms. Khushbu Bataviya, Office Superintendent	Secretary
9	Ms. Shailaza Andhare, Stree Chetna, NGO	One Member From NGO
10	<ul style="list-style-type: none"> <li>Juhi A. Zanje (UG)- 170170116061</li> <li>Modi Gopi R (PG)- 188390593029</li> <li>Shukla Rena. N (Ph.D)- 159997106014</li> </ul>	Students (If the matter involves students)

- This committee has been formed with reference to GTU/ Sexual Harassment & Monitoring Committee/2021/1736 Date: 07.04.2021. The committee has to monitor Prevention, Prohibition and Redressal of Sexual Harassment of women/ men employees and Students (girls/boys) in the institution.
- The committee has to monitor any issue related of sexual harassment among staff and students, counselling of students, regular meeting with the students, and arrangement for students' complaints. If any such incident comes to the notice of the authorities, action should be taken against the erring Students/ Official/ Faculties members promptly as per guidelines of UGC.

**5.1.5 Women Development Committee**

1	Prof. Komal Borisagar Asso. Professor, GTU-GSET	Chairperson
2	Prof. Shweta Bambuwala, Assistant Professor	WDC-GTU Coordinator
3	Prof. Seema Joshi, Assistant Professor	Member
4	Prof. Jignasha Acharya, Assistant Professor	Member
5	Prof. Bhumika Maheria, Assistant Professor	Member
6	Ms. Jenifer Solanki, Office Superintendent	Member
7	Ms. Pinky Panchal Store Officer	Member
8	Ms. Neha Gameti Research Associate	Member
9	Adv. Hemlata Verma OSD	Member
10	Ms. Bhagyashri Vyas Admin Assistant	Member

- This committee has been formed with reference to GTU/ WDC/2021/1535 dated 23/03/2021.
- The committee has to work as per guidelines of the Women Development Committee of the University.

**5.1.6 GTU Innovation Council**

1	Prof. S. K. Hadia, Asso. Professor, GTU-GSET	Chairperson
2	Prof. Raj Hakani, Asst. Professor, GTU-GSET	Member
3	Prof. Margam Suthar, Asst. Professor, GTU-GSET	Member
4	Prof. Hemal Nayak, Asst. Professor, GTU-GSET	Member
5	Prof. Vagmin Joshi, Asst. Professor, GTU-GSET	Member
6	Prof. Mahesh Panchal, Asst. Professor, GTU-GSET	Member

- The Committee will make awareness amongst students regarding support from GTU innovation council under various schemes.
- Committee will encourage students to apply for funding to GTU Innovation Council for different projects.
- Committee will be responsible to promote the innovation and research environment in the Institute Planning and implementation of the various initiatives taken by university/AICTE/MHRD and UGC in the domain of innovation and start-up.

## 5.2 Department Level Committees

### 5.2.1 Internal Quality Assurance Cell (IQAC)

1	Prof. S. K. Hadia, Asso. Professor, GTU-GSET	Coordinator
2	Prof. Jignesh Amin, Professor, GTU-GSET	Member
3	Prof. Komal Borisagar, Asso. Professor, GTU-GSET	Member
4	Prof. Palvinder Singh Mann, Asso. Professor, GTU-GSET	Member
5	Prof. Mahesh Panchal, Asst. Professor, GTU-GSET	Member

- IQAC will work towards standardization of activities and processes and strive for continuous improvements in standards and their achievement.
- It will promote measures for institutional functioning towards continuous quality enhancement through quality culture and establishment of best practices.
- It will help to develop a sound basis for decisions required for improving institutional functioning and the building of an organized methodology of documentation.
- It will establish procedures and modalities to collect data and information on various aspects of institutional functioning for enabling easier and faster decision-making.
- It will enhance quality awareness within the institution and establish the credibility for external accreditation.

### 5.2.2 Student Support and Counseling Committee (National/International student)

1	Prof. Gautam Makwana, Asst. Professor, GTU-GSET	Coordinator
2	Prof. Palvinder Singh Mann, Asso. Professor, GTU-GSET	Member
3	Prof. S. K. Hadia, Asso. Professor, GTU-GSET	Member
4	Prof. Komal Borisagar, Asso. Professor, GTU-GSET	Member
5	Prof. Mahesh Panchal, Asst. Professor, GTU-GSET	Member
6	Prof. Jignesh Amin, Professor, GTU-GSET	Member
7	Prof. Deepak Upadhyay, Asst. Professor, GTU-GSET	Member (International Student)

- The committee aims to nurture, support and guide in academic, social, personal development, and research services throughout their stay in the institute.
- It helps to enhance the students' effectiveness, ability, and skills to build their healthy lifestyle.
- It handles all services such as joining, enrollment, scholarship, certifications etc.
- Attention toward the international students and related correspondence with the Authority.

### 5.2.3 Library Committee

1	Prof. Komal Borisagar, Asso. Professor, GTU-GSET	Coordinator
2	Prof. Palvinder Singh Mann, Asso. Professor, GTU-GSET	Member
3	Prof. Rutika Ghariya, Asst. Professor, GTU-GSET	Member
4	Shri Ranchhodbhai Khambhala, Librarian, GTU-GSET	Member

- The committee works to provide state of art library and e-library facilities to all the stakeholder of the Institute
- The Committee will provide latest journals, e-books, different magazines as per the requirement of the curriculum.
- Budget planning and utilization under the library head

### 5.2.4 Scrutiny Committee for Seed Money Scheme of GTU

1	Prof. S. D. Panchal, Professor & Director, GTU-GSET	Chairperson
2	Prof. S. K. Hadia, Asso. Professor, GTU-GSET	Coordinator
3	Prof. Komal Borisagar, Asso. Professor, GTU-GSET	Member
4	Prof. Seema Joshi, Asst. Professor, GTU-GSET	Member

- The committee has to review proposals for seed money schemes received from faculties/students of GSET.
- The Committee will scrutinize proposals as per guideline of GTU SMS policy and submit them to University IQAC.

#### 5.2.5 Scrutiny Committee for AICTE-Doctoral Fellowship programme

1	Prof. Gautam Makwana, Asso. Professor, GTU-GSET	Coordinator
2	Prof. S. K. Hadia, Asso. Professor, GTU-GSET	Member
3	Prof. Koma Borisagar Asso. Professor, GTU-GSET	Member

- ADF admission process as per GTU norms
- Follow the rules and regulations as per the AICTE/GTU directives
- The committee aims to scrutinize applications for Ph.D. program and responsible for correspondence with AICTE, and monitor the progress of Ph.D. status of the students.

#### 5.2.7 Research Innovation, Consultancy & IPR Activities

1	Prof. Jignesh Amin, Professor, GTU-GSET	Coordinator
2	Prof. Seema Joshi, Asst Professor, GTU-GSET	Member
3	Prof. S. K. Hadia, Asso. Professor, GTU-GSET	Member
4	Prof. Gautam Makwana, Asso. Professor, GTU-GSET	Member

- To promote the Research and Consultancy in the Institute
- To develop overall research Oriented ecosystem in the Institute
- To proliferate the various grant information among the various faculties
- To plan/organize skill enhancement programs for the faculties and students

#### 5.2.8 Tech-Fest, Cultural and Sport Promotion Committee

1	Prof. Deepak Upadhyay Asst. Professor, GTU-GSET	Coordinator
2	Prof. Rutika Ghariya, Asst. Professor, GTU-GSET	Member
3	Prof. Mridul Seth, Asst. Professor, GTU-GSET	Member
4	Prof. Raj Hakani, Asst. Professor, GTU-GSET	Member
5	Prof. Hemal Nayak, Asst. Professor, GTU-GSET	Member

- The formation of the various student clubs (Technical and Non-Technical)
- The committee aims to promote co-curricular and extra-curricular activities in the Institute
- To promote the sport culture and to organize the sports event in the Institute
- Mentorship support to various student club
- Encourage students for participation in various events.

#### 5.2.9 Institute Newsletter Committee

1	Prof. S. D. Panchal, Professor & Director, GTU-GSET	Chairperson
2	Prof. Rutika Ghariya, Asst. Professor, GTU-GSET	Member
3	Prof. Seema Joshi, Asst. Professor, GTU-GSET	Member
4	Prof. Mahesh Panchal, Asst. Professor, GTU-GSET	Member
5	Shri Ranchhodbhai Khambhala, Librarian, GTU-GSET	Member

- To publish the Institute newsletter quarterly.
- Data collection and selection for to publish in the newsletter

**5.2.10 Institute Store and Purchase Committee**

1	Prof. Seema Joshi, Asst Professor, GTU-GSET	Coordinator (Purchase)
2	Prof. Gautam Makwana, Asso. Professor GTU-GSET	Coordinator (New Campus)
3	Ms. Zalak Nayak, Office Assistant, GTU-GSET	Member
4	Mr. Samik Dave, Lab Assistant, GTU-GSET	Member
4	PI / Co-PI / Concern Faculty	Invitee

- To look in the Institute purchase matters
- Necessary approvals and bill passing process
- Dead stock/Consumable register update
- Lekawada Campus Planning

**5.2.11 Industry and Outreach Committee**

1	Prof. Seema Joshi, Asst Professor, GTU-GSET	Coordinator, Cyber security Program
2	Prof. Gautam Makwana, Asso. Professor GTU-GSET	Coordinator, MCNT/IOT Program
3	Prof. Mahesh Panchal, Asst Professor, GTU-GSET	Coordinator, AI & DS/PGDDS Program
4	Prof. Mridul Seth, Asst Professor, GTU-GSET	Coordinator, Structural Engineering Program

- The Committee will be responsible for to organize Industry visit, Placement Fair, Open House events, Form Industry advisory board for each Programs.
- Pre-placement activities

**5.2.12 ICT & Estate Committee**

1	Prof. Mahesh Panchal, Asst. Professor GTU-GSET	Coordinator
2	Prof. Deepak Upadhyay, Asst Professor, GTU-GSET	Member
3	Prof. Mridul Seth, Asst Professor, GTU-GSET	Member
4	Shri Harishbhai Vaghela, office assistant, GTU-GSET	Member

- ICT Planning and Execution monitoring
- Estate related development and maintenance related work
- Liaison with University IT and Estate Department
- Overall Institute ambience monitoring
- Institute website update and monitoring
- Social Media Handling

**5.2.13 Skill Enhancement Program Committee**

1	Prof. S. D. Panchal Professor & Director, GTU-GSET	Chairperson
2	Prof. Mahesh Panchal, Asst. Professor GTU-GSET	Member
3	Prof. Deepak Upadhyay, Asst Professor, GTU-GSET	Member
4	Prof. Mridul Seth, Asst Professor, GTU-GSET	Member
5	Prof. Margam Suthar, Asst Professor, GTU-GSET	Member
6	Prof. Palvinder Singh Mann, Asso. Professor, GTU-GSET	Member

- The planning of skill enhancement programs and monitoring
- Expert Talk/ Seminar/ Workshop/FDP etc planning and monitoring
- To start professional student chapters



### 5.3 Saptak-The Seven Clubs

GTU-Graduate School of Engineering and Technology has formed 7 clubs for the welfare of students, faculty members and it's all stakeholders.

The objectives of the saptak clubs are:

- To make students socially responsible for the environment and cultural heritage as the clubs are for the students and by the students.
- Improving skill-sets and knowledge to share with others.
- Learning practical things together and to build a network with peers and mentors.
- Learning collaboratively and sharing technical expertise.
- Hands-on practice with tools and frameworks being used in the industry to develop solutions.
- Bringing up the students innovative side and come up with great ideas, discuss with others and plan its execution.
- Learning to have a positive attitude towards life.

Following are the Various Clubs & Mentors:

Sr No	Club Name	Faculty Mentor
1	GTU-GSET Cyber Security Club	Prof. Seema Joshi
2	GTU-GSET MCNT/ IOT Club	Prof. Raj Hakani
3	GTU-GSET AI&DS/ Data Science Club	Prof. Mahesh Panchal
4	GTU-GSET Research & Innovation and Club	Prof. P. S. Maan
5	GTU-GSET Social Service Club	Prof. Deepak Upadhyay
6	GTU-GSET Enviroment Club	Prof. Mridul Seth
7	GTU-GSET Techfest-sports-cultural Club	Prof. Rutika Ghariya



# Proposed GTU campus @ Gandhinagar



## Programs @ GTU-GSET



**M.E. – Computer Engineering (Cyber Security) – AICTE Approved (2 Years Program)**



**M.E. – Computer Engineering (Internet of Things) – AICTE Approved (2 Years Program)**



**M.E. – Electronics and Communication Engineering (Mobile Communication and Network Technology) – AICTE Approved (2 Years Program)**



**Post Graduate Diploma in (Data Science)- University Approved (1 Year Program)**



**M.E. - Civil Engineering (Structural Engineering) - AICTE Approved (2 Years Program)**



**M.E. – Computer Engineering (Artificial Intelligence and Data Science) – AICTE Approved (2 Years Program)**

