



# TECHNICAL EDUCATION DEPARTMENT

# **GOVERNMENT OF GUJARAT**

Dr. S. & S.S. Ghandhy College of Engg. & Tech., Surat

Affiliated to

GUJARAT TECHNOLOGICAL UNIVERSITY

# Information Technology Department Booklet





# INFORMATION TECHNOLOGY DEPARTMENT

### **ABOUT DEPARTMENT**

Year 2000 was the Pioneer year for IT Department in this Institute. Since 2000 to till date continuous evaluation and improvisation makes our journey very successful like fruitful tree from small seed.

Our Department is armed up with agile young faculties and 500 plus enthusiastic students studying in single shift. We are equipped with well-developed Classrooms & Laboratories with Servers, Projectors and 100 plus computers.

Our main focus is on the Quality Education with Multidimensional skill development approach. Our constant efforts to develop industry compatible curriculum and live contact with industry Experts makes our students more orient for the real world. A regular arrangement of Expert Lectures, Technological Workshops, Seminars, and Technical Events makes our students more dynamic and creative.

Our Department is keen to achieve the decided goals to serve its best services to Institute and Country.

### **STUDENT INTAKE/YEAR**

Name of Department	Year	Student Intake
Information Technology	2000	60
	2018-19	63

### **DURATION OF COURSE**

03 years full time course, six semesters.

## **ENTRY LEVEL**

- 1. 10<sup>th</sup> Standard Pass (1<sup>st</sup> Sem. Entry)
- 2. Certificate course of duration 2 years from TEB /NCVT/GCVT/IGTR (3<sup>rd</sup> Sem. Entry)

## **ADMISSION**

Admission through Central Admission Committee for Professional Diploma Courses on the basis of state level merit List. For More information visit <a href="https://www.acpdc.co.in">www.acpdc.co.in</a>

## **VISION**

"To be a leading department in providing competent IT engineer for the benefit of industry and society."

#### **MISSION**

- ✓ M1: To prepare competent IT engineer by imparting qualitative technical education in IT field with best infrastructure.
- ✓ M2: To enhance the student's technical competency in IT field for solving real world problems.
- ✓ M3: To nurture professional and ethical values in IT engineer to become a responsible member of workforce and society.

# PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

The program in Information Technology will prepare students

- ✓ PEO1: To become software solution provider for real world problems.
- ✓ PEO2: To prepare a diploma engineer who is employable in industry, academia and allied areas related to IT field or become an entrepreneur.
- ✓ PEO3: To be a successful professional with ethical values, oral and written communication skills to work as an individual and team member

# PROGRAM SPECIFIC OUTCOMES (PSOs)

Diploma IT graduate will be able

- ✓ PSO1: A graduate will be able to design and implement solutions using object oriented programming.
- ✓ PSO2: A graduate will be able to build real world applications for World Wide Web and Android platform.

### PROGRAM OUTCOMES (POs)

- i. **Basic and Discipline specific knowledge:** Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.
- ii. **Problem analysis:** Identify and analyze well-defined engineering problems using codified standard methods.
- iii. **Design/ development of solutions:** Design solutions for well-defined technical problems and assist with the design of systems components or processes to meet specified needs.
- iv. **Engineering Tools, Experimentation and Testing:** Apply modern engineering tools and appropriate technique to conduct standard tests and measurements.
- v. **Engineering practices for society, sustainability and environment:** Apply appropriate technology in context of society, sustainability, environment and ethical practices.
- vi. **Project Management:** Use engineering management principles individually, as a team member or a leader to manage projects and effectively communicate about well-defined engineering activities.
- vii. **Life-long learning:** Ability to analyze individual needs and engage in updating in the context of technological changes.

#### TEACHING SCHEME FOR DIPLOMA IN INFORMATION TECHNOLOGY

	SEMESTER I					
SR. COURE COURE TITLE		TEACHING SCHEME(HOURS)			CREDITS	
NO.	CODE		THEORY	TUTORIAL	PRACTICAL	
1	3300001	BASIC MATHEMATICS	2	2	0	4
2	3300002	ENGLISH	3	2	0	5
3	3 3300003 ENVIRONMENT CONSERVATION & HAZARD MANAGEMENT		4	0	0	4
4	3310701	COMPUTER PROGRAMMING	3	0	4	7
5	5 3310702 FUNDAMENTAL OF DIGITAL ELECTRONICS		3	0	2	5
6	6 3310703 FUNDAMENTAL OF COMPUTER APPLICATION		0	0	4	4
TOTAL 15				4	10	29
	SEMESTER II					
SR. COURE COURE TITLE		TEACHING SCHEME(HOURS)		CREDITS		
NO.	CODE		THEORY	TUTORIAL	PRACTICAL	
1	1990001	CONTRIBUTOR PERSONALITY DEVELOPMENT	4	0	0	4
2	3320002	ADVANCED MATHEMATICS(GROUP-1)	2	2	0	4
3	3300005	BASIC PHYSICS (GROUP-2)	3	0	2	5
4	3320701	BASIC ELECTRONICS	3	0	2	5
5	3320702	ADVANCED COMPUTER PROGRAMMING	3	0	4	7
6	6 3321701 FUNDAMENTAL OF INFORMATION TECHNOLGY		0	2	2	4
	TOTAL 15 4 10 29					29

		SEMESTER III					
SR. COURE COURE TITLE		TEACHING SCHEME(HOURS)		CREDITS			
NO.	CODE		THEORY	TUTORIAL	PRACTICAL		
1	3331601	DIGITAL MEMORY SYSTEM	3	2	2	7	
2	3330701	OPERATING SYSTEM		0	2	5	
3	3331602	COMPUTER GRAPHICS	3	2	2	7	
4	3330704	DATA STRUCTURE	3	2	2	7	
5	3331603	SOFTWARE PRACTICES WITH VB.NET	0	2	2	4	
		TOTAL	12	8	10	20	
		SEMESTER IV					
SR.	COURE	COURE TITLE	TEA	ACHING SCHEM	IE(HOURS)	CREDITS	
NO	CODE		THEORY	TUTORIAL	PRACTICAL		
1	3341601	INFORMATION COMMUNICATION TECHNOLOGY	4	0	2	6	
2	3341602	OBJECT ORINTED PROGRAMMING	3	0	4	7	
3	3341603	FUNDAMENTALS OF SOFTWARE DEVELOPMENT	3	0	2	5	
4	3341604	INTERNET TECHNOLOGY	3	0	4	7	
5	3341605	DATABASE MANAGEMENT	3	0	4	7	
		TOTAL	16	0	16	32	
	SEMESTER V						
SR.	COURE	COURE TITLE	TE <i>l</i>	ACHING SCHEM	1E(HOURS)	CREDITS	
NO.	CODE		THEORY	TUTORIAL	PRACTICAL		
1	3350703	JAVA PROGRAMMING	3	0	4	7	
2	3351601	INFORMATION COMMUNICATION NETWORKS	3	0	4	7	
3	3351602	ESSENTIALS OF NETWORK SECURITY	3	0	4	7	
4	3351603			0	4	7	
5	3351605	PROJECT-I	0	0	4	4	
TOTAL 12 0 20			20	32			
		SEMESTER VI					
SR.	COURE	COURE TITLE	TE <i>l</i>	ACHING SCHEM	IE(HOURS)	CREDITS	
NO.	CODE		THEORY	TUTORIAL	PRACTICAL		
1	3361601	WEB AND NETWORK SECURITY	4	0	2	6	
2	3360701	ADVANCE JAVA PROGRAMMING	3	0	4	7	
3	3361602	ANDROID APPLICATION DEVELOPMENT	3	0	4	7	
4	3361603	WEB DESIGNING USING PHP AND MYSQL	3	0	4	7	
5	3361606	PROJECT-II	0	0	6	6	
		TOTAL	13	0	20	33	
		BRIDGE COURSE For C2D STUI	DENTS				
		SEMESTER I (Bridge Cours	e)				
SR.	COURE	COURE TITLE	TEA	ACHING SCHEM	ME(HOURS)	Total	
NO.	CODE		THEORY	TUTORIAL	PRACTICAL	Hrs	
	G0.0.0.0.1	DAGIG MATTYDO	L	T	P	(L+T+P)	
1	C300001	BASIC MATHEMATICS	14	10	0	24	
2	C300002	ENGLISH	21	10	0	31	

3	C300003	ENVIRONMENT CONSERVATION & HAZARD MANAGEMENT	28	0	0	28
4	C310702	FUNDAMENTAL OF DIGITAL ELECTRONICS	21	14	0	35
	TOTAL		84	14	20	118
	SEMESTER II (Bridge Course)					
SR.	COURSE	COURSE TITLE	TEACHING SCHEME(HOURS)		Total Hrs	
NO.	CODE		THEORY	TUTORIAL	PRACTICAL	(L+T+P)
			L	T	P	
1	C320002	ADVANCED MATHEMATICS(GROUP-1)	14	0	10	24
2	C300005	BASIC PHYSICS (GROUP-2)	21	14	0	35
3	C320702	ADVANCED COMPUTER PROGRAMMING	21	28	0	49
TOTAL		56	42	10	108	

For more details regarding syllabus, examination scheme etc., kindly visit www.gtu.ac.in

# **INFRASTRUCTURE**

Information Technology Department is equipped with well-ventilated classrooms with adequate flexible furniture. Department is equipped with Five well equipped laboratories. Details of various labs are given below.

# **OPERATING SYSTEM LAB (IT-09)**

Operating System Computer Laboratory is equipped with ACER Brand computers having latest configuration and Different software like Turbo C, MS Office, and Notepad++ etc.

Computer Programming, Data Structure and Computer Graphics subject's laboratories are conducted in Operating System Lab.

Total Numbers of Computers in Lab: 20



# **PROJECT LAB (IT-10)**

Project Laboratory is equipped with ACER Brand computers having latest configuration and software like XAMPP, Turbo C and Notepad++ etc. The students are encouraged to develop innovative projects under faculty guidance to enhance their skills.

Web designing using PHP and MySQL, Essentials of Network security subject's Laboratories are conducted in Project Lab.

Total Numbers of Computers in Lab: 20



# **DATABASE MANAGEMENT LAB (IT-11)**

Database Management Laboratory is equipped with ACER Brand computers having latest configuration and software like Android Studio, JDK etc.

Android Programming, Java Programming and Advance java programming subjects Laboratories are conducted in DBMS lab.

Total Numbers of Computers in Lab: 20



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# **PROGRAMMING LAB (IT-12)**

Programming Laboratory is equipped with Dell and Lenovo brand computers having latest configuration and compiling tools required for programming in various languages like Java, C++, C, ASP and VB.Net. It has Software like Visual Studio, Turbo C and Unix Shell.

Operating System and Web programming using VB.Net Subject's Laboratories are conducted in Programming Lab.

Total Numbers of Computers in Lab: 20



#### **COMPUTING FACILITIES**

Department is equipped with adequate computing facilities. ICT tools like Laptop, projector, speakers are frequently used in classrooms to enhance the teaching learning process. Free Access NaMo Wifi facility available at department.

### **DEPARTMENT LIBRARY**

Many reference books for IT engineering is available in department library. Students can access the books as per their will and convenience.

#### **FACULTY DETAILS**

Sr. No.	Name of Faculty	Designation	Qualification	Teaching Experience
1	Mr. J. R. Mahida	H.O.D.	M.E.C.E	15 years
2	Mr. D. R. Gandhi	Lecturer	M.E.I.T	9 years
3	Mr. C. A. Gajjar	Lecturer	M.E.I.T	3 years
4	Ms. B. S. Patel	Lecturer	B.E.I.T	12 years
5	Mr. M. R. Patel	Lecturer	B.E.I.T	8 years
6	Ms. S. M. Chauhan	Lecturer	B.E.I.T	7.6 years

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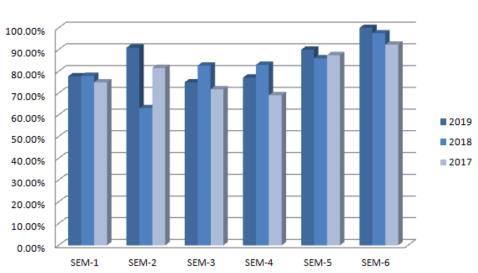
For more information kindly visit www.ssgc.cteguj.in

# **TECHNICAL & SUPPORTING STAFF**

Sr.No.	Name of the Technical Staff	Designation	Qualification	Date of Joining
1	Ms. K. S. Gupta		Diploma in Computer Technology, B.A in English	23/12/1997

# **RESULT ANALYSIS**





# **TRAINING & PLACEMENTS OPPORTUNITIES**

Each year after completing Diploma in Information Technology many students join the Bachelor of Engineering course and some of the students are placed in companies.

Year of Passing	Students in Higher Studies (B.E.)	Students in Job
2018	31	4
2019	27	3
2020	42	5

Students got the job in following companies:

Sr.	Name of Company	
No.		
1	Microhard IT Solutions Pvt Ltd., Surat	
2	Jio Service Center, Surat	
3	R apparels, Udhna	
4	SMIMER Hospital, Surat	
5	ELaunch Infotech, Surat	

#### **CO - CURRICULAR AND EXTRACURRICULAR ACTIVITIES**

Series of Co-curricular and extracurricular activities like Group Discussions, Expert lectures, Industrial visits, Tree plantation, Cleanliness drive, Yoga celebrations, Sports week, NCC and NSS activities are planned and organized in department and institute for a harmonious development of students in respect to their morality, humanity, honesty, character and health. These activities also contribute to the development of soft skills or employable skills to great extent, which are ultimately required at the world of work.

#### **CONTACT US**

Information Technology Department

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