

Electronics & Communication Engineering

Part A :

1 Name and Address of the Institution:

Government Polytechnic Palanpur
Out side malan Gate Ambaji Road palanpur-385001

2 Name and Address of the Directorate of Technical Education:

Directorate of Technical Education,
Block No.2,
6th Floor,
Karmyogi Bhavan,
Sector 10-A,
Gandhinagar - 382010.
Gujarat State.
Phone : +91-79-232 53546
Fax : +91-79-232 53539
Email : dire-dte@gujarat.gov.in

3 Year of Establishment:

1984

4 Type of the Institution:

University

Autonomous

<input type="radio"/> Deemed University	<input type="radio"/> Any Other(Please Specify)
<input checked="" type="radio"/> Affiliated	

5 Ownership Status:

<input type="checkbox"/> Central Government	<input type="checkbox"/> Trust
<input checked="" type="checkbox"/> State Government	<input type="checkbox"/> Society
<input type="checkbox"/> Government Aided	<input type="checkbox"/> Section 25 Company
<input type="checkbox"/> Self financing	<input type="checkbox"/> Any Other(Please Specify)

6 Other Academic Institutions of the Trust/Society/Company etc., if any:

Name of Institutions	Year of Establishment	Programs of Study	Location
	YYYY		

7 Details of all the programs being offered by the institution under consideration:

Name of Program	Program Applied level	Start of year	Year of AICTE approval	Initial Intake	Intake Increase	Current Intake	Accreditation status	From	To	Program for consideration	Program for Duration
Electronics & Communication Engineering	Diploma	1994	1994	30	Yes	30	Applying first time	--	--	Yes	3
Sanctioned Intake for Last Five Years for the Electronics & Communication Engineering											
Academic Year						Sanctioned Intake					
2025-26						30					
2024-25						30					
2023-24						30					
2022-23						30					
2021-22						30					
2020-21						30					
2019-20						150					
Information and Communication Technology	Diploma	2022	2022	60	No	60	Not eligible for accreditation	--	--	No	3

Name of Program	Program Applied level	Start of year	Year of AICTE approval	Initial Intake	Intake Increase	Current Intake	Accreditation status	From	To	Program for consideration	Program for Duration
DIPLOMA MECHANICAL ENGINEERING	Diploma	1988	1988	30	Yes	60	Granted accreditation for 3 years for the period (specify period)	2021	2027	No	3
DIPLOMA CIVIL ENGINEERING	Diploma	1984	1984	30	Yes	90	Granted accreditation for 3 years for the period (specify period)	2021	2027	0	3
Information Technology	Diploma	2023	2023	30	No	30	Not eligible for accreditation	--	--	No	3
DIPLOMA ELECTRICAL ENGINEERING	Diploma	1984	1984	30	Yes	60	Granted accreditation for 3 years for the period (specify period)	2021	2027	0	3

7a Accreditation History

Sr.No	Name of the Department	Name of the Program	Year of 1st Accreditation(if Applicable)	Year of 2nd Accreditation(if Applicable)	Year of 3rd Accreditation(if Applicable)
1	DIPLOMA	DIPLOMA MECHANICAL ENGINEERING	2021	2024	
2	DIPLOMA	DIPLOMA CIVIL ENGINEERING	2021	2024	
3	DIPLOMA	DIPLOMA ELECTRICAL ENGINEERING	2021	2024	

7b Programs to be considered for Accreditation vide this application:

S No	Level	Discipline	Program
1	Diploma	Engineering & Technology	Electronics & Communication Engineering

8 Total number of Employees:

A. Regular* Employees (Faculty and Staff):

Engineering and Technology- Diploma	<input checked="" type="checkbox"/> Shift1	<input type="checkbox"/> Shift2
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Engineering and Technology- Diploma Shift-1

Items	2025-26		2024-25		2023-24		2022-23	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
Faculty in Engineering & Technology (Male)	52 52		52 52		54 54		54 58	
Faculty in Engineering & Technology (Female)	6 6		6 6		6 6		5 8	
Faculty in Science & Humanities (Male)	4 4		4 4		4 4		4 4	
Faculty in Science & Humanities (FeMale)	1 1		1 1		1 1		1 1	
Non-teaching staff (Male)	9 10		10 10		13 13		18 19	
Non-teaching staff (FeMale)	4 4		3 4		5 5		5 5	

B. Contractual Staff (Not Covered in 9.A):

Engineering and Technology- Diploma	<input checked="" type="checkbox"/> Shift1	<input type="checkbox"/> Shift2
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Engineering and Technology- Diploma Shift-1

Items	2025-26		2024-25		2023-24		2022-23	
	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX
Faculty in Engineering & Technology (Male)	0 0		0 0		0 0		0 3	
Faculty in Engineering & Technology (Female)	1 1		1 1		1 1		1 1	
Faculty in Science & Humanities (Male)	0 0		0 0		0 0		0 0	
Faculty in Science & Humanities (FeMale)	0 0		0 0		0 0		0 0	
Non-teaching staff (Male)	0 0		0 0		0 0		0 0	
Non-teaching staff (FeMale)	0 0		0 0		0 0		0 0	

9 Total number of Students:

Engineering and Technology- Diploma	<input checked="" type="checkbox"/> Shift1	<input type="checkbox"/> Shift2
--	--	---------------------------------

Engineering and Technology- Diploma Shift-1

Course Name	2025-26	2024-25	2023-24	2022-23
Total no. of Boys	358	351	331	213
Total no. of Girls	32	30	29	7
Total	390	381	360	220

10 Contact Information of the Head of the Institution and NBA Coordinator:

Head of the Institution

Name Mr.Sureshkumar.D.Dabhi

Designation Head of the Department
(Mechanical Engineering),Principal(I/C)

Mobile No. 9825697278

Email ID gp-palanpur-dte@gujarat.gov.in

 NBA Coordinator, If Designated

Name Mr. N V OZA

Designation Lecturer in Mechanical Engineering

Mobile No. 9067737576

Email ID E-Mail

Electronics & Communication Engineering

PART B: Criteria Summary

Criteria No.	Criteria	Total Marks	Institute Marks
1	VISION, MISSION AND PROGRAM EDUCATIONAL OBJECTIVES	50	50.00
2	PROGRAM CURRICULUM AND TEACHING - LEARNING PROCESSES	200	200.00
3	COURSE OUTCOMES AND PROGRAM OUTCOMES	100	100.00
4	STUDENTS' PERFORMANCE	200	80.63
5	FACULTY INFORMATION AND CONTRIBUTIONS	150	146.33
6	FACILITIES AND TECHNICAL SUPPORT	100	100.00
7	CONTINUOUS IMPROVEMENT	75	75.00
8	STUDENT SUPPORT SYSTEMS	50	50.00
9	GOVERNANCE, INSTITUTIONAL SUPPORT AND FINANCIAL RESOURCES	75	75.00
	Total	1000	877

Part B

1 VISION, MISSION AND PROGRAM EDUCATIONAL OBJECTIVES (50)

1.1 State the Vision and Mission of the Department and Institution (5)

Vision of the institute

To produce competent diploma engineers as per need of industries and entrepreneurs with ethical values.

Mission of the institute

Government Polytechnic, Palanpur strives to impart,
 1. To impart industry oriented technical education.
 2. Excellent teaching and learning environment.
 3. Promote entrepreneurship activities.
 4. Continual growth in every sphere of life by developing core human values.

Vision of the Department

To prepare competent diploma level electronics and communication engineers, catering the needs of industries and society as an excellent employees, innovator and entrepreneur with moral values.

Mission of the Department

Mission No.	Mission Statements
M1	Provide quality education in the field of EC engineering
M2	Develop state of art laboratories, classrooms and up gradation of faculties
M3	Strengthen industrial liaison by offering mutual beneficiaries services
M4	Execute extra curricular and co-curricular activities to inculcate innovation, entrepreneurship and moral values

1.2 State the Program Educational Objectives (PEOs) (5)

PEO No.	Program Educational Objectives Statements
PEO1	Successfully pursue professional Electronics and Communication engineering career working in multidisciplinary areas, focusing on innovation and entrepreneurship.
PEO2	Pursue higher education.
PEO3	Demonstrate societal and ethical responsibility in every domain of life.
PEO4	Adapt technological changes with focus on societal and environmental issues.

1.3 Indicate where and how the Vision, Mission and PEOs are published and disseminated among stakeholders (10)

The Vision, Mission, and PEOs of the Electronics & Communication Engineering department are strategically published and disseminated to ensure they serve as the foundation for all academic and administrative activities. T objectives through a multi-channel approach and processes:

Publication Channels

The following table outlines the specific locations and target audiences for the dissemination of the Departmental Vision, Mission, and PEOs.

Sr. No.	Place of Dissemination	Target Stakeholders
1	Institute & Departmental Website (https://gppalanpur.ac.in/)	Internal & External Stakeholder (Global access)
2	Department Notice Board & Head Office	Internal & External Stakeholder
3	Department Laboratories & Classrooms	Internal Stakeholder
4	Orientation Programme & Parents Teacher Meetings	Internal & External Stakeholder
5	Curriculum documents: Course Files, Lab Manuals	Internal Stakeholder
6	Departmental Newsletter & email (Signatures)	Internal & External Stakeholder

Table 1.3.1 Publication and Dissemination Channels for Vision, Mission, and PEOs

Dissemination Process and Stakeholder Engagement

To ensure the deep-rooted understanding of Vision and Mission, these statements are actively disseminated through structured engagements among stakeholders.



Figure 1.3.1 Dissemination in Orientation Programme

- **Internal Stakeholders (Students & Faculty):**
 - **Induction Programs:** Newly admitted students are briefed on the Vision, Mission, and PEOs in the orientation program.
 - **Continuous Awareness:** Faculty members reiterate the alignment of Course Outcomes (COs) with the Departmental Mission during the introductory lecture of every course.
 - **Academic Records:** Every lab manual and course file begins with these statements to remind students about the motive behind their education.
- **External Stakeholders (Parents, Alumni, & Industry):**
 - **Parent-Teacher Meetings (PTM):** Statements are presented to parents to align their support with departmental goals.
 - **Industry-Institute Interaction:** The statements are shared with industry partners to ensure our objectives match professional requirements.
 - **Alumni Meets:** The statements are reviewed with alumni to validate if the program successfully prepared them.

The department ensures effective dissemination through continuous stakeholder interaction via multiple channels and feedback mechanisms.

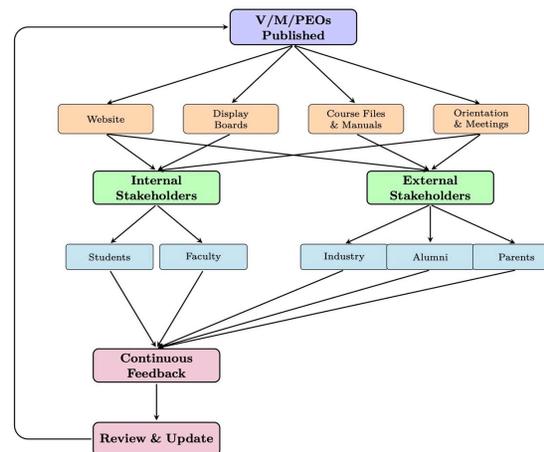


Figure 1.3.2 Dissemination Process and Stakeholder Engagement Framework

Stakeholder Roles and Contributions

The department recognizes that quality enhancement is a collaborative effort. Each stakeholder plays a specific role in the formulation, implementation, and attainment of the Vision, Mission, and PEOs.

Stakeholder	Type	Role in V/M/PEO Implementation	Contribution to Quality Enhancement
Students	Internal	Primary beneficiaries of the program	<ul style="list-style-type: none"> • Active participation in the Teaching-Learning Process • Provide feedback through Course Exit Surveys and Program Ex • Participate in professional bodies and technical events to achiev
Faculty / DQAC	Internal	Implement vision and mission via teaching	<ul style="list-style-type: none"> • Execute teaching-learning processes • Mapping of COs to POs and PEOs. • Serve in academic committees • Provide inputs for curriculum design and assessment
Parents	External	Support students' academic journey and career goals	<ul style="list-style-type: none"> • Attend orientation and Parent-Teacher Meetings (PTM) to mon • Support students' career aspirations

Industry	External	Key employers and skill validators	<ul style="list-style-type: none"> • Employ graduates and provide internships • Conduct workshops, seminars, and guest lectures
Alumni	External	Long-term success indicators	<ul style="list-style-type: none"> • Represent program effectiveness in careers • Provide feedback on curriculum relevance • Mentoring support to our students • Facilitate placement opportunities and industry networking.

Table 1.3.2 Stakeholder Roles & Contributions to Quality Enhancement

1.4 State the process for defining the Vision and Mission of the Department, and PEOs of the program (15)

Process for Defining Vision and Mission

The department follows a systematic, stakeholder-driven process to define and refine the Vision and Mission statements. This process ensures alignment of departmental Vision and mission with the Institute's goals while address the needs of stakeholders. The process was executed in 2017 as follows:

SWOT Analysis and Draft Formulation:

The process initiated with an exhaustive SWOT analysis involving a broad spectrum of internal and external stakeholders (faculty, students, alumni, and industry experts) between January 16 and January 23, 2017. This process was supported by the Departmental Quality Assurance Cell (DQAC) which synthesized the SWOT findings.



Figure 1.4.1 Departmental Meeting for SWOT

The drafting process was strictly guided by:

- The Institute's Vision and Mission (to ensure vertical consistency).
- Regulatory benchmarks from AICTE, NBA, DTE and GTU.

Stakeholder Consultation and Validation:

The draft was presented for review by stakeholders on February 4, 2017. Feedback was gathered and analyzed to ensure the statements were measurable and achievable. If refinement was needed, feedback was incorporated, and the process was repeated.

Final Approval and Dissemination:

A final approval meeting with stakeholders was held on February 18, 2017 to finalize the statements. Upon formal approval by the stakeholders and departmental leadership, the Vision and Mission were adopted and formally

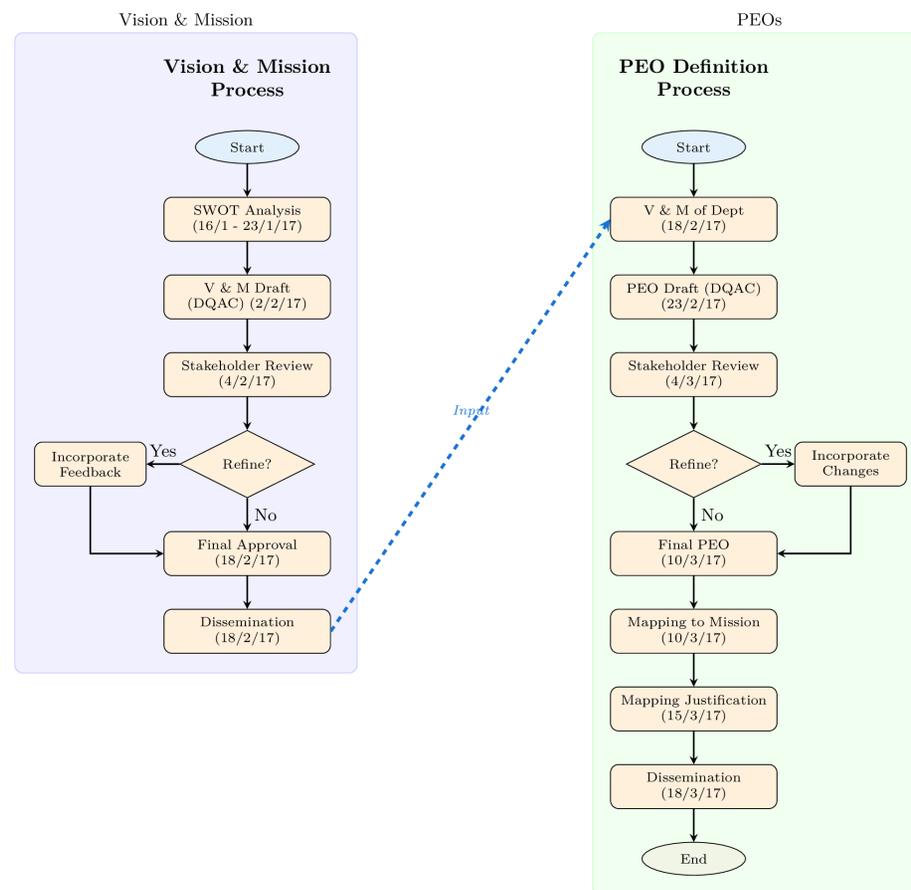


Figure 1.4.2 Systematic Process for Defining Vision, Mission & PEOs

Process for Defining PEOs

The Department follows a systematic process to ensure that the PEOs are aligned with the Mission of the Department. The PEOs were defined through a structured process involving all key stakeholders.

Initial Drafting:

Following the formal adoption of the Departmental Vision and Mission on February 18, 2017, the Departmental Quality Assurance Cell (DQAC) initiated the drafting of the PEOs. On February 23, 2017, an initial set of PEOs

- Graduates professional career progression
- Academic pursuits and lifelong learning.
- Social responsibility and ethical practice.

Stakeholder Consultation and Refinement:

On March 4, 2017, the draft PEOs were subjected to a rigorous review process. Feedback was collected from the stakeholders, and necessary refinements were made.

Finalization and Mission Mapping:

The PEOs were formally finalized on March 10, 2017. To ensure "Vertical Consistency," the department performed a PEO-Mission Mapping exercise. This step verified that every Mission statement is supported by at least one

Justification and Dissemination:

On March 15, 2017, the DQAC documented the justification for the mapping matrix, explaining the strength of the correlation between the Mission and the PEOs. On March 18, 2017, the PEOs were disseminated across all pl

1.5 Establish Consistency of PEOs with Mission of the Department (15)

The following rationale explains the strength of the correlation (Substantial, Moderate, or Slight) established between the Departmental Mission and Program Educational Objectives.

Table 1.5.1 PEO-Mission Correlation Justification Matrix

Mission	PEO1	PEO2	
M1: Provide quality education in EC engineering	3: Quality EC education is essential for professional success and innovation	3: Strong foundation enables graduates to pursue higher studies and continuous learning	2: Curriculum integra responsibility
M2: Develop state of art laboratories, classrooms and faculty upgradation	2: Modern facilities and upgraded faculty support skill development for careers	3: Adequate infrastructure and knowledgeable faculty facilitate higher learning	1: Upgradation of fac awareness
M3: Strengthen industrial liaison by offering mutual beneficiaries services	3: Industry liaison directly enhances employability, innovation, and entrepreneurial skills	2: Industry exposure motivates students to learn advanced technologies and skills needed	2: Industry interaction ethics and social resp
M4: Execute extra-curricular and co-curricular activities to inculcate innovation, entrepreneurship and moral values	3: Activities directly nurture innovation and entrepreneurial mindset	2: Co-curricular activities complement academic learning and encourage growth	3: Activities explicitly responsibility

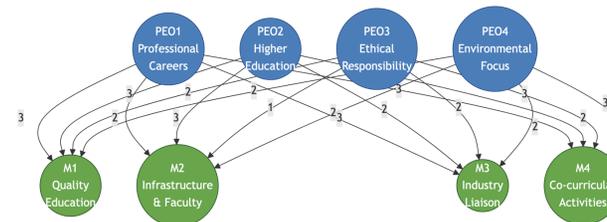


Figure 1.5.1 PEO-Mission Correlation Graph

PEO Statements	M1	M2	M3	M4
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Successfully pursue professional Electronics and Communication engineering career working in multidisciplinary areas, focusing on innovation and entrepreneurship.	3	2	3	3
Pursue higher education.	3	3	2	2
Demonstrate societal and ethical responsibility in every domain of life.	2	1	2	3
Adapt technological changes with focus on societal and environmental issues.	2	2	2	3

2 PROGRAM CURRICULUM AND TEACHING - LEARNING PROCESSES (200)

2.1 Program Curriculum (40)

All POs and PSOs are being demonstrably met through Curriculum ? :

2.1.1 State the process used to identify extent of compliance of the Board curriculum for attaining the Program Outcomes (POs) and Program Specific Outcomes (PSOs) as mentioned in Annexure I. Also mention the

A. Process used to identify extent of compliance of curriculum for attaining POs & PSOs (15)

Government Polytechnic Palanpur is affiliated with Gujarat Technological University (GTU), which provides the curriculum for the Diploma in Electronics and Communication Engineering. Each syllabus clearly outlines the course title and code, the semester in which it is offered, the teaching and cognitive levels, expected course outcomes, laboratory experiments, required equipment, and recommended reference books.

GTU began its academic activities in 2008, and the first revised diploma curriculum was introduced in the academic year 2012–13. To strengthen and update its academic framework, GTU established the Curriculum Development Cell (CDC) in 2012. This cell was responsible for revising syllabus Training and Research), Bhopal, along with faculty members from GTU-affiliated diploma institutes across Gujarat. The syllabus development process involved contributions from all major stakeholders, including implementers, students, faculty members, alumni, and industry professionals. After again revised the syllabus introducing the concept of the Competency Oriented Green Curriculum (COGC), as the previous curriculum had completed its ten-year cycle. The updated structure of the Electronics and Communication Engineering curriculum developed during this revision is presented in

New Teaching Scheme and Course Category											
Course Code	Course Title	Teaching Scheme/ Week		Credit (L+T+P)	Theory Mark		Practical Mark		Grand Total		Course Category
		L	T		P	ESE	PA	ESE	PA		
SEMESTER – 1											
4300001	Mathematics	3	1	0	4	70	30	0	0	100	Basic science
4300002	Communication Skills in English	2	0	2	3	70	30	25	25	150	HS
4300005	Physics	3	0	2	4	70	30	25	25	150	Basic science
4300010	Basics of Information and Communication Technology	0	0	4	2	0	0	25	25	50	Engineering Sciences

4300015	Sports and Yoga	0	0	2	0	0	0	50	0	50	HS
4311101	Fundamentals of Electrical Engineering	3	0	2	4	70	30	25	25	150	Engineering Sciences
4311102	Fundamentals of Electronics	4	0	2	5	70	30	25	25	150	Program Core
SEMESTER – 2											
4300003	Environment and Sustainability	3	0	0	3	70	30	0	0	100	General Science
4300012	Engineering Drawing and Computer Aided Design	0	0	4	2	0	0	25	25	50	Engineering Sciences
4300016	Indian Constitution	2	0	0	0	0	0	50	0	50	HS
4320002	Engineering Mathematics	3	1	0	4	70	30	0	0	100	Basic Sciences
4321101	Electronics Workshop	0	0	4	2	0	0	25	25	50	Engineering Sciences
4321102	Digital Electronics	3	0	2	4	70	30	25	25	150	Program Core
4321103	Electronic Circuits & Applications	3	0	2	4	70	30	25	25	150	Program Core
SEMESTER – 3											
4330001	Summer Internship-I	0	0	2	1	0	0	25	25	50	Summer Internship- (2 Weeks) after sem-2
4331101	Electronic Circuits & Networks	3	0	2	4	70	30	25	25	150	Program Core
4331102	Electronic Measurements & Instruments	3	0	2	4	70	30	25	25	150	Program Core
4331103	Industrial Electronics	3	0	2	4	70	30	25	25	150	Program Core
4331104	Principle of Electronic Communication	3	0	2	4	70	30	25	25	150	Program Core
4331105	Programming In C	2	0	2	3	70	30	25	25	150	Program Core
SEMESTER - 4											
4340003	Integrated Personality Development Course	2	0	0	2	70	30	25	25	150	Program elective
4341101	Microprocessor & Microcontroller	3	0	2	4	70	30	25	25	150	Program Core
4341102	Digital Communication	3	0	2	4	70	30	25	25	150	Program Core

4341107	Consumer Electronics and Maintenance	3	0	2	4	70	30	25	25	150	Program elective
4341104	Circuit Design Tools	0	0	2	1	0	0	25	25	50	Program Core
4341105	Linear Integrated Circuit (Analog Electronics)	3	0	2	4	70	30	25	25	150	Program Core
4341106	Antenna & Wave Propagation	2	0	2	3	70	30	25	25	150	Program Core
SEMESTER - 5											
4300021	Entrepreneurship and Start-ups	3	0	0	3	70	30	0	0	100	Program Core
4351102	Embedded System	3	0	2	4	70	30	25	25	150	Program Core
4351103	Microwave and Radar Communication	3	0	2	4	70	30	25	25	150	Program elective
4351104	Mobile & Wireless Communication	3	0	2	4	70	30	25	25	150	Program Core
4351105	Software Practices	0	0	2	1	0	0	25	25	50	Program Core
4351106	Summer Internship-II	0	0	6	3	0	0	50	50	100	Program Core
4351107	Electronics and Communication Engineering Project-I	0	0	2	1	0	0	50	50	100	Program Core
4351108	OOPS & Python Programming	2	0	2	3	70	30	25	25	150	Program elective
SEMESTER - 6											
4361101	Computer Networks & Data Communication	3	0	2	4	70	30	25	25	150	Program Core
4361102	VLSI	3	0	2	4	70	30	25	25	150	Program Core
4361103	Electronics & Communication Engineering Project-II	0	0	2	1	0	0	25	25	50	Program Core
4361104	Android App Development	0	0	4	2	0	0	50	50	100	Program Core
4361106	Renewable Energy & Emerging Trends in Electronics	2	0	2	3	70	30	25	25	150	Program elective

Table 2.1.1.1 Teaching Scheme & course Category

- Semester wise Credit distribution and Weightage

Sr. No	Semester	Credit	Weightage
1	First	22	18.33%
2	Second	19	15.83%
3	Third	20	16.67%
4	Fourth	22	18.33%
5	Fifth	23	19.17%
6	Sixth	14	11.67%
	Total	120	100%

Table 2.1.1.2 Credit distribution and its Weightage Semester wise

Sr. No.	Components	Credit	No. of courses	% Weightage of cours
1	HS – Humanities & Social Science Courses	3	3	7.50%
2	BS – Basic Science	12	3	7.50%
3	GS – General science	3	1	2.50%
4	ES – Engineering Science Course	10	4	10.00%
5	PC – Program Core Course	75	23	57.50%
6	PEC – Program Elective Course	16	5	12.50%
7	Internship	1	1	2.50%
	Total	120	40	100%

Table 2.1.1.3 Percentage Weightage of course and credit distribution

Identification of Compliance of curriculum for attaining POs and PSOs

The process of mapping of course outcome with POs and PSOs for each course is described in Criteria-3 in detail with justification.

Program Articulation Matrix

The Program Articulation Matrix (PAM) is a vital component of Outcome-Based Education (OBE), serving as a systematic tool to map the relationship between Course Outcomes (COs) and the broader Program Outcomes (POs) as well as Program Specific Outcomes (PSOs). Within the framework of curriculum contributes to the attainment of well-defined program objectives. The PAM offers a clear and structured visual representation of this alignment, ensuring that the intended learning outcomes of every course are meaningfully linked to—and support the achievement of—the overall diploma ;

The Program Articulation Matrix (PAM) is a powerful tool for:

- Ensuring systematic curriculum-outcome alignment
- Identifying areas of improvement within the curriculum
- Addressing curricular gaps through targeted interventions
- Providing evidence of outcome-based education implementation to NBA

Supporting continuous improvement for educational quality assurance

The program articulation matrix indicates the extent each course helps to attain program outcomes.

Sr. No.	Course Code	Code ID	Course Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
1	4300001	C111	Mathematics	3	1.25	1	-	-	-	1	-	-
2	4300002	C112	Communication Skills in English	1.75	-	-	-	-	2	1.8	-	-
3	4300005	C113	Physics	3	1	1	2	1	-	1	1.6	-
4	4300010	C114	Basics of Information and Communication Technology	2.8	2	2	2	1.25	2	2.4	2.5	2.5
5	4300015	C115	Sports and Yoga	2.4	-	-	-	1	-	2	-	-
6	4311101	C116	Fundamentals of Electrical Engineering	3	2	-	1	3	1	2	3	1
7	4311102	C117	Fundamentals of Electronics	3	1.2	1.6	2.2	1.67	1.25	1	3	1
8	4300003	C121	Environment and Sustainability	2	1.8	1.6	1	1.8	1.25	1.4	2	-
9	4300012	C122	Engineering Drawing and Computer Aided Design	3	1.5	2.75	2.5	2	2	2	-	1
10	4300016	C123	Indian Constitution	-	1	1	-	2	1	2	-	-
11	4320002	C124	Engineering Mathematics	3	1	1	-	-	-	1	-	-
12	4321101	C125	Electronics Workshop	2.6	2.2	2.4	2.8	1.6	1.4	2.2	2.6	2.6
13	4321102	C126	Digital Electronics	3	1.8	1.8	1.8	2	1.8	1.2	2.6	1
14	4321103	C127	Electronic Circuits & Applications	3	2.2	2.4	2.4	1.5	2.8	1.6	2.2	2.6

Sr. No.	Course Code	Code ID	Course Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
15	4330001	C231	Summer Internship-I	1.4	1	1.5	1.2	1	1	1	1.5	1
16	4331101	C232	Electronic Circuits & Networks	3	2.8	2.6	2.2	1.6	1.8	2.2	3	2
17	4331102	C233	Electronic Measurements & Instruments	3	2	2.5	2.8	2	1	1.2	3	1.33
18	4331103	C234	Industrial Electronics	3	2	2	2.4	1	2.4	1.4	2.8	2.6
19	4331104	C235	Principle of Electronic Communication	2.8	2	1.6	2.2	1.6	1	2.6	1.6	1
20	4331105	C236	Programming In C	2.6	2.25	2	2.4	1.6	1.6	2.2	-	3
21	4340003	C241	Integrated Personality Development Course	1	1	1	-	2.67	2.33	2.8	-	-
22	4341101	C242	Microprocessor & Microcontroller	3	2	2.2	2.2	1	2.2	2.4	2.5	1.8
23	4341102	C243	Digital Communication	3	1.4	1.4	2.4	1.6	1.8	2.6	2.8	2.6
24	4341104	C244	Circuit Design Tools	2.5	2.67	2.67	3	1.67	1	1.25	3	2.5
25	4341105	C245	Linear Integrated Circuit (Analog Electronics)	3	2.6	2.4	2.2	2	2.8	2.4	2.6	2.8
26	4341106	C246	Antenna & Wave Propagation	3	2.8	2.6	2.2	1.6	1.8	2.2	3	1.4
27	4341107	C247	Consumer Electronics and Maintenance	3	2.2	2	2.6	2.6	1.8	3	3	1
28	4300021	C351	Entrepreneurship and Start-ups	2.8	2	1.8	1.25	1.25	2.4	2.6	2	2
29	4351102	C352	Embedded System	3	2.4	2	2	1.67	2.2	2.4	2.2	2
30	4351103	C353	Microwave and Radar Communication	2.2	1.6	2.2	2	2	2	1.8	2.4	2.2
31	4351104	C354	Mobile & Wireless Communication	2.8	2	1.8	2	1.6	2	2.4	3	2.33
32	4351105	C355	Software Practices	3	2.2	2	2.4	1	1.33	3	-	3
33	4351106	C356	Summer Internship-II	1.6	2	1.8	1.2	2.2	1.6	2	2.4	2.33
34	4351107	C357	Electronics and Communication Engineering Project-I	3	2	1.4	1.6	1.8	1.4	3	2	2.2
35	4351108	C358	OOPS & Python Programming	2.25	2	2	1.75	-	1.25	2.5	-	3

Sr. No.	Course Code	Code ID	Course Name	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
36	4361101	C361	Computer Networks & Data Communication	3	2.2	1.8	1.6	1.4	2.2	2.8	2.4	2.8
37	4361102	C362	VLSI	2.6	2.4	2	2.2	2.67	2.33	2.2	2.4	2.5
38	4361103	C363	Electronics & Communication Engineering Project-II	3	1	2.33	1.8	2	2	2	2.2	2
39	4361104	C364	Android App Development	2.2	2.4	3	2.4	1.6	1.4	1	1	2
40	4361106	C365	Renewable Energy & Emerging Trends in Electronics	3	2	2	2	1.75	2	2.75	3	3
			Average Attainment	2.67	1.89	1.92	2.05	1.71	1.75	2.01	2.44	2.07

Table 2.1.1.4 Program Articulation Matrix

Process for Finding Curricular Gaps:

The Entire Process of Finding Curricular Gaps Focuses On (Through Program Articulation Matrix):

The basic steps for gap analysis include:

1. Mapping Outcomes through PAM:

- The Program Assessment Matrix (PAM) serves as a critical tool to systematically link Course Outcomes (COs) to Program Outcomes (POs) and Program Specific Outcomes (PSOs).
- Each course offered in the curriculum is analyzed for its contribution to the attainment of POs and PSOs.
- The strength of mapping is usually quantified using levels (e.g., 1 – low, 2 – moderate, 3 – high), showing how strongly each course outcome supports specific program outcomes.
- This mapping provides a consolidated overview of how well the curriculum aligns with the intended program-level educational objectives.

2. Identifying Gaps:

- Once the PAM is developed, gap identification involves a detailed analysis of the distribution and strength of mappings across all CO-PO and CO-PSO relationships.
- Gaps are identified when:
 - Certain POs or PSOs are not addressed or are mapped at a very low level (e.g., Level 0 or 1) across the entire program.
 - Some outcomes are underrepresented or overly dependent on a limited number of courses.
 - There is imbalanced mapping, where some POs are addressed excessively while others are neglected.
- It ensures that the curriculum's contribution to program goals is comprehensive and evenly distributed, without over-reliance on a few courses.

3. Addressing the Identified Gaps:

- The insights derived from PAM directly inform stakeholders to take corrective actions.
- This may include updating syllabus or organizing seminar, workshops, expert lectures, industrial visit where specific POs/PSOs are lacking.

Flowchart of Process for finding curricular gaps

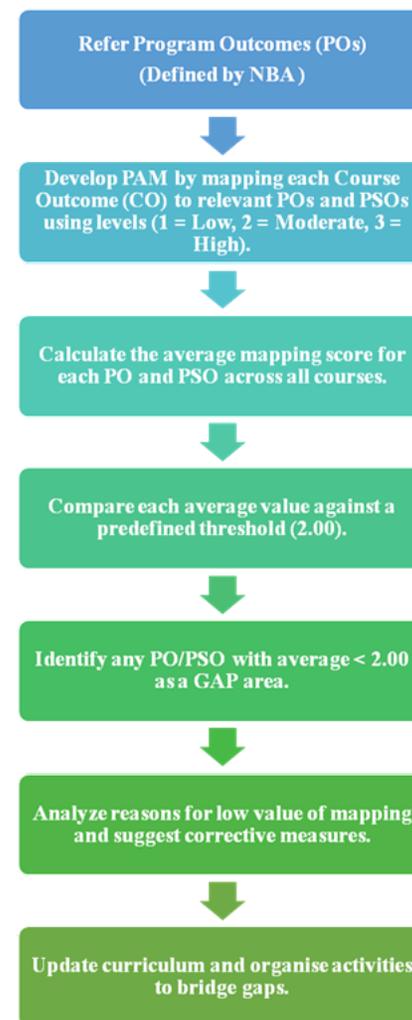


Figure 2.1.1.1 Process to identify gaps in curriculum

Step 1: Define Program Outcomes (POs) (Defined by NBA)

Program Outcomes (POs) are specific competencies that students are expected to achieve upon completion of diploma. These are derived from the NBA. Clearly defining POs helps in aligning course objectives with broader educational expectations and ensures uniformity in curriculum planning and

Step 2: Develop PAM by mapping each Course Outcome (CO) to relevant POs and PSOs using levels (1 = Low, 2 = Moderate, 3 = High)

The **Program Articulation Matrix (PAM)** is a structured tool where each Course Outcome (CO) is mapped against Program Outcomes (POs) and Program Specific Outcomes (PSOs). The mapping is based on the extent to which a course supports each outcome:

- **Level 1:** Low contribution
- **Level 2:** Moderate contribution
- **Level 3:** High contribution

Step 3: Calculate the average mapping score for each PO and PSO across all courses

Once the matrix is filled, calculate the **average score** for each PO and PSO by aggregating the mapping levels across all relevant courses. This score gives an overall view of how strongly the curriculum supports each outcome and helps quantify program effectiveness.

Step 4: Compare each average value against a predefined threshold (2.00)

A benchmark or threshold (commonly set at **2.00**) is used to assess adequacy. Each PO and PSO's average score is compared to this threshold:

- If the average is ≥ 2.00 , the outcome is considered adequately addressed.
- If it is < 2.00 , there is a shortfall that must be investigated.

This numerical comparison adds objectivity to the evaluation process.

Step 5: Identify any PO/PSO with average < 2.00 as a GAP area

Any Program Outcome or Program Specific Outcome with an average score below the threshold is flagged as a **curricular gap**. These gaps indicate that students may not be adequately achieving certain competencies or skills and highlight areas in need of academic attention.

Step 6: Analyze reasons for low value of mapping and suggest corrective measures

Conduct a **root cause analysis** to identify why certain POs/PSOs are underachieved. Possible reasons may include:

- Insufficient course content addressing that PO/PSO
- Lack of practical exposure or contextual learning
- Misalignment of assessments with intended outcomes.
- Based on the analysis, formulate actionable recommendations to address the root causes.

Step 7: Update curriculum and organize activities to bridge gaps.

Based on the identified gaps and their causes, implement curriculum changes such as:

- Organising expert lecture, workshops, seminars, industrial visit to fill the gap
- Introducing interdisciplinary learning
- Updating curriculum

This step is crucial for closing the loop in the Continuous Quality Improvement (CQI) process.

Based on the provided Program Articulation Matrix, the curricular gaps can be identified as below:

Curricular Gap Analysis**PO & PSO mapping Summary and Gap Identification**

PO/PSO		Average mapping	Gap Identified (Threshold < 2.00)
PO1	Basic & Discipline specific knowledge	2.67	No
PO2	Problem Analysis	1.89	Yes
PO3	Design/Development of Solutions	1.92	Yes
PO4	Engineering Tools, Experimentation and Testing	2.05	No
PO5	Engineering practices for Society, Environment and Sustainability	1.71	Yes
PO6	Project Management	1.75	Yes
PO7	Life-long Learning	2.01	No

PSO1	Demonstrate proficiency in installation, maintenance and problem solving of electronic and communication equipments.	2.44	No
PSO2	Proficiency in specialized software packages and coding useful for the analysis of electronics engineering systems and PCB design.	2.07	No

Table 2.1.1.5 PO mapping Summary and Gap Identification

Detailed Gap Analysis:**PO2 – Problem Analysis****Reasons for Gap in PO2:**

As the major courses in diploma level EC curriculum emphasize conceptual understanding and awareness rather than analytical problem-solving or systematic evaluation of engineering problems.

Suggested Actions to Bridge PO2 Gap:

- Organize project competitions.
- Arrange Industrial Visits, expert lectures, workshops.

PO3 – Design/Development of Solutions**Reasons for Gap in PO3:**

As the major courses in diploma level EC curriculum do not include design-oriented activities or open-ended problem-solving tasks requiring solution development.

Suggested Actions to Bridge PO3 Gap:

- Organize workshops/project hackathons focused on design innovation.
- Arrange Industrial Visits, expert lectures, workshops.

PO5 – Engineering practices for Society, Environment and Sustainability**Reasons for Gap in PO5:**

Societal, environmental, ethical, and sustainability aspects receive limited coverage in the major courses of the diploma level EC curriculum.

Suggested Actions to Bridge PO5 Gap:

- Motivate students to prepare Projects focused on this Program outcome.
- Arrange Industrial Visits, expert lectures, workshops.

PO6 – Project Management**Reasons for Gap in PO6:**

Major technical core subjects include micro-projects, but few subjects do not incorporate project management component.

Suggested Actions to Bridge PO6 Gap:

- Promote collaborative projects and presentations to strengthen leadership and communication.
- Include group assignments with defined roles, timelines, and deliverables.

B. List the curricular gaps for the attainment of POs & PSOs (10)

List the curricular gaps for the attainment of POs & PSOs

Curricular Gaps from Program Articulation Matrix

Program Outcome	Average Mapping	Gap Identified	Appropriateness of the Gap
PO2 - Problem Analysis	1.89	Yes	The average mapping score for PO2 falls below the benchmark level of 2.00, reflecting inadequate development of students' analytical and problem-analysis skills. This shortfall indicates a need for more structured problem-solving activities and application-oriented case studies within the curriculum. Strengthening these components will help students effectively identify, formulate, and analyze engineering problems using established methodologies.
PO3- Design/Development of Solutions	1.92	Yes	With an average score below 2.00, PO3 indicates that students are not acquiring sufficient exposure to the development of design and solution-oriented skills. This may be attributed to a scarcity of design-focused assignments and limited opportunities for interdisciplinary project work. Addressing this gap will foster greater innovation, creativity, and a stronger emphasis on solution-based learning among students.
PO5-Engineering practices for Society, Environment and Sustainability	1.71	Yes	This gap highlights the limited emphasis on integrating environmental, ethical, and societal considerations within the curriculum. An average mapping score of 1.71 suggests that students may not fully appreciate the broader societal implications of technological solutions. Strengthening this Program Outcome will help prepare students to become socially responsible and ethically aware engineers.
PO6-Project Management	1.75	Yes	The PO6 score indicates that students have limited exposure to applying project management principles in academic activities. As a result, essential skills such as leadership, communication, and resource planning—critical to professional engineering practice—are not sufficiently developed. This gap underscores the need to incorporate structured project-based learning and dedicated management-oriented workshops into the curriculum.

Table 2.1.1.6 Curricular Gaps from Program Articulation Matrix

The process of finding curricular gaps from the Program Articulation Matrix is crucial for meeting NBA accreditation criteria 2.1.2, which focuses on the attainment of Program Outcomes and Program Specific Outcomes.

Justification of the process to find curricular gap:

- Threshold Selection: The threshold of 2 for average attainment is chosen based on the common practice in outcome-based education. On a scale typically ranging from 1 to 3, a value of 2 represents satisfactory accomplishment. Anything below this indicates a need for improvement.

- **Comprehensive Evaluation:** By calculating the average mapping for each PO and PSO across all courses, we get a holistic view of how well the curriculum is addressing each outcome.
- **Objective Identification of Gaps:** Comparing each average mapping to the threshold provides an objective method to identify areas where the curriculum may be falling short. This removes subjectivity from the process.
- **Alignment with NBA Requirements:** NBA criteria 2.1.2 specifically asks for the identification of curricular gaps concerning the attainment of POs and PSOs. This process directly addresses this requirement.
- **Basis for Improvement:** Identifying these gaps provides a clear starting point for curriculum enhancement. It allows the institution to focus its efforts on the most critical areas needing improvement.
- **Continuous Improvement:** This process supports the principle of continuous improvement, which is a key aspect of NBA accreditation. By regularly assessing and addressing curricular gaps, the program can evolve and better meet the needs of students and industry.

In conclusion, this process offers a systematic, objective, and comprehensive method for identifying curricular gaps in alignment with NBA accreditation Criteria 2.1.2. It helps institutions accurately pinpoint areas that require enhancement within the curriculum, thereby strengthening overall education.

2.1.2 Contents beyond the Syllabus (15)

A. Steps taken to get identified gaps included in the curriculum (eg. letters to Board) (2)

A. Steps taken to get identified gaps included in the curriculum

Electronics and Communication Deptt.

Govt. Polytechnic , Palanpur

Date : 19/2/2020

To,

The registrar

GTU, Ahmedabad

Subject: Remove Curriculum gap in existing syllabus of EC engg. Branch (Diploma)

Respected sir

The EC Engineering Department of this institute is affiliated with GTU . The existing outcome based curriculum was developed by GTU during year 2012 to 2014 .

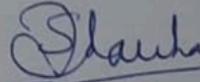
In light of above mentioned subject on behalf off all stackholders of Diploma EC I would like to draw your kind attention regarding some latest emerging areas of Electronics communication branch. We are taking regular feedback from our stakeholders, regarding diploma curriculum and its effectiveness in the modern era. We have got some concrete suggestion to add following in existing curricula to remove curricular gap enabling students to explore new area of security surveilance.

Sr. No.	Branch	Semester	Subject Code	Name of Subject	Identified GAP	Justification
1	EC Eng.	6	3361102	Consumer Electronics	Electronics surveillance system	<ul style="list-style-type: none"> • Consumer products used in electronics surveillance which includes CCTV camera. • Plenty of self employment scope with electronics

surveillance system.

We request you to take this communication in discussion for further revision of curriculum of diploma EC as and when initiated.

With best regards,



Head of Electro. & Comm. Engg. Deptt.
Government Polytechnic
PALANPUR-385 001(B.K.)

Figure 2.1.2.1 Communication-1 to university

Electronics and Communication Deptt.
Govt. Polytechnic , Palanpur
Date : 2/12/2025

To,
The registrar
GTU, Ahmedabad

Subject: Regarding Curriculum gap in existing syllabus of EC Engg. Branch (Diploma)

Respected sir

The EC Engineering Department of this institute is affiliated with GTU .
Currently there is ongoing curriculum's revision at University level. Upto 4th semester curriculum of various subject of Diploma EC has been published.

We would like to draw your kind attention regarding some latest emerging areas of Electronics communication branch. We are taking regular feedback from our stakeholders, regarding diploma curriculum and its effectiveness in the modern era.

Kindly consider following suggestions to incorporate/Update following areas in existing curricula to remove curricular gap enabling students to explore new area of electronics and communication.

Sr. No.	Semester Subject Code	Name of Subject	Identified GAP	Justification	Remark
1	4th DI04011031	Consumer Electronics	Concept of AUTO electronics	All cars now days equipped with electronic control module controlling all operations of a car.	Curriculum just published. Update before study start from 22/12/2025
			Air fryer	Oil free cooking in a Kitchen	
			(Inverter home Usage specific)	Solar rooftop plant uses Inverter	
			Electronic Weighing	Used in Kitchen as well.	

			scale		
			Induction cooking stove	Electronic heating process based on power electronics and electromagnetic induction.	
2	6th	Internship	Industry Specific knowledge	Industrial internship is a bridge between education and employment. For a diploma final year student, it is an essential step to	To be incorporated as per guidelines of NEP 2020.

				become industry-ready and successful in their career.	
3	3rd EC DI03011011	Programming in C	Introduction about debugging tools, version control and modern IDEs	Industrial requirements is that students must know Code debugging, version control using GitHub etc. and modern IDEs like VS code	These may be included in practical where in Online GDB, VS code with extensions and project management in Git hub may be introduced
4	4th EC DI04000121	Embedded System	ARM processors, ESP32, PIC controllers	As the course focuses only on AVR, students will have lack of exposure to modern controllers, reducing employability in IoT, automotive, consumer electronics, and industrial automation.	Advance controllers overview with a comparative study may be added in unit 1. Wireless modules like ESP32 may be added in unit 5 as an application.
5	<u>Topic of Wave propagation</u>	To be included	Yet not incorporated in syllabus.	Forms the backbone of communication systems Builds practical and troubleshooting skills Increases employability in telecom and electronics industries	Not included in 3rd Semester of Subject "Principle of Electronic Communication". However Antenna is included but this wave propagation topic is omitted despite of its importance.
6	In subjects pertaining to electronics and communication ,uptil now no weightage is given to Suggested Activities for Students. So it is neglected by students yielding no gain in hands on practice for project work related to that subject. So it should be made compulsory part in Progressive assessment (Practical) from semester 3 onwards.				

We request you to take this communication in discussion for further revision of curriculum of diploma EC as and when initiated.
With best regards

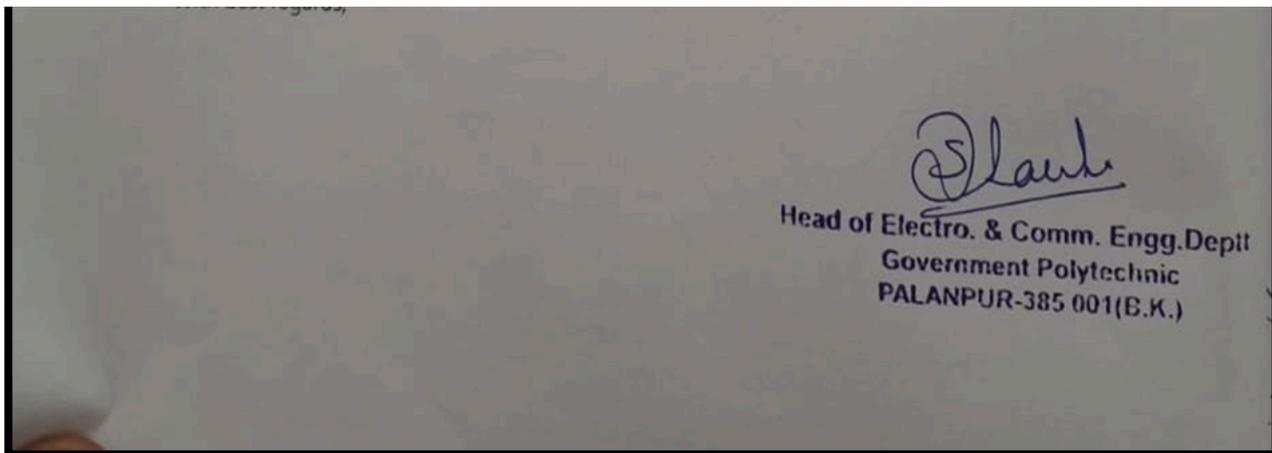


Figure 2.1.2.2 Communication-2 to university

B. Delivery details of content beyond syllabus (10)

Sr. No.	Event Type	Year	Date	Event Name
1	Expert Lecture by Mr. Dhananjay Pathak	2019-20	02-01-2020	CCTV Installation
2	Industrial Visit	2019-20	15-02-2020	Rudraksh Electronics
3	Webinar by Mr. L K Patel	2020-21	27-09-2020	Entrepreneurship
4	Webinar by Dr. Urvashi P. Shukla	2020-21	19-03-2021	Digital Communication Basics Realization With MATLAB
5	Industrial Visit	2021-22	24-03-2022	Community Radio Station, Palanpur
6	Industrial Visit	2021-22	29-03-2022	Samsung Care, Palanpur
7	Industrial Visit	2023-24	16-03-2024	PCB Power Pvt. Ltd., Gandhinagar
8	Industrial Visit	2023-24	16-03-2024	MCBS Pvt. Ltd., Gandhinagar
9	Industrial Visit	2024-25	25-09-2024	Railway Station, Palanpur
10	Industrial Visit	2024-25	05-10-2024	Banas Dairy
11	Industrial Visit	2024-25	16-10-2024	Community Radio Station, Palanpur
12	Expert Lecture by Dr. V K Thakar	2024-25	22-10-2024	Internet of Things
13	Expert Lecture by Mr. Krishna Panchal	2024-25	10-11-2024	Career Guidance For EC Engineers
14	Workshop by Mr. Yuvrajsinh Rajput	2024-25	15-02-2025	Drone Technologies
15	Industrial Visit	2025-26	20-09-2025	NETRAM (Command and Control Centre) Palanpur
16	Expert Lecture by Mr. Rishabh Prajapati	2025-26	07-10-2025	IOT Application with ESP-32, NOD-MCU, Raspberry Pi
17	Industrial Visit	2025-26	17-11-2025	Community Radio Station, Palanpur
18	Scratch Coding Competition	2025-26	16-12-2025	Scratch Coding Competition

Table 2.1.2.1 Delivery details of the content beyond the syllabus

C. Mapping of content beyond syllabus with the POs & PSOs (3)

2025-26

S.No	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	Mode
1	Fundamentals of	Scratch Coding C	16/12/2025	Ms.M.K.Pedhadiya (Lecturer)	Offline Competition
2	Principle of Elect	Industrial Visit at	17/11/2025	Ms.M.K.Pedhadiya (Lecturer)	Offline Industrial Visit
3	Computer Netwo	Industrial Visit at	20/09/2025	Mr. M.J.Dabgar (Lecturer EC)	Offline Industrial Visit
4	Embedded Syste	Expert Lecture or	07/10/2025	Mr. Rishabh Prajapati	Offline Expert Lecture
5	Programming in C	Web Resources f	04/10/2025	Ms.M.K.Pedhadiya (Lecturer)	Offline Hands-on Practice

2024-25

S.No	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	Mode
1	Consumer Electr	Industrial Visit at	25/09/2024	Ms.M.K.Pedhadiya (Lecturer)	Offline Industrial Visit
2	Automation	Industrial Visit at	05/10/2024	Dr. R.N.Patel (Lecturer EC),	Offline Industrial Visit
3	Principle of Elect	Industrial Visit at	16/10/2024	Dr. R.N.Patel (Lecturer EC),	Offline Industrial Visit
4	WSN&IOT	Expert Lecture or	22/10/2024	DR. V K THAKAR	Offline Expert Lecture
5	RE&ETE and MF	Expert Lecture or	15/02/2025	Mr. Yuvrajsinh Rajput	Offline Expert Lecture
6	Entrepreneurship	Entrepreneurship	07/04/2025	CED (Center of Entrepreneu	Offline Expert Lecture

2023-24

S.No	Gap	Action Taken	Date-Month-Year	Resource Person with Designation	Mode
1	Consumer Electr	Industrial Visit at	16/03/2024	Ms.M.K.Pedhadiya (Lecturer)	Offline Industrial Visit

2.2 Teaching - Learning Process (160)

2.2.1 Describe Processes followed to ensure/improve quality of Teaching & Learning based on following points (25)

A. Adherence to Academic Calendar (3)

A. Adherence to Academic calendar:

To maintain a structured and effective teaching-learning process, the department adheres to a three-tier academic calendar framework, implemented sequentially at the University, Institute, and Department levels.

1. GTU Calendar:

Gujarat Technological University (GTU) declares the academic calendar before the start of every term. It includes the start and end dates of the semester, tentative exam schedules, internship periods, and official vacation/holiday lists.

2. Institute Calendar:

Based on GTU's academic calendar, Government Polytechnic, Palanpur prepares its institutional calendar. It incorporates term duration, internal examinations, industrial visits, expert lectures and holidays.

3. Department Calendar – Electronics and Communication Engineering:

The department prepares a comprehensive academic calendar aligned with both GTU and institute calendars. It serves as the backbone for planning and implementing all departmental academic and co-curricular activities.

It includes:

- Term start and end dates for each semester
- Class Test schedules
- Remedial exam periods and submission timelines
- Industrial/site visits, seminars, expert lectures, webinars and co-curricular activities
- Parent-teacher meetings and weak student support sessions
- Government-declared holidays and official vacations

Key Attributes of Calendar Adherence:

- Smooth functioning of the teaching-learning process
- Clarity of all scheduled events across the campus
- A structured and well-organized academic environment
- Avoidance of clashes between various institutional activities
- Equal opportunity for students to participate in co-curricular and extracurricular activities
- Fair planning window for faculty to deliver the syllabus effectively

The academic calendar is published on departmental notice boards and through electronic media at the beginning of each term. This layered adherence enhances coordination, discipline, and overall academic quality at the department level.

Government Polytechnic, Palanpur

Academic Calendar - Odd Term - 2025-26
Information and Communication Technology
Electronics & Communication Engineering Department

Activity	SEMESTER-1		SEMESTER-3		SEMESTER-5		Vision
	From	To	From	To	From	To	
Academic activity							To produce competent diploma engineers as per need of Industries, Entrepreneurs with ethical values Mission <ul style="list-style-type: none"> • Industry oriented technical education • Excellent teaching and learning environment • Promote entrepreneurship activities • Continual growth in every sphere of life by developing core human values
Term Date	24/07/25	30/12/25	30/06/25	24/11/25	24/05/25	17/10/25	
Attendance review-1	19/09/25	--	30/08/25	--	30/08/25	--	
Prog. Assessment-1	1/12/25	06/12/25	13/10/25	17/10/25	01/09/25	06/09/25	
PA-1 Result Display	12/12/25		17/10/25		10/09/25		
Parents Meeting	20/09/25		20/09/25		20/09/25		
Remedial Classes	10/11/25	30/12/25	10/11/25	24/11/25	10/09/25	17/10/25	
Attendance review-2	17/11/25		06/10/25		06/10/25		
Prog. Assessment-2	22/12/25	26/12/25	17/11/25	21/11/25	13/10/25	17/10/25	
PA-2 Result Display	29/12/25		21/11/25		07/12/25		
Term work submission	22/12/25	26/12/25	17/11/25	21/11/25	13/10/25	17/10/25	
GTU practical exam	As per GTU		As per GTU		As per GTU		
GTU-Theory End Semester Examination	As per GTU		As per GTU		As per GTU		Department Vision
Project (Sem 5)							To prepare competent diploma engineers of Information and communication technology, catering the needs of industries and society as an excellent employee, innovator and entrepreneur with moral values.
Project Review-1	--		--		---		
Final Project Presentation	--		--		--		
Students feedback on faculty performance							Department Mission
Feedback 1	24/11/25	28/11/25	06/10/25	10/10/25	25/08/25	29/08/25	
Feedback 2	22/12/25	26/12/25	17/11/25	21/11/25	13/10/25	17/10/25	
Industrial Visits							<ul style="list-style-type: none"> • Provide quality education in the field of ICT engineering • Develop state of art laboratories, classrooms and up gradation of faculties. • Strengthen industrial liaison by offering mutual beneficiaries services • Execute extracurricular and co-curricular activities to inculcate innovation, entrepreneurship and moral values
Banas Dairy, Palanpur	05/10/2025						
FM Radio, Palanpur	05/08/2025		27/09/2025				
Police control room			4/10/2025				
Railway control room	--		--		26/9/2025		
Expert Lectures							
Workshop on Embedded system	18/09/2025						
Seminar on Cyber security	19/09/2025						
International/ National day celebration							
International Yoga Day	21/07/2025						
Independence Day celebration	15/08/2025						
Teachers' Day	05/09/2025						

celebration	05/09/2025
Mahatma Gandhi Jayanti	02/10/2025
Navratri celebration	03/10/2025
Diwali Vacation	17/10/2025- 6/11/2025

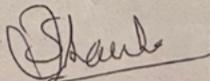

Head of Electro. & Comm. Engg. Deptt
Government Polytechnic
PALANPUR-385 001(B.K.)



Figure 2.2.1.1 Department Academic calendar format

B. Use of various instructional planning and delivery methods (3)

Effective teaching–learning requires a mix of different instructional planning and delivery methods. The Department of Electronics and Communication uses a variety of teaching methods to ensure better understanding, active learning, and deeper engagement of students.

Below are the key teaching–learning methods adopted by the department:

- **Traditional Black board and Chalk method**

This is the most widely used teaching method where faculty teach using a blackboard (or green/white board) and chalk (or marker pens).



Figure 2.2.1.2 Traditional black (Green) board and Chalk method

Importance:

- Simple and effective for concept explanation
- Real-time interaction between faculty and students
- Immediate doubt solving and feedback
- Easy monitoring of student understanding
- Helps maintain classroom discipline and focus

- **Multimedia method**

Faculty members use various ICT tools like Powerpoint presentations, video lectures, animations, and simulation software to explain complex concepts in an interactive way.



Figure 2.2.1.3 Multimedia teaching

Importance

- Learning is more effective and interesting
- Easy understanding of topics
- Students may get additional knowledge of topics.
- Video lecture provide practical application of knowledge to industries.

- **Demonstration method**

The demonstration of equipment / instrument is one of the practical methods to explain concept to students. Various models and charts in different subjects in department are useful to clear the concepts of topics.



Figure 2.2.1.4 Demonstration teaching method

Importance

- Improves conceptual clarity through hands-on learning
- Encourages active participation of students
- Builds confidence and interest in subjects
- Enhances practical skills and real-time observation

- **Seminars / Presentation**

Students are assigned topics from the curriculum or related fields. They research, prepare, and present in front of peers and faculty.



Figure 2.2.1.5 Seminar/Presentation teaching method

Importance

- Improves understanding of topics in depth
- Enhances communication and presentation skills
- Builds self-confidence and teamwork
- Promotes self-learning and research attitude

- **Flipped Classroom technique:**

In few Classes we use this techniques where instead of introducing new concepts during classroom lectures, students first engage with learning materials—such as video lectures, reading content, or recorded presentations before coming to class. Classroom time is then utilized for discussions, problem



Figure 2.2.1.6 Flipped Classroom method

Importance

- Enhances conceptual understanding
- Promotes active learning
- Improves student engagement
- Supports diverse learners
- Effective use of classroom time
- Develops self-learning skills

• Teaching through online Platform

During the COVID-19 pandemic, the Department of Electronics and Communication adopted Microsoft Teams as the primary platform for conducting online classes. It enabled faculty members to deliver lectures, conduct assessments, and interact with students effectively during lockdown periods. A

- Live online classes with screen sharing and digital whiteboard
- Conducting quizzes, unit tests, and viva exams
- Maintaining subject-wise channels for better class management
- Organizing parent-teacher meetings and online mentoring
- Sharing of lecture recordings for revision

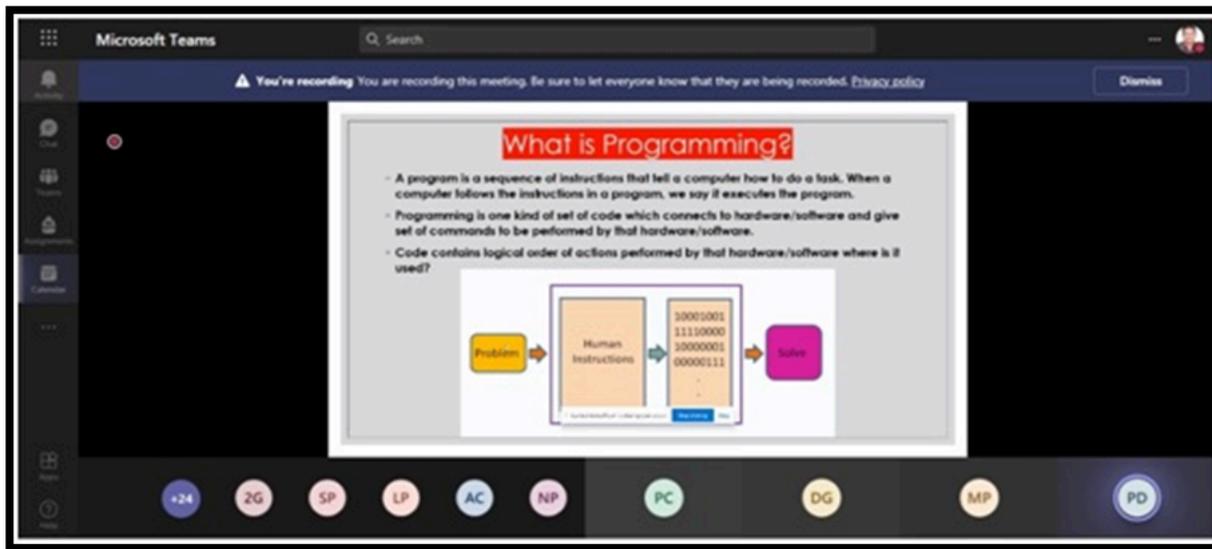
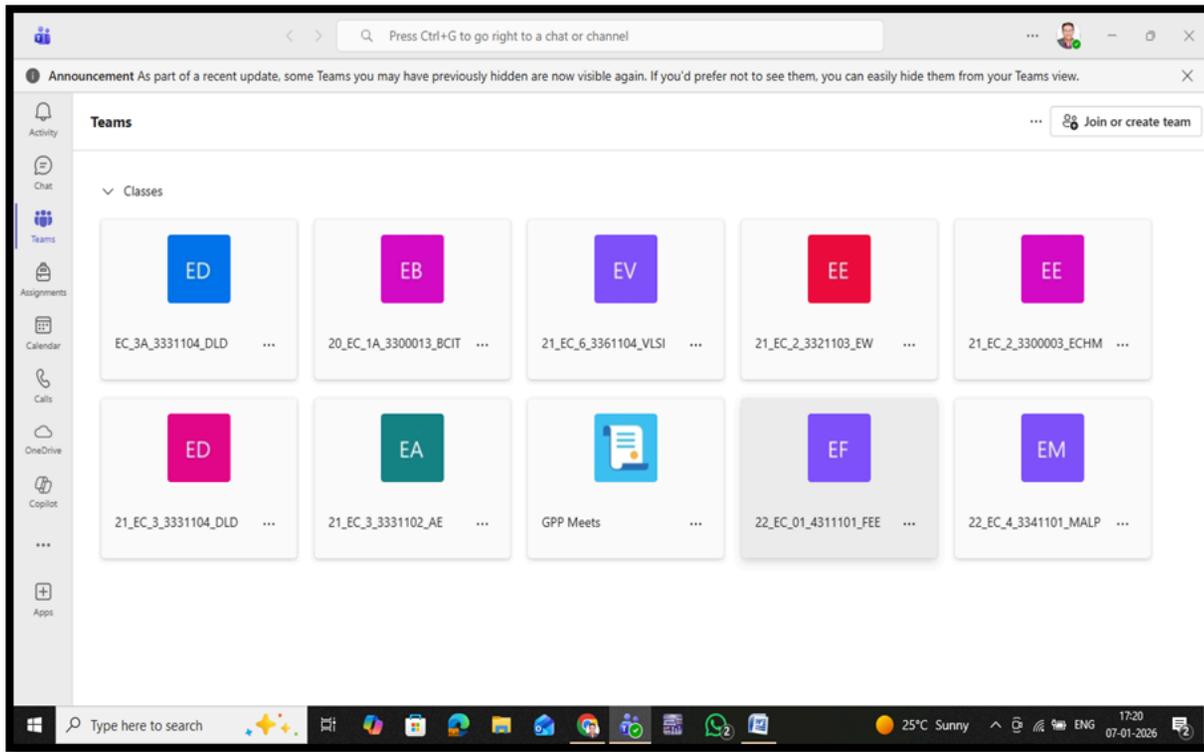


Figure 2.2.1.7 Microsoft Team online teaching

However, post-pandemic, the department has transitioned to using Google Classroom as the primary online platform for supporting academic activities, and it continues to be used effectively even in the current academic sessions. Google classroom is used for following aspects.

- Uploading of study materials, notes, and recorded video lectures
- Sharing of assignments, question banks, and lab manuals
- Collection of written submissions such as assignments and practical journals
- Continuous communication between faculty and students outside classroom hours

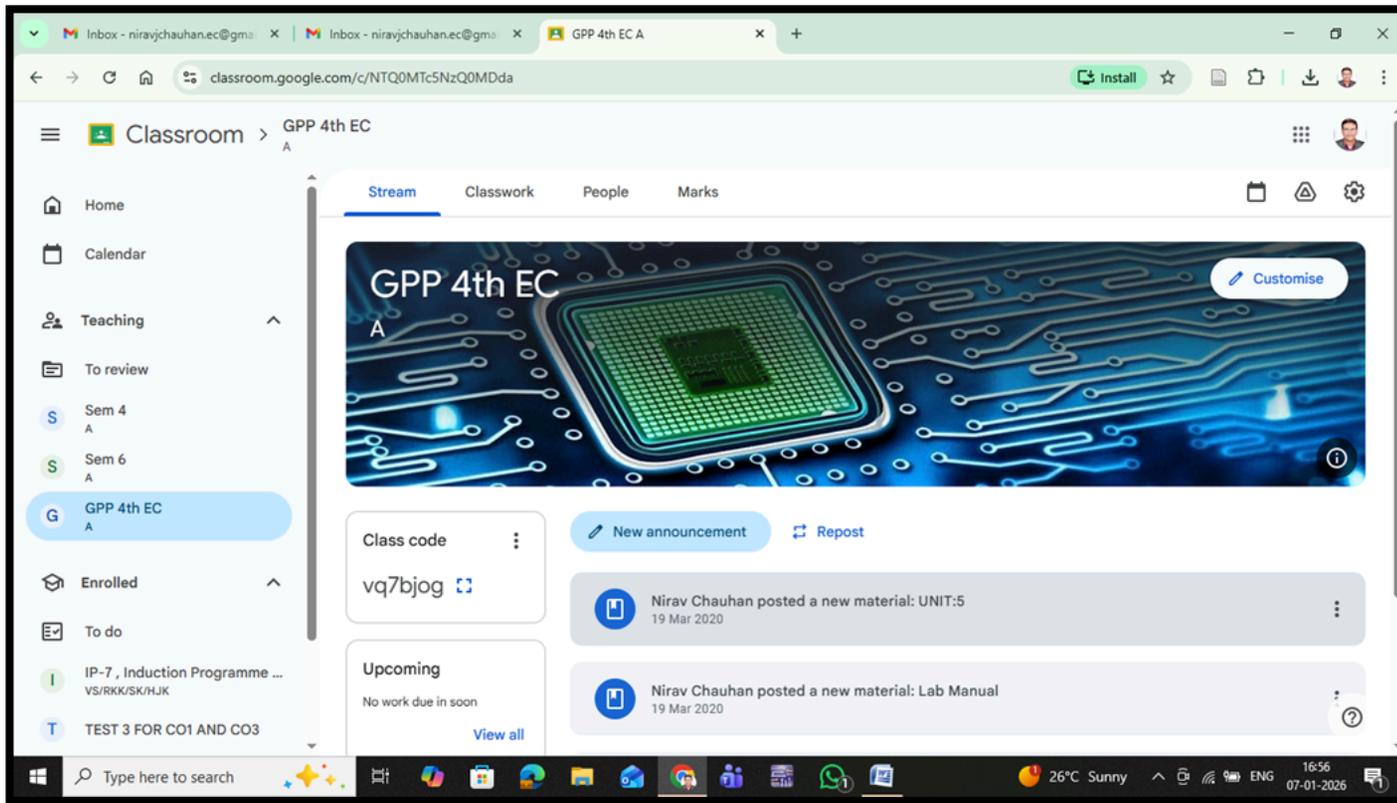


Figure 2.2.1.8 Google classroom online teaching

Importance:

- Supports blended learning with a mix of online and offline resources
 - Students can access content anytime, aiding revision and self-paced learning
 - Encourages the habit of independent and responsible learning
 - Provides a structured digital environment for academic content management
 - Bridges the gap in case of student absenteeism or special needs
- **Use of Models, Charts, and Posters**

Models and wall charts are placed in classrooms and labs to give visual support to theoretical topics.



Figure 2.2.1.9 Chart/poster in laboratory

Importance :

- Enhances memory retention through visual aids
- Encourages students' interest in the subject
- Helps in quick revision and referencing during practicals.
- Aids in better classroom environment and decorum

Conclusion:

The department consistently implements innovative instructional planning and delivery strategies to enhance the effectiveness of the teaching-learning process. By integrating traditional pedagogical approaches with modern, technology-enabled methods, the department ensures comprehensive conce

C. Methodologies to support weak students and encourage bright students (4)

Students enrolling in diploma programs demonstrate varied academic backgrounds and learning paces. While some learners require additional academic support to strengthen their understanding of fundamental concepts, others show advanced capabilities and seek opportunities beyond the prescribe the identification and mentoring of **weak students** as well as the encouragement and advancement of **bright students**. This initiative enhances overall academic performance, promotes equitable development, and cultivates a balanced, performance-oriented learning environment.

Weak Students – Identification

Weak students (slow learners) are identified through:

- Academic performance: Scoring less than 50% in unit/mid-semester/class tests.
- Attendance: Less than 75% attendance, as low presence often correlates with poor understanding.
- Conceptual clarity: Difficulty in grasping basic topics, requiring repeated explanations.
- Class engagement: Low participation in discussions, hesitation in asking doubts, and poor assignment submission record.
- Past academic history: Consistently low performance in previous semesters.

Steps Taken for Weak Students

To support weak students, the department implements structured academic interventions such as:

- Remedial/Extra Classes for concept revision and doubt-solving.
- Personalized Mentoring by subject faculty during lectures.
- Assignments/question bank is provided focused on university question patterns and basic concept reinforcement.
- YouTube subject related video links are provided aligned with the syllabus.
- One-to-One Counseling with subject teachers and mentors for motivation.
- Parent-Teacher Interaction to ensure parental support and track attendance.

Improvement in Weak Students (Result-Based Evidence)

- Continuous support has led to gradual improvement in internal marks (from <50% to 55–65% range) in many students.
- Increased attendance and classroom participation observed after mentoring and counseling and parent teacher meeting.
- Students identified as weak in one semester have progressed to average or higher academic standing in the following semesters.
- The “loop is closed” by tracking their university result and documenting it, ensuring measurable outcomes.

Bright Students – Identification

Bright students are identified based on:

- Scoring more than 60% in class/unit/mid-semester exams.
- Strong previous academic record and consistent performance.
- Quick grasp of concepts, problem-solving skills, and self-learning capabilities.
- Active participation in class discussions, group activities, and leadership roles.
- High attendance and academic discipline.

Steps Taken for Bright Students

To encourage high performers, the department offers:

- Encouraging them to participate in technical workshops and competitions.
- Advanced Learning via NPTEL videos and YouTube subject related videos and additional reference material aligned with the syllabus.
- Recognition & Motivation through certificates and displaying achievers on department notice boards or websites.
- Regular Feedback and encouragement from faculty to promote innovation, curiosity, and self-directed learning.

Improvement in Bright Students (Result-Based Evidence)

- These students consistently achieve good grades (60% and above) in internal and university exams.
- Results show that these students maintaining or improving their academic standing across semesters.

Conclusion

The effective implementation of this policy has substantially enhanced students’ academic performance and holistic development. By emphasizing early identification, need-based academic planning, and continuous monitoring, the policy successfully addresses learning gaps and supports progress; commitment to student-centric teaching–learning practices and academic excellence.





Figure 2.2.1.10 Parents Teacher Meeting

D. Quality of classroom teaching (3)

The Electronics & Communication Engineering Department emphasizes effective and engaging classroom teaching to ensure attainment of Course Outcomes (COs) and foster deep learning among diploma students.

1. Academic Planning & Preparedness

The department strictly follows the academic calendar issued by GTU and the institute. Subject allotment is done well in advance before the commencement of each semester, enabling faculty members to prepare:

- Lesson plans
- Laboratory plans
- PowerPoint presentations / study materials/ lecture notes

This ensures that teaching aligns with the academic schedule and individual faculty timetables approved by the Head of Department (HOD).

2. Course File Preparation

Each subject coordinator, along with associated faculty members, prepares a comprehensive **Course File** which includes:

- University syllabus
- Lesson plan
- Laboratory plan including list of practicals
- Study materials
- Assignment questions for weak students
- Exam papers mapped with COs
- Attendance records

This documentation ensures transparency and structured delivery of curriculum.

3. Teaching Methodology

Faculty members adopt a variety of **instructional methods** to cater to diverse learning needs:

- Whiteboard and chalk method
- Multimedia teaching (PowerPoint, videos, animations)
- Demonstration-based teaching
- Flipped Classroom technique
- Seminar and discussion method

At the end of every session, students are encouraged to **summarize key points, ask questions, and clarify doubts**, which enhance interactive learning.

4. Learner-Centric Approach

The teaching approach promotes a **positive and conducive environment** for active participation. Faculty members frequently use **question-answer techniques, brainstorming, and problem-solving sessions** to test and reinforce student understanding.

5. Assessment of Learning

Various internal assessment tools are implemented to evaluate the learning outcomes:

- Class/Mid test (Internal)
- Practical viva

These assessments are mapped with COs to ensure proper monitoring of learning objectives.

6. Industry Interaction & Exposure

To bridge the gap between industry and academics, the department regularly organizes:

- Expert talks and seminars on emerging technologies
- Industrial visits to enhance practical understanding and real-world relevance
- MOUs with industries

7. Faculty Development & Up-gradation

The department places strong emphasis on continuous faculty development to ensure high-quality teaching and subject expertise. Faculty members actively participate in **Faculty Development Programs (FDPs), MOOCs, Workshops, and Short-Term Training Programs (STTPs)** to upgrade their

In addition to this:

- Two faculty members have successfully earned their Ph.D. degrees.
- One faculty member has completed her Master's degree.
- One faculty member is currently pursuing his Ph.D.
- One faculty member has completed AICTE QIP PG Certificate in Deep Learning.
- One faculty member is currently pursuing his B.S. in Data Science and applications (Completed till Level- Diploma in Programming, Diploma in Data Science).
- These academic pursuits enhance the subject depth, research orientation, and overall teaching quality of the department.

This continuous focus on faculty up-skilling ensures that students receive updated, industry-relevant, and research-backed instruction.

8. Monitoring and Feedback

- The HOD conducts surprise classroom and lab visits to verify coverage of lesson plans, proper resource utilization, and teaching effectiveness.
- Feedback from students is periodically collected and analyzed. Based on this, HOD provides constructive suggestions for continuous improvement in teaching quality.

- CCTV surveillance in classrooms ensures real-time monitoring and discipline.

9. Infrastructure Support

The campus is Wi-Fi enabled, facilitating access to digital content and online learning resources during classroom sessions.

Conclusion:

The department ensures high-quality classroom teaching through planning, varied instructional methods, regular assessments, industry-academia linkage, and continuous monitoring. These initiatives collectively aim to enhance student learning, achieve COs, and maintain academic excellence.

E. Conduct of experiments (3)

The Electronics and Communication Engineering Department places strong emphasis on the systematic conduct of laboratory experiments to enhance students' practical understanding and application of theoretical concepts. These laboratory activities are carefully structured and aligned with Course t

1. Planning of Practical Sessions

The Subject Coordinator prepares a detailed list of experiments and laboratory manual as per the GTU-prescribed syllabus, which also clearly outlines the intended learning outcomes and their mapping with Course Outcomes (COs). A course file is maintained which includes:

- List of experiments
- Weekly laboratory planning
- Lab manuals
- Assessment rubrics

2. Common Laboratory Manuals

- From the academic year 2021-22, the Director of Technical Education (DTE) has implemented a standardized approach by introducing common laboratory manuals for each subject.
- This initiative ensures uniformity in experiment delivery, evaluation, and alignment with learning outcomes across all polytechnics.

3. Hands-on Learning Environment

- Practical sessions are conducted in well-equipped laboratories, where students perform experiments in small groups to ensure better individual attention and learning.
- Faculty members provide detailed explanation and demonstration before allowing students to perform the experiments, ensuring that students understand both theory and application.

4. Alternative Learning Resources

In case of non-availability of specific equipment or trainers, the department adopts alternative strategies to ensure continuity in practical learning, such as:

- Simulation software
- Mobile applications
- Virtual laboratories (Govt. of India initiatives)
- YouTube video lectures and animations
- Visits to other polytechnic institutes for hands-on demonstration

5. Assessment of Practical Outcomes

- Faculty members use rubrics-based evaluation at the end of each practical session to assess the students performance and achievement of learning outcomes.
- Regular feedback is given to students to improve their practical skills and understanding.

- A practical examination is conducted at the end of each semester as per GTU norms, which further ensures attainment of the practical component of the curriculum.

Conclusion:

The department ensures that practical sessions are systematically planned, effectively delivered, and appropriately assessed through a balanced integration of physical and virtual resources. A strong emphasis on hands-on learning, standardized laboratory manuals, and continuous evaluation supports t



Figure 2.2.1.11 Lab Experiment

F. Continuous Assessment in the laboratory (3)

A well-defined **continuous assessment system** is implemented across all laboratory courses to ensure consistent and fair evaluation of student performance throughout the semester.

- **Regular Evaluation:**

Students are assessed in each lab session based on their participation, performance, sincerity, and timely submission of assigned work.

- **Assessment Approach:**

Continuous assessment is carried out by the **concerned subject in-charge** using pre-decided assessment parameters. The criteria are designed to suit the nature of the subject and the type of laboratory (e.g., software-based, hardware-based, etc.).

- **End-Semester Practical Examination:**

Practical examinations are conducted at the end of each semester.

- For Semesters 5 and 6, evaluations are conducted by external examiners appointed by Gujarat Technological University (GTU).
- For **Semesters 1 to 4**, the **departmental faculty** conducts the examination as per institute and university norms.

This structured approach ensures that students are continuously monitored, guided, and evaluated throughout the semester.

VLSI (4361102)

N. Assessment-Rubrics

The following rubric will be used in grading all Verilog source code submitted for this course. There are four categories under which your programs will be graded including functionality, readability, documentation, Design testing. Each category will be assigned a specific rubric score (1-5).

Excellent = 5-4, Very good = 3, Good = 2, Fair= 1 Max 25 marks

Assessment criterion	Excellent 5 or 4 marks	Very Good 3 or 2 marks	Good 1 or 0 mark	Fair	Marks
Program Completeness/ Correctness	Code is completely functional	Code is completely functional with minor implementation issues	Code is marginally functional with multiple errors and/or incomplete code sections.	Code is minimally functional with significant portion of the code missing or incomplete	5
Readability	Code is extremely well organized, properly formatted and easy to follow. Related code sections are logically grouped.	Code is reasonably easy to follow with logically grouped codes. Minor formatting problems.	Code is readable with significant efforts. Significant problems with code organization.	Code is poorly organized with little to no consistency in formatting and logical grouping.	5
Design testing	All the test cases are covered with proper simulation results	Reasonable test cases are covered with issues in very few test cases	Testing of the code with very few test cases.	Test case design is erroneous or inconsistent with the code.	5
Efficiency	Code is efficient without sacrificing readability and understanding	Code is mostly efficient with a scope to improve by selection of different constructs or modelling	Code is marginally efficient with significant scope to improve by changing coding styles and constructs.	Code unable to achieve the result with an irrelevant patched coding	4
Documentation/ Presentation	Code is well documented with related comments and design details. No typos/grammatical errors	Code is well documented with minor formatting issues. Minimal typing mistakes and grammatical errors	Significant portions of the code are undocumented or poorly documented	Major portion of the code is not documented or is with wrong/irrelevant comments.	4
Total marks					23

P/25/3/25
Sign with Date

Figure 2.2.1.12 Practical rubrics

G. Student feedback of teaching learning process and action taken (6)

The institute follows a defined policy to collect, analyze, and act upon student feedback to continuously improve the teaching–learning process (TLP). Feedback is taken with transparency, confidentiality, and without hurting their progress.

1) Feedback Collection Process

a) Direct feedback

- A well-defined process is implemented at department level.
- All students are encouraged to submit feedback.
- Feedback is collected **once each semester**, either offline **or online**, coordinated by the **Head of Department (HOD)** / department coordinator.
- The questionnaire covers key aspects of TLP (content knowledge, delivery, communication, punctuality/regularity, interaction, response to queries, prerequisite coverage, real-life examples, and learning support).
- Responses are recorded on a **five points scale** (Excellent/ Very good/Good/Fair/Satisfactory).
- Data confidentiality is maintained; only consolidated results are shared.

b) Indirect feedback

- HOD conducts periodic campus/classroom interactions with students regarding academics, laboratories, and support services.
- **Course Exit Survey** (for each course) and **Program Exit Survey** (for pass-out students) are administered every semester/year to capture attainment against course/program outcomes.

2) Data Analysis & Reporting

- Department compiles the received feedback, prepares **consolidated analysis reports**, and identifies strengths and areas for improvement at course and faculty levels.
- Reports are discussed by HOD with concerned faculty members.

3) Action Taken Mechanism

- The HOD may suggest and guide faculty as per the feedback, which may include:
 - Participation in **FDPs** and workshops for pedagogy enhancement.
 - Adjustments in lesson planning, pace of delivery, and learner engagement methods.
 - Additional tutorials, remedial sessions, lab demonstrations and YouTube videos.
 - Improvement/addition of learning resources (notes, PPTs, manuals, question banks).
- **Appreciation/Motivation:** Faculty showing consistently high or improved feedback receive **appreciation certificates** from the department.

4) Effectiveness

- Improvements are monitored in the **subsequent feedback cycle(s)** and reflected through better consolidated scores, increased student satisfaction, and improved CO/PO attainment trends.
- Continuous review effectively closes the feedback loop and sustains the quality of the teaching–learning process.

2.2.2 Initiatives to improve the quality of semester tests and assignments (15)

A. Process for Internal semester question paper setting and evaluation and effective process implementation (5)

Internal assessment for each course is conducted through class tests. The following structured process is followed for question paper setting, evaluation, and implementation to ensure transparency and academic effectiveness:

- The Head of Department (HOD) appoints a subject coordinator for each course, responsible for setting the class test paper and evaluating student performance.

- The subject coordinator, in consultation with the subject coordinator, defines the syllabus coverage for the class test and informs students in advance.
- The question paper is designed by the subject in-charge with clear mapping to Course Outcomes (COs). Questions are framed as per Bloom's Taxonomy levels, ensuring inclusion of various cognitive domains (R/U/A) as per suggestion provided by the Departmental IQAC Committee/ Head of Department.
- The question papers are submitted to the Department GTU Coordinator for smooth conduction of the test.
- Students are briefed regarding the question paper format, evaluation scheme, and syllabus coverage. Seating arrangements and test schedules are displayed on the department notice board and/or digital media.
- After the test, answer sheets are evaluated by the subject faculty. Marks and performance are declared as per the scheduled timeline.
- Result analysis is carried out by the subject in-charge to identify slow learners. Remedial measures such as counselling and remedial classes are conducted to support their improvement.
- During COVID-19 pandemic, the same procedure was followed through online platforms, maintaining consistency and academic integrity in internal assessments.

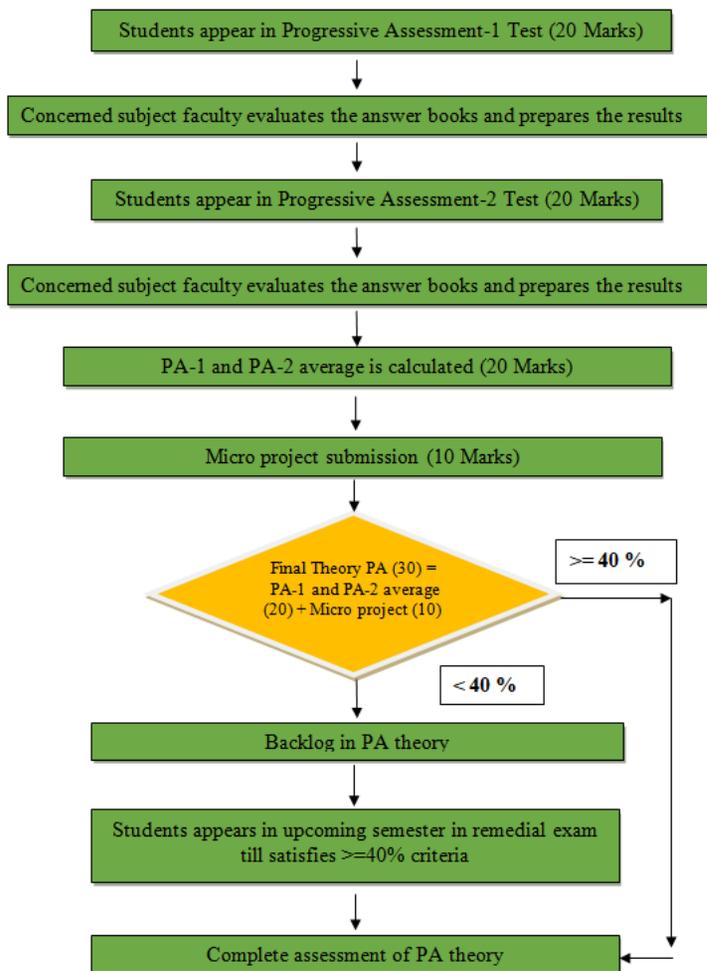


Figure 2.2.2.1 Assessment for PA Theory Component

(Competency-focused Outcome-based Green Curriculum)

B. Question paper setting taking into account outcomes/learning levels (5)

For internal assessment through Progressive assessment tests, question paper setting is carried out systematically with a clear focus on Course Outcomes (COs) and student learning levels.

- The subject coordinator prepares the question paper by mapping each question to the appropriate Course Outcome (CO) and Revised Bloom's Taxonomy level, ensuring coverage of different cognitive domains such as knowledge, comprehension and application.
- The question paper also reflects the learning level expected from students based on the syllabus and academic progression of the course.
- Once the paper is prepared, the subject coordinator provides the test paper to the departmental GTU coordinator for the smooth conduct of the Progressive assessment tests.
- During the CO-wise assessment review, the following key aspects are verified for each question paper:
 - Type of exam (PA-1 Test or PA-2 Test)
 - Revised Bloom's Taxonomy level addressed (e.g., Remember, Understand, Apply)
 - Each CO is covered in the PA Exams

This structured approach ensures that question papers are not only academically sound but also outcome-based and student-centric.

C. COs coverage in class test / mid-term tests and assignments (5)**C. COs covering in Class test / Mid - term tests and assignment (5)**

To ensure proper alignment of internal assessments with Course Outcomes (COs), a structured assessment plan is prepared and implemented for each subject.

- At the beginning of the semester, the subject coordinator prepares the assessment plan (a part of the lesson plan).
- The assessment plan clearly outlines the CO-wise mapping for each evaluation method and covers the following elements:
 - Course COs assessment is done by Progressive assessment tests.
- This systematic approach ensures continuous and outcome-based evaluation throughout the semester.
- A standard Progressive assessment test format is used across all subjects, as shown in the sample provided below. The format includes:
 - Mapping of each question with the corresponding CO
 - Indication of cognitive level (Remembering / Understanding / Applying, i.e., R/U/A)
 - Marks distribution for each question
 - Structured layout with optional and compulsory sections, ensuring coverage of the entire CO range

This process ensures transparency and uniformity while facilitating effective tracking of CO attainment across all subjects and assessments.

Government Polytechnic, Palanpur

EC/ICT Department

Progressive Assessment - 1 (April-2024) Sem - 2

Sub Name & Code: Digital Electronics (4321102)

Time: 11:30am to 12:30pm

Date: 03/04/2024

Total Marks: 20

Q-1 Answer Following Questions

[6] CO1

(a)	Convert: $(46)_{10} = (\quad)_2 = (\quad)_8 = (\quad)_{16}$	[3]	A
	OR		
	Convert: $(110111)_2 = (\quad)_{10} = (\quad)_8 = (\quad)_{16}$		A
(b)	(i) Subtract using 2's Complement method: $(1110)_2 - (1000)_2$ (ii) Perform: $(11101101)_2 + (10101000)_2$	[3]	U

Q-2 Answer Following Questions

[10] CO2

(a)	Explain Logic Gates: AND, NOR, NOT, EX-OR with their symbol, truth table and equation.	[4]	R, U
	OR		
	Name the Universal Gates. Draw circuit of AND, OR, NOT gate using NAND Gate.		R, U
(b)	Simplify the following Boolean function using K-map: $f(A,B,C,D) = \sum m(0,3,4,6,8,11,12)$	[3]	A
	OR		
	Simplify using Boolean Algebra: $Y = A B + A' B + A' B' + A B'$		A
(c)	State De-Morgan's theorems and prove it.	[3]	U

Q-3 Answer Following Questions

[4] CO3

(a)	Draw the logic circuit of Full Adder and explain its working.	[4]	U
	OR		
	Draw the logic circuit of half Subtractor and explain its working.		U

Course Outcomes:

CO	Code	Statement
CO1	4321102.1	Interpret various number systems and their conversions with binary arithmetic operations.
CO2	4321102.2	Implement simplified Boolean equations using logic gates.

CO3	4321102.3	Test different types of combinational logic circuits.
CO4	4321102.4	Test different types of sequential logic circuits.
CO5	4321102.5	Classify various memories and logic families.

Note: R=Remember, U=Understand, A=Apply and above (Revised Bloom's taxonomy)

All the Best

Figure 2.2.2.2 Sample Progressive assessment-1 test paper

Government Polytechnic, Palanpur

EC/ICT Department

Progressive Assessment - 2 (May-2024) Sem - 2

Sub Name & Code: Digital Electronics (4321102)

Time: 11:30am to 12:30pm

Date: 22/05/2024

Total Marks: 20

Q-1 Answer Following Questions

[4] CO3

(a)	Describe 8:1 Multiplexer with truth table, equation and circuit diagram. OR Explain 3:8 Decoder with truth table and circuit diagram.	[4]	U U
-----	--	-----	------------

Q-2 Answer Following Questions

[10] CO4

(a)	Describe JK flip flop with truth table and circuit diagram. OR Explain SR flip flop with truth table and circuit diagram.	[4]	R, U R, U
(b)	Classify Shift Registers with the help of Block diagram. OR Explain SISO shift registers in detail.	[3]	U U
(c)	Describe 4-bit Asynchronous UP Counter with truth table and circuit diagram.	[3]	U

Q-3 Answer Following Questions

[6] CO5

(a)	Define: Fan in, Fan out, Noise margin OR Compare SRAM and DRAM.	[3]	R, U R, U
(b)	Classify different Logic Families.	[3]	A

Course Outcomes:

CO	Code	Statement
CO1	4321102.1	Interpret various number systems and their conversions with binary arithmetic operations.
CO2	4321102.2	Implement simplified Boolean equations using logic gates.

CO3	4321102.3	Test different types of combinational logic circuits.
CO4	4321102.4	Test different types of sequential logic circuits.
CO5	4321102.5	Classify various memories and logic families.

Note: R=Remember, U=Understand, A=Apply and above (Revised Bloom's taxonomy)

All the Best

Figure 2.2.2.3 Sample Progressive assessment-2 test paper

2.2.3 Quality of Experiments (15)

A. Experimental methodologies (5)

- In Electronics & communication department we have allotted all courses in Nine (09) different laboratories. Details of laboratories are given in below table.
- Laboratory experiments for all courses are designed in accordance with the experiment list prescribed in the GTU curriculum.
- Batch size for laboratory session is decided as per guideline of Directorate of Technical Education.
- The laboratory sessions are conducted as per time table approved by Head and Principal.
- The procedure/theory/learning outcome is explained by faculties in prior to performance of experiment.
- Groups of 4 to 5 students are allowed to perform the practical for hands-on practice under the supervision of faculties and supporting staff.
- Students are encouraged to perform practical on bread board in courses where experiments kits are not available.
- Students are encouraged to design and develop circuits on PCB in courses like Electronics Workshop and Project for testing and troubleshooting.
- Students complete laboratory manual during course work which is continuously evaluated by concern faculty.
- Laboratory-in charge is allocated for each laboratory, to take care of laboratory.
- Equipment utilization register is maintained by lab assistant for each laboratory and it is dully signed by faculty.
- Experiments are performed on equipment or trainer kit. Some subjects are having computer related experiment so those are performed on computer lab.
- If there is no equipment or trainer kit available then that practical is performed either with simulation software or with virtual labs.



Figure: 2.2.3.1 Hands on practical in VLSI Lab

Features of laboratory manual/ file

- Laboratory manuals for all courses are available with the department in hard copy/ soft copy.
- The list of experiment is prepared as per the suggested list of experiment by GTU in curriculum.
- DTE provides standardized common lab manuals for all subjects to ensure uniform practical training across all polytechnic institutes. These manuals help maintain consistency in laboratory work and assessments.
- Each title of the experiment is mapped with relevant course outcome of the course.
- Sample laboratory manual of each course with reading and observation is available to refer and verify the respective experiment data.

Availability of adequate and well-equipped workshops, Laboratories

- The Electronics and Communication Engineering Department of Government Polytechnic Palanpur has a sufficient number of well-equipped laboratories and workshops to conduct various laboratory sessions.
- All laboratories are equipped with efficient equipment, enabling students to engage in hands-on activities and experiential learning during practical sessions as well as during flexible time slots based on their interests
- Equipments are stored at designated locations with appropriate tagging to ensure easy accessibility.
- Our laboratories consist of a comprehensive array of instruments and facilities, providing ample resources to support experimentation endeavours.
- All laboratories are provided with adequate display boards/Charts for necessary information to students and sufficient furniture facilities.
- The laboratories slots are provided as per curriculum requirement.

SR. NO	ROOM NO.	LAB NAME	NAME OF LAB INCHARGE

1	B002	Computer Lab-1	Ms. M.K. Pedhadiya
2	B008	Computer Lab-2	Dr. L.K. Patel
3	B009	Computer Lab-3	Mr. M.J. Dabgar
4	B014	Computer Lab-4	Mr. S.P. Joshiara
5	B010	Electronics Lab-1	Mr. N.J. Chauhan
6	B013	Electronics Lab-2	Mr. R.C. Parmar
7	B106	Electronics Lab-3	Mr. N.J. Chauhan
8	B101	Communication Lab-1	Dr. R.N. Patel
9	B105	Communication Lab-2	Dr. R.N. Patel

Table: 2.2.3.1 Name of Laboratory and in charge

B. Innovative experiments including industry attached practices, virtual labs (5)

- Across many courses, innovative practices are adopted to actively engage students with emerging technologies. The department faculty consistently strive to introduce innovative laboratory experiments.
- In addition to curriculum-prescribed experiments, students are assigned micro-projects aligned with current industry requirements and emerging trends, thereby enhancing their simulation and practical skills.

SR. NO.	SEMESTER	SUBJECT	TOOL	DETAIL
1	6	VLSI	Quartus Free version	Simulation Software
2	2	DE	Virtual Lab	Simulation Software

3	3,6	CN	CISCO Packet Tracer	Simulation Software
4	4	MP&MC	Keil Free version	8051 Programming Software
5	4	MP&MC	Proteus Demo version	Device interfacing and simulation with 8051 microcontrollers
6	4	DCOM	Scilab	Modulation and demodulation of analog and digital communication
7	5	SP	Scilab	Simulation Software
8	5	OOPS & PP	Python IDLE	Programming Software
9	5	OOPS & PP	pycharm	Programming Software
10	5	OOPS & PP	jupyter	Programming Software
11	5	ES	AVR Studio	Integrated Digital Environment
12	6	RE&ETE	Arduino IDE	Integrated Digital Environment
13	5	ES	eXtreme Burner	Development interface for AVR
14	2	PCB&EWS	KiCad	Electronic Design Automation (EDA) tool
15	3	PC	Code Block	Integrated Digital Environment

Table: 2.2.3.2 Sample copy of ICT Tools and Software

C. Relevance to outcomes (5)

- For all the courses, laboratory experiments to be performed are mapped with CO.
- DTE provides standardized common lab manuals for all subjects to ensure uniform practical training across all polytechnic institutes.
- The assessment is done based on rubrics for performance-based courses.
- Maximum COs are included in the list of experiments to be performed.
- The remaining COs are assessed through CO-wise examinations and other activities suggested by course coordinator.

Practical Outcome - Course Outcome matrix : Course Outcomes (COs): Microwave and Radar Communication) (4351103)

- a) CO1 Distinguish Electromagnetic wave propagation through reflections from voltage and Current transmission
 b) CO2 Analyze performance of microwave components from a field point of view.
 c) CO3 Maintain microwave components and Set up of microwave bench for optimum Operation.
 d)CO4 Maintain microwave semiconductor devices used to realize amplifiers and Oscillators.
 e)CO5 Maintain SONAR and RADAR systems as microwave applications.

S. No.	Practical Outcome/Title of experiment	CO1	CO2	CO3	CO4	CO5
1	Demonstrate Transmission line and its parameters.	√				
2	Identify various microwave components in the microwave circuit.		√			
3	Test different control functions of GUNN power supply and draw V/I characteristics.		√	√	√	
4	Set the microwave bench for optimum operation.		√	√		
5	Measure the frequency generated by source and different wavelength in rectangular waveguide for TE _{1,0} mode		√	√		
6	Measure VSWR for given microwave loads		√	√		
7	Measurement of attenuation of a given fixed attenuator.		√	√		
8	Study of Power division in Directional coupler and its characteristics.		√	√		
9	Study circulator and its characteristics		√	√		
10	Study of Power division in Magic Tee and its characteristics.		√	√		
11	Calibration of given variable attenuator		√	√		
12	Introduction to RADAR .					√
13.	Measure VSWR and reflection coefficient for given length of transmission line.	√				

Figure: 2.2.3.2 Sample copy of laboratory experiments mapped with CO

L. Interpretation of Results (To be discussed and written during experiment by faculty and student)

M. Conclusion (To be written by student after performing experiment and to be verified by faculty)

N. Practical related Quiz.
 1. List two port microwave components

2. List types of waveguide TEE

3. List more than two port (multi port)microwave components

O. References / Suggestions (lab manual designer should give)
<https://www.youtube.com/watch?v=jgBiWVLYFiA> (faculty explains microwave components)

P. Assessment-Rubrics

Rubrics	Prepare The experimental setup. (5)	Operate the equipment setup or circuit.(5)	Follow safe practices measures. (5)	Record observations correctly. (5)	Interpret the result and conclude. (5)	Total 25
Marks						

Sign with Date

20 |

Figure: 2.2.3.3 Sample copy of laboratory experiments Rubrics

This is a sample copy; rubrics for practical examinations and records for other subjects are maintained in the respective faculty members' course files.

2.2.4 Quality of Students Projects and Report Writing (35)

A. Identification of projects and allocation methodology (3)

- The Electronics & Communication Department at Government Polytechnic, Palanpur, affiliated with Gujarat Technological University (GTU), offers project work to students in designated groups during the 5th and 6th semesters (Final Year), as per the university's curriculum structure.
- Under the GTU curriculum introduced in September 2012, final-year project work carried a total of 10 credits and was divided into two parts:

Project–1 (Course Code: 3351107) in the 5th semester – 4 credits, with Internal Evaluation: 60 marks and External Evaluation: 40 marks, Total: 100 marks.

Project–2 (Course Code: 3361109) in the 6th semester – 6 credits, with Internal Evaluation: 100 marks and External Evaluation: 200 marks, Total: 300 marks.

(GTU Website Reference for Diploma Program – Project: Circular dated 13.08.2012, available at: https://s3-ap-southeast-1.amazonaws.com/gtusitecirculars/circulars/12Aug/13082012_03.pdf)

- With the implementation of the Competency-focused Outcome-based Green Curriculum-2021 (COGC-2021), the curriculum was restructured to introduce mandatory summer internships alongside project work. The summer internships aim to provide practical, industry-focused exposure, guidance, and industry-linked education.
- As a result, the allocation of credits and structure for project courses was revised to accommodate these internships in the final year. With the GTU revised curriculum implemented from 2021, the final-year project credit distribution was reduced to a total of 2 credits, as follows

E&C Project–1 (*Course Code: 4351107*) in the 5th semester – 1 credit, with Internal Evaluation: 50 marks and External Evaluation: 50 marks, Total: 100 marks.

E&C Project–2 (Course Code: 4361103) in the 6th semester – 1 credit, with Internal Evaluation: 25 marks and External Evaluation: 25 marks, Total: 50 marks.

- Also, Since 2021, GTU's revised diploma curriculum (COGC-2021), Competency-focused Outcome-based Green Curriculum-2021, includes a 10-mark micro/mini project in the mid-semester internal evaluation. These micro/mini, application-oriented projects (14–16 hrs/semester) promote experiential and industry-linked education, integrating theory with practice.
- This change is aligned with NEP 2020, which emphasizes experiential and industry-linked education, integrating theory with practice.

Project Identification Process:

- Final-year diploma projects, usually undertaken in Semesters 5 and 6, focus on addressing real-world problems, often drawn from industry, research institutions, government agencies, or broader socio-technical challenges.
- Shodh-Yatra: After completing the 4th semester, students embark on a "Shodh-Yatra," a problem-identification journey aimed at discovering potential project ideas from industry or relevant organizations. This exploration is usually completed before or shortly after the beginning of the 5th semester.
- Each student or project group is required to submit their problem definition to the departmental project guide within the timeline prescribed by GTU, through their assigned faculty guide.

Guide Allocation:

- Each student or group is assigned a faculty guide responsible for reviewing, mentoring, and monitoring project progress throughout the academic year.
- The guide evaluates the problem definition and determines feasibility and relevance.
- An industry mentor may also be involved in guidance and evaluation, especially during final presentations and evaluations.
- The final allocation and confirmation process is managed by the concerned department HOD and communicated as per university guidelines.

Key Points to be considered:

- Projects must align with a student's chosen electives or branch specialization.
- Regular evaluations and reviews by guides are mandatory, and involvement of industry mentors is encouraged for practical/vocational relevance.
- Strict timelines are set for project identification, title submission, and evaluation stages, usually within the first three weeks of the 5th semester.

Guidelines for Students

A. Team Formation

- Team Size: 3 to 4 students per group
- Each group must be assigned to a faculty Guide
- Guide will evaluate progress weekly and maintain a Project Progress Record

B. Project Selection Guidelines

- Must address a real-world problem or innovative application.

- Ideas may originate from:
 - Industry visits
 - Faculty suggestions
 - Student research
 - Community needs (NGO/MSME/Smart City)
- Projects should integrate both hardware and software components.
- Projects with SSIP/startup potential are highly encouraged.

B. Types and relevance of the projects and their contribution towards attainment of POs and PSOs (5)

- Every EC diploma project in fifth and sixth semester should be clearly classified (application/product/research/review), selected after evaluating environment, safety, ethical, cost, and standards aspects, and mapped to relevant POs/PSOs.
- Most students opt for UDP (User Defined Projects), and industry mentors provide guidance mainly for selected project titles as per department project guide suggestions.
- Most projects are UDPs with optional industry mentor input for title selection and implementation guidance. This structured approach aligns with both GTU curriculum and Outcome based education requirements for quality assurance and outcome-based education.

Mapping with Program Outcomes (POs) & Program Specific Outcomes (PSOs)

- Projects must demonstrate contributions to the solution of engineering problems, design and development, teamwork, communication, ethics, societal/environmental impact, life-long learning.
- Also, in line with the application of electronics/communication engineering concepts, tools, and processes for real-world problem solving and innovation.

Project List Year 2025-26

Project Title	Type	Mapping to POs/PSOs	Guide Name
Smart auto-positioning chair system	Hardware+Software	PO1, PO2, PO3, PO4, PO6, PSO1, PSO2	Mr. M J Dabgar
Health Monitoring system	Hardware+Software	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PSO1, PSO2	Mr. M J Dabgar
Wet, Dry and Metal Waste Segregation	Hardware+Software	PO1, PO2, PO3, PO4, PO5, PO6, PSO1, PSO2	Mr. M J Dabgar

Project List Year 2024-25

Project Title	Type	Mapping to POs/PSOs	Guide Name
IoT Based Home Automation	Hardware+Software	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PSO1, PSO2	Mr. N J Chauhan
The Smart Dustbin	Hardware+Software	PO1, PO2, PO3, PO4, PO5, PO6, PSO1, PSO2	Mr. N J Chauhan
Smart Attendance System	Hardware + Software	PO1, PO2, PO3, PO4, PO6, PSO1, PSO2	Mr. N J Chauhan

Project List Year 2023-24

Project Title	Type	Mapping to POs/PSOs	Guide Name
Smart Trolley using Arduino	Hardware+Software	PO1, PO2, PO3, PO4, PO5, PO6, PSO1, PSO2	Mr. M J Dabgar
Smart Juice Vending Machine	Hardware+Software	PO1, PO2, PO3, PO4, PO5, PO6, PO7, PSO1, PSO2	Mr. M J Dabgar

Table: 2.2.4.1 Project List Year wise

C. Process for monitoring and evaluation (5)

1. Weekly Monitoring & Progress Reporting

- Each project group meets their assigned faculty guide once every week for structured progress monitoring.
- Guides record observations in a weekly progress report, covering work done, issues faced, corrective actions suggested, and alignment with POs/PSOs.

2. Continuous Assessment by Faculty Guide

- Evaluation includes technical progress, design quality, adherence to safety, ethical practices, cost management, and compliance with relevant standards.
- Industry mentors (for selected UDP projects) provide suggestive inputs on title selection and technical improvements when required.

3. Individual & Group Performance Tracking

- Contributions of each student are tracked through the progress reports, interim presentations, and mentor feedback.
- Rubrics aligned to NBA criteria assess problem-solving, innovation, teamwork, communication, and ethical/environmental considerations.

4. Mid-Term & Final Review

- Mid-term review assesses ~50% project completion status; corrective measures are taken if required.
- Final review and evaluation (internal + external) involve prototype demonstration, viva-voce, and documentation quality check.

5. Documentation & Feedback

- All weekly progress reports, rubric sheets, mentor comments, and evaluation summaries are maintained for NBA SAR evidence.
- Feedback is used for improving project execution processes in subsequent batches.

Legends: R = Remembrance; U = Understanding; A = Application and above levels (Revised Bloom's taxonomy)

Project Presentation Rubrics (Course Code: 4351107)

Activity	Technical Content of project (Innovative/ Project Complexity/ Quality of Build and Components /Recent trends /Expansion etc.)	Status of Hardware/ Coding	PPT content/style	Communication skill (Verbal/Non verbal)	Question Answer/ Discussion
Weightage	0 to 4 Marks	0 to 4 Marks	0 to 4 Marks	0 to 4 Marks	0 to 4 Marks
Presentation-1 (20-Marks)					
Presentation-2 (20-Marks)					

Documentation /Project Report Rubrics: (Course Code: 4351107)

Activity	Report as per University format	Report Contents (Sequence, Bibliography, Resources etc.)	Presentation of Block diagram/Circuit/Flow Chart	Submission of weekly Progress Report	Overall Quality of Report
Weightage	0 to 2 Marks	0 to 2 Marks	0 to 2 Marks	0 to 2 Marks	0 to 2 Marks
Documentation (10-Marks)					

Project Presentation Rubrics (Course Code: 4361103)

Activity	Technical Content of project (Innovative/ Project Complexity/ Quality of Build and Components /Recent trends /Expansionetc.)	Status of Hardware/ Coding	PPT content/style	Communication skill (Verbal/Non verbal)	Question Answer/ Discussion
Weightage	0to 4Marks	0to4Marks	0 to 4 Marks	0to 4Marks	0to 4Marks
Presentation-1 (20-Marks)					
Presentation-2 (20-Marks)					

Documentation/ProjectReport Rubrics: (Course Code: 4361103)

Activity	Report as per University format	Report Contents (Sequence, Bibliography, Resources etc.)	Presentation of Block diagram/Circuit/Flow Chart	Submission of weekly Progress Report	Overall Quality of Report
Weightage	0 to 2 Marks	0 to 2 Marks	0 to 2 Marks	0 to 2 Marks	0 to 2 Marks
Documentation (10-Marks)					

Table: 2.2.4.2 Project Rubrics

D. Process to assess individual and team performance (5)

1. Individual Assessment

- Each student's contribution is tracked through weekly progress reports and guide observations during meetings and presentations.
- Peer feedback and individual viva sessions evaluate understanding, skills, and communication.

2. Team Evaluation

- Overall project progress, collaboration, and quality of outcomes are assessed by faculty guides and external examiners.
- Industry mentors provide input on team coordination and practical implementation for relevant projects.

3. Assessment Methods

- Structured rubrics aligned with NBA criteria cover technical content, teamwork, innovation, ethics, and environmental aspects.
- Both ongoing monitoring and final evaluations are used to gauge performance.

4. Feedback and Improvement

- Timely feedback is shared with students and teams to promote learning, accountability, and teamwork enhancement.

This streamlined process ensures fair and effective evaluation of both individuals and teams while meeting NBA accreditation standards and supporting our department and university guidelines.

The following competencies broadly needs to be developed in students :

- Co-creation & Interpersonal abilities
- Analysis Test and Troubleshooting skills
- Programming/simulation/ debugging skills
- PCB fabrication/ soldering skills/ modeling skill
- Documentation & Presentation skill

E. Quality of deliverable, working prototypes (12)

- Completed projects and working prototypes are evaluated rigorously for functionality, innovation, and adherence to project objectives.
- Quality parameters include reliability, robustness, safety, ethical considerations, cost-effectiveness, and compliance with relevant standards.
- Projects are expected to demonstrate practical applicability and relevance to real-world problems, especially in line with UDP guidelines and industry input where applicable.
- Documentation quality—including design specifications, test results, and user manuals—is reviewed to ensure completeness and clarity.
- Final assessment involves faculty guides and external examiners who verify prototype working condition, effectiveness, and the student's understanding during demonstration and viva.
- The evaluation results are mapped with Program Outcomes (POs) and Program Specific Outcomes (PSOs) as evidence for NBA accreditation.

Some Glimpse of completed projects:

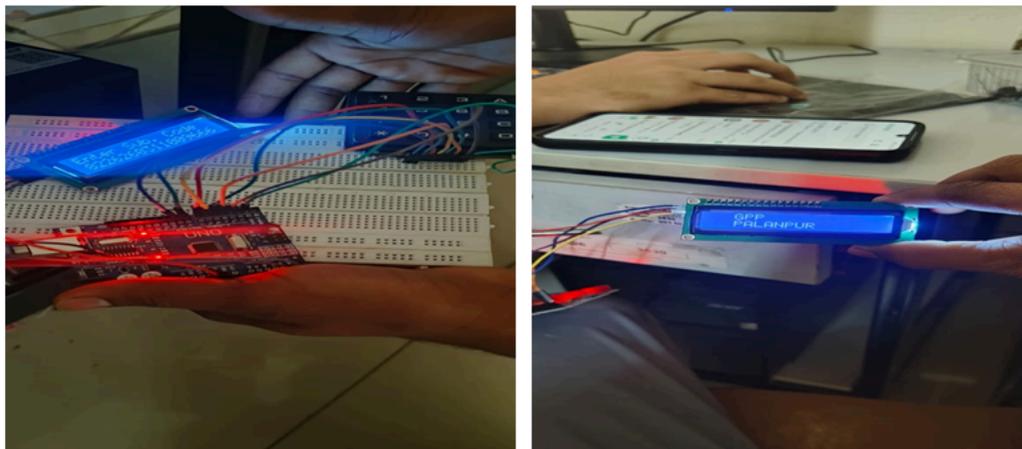


Figure: 2.2.4.1 Sample project photos

F. Papers published /Awards/ Recognition received by projects at State/ National level (5)

Student Startup and Innovation Policy (SSIP) support

- During the academic year 2024-2025 and 2025-26, students of EC department received funding through the SSIP Cell at the institute level. Under this support, the team developed a Proof of Concept (PoC), showcasing innovation, practical application, and potential societal impact.
- The details of projects supported from SSIP is as follows

2024-25

Sr no	Title	Student Name	Approved Fund
1	Smart Attendance System	Suthar Bharat Vishanubhai	25000/-
2	Smart Dustbin	Prajapati Harshad S	16792/-

2025-26

Sr no	Title	Student Name	Approved Fund
1	Smart chair positioning system	Dave Falguni J	25,200/-
2	Core XY 3D Printer (Apart from academic projects)	Mali Paresh	1,45,000/-

Table: 2.2.4.3 Details of projects supported from SSIP

2.2.5 Industry Interaction and Industry Internship/Training (30)

A. Industry supported Labs (2)

We have established an industry supported lab in collaboration with BeeRobokids innovations pvt ltd with Title: "Advanced controller and processor laboratory".

From: BeeRobokids <beerobokids@gmail.com>

Sent: Tuesday, January 27, 2026 3:05 PM

To: principal-gp-palanpur

Subject: Re: Subject: Invitation for Industry Collaboration to Establish an Advanced Controller and Processor Laboratory

***** This mail is from external domain, i.e. not from gujarat.gov.in domain. Kindly open attachment and link with caution. *****

To,
The Head of Department
Department of Electronics and Communication
Government Polytechnic
Palanpur, Banaskantha
Gujarat – 385001

Respected Sir,

Greetings from **Beerobokids Innovations Pvt. Ltd.**, Palanpur

We sincerely thank you for reaching out to us and for sharing the details of your proposed **Industry-Supported Advanced Controller and Processor Laboratory** initiative. We truly appreciate the efforts taken by the Department of Electronics and Communication, Government Polytechnic, Palanpur, to enhance technical education and provide industry-oriented practical exposure to students.

We are pleased to inform you that **Beerobokids Innovations Pvt. Ltd. is happy to collaborate** with your esteemed institute for this initiative. We strongly believe that such industry–academia collaborations play a vital role in developing skilled, competent, and industry-ready engineers.

Our organization is willing to extend support in areas such as technical guidance, expert lectures, student training programs, internships, and possible assistance related to equipment and software, subject to mutual discussion and feasibility.

We look forward to a fruitful and long-term association that will benefit students, faculty members, and the industry alike. Kindly let us know a convenient time for further discussion to explore the collaboration in detail.

Thank you once again for considering our organization as an industry partner.

With best regards,
Beerobokids Innovations Pvt. Ltd
Contact: 9023415864

Government Polytechnic



Palanpur
EC Department



INDUSTRY SUPPORTED
LABORATORY



**“Advanced Controller and Processor
Laboratory”**

In collaboration with
Beerobokids innovations Pvt. Ltd,
Palanpur

Inaugurated on: 5th February 2026



Figure: 2.2.5.1 Industry supported lab

B. Delivery of appropriate Course work by Industry experts (5)

- The delivery of coursework by industry experts adopts a holistic approach that blends real-world perspectives with practical experience and professional expertise.
- By inviting specialists from diverse fields to lead guest lectures and workshops, classrooms are enriched with authentic industry insights.
- Learners gain valuable exposure through direct interaction with professionals who share their experiences, offer practical guidance, and provide actionable insights.
- Additionally, industry experts support students in bridging the gap between theory and practice by demonstrating the real-world application of academic concepts.

Sr. No	Topic	Name of Expert	Expert's Designation	Expert's in:
2023-24				
1	Fabrication of Solar Cell	Mr. Sandip Joshi	Jr. Engineer Diploma EC	Adani
2	Embedded System	Mr. Vishal Vadher	Aast. Manager Training B.E.E.C.	SOFCON I

3	Web development technologies	Mr. Vishal Vadher	Aast. Manager Training B.E.E.C	SOFCON I
2024-25				
1	Ai-MI: A New Era Of Future	Mr. Vishal Vadher	Aast. Manager Training B.E.E.C.	Sofcon
2	Internet Of Things	Dr. V K Thakar	Dean Indrashil university ph.D.	Indrash
3	Career Guidance For Ec engineers	Mr. Krishna Panchal	Associate engineer B.E.E.C.	E-I
4	HAM Radio Workshop	Mr. N. B. Nadoda	Senior Lecturer	GGP,
5	Drone Technologies	Mr. Yuvrajsinh Rajput	CEO	Bee-Robokids
2025-26				
1	Cyber Crime Awareness	Mr. Manish S Chauhan	Assistant Professor	GEC
2	IoT Applications with NodeMCU & Raspberry Pi	Mr. Rishabh Prajapati	Co-Founder	Bee-Robokids Inn

Table: 2.2.5.1 Expert Lecture details



Figure 2.2.5.2 Embedded System expert lecture (2023-24)

Government Polytechnic Palanpur

HAM RADIO WORKSHOP

WORLD RADIO DAY
13 FEBRUARY

ORGANISED BY EC DEPARTMENT

13 FEBRUARY 2025
10.30 TO 05.30 PM
ROOM NO. 009 (BADP)

- Evolution of Radio
- Introduction of HAM Radio
- Basics of antenna
- Use of radio in emergency communication
- Practical demonstration of HF/VHF/UHF transmission

Expert :
SHREE N.B.NADODA
Senior Lecturer-EC
GGP Ahmedabad

Coordinator
Dr. R.N.PATEL
Lecturer- EC Department

Convenor
SHREE S.J.CHAUHAN
Head EC Department

Patron
SHREE S.D.DABHI
Principal

Figure 2.2.5.3 HAM Radio Workshop (2024-25)

Organized By
Department of Electronics and Communication Engineering
Government Polytechnic Palanpur
(Under Directorate of Technical Education, Gujarat)

Expert Talk On
Cyber Crime Awareness and Crime Detection

Prof. Manish S. Chauhan
Assistant Professor
(GES Class-2) at
Government Engineering College,
Modasa

Prof. Manish S. Chauhan is M.Tech. in Digital Communication, Assistant Professor (GES Class-2) in Government Engineering College, Modasa (Having 8 Years of teaching Experience), Ex. PDI(Wireless) at ATS Gujarat and Local Crime Branch/Cyber Crime, Palanpur(R.K.) (8 Years of Experience in Field also).
Expertise in Crime detection, Cyber Crime, Digital system Design, Linear Circuits like Op-amp, Optical Communication and more.

12 September 2025
11:00 AM Onwards

Venue: EC Department

Coordinator:
Mr. N.J Chauhan,
(Lecturer in EC,
GP Palanpur)

Facilitator:
Mr. S. J. Chauhan
(HoD, Dept. of EC,
GP Palanpur)

Patrons:
Mr. S.D. Dabhi
(Principal, GP Palanpur)

Contact:
Email Id –
apmc11@gmail.com

Expected Participants: Electronics and Communication & Information and Communication Technology

Figure 2.2.5.4 Cyber Crime Awareness (2025-26)

C. Industrial visits/tours for students (3)

- Industrial tours and field visits provide students with valuable practical exposure by demonstrating the real-world application of their academic studies.

- Organizing regular industry visits allows students to experience the actual working environment of organizations related to their field of study. These visits enable students to observe theoretical concepts in practice, helping them better understand how classroom knowledge translates into real
- Through industrial exposure, students gain insights into industry-specific practices, standards, and regulations that may not be fully addressed in textbooks. Such experiences enhance student engagement with coursework, as learners can directly connect theory with practical applications.
- Additionally, industrial visits support students in the design, simulation, and implementation phases of their academic projects by providing real-world context and inspiration.

Year 2023-24					
Sr. No.	Date	Name of Industry	Semesters	No. of Participants	Name of Faculty
1	04/05/2023	SAMSUNG SERVICE CENTRE, PALANPUR	2 &4	19	Mr. S P Joshiara & Dr. R N Patel
2	10/05/2023	COMMUNITY RADIO STATION, PALANPUR	4	11	Mr. S J Chauhan & Mr. M J Dabgar
3	01/08/2023	BAJARANG PAPER PRODUCTS, PALANPUR	1	7	Mr. S J Chauhan & Mr. M J Dabgar
4	16/03/2024	PCB POWER PVT LTD, GANDHINAGAR	2,4,6	14	Mr. L K Patel, Mr. N J Chauhan, Ms. M K Pedhadiya
5	16/03/2024	MCBS PVT LTD, GANDHINAGAR	2,4,6	14	Mr. L K Patel, Mr. N J Chauhan, Ms. M K Pedhadiya

Table: 2.2.5.2 Industrial Visits details Year 2023-24



Figure: 2.2.5.5 Industrial Visit at PCB POWER PVT LTD, GANDHINAGAR

Year 2024-25					
Sr. No.	Date	Name of Industry	Semesters	No. of Participants	Name of Faculty
1	02/08/2024	BAJARANG PAPER PRODUCTS, PALANPUR	1	13	Mr. M J Dabgar
2	25/09/2024	RAILWAY STATION, PALANPUR	3,5	12	Mr. N J Chauhan, Ms. M K Pedhadiya
3	05/10/2024	BANAS DAIRY	3,5	10	Dr. R N Patel, MJD, Mr. S P Joshiara
4	16/10/2024	COMMUNITY RADIO STATION, PALANPUR	4	7	Dr. R N Patel, Mr. S P Joshiara

Table: 2.2.5.3 Industrial Visits details Year 2024-25



Figure: 2.2.5.6 Industrial Visit at RAILWAY STATION, PALANPUR

Year 2025-26					
Sr. No.	Date	Name of Industry	Semesters	No. of Participants	Name of Faculty
1	05/08/2025	COMMUNITY RADIO STATION, PALANPUR	1	6	R C Parmar, Mr. N J Chauhan
2	20/09/2025	NETRAM (Command and Control Centre) Palanpur	3,5	12	Mr. M J Dabgar &, S P Joshiara
3	17/11/2025	COMMUNITY RADIO STATION, PALANPUR	3	6	Mr. L K Patel, Ms. M K Pedhadiya

Table: 2.2.5.4 Industrial Visits details Year 2025-26



Figure: 2.2.5.7 Industrial Visit at COMMUNITY RADIO STATION, PALANPUR

At the conclusion of the industry visit, students were encouraged to share their reflections on the experience. Based on their feedback, the following key benefits were identified:

- Observing theoretical concepts in real-world applications helped students better correlate academic knowledge with practical scenarios.
- Students gained valuable insights into industry-specific practices, standards, and regulatory frameworks that are not always fully addressed in textbooks.
- The visit enhanced students' engagement with coursework by enabling them to connect theoretical concepts with practical implications.
- Students found the experience beneficial for the design, simulation, and implementation stages of their academic projects.
- Learners developed an understanding of organizational culture, workplace ethics, and professional conduct prevalent in industry settings.
- Exposure to diverse industries allowed students to explore a wide range of career opportunities related to their field of study.

D. Industrial training/ internship (5)

- With the objective of exposing students to professional career pathways through observation, understanding of industry working mechanisms, and hands-on experience in real-world projects, an internship program has been made mandatory during the 3rd and 5th semesters.
- The internship aims to equip students with practical knowledge and provide exposure to real-time industrial environments. To ensure broad learning opportunities, students may choose internships across various sectors, including government agencies, skill development centres, the social sec
- The internship duration is structured to align with academic progression, with a two-week internship for 3rd semester students and a six-week internship for 5th semester students.

Year 2022-23			
Sr. No.	Semester	Number of Regular Students	Students completed internship Participants
1	3	12	12

Year 2023-24			
Sr. No.	Semester	Number of Regular Students	Students completed internship Participants
1	3	9	8
2	5	5	5

Year 2024-25			
Sr. No.	Semester	Number of Regular Students	Students completed internship Participants
1	3	6	6
2	5	7	7

Year 2025-26			
Sr. No.	Semester	Number of Regular Students	Students completed internship Participants
1	5	5	5

Table: 2.2.5.5 Student Internship details yearwise



Figure 2.2.5.8 Sample Internship Photo

E. Post training/ internship Assessment (10)

Upon completion of the internship, an evaluation is conducted at the institute in consultation with industry. At institute level, Students are assessed using a defined evaluation rubric that measures the knowledge and skills acquired during the internship period.

Internal Evaluation – 25 Marks PA(I)					
(To be carried out by the mentor in consultation with Industry) Minimum Passing Marks: 13					
Parameter	Excellent	Good	Average	Not up the level of Satisfaction	Obtained Marks
Mark range	4-5	3-4	2-3	Below 2	
Knowledge acquisition in specific domain. 5 marks					
Skill and attitude attainment in specific domain. 5 marks					
Feedback and suggestions given are incorporated? 5 marks					
Quality of the prepared report and poster. 5 marks					
Quality of the presentation. 5 marks					
Total Marks Obtained Out of 25 PA(I)					

Figure 2.2.5.9 Rubrics for Internal Evaluation

F. Contribution to Community related projects/activities (5)

- Participating in community service allows students to actively contribute to their communities while creating a meaningful, long-term positive impact on society.
- Through community service or volunteerism, students develop valuable life skills and practical knowledge while offering support to individuals and groups in need.

Sr. NO	Date	Activities	Participated Student
1	05/05/2022	Drawing and essay writing Competition on the theme of Matdan Awareness	53
2	24/09/2022	Talk with Village people about importance of organic farming @ Dhelana Village & playing physical games with primary school students	276
3	02/01/2023 To 08/01/2023	Special Camp @ Jalra Karja Village <ul style="list-style-type: none"> ○ Learning through teaching ○ Yoga Practice ○ Village Survey ○ Horticulture Development Seminar ○ Sight seen through Walking at dantiwada dam water ○ Awareness Rally ○ Self employment through bakery business ○ Distribution of TULSI Plants ○ Tree Plantation ○ Primary school kitchen services and gathering firewood from the forest for cooking 	50
4	14/07/2023	Trekking @ Jeshor Forest Hills & Collecting plastic garbage	46

5	09/08/2023	Earthen Lamp Lighting (Meri Matti Mera Desh)	187
6	10/08/2023	Vasudha Vandan By Tree Plantation	175
7	08/12/2023	Awareness Program on Mission LiFE (Life for Environment)	48
8	28/03/2024	Seminar and hands on practice for organic farming	70
9	19/04/2024	Thalassemia Testing, Eye Check up and Dental Checkup	170
10	01/10/2024	Cleanliness Drive at Railway station Palanpur	46
11	09/12/2024	ACPDC awareness program	School students
12	10/02/2025	Ambaji NSS Seva Camp	24
13	07/03/2025	Gujarat cultural Elocution competition- 2025	06
14	Yearly Activity	RTO (Learning license) duties by faculties	All learning license aspirants

Table: 2.2.5.6 Community related activity details



Figure 2.2.5.10 Cleanliness Drive at Railway station Palanpur



Figure 2.2.5.11 ACPDC awareness program

2.2.6 Information Access Facilities and Student Centric Learning Initiatives (15)

A. Availability of facilities & Effective Utilization; specify the facilities, materials and scope for self-learning, Webinars, NPTEL Podcast, MOOCs etc (10)

List of available information access facilities

- The Institute provides 24x7 internet connectivity to support students' academic and research activities.
- The Government of Gujarat has distributed tablets to students at a subsidized cost of ₹1000, enabling them to leverage modern technology and enhance their technical knowledge.
- The college offers access to the National Digital Library of India (NDLI), a vast digital repository developed by IIT Kharagpur under the Ministry of Education.
- The Institute website functions as the official digital platform, providing comprehensive and up-to-date information about the college.
- The Department website provides detailed information on faculty profiles, curriculum, laboratory facilities, events, and academic activities.
- The Department ensures 24x7 access to academic resources through a systematically organized Google Drive repository.

- The Department regularly organizes expert lectures and industrial visits to familiarize students with real-world applications and current industry practices.
 - During the COVID-19 period, the Government of Gujarat provided students with Microsoft Teams accounts and Office 365 subscriptions to facilitate online learning.
 - Faculty members utilize Google Classroom to share lecture materials, assignments, quizzes, and important announcements, ensuring effective communication, timely feedback, and an enhanced teaching–learning process.
 - An induction program is conducted for first-year students to orient them to the academic environment, institutional facilities, and support systems.
- The students also have wired connectivity of internet in each lab. Sufficient LAN ports are available in all labs.
 - A projector is setup along with screen in room no 009 and 011. This is helpful in teaching learning process and project presentation for the students.
 - The department has a movable projector available for setting up ICT-based learning in several classrooms.



Figure: 2.2.6.1 Multimedia Classroom

- The Government of Gujarat has provided Tablets to the students at a cost of Rs. 1000. So that students could take lever age of today's technological trends and add some more knowledge into their technical database.
- Under the Nam0 E-Tablet Scheme, Gujarat Government offers subsidized tablets (Acer/Lenovo) to first-year college and polytechnic students from financially weaker backgrounds (annual income \leq ₹1 lakh). Students pay a token fee of ₹1,000 for a device valued around ₹8–9 k, preloaded with edu years.

Government Polytechnic, Palanpur

Tablet distribution-2017

Sr.No	EC	IC	CIVIL	MECHANICAL	ELECTRICAL	Total
1	2	7	70	103	52	234

Government Polytechnic, Palanpur

Tablet distribution-2018

Sr.No	EC	IC	CIVIL	MECHANICAL	ELECTRICAL	Total
1	2	3	77	102	76	260

Government Polytechnic, Palanpur

Tablet distribution -2019

Sr.No	EC	IC	CIVIL	MECHANICAL	ELECTRICAL	Total
1	17	3	97	58	42	217

Figure: 2.2.6.2 Tablet distribute to students copy

- The Government of Gujarat has facilitated digital education by providing Microsoft Teams accounts and Office 365 subscriptions to faculty and students. This initiative supports seamless online teaching, learning.
- Faculty members can now conduct live classes, share study materials, and interact with students more efficiently during COVID time. And no teaching suffers during pandemic. It has enhanced the overall accessibility and effectiveness of digital education in the institute.
- All the teaching and learning data is available with faculty members through Microsoft Teams. This includes lecture recordings, study materials, assignments, and student attendance records. It helps ensure organized and efficient academic management.

FirstName	LastName	DisplayName	UserPrincipalName	Department	Title	MobilePhone	UsageLocation	AccountSkuld
ASHWINSINH	DABHI	ASHWINSINH DABHI	196260311002@gppalanpur.onmicrosoft.com	EC_2019	ST_regular	reseller-account:STANDARDWOFFPACK_STUDENT	IN	reseller-account:STANDAF
KHUSHBU	GARASIYA	KHUSHBU GARASIYA	196260311003@gppalanpur.onmicrosoft.com	EC_2019	ST_regular	6356251075	IN	reseller-account:STANDAF
KAILASHKUMAR	JOSHI	KAILASHKUMAR JOSHI	196260311004@gppalanpur.onmicrosoft.com	EC_2019	ST_regular	8141973318	IN	reseller-account:STANDAF
CHHAYANK	MEVADA	CHHAYANK MEVADA	196260311005@gppalanpur.onmicrosoft.com	EC_2019	ST_regular	9328231687	IN	reseller-account:STANDAF
DARSHILKUMAR	MODI	DARSHILKUMAR MODI	196260311006@gppalanpur.onmicrosoft.com	EC_2019	ST_regular	8780215685	IN	reseller-account:STANDAF
TIRTH	PANCHAL	TIRTH PANCHAL	196260311008@gppalanpur.onmicrosoft.com	EC_2019	ST_regular	9510209937	IN	reseller-account:STANDAF
LAYRAJ	PARMAR	LAYRAJ PARMAR	196260311010@gppalanpur.onmicrosoft.com	EC_2019	ST_regular	8511866599	IN	reseller-account:STANDAF
KHUSHIBEN	PATEL	KHUSHIBEN PATEL	196260311011@gppalanpur.onmicrosoft.com	EC_2019	ST_regular	9328864396	IN	reseller-account:STANDAF
AKSHITKUMAR	PRAJAPATI	AKSHITKUMAR PRAJAPATI	196260311012@gppalanpur.onmicrosoft.com	EC_2019	ST_regular	6352030854	IN	reseller-account:STANDAF
ROHIT	PRAJAPATI	ROHIT PRAJAPATI	196260311013@gppalanpur.onmicrosoft.com	EC_2019	ST_regular	9484400133	IN	reseller-account:STANDAF
BHAVIK	RAJPUT	BHAVIK RAJPUT	196260311014@gppalanpur.onmicrosoft.com	EC_2019	ST_regular	8160596361	IN	reseller-account:STANDAF
YUVRAJSINH	RAJPUT	YUVRAJSINH RAJPUT	196260311015@gppalanpur.onmicrosoft.com	EC_2019	ST_regular	8160664564	IN	reseller-account:STANDAF
ANAS	UMATIYA	ANAS UMATIYA	196260311016@gppalanpur.onmicrosoft.com	EC_2019	ST_regular	7043030244	IN	reseller-account:STANDAF
NITESHBHAI	CHAUDHARI	NITESHBHAI CHAUDHARI	196260311502@gppalanpur.onmicrosoft.com	EC_2019	ST_regular	7383161793	IN	reseller-account:STANDAF
BHARGAVKUMAR	DAMOR	BHARGAVKUMAR DAMOR	196260311503@gppalanpur.onmicrosoft.com	EC_2019	ST_regular	7984808433	IN	reseller-account:STANDAF
HETALKUMARI	PATEL	HETALKUMARI PATEL	196260311504@gppalanpur.onmicrosoft.com	EC_2019	ST_regular	7203037190	IN	reseller-account:STANDAF
NIRAVBHAI	SOLANKI	NIRAVBHAI SOLANKI	196260311505@gppalanpur.onmicrosoft.com	EC_2019	ST_regular	9726745691	IN	reseller-account:STANDAF
Nirajkumar	Prajapati	Nirajkumar Prajapati	186260311002@gppalanpur.onmicrosoft.com	EC_2018	ST_regular	7043848309	IN	reseller-account:STANDAF
Arunkumar	Patel	Arunkumar Patel	176260311001@gppalanpur.onmicrosoft.com	EC_2017	ST_regular	6352165925	IN	reseller-account:STANDAF

Figure: 2.2.6.3 Sample of registration details of MS Team credential

Institute Library – EC Department Collection:

- Apart from NDLI access, the institute library houses a dedicated collection of over 102 books related to Electronics and Communication Engineering.
- These include textbooks, reference books, manuals, and competitive exam materials covering key areas like analog & digital electronics, communication systems, microprocessors, VLSI, and embedded systems.
- The library supports students' academic, project, and research needs, and provides a quiet environment for self-study and knowledge enhancement.
- Students issue books from the institute library as per their academic requirements. Records of both book issuance and return are systematically maintained in the library.

A sample copy of the record format is available for reference. This helps in ensuring proper tracking and management of library resources

पुस्तकीना					विद्युत पुस्तक				
Sr. No.	Name of the Book	No. of Book	Issue Date	Name	Address	Signature	Received Date	Signature of Receiver	Remarks
63	संज्ञान विज्ञान	1131	11/11/17	Medi Jaini D	24626031011	[Signature]	11/11/17	[Signature]	
64	संज्ञान विज्ञान	1132	11/11/17	Samir Jaini D	24626031015	[Signature]	11/11/17	[Signature]	
65	संज्ञान विज्ञान	1133	11/11/17	Trivedi Ansh S	25626031902	[Signature]	11/11/17	[Signature]	
66	संज्ञान विज्ञान	1134	11/11/17	Trivedi Ansh S	25626031902	[Signature]	11/11/17	[Signature]	
67	संज्ञान विज्ञान	1135	11/11/17	Trivedi Ansh S	24626030609	[Signature]	11/11/17	[Signature]	
68	संज्ञान विज्ञान	1136	11/11/17	Trivedi Ansh S	24626030609	[Signature]	11/11/17	[Signature]	
69	संज्ञान विज्ञान	1137	11/11/17	Trivedi Ansh S	24626030609	[Signature]	11/11/17	[Signature]	
70	संज्ञान विज्ञान	1138	11/11/17	Trivedi Ansh S	24626030609	[Signature]	11/11/17	[Signature]	
71	संज्ञान विज्ञान	1139	11/11/17	Trivedi Ansh S	24626031011	[Signature]	11/11/17	[Signature]	
72	संज्ञान विज्ञान	1140	11/11/17	Trivedi Ansh S	24626031015	[Signature]	11/11/17	[Signature]	
73	संज्ञान विज्ञान	1141	11/11/17	Trivedi Ansh S	25626031902	[Signature]	11/11/17	[Signature]	
74	संज्ञान विज्ञान	1142	11/11/17	Trivedi Ansh S	25626031902	[Signature]	11/11/17	[Signature]	
75	संज्ञान विज्ञान	1143	11/11/17	Trivedi Ansh S	24626030609	[Signature]	11/11/17	[Signature]	
76	संज्ञान विज्ञान	1144	11/11/17	Trivedi Ansh S	24626030609	[Signature]	11/11/17	[Signature]	
77	संज्ञान विज्ञान	1145	11/11/17	Trivedi Ansh S	24626030609	[Signature]	11/11/17	[Signature]	
78	संज्ञान विज्ञान	1146	11/11/17	Trivedi Ansh S	24626030609	[Signature]	11/11/17	[Signature]	
79	संज्ञान विज्ञान	1147	11/11/17	Trivedi Ansh S	24626030609	[Signature]	11/11/17	[Signature]	
80	संज्ञान विज्ञान	1148	11/11/17	Trivedi Ansh S	24626030609	[Signature]	11/11/17	[Signature]	
81	संज्ञान विज्ञान	1149	11/11/17	Trivedi Ansh S	24626033211	[Signature]	11/11/17	[Signature]	
82	संज्ञान विज्ञान	1150	11/11/17	Trivedi Ansh S	24626030609	[Signature]	11/11/17	[Signature]	
83	संज्ञान विज्ञान	1151	11/11/17	Trivedi Ansh S	25626031902	[Signature]	11/11/17	[Signature]	
84	संज्ञान विज्ञान	1152	11/11/17	Trivedi Ansh S	25626031902	[Signature]	11/11/17	[Signature]	
85	संज्ञान विज्ञान	1153	11/11/17	Trivedi Ansh S	24626030609	[Signature]	11/11/17	[Signature]	
86	संज्ञान विज्ञान	1154	11/11/17	Trivedi Ansh S	23626030604	[Signature]	11/11/16	[Signature]	
87	संज्ञान विज्ञान	1155	11/11/17	Trivedi Ansh S	23626030604	[Signature]	11/11/16	[Signature]	
88	संज्ञान विज्ञान	1156	11/11/17	Trivedi Ansh S	23626030604	[Signature]	11/11/16	[Signature]	
89	संज्ञान विज्ञान	1157	11/11/17	Trivedi Ansh S	24626031101	[Signature]	11/11/17	[Signature]	
90	संज्ञान विज्ञान	1158	11/11/17	Trivedi Ansh S	23626031603	[Signature]	11/11/17	[Signature]	
91	संज्ञान विज्ञान	1159	11/11/17	Trivedi Ansh S	23626030609	[Signature]	11/11/17	[Signature]	
92	संज्ञान विज्ञान	1160	11/11/17	Trivedi Ansh S	24626031101	[Signature]	11/11/17	[Signature]	
93	संज्ञान विज्ञान	1161	11/11/17	Trivedi Ansh S	23626030609	[Signature]	11/11/17	[Signature]	
94	संज्ञान विज्ञान	1162	11/11/17	Trivedi Ansh S	25626031902	[Signature]	11/11/17	[Signature]	

Figure: 2.2.6.4 A sample copy of the Library book issue return record

EC Department Library:

- In addition to the central library, the Electronics and Communication (EC) Department maintains a dedicated departmental library housing approximately 102 books, including subject-specific textbooks and reference materials aligned with the EC curriculum.
- This departmental library functions as a readily accessible academic resource center for both students and faculty, facilitating focused learning and providing convenient, department-level academic support.
- In addition to the central and departmental libraries, the institute provides online access to study materials for all subjects of the Electronics and Communication (EC) Department through the Learning Resources tab on the institute website, as mentioned below: <https://www.gppalanpur.ac.in/>

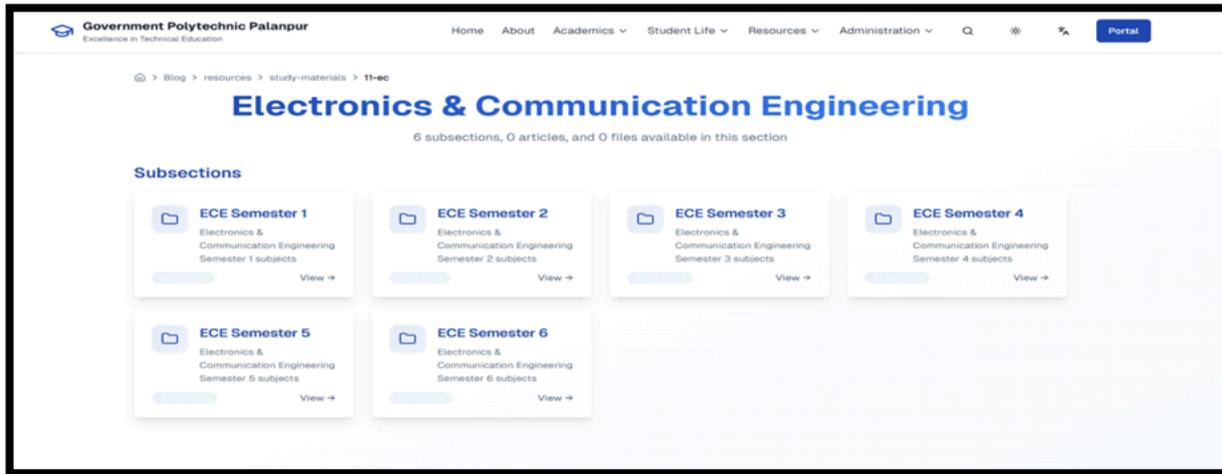


Figure: 2.2.6.5 Institute website

- The department website offers detailed information about the department's faculty, curriculum, lab facilities, events, and academic activities. It supports students by providing learning materials, project guidance, and updates related to departmental achievements.

The department website Link: <https://ec.gppalanpur.in/>

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By milav.dabgar • March 28, 2025

Semester 1, Academic Year 2024-2025
 Student Performance Summary Rank
 Student Name Enrollment ID SPI CPI
 Result Backlogs 1 MALI BHAVIN...

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By milav.dabgar • March 28, 2025

Executive Summary This report presents an analysis of the results for students in the Electrical and Communication Engineering Department...

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Figure: 2.2.6.6 Department website

Google Drive-Based Learning Material Access

- The department provides students with 24x7 access to academic resources through a well-organized Google Drive repository. This includes lecture notes, lab manuals, previous year question papers, assignments, and reference materials, arranged semester and subject-wise.
- The facility supports self-learning and ensures students can conveniently access study materials anytime, enhancing the overall learning experience.
- Students can conveniently access the study materials stored in Google Drive by scanning the provided QR code, which directs them to the digital repository for quick and easy reference.
- Students can conveniently access the study materials stored in Google Drive by scanning the provided QR code, which directs them to the digital repository for quick and easy reference.



Figure: 2.2.6. 7 Google Drive-Based Learning Material Access QR code is available on notice board

- The department regularly organizes expert lectures by industry professionals and academic experts to enhance students technical knowledge and exposure. Industrial visits are also arranged to help students understand real-world applications and industry practices related to their field of study

List of E resources available

- Students are informed regarding NPTEL/SWAYAM portal for different MOOC training in engineering. Now, GTU has introduced MOOC credit program in sem-4 and sem-5 in NEP based syllabus. An introductory lecture is organized to make students aware of NPTEL website,
- Google classroom
- Microsoft Team
- Faculty members use Google Classroom to share lecture notes, assignments, quizzes, and important updates with students. It enables smooth communication, timely feedback, and enhances the overall teaching-learning process.

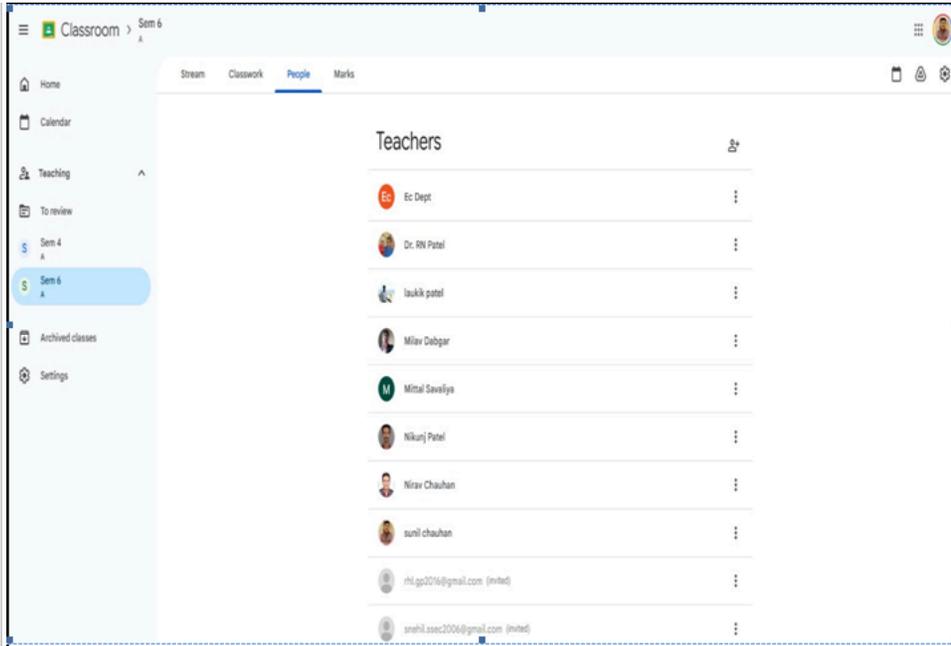


Figure: 2.2.6.8 Usage of Google classroom created for students

The Government of Gujarat has provided Microsoft Teams accounts and Office 365 subscriptions to all diploma institute faculties during the COVID-19 pandemic.

This initiative aimed to support uninterrupted online teaching and learning. Faculties can now effectively conduct virtual classes, share study materials, and collaborate with students in real time. The use of Office 365 tools has enhanced productivity and streamlined academic communication

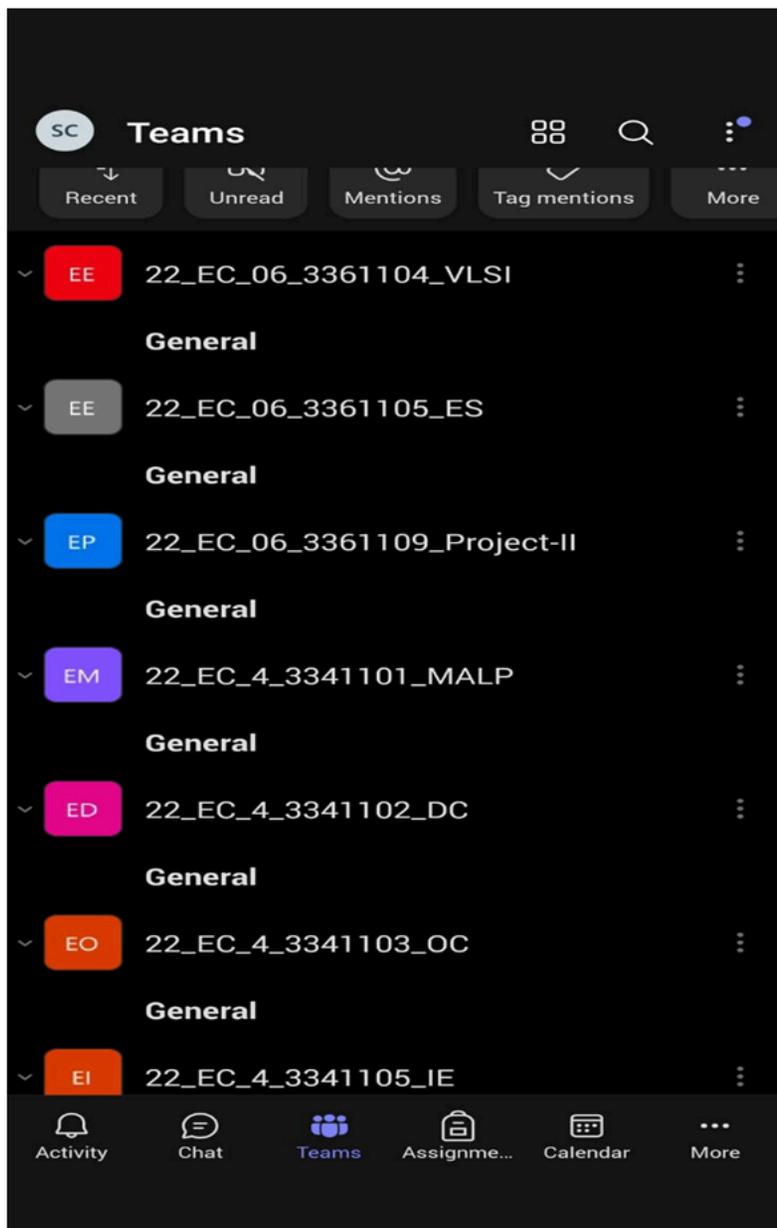


Figure: 2.2.6.9 MS Team used by faculties of E.C. Department

- Data related to lectures and lab sessions are maintained by the respective faculty members. This includes records of topics covered, attendance, and practical performance. Such documentation helps ensure proper academic monitoring and compliance.
- The department conducts a bridge course for lateral entry students (from Certificate to Diploma) to strengthen their fundamental knowledge and bridge curriculum gaps. The course covers essential topics in mathematics, basic sciences, and core engineering subjects, ensuring a smooth transition to the diploma program.
- GTU has introduced a MOOC credit program in Semester 4 and Semester 5 under the NEP-based syllabus, which will be implemented from the next academic year. This program allows students to earn academic credits through online courses offered by recognized platforms.
- It aims to promote flexible, self-paced, and industry-relevant learning. A sample copy of the MOOC credit course details is attached for reference. [Gujarat Technological University](https://www.gtu.ac.in/) website of GTU

TEACHING SCHEME / DETAIL SYLLABUS

[Home](#)

DIPLOMA ▼

11 - ELECTRONICS AND COMMUNICATION ENGINEERING ▼

4 ▼

2024-25 ▼

Select Elective / Non-Elective ▼

Subject Code

Enter Subject Name

Search

*L=Lectures,T=tutorial,P=Practical,E=TheoryExternal,M=TheoryInternal,I=Practical Internal,V=Practical External,On Job Training(OJT) is equivalent to Practical

Exp.	Subcode	Branch code	Eff from	SubjectName	Category	Sem /Year	Hours				Total	Credit				Max Marks			
							L	T	P	TW/SL		E	M	I	V	Total	Total	Total	Total
+	ini25_cs02	11	Jan-25	Machine Learning Using Python Programming	PEC-02(MOOC)	4	4	0	0	NA	4	100	0	0	0	100			
+	noc25_cs11	11	Jan-25	Cloud Computing	PEC-01(MOOC)	4	4	0	0	NA	4	100	0	0	0	100			
+	noc25_ge11	11	Jan-25	Entrepreneurship Essentials	MOPEC-01(MOOC)	4	3	0	0	NA	3	100	0	0	0	100			
+	ntr24_ed42	11	Jul-24	Graphics and Animation Development	MOPEC-01(MOOC)	4	3	0	0	NA	3	100	0	0	0	100			
+	ntr24_ed51	11	Jul-24	Entrepreneurship Development	MOPEC-01(MOOC)	4	3	0	0	NA	3	100	0	0	0	100			

Figure: 2.2.6.10 Sample copy of the MOOC credit course details is attached for reference

B. Student Centric Learning Initiatives & Effective Implementation (5)

- Student Centric Learning focuses on empowering students to take an active role in education.
- Student Centric Learning is a worldwide popular teaching methodology which provides a thorough understanding of the concepts and process through active learning and co-operative participation.
- The project and problem-based learning is one kind of student centric learning which gives spark to the students' lateral thinking and promotes real application of the experiments in their fields of engineering.
- We are using various methods to raise the interest of students in the courses and technical events. We adapt various learning methods in classroom, like

1. Presentations
2. Seminar/WORKSHOP
3. Industrial Visit
4. You tube
5. National Digital library
6. E-Books (AICTE E Kumbh portal)
7. Induction program
8. Skilling Program



Figure: 2.2.6.11 Students present their project presentation in class.

- Students present project or topic-based PPTs to improve communication, subject understanding, peer learning, and confidence



Figure: 2.2.6.12 Workshop organized by the department

- Seminars and workshops by industry and academic experts enhance students' technical knowledge, soft skills, and link classroom learning with real-world applications.
- Industrial visits give students practical exposure to industry practices, technologies, and workflows, bridging classroom learning with real applications. Reports with details, participation, and observations are maintained for academic records.



Figure: 2.2.6. 13 Sample photographs of industrial visit

- Faculty share subject-related YouTube links to support self-learning and revision. A department faculty has created playlists on C Programming and DC Circuits, shared via Google Classroom and WhatsApp for easy access.

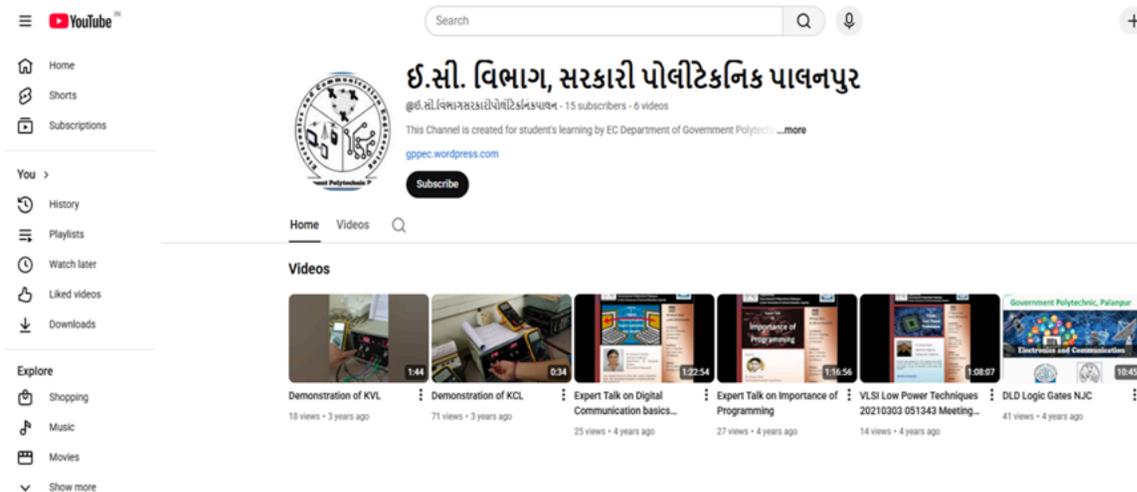


Figure: 2.2.6.14 Sample copy of you tube channel

- Our college provides access to the National Digital Library of India (NDLI), offering books, journals, videos, and exam materials. Students use it to enhance knowledge, support research, and promote self-learning.



NDLI Club

Your Institute Government Polytechnic, Palanpur is now is now a part of the NDLI Club

Dear Kinjal,

The request of Government Polytechnic, Palanpur to set up NDLI Club at the institute has been approved. All interested students, faculty members and employees of Government Polytechnic, Palanpur can now enroll themselves as members of Government Polytechnic, Palanpur NDLI Club, using the passkey given below:

Passkey: – **31c231de-e678-4046-b3bf-dc5ea1b7e397**

SURESHKUMAR
R DALABHAI
DABHI

Digitally signed by
SURESHKUMAR
DALABHAI DABHI
Date: 2024.02.19
20:17:12 +05'30'

Club Registration Number : **INGJNCR47D4WSDV**

You are requested to share the Passkey with all your students, faculty members and employees via e-mail and advise them to visit

<https://club.ndl.iitkgp.ac.in/sign-up> to enroll themselves as member of the NDLI Club using their e-mail id and the Passkey. You may also take a printout of the enclosed document and paste it on

Scanned by CamScanner

Figure: 2.2.6.15 Copy of NDLI club registration

- AICTE e-Kumbh promotes digital learning by offering online resources, webinars, and expert sessions to enhance technical knowledge and industry readiness. Students are encouraged to use the platform and actively benefit from its resources for academic growth

The screenshot shows the AICTE e-Kumbh platform interface. At the top, there are logos for AICTE and e-Kumbh. Below them is a navigation menu with links: Home, Contributors, Books, Activities, Videos, and Feedback Form. A 'Filter By' section on the left includes options for Course (Civil Engineering, Computer Science and Engineering, Electrical Engineering, Electronics and Communication Engineering, Mechanical Engineering, Others) and Language (Assamese, Bengali, English, Gujarati, Hindi, Kannada, Malayalam, Marathi, Odia, Punjabi, Tamil, Telugu, Urdu). A search bar is located at the top right of the main content area, with the text 'Search by book Name : Search for names.' Below the search bar, a yellow banner reads 'AICTE Diploma Books'. Four book covers are displayed in a row, each with its title, author, language, and download count.

Book Title	Author	Language	Download Count
PYTHON PROGRAMMING	Dr. Rupesh Nazre	English	27298
Fundamentals of Electrical & Electronics Engineering	Prof. Susan S. Mathew	English	27298
MATHEMATICS-I	Dr. Deepak Singh	English	27298
DATA STRUCTURES: THEORY & PRACTICALS	Dr. NB Venkateswarlu	English	27298

Figure: 2.2.6.16 Students use e-resources on AICTE e-Kumbh platform by using their credentials

- As per GTU guidelines, the department conducts a two-week induction program for first-year students with sessions on values, communication, arts, technical awareness, and expert talks. It helps students adapt to college life, build confidence, and understand departmental activities. Records

Government Polytechnic Palanpur (626)						
Induction/Orientation Programme (For First Year Students) (Admission Year-2025)						
Duration Of Programme: (24-07-2025 TO 06-08-2025) (2 Weeks)						
Week-1						
DATE	Session-A (10.30 AM TO 02.00 PM)	(12.30 PM TO 01.00 PM - Lunch Break)	Session-B (2.00 PM TO 5.00 PM)	(4.00 PM to 4.10 PM- Short Break)	Programme/Session Coordinator(s)	Programme Venue
24/7/25	Students Arrival/Welcome to campus (10:30 AM TO 11:00 AM) Light the lamp (By Principal & Head's All Dept.) (11:00 AM TO 11:15 AM)	Shri P.K.Bhavsar	Seminar Hall	M-3 "KNOW YOUR DEPARTMENT" Department Presentation (Dept.facilities/Career Opp.etc.) & "Campus Visit" (02:00 PM TO 3:30 PM)	Respective Department under the guidance of H.O.D & Class Coordinator/s (1st Year-2025)	1.Mech- (F09) (Mech.Block)
	Welcome Speech (By Principal) (11:15 AM TO 11:30 AM)	Shri P.K.Bhavsar	Seminar Hall			2.Elect-(A-101) (Main Building)
	Brief Info. About "Student Induction Diary/ Induction Program Report & Evaluation Pattern" (11:30 AM TO 12:00 PM)	Shri T.D.Modi	Seminar Hall			3.Civil-(A-210) (Main Building)
	"KNOW YOUR INSTITUTE" (Vision/Mission/Inst.Website Rules&Regulation,Video tour Of institute) (12:00 PM TO 12:30 PM)	Smt. M.K.Pedhiya Dr. R.N.Patel	Seminar Hall			4. E.C (B-008) L.C.T (B-009) (B.A.D.P Building)
	"KNOW YOUR UNIVERSITY" (Rules & Regulations) (01:00 PM TO 01:30 PM)	Shri B.N.Prajapati Shri V.P.Patel	Seminar Hall			5. IT (Seminar Hall)
	"KNOW YOUR HOSTEL FACILITIES" (Team Introduction ,Rules & Regulations) (01:30 PM TO 2:00 PM)	Shri A.D.Shah & Hostel Team	Seminar Hall			"HOSTEL COUNSELLING ACTIVITIES" (3.30 PM TO Onwards)
25/7/25	M-7 "LITERATURE ACTIVITIES Including INDIAN KNOWLEDGE SYSTEMS-1 (IKS-1)" Everyday " Physics" (10:30 AM TO 11:30 PM)	Dr. B.B.Mor	Seminar Hall	M-2 "PHYSICAL ACTIVITY" Instant Games: (Musical Chair, Rope,Pushups,Situps,Plank test etc.) (All Students) (02:00 PM TO Onwards)	M.E (MKP/DPJ) E.E (RMP/VBC) CIVIL (JNC/FMP) E.C/ICT/IT(NJC/JVQ)	Seminar Hall Area
	M-7 "LITERATURE ACTIVITIES Including INDIAN KNOWLEDGE SYSTEMS-1 (IKS-1)" (Indian Contribution to "Chemistry") (11:30 AM TO 12:30 PM)	Dr.J.D.Modi	Seminar Hall			
	M-4 "PROFICIENCY MODULES" "ENGLISH" PROFICIENCY (01:00 PM TO 02:00 PM)	Dr.C.S.Pandya	Seminar Hall			
26/7/25 & 27/7/25 (Holiday)						
28/7/25	M-2 "PHYSICAL ACTIVITY" Warmup & Yoga/Breath Practices (Group-1- ME/EC/ICT/IT) & Outdoor Games (Group-2- EE/CIVIL) (10:30 AM TO 02:00 PM)	G-1 (PKB) & G-2 E.E (RMP/VBC) CIVIL (JNC/FMP) (Games) : Kabaddi/Kho-Kho/Leng Jump/ 100 Mtr race/Slow Cycling/Rassa Khech etc....)	G-1 (Seminar Hall) & G-2 (Seminar Hall Outside Area/College Ground)	M-1 "UNIVERSAL HUMAN VALUES-1" Presentation On "Personality Development & Self Improvement" (02:00 PM TO 04:00 PM)	Shri T.D.Modi Shri S.N.Chauhan	Seminar Hall
				M-7 "LITERATURE ACTIVITIES Including INDIAN KNOWLEDGE SYSTEMS-1 (IKS-1)" Indian Contribution in Mathematics (04:00 PM TO 05:00 PM)	Shri C.P.Geloch	Seminar Hall

Figure: 2.2.6.17 Sample Time table of induction program

- The KCG Education Department's Finishing School, launched in 2016-17, delivers 80/40 hours of skill-enhancement training—structured across four modules—that empower final-year college students with life skills, employability skills, and spoken English proficiency to boost their industry

Batch No.	Training Date		Component Number	Training Hours	Total Students	Name of Trainer
	From	To				
1/2022-2023	06-FEB-2023	03-MAR-2023	ALL SETS	80	06	Mr. ANAND VYAS & Ms URJA JOSHI
3/2023-2024	19-FEB-2024	16-MAR-2024	ALL SETS	80	05	Mr Divyang Gor & Ms Kuntal Gor
6/2025-2026	15-SEPT-2025	26-SEPT-2025	ALL SETS	40	7	Mr Divyang Gor

Table: 2.2.6.1 KCG Finishing School details

2.2.7 New Initiatives for embedding Professional Skills (15)

A. Employability skill enhancement Initiatives and effective implementation (8)

The Department of Electronics and Communication Engineering at Government Polytechnic, Palanpur places a strong emphasis on developing professional competence and employability skills among diploma students. This is achieved through systematic initiatives such as Placement as industry exposure through Industrial Visits and Expert Lectures.

1. Placement Fairs (Job Fairs)

The institute, in collaboration with the Education Department and the Knowledge Consortium of Gujarat (KCG), organized mega placement camps providing state-level opportunities for diploma students.

- 10th March 2023, GP Palanpur - 5 EC students participated
- 11th March 2024, DNP Arts, Deesa - 5 EC student participated
- 25th February 2025, GP Palanpur - 7 EC students participated.

These initiatives have provided students with real interview exposure and direct interaction with industries, while companies appreciated the discipline and technical competence of students.

2. Career guidance and counseling- Mentors and TPO Cell:

The EC Department facilitates career guidance and counseling through mentors and the TPO Cell by conducting expert talks, workshops, and employability-focused training sessions.

- Workshops on HAM Radio, Drone Technologies etc.
- Expert Lectures on Career Guidance For EC Engineers by Mr. Krishna Panchal
- Soft Skills sessions under Finishing School, KCG.

These initiatives improved communication skills, professional awareness, and prepared students for higher studies and entrepreneurship.

3. Industrial Visits & Expert Lectures:

Industrial Visit details:

Year 2023-24					
Sr. No.	Date	Name of Industry	Semesters	No. of Participants	Name of Faculty
1	04/05/2023	SAMSUNG SERVICE CENTRE, PALANPUR	2 & 4	19	Mr. S P Joshiara & Dr. R N Patel
2	10/05/2023	COMMUNITY RADIO STATION, PALANPUR	4	11	Mr. S J Chauhan & Mr. M J Dabgar
3	01/08/2023	BAJARANG PAPER PRODUCTS, PALANPUR	1	7	Mr. S J Chauhan & Mr. M J Dabgar
4	16/03/2024	PCB POWER PVT LTD, GANDHINAGAR	2,4,6	14	Mr. L K Patel, Mr. N J Chauhan, Ms. M K Pedhadiya
5	16/03/2024	MCBS PVT LTD, GANDHINAGAR	2,4,6	14	Mr. L K Patel, Mr. N J Chauhan, Ms. M K Pedhadiya
Year 2024-25					
Sr. No.	Date	Name of Industry	Semesters	No. of Participants	Name of Faculty
1	02/08/2024	BAJARANG PAPER PRODUCTS, PALANPUR	1	13	Mr. M J Dabgar
2	25/09/2024	RAILWAY STATION, PALANPUR	3,5	12	Mr. N J Chauhan, Ms. M K Pedhadiya
3	05/10/2024	BANAS DAIRY	3,5	10	Dr. R N Patel, MJD, Mr. S P Joshiara
4	16/10/2024	COMMUNITY RADIO STATION, PALANPUR	4	7	Dr. R N Patel, Mr. S P Joshiara

Year 2025-26					
Date	Name of Industry	Semesters	No. of Participants	Name of Faculty	
05/08/2025	COMMUNITY RADIO STATION, PALANPUR	1	6	R C Parmar, Mr. N J Chauhan	
20/09/2025	NETRAM (Command and Control Centre) Palanpur	3,5	12	Mr. M J Dabgar &, S P Joshiara	
17/11/2025	COMMUNITY RADIO STATION, PALANPUR	3	6	Mr. L K Patel, Ms. M K Pedhadiya	

Table 2.2.7.1 Industrial Visit details

Expert Lecture details:

Sr. No	Topic	Name of Expert	Expert's Designation	Expert's in
2022-23				
1	NAVIC and its applications	Dr. Mehl kumar	Lecturer PhD EC	GC
2	Future of Electronics in industries	Mr. Prakash Darji	Design Engineer BE EC	Googl
3	Importance of Communication in industries	Mr. Jaimin Rami	Station Controller ME EC	JMRC
4	Cyber Security	Mr. Sagar Hajare	Security Expert	Bank
2023-24				
1	Fabrication of Solar Cell	Mr. Sandip Joshi	Jr. Engineer Diploma EC	Adani
2	Embedded System	MR. VISHAL VADHER	AAST. MANAGER TRAININGB.E.E.C.	SOFCON I
3	Web development technologies	MR. VISHAL VADHER	AAST. MANAGER TRAINING B.E.E.C.	SOFCON I
2024-25				
1	AI-ML: A NEW ERA OF FUTURE	MR. VISHAL VADHER	AAST. MANAGER TRAININGB.E.E.C.	SOFCON I
2	INTERNET OF THINGS	DR. V K THAKAR	DEAN INDRASHILUNIVERSITYPH.D.	INDRASHI

3	CAREER GUIDANCE FOR ECENGINEERS	MR. KRISHNA PANCHAL	ASSOCIATEENGINEERB.E.E.C.	E-IN
4	HAM Radio Workshop	Mr. N. B. Nadoda	Senior Lecturer	GGP, I
5	Drone Technologies	Mr. Yuvrajsinh Rajput	CEO	Bee-Robokids
2025-26				
1	Cyber Crime Awareness	Mr. Manish S Chauhan	Assistant Professor	GEC
2	IoT Applications with NodeMCU & Raspberry Pi	Mr. Rishabh Prajapati	Co-Founder	Bee-Robokids Inn

Table 2.2.7.2 Expert Lecture details

Comprehensive Employability and Soft Skills Training Initiative

- Wadhvani Foundation Skilling Program was offered to students for gaining essential skills in ideation, prototyping, business modelling, and financial planning . The program focused on communication skills, job readiness, and entrepreneurship.



CERTIFICATE OF PARTICIPATION

This is to certify that

Jainilkumar Modi

has successfully participated in the
Ignite Bootcamp - Venture Idea on **September**
Development **23, 2025**

gaining essential skills in ideation, prototyping, business modeling, and financial planning.

This certificate recognises their commitment to learning and ability to drive innovation and impact.

Meetul Patel

Meetul Patel

President

Wadhvani Global Entrepreneur

This certificate confirms the completion of 10 hours of training



SCAN & VERIFY

Figure: 2.2.7.1 Sample Student Certificate from Wadhvani Foundation

- Such value-added programs are organized every year to support students' overall development. These initiatives help bridge the gap between academics and industry expectations. After completion of course they provide certificate.

B. Personality development related Initiatives & effective implementation (7)

The Department of Electronics and Communication Engineering at Government Polytechnic, Palanpur emphasizes the holistic development of students by strengthening their personality, communication, and life skills. These initiatives aim to prepare diploma students to face challenges with detailed below:

1. Finishing School Programme

The institute, in collaboration with the Education Department and Knowledge Consortium of Gujarat (KCG), has successfully implemented the **Finishing School Programme** for final year students.

- **Duration:** 80/40 hours
- **Focus Areas:** Life skills, employability skills, functional English, and personality development.
- **Outcome:** Students developed self-confidence, communication ability, and professional etiquette, which enabled them to perform better in interviews and workplace environments.

2. Training & Placement (T&P) Cell Activities

The T&P Cell of the institute plays a vital role in the overall personality development of EC students.

- Resume & LinkedIn Profile creation.
- Placement fair conduction every year under KCG.
- Students are trained to handle stress, demonstrate leadership, and improve interpersonal skills.
- Industrial Visits and Expert Lectures conduction in collaboration with departments.

3. Value-Added Personality Development Programs

In addition to core technical training, the department encourages students to participate in programs aimed at soft skills, communication, and entrepreneurship mindset.

- **Wadhvani Foundation Skilling Program:** Focused on communication, job readiness, and entrepreneurship skills. Certificates are awarded upon completion.
- **Expert Lectures & Workshops:** Topics covered include soft skills for job interviews, career opportunities, teamwork, and leadership.

Outcomes of Personality Development Initiatives

- Improved communication skills and self-confidence among students.
- Enhanced ability to face interviews and interact with industry professionals.
- Positive attitude, leadership qualities, and teamwork capabilities.
- Better adaptability to changing industry demands and lifelong learning orientation.
- Stronger alignment of academic learning with professional personality requirements.

2.2.8 Co-curricular & Extra Curricular Activities (10)

Co-curricular Activities

The Electronics & Communication Engineering Department at Government Polytechnic, Palanpur conducts a variety of co-curricular activities to enhance technical competence, industry exposure, and practical learning among students.

- The Institute organizes Department Level Project Exhibitions (New Palanpur for New India event) to showcase innovative ideas and practical solutions developed by students.
- Regular Expert Lectures and Seminars are conducted by industry experts and academicians to bridge the gap between academics and industry practices.
- Industrial Visits are arranged to reputed industries to provide students with real-time exposure to industrial processes and technologies.
- Various Workshops and Hands-on Training Programs on HAM Radio, Drone Technologies etc. are conducted to strengthen applied knowledge.

Sr. No	Co-curricular Activities	2023-24	2024-25	2025-26
1	Industrial Visits	5	4	3
2	Workshop/ Expert Lectures	3	5	2
3	Project Exhibitions (New Palanpur for New India event)	1	1	-

Sr. No	Activities under ISTE Student Chapter (Co-curricular Activities)	Organized Period	No. of Participants	No. of Days	Resource Person / Organizer
1	Entrepreneurship Awareness Drive by ISTE Student Chapter GP Palanpur	07/04/2025 & 08/04/2025	95	2	CED (Centre of Entrepreneurship Development)

Figure 2.2.8.1 Co-curricular Activity details

Extra-Curricular Activities

The Electronics & Communication Engineering Department at Government Polytechnic, Palanpur actively promotes student participation in diverse extra-curricular activities to foster holistic growth.

- Students enthusiastically participated in the Annual Sports Week –2023, 2024, and 2025, where they showcased their talent in different sports and games, fostering team spirit, leadership, and discipline.
- Under the banner of NSS (National Service Scheme), students took part in multiple social and cultural initiatives.
- International Yoga Day is celebrated every year to promote physical and mental well-being.
- A Tree Plantation Drive is organized every year, contributing to environmental sustainability and the development of a green campus.
- Independence Day and Republic Day celebrations, along with related programs, are organized every year to inculcate patriotism and national pride.
- The Garba event is conducted annually, contributing to the preservation and promotion of cultural heritage.
- Voter Awareness drives and Road Safety Oath programs are held frequently to encourage responsible citizenship and safe practices

These extra-curricular activities not only provide students with opportunities to showcase their skills but also help in nurturing values of discipline, social responsibility, and cultural belongingness.

Sr. No	Year	No. of Events (Gymkhana)	No. of Events (NSS)
1	2023-24	11	7
2	2024-25	13	4
3	2025-26	12	0

Figure 2.2.8.2 Extra-Curricular Activity details

3 COURSE OUTCOMES AND PROGRAM OUTCOMES (100)

Define the Program specific outcomes

PSO1	Demonstrate proficiency in installation and problem
PSO2	Proficiency in specialized software packages and c

3.1 Establish the correlation between the courses and the POs and PSOs (20)

3.1.1 Course Outcomes (SAR should include course outcomes of one course from each semester of study, however, should be prepared for all courses) (5)

Note : Number of Outcomes for a Course is expected to be 3 to 5.

Course Name :

C1 17

Course Year :

2023-24

Course Name	Statements
C1 17.1	Use basic active and passive electronic components.
C1 17.2	Develop different types of rectifiers using PN junction diode.
C1 17.3	Use special purpose diodes for different applications.
C1 17.4	Analyze various transistor configurations.
C1 17.5	Dispose electronic waste safely.

Course Name :

C1 26

Course Year :

2023-24

Course Name	Statements
C1 26.1	Interpret various number systems and their conversions with binary arithmetic operations.

C1 26.2	Implement simplified Boolean equations using logic gates.
C1 26.3	Test different types of combinational logic circuits.
C1 26.4	Test different types of sequential logic circuits.
C1 26.5	Classify various memories and logic families.

Course Name :

C2 32

Course Year :

2024-25

Course Name	Statements
C2 32.1	Analyze the DC circuit to calculate voltage and current at various points in the circuit.
C2 32.2	Understand Concepts Of Two Port Network With Parameters.
C2 32.3	Use various network theorems to analyze electronic networks.
C2 32.4	Calculate parameters of series/parallel resonant and coupled circuits.
C2 32.5	Build different types of Attenuators and constant K-type passive filters.

Course Name :

C2 42

Course Year :

2022-23

Course Name	Statements
C2 42.1	Identify basic features of microprocessor.
C2 42.2	Explain architecture and working of microprocessor.
C2 42.3	Illustrate microcontroller internal architecture.
C2 42.4	Write and execute assembly language programs(software) for given application.
C2 42.5	Interface microcontroller with hardware for given application.

Course Name :

C3 53

Course Year :

2024-25

Course Name	Statements
C3 53.1	Distinguish Electromagnetic wave propagation through reflections from voltage and Current transmission.
C3 53.2	Analyze performance of microwave components from field point of view.
C3 53.3	Maintain microwave components and Set up of microwave bench for optimum Operation.
C3 53.4	Maintain microwave semiconductor devices used to realized amplifiers and Oscillators
C3 53.5	Maintain SONAR and RADAR systems as microwave application.

Course Name :

C3 62

Course Year :

2024-25

Course Name	Statements
C3 62.1	Describe working of MOSFET system.

C3 62.2	Maintain MOS inverters.
C3 62.3	Maintain MOS circuits.
C3 62.4	Describe fabrication process for MOS.
C3 62.5	Develop VERILOG Programs for combinational and sequential circuits.

3.1.2 CO-PO matrices of courses selected in 3.1.1(Six matrices to be mentioned; one per semester from 1st to 6th semester) (5)

1. course name : C217

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7
C117.1	3 ▾	2 ▾	1 ▾	3 ▾	- ▾	2 ▾	1 ▾
C117.2	3 ▾	1 ▾	2 ▾	2 ▾	1 ▾	1 ▾	- ▾
C117.3	3 ▾	1 ▾	2 ▾	2 ▾	1 ▾	1 ▾	1 ▾
C117.4	3 ▾	1 ▾	2 ▾	2 ▾	- ▾	- ▾	- ▾
C117.5	3 ▾	1 ▾	1 ▾	2 ▾	3 ▾	1 ▾	1 ▾
Average	3.00	1.20	1.60	2.20	1.67	1.25	1.00

2. course name : C226

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7
C126.1	3 ▾	1 ▾	1 ▾	1 ▾	- ▾	1 ▾	1 ▾
C126.2	3 ▾	3 ▾	2 ▾	2 ▾	- ▾	2 ▾	1 ▾
C126.3	3 ▾	2 ▾	2 ▾	2 ▾	- ▾	2 ▾	1 ▾
C126.4	3 ▾	2 ▾	2 ▾	2 ▾	- ▾	2 ▾	1 ▾
C126.5	3 ▾	1 ▾	2 ▾	2 ▾	2 ▾	2 ▾	2 ▾
Average	3.00	1.80	1.80	1.80	2.00	1.80	1.20

3. course name : C332

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7
C232.1	3 ▾	3 ▾	3 ▾	3 ▾	2 ▾	2 ▾	2 ▾
C232.2	3 ▾	3 ▾	2 ▾	2 ▾	1 ▾	1 ▾	3 ▾
C232.3	3 ▾	3 ▾	2 ▾	2 ▾	1 ▾	2 ▾	2 ▾
C232.4	3 ▾	2 ▾	3 ▾	2 ▾	2 ▾	2 ▾	2 ▾
C232.5	3 ▾	3 ▾	3 ▾	2 ▾	2 ▾	2 ▾	2 ▾
Average	3.00	2.80	2.60	2.20	1.60	1.80	2.20

4 . course name : C342

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7
C242.1	3 ▾	2 ▾	2 ▾	2 ▾	1 ▾	2 ▾	2 ▾
C242.2	3 ▾	1 ▾	2 ▾	1 ▾	- ▾	2 ▾	1 ▾
C242.3	3 ▾	2 ▾	2 ▾	3 ▾	- ▾	2 ▾	3 ▾
C242.4	3 ▾	2 ▾	2 ▾	2 ▾	- ▾	2 ▾	3 ▾
C242.5	3 ▾	3 ▾	3 ▾	3 ▾	1 ▾	3 ▾	3 ▾
Average	3.00	2.00	2.20	2.20	1.00	2.20	2.40

5 . course name : C453

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7
C353.1	3 ▾	2 ▾	2 ▾	2 ▾	2 ▾	- ▾	2 ▾
C353.2	2 ▾	2 ▾	2 ▾	2 ▾	2 ▾	- ▾	2 ▾
C353.3	2 ▾	2 ▾	2 ▾	3 ▾	2 ▾	2 ▾	2 ▾
C353.4	3 ▾	1 ▾	3 ▾	2 ▾	- ▾	2 ▾	2 ▾
C353.5	1 ▾	1 ▾	2 ▾	1 ▾	- ▾	- ▾	1 ▾
Average	2.20	1.60	2.20	2.00	2.00	2.00	1.80

6 . course name : C462

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7
C362.1	3 ▾	1 ▾	1 ▾	1 ▾	- ▾	- ▾	2 ▾
C362.2	2 ▾	3 ▾	1 ▾	2 ▾	- ▾	- ▾	2 ▾
C362.3	3 ▾	3 ▾	3 ▾	2 ▾	2 ▾	2 ▾	2 ▾
C362.4	3 ▾	2 ▾	2 ▾	3 ▾	3 ▾	2 ▾	3 ▾
C362.5	2 ▾	3 ▾	3 ▾	3 ▾	3 ▾	3 ▾	2 ▾
Average	2.60	2.40	2.00	2.20	2.67	2.33	2.20

1 . Course Name : C217

Course	PSO1	PSO2
C117.1	3 ▾	- ▾
C117.2	3 ▾	1 ▾
C117.3	3 ▾	1 ▾
C117.4	3 ▾	1 ▾
C117.5	3 ▾	3 ▾
Average	3.00	1.00

2 . Course Name : C226

Course	PSO1	PSO2
C126.1	2 ▾	1 ▾
C126.2	3 ▾	1 ▾
C126.3	3 ▾	1 ▾
C126.4	3 ▾	1 ▾
C126.5	2 ▾	1 ▾
Average	2.60	1.00

3 . Course Name : C332

Course	PSO1	PSO2
C232.1	3 ▾	2 ▾
C232.2	3 ▾	2 ▾
C232.3	3 ▾	2 ▾
C232.4	3 ▾	2 ▾
C232.5	3 ▾	2 ▾
Average	3.00	2.00

4 . Course Name : C342

Course	PSO1	PSO2
C242.1	2 ▾	1 ▾
C242.2	3 ▾	1 ▾
C242.3	3 ▾	2 ▾
C242.4	- ▾	3 ▾
C242.5	2 ▾	2 ▾
Average	2.50	1.80

5 . Course Name : C453

Course	PSO1	PSO2
C353.1	3 ▾	2 ▾
C353.2	2 ▾	2 ▾
C353.3	1 ▾	3 ▾
C353.4	3 ▾	2 ▾
C353.5	3 ▾	2 ▾
Average	2.40	2.20

6 . Course Name : C462

Course	PSO1	PSO2
C362.1	1 ▾	- ▾
C362.2	2 ▾	2 ▾
C362.3	3 ▾	- ▾
C362.4	3 ▾	- ▾
C362.5	3 ▾	3 ▾
Average	2.40	2.50

3.1.3 - A Program level Course-PO matrix of all courses INCLUDING first year courses (10)

Course	PO1	PO2	PO3	PO4	PO5	PO6	PO7
C111	3.00	1.25	1.00	0.00	0.00	0.00	1.00
C112	1.75	0.00	0.00	0.00	0.00	2.00	1.80
C113	3.00	1.00	1.00	2.00	1.00	0.00	1.00
C114	2.80	2.00	2.00	2.00	1.25	2.00	2.40
C115	2.40	0.00	0.00	0.00	1.00	0.00	2.00
C116	3.00	2.00	0.00	1.00	3.00	1.00	2.00
C117	3.00	1.20	1.60	2.20	1.67	1.25	1.00
C121	2.00	1.80	1.60	1.00	1.80	1.25	1.40
C122	3.00	1.50	2.75	2.50	2.00	2.00	2.00
C123	0.00	0.00	0.00	0.00	0.00	0.00	0.00
C124	3.00	1.00	1.00	0.00	0.00	0.00	1.00
C125	2.60	2.20	2.40	2.80	1.60	1.40	2.20
C126	3.00	1.80	1.80	1.80	2.00	1.80	1.20
C127	3.00	2.20	2.40	2.40	1.50	2.80	1.60
C231	1.40	1.00	1.50	1.20	1.00	1.00	1.00
C232	3.00	2.80	2.60	2.20	1.60	1.80	2.20
C233	3.00	2.00	2.50	2.80	2.00	1.00	1.20
C234	3.00	2.00	2.00	2.40	1.66	2.40	1.40
C235	2.80	2.00	1.60	2.20	1.60	1.00	2.60
C236	2.60	2.25	2.00	2.40	1.60	1.60	2.20

C241	1.00	1.00	1.00	0.00	2.67	2.33	2.80
C242	3.00	2.00	2.20	2.20	1.00	2.20	2.40
C243	3.00	1.40	1.40	2.40	1.60	1.80	2.60
C244	2.50	2.67	2.67	3.00	1.67	1.00	1.25
C245	3.00	2.60	2.40	2.20	2.00	2.80	2.40
C246	3.00	2.80	2.60	2.20	1.60	1.80	2.20
C247	3.00	2.20	2.00	2.60	2.60	1.80	3.00
C351	2.80	2.00	1.80	1.25	1.25	2.40	2.60
C352	3.00	2.40	2.00	2.00	1.67	2.20	2.40
C353	2.20	1.60	2.20	2.00	2.00	2.00	1.80
C354	2.80	2.00	1.80	2.00	1.60	2.00	2.40
C355	3.00	2.20	2.00	2.40	1.00	1.33	3.00
C356	1.60	2.00	1.80	1.20	2.20	1.60	2.00
C357	3.00	2.00	1.40	1.60	1.80	1.40	3.00
C358	2.25	2.00	2.00	1.75	0.00	1.25	2.50
C361	3.00	2.20	1.80	1.60	1.40	2.20	2.80
C362	2.60	2.40	2.00	2.20	2.67	2.33	2.20
C363	3.00	1.00	2.33	1.80	2.00	2.00	2.00
C364	2.20	2.40	3.00	2.40	1.60	1.40	1.00
C365	3.00	2.00	2.00	2.00	1.75	2.00	2.75

3.1.3 - B Program level Course-PSO matrix of all courses INCLUDING first year courses

Course	PSO1	PSO2
C111	0	0
C112	0	0
C113	1.6	0
C114	2.5	2.5
C115	0	0
C116	3	1
C117	3	1
C121	2	0
C122	0	1
C123	0	0

C124	0	0
C125	2.6	2.6
C126	2.6	1
C127	2.2	2.6
C231	1.5	1
C232	3	2
C233	3	1.33
C234	2.8	2.6
C235	1.6	1
C236	0	3
C241	0	0
C242	2.5	1.8
C243	2.8	2.6
C244	3	2.5
C245	2.6	2.8
C246	3	1.4
C247	3	1
C351	2	2
C352	2.2	2
C353	2.4	2.2
C354	3	2.33
C355	0	3
C356	2.4	2.33
C357	2	2.2
C358	0	3
C361	2.4	2.8
C362	2.4	2.5
C363	2.2	2
C364	1	2
C365	3	3

3.2 Attainment of Course Outcomes (40)

3.2.1 Describe the assessment processes used to gather the data upon which the evaluation of Course Outcome is based (10)

We are using two methods for calculating attainment of course outcomes of each subject, So, direct course outcomes attainment calculated based on the Direct and Indirect Method. For calculation of final attainment 80% of direct COs attainment and 20% of indirect COs attainment components defined by the University for evaluating the performance of the students as shown in figure 3.2.1. Course exit survey form filled by student for indirect course outcomes attainment.

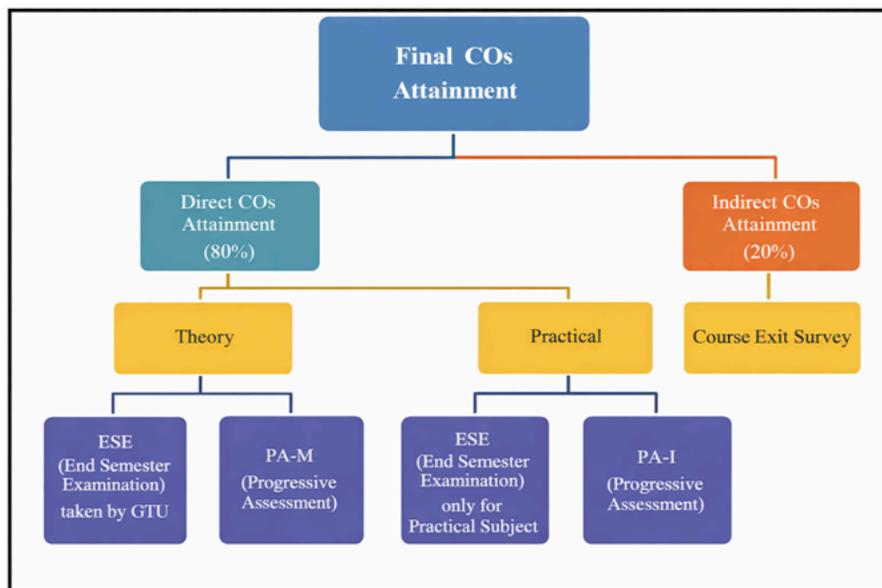


Fig 3.2.1: Structure and Weightage for CO attainment

The various assessment components and processes used to gather the data for the evaluation of Course Outcomes by direct method are described as follows. The maximum marks are summarized in the Table 3.2.1.1

Sr. No.	Component Name	Exam Conducted by	Marks	Remarks	Relevance of assessment
1	End Semester Exam (ESE)	University	70	Results are declared by university in form of Grades	ESE is intended for making a comprehensive assessment of the ability of students to understand / apply / anal

2	End Semester Practical Exam ESE(V) – PR	Department (Sem. 1 to 4) University (Sem. 5 to 6)	25/50 25/50	Results are declared by university in form of Grades	The comprehensive assessment associated with the practical aspects of the course is carried out at the end of t
3	Mid Semester Exam PA(M) + Micro Project	Department	30	Results are declared by university in form of Grades. Marks are provided by the department to the university	The Class test/Mid Semester Exam are conducted to assess the ability of students to understand / apply / anal At the end of the semester as per curriculum students need to submit the micro project as per concern subject
4	Internal PA(I)	Department	25/50	Results are declared by university in form of Grades. Marks are provided by the department to the university	Assesses the ability of students to apply the theoretical aspects in practice as an individual task or as team wo carried out at the end of each experiment conducted and is based on the inferences drawn, data collected, anal

Table B.3.2.1.1 Assessment Component Weightage

PA (M) Conducted by Institute.

PA (I) Conducted by Institute.

ESE (V) PR For 1 to 4 Semester Conducted by Institute and for 5 to 6 Semester conducted by university.

Various courses offered to the students of diploma Electronics and Communication as per GTU curriculum has three different evaluation schemes.

CO attainment is based on the internal and external assessment as per GTU scheme of examination. Depending upon nature, of course, maximum marks for various courses may be 50,100,150.

Course Outcomes Assessment Processes by Direct Method:

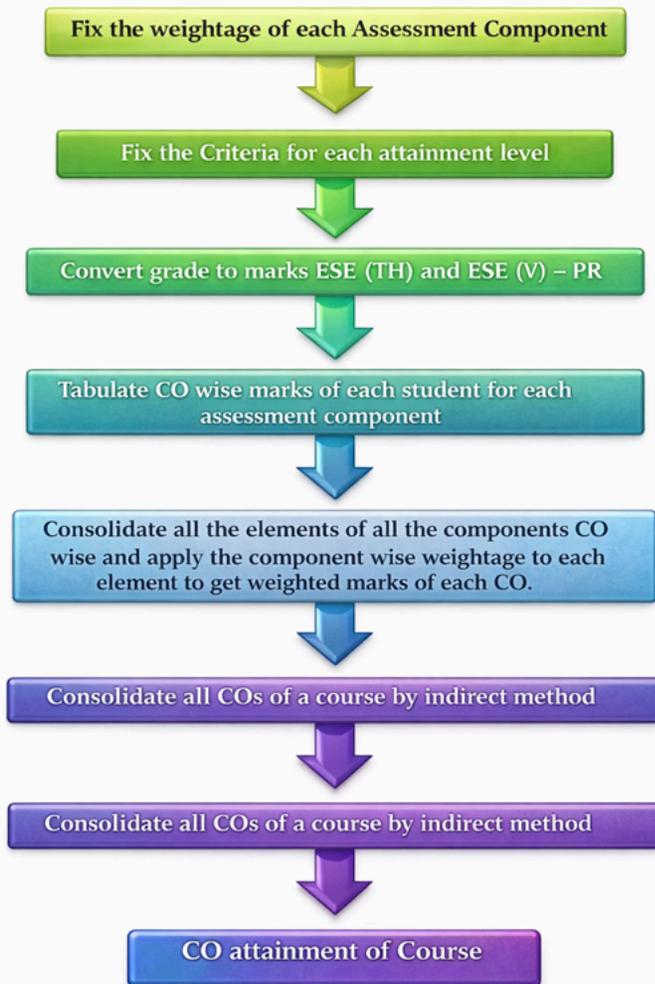


Figure 3.2.2 Steps of Course Outcomes Attainment Calculation

Step 1: Fix the weightage of each Assessment Component Prescribed by GTU for the courses offered in the program as per teaching scheme.

Our institute is affiliated to Gujarat Technological University. There are four major (Maximum) components defined by the University for evaluating the performance of the students. The number of components for the subject varies from 2 to 4. The component wise distribution of marks for various c

Subjects having Credit 3/4/5		
Component wise Weightage		
Component	Marks	% Weight
ESE	70	46.67
PA	30	20
ESE	25	16.67
PA	25	16.67
Total	150	100

(a)

Subjects having Credit 1/2/3		
Component wise Weightage (Practical Only)		
Component	Marks	% Weight
PA (I)	25/50	50/50
ESE (V) – PR	25/50	50/50
Total	50/100	100

(b)

Subjects having Credit 3/4		
Component wise Weightage (Theory only)		
Component	Marks	% Weight
ESE	70	70
PA (M)	30	30
Total	100	100

(c)

Table 3.2.1.2 Subjects with (a) 4 components, (b) 2 components & (c) 2 components as assessment tool

PA (M) Conducted by Institute.

PA (I) Conducted by Institute.

ESE (V) PR For 1 to 4 semester Conducted by Institute and for 5 to 6 semesters conducted by university.

ESE – Conducted by University

Step 2: Fix the Criteria for CO attainment Level.

At the end of each course, the CO attainment is evaluated for all curriculum components. The attainment level is set by the Course Coordinator with the reference of previous results. The attainment is made by the institute department has used the following method. Attainment level is taken as given below as considering student percentage fixed and varying the marks.

CO Attainment Level	1 st and 2 nd Year	3 rd Year
3	50% of students score more than 60% marks	50% of students score more than 70% marks
2	50% of students score more than 50% marks	50% of students score more than 60% marks
1	50% of students score more than 40% marks	50% of students score more than 50% marks

Table 3.2.1.3 CO attainment levels

At the end of each course CO attainment is evaluated for all courses. For setting up the attainment level our department has used the following method.

	2021 Entry Batch		2022 Entry Batch		2023 Entry Batch	
	% of Marks	Level	% of Marks	Level	% of Marks	Level
For First and Second-Year Courses	60	3	60	3	60	3
	50	2	50	2	50	2
	40	1	40	1	40	1

Table 3.2.1.4 Target Level for First and Second-Year Courses

	2021 Entry Batch		2022 Entry Batch		2023 Entry Batch	
	% of Marks	Level	% of Marks	Level	% of Marks	Level
For Last Year Courses	70	3	70	3	70	3
	60	2	60	2	60	2
	50	1	50	1	50	1

Table 3.2.1.5 Target Level for Final Year Courses

Step 3: Convert grade to marks ESE (TH).

For ESE (TH) component the grades from the GTU result are converted to marks as per table given below.

Mark Range	Grade	Mid value of range
85 to 100	AA	92.5
75 to 84	AB	80
65 to 74	BB	70
55 to 64	BC	60
45 to 54	CC	50

40 to 44	CD	42
35 to 39	DD	37
<35	FF	17

Table 3.2.1.6 Grade to Marks Conversion

Step 4: Tabulate CO wise marks of each student for each assessment component.

Each assessment component comprises of various elements which are as follows:

- Theory End Semester exam (70 marks)
- Theory Mid Semester Exam (30 marks, Comprise of Progressive Assessment Exam and micro project)
- Practical End Semester Viva (25/50 marks)
- Practical Progressive Assessment (25/50 marks)

GOVERNMENT POLYTECHNIC PALANPUR									
SUBJECT CODE & NAME :		4341105 - Linear Integrated Circuit(Analog Electronics)							
Sr. No	Enrollment No.	Name of Students	PA_M						
			ESE_TH	30					
			70	C245.1	C245.2	C245.3	C245.4	C245.5	TOTAL
			11	11	10	14	14	14	30
1	226260311002	LOKHANDWALA MAHAMMADTAUKIR TAIYAB	42	5.0	3.0	4.0	8.0	8.0	14
2	226260311003	PANCHAL SHUBH KIRANBHAI	25.9	5.5	4.5	6.0	8.0	9.5	17
3	226260311004	PATEL AKSHAR DILIPKUMAR	35	8.0	10.0	7.5	10.5	10.0	23
4	226260311007	PRAJAPATI HARSHOKUMAR SURESHBHAI	15.4	5.0	2.0	2.0	6.0	9.0	12
5	226260311008	PRAJAPATI KUNDAN HARIBHAI	25.9	7.0	3.0	2.0	7.0	7.0	13
6	226260311009	SUTHAR BHARAT VISHNUBHAI	35	8.0	7.0	7.0	7.5	10.5	20
7	226260311011	VAGDOJIYA SHUBHAM RASHMIKANT	15.4	4.5	4.5	3.0	6.5	7.0	13

GOVERNMENT POLYTECHNIC PALANPUR														
SUBJECT CODE & NAME :		4341105 - Linear Integrated Circuit(Analog Electronics)							NO OF STUDENTS :					
Sr. No	Enrollment No.	Name of Students	ESE_V					PA_I						
			25					25						
			C245.1	C245.2	C245.3	C245.4	C245.5	TOTAL	C245.1	C245.2	C245.3	C245.4	C245.5	TOTAL
			4	5	4	7	5	25	5	5	5	5	5	25
1	226260311002	LOKHANDWALA MAHAMMADTAUKIR TAIYAB	3.00	4.00	3.00	6.00	4.00	20	4.0	3.0	4.0	5.0	5.0	21.0
2	226260311003	PANCHAL SHUBH KIRANBHAI	3.00	4.00	3.00	5.00	4.00	19	3.0	4.0	4.0	4.0	5.0	20.0
3	226260311004	PATEL AKSHAR DILIPKUMAR	3.00	5.00	3.00	6.00	4.00	21	4.0	4.0	4.0	5.0	5.0	22.0
4	226260311007	PRAJAPATI HARSHOKUMAR SURESHBHAI	3.00	4.00	3.00	5.00	3.00	19	3.0	4.0	4.0	4.0	4.0	19.0
5	226260311008	PRAJAPATI KUNDAN HARIBHAI	3.00	4.00	3.00	5.00	4.00	19	4.0	4.0	4.0	4.0	4.0	20.0
6	226260311009	SUTHAR BHARAT VISHNUBHAI	3.00	5.00	3.00	6.00	4.00	21	4.0	4.0	4.0	5.0	5.0	22.0
7	226260311011	VAGDOJIYA SHUBHAM RASHMIKANT	3.00	4.00	3.00	6.00	4.00	20	3.0	4.0	4.0	4.0	5.0	20.0

Figure 3.2.3: Sample Overall Marksheet for course Linear Integrated Circuit(Analog Electronics)

For all relevant components for the subject CO wise marks of each student for each assessment component is tabulated. Sample for ESE TH component is shown in figure 3.2.4.

GOVERNMENT POLYTECHNIC PALANPUR										
SUBJECT CODE AND NAME :		4341105 - Linear Integrated Circuit(Analog Electronics)					NO OF STUDENTS:	7		
Sr. No	Enrollment No.	Name of Students	C245.1	C245.2	C245.3	C245.4	C245.5	OUT OF TOTAL(70)	OUT OF TOTAL (100)	
			20.00	20.00	25.71	22.86	11.43			
1	226260311002	LOKHANDWALA MAHAMMADTAUKIR TAIYAB	12	12	15.43	13.72	6.86	42	60	
2	226260311003	PANCHAL SHUBH KIRANBHAI	7.4	7.4	9.51	8.46	4.23	25.9	37	
3	226260311004	PATEL AKSHAR DILIPKUMAR	10	10	12.86	11.43	5.72	35	50	
4	226260311007	PRAJAPATI HARSHDKUMAR SURESHBHAI	4.4	4.4	5.66	5.03	2.51	15.4	22	
5	226260311008	PRAJAPATI KUNDAN HARIBHAI	7.4	7.4	9.51	8.46	4.23	25.9	37	
6	226260311009	SUTHAR BHARAT VISHNUBHAI	10	10	12.86	11.43	5.72	35	50	
7	226260311011	VAGDOJIYA SHUBHAM RASHMIKANT	4.4	4.4	5.66	5.03	2.51	15.4	22	

Figure 3.2.4: Sample Tabular form of CO wise marks for component ESE_TH for Linear Integrated Circuit(Analog Electro

Step 5: Consolidate all the elements of all the components CO wise and apply the component wise weightage to each element to get weighted marks of each CO.

Sample for CO1 is shown in Figure 3.2.5. Similarly, element wise consolidation for all COs of a course gives the attainment level of all the CO of a particular course.

GOVERNMENT POLYTECHNIC PALANPUR									
ATTAINMENT EVALUATION : C245.1									
Term Date:		18-12-2024		TO		28-04-2025			
Programme:		Diploma in Electronics and Communication							
Semester :		4							
Academic Year :		Feb 2024 TO May 2024							
Course Code and Name :		4341105 Linear Integrated Circuit(Analog Electronics)							
Course Coordinator :		Mr.R.C.Parmar							
Faculty Members Involved :		0.00							
No of Students in Class :		7							
C245.1 TARGET LEVEL		50		No of students		4			
Teaching scheme		ESE_TH	PA_M	ESE_V	PA_I	CO Attainment		No. of students	
Component weightage		46.67	20.00	16.67	16.67	3.0	3		
Attainment level		3	2	1	0	2.0	1		
Criteria		Marks >= 60%	50%>Mark <= 60%	50%>Mark <= 40%	40% > Marks	1.0	3		
						0.0	0		
						Total	7		
						>= 2 (in 2)	57.1		
COMPONENT WEIGHTAGE	ESE_TH	PA_M	ESE_V	PA_I	TOTAL	TOTAL	% OF	ATTAINME	
	20.00	18.33	20.00	16.00	74.33	19.00			
Sr.	Enrollment								
1	226260311002	12	8	15	13	48	11.9	62.63	3
2	226260311003	7	9	15	10	41	3.39	49.42	1
3	226260311004	10	13	15	13	51	11.37	63.00	3
4	226260311007	4	8	15	10	37	7.82	41.16	1
5	226260311008	7	12	15	13	47	10.42	54.84	2
6	226260311009	10	13	15	13	51	11.37	63.00	3
7	226260311011	4	8	15	10	37	7.65	40.26	1

Figure 3.2.5: Sample consolidation of element wise marks for CO1 For Linear Integrated Circuit(Analog Electronics

We have taken students records for a particular subject as a sample data. In above figure column 3 to 6 shown marks gained by each student in different assessment component.

Total weightage marks of each component and for each student calculated by equation,

Total Weightage Marks = $\sum \text{Weightage of component} \times \text{Marks obtained in component}$

Max weightage marks of C245.1 = $(20 \times 0.4667) + (18.33 \times 0.20) + (20 \times 0.1667) + (16 \times 0.1667)$

= 19

Marks obtained by student (Sr.No.-1) in C245.1

$$= (12 \times 0.4667) + (8.33 \times 0.20) + (12.8 \times 0.1667) + (15 \times 0.1667)$$

= 11.90

Percentage weightage marks obtained by student in C245.1 =

$$\frac{\text{Marks obtained by a student in C245.1}}{\text{Max marks of C245.1}} * 100 = \frac{11.90}{19} = 62.63\%$$

Percentage weightage marks obtained by each student is calculated. Student wise CO attainment calculation criteria are given in table 3.2.5. As per that table student 226260311002 obtained 62.63% in C245.1, so attainment in C245.1 is 1.

CO Attainment Level	Target Attainment Level	Percentage for First & Second Year	Percentage for Final Year
3	2	$\geq 60\%$	$\geq 70\%$
2		≥ 50 and $\leq 60\%$	$\geq 60\%$ and $\leq 70\%$
1		$\geq 40\%$ and $\leq 50\%$	$\geq 50\%$ and $\leq 60\%$
0		$< 40\%$	$< 50\%$

Table 3.2.1.7 Student wise CO calculation criteria

Step 6: Consolidate all COs of a course by direct method.

For each student CO wise attainment calculated. After that we make one summary sheet of all CO Attainment as shown in figure 3.2.6. From that, average value of each CO is considered as direct CO attainment for final at

GOVERNMENT POLYTECHNIC PALANPUR

Term Date:	18-12-2024	TO	28-04-2025					
Programme :	Diploma in Electronics and Communication							
Semester :	4							
Academic Year :	Feb 2024 TO May 2024							
Course Code and Name :	4341105 Linear Integrated Circuit(Analog Electronics)							
Course Coordinator :	Mr.R.C.Parmar							
Faculty Members Involved :	0.00							
No of Students in Class :	7.00							
AVERAGE ATTAINM	2	1.86	1.71	2.14	2.57	0	2.056	
Maximum weighted Marks -->	C245.1	C245.2	C245.3	C245.4	C245.5		TOTAL	
	19.00	19.67	21.33	23.33	16.67	0.00	100.00	
Sr. No	Roll No.	CO wise attainment level						Student
1	226260311002	3	2	3	3	3	0	2.3
2	226260311003	1	2	2	2	3	0	1.48
3	226260311004	3	3	3	3	3	0	2.5
4	226260311007	1	1	0	1	2	0	0.62
5	226260311008	2	1	1	2	2	0	1.26
6	226260311009	3	3	3	3	3	0	2.5
7	226260311011	1	1	0	1	2	0	0.62

Figure 3.2.6: Sample summary sheet of all COs attainment for Linear Integrated Circuit(Analog Electronics)

Step 7: Consolidate all COs of a course by indirect method.

Course Exit Survey:

A course exit survey is conducted via hard copy for students who have completed the particular course. The Course outcome relevant questionnaires are asked in Course Exit Survey to evaluate the contribution of Course to corrective actions to improve. Sample of Course exit survey is shown in below figure:



Government Polytechnic, Palanpur



Electronics and Communication Department

Course Exit Survey

Course: Linear Integrated Circuit (Analog Electronics) [4341105]

Enrollment Number: _____ Date: ___/___/_____

- 1) Are you able to understand the key parameters (like gain and bandwidth) of negative feedback amplifier?
- 1.Excellent 2.Very Good 3.Good 4.Average 5.Poor
- 2) Are you able to measure the frequency, amplitude, and waveform shape of oscillator outputs?
- 1.Excellent 2.Very Good 3.Good 4.Average 5.Poor
- 3) Are you able to describe the advantages and disadvantages of each type of power amplifier in practical applications?
- 1.Excellent 2.Very Good 3.Good 4.Average 5.Poor
- 4) Are you able to observe the output waveform of different circuits developed using IC 741 operational amplifier?
- 1.Excellent 2.Very Good 3.Good 4.Average 5.Poor
- 5) Are you able to design multivibrator circuits (astable, monostable, bistable) using the 555 timer IC?
- 1.Excellent 2.Very Good 3.Good 4.Average 5.Poor

Figure: 3.2.7 Course Exit Survey

Based on Course Exit survey data received from student the co-relation has been established weightage between 1 to 3 as per need for calculating attainment of CO. So, we have established a co-relation for the values Excellence the student is compiled as shown in figure and average of COs used for final attainment calculation.

Step 8: Determine the overall attainment level of the course.

80 % weightage is given to direct assessment and 20 % to indirect assessment for overall CO Calculation.

For Example:

Direct Attainment Value of C245.1 = 2

Indirect Attainment Value of C245.1 = 2.29

Overall Attainment level of C245.1 = $(2.0 \times 0.8) + (2.29 \times 0.2) = 2.06$

Final overall attainment level of each COs for Linear Integrated Circuit (Analog Electronics) is calculated as shown in table 3.2.1.8.

	C245.1	C245.2	C245.3	C245.4	C245.5
Direct COs Attainment	2	1.86	1.71	2.14	2.57
Indirect COs Attainment	2.29	1.86	2.29	2.36	2.21

Final COs Attainment (80% of Direct Attainment + 20% of Indirect Attainment)	2.06	1.86	1.83	2.18	2.50
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Table 3.2.1.8: Overall Attainment Level Calculation for Linear Integrated Circuit (Analog Electronics)

3.2.2 Record the attainment of Course Outcome of all courses with respect to set attainment levels (30)

Sr. No.	Sem	Course Code	Course Name	CO1	CO2	CO3	CO4	CO5	CO6	Average CO
1		C111	Mathematics	0.86	0.67	1.11	0.98	0.90	-	0.90
2		C112	Communication Skills in English	2.42	2.43	2.5	2.78	2.6	-	2.54
3		C113	Physics	1.98	1.67	1.57	1.62	1.54	-	1.67
4	1	C114	Basics of Information and Communication Technology	2.68	2.71	2.71	2.70	2.74	-	2.71
5		C115	Sports and Yoga	2.93	2.92	2.85	2.84	2.88	-	2.89
6		C116	Fundamentals of Electrical Engineering	1.61	1.24	2.66	2.09	-	-	1.90
7		C117	Fundamentals of Electronics	0.64	1.4	1.72	1.79	1.43	-	1.39

Sr. No.	Sem	Course Code	Course Name	CO1	CO2	CO3	CO4	CO5	CO6	Average CO
8	2	C121	Environment and Sustainability	1.29	1.91	1.67	1.99	1.88	-	1.75
9		C122	Engineering Drawing and Computer Aided Design	2.82	2.83	2.77	2.84	2.63	-	2.77
10		C123	Indian Constitution	2.87	2.77	2.86	2.87	2.83	-	2.84
11		C124	Engineering Mathematics	1.54	0.96	1.52	1.41	1.33	-	1.35
12		C125	Electronics Workshop	2.85	2.82	2.61	2.75	2.70	-	2.69
13		C126	Digital Electronics	2.4	2.28	2	2	2.13	-	2.16
14		C127	Electronic Circuits & Applications	1.68	1.47	1.87	2.01	1.76	-	1.76
15	3	C231	Summer Internship-I	2.85	2.48	2.68	2.37	2.56	-	2.59
16		C232	Electronic Circuits & Networks	1.53	1.75	1.52	1.14	1.69	-	1.52
17		C233	Electronic Measurements & Instruments	1.32	1.03	1.28	1.27	1.43	-	1.27
18		C234	Industrial Electronics	1.38	1.39	1.43	1.36	1.12	-	1.34
19		C235	Principle of Electronic Communication	1.69	1.29	1.67	1.25	1.56	-	1.47
20		C236	Programming In C	1.27	1.29	1.47	1.68	1.54	-	1.46
21	4	C241	Integrated Personality Development Course	2.90	2.87	2.87	2.88	2.88	2.88	2.88
22		C242	Microprocessor & Microcontroller	1.90	2.20	2.31	2.17	2.10	-	2.14
23		C243	Digital Communication	2.55	2.38	2.80	2.36	2.59	-	2.54
24		C244	Circuit Design Tools	2.80	2.80	2.90	2.77	-	-	2.82
25		C245	Linear Integrated Circuit(Analog Electronics)	1.87	1.68	1.69	1.70	2.03	-	1.8
26		C246	Antenna & Wave Propagation	2.63	2.68	2.57	2.77	2.87	-	2.70

Sr. No.	Sem	Course Code	Course Name	CO1	CO2	CO3	CO4	CO5	CO6	Average CO
27		C247	Consumer Electronics & Maintenance	1.75	1.29	1.40	1.75	1.31	-	1.5
28	5	C351	Entrepreneurship and Start-ups	1.90	2.06	1.74	1.16	1.36	-	1.64
29		C352	Embedded System	2.20	1.94	2.58	2.34	2.68	-	2.35
30		C353	Microwave and Radar Communication	1.70	2.72	2.10	0.86	1.74	-	1.82
31		C354	Mobile & Wireless Communication	1.72	2.84	2.74	2.50	2.68	-	2.50
32		C355	Software Practices	2.82	2.88	2.80	2.88	2.86	-	2.85
33		C356	Summer Internship-II	2.84	2.84	2.90	2.82	2.84	-	2.85
34		C357	Electronics and Communication Engineering Project-I	2.68	2.62	2.72	2.72	2.66	-	2.68
35		C358	OOPS & Python Programming	2.68	2.18	2.04	1.70	-	-	2.15
36		C361	Computer Networks & Data Communication	2.80	2.88	2.85	2.23	2.38	-	2.63
37	C362	VLSI	1.78	1.63	2.90	1.30	2.63	-	2.05	
38	6	C363	Electronics & Communication Engineering Project-II	2.83	2.75	2.93	2.88	2.83	-	2.84
39		C364	Android App Development	2.83	2.75	2.93	2.88	2.83	-	2.84
40		C365	Renewable Energy & Emerging Trends in Electronics	2.88	2.63	2.88	2.85	-	-	2.81

Table 3.2.2.1 Attainment of Course outcome of Batch 2021-2024

Sr. No.	Sem	Course Code	Course Name	CO1	CO2	CO3	CO4	CO5	CO6	Average CO
1		C111	Mathematics	1.59	1.15	1.58	1.59	1.55	-	1.49
2		C112	Communication Skills in English	1.6	1.55	1.6	2.19	2.1	-	1.8
3		C113	Physics	2.14	2.34	2.06	2.07	1.37	-	1.90
4	1	C114	Basics of Information and Communication Technology	2.68	2.61	2.78	2.69	2.76	-	2.71
5		C115	Sports and Yoga	2.87	2.78	2.85	2.87	2.78	-	2.83
6		C116	Fundamentals of Electrical Engineering	2.17	2.11	2.42	2.33	-	-	2.26
7		C117	Fundamentals of Electronics	1.84	1.80	2.09	2.16	-	-	1.97
8		C121	Environment and Sustainability	1.78	1.68	1.60	1.79	1.68		1.71
9		C122	Engineering Drawing and Computer Aided Design	2.02	2.06	2.04	2.08	2.00	-	2.04
10		C123	Indian Constitution	2.65	2.54	2.43	2.21	2.59	-	2.48
11	2	C124	Engineering Mathematics	1.92	1.66	2.1	2.1	1.98	-	1.95
12		C125	Electronics Workshop	2.60	2.57	2.51	2.44	2.24	-	2.35
13		C126	Digital Electronics	2.42	2.09	2	2.14	2.29	-	2.19
14		C127	Electronic Circuits & Applications	1.62	1.70	2.11	2.04	1.88	-	1.87
15	3	C231	Summer Internship-I	2.57	2.45	2.68	2.53	2.57	-	2.56
16		C232	Electronic Circuits & Networks	2.06	2.17	1.95	1.80	2.06	-	2.01
17		C233	Electronic Measurements & Instruments	2.28	1.86	2.15	2.05	2.20	-	2.11
18		C234	Industrial Electronics	1.73	1.84	1.58	1.60	1.63	-	1.67
19		C235	Principle of Electronic Communication	2.49	1.59	2.37	1.36	2.05	-	1.97

Sr. No.	Sem	Course Code	Course Name	CO1	CO2	CO3	CO4	CO5	CO6	Average CO
20		C236	Programming In C	1.83	1.60	0.78	1.38	1.69	-	1.46
21		C241	Integrated Personality Development Course	2.87	2.88	2.91	2.91	2.89		2.89
22		C242	Microprocessor & Microcontroller	2.62	2.76	2.32	2.14	2.23	-	2.47
23		C243	Digital Communication	2.86	2.46	2.41	2.47	2.43	-	2.53
24	4	C244	Circuit Design Tools	2.80	2.80	2.90	2.77	-	-	2.82
25		C245	Linear Integrated Circuit(Analog Electronics)	2.06	1.86	1.83	2.18	2.50	-	2.08
26		C246	Antenna & Wave Propagation	2.63	2.68	1.40	2.77	2.87	-	1.61
27		C247	Consumer Electronics & Maintenance	1.75	1.29	1.40	1.75	1.31	-	1.5
28		C351	Entrepreneurship and Start-ups	2.01	1.57	1.59	1.53	1.33	-	1.6
29		C352	Embedded System	1.99	1.71	2.47	2.56	2.67	-	2.28
30		C353	Microwave and Radar Communication	2.51	2.32	2.51	2.18	2.61	-	2.43
31		C354	Mobile & Wireless Communication	2.21	1.99	2.51	2.23	2.30	-	2.25
32	5	C355	Software Practices	2.84	2.77	2.77	2.84	2.83	-	2.81
33		C356	Summer Internship-II	2.71	2.71	2.76	2.70	2.71	-	2.72
34		C357	Electronics and Communication Engineering Project-I	2.77	2.89	2.87	2.84	2.89	-	2.85
35		C358	OOPS & Python Programming	2.83	2.36	2.50	2.27	-	-	2.52
36	6	C361	Computer Networks & Data Communication	2.54	2.53	5.63	2.50	1.45	-	2.33
37		C362	VLSI	2.67	1.50	1.74	2.68	2.46	-	2.21
38		C363	Electronics & Communication Engineering Project-II	2.73	2.72	2.84	2.86	2.84	-	2.8

Sr. No.	Sem	Course Code	Course Name	CO1	CO2	CO3	CO4	CO5	CO6	Average CO
39		C364	Android App Development	2.71	2.67	2.74	2.74	2.70	-	2.71
40		C365	Renewable Energy & Emerging Trends in Electronics	2.77	2.82	2.79	2.58	-	-	2.74

Table 3.2.2.2 Attainment of Course outcome of Batch 2022-2025

Sr. No.	Sem	Course Code	Course Name	CO1	CO2	CO3	CO4	CO5	CO6	Average CO
1		C111	Mathematics	1.71	1.28	1.95	1.73	1.81	-	1.70
2		C112	Communication Skills in English	2.63	2.54	2.63	2.76	2.84	-	2.68
3		C113	Physics	2.63	2.66	2.63	2.07	1.81	-	2.36
4	1	C114	Basics of Information and Communication Technology	2.81	2.83	2.84	2.90	2.81	-	2.84
5		C115	Sports and Yoga	2.84	2.86	2.87	2.90	2.83	-	2.86
6		C116	Fundamentals of Electrical Engineering	2.15	1.85	2.43	2.15	-	-	2.15
7		C117	Fundamentals of Electronics	2.25	2.14	2.35	2.29	0.46	-	1.90
8		C121	Environment and Sustainability	1.33	1.46	1.7	1.41	1.21	-	1.42
9		C122	Engineering Drawing and Computer Aided Design	2.81	2.83	2.84	2.9	2.81	-	2.83
10		C123	Indian Constitution	2.8	2.83	2.84	2.9	2.81	-	2.84
11	2	C124	Engineering Mathematics	1.37	1.17	1.37	1.38	1.35	-	1.33
12		C125	Electronics Workshop	2.81	2.81	2.79	2.86	2.86	-	2.83
13		C126	Digital Electronics	2.76	2.50	2.54	2.37	2.73	-	2.58
14		C127	Electronic Circuits & Applications	1.73	1.70	1.74	1.68	1.93	-	1.76

Sr. No.	Sem	Course Code	Course Name	CO1	CO2	CO3	CO4	CO5	CO6	Average CO
15	3	C231	Summer Internship-I	2.83	2.72	2.97	2.82	2.88	-	2.84
16		C232	Electronic Circuits & Networks	2.03	2.32	2.30	1.88	2.08	-	2.12
17		C233	Electronic Measurements & Instruments	2.59	1.91	2.25	2.17	2.17	-	2.22
18		C234	Industrial Electronics	2.25	2.03	2.28	2.24	2.07	-	2.17
19		C235	Principle of Electronic Communication	2.43	1.78	2.83	1.75	2.62	-	2.28
20		C236	Programming In C	1.88	1.93	1.35	1.84	2.59	-	1.92
21		4	C241	Integrated Personality Development Course	2.87	2.88	2.91	2.91	2.89	2.89
22	C242		Microprocessor & Microcontroller	1.90	2.20	2.31	2.17	2.10	-	2.14
23	C243		Digital Communication	2.55	2.38	2.80	2.36	2.59	-	2.54
24	C244		Circuit Design Tools	2.80	2.80	2.90	2.77	-	-	2.82
25	C245		Linear Integrated Circuit(Analog Electronics)	2.48	2.57	2.03	2.60	2.88	-	2.51
26	C246		Antenna & Wave Propagation	2.63	2.68	2.57	2.77	2.87	-	2.70
27	C247		Consumer Electronics & Maintenance	2.42	2.38	2.40	2.36	2.71	-	2.45
28	5	C351	Entrepreneurship and Start-ups	2.80	2.43	1.83	2.68	1.95	-	2.34
29		C352	Embedded System	1.85	2.28	2.50	2.78	2.68	-	2.42
30		C353	Microwave and Radar Communication	2.40	2.83	2.50	2.98	2.80	-	2.70
31		C354	Mobile & Wireless Communication	2.40	2.43	2.70	2.98	2.80	-	2.66
32		C355	Software Practices	2.83	2.83	2.85	2.88	2.80	-	2.84
33		C356	Summer Internship-II	2.83	2.83	2.85	2.88	2.80	-	2.85

Sr. No.	Sem	Course Code	Course Name	CO1	CO2	CO3	CO4	CO5	CO6	Average CO
34		C357	Electronics and Communication Engineering Project-I	2.85	2.88	2.93	2.78	2.80	-	2.85
35		C358	OOPS & Python Programming	2.60	2.43	2.10	2.58	-	-	2.43

Table 3.2.2.3 Attainment of Course outcome of Batch 2023-2026

3.3 Attainment of Program Outcomes and Program Specific Outcomes (40)

3.3.1 Describe assessment tools and processes used for assessing the attainment of each POs and PSOs as mentioned in Annexure 1 (10)

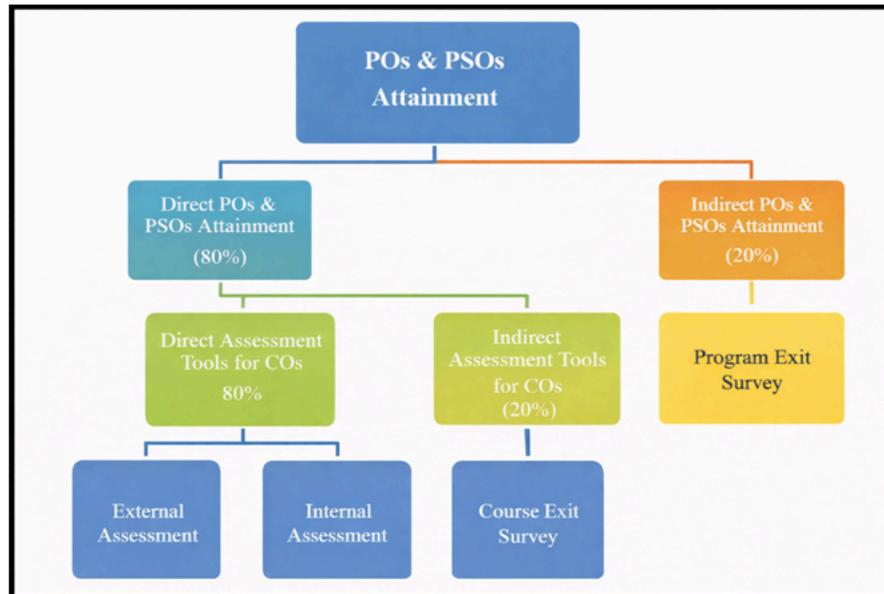


Fig. 3.3.1.1 Structure for POs & PSOs Attainment

The assessment tools and processes used for measuring the attainment of each of the Program Outcomes and Program Specific Outcomes consist of direct and indirect attainment. For direct attainment process of POs consists of assessment tool consists of Internal and External assessment of the student as mentioned in above figure. The indirect assessment of COs is carried out by course exit survey.

Direct POs & PSOs Attainment:

Each COs of a particular course is mapped with the POs and PSOs with attainment level 1, 2, and 3. The value of particular COs attainment and COs POs PSOs mapping is used to derive the attainment of particular POs and P

Likewise, attainment of all POs and PSOs with respect to all COs are derived and tabulated in COs-POs-PSOs attainment matrix.

The last row of COs-POs-PSOs attainment matrix indicates weighted average of all COs attainment for particular POs and PSOs, which in turns, represents POs and PSOs attainment for a particular course. A sample COs-POs-PSOs attainment matrix is given below.

GOVERNMENT POLYTECHNIC PALANPUR										
Term Date:	18-12-2024	TO	28-04-2025							
Programme :	Diploma in Electronics and Communicati									
Semester :	4									
Academic Year :	Feb 2024 TO May 2024									
Course Code and Name :	4341105 Linear Integrated Circuit(Analog El									
Course Coordinator :	Mr.R.C.Parmar									
Faculty Members Involve	0.00									
No of Students in Class	7.00									
CO	AVERAGE	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
C245.1	2.06	3	2	2	2	2	2	2	2	2
		2.1	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
C245.2	1.86	3	3	2	2	2	3	2	3	3
		1.3	1.3	1.2	1.2	1.2	1.3	1.2	1.3	1.3
C245.3	1.83	3	3	2	2	2	3	3	2	3
		1.8	1.8	1.2	1.2	1.2	1.8	1.8	1.2	1.8
C245.4	2.18	3	2	3	2	2	3	3	3	3
		2.2	1.5	2.2	1.5	1.5	2.2	2.2	2.2	2.2
C245.5	2.50	3.0	3.0	3.0	3.0	2.0	3.0	2.0	3.0	3.0
		2.5	2.5	2.5	2.5	1.7	2.5	1.7	2.5	2.5
		-	-	-	-	-	-	-	-	-
		-	-	-	-	-	-	-	-	-
Attainment	2.08	1.80	1.70	1.56	1.39	1.95	1.66	1.83	1.95	

Figure 3.3.1.2: Sample COs/POs/PSOs Direct Attainment of Course Linear Integrated Circuit (Analog Electronics)

Course attainment value for each POs and PSOs is then tabulated for all the courses of the program to measure the direct attainment value for POs and PSOs. Average of all course POs & PSOs is considered as direct attainmer

Indirect POs & PSOs Attainment:

Indirect assessment includes program exit survey. These are based on a questionnaire which directly resembles with POs and PSOs. It is taken from passed out students from each batch through hard copy. The format of progra



Government Polytechnic, Palampur
Electronics and Communication Department

Program Exit Survey

Enrollment Number: _____ Date: ___/___/____

- 1) PO1 - Have you attained the ability to apply knowledge of basic mathematics, science and engineering fundamentals and Electronics and Communication specialization to solve engineering problems? (Basic and discipline specific knowledge).
1.Excellent 2.Very Good 3.Good 4.Average 5.Poor
- 2) PO2 - Will you be able to identify and analyze well-defined engineering problems using codified standard methods? (Problem analysis).
1.Excellent 2.Very Good 3.Good 4.Average 5.Poor
- 3) PO3 - Will you be able to design solutions for well-defined technical problems and assist with the design of systems components or processes to meet specified needs? (Design and development of solutions).
1.Excellent 2.Very Good 3.Good 4.Average 5.Poor
- 4) PO4 - Will you be able to apply modern engineering tools and appropriate technique to conduct standard tests and measurements? (Engineering Tools, experimentation and testing).
1.Excellent 2.Very Good 3.Good 4.Average 5.Poor
- 5) PO5 - Will you be able to produce technical solution in global and societal context and get an understanding of professional and ethical responsibilities and act accordingly in all situations? (Engineering practices for society, sustainability and environment)
1.Excellent 2.Very Good 3.Good 4.Average 5.Poor
- 6) PO6 - Will you be able to function effectively as an individual, as a team member, and in multidisciplinary environment teams? (Project Management).
1.Excellent 2.Very Good 3.Good 4.Average 5.Poor
- 7) PO7 - Would be able to improve self through continuous professional development, and independent and lifelong learning in the context of technological changes? (Life-long learning).
1.Excellent 2.Very Good 3.Good 4.Average 5.Poor
- 8) PSO1 - Are you able to develop Developed proficiency in installation, maintenance and troubleshooting of electronics and communication systems?
1.Excellent 2.Very Good 3.Good 4.Average 5.Poor
- 9) PSO2 - Are you able to customized solution of real-life problems using hardware and software?
1.Excellent 2.Very Good 3.Good 4.Average 5.Poor

Figure 3.3.1.3: Sample of Program exit survey form

The responses are analyzed and transformed into Weightage of 1 to 5 as per need for calculating attainment of POs & PSOs. So, we have established a co-relation for the values Excellent, Very Good, Good, Average and Poor in figure 3.3.1.4. Average of each POs & PSOs is taken for overall attainment of POs & PSOs calculation.

PO	Total Count in received feedback									
	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2	
Excellent (5)	2	3	1	0	0	2	2	0	2	
Very Good (4)	2	1	4	3	2	4	1	3	2	
Good (3)	3	3	2	3	2	1	4	3	3	
Average (2)	0	0	0	1	3	0	0	1	0	
Poor (1)	0	0	0	0	0	0	0	0	0	

PO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
LEVEL	2.35	2.42	2.5	2.5	2.54	2.54	2.46	2.62	2.42

Figure 3.3.1.4: Sample Summary Sheet of Indirect POs & PSOs Attainment for Batch 2022-25

Overall attainment of POs and PSOs:

The overall attainment for each POs and PSOs is derived as per weightage of direct and indirect assessment. To measure the attainment of POs and PSOs, direct assessment has 80% weightage and indirect assessment has 20% indirect attainment in measuring overall attainment of POs and PSOs.

	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PSO1	PSO2
Direct Attainment of POs/PSOs	1.96	1.38	1.42	1.50	1.30	1.31	1.51	1.90	1.71
Indirect Attainment of POs/PSOs	2.43	2.50	2.43	2.08	1.72	2.58	2.36	2.08	2.43
Final Attainment of POs/PSOs (80% Direct + 20% Indirect)	2.05	1.60	1.62	1.62	1.38	1.56	1.68	1.90	1.71

Table 3.3.1.1: Sample Overall attainment of POs and PSOs For Batch 2022-2025

3.3.2 Provide results of evaluation of each PO & PSO (30)

PO Attainment

Course	PO1	PO2	PO3	PO4	PO5
C111	1.49	0.62	0.48	0	0
C112	1.11	0	0	0	0
C113	2	0.72	0.67	1.33	0.61
C114	2.53	1.81	1.80	1.81	1.13
C115	2.26	0	0	0	0.94
C116	2.26	1.43	0	0.74	2.33
C117	1.58	0.65	0.93	1.18	0.43
C121	1.14	1.02	0.91	0.56	1.03
C122	2.05	1.02	1.88	1.71	1.37

C123	0	0.83	0.83	0	1.66
C124	1.95	0.65	0.65	0	0
C125	2.15	1.80	1.97	2.31	1.30
C126	2.19	1.28	1.30	1.30	1.52
C127	1.87	1.38	1.51	1.48	0.97
C231	1.20	0.85	1.29	1.03	0.85
C232	2.01	1.89	1.74	1.48	1.07
C233	2.11	1.40	1.78	1.96	1.30
C234	1.40	0.93	0.93	1.12	0.71
C235	1.83	1.26	1.09	1.42	1.01
C236	1.22	0.97	0.85	1.10	0.74
C241	0.97	0.97	0.97	0	2.58
C242	1.77	1.15	1.29	1.27	0.61
C243	2.32	1.08	1.07	1.86	1.24
C244	2.35	1.91	1.90	2.76	1.09
C245	2.15	1.86	1.76	1.61	1.44
C246	2.50	2.34	2.17	1.85	1.34
C247	1.60	1.19	1.08	1.38	1.38
C351	1.50	1.03	0.97	0.63	0.63
C352	2.28	1.87	1.62	1.62	1.32
C353	1.76	1.30	1.76	1.61	1.63
C354	2.10	1.52	1.37	1.52	1.20
C355	2.81	2.07	1.88	2.26	0.95
C356	1.45	1.81	1.63	1.09	2
C357	2.85	1.90	1.33	1.52	1.71
C358	1.90	1.65	1.63	1.09	2
C361	2.33	1.65	1.46	1.22	1.04
C362	1.95	1.68	1.48	1.64	2.10
C363	2.72	0.91	2.14	1.67	1.85
C364	1.99	2.17	2.71	2.17	1.45
C365	2.74	1.81	1.81	1.81	1.60

PO Attainment Level

Course	PO1	PO2	PO3	PO4	
Direct Attainment	1.96	1.38	1.42	1.50	1.30
InDirect Attainment	2.43	2.50	2.43	2.08	1.72
PO Attainment	2.05	1.60	1.62	1.62	1.38

PSO Attainment

Course	PSO1	
C111	0	0
C112	0	0
C113	1.06	0
C114	2.24	2.34
C115	0	0
C116	2.26	0.75
C117	1.58	0.67
C121	1.23	0
C122	0	0.69
C123	0	0
C124	0	0
C125	2.15	2.15
C126	1.87	0.73
C127	1.87	0.73
C231	1.29	0.85
C232	2.01	1.34
C233	2.11	0.91
C234	1.30	1.22
C235	1.08	0.66
C236	0	1.46
C241	0	0
C242	1.54	1.01
C243	2.15	2.01

C244	2.48	2.35
C245	1.89	2.02
C246	2.50	1.16
C247	1.60	0.53
C351	0	0
C352	1.75	1.61
C353	1.94	1.79
C354	2.25	1.71
C355	0	2.81
C356	2.18	2.12
C357	1.90	2.09
C361	1.82	2.16
C362	1.93	1.73
C363	2.05	1.87
C364	0.90	1.81
C365	2.74	2.70

PSO Attainment Level

Course	PSO1
Direct Attainment	1.85
InDirect Attainment	2.08
PSO Attainment	1.90

4 STUDENTS' PERFORMANCE (200)

Intake Information:

Table 4.1

Item	2025-26 (CAY)	2024-25 (CAYm1)	2023-24 (CAYm2)	
Sanctioned intake strength of the program((N)	30	30	30	30
Total number of students, admitted through state level counseling (N1)	17	15	7	11

Number of students, admitted through Institute level quota (N2)	0	0	0	0
Number of students, admitted through Lateral Entry (N3)	0	0	1	1
Total number of students admitted in the programme(N1 + N2 + N3)	17	15	8	12

Table 4.2

Year of entry	Total No of students admitted in the program (N1 + N2 + N3)	Number of students who have s	
		I year	
2025-26	17	0	0
2024-25	15	2	0
2023-24	8	3	1
2022-23 (LYG)	12	3	0
2021-22 (LYGm1)	19	1	1
2020-21 (LYGm2)	6	4	2

Table 4.3

Year of entry	Total No of students admitted in the program(N1 + N2 + N3)	Number of students who have s	
		I year	[Total
2025-26	17	0	0
2024-25	15	8	0
2023-24	8	6	4
2022-23 (LYG)	12	9	7
2021-22 (LYGm1)	19	13	5
2020-21 (LYGm2)	6	6	5

4.1 Enrolment Ratio (20)

	N (From Table 4.1)	N1 + N2 (From Table 4.1)	
2025-26	30	17	56.67

2024-25	30	15	50.00
2023-24	30	7	23.33

Average [(ER1 + ER2 + ER3) / 3] : 43.33

Assessment : 0.00

4.2 Success Rate in the stipulated period of the program (60)

4.2.1 Success rate without backlogs in any year of study (40)

Item	Last Year Graduate (2022-23)	Last Year Graduate Minus 1 Batch (2021-22)
Total Number of students (X) (admitted through state level counseling + admitted through Institute on Level quota + admitted through Lateral entry) (N1 + N2 + N3)	12.00	19.00
Number of students who have graduated without backlogs in the stipulated period (Y)	0.00	1.00
Success Index [SI = Y / X]	0.00	0.05

Average SI [(SI1 + SI2 + SI3) / 3] : 0.13

Assessment [40 * Average SI] : 5.20

4.2.2 Success rate in stipulated period (20)

Item	Latest Year of Graduation, LYG (2022-23)	Latest Year of Graduation minus 1, LYGm1 (2021-22)
Total Number of students (X) (admitted through state level counseling + admitted through Institute on Level quota + admitted through Lateral entry) (N1 + N2 + N3)	12.00	19.00
Number of students who have passed in the stipulated period (Y)	7.00	4.00
Success Index [SI = Y / X]	0.58	0.21

Average SI [(SI1 + SI2 + SI3) / 3]: 0.49

Assessment [20 * Average SI] : 9.73

4.3 Academic Performance in First Year (25)

Academic Performance	2024-25 (CAYm1)	202
Mean of CGPA or mean percentage of all successful students(X)	6.34	6.00
Total number of successful students(Y)	8.00	6.00
Total number of students appeared in the examination(Z)	15.00	7.00
API [X*(Y/Z)]:	3.38	5.14

Average API [(AP1 + AP2 + AP3)/3] : 4.40

Assessment [2.5 * AverageAPI] : 10.99

4.4 Academic Performance in Second Year (20)

Academic Performance	2023-24(CAYm2)	202
Mean of CGPA or mean percentage of all successful students(X)	6.93	4.90
Total number of successful students (Y)	4.00	7.00
Total number of students appeared in the examination (Z)	7.00	10.00
API [X * (Y/Z)]	3.96	3.43

Average API [(AP1 + AP2 + AP3)/3] : 3.26

Assessment [2.0 * AverageAPI] : 6.51

4.5 Academic Performance in Final Year (15)

Academic Performance	2022-23 (LYG)	202
Mean of CGPA or mean percentage of all successful students(X)	6.94	7.53
Total number of successful students(Y)	7.00	4.00
Total number of students appeared in the examination(Z)	7.00	5.00
API [$X*(Y/Z)$]:	6.94	6.02

Average API [$(AP1 + AP2 + AP3)/3$] : 6.26

Assessment [$1.5 * \text{Average API}$] : 9.40

4.6 Placement and Higher Studies (40)

Item	2022-23 (Last Year Graduate,LYG)	2021-22 (Last Year Graduate Minus 1 Batch)
Total No of Final Year Students(N)	7.00	5.00
No of students placed in the companies or government sector(X)	1.00	2.00
No of students admitted to higher studies (Y)	1.00	1.00
No. of students turned entrepreneur in the respective field of engineering/technology (Z)	0.00	0.00
Placement Index [$((1.25 * X) + Y + Z) / N$] :	0.32	0.70

Average Placement [$(P1 + P2 + P3)/3$] : 0.47

Assessment [$40 * \text{Average Placement}$] : 18.80

Provide the placement data in the below mentioned format with the name of the program and the assessment year (separately for CAYm1, CAYm2 and CAYm3):

Program Name : Electronics & Communication Engineering

Assessment Year : 2024-25 (CAYm1)

S.No	Student Name	Enrollment No	Employee Name	Appointment No
1	PANCHAL SHUBH KIRANBH	226260311003	MICRON SEMICONDUCTOI	

Assessment Year : 2023-24 (CAYm2)

S.No	Student Name	Enrollment No	Employee Name	Appointment No
1	PAWAR BHARAT SHANKAR	216260311003	MICRON SEMICONDUCTOI	
2	RAVAL STUTIBEN AMITKUM	216260311005	TDS Lithium-Ion Battery Guji	

Assessment Year : 2022-23 (CAYm3)

S.No	Student Name	Enrollment No	Employee Name	Appointment No
1				

4.7 Professional Activities (20)

4.7.1 Professional societies/ student chapters and organizing technical events (10)

A. Availability of Professional Societies/Chapters & Relevant activities (5)

RUSA:

- Rashtriya Uchchar Shiksha Abhiyan (RUSA) is a Centrally Sponsored Scheme (CSS), launched in 2013 aims at providing strategic funding to eligible state higher educational institutions.
- Improve equity in higher education by providing adequate opportunities of higher education to SC/STs and socially and educationally backward classes; promote inclusion of women, minorities, and differently abled per

Sr. No	Organized Events and Titles	Organized Period	No. of Days
1	Expert lecture on Energy conservation	30/03/2017	1
2	Expert lecture on Kaizen & Quality Trends	31/08/2017	1
3	Expert lecture on Recent Trends in Automobile Engineering	5/9/2018	1
4	Expert lecture on Health Awareness Among Girl Child	27/9/2018	1
5	Expert lecture on Laws Related to Women Safety	29/01/2020	1
6	Expert lecture on "Create a atmosphere of Excellence & Equality among all sections of society"	13/02/2020	1
7	Expert lecture on "Health Awareness Among Girl Child"	13/02/2020	1
8	Workshop on "Self Defence Training for Women"	25/02/2020 To 29/02/2020	5

9	Workshop "Self Defence Training for Women"	13/12/2021 To 17/12/2021	5
10	Expert lecture on "LAW RELATED TO WOMEN SAFET"	03/05/2022	1
11	Expert lecture on "DISADVANTAGES OF MOBILE AND INTERNET"	03/05/2022	1
12	Expert lecture on "SELF EMPLOYMENT ENHANCEMENT"	03/05/2022	1
13	Expert lecture on "COMPETITIVE EXAM PREPARATION CLASSES"	09/12/2022	1
14	Expert lecture on "PREVENTION OF FETICIDE"	09/12/2022	1
15	Expert lecture on "GROUP COUNCELLING"	09/12/2022	1
16	Expert lecture on "SELF EMPLOYMENT AND ENHANCEMENT FOR GIRLS' STUDENTS "	13/03/2023	1
17	Expert lecture on "MOTIVATIONAL TALK FOR GIRL'S STUDENTS"	13/03/2023	1
18	Expert lecture on "WOMEN EMPOWERMENT FOR GIRLS STUDENTS"	15/03/2023	1
19	Expert lecture on "ICE BREAKING ACTIVITY FOR GIRLS' STUDENTS"	17/03/2023	1
20	Expert lecture on "ENHANCE CREATIVITY SKILLS FOR GIRLS' STUDENTS"	17/03/2023	1
21	Expert lecture on "ENTREPRENEURSHIP DEVELOPMENT"	21/08/2023	1
22	Expert lecture on "INNOVATIONS & CREATIVITY"	21/08/2023	1
23	Expert lecture on "SELF EMPLOYMENT AND ENHANCEMENT"	21/08/2023	1
24	KARATE WORKSHOP FOR GIRLS	28/08/2023	1
25	YOGA WORKSHOP	15/09/2023	1

Table 4.7.1.1 Professional Society Activities



Figure 4.7.1.1 Expert lecture on Energy conservation



Figure 4.7.1.2 Expert lecture on Kaizen & Quality Trends



Figure 4.7.1.3 Expert lecture on Recent Trends in Automobile Engineering



Figure 4.7.1.4 Expert lecture on Health Awareness Among Girl Child



Figure 4.7.1.5 Expert lecture on Laws Related to Women Safety



Figure 4.7.1.6 Expert lecture on “Create a atmosphere of Excellence & Equality among all sections of society”



Figure 4.7.1.7 Expert lecture on “Health Awareness Among Girl Child”



Figure 4.7.1.8 Workshop on “Self Defence Training for Women”



Figure 4.7.1.9 Workshop on “Self Defence Training for Women”



Figure 4.7.1.10 Expert lecture on Laws Related to Women Safety



Figure 4.7.1.11 Expert lecture on “DISADVANTAGES OF MOBILE AND INTERNET”



Figure 4.7.1.12 Expert lecture on “SELF EMPLOYMENT ENHANCEMENT”



Figure 4.7.1.13 Expert lecture on “COMPETITIVE EXAM PREPARATION CLASSES”



Figure 4.7.1.14 Expert lecture on “PREVENTION OF FETICIDE”



Figure 4.7.1.15 Expert lecture on “GROUP COUNSELLING”



Figure 4.7.1.16 Expert lecture on “SELF EMPLOYMENT AND ENHANCEMENT FOR GIRLS’ STUDENTS”



Figure 4.7.1.17 Expert lecture on “MOTIVATIONAL TALK FOR GIRL’S STUDENTS”



Figure 4.7.1.18 Expert lecture on “WOMEN EMPOWERMENT FOR GIRLS STUDENTS”



Figure 4.7.1.19 Expert lecture on “ICE BREAKING ACTIVITY FOR GIRLS’ STUDENTS”



Figure 4.7.1.20 Expert lecture on “ENHANCE CREATIVITY SKILLS FOR GIRLS’ STUDENTS”



Figure 4.7.1.21 Expert lecture on “ENTREPRENEURSHIP DEVELOPMENT”



Figure 4.7.1.22 Expert lecture on "INNOVATIONS & CREATIVITY"



Figure 4.7.1.23 Expert lecture on "SELF EMPLOYMENT AND ENHANCEMENT"



Figure 4.7.1.24 KARATE WORKSHOP FOR GIRLS



Figure 4.7.1.25 YOGA WORKSHOP

ISTE (Student chapter):

The Indian Society for Technical Education (ISTE) is the leading National Professional non-profit making Society for the Technical Education System in our country with the motto of Career Development of Teachers : System.

Professional Societies/Chapters	Year
ISTE Chapter	Since 2021

Table 4.7.1.2 ISTE Chapter

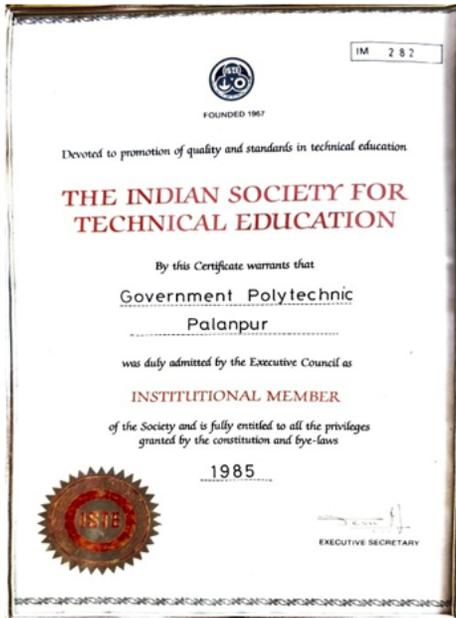


Figure 4.7.1.26 Institutional Member ISTE Chapter

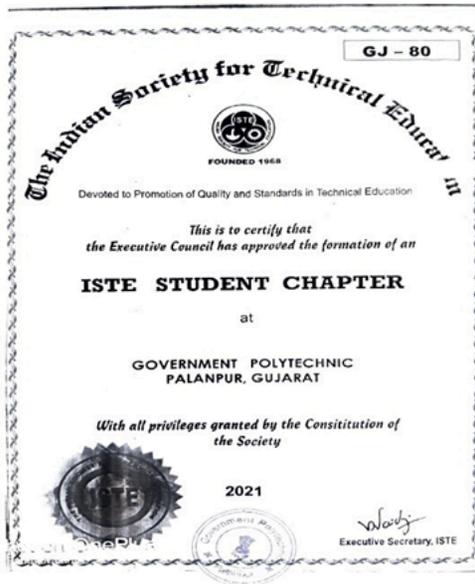


Figure 4.7.1.27 ISTE Student Chapter

Activities under ISTE student chapter:

Sr. No	Organized Events and Titles	Organized Period	No. Of Participants
1	Entrepreneurship Awareness Drive	07/04/2025 To 08/04/2025	95
2	Expert Lecture on “Drone Technologies”	15/02/2025	36
3	Scratch Coding Competition	16/12/2025	12
4	Workshop on “ Introduction to RTL Design using Verilog HDL”	15/04/2023	37

Table 4.7.1.3 Activities under ISTE student chapter



(a) Entrepreneurship Awareness Drive



(b) Expert Lecture on "Drone Technologies"



(c) Scratch Coding Competition

WORKSHOP ON INTRODUCTION TO RTL DESIGN USING VERILOG HDL

Title: Introduction to RTL Design using Verilog HDL
Time: 15th April 2023 at 11:00 AM
Duration: 2 hours
Target Audience: Beginners and those with little or no experience in RTL Design
Materials: A computer, internet connection, and Verilog simulator tool/displayground
Speaker: Prakash Darji (Principal Design Engineer at Cadence Design Systems)
Workshop Objectives:

- Understand the basic concepts of RTL Design
- Learn the importance of RTL Design
- Understand the difference between RTL Design and other design methodologies
- Learn how RTL Design works
- Get an overview of the various tools used for RTL Design

Agenda:

1. Introduction
2. What is RTL Design?
3. How does RTL Design work?
4. RTL Design tools
5. Break
6. Verilog Basics
7. Hands-on Exercise
8. Q&A and Conclusion

“LEARN HOW TO BRING YOUR DIGITAL DESIGNS TO LIFE WITH VERILOG HDL IN OUR RTL DESIGN WORKSHOP. GET HANDS-ON EXPERIENCE AND TAKE YOUR SKILLS TO THE NEXT LEVEL!”

VERILOG
 ROOM No. B-009
 ELECTRONICS AND COMMUNICATION
 ENGINEERING DEPARTMENT,
 GOVERNMENT POLYTECHNIC,
 PALANPUR - 385001

PRAKASH DARJI
 (Principal Design Engineer at Cadence Design Systems)

(d) Workshop on “ Introduction to RTL Design using Verilog HDL”
Figure 4.7.1.28 ISTE student chapter activities

Outcomes:

- Increased awareness among students about entrepreneurship as a career option
- Improved understanding of startup ecosystems, funding, and innovation
- Awareness of career opportunities in UAV and aerospace industries
- Understanding of real-world applications in agriculture, defense, surveillance, and logistics
- Improved logical thinking and problem-solving skills among participants
- Increased interest in programming and computational thinking

B. Number, quality of engineering events (5)

- Various activities like Expert Lectures, Seminars, Guest Lectures and Career Guidance Programs are conducted to enhance various technical and professional skills among the students.
- Through these, we motivate our young, energetic, enthusiastic students to use their creative minds and their boundless imagination in the best possible way.
- With the help of this, students exhibit their talents which help in their career development and to elevate themselves onto excellent positions in the society.

Academic Year 2025-26					
Sr No	Title Of Event	Date	Type Of Event	No. Of Student Participants	Name of Expert/Place
1	IOT Application with ESP-32, NOD-MCU, Raspberry Pi	07/10/2025	Technical Event	21	Mr. Rishabh Prajapati

2	Cyber Crime Awareness and Crime Detection	12/09/2025	Technical Event	35	Prof. Manish Chauhan
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Table 4.7.1.4 Expert Lecture Detail 2025-26



Figure 4.7.1.29 IOT Application with ESP-32, NOD-MCU, Raspberry Pi



Figure 4.7.1.30 Cyber Crime Awareness and Crime Detection

Industrial Visit (Academic Year 2025-26)						
Sr No.	Date	Area/Subject Of Industrial Visit	Name of Industry /Organization	Sem	Number of Students Benefited (EC & others)	Name of Faculties Who Visited Industry
1	17/11/2025	Communication System	COMMUNITY RADIOSTATION, PALANPUR	3	14	Ms.M.K.Pedhadiya Dr. L.K.Patel
2	20/09/2025	Computer Networking	NETRAM (Command and Control Centre) Palanpur	3,5	49	Mr. M.J.Dabgar Mr. S.P.Joshiara

3	05/08/2025	Communication System	COMMUNITY RADIOSTATION, PALANPUR	1	14	Mr. R.C.Parmar Mr. N.J.Chauhan
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Table 4.7.1.5 Industrial Visit Detail 2025-26



Figure 4.7.1.31 COMMUNITY RADIO STATION, PALANPUR



Figure 4.7.1.32 NETRAM (Command and Control Centre) Palanpur



Figure 4.7.1.33 COMMUNITY RADIO STATION, PALANPUR

Academic Year 2024-25					
Sr No	Title Of Event	Date	Type Of Event	No. Of Student Participants (EC & others)	Name of Expert/Place
1	HAM Radio Workshop	14/02/2025	Technical Event	54	Mr. N. B. Nadoda
2	INTERNET OF THINGS	22/10/2024	Expert Lecture	81	DR. V K THAKAR
3	AI-ML: A NEW ERA OF FUTURE	30/09/2024	Expert Lecture	91	MR. VISHAL VADHER
4	Embedded -IOT	30/09/2024	Expert Lecture	91	MR. VISHAL VADHER

Table 4.7.1.6 Expert Lecture Detail 2024-25



Figure 4.7.1.34 HAM Radio Workshop



Figure 4.7.1.35 INTERNET OF THINGS



Figure 4.7.1.36 Embedded -IOT and AI-ML: A NEW ERA OF FUTURE

Industrial Visit (Academic Year 2024-25)						
Sr No.	Date	Area/Subject Of Industrial Visit	Name of Industry /Organization	Sem	Number of Students Benefited (EC & others)	Name of Faculties Who Visited Industry
1	16/10/2024	Communication system	COMMUNITY RADIOSTATION, PALANPUR	4	24	Dr. R.N.Patel, Mr. S.P.Joshiara
2	05/10/2024	Automation	BANAS DAIRY	3, 5	37	Dr. R.N.Patel, Mr. M.J.Dabgar Mr. S.P.Joshiara
3	25/09/2024	Fiber optics and communication	RAILWAY STATION, PALANPUR	3,5	49	Ms.M.K.Pedhadiya Mr. N.J.Chauhan
4	02/08/2024	Automation	BAJARANG PAPER PRODUCTS, PALANPUR	1	23	Mr. N.J.Chauhan Mr. M.J.Dabgar



Figure 4.7.1.37 COMMUNITY RADIO STATION, PALANPUR



Figure 4.7.1.38 BANAS DAIRY



Figure 4.7.1.39 RAILWAY STATION, PALANPUR



Figure 4.7.1.40 BAJARANG PAPER PRODUCTS, PALANPUR

Academic Year 2023-24					
Sr No	Title Of Event	Date	Type Of Event	No. Of Student Participants(EC & others)	Name of Expert/Place

1	Web development technologies	13/03/2024	Expert Lecture	74	MR. VISHAL VADHER
2	Embedded System	13/03/2024	Expert Lecture	74	MR. VISHAL VADHER
3	SEMICON INDIA-2023 Exhibition	23/07/2023	Technical Event	27	Mahatma Mandir, Gandhinagar

Table 4.7.1.8 Expert Lecture Detail 2023-24



Figure 4.7.1.41 Web development technologies and Embedded System



Figure 4.7.1.42 SEMICON INDIA-2023 Exhibition

Industrial Visit (Academic Year 2023-24)						
Sr No.	Date	Area/Subject Of Industrial Visit	Name of Industry /Organization	Sem	Number of Students Benefited (EC & others)	Name of Faculties Who Visited Industry
1	16/03/2024	Electronics and Embedded system	PCB POWER AND MCBS PVT LTD, GANDHINAGAR	2,4,6	56	Ms.M.K.Pedhadiya Dr. L.K.Patel, Mr. N.J.Chauhan
2	01/08/2023	Automation	BAJARANG PAPERPRODUCTS, PALANPUR	1	51	Mr. S.J.Chauhan Mr. M.J.Dabgar

Table 4.7.1.9 Industrial Visit Detail 2023-24



Figure 4.7.1.43 PCB POWER AND MCBS PVT LTD, GANDHINAGAR



Figure 4.7.1.44 BAJARANG PAPERPRODUCTS, PALANPUR

Academic Year 2022-23					
Sr No	Title Of Event	Date	Type Of Event	No. Of Student Participants(EC & others)	Name of Expert/Place
1	Cyber Security	31/03/2023	Expert Lecture	94	Mr. Sagar Hajare
2	Importance of Communication in industries	08/09/2022	Expert Lecture	05	Mr. Jaimin Rami
3	Future of Electronics in industries	06/08/2022	Expert Lecture	34	Mr. Prakash Darji

Table 4.7.1.9 Expert Lecture Detail 2022-23



The poster is for an "Expert Talk On Cyber Security" organized by the Department of Electronics and Communication Engineering at Government Polytechnic, Palanpur. It features a central image of a man in a suit holding a tablet with a glowing padlock icon. The text provides details about the speaker, Mr. Sagar Hajare, and the event date and time.

Organized By
Department of Electronics and Communication Engineering
Government Polytechnic, Palanpur
(Under Directorate of Technical Education, Gujarat)

Expert Talk
On
Cyber Security

31st March 2023
3:00 PM Onwards

Coordinator:
Mr. M. J. Dabgar,
Mr. N. M. Patel
(Lecturer in EC,
GP Palanpur)

Facilitator:
Mr. S. J. Chauhan
(HOD, Dept. of EC,
GP Palanpur)

Patrons:
Mr. S.D. Dabhi
(Principal, GP Palanpur)

Contact:
Email Id:
gppec11@gmail.com

Mr. Sagar Hajare,
Infrastructure Lead,
Bank Of America.

He has more than 13 years of experience in Cyber Security and Computer networks domain. He has started his career as a network engineer at MYND Sol. Pvt Ltd., he also work at Wipro Ltd as a project lead for 4.5 years and currently he is working as a Infrastructure lead at Bank of America.

He received his BE Degree in 2010 from S.P University, V. V. Nagar and before that he completed Diploma in EC from our own Institute G.P. Palanpur.

Figure 4.7.1.45 Cyber Security



Organized By

Department of Electronics and Communication
Engineering
Government Polytechnic Palanpur
(Under Directorate of Technical Education, Gujarat)



Expert Talk
On

Importance of Communication in Industries



*Mr. Jaimin Rami,
Station Controller,
Gujarat Metro Rail
Corporation (GMRC)
Limited, Ahmedabad*

He has completed his Masters with specialization in Wireless Communication Technology from Sankalchand Patel University. He has experience of Telecommunication Lab., MATLAB Lab., VAPT Lab. and Computer Network Lab. as a Laboratory In charge at Rashtriya Raksha University (Pioneering National Security and Police University of India). And currently he is working as a Station Controller in Gujarat Metro Rail Corporation, Ahmedabad.

08th September 2022
12:00 PM Onwards

Coordinator:
Ms. M. K. Pedhadiya
Mr. S. P. Joshiara
(Lecturer in EC,
GP Palanpur)

Facilitator:
Mr. S. J. Chauhan
(HoD, Dept. of EC,
GP Palanpur)

Patrons:
Mr. S.D. Dabhi
(Principal, GP Palanpur)

Contact:
Email Id –
gppec11@gmail.com

Figure 4.7.1.46 Importance of Communication in industries



Organized By

Department of Electronics and Communication Engineering

Government Polytechnic Palanpur

(Under Directorate of Technical Education, Gujarat)



Expert Talk

On

Future of Electronics in Industries



Mr. Prakash Darji,
Silicon Digital Design Engineer,
Google, Bangalore

He has 7 years of experience in ASIC/FPGA RTL Design. He has worked on USB and DDR IPs. He is currently working with the Google-gChips team on Fabric. He is an Electronics and Communication alumni of Govt. Polytechnic, Palanpur, and DDIT, Nadiad. He has worked in VLSI industry at Softnautics/Sibridge technologies and Intel.

06th August 2022
11:00 AM Onwards

Coordinator:
Ms. M. K. Pedhadiya,
Mr. N. M. Patel
(Lecturer in EC,
GP Palanpur)

Facilitator:
Mr. S. J. Chauhan
(HoD, Dept. of EC,
GP Palanpur)

Patrons:
Mr. S.D. Dabhi
(Principal, GP Palanpur)

Contact:
Email Id –
gppec11@gmail.com

Figure 4.7.1.47 Future of Electronics in industries

Industrial Visit (Academic Year 2022-23)						
Sr No.	Date	Area/Subject Of Industrial Visit	Name of Industry /Organization	Sem	Number of Students Benefited (EC & others)	Name of Faculties Who Visited Industry
1	10/05/2023	Communication system	COMMUNITY RADIO STATION, PALANPUR	4	12	Mr. S.J.Chauhan Mr. M.J.Dabgar
2	01/08/2023	Mobile communication	SAMSUNG SERVICE CENTRE, PALANPUR	2,4	19	Dr. R.N.Patel, Mr. S.P.Joshiara
3	21/09/2022	Automation	BAJARANG PAPERPRODUCTS, PALANPUR	1	23	Mr. N.J.Chauhan

Table 4.7.1.9 Industrial Visit Detail 2022-23



Figure 4.7.1.48 COMMUNITY RADIO STATION, PALANPUR



Figure 4.7.1.49 SAMSUNG SERVICE CENTRE, PALANPUR



Figure 4.7.1.50 BAJARANG PAPER PRODUCTS, PALANPUR

Academic Year 2021-22					
Sr No	Title Of Event	Date	Type Of Event	No. Of Student Participants(EC & others)	Name of Expert/Place
1	NAVIC and its applications	29/01/2022	Expert Lecture	29	Dr. Mehulkumar
2	Importance of Programming	09/08/2021	Expert Lecture	39	Mr. Pranav Dave

Table 4.7.1.10 Expert Lecture Detail 2021-22

Organized By
Department of Electronics and Communication
Engineering
Government Polytechnic Palanpur
(Under Directorate of Technical Education, Gujarat)

Expert Talk
On
**Importance of
Programming**

Expert:

Mr. Pranav Dave
Tech Lead (Associate consultant)
Tata Consultancy Services(TCS),
Gandhinagar

Registration Link:
<https://forms.gle/gtwtwKxWZHCU6U4d8>
Link to join:
[Click Here](#)

09 Aug 2021
11:00 am Onwards

Coordinator:
Ms. M. K. Pedhadiya,
(Lecturer in EC,
GP Palanpur)

Facilitator:
Mr. S. J. Chauhan
(HoD, Dept. of EC,
GP Palanpur)

Patrons:
Mr. S.D. Dabhi
(Principal, GP Palanpur)

Contact:
Email Id –
ropec11@gmail.com

**Note: e-certificates will be
given to the participants**

Figure 4.7.1.51 Importance of Programming

Organized By
Department of Electronics and Communication
Engineering
Government Polytechnic Palanpur
(Under Directorate of Technical Education, Gujarat)

Expert Talk
On
**India's NavIC
Navigation with
Indian
Constellation
(NavIC) and Its
Application**

Expert:

Dr. Mehulkumar Desai,
Lecturer in EC,
Government Polytechnic for
Girls, Surat

He completed his Ph.D from SNIT, Surat, Gujarat, India. His work is on "Development and Analysis of Ionospheric Correction Model for Position Estimation with NavIC Receiver". He has published many papers in reputed journals and conferences. He is recognized as winner in the IITB-ISRO-AICTE Mapathon held on 7 Dec. to 22 Dec. 2020.

[Click Here to Join Talk](#)

29 January 2022
03:00 PM Onwards

Coordinator:
Ms. M. K. Pedhadiya,
(Lecturer in EC,
GP Palanpur)

Facilitator:
Mr. S. J. Chauhan
(HoD, Dept. of EC,
GP Palanpur)

Patrons:
Mr. S.D. Dabhi
(Principal, GP Palanpur)

Contact:
Email Id –
ropec11@gmail.com

Figure 4.7.1.52 NAVIC and its applications

Sr No.	Date	Area/Subject Of Industrial Visit	Name of Industry /Organization	Sem	Ni
1	02/05/2022	Fundamental of electrical engineering	J K INDUSTRIES, CHANDISAR	2	
2	12/04/2022	Optical Communication	SAHAJANAND LASER TECH, GANDHINAGAR	4	
3	29/03/2022	Mobile Communication	SAMSUNG CARE, PALANPUR	4	
4	26/03/2022	Communication system	COMMUNITY RADIO STATION, PALANPUR	6	

Table 4.7.1.11 Industrial Visit Detail 2021-22



Figure 4.7.1.53 J K INDUSTRIES, CHANDISAR



Figure 4.7.1.54 SAHAJANAND LASER TECH, GANDHINAGAR



Figure 4.7.1.55 SAMSUNG CARE, PALANPUR



Figure 4.7.1.56 COMMUNITY RADIO STATION, PALANPUR

Academic Year 2020-21					
Sr No	Title Of Event	Date	Type Of Event	No. Of Student Participants(EC & others)	Name of Expert/Place
1	Digital Communication basics realization with MATLAB	19/03/2021	Expert Lecture	17	Dr. Urvashi P. Shukla
2	VLSI Low Power Techniques	03/03/2021	Expert Lecture	20	Mr. Nishant Patel
3	PCB Design	10/10/2020	Expert Lecture	23	Mr. Ankit Tundeliya
4	Basic of Chip Design	26/09/2020	Expert Lecture	22	Mr. Abhishek Joshi

Table 4.7.1.12 Expert Lecture Detail 2020-21

Organized By
Department of Electronics and Communication
Engineering
Government Polytechnic Palanpur
(Under Directorate of Technical Education, Gujarat)




Expert Talk
On
**Digital
Communication
basics realization
with Matlab**



**19 March 2021
11:00 AM Onwards**

Coordinator:
Ms. M. K. Pethadiya,
(Lecturer in EC,
GP Palanpur)

Facilitator:
Mr. S. J. Chauhan
(HoD, Dept. of EC,
GP Palanpur)

Patrons:
Mr. S.D. Dabhi
(Principal, GP Palanpur)

Contact:
Email Id –
gppec11@gmail.com



*Dr. Urvashi P. Shukla,
Assistant Professor,
Department of Computer
Science,
Bansanthal Vidhyapith*

She completed her Ph.D from NIT, Jaipur, Rajasthan, India. She has published papers in reputed journals and conferences.

Click Here to Join Talk:
<https://teams.microsoft.com/>

Figure 4.7.1.57 Digital Communication basics realization with MATLAB

Organized By
Department of Electronics and Communication
Engineering
Government Polytechnic Palanpur
(Under Directorate of Technical Education, Gujarat)




Expert Talk
On
**VLSI
Low Power
Techniques**



**3 March 2021
10:30 AM Onwards**

Coordinator:
Mr. N. J. Chauhan,
(Lecturer in EC,
GP Palanpur)

Facilitator:
Mr. S. J. Chauhan
(HoD, Dept. of EC,
GP Palanpur)

Patrons:
Mr. S.D. Dabhi
(Principal, GP Palanpur)

Certification:
E - Certificate will be
provided to the
participants

Contact:
Email Id –
gppec11@gmail.com



*Mr. Nishant Patel,
Application Engineer,
Synopsys Inc., California*

He joined efnocchips in 2010. He has more than 10 years of experience in VLSI back end design. He has an expertise in low power chip designs.

Click Here to Join Talk: <https://teams.microsoft.com/>

Registration Link: <https://forms.gle/4d8i1cckHw0u0uf6>

Figure 4.7.1.58 VLSI Low Power Techniques

Organized By
Department of Electronics and Communication
Engineering
Government Polytechnic Palanpur
(Under Directorate of Technical Education, Gujarat)





10 October 2020
4.00 P.M Onwards

Facilitator:
Mr. S. J. Chauhan
(HoD, Dept. of EC,
GP Palanpur)

Contact:
Email Id –
gppec11@gmail.com

Expert:
Ankit Tundeliya
Project Head,
L & T Technology Services Limited,
Vadodara

Link to join:
<https://teams.microsoft.com/j/message/19:6632dfc97a46492cb180355899e47f6d@thread.tacv2/1602146352594?tenantId=7cfa175f-8d81-4312-9024-30a277bf321f&asupid=6c6d9da-03f-c939-3ea7-0a69e2d804&parentMessageId=1602146352594&teamName=GPPN%20EC%20StaffChannelName=General&createdTime=1602146352594>

Figure 4.7.1.59 PCB Design

Organized By
Department of Electronics and Communication
Engineering
Government Polytechnic Palanpur
(Under Directorate of Technical Education, Gujarat)





26 Sept 2020
12 noon Onwards

Facilitator:
Mr. S. J. Chauhan
(HoD, Dept. of EC,
GP Palanpur)

Contact:
Email Id –
gppec11@gmail.com

Expert:
Mr. Abhishek Joshi
Design Engineer
Numem Global India Pvt. LTD,
Ahmedabad

Link to join:
<https://teams.microsoft.com/j/message/19:6632dfc97a46492cb180355899e47f6d@thread.tacv2/1600938528279?tenantId=7cfa175f-8d81-4312-9024-30a277bf321f&asupid=6c6d9da-03f-c939-3ea7-0a69e2d804&parentMessageId=1600938528279&teamName=GPPN%20EC%20StaffChannelName=General&createdTime=1600938528279>

Figure 4.7.1.60 Basic of Chip Design

4.7.2 Publication of technical magazines, newsletters, etc. (5)

A. Quality & Relevance of the contents and Print Material (3)

- o Electronics & Communication department publishes yearly newsletter that broadly includes Vision and Mission of Department and Institute, PSOs, Photographs related to Departmental Curricular activities and Institute
- o All the newsletters can be viewed from the link: <https://gppalanpur.ac.in/newsletters/spectrum/interactive> [GP Palanpur](#)

B. Participation of Students from the program (2)

- o The head of Department is the chief editor and designated faculty and student coordinator yearly provide volunteer contribution for proof reading and selection of contents that has key thrust on upcoming technologies at

List of Publication of Newsletters in CAY (2024-2025)

Year	Publication Name	Chief Editor/Faculty coordinator	NameoftheStudents
2024-25	Spectrum (Band-IV)	Mr. S.J.Chauhan, HOD EC (Chief Editor)	MALI BHAVIN ASHOKBHAI
		Mr. Milav Dabgar (FacultyCoordinator)	MODI JAINILKUMAR DIPAKBHAI



List of Publication of Newsletters in CAYm1 (2023-2024)

Year	Publication Name	Chief Editor/Faculty coordinator	NameoftheStudents
2023-24	Spectrum (Band-III)	Mr. S.J.Chauhan, HOD EC (Chief Editor)	DAVE FALGUNI JITENDRAKUMAR
		Mr. Milav Dabgar (FacultyCoordinator)	PRAJAPATI PRINCEKUMAR DILIPBHAI



List of Publication of Newsletters in CAYm2 (2022-2023)

Year	Publication Name	Chief Editor/Faculty coordinator	NameoftheStudents
2022-23	Spectrum (Band-II)	Mr. S.J.Chauhan, HOD EC (Chief Editor)	PANCHAL SHUBH KIRANBHAI
		Mr. Milav Dabgar (FacultyCoordinator)	PATEL AKSHAR DILIPKUMAR



List of Publication of Newsletters in CAYm2 (2021-2022)

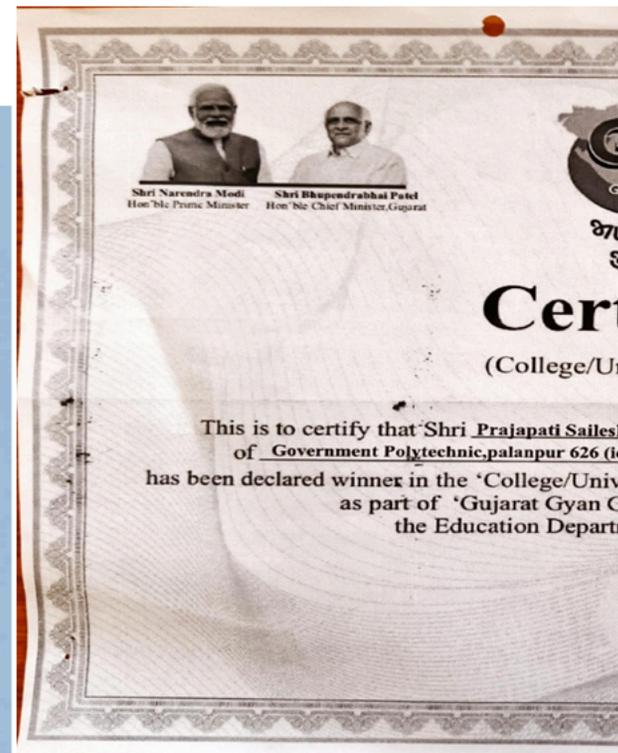
Year	Publication Name	Chief Editor/Faculty coordinator	NameoftheStudents
2021-22	Spectrum (Band-I)	Mr. S.J.Chauhan, HOD EC (Chief Editor)	PAWAR BHARAT SHANKARLAL
		Mr. Milav Dabgar (FacultyCoordinator)	RAVAL STUTIBEN AMITKUMAR



4.7.3 Participation in inter-institute / state/national events by students of the program of study (5)

Electronics & Communication department have encouraged and motivated students to participate in technical events with strong support of department faculties and head of department.

Sr No.	Enrollment No.	Name of Student	Name of Event	Place	Year	Outcome
1	236260311003	MALI PARESH RAMESHBHAI	G3Q 2.0	Government of Gujarat	2024	Winner
2	236260311007	PRAJAPATI SHAILESH	G3Q 2.0	Government of Gujarat	2024	Winner



Sr.No	Title of Event	Dates	No. of Participants	Place/Institute Name	Sponsor/ Collaboration	Level of Event (Zonal/State/National)
Academic Year 2022-23						
1	Placement Fair	10/03/2023	5	G.P.Palanpur	KCG	Zonal Level
Academic Year 2023-24						
1	Placement Fair	11/03/2024	5	DNP arts College , Deesa	KCG	Zonal Level
Academic Year 2024-25						
1	Placement Fair	25/02/2025	7	G.P.Palanpur	KCG	Zonal Level

Academic Year 2025-26						
1	Placement Fair	24/02/2026	6	DNP arts College , Deesa	KCG	Zonal Level

5 FACULTY INFORMATION AND CONTRIBUTIONS (150)

Name	University Degree	Area of Specialization	Contribution to the program(% load)			Research Paper Publications	Faculty receiving Ph.D/M.Tech during the Assessment year	Current Designation	Initial Date Joining
			CAY (2025-26)	CAYm1 (2024-25)	CAYm2 (2023-24)				
Mr. Sunil J. Chauhan	M.E.	COMMUNICATION SYSTEM ENGG.	42	40	69	0	0	HOD	07/12/1993
Ms. Mittal K. Pedhadiya	M.Tech	WIRELESS COMMUNICATION AND TECHNOLOGY	50	32	46	1	0	Lecturer	26/04/2011
Dr. Laukikkumar K. Patel	Ph.D	ELECTRONICS AND COMMUNICATION	30	35	36	1	1	Lecturer	28/04/2011
Dr. Ratansing N. Patel	Ph.D	ELECTRONICS AND COMMUNICATION	63	62	61	1	0	Lecturer	28/10/2016
Mr. Milav J. Dabgar	M.E.	COMMUNICATION SYSTEM ENGG.	18	23	31	0	0	Lecturer	02/11/2016
Mr. Rahul C. Parmar	M.E.	COMMUNICATION SYSTEM ENGG.	48	56	50	0	0	Lecturer	28/10/2016
Mr. Snehilkumar P. Joshiara	B.E.	ELECTRONICS AND COMMUNICATION	67	61	35	0	0	Lecturer	25/05/2017
Mr. Nirav J. Chauhan	M.E.	COMMUNICATION SYSTEM ENGG.	45	37	35	3	0	Lecturer	01/07/2017
Mr. Chetan P. Gehlot	M.Phil	MATHS	10	15	11	0	0	Lecturer	17/12/2009
Dr. Chirag S. Pandya	Ph.D	ENGLISH	19	10	10	0	0	Lecturer	26/05/2011
Dr. Bhupendra B Mor	Ph.D	PHYSICS	24	13	14	6	0	Lecturer	06/02/2012
Dr. Mahesh F. Tank	Ph.D	chemistry	12	12	0	0	0	Lecturer	08/02/2010
Dr. Jigna D. Modi	Ph.D	chemistry	0	6	0	0	0	Lecturer	08/10/2010
Mr. Chirag M. Amin	M.E.	MECHANICAL	0	4	0	0	0	Lecturer	09/11/2016

Mr. Tarun D. Modi	B.E.	MECHANICAL	0	4	0	0	0	Lecturer	28/10/2016
Mr. Sandip P. Mahant	B.E.	MECHANICAL	0	38	0	0	0	Lecturer	28/10/2016
Mr. Rajesh L. Chaudhari	B.E.	MECHANICAL	0	0	17	0	0	Lecturer	28/10/2016
Mr. Dhanraj P. Judal	B.E.	MECHANICAL	0	0	14	0	0	Lecturer	28/10/2016
Mr. Ashfaq M. Qureshi	M.E.	ELECTRICAL ENGG.	0	13	0	0	0	Lecturer	15/11/2016
Mr. Ravindra P. Chavda	M.E.	ELECTRICAL ENGG.	0	4	0	0	0	Lecturer	17/05/2017
Mrs. Meghana M. Shah	B.E.	IC	0	0	100	0	0	Lecturer	14/02/1997
Mr. Mahesh J. Vadhvaniya	B.E.	IC	50	0	33	0	0	Lecturer	17/11/2000
Mr. Jabbar V. Kureshi	M.E.	IC	0	0	17	0	0	Lecturer	20/10/2015

5.1 Student-Faculty Ratio (SFR) (25)

Year	N	F
2025-26(CAY)	90	4.78
2024-25(CAYm1)	90	4.65
2023-24(CAYm2)	91	5.79

Average SFR : 17.97

Assesement SFR : 25

5.1.1. Provide the information about the regular and contractual faculty as per the format mentioned below:

	Total number of regular faculty in the department	To
2025-26(CAY)	7	0
2024-25(CAYm1)	11	0
2023-24(CAYm2)	11	0

5.2 Faculty Qualification (25)

5.2.1 Faculty Qualification Index (20)

	X	Y	F	FQ = 2
2025-26	2	1	4.00	13.50
2024-25	2	1	4.00	13.50
2023-24	3	2	4.00	22.00

Average Assessment : 16.33

5.2.2 Availability of Faculty/principal of that discipline with PhD. Qualification (5)Availability of Faculty/principal of that discipline with PhD. Qualification ? : NO **5.3 Faculty Retention (20)**

Description	2024-25 (CAYm1)
No of Faculty Retained	11
Total No. of Required Faculty	4
% of Faculty Retained	275

Average : 275.00

Assessment Marks : 20.00

5.4 Faculty as participants in Faculty development/training activities conducted by other organizations (30)

Name of the faculty	Max 5 Per Faculty

	2022-23 (CAYm3)	2023-24 (CAYm2)	2024-25 (CAYm1)
Dr. Bhupendra B Mor	5.00	5.00	0.00
Dr. Chirag S. Pandya	5.00	5.00	0.00
Dr. Jigna D. Modi	2.00	5.00	5.00
Dr. Laukikkumar K. Patel	2.00	5.00	5.00
Dr. Mahesh F. Tank	5.00	5.00	0.00
Dr. Ratansing N. Patel	2.00	5.00	5.00
Mr. Ashfaq M. Qureshi	5.00	5.00	0.00
Mr. Chetan P. Gehlot	5.00	5.00	0.00
Mr. Chirag M. Amin	5.00	5.00	5.00
Mr. Dhanraj P. Judal	0.00	4.00	5.00
Mr. Jabbar V. Kureshi	0.00	5.00	0.00
Mr. Mahesh J. Vadhvaniya	5.00	5.00	0.00
Mr. Milav J. Dabgar	0.00	2.00	5.00
Mr. Nirav J. Chauhan	2.00	5.00	5.00
Mr. Rahul C. Parmar	0.00	0.00	5.00
Mr. Rajesh L. Chaudhari	2.00	5.00	5.00
Mr. Ravindra P. Chavda	2.00	5.00	5.00
Mr. Sandip P. Mahant	5.00	5.00	5.00
Mr. Snehilkumar P. Joshiara	0.00	2.00	5.00
Mr. Sunil J. Chauhan	3.00	1.00	5.00
Mr. Tarun D. Modi	5.00	5.00	5.00

Ms. Mittal K. Pedhadiya	5.00	5.00	1.00
Sum	65.00	94.00	71.00
RF = Number of Faculty required to comply with 25:1 SFR as per 5:	3.64	3.60	3.60
Assessment $[6*(Sum / 0.5RF)]$ (Marks limited to 30)	30.00	30.00	30.00

Average assessment over 3 years (Marks limited to 30): 30.00

5.4. a. Organized/ Conducted FDPs and STTP by this department at State / National Level (12)

Table 5.4.1 Expert Sessions Organized

Sr. No.	Session Title	Name Of External Professional	Designation / Education Of Expert	Expert Institut
1	VLSI Low Power Techniques	Mr. Nishant Patel	Application Engineer B.E.E.C.	Synopsys Inc.
2	Digital Communication Basics Realization With Matlab	Dr. Urvashi P. Shukla	Assistant Professor Phd Ec	Bansanthali V
3	Importance Of Programming	Mr. Pranav Dave	Associate Consultant MCA	TCS Gand
4	NAVIC And Its Applications	Dr. Mehulkumar	Lecturer Phd Ec	GGP S
5	Future Of Electronics In Industries	Mr. Prakash Darji	Design Engineer Be Ec	Google Be
6	Importance Of Communication In Industries	Mr. Jaimin Rami	Station Controller Me Ec	Jmrc, Ahm
7	Cyber Security	Mr. Sagar Hajare	Security Expert	Bank Of A
8	Fabrication Of Solar Cell	Mr. Sandip Joshi	Jr. Engineer Diploma Ec	Adani Pow
9	Embedded System	Mr. Vishal Vadher	Assistant Manager Training, B.E.E.C.	Sofcon Indii
10	Web Development Technologies	Mr. Vishal Vadher	Assistant Manager Training, B.E.E.C.	Sofcon Indii
11	AI-ML: A New Era Of Future	Mr. Vishal Vadher	Assistant Manager Training, B.E.E.C.	Sofcon Indii

12	Internet Of Things	Dr. V K Thakar	Dean, Indrashil University, Ph.D.	Indrashil Un
13	Career Guidance For EC Engineers	Mr. Krishna Panchal	Associate Engineer, B.E.E.C.	E-Infoc
14	Ham Radio Workshop	Mr. N. B. Nadoda	Senior Lecturer	GGP, Ahm
15	Drone Technologies	Mr. Yuvrajsinh Rajput	Founder	Bee-Robokits Aca
16	Cyber Crime Awareness	Mr. Manish S Chauhan	Assistant Professor	GEC Mo
17	IoT Applications with Node MCU & Raspberry Pi	Mr. Rishabh Prajapati	Co-Founder	Bee-Robokids Innovat



Figure 5.4.1 Expert Sessions

Achievement Summary:

- **17 Expert Sessions:** Comprehensive coverage of emerging technologies
- **Industry Collaboration:** 9 sessions by industry professionals from Google, TCS, Bank of America, Synopsys, etc.
- **Academic Partnership:** 8 sessions by academic experts from universities and research institutions
- **Contemporary Topics:** VLSI, IoT, AI-ML, Embedded Systems, Cyber Security, Drone Technology

Student Benefit: Exposure to industry practices and career guidance

5.5 Product development, Consultancy, Manufacturing contracts, testing contracts (8)

Our faculties perform and serve various duties other than classroom teaching as detailed out below.

Contributions other than classroom teaching:

- **Civic Duties**

- Citizen Service Support – RTO Help Center
- Democratic Engagement – Election Duties
- Public Service – Government Examination Duties

Educational Contributions

- Academic Contribution – Syllabus & Lab Manual Development (GTU)

Student Support & Career Development

- Career Facilitation – Placement Fair

Table 5.5.1 Patent Details

Faculty Name	Patent Type	Status	Application No.	Date
Shri N. J. Chauhan	Design	Awaiting for Technical Examination	472301-001	03/09/2025
Dr. R. N. Patel	Design	Published	202341001043 A	05/01/2023
Dr. R. N. Patel	Design	Published	202241008305 A	25/02/2022
Dr. R. N. Patel	Design	Published	202141060958 A	21/01/2022

Table 5.5.2 Faculty Contribution to Syllabus Development

Faculty Name	Department	Subject Code	Subject Name	Academic Year
Ms. M. K. Pedhadiya	Electronics And Communication Department	4321103	Electronic Circuits & Applications	2022-23
Shri Jabbarbhai Valibhai Kureshi	Instrumentation & Control Engineering	4341706	Industrial Power Control	2022-23

Shri Nirav Jashvantkumar Chauhan	Electronics And Communication Department	4321102	Digital Electronics	2022-23
Shri S J Chauhan	Electronics And Communication Department	4321101	Electronics Workshop	2022-23
Shri R C Parmar	Electronics And Communication Department	4331105	Industrial Electronics	2022-23
Dr. Laukikkumar K Patel	Electronics And Communication Department	4351104	Mobile And Wireless Communication	2022-23
Shri Milav Dabgar	Electronics And Communication Department	4341104	Circuit Design Tools	2022-23
Ms. M. K. Pedhadiya	Electronics And Communication Department	4361102	VLSI	2023-24
Shri S J Chauhan	Electronics And Communication Department	4341108	Circuit Design Tools	2023-24
Shri Milav Dabgar	Electronics And Communication Department	4343203	Java Programming	2023-24
Shri S J Chauhan	Electronics And Communication Department	4361103	Electronic Project -II	2024-25
Shri Ashfaq M. Qureshi	Electrical Engineering Department	Di01000171	Basics Of Electricals And Electronics Engineering	2024-25
Dr. Jigna D Modi	Sciences And Humanities Department	Di01021011	Applied Chemistry	2024-25
Dr. Jigna D Modi	Sciences And Humanities Department	Di01000071	Engineering Chemistry	2024-25
Shri Milav Dabgar	Electronics And Communication Department	4353207	Advance Java	2024-25
Shri Milav Dabgar	Electronics And Communication Department	Di04032021	Advance Java	2025-26

Table 5.5.3 Duties Performed by Faculties outside GP Palanpur

Faculty Name	Department	Academic Year of Contribution/Duty	Contribution/Duty Start Date	Contribution/Duty End Date	Type of Contribution/D
Dr. Bhupendra Mor	Science & Humanities Department	2021-2022	2/13/22	2/13/22	Government Exam Duty
Dr. Bhupendra Mor	Science & Humanities Department	2021-2022	3/23/22	3/24/22	Placement Fair Facilitati
Shri C P GELOT	GENERAL	2021-2022	2/13/22	2/13/22	Government Exam Duty

Dr R N Patel	EC	2021-2022	10/1/22	10/5/21	Election Duty
Dr R N Patel	EC	2021-2022	3/23/22	3/24/22	Placement Fair Facilitati
Shri T D MODI	MECHANICAL	2021-2022	1/1/26	1/31/26	RTO Help Center Suppo
Shri T D MODI	MECHANICAL	2021-2022	4/1/22	4/30/22	RTO Help Center Suppo
Shri Nirav J Chauhan	EC	2021-2022	3/2/22	3/24/22	Placement Fair Facilitati
Shri J V KURESHI	IC	2021-2022	3/2/22	3/25/22	Placement Fair Facilitati
Shri J V KURESHI	IC	2021-2022	4/24/22	4/24/22	Government Exam Duty
Shri J V KURSEHI	IC	2021-2022	10/1/21	10/31/21	RTO Help Center Suppo
Shri J V KURESHI	IC	2021-2022	9/17/21	9/17/21	Other Consultancy/Servi
Shri Nirav J Chauhan	EC	2021-2022	10/1/21	10/31/21	RTO Help Center Suppo
Shri Nirav J Chauhan	EC	2021-2022	1/1/22	1/31/22	RTO Help Center Suppo
Shri Nirav J Chauhan	EC	2021-2022	4/1/22	4/30/22	RTO Help Center Suppo
Shri R C PARMAR	Electronics and Communication	2021-2022	9/1/22	12/31/22	Election Duty
Shri RAJESH CHAUDHARI	MECHANICAL	2021-2022	7/1/21	6/30/22	UPSC Exam Center Dut
Shri RAJESH CHAUDHARI	MECHANICAL	2021-2022	7/1/21	6/30/22	Election Duty
Dr. Bhupendra Mor	Science & Humanities Department	2022-2023	11/7/22	11/7/22	Election Duty
Dr. Bhupendra Mor	Science & Humanities Department	2022-2023	3/9/23	3/10/23	Placement Fair Facilitati
Shri C P GELOT	GENERAL	2022-2023	3/9/23	3/10/23	Placement Fair Facilitati
Dr R N Patel	EC	2022-2023	12/7/22	12/8/22	Election Duty
Dr R N Patel	EC	2022-2023	3/9/23	3/10/23	Placement Fair Facilitati
Shri T D MODI	MECHANICAL	2022-2023	10/1/22	10/31/22	RTO Help Center Suppo

Shri Nirav J Chauhan	EC	2022-2023	2/15/23	3/10/23	Placement Fair Facilitati
Shri T .D.MODI	MECHANICAL	2022-2023	7/1/22	6/30/23	Election Duty
Shri J V KURESHI	IC	2022-2023	9/1/22	12/30/22	Election Duty
Shri Nirav J Chauhan	EC	2022-2023	1/7/23	1/8/23	Government Exam Duty
Ms. M. K. Pedhadiya	EC	2022-2023	3/9/23	3/10/23	Placement Fair Facilitati
Shri RAJESH CHAUDHARI	MECHANICAL	2022-2023	7/1/22	6/30/23	RTO Help Center Suppo
Shri RAJESH CHAUDHARI	MECHANICAL	2022-2023	7/1/22	6/30/23	RTO Help Center Suppo
Ms. M. K. Pedhadiya	EC	2022-2023	12/4/22	12/6/22	Election Duty
Ms. M. K. Pedhadiya	EC	2022-2023	3/9/23	3/10/23	Placement Fair Facilitati
Dr. Bhupendra Mor	Science & Humanities Department	2023-2024	10/15/23	10/15/23	Government Exam Duty
Dr. Bhupendra Mor	Science & Humanities Department	2023-2024	3/12/24	3/13/24	Placement Fair Facilitati
Shri C P GELOT	GENERAL	2023-2024	1/7/24	1/7/24	Government Exam Duty
Shri C P GELOT	GENERAL	2023-2024	1/21/24	1/21/24	Government Exam Duty
Dr R N Patel	EC	2023-2024	12/18/23	1/30/24	Election Duty
Dr R N Patel	EC	2023-2024	10/1/23	10/31/23	RTO Help Center Suppo
Dr R N Patel	EC	2023-2024	12/1/23	12/31/23	RTO Help Center Suppo
Shri T D MODI	MECHANICAL	2023-2024	2/1/24	2/29/24	RTO Help Center Suppo
Shri Nirav J Chauhan	EC	2023-2024	2/26/24	3/13/24	Placement Fair Facilitati
Shri T.D.MODI	MECHANICAL	2023-2024	7/1/23	6/30/24	Election Duty
Shri T.D.MODI	MECHANICAL	2023-2024	7/1/23	6/30/24	Other Consultancy/Servi
Shri J V KURESHI	IC	2023-2024	2/15/23	3/10/23	Placement Fair Facilitati

Shri J V KURESHI	IC	2023-2024	2/20/24	3/13/24	Placement Fair Facilitati
Shri Nirav J Chauhan	EC	2023-2024	4/1/24	4/30/24	RTO Help Center Suppo
Shri Nirav J Chauhan	EC	2023-2024	3/21/24	5/5/24	Election Duty
Shri Nirav J Chauhan	EC	2023-2024	1/17/24	1/21/24	Government Exam Duty
Shri R C PARMAR	Electronics and Communication	2023-2024	12/19/23	5/31/23	Election Duty
Shri S.P.JOSHIARA	Electronics & communication engineering	2023-2024	9/1/23	9/30/23	RTO Help Center Suppo
Shri RAJESH CHAUDHARI	MECHANICAL	2023-2024	7/1/23	6/30/24	RTO Help Center Suppo
Shri SNEHILKUMAR P JOSHIARA	ELECTRONICS & COMMUNICATION ENGINEERING	2023-2024	12/28/23	5/8/24	Election Duty
Ms. M. K. Pedhadiya	EC	2023-2024	5/6/24	5/8/24	Election Duty
Ms. M. K. Pedhadiya	EC	2023-2024	10/10/23	10/10/23	Government Exam Duty
Dr. Laukikkumar K Patel	EC	2023-2024	12/28/23	3/15/24	Election Duty
Dr. Bhupendra Mor	Science & Humanities Department	2024-2025	9/14/25	9/14/25	Government Exam Duty
Dr. Bhupendra Mor	Science & Humanities Department	2024-2025	4/19/25	4/19/25	Government Exam Duty
Dr. Bhupendra Mor	Science & Humanities Department	2024-2025	2/25/25	2/25/25	Placement Fair Facilitati
Shri C P GELOT	GENERAL	2024-2025	5/7/24	5/7/24	Election Duty
Dr R N Patel	EC	2024-2025	11/1/24	11/30/24	RTO Help Center Suppo
Dr R N Patel	EC	2024-2025	2/25/25	2/25/25	Placement Fair Facilitati
Shri T.D.Modi	MECHANICAL	2024-2025	2/1/25	2/28/25	RTO Help Center Suppo
Shri Nirav J Chauhan	EC	2024-2025	8/27/25	2/25/25	Placement Fair Facilitati
Shri S J Chauhan	EC	2024-2025			Election Duty
Shri T.D.MODI	MECHANICAL	2024-2025	7/1/24	6/30/25	Election Duty

Shri T.D.MODI	MECHANICAL	2024-2025	7/1/24	6/30/25	Other Consultancy/Servi
Shri T.D.MODI	MECHANICAL	2024-2025	7/1/24	6/30/25	Other Consultancy/Servi
Shri MAHESH F TANK	General	2024-2025	5/6/24	5/8/24	Election Duty
Shri J V KURESHI	IC	2024-2025	1/25/25	2/25/25	Placement Fair Facilitati
Shri Nirav J Chauhan	EC	2024-2025	12/20/24	12/22/24	Government Exam Duty
Ms. M. K. Pedhadiya	EC	2024-2025	2/25/25	2/25/25	Placement Fair Facilitati
Shri C P GELOT	GENERAL	2025-2026	4/19/25	4/19/25	Government Exam Duty
Dr R N Patel	EC	2025-2026	9/10/25	9/14/25	Government Exam Duty
Shri T.D.Modi	MECHANICAL	2025-2026	2/1/26	2/28/26	RTO Help Center Suppo
Shri Nirav J Chauhan	EC	2025-2026	1/28/26	2/24/26	Placement Fair Facilitati
Shri T.D.MODI	MECHANICAL	2025-2026	7/1/21	3/1/25	Placement Fair Facilitati
Shri J V KURESHI	IC	2025-2026	1/28/26	2/24/26	Placement Fair Facilitati
Shri J V KURESHI	IC	2025-2026	9/1/25	9/30/25	RTO Help Center Suppo
Shri Nirav J Chauhan	EC	2025-2026	9/1/25	9/30/25	RTO Help Center Suppo
Shri S.P.JOSHIARA	Electronics and communication engineering	2025-2026	12/1/25	12/31/25	RTO Help Center Suppo

5.6 Faculty Performance Appraisal and Development System (FPADS) (30)

A. A well-defined FPADS instituted for all the assessment years (5)

Being a government institution, the faculty appraisal system is well defined, objective and transparent. Faculties are required to fill their appraisal report every year in the month of April in SATHI (System of Application of Te faculties are required to fill their appraisal report every year in the month of April in Karmyogi portal (<https://karmyogi.gujarat.gov.in/>)).

The Performance Appraisal Report (PAR) format is in accordance with the procedure followed by all the departments in Government of Gujarat. These reports have replaced brief confidential reports with a transparent and det follows:

Table 5.6.1 FPADS Evaluation Parameters

Category	Parameter	Evaluated By	Assess Scale	Purpose
Self-Appraisal	Training programs attended	Faculty	Qualitative	Professional development tracki
	Additional charges held (3+ months)	Faculty	Qualitative	Administrative contribution
	Duty descriptions	Faculty	100 words	Role clarity and responsibilities
	Annual work plan & achievements	Faculty	Qualitative	Goal setting and accomplishmer
	Extraordinary contributions	Faculty	Qualitative	Social impact and innovation
	Performance hindrances	Faculty	Qualitative	Obstacle identification
	Training needs	Faculty	3 specific areas	Skill development planning
	Property declaration	Faculty	Mandatory	Transparency compliance
Work Performance	Work plan accomplishment	HOD/Reporting Officer	1-10 scale	Deliverable completion
	Extraordinary work claims	HOD/Reporting Officer	Qualitative	Validation of special achieveme
	Quality of work output	HOD/Reporting Officer	1-10 scale	Work standard assessment
	Decision making ability	HOD/Reporting Officer	1-10 scale	Management capability
	Initiative for work	HOD/Reporting Officer	1-10 scale	Proactive behavior
Prof. Skills	Analytical ability	HOD/Reporting Officer	1-10 scale	Problem-solving skills
	Communication skills	HOD/Reporting Officer	1-10 scale	Expression effectiveness
	Knowledge of laws/rules/IT	HOD/Reporting Officer	1-10 scale	Tech. & regulatory compliance
	Coordination ability	HOD/Reporting Officer	1-10 scale	Collaborative efficiency
Personal Attrib.	Attitude towards work	HOD/Reporting Officer	1-10 scale	Professional demeanor

Category	Parameter	Evaluated By	Assess Scale	Purpose
	Sense of responsibility	HOD/Reporting Officer	1-10 scale	Accountability
	Interpersonal relations	HOD/Reporting Officer	1-10 scale	Emotional stability
	Ability to motivate	HOD/Reporting Officer	1-10 scale	Team building
Lead. & Ethics	Leadership quality	HOD/Reporting Officer	1-10 scale	Guidance and direction
	Team spirit	HOD/Reporting Officer	1-10 scale	Collaborative mindset
	Integrity	HOD/Reporting Officer	1-10 scale	Ethical conduct
	Moral courage	HOD/Reporting Officer	1-10 scale	Principled decision-making
Compliance	Disciplinary action report	HOD/Reporting Officer	Yes/No	Conduct monitoring
	Significant failures	HOD/Reporting Officer	Qualitative	Improvement areas

Assessment Process: The evaluation by the reporting officer (HOD) on 18 parameters (scale 1-10) is reviewed by the reviewing authority (Principal). Overall assessment is computed out of 100 marks. After review, faculty are dissatisfied. Reports are then forwarded to the Commissionerate of Technical Education for further processing.

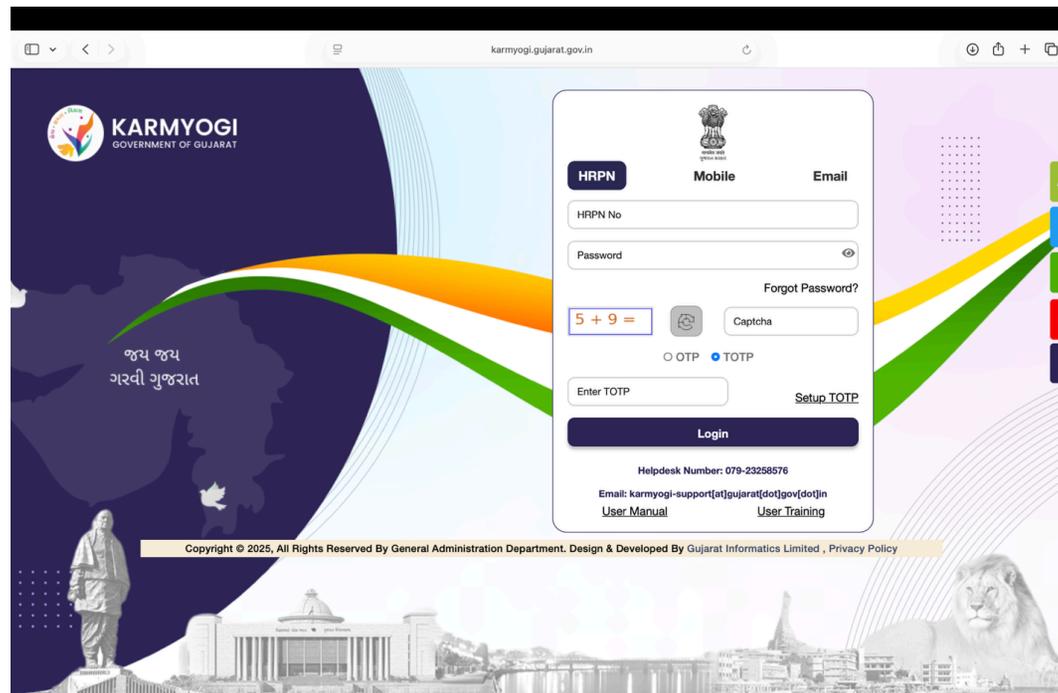


Figure 5.6.1 Karmyogi Portal

Key Features of the System:

- **Comprehensive Coverage:** 18 performance parameters covering all aspects of faculty role
- **Dual Assessment:** Self-appraisal combined with supervisor evaluation
- **Quantitative Rating:** 1-10 scale enables objective comparison
- **Transparency:** Faculty review their reports before finalization
- **Grievance Mechanism:** Objection provision ensures fairness
- **Career Linkage:** Directly connected to promotions and AGP advancement

The following table shows various sections included in the performance appraisal report:

Table 5.6.2 Performance Appraisal Report Format

Sr. No	Name of Section	Section to be filled by
1	Section I - Basic information	Establishment section
2	Section II - Self Appraisal	Faculty himself/herself
3	Section III - Appraisal	Head of Department
4	Section IV - Review	Head of Institution

B. Its implementation and effectiveness (15)

The entire appraisal system is transparent and time bound. Faculties are required to fill their Performance Appraisal Report (PAR) every year in the month of April. All the reports are sent to the Reporting Officer (Head of Dep reviewing, it is shown to the faculties to let them know their performance. Faculties are allowed to raise an objection, if they are not satisfied with the grades. The reports are then sent to the Commissionerate of Technical Edu are kept at CTE office and reports of Head of the departments (class 1) are sent to the education department.

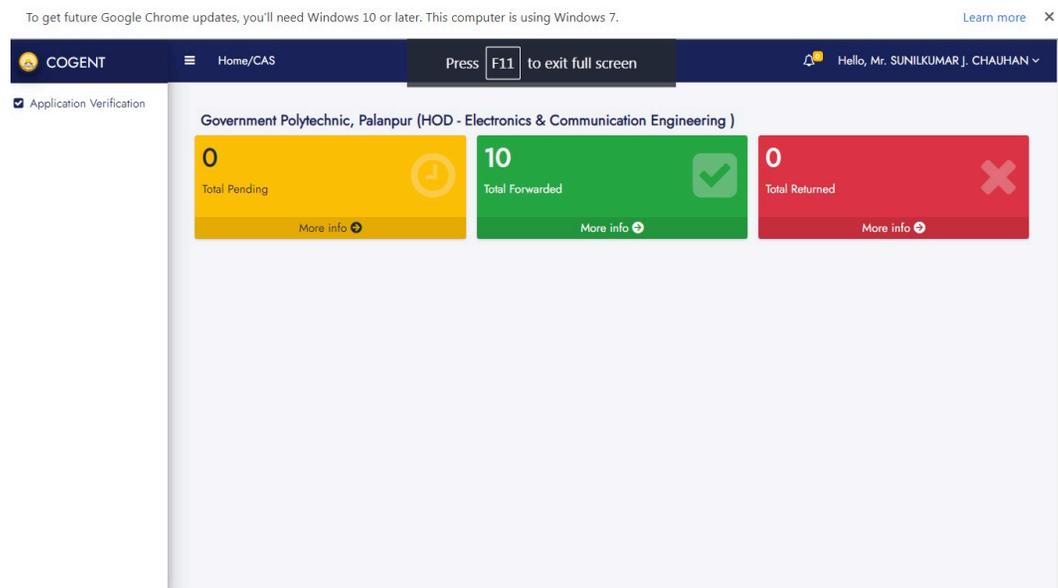


Figure 5.6.2 Cogent Portal CAS Feature in HOD Role

During the first ever joining if the faculty of technical branch is equipped with a Master degree and faculty for general stream is equipped with an MPhil or Ph.D. he/she directly placed in the 6000 (level 10) grade pay. If a faculty successfully completing 4 years. For faculty a periodic change in their pay grade and all the appraisal reports are to be reviewed and all the reports with a score of 60 or more out of 100 are considered to be eligible for the AGI (level 11 to 12) and 8000 to 9000 (level 12 to 13A1) respectively. For AGP promotion of 9000 to 10000 additional PhD qualification is required (applicable for only 6th Pay commission).

Eligibility criteria for various AGP movements for 6th CPC are as follows:

Table 5.6.3 Eligibility for academic grade pay (AGP) scale movement as per 6th pay

Degree	AGP Scale Movement	Eligibility Criteria
Bachelor of Engineering (B.E.)	5400	At the time of appointment
Bachelor of Engineering (B.E.)	6000	After acquiring ME or 6 years
Bachelor of Engineering (B.E.)	7000	After completing 3 years

Degree	AGP Scale Movement	Eligibility Criteria
Bachelor of Engineering (B.E.)	8000	After completing 5 years
Bachelor of Engineering (B.E.)	9000	After completing 3 years
Master of Engineering/Master of Technology (M.E./M.Tech)	6000	At the time of appointment
Master of Engineering/Master of Technology (M.E./M.Tech)	7000	After completing 5 years
Master of Engineering/Master of Technology (M.E./M.Tech)	8000	After completing 5 years
Master of Engineering/Master of Technology (M.E./M.Tech)	9000	After completing 3 years

The faculty members are given Career Advancement (AGP) as per AICTE under career advancement scheme (CAS) on the basis of PBAS points obtained during the assessment period. The eligible faculty member aspiring for the CAS Committee in the institute. The application is forwarded to the Commissionerate office for further processing. For promotion to the next higher level, all PARs (last 5 years) are to be reviewed. PAR is also considered

परिशिष्ट-२
डिप्लोमा संस्थानों के लिए पूर्ण करने के लिए समयपत्रक :

No. क्र.	Activity प्रवृत्तियाँ	Cut off Dates तारीख के ले पहेला डिप्लोमा पूर्ण करनी	
1	PAR form to be generated of the officer reported upon by the Administration / Establish Division.	15 th April	On line
2	Self-appraisal for current year	15 th May	On line
3	Appraisal by reporting authority	15 th June	On line
4	Appraisal by reviewing authority and discloser of PAR to officer reported upon	15 th July	On line
5	Acceptance of PAR or representation if any by officer reported upon.	15 th August	On line
6	Comments of the Reporting Authority on representation if any	31 st August	On line
7	Comments of the Reviewing Authority on representation if any	15 th September	On line
8	Decision of CCA about the representation and communication of the same alongwith complete PAR to the officer reported upon.	15 th October	On line
9	Acceptance of decision or representation if any to the Referral Board by the officer reported upon through CCA	31 st October	Off line
10	Conveying of representation to the Referral Board alongwith all relevant documents by CCA	15 th November	Off line
11	Decision and communication to the officer reported upon by the referral Board and end of entire PAR process (Copy of the decision to CCA, reporting officer and reviewing officer)	31 st December	Off line

Figure 5.6.3 GAD Guidelines for PAR

Process Timeline:

- **Step 1:** Faculty self-appraisal (April annually)
- **Step 2:** HOD evaluation and grading (April-May)
- **Step 3:** Principal review and finalization (May)
- **Step 4:** Faculty acknowledgment with objection window (May-June)
- **Step 5:** CTE processing and career advancement eligibility (June onwards)

Key Decision Points:

- Score more than or equal to 60 out of 100 required for AGP promotion eligibility
- Last 5 years PARs reviewed for career advancement
- PBAS points assessed by CAS Committee for promotion
- Transparent process with faculty access and objection mechanism

Gujarat Government implemented 7th pay scale for diploma institutions w.e.f 20/3/2020. Presently all faculty members are getting seventh pay scale. Gujarat government declared Career Advancement Scheme (CAS) implem

The following faculty members are given career advancement as per seventh pay under CAS by CTE office.

Table 5.6.4 Career Advancement under CAS

Sr. No.	Faculty Name	CAS Eligibility Date	AGP Movement	Status
1	Mr. Nirav J. Chauhan	01/07/2022	L10-L11	Complete
2	Miss Mittal K. Pedhadiya	08/05/2018	15600-39100 (6000) – 15600-39100 (7000)	Complete
3	Mr. Snehilkumar P. Joshiara	25/05/2022	L9A – L10	Complete
4	Mr. Rahul C. Parmar	11/06/2021	L10-L11	Complete
5	Mr. Milav J. Dabgar	02/11/2021	L10-L11	Complete
6	Miss Mittal K. Pedhadiya	26/04/2017	15600-39100 (5400) - 15600-39100 (6000)	Complete
7	Dr. Ratansing N. Patel	28/10/2020	15600-39100 (6000) - 15600-39100(7000)	Complete
8	Mr. Laukikkumar K. Patel	09/05/2016	15600-39100 (6000) - 15600-39100 (7000)	Complete
9	Dr. Laukikkumar K. Patel	09/05/2021	L11-L12	Complete

C. Details of qualification up-gradation of faculty (10)

Faculties are sent for higher education by head office on seniority basis. Following faculties were permitted by the head office for pursuing higher study and the said faculties successfully up-graded their qualifications.

Table 5.6.5 Faculty Qualification Upgradation

Sr No.	Name of Faculty	Designation	Department	Degree	Area of Specialization	University	Duration
1	Dr. Laukikkumar K. Patel	Lecturer	ECE	Ph.D.	Feature based image registration using machine learning	SPU, Mehsana	2019-2024
2	Dr. Ratansing N. Patel	Lecturer	ECE	Ph.D.	Rectangular Microstrip Patch Antenna Design for Satellite image vision system application	GTU, Ahmedabad	2014-2019
3	Mr. Nirav J. Chauhan	Lecturer	ECE	Ph.D.	Design of Compact Wideband Microstrip Patch Antenna for Wireless Applications	GTU, Ahmedabad	2022-Continue
4	Mr. Milav J. Dabgar	Lecturer	ECE	AICTE QIP PG Certificate	Deep Learning	NIT, Surat	2025-2025

5	Mr. Milav J. Dabgar	Lecturer	ECE	B.S.	Data Science & Applications	IIT, Madras	2021-Continue
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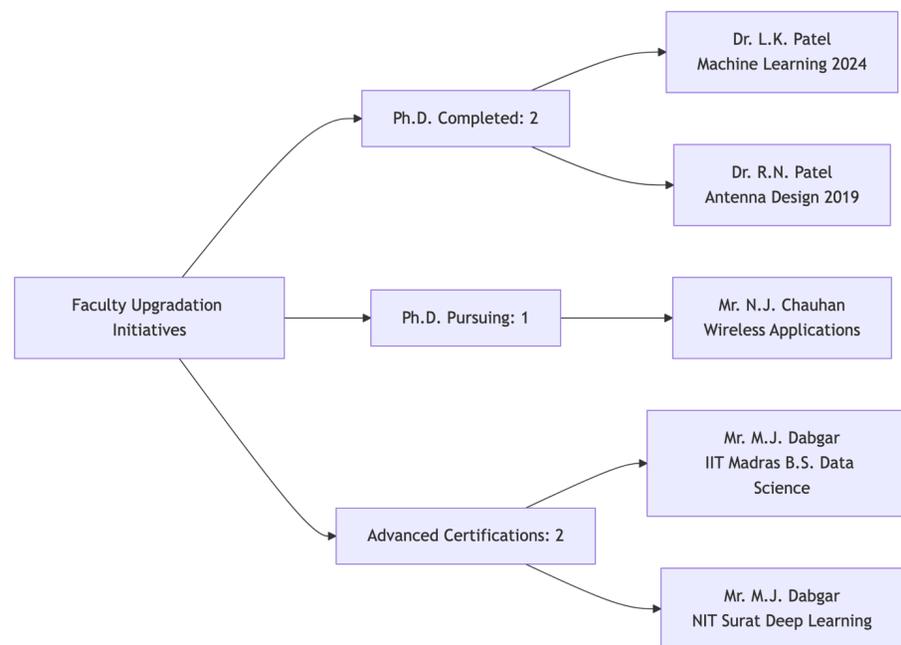


Figure 5.6.4 Faculty Qualification Upgradation Analysis

Achievement Highlights:

- **2 Faculty:** Successfully completed Ph.D. during/before assessment period
- **1 Faculty:** Actively pursuing Ph.D. research
- **Advanced Certifications:** Faculty enrolled in IIT Madras and NIT Surat programs
- **Continuous Learning:** Institutional support for qualification upgradation
- **Diverse Specializations:** Machine Learning, Antenna Design, Data Science, Deep Learning.

6 FACILITIES AND TECHNICAL SUPPORT (100)

6.1 Availability of adequate, well equipped classrooms to meet the curriculum requirements (10)

[A] Adequacy of number of classrooms in department

Course duration: 03 Year

Number of available classrooms: 05

Adequacy: Yes, Adequate

The Electronics and Communication Engineering Department of Government Polytechnic, Palanpur, is equipped with five (05) well-furnished classrooms, each designed to facilitate effective teaching-learning processes. These classrooms are:

- **Adequate in number and capacity** to conduct lectures, tutorials, and other academic activities as per curriculum requirements, ensuring compliance with NBA's emphasis on infrastructure sufficiency.
- **Well-equipped with modern teaching aids** such as whiteboards, projection facilities, and audio-visual support, thereby enhancing student engagement and meeting the NBA criterion of effective delivery of curriculum.
- **Integrated with CCTV surveillance systems**, which not only strengthen institutional discipline and security but also align with NBA's focus on creating a safe and conducive learning environment.
- **Designed to support inclusivity and accessibility**, ensuring that students from diverse backgrounds can benefit equally, in line with NBA's quality benchmarks for equity in education.
- **Maintained to high standards of cleanliness and ergonomics**, contributing to student comfort and concentration, which indirectly supports NBA's concern for student-centric learning outcomes.

Sr. No.	Building Name Room No.	Seating Capacity	Area (m ²)	Facilities						
				Projector	Chalk Board/ White Board	Benches	Internet/ Wi-Fi	Laptop/ PC (when required)	Fan	Light
1	BADP Building Ground Floor (B007)	60	45	Portable projector	Yes	Yes	CWAN (Wired and Wireless)	Laptop	Yes	Yes
2	BADP Building Ground Floor (B011)	60	45	Fixed Projector with Screen (OHP)	Yes	Yes	CWAN (Wired and Wireless)	PC	Yes	Yes
3	BADP Building First Floor (B108)	60	45	Portable projector	Yes	Yes	CWAN (Wired and Wireless)	Laptop	Yes	Yes
4	BADP Building First Floor (B109)	90	75	Portable projector	Yes	Yes	CWAN (Wired and Wireless)	Laptop	Yes	Yes
5	BADP Building First Floor (B111)	60	45	Fixed Projector with Screen	Yes	Yes	CWAN (Wired and Wireless)	Laptop	Yes	Yes

Table: 6.1.1 List of Classroom/Tutorial room with amenities**[B] Adequate classroom infrastructure checklist****[1] Class room: B007**

Sr. No.	Parameter	Criteria / Norms	Available (Yes/No)	Quantity / Details	Remarks / Evidence Attached
1	Size & Seating Capacity	Minimum 33 sqm per class, 30 seats	Yes	45 Sqm	Area sheet of Institute
2	Ventilation & Lighting	Adequate lighting airflow, fans/windows functional	Yes	Entry & Exit Doors, 4 windows	Photographs
3	ICT Infrastructure	Projector / Internet / Audio system	Yes	Portable projector CWAN (Wired and Wireless)	Photographs
4	Furniture	Comfortable Benches/chairs, Black board, clean layout	Yes	20 Benches, 1 Chair, 1 Table, 1 Blackboard	Photographs
5	Cleanliness	Regularly cleaned and maintained	Yes	Regularly cleaning of each classroom	Register/ Contract letter
6	Safety Measures	Fire extinguisher, emergency exits, CCTV, first aid	Yes	CCTV Camera, MCBs, Fire extinguisher near entrance	Photographs
7	Network Connectivity	LAN / Wi-Fi present functional	Yes	CWAN (Wired and Wireless)	Photographs
8	Evidence of Academic Use	Photos, logs, lecture sessions	Yes	As per timetable	Timetable file
9	Display of Academic Information	Timetables, notices displayed	Yes	Notice board available near entrance	Photographs

10	Academic Ambience	Posters/charts, inspirational content	Yes	Posters/charts, inspirational content	Photographs
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Table: 6.1.2 Adequate classroom B007 infrastructure checklist

[2] Class room: B011

Sr. No.	Parameter	Criteria / Norms	Available (Yes/No)	Quantity / Details	Remarks / Evidence Attached
1	Size & Seating Capacity	Minimum 33 sqm per class, 30 seats	Yes	45 Sqm	Area sheet of Institute
2	Ventilation & Lighting	Adequate lighting airflow, fans/windows functional	Yes	Entry & Exit Doors, 4 windows	Photographs
3	ICT Infrastructure	Projector / Internet / Audio system	Yes	Projector installed with Screen, CWAN (Wired and Wireless)	Photographs
4	Furniture	Comfortable Benches/chairs, Black board, clean layout	Yes	20 Benches, 1 Chair, 1 Table, 1 Blackboard	Photographs
5	Cleanliness	Regularly cleaned and maintained	Yes	Regularly cleaning of each classroom	Register/ Contract letter
6	Safety Measures	Fire extinguisher, emergency exits, CCTV, first aid	Yes	CCTV Camera, MCBs, Fire extinguisher near entrance	Photographs
7	Network Connectivity	LAN / Wi-Fi present functional	Yes	CWAN (Wired and Wireless)	Photographs
8	Evidence of Academic Use	Photos, logs, lecture sessions	Yes	As per timetable	Timetable file

9	Display of Academic Information	Timetables, notices displayed	Yes	Notice board available near entrance	Photographs
10	Academic Ambience	Posters/charts, inspirational content	Yes	Posters/charts, inspirational content	Photographs

Table: 6.1.3 Adequate classroom B011 infrastructure checklist

[3] Class room: B108

Sr. No.	Parameter	Criteria / Norms	Available (Yes/No)	Quantity / Details	Remarks / Evidence Attached
1	Size & Seating Capacity	Minimum 33 sqm per class, 30 seats	Yes	45 Sqm	Area sheet of Institute
2	Ventilation & Lighting	Adequate lighting airflow, fans/windows functional	Yes	Entry & Exit Doors, 4 windows	Photographs
3	ICT Infrastructure	Projector / Internet / Audio system	Yes	Portable projector CWAN (Wired and Wireless)	Photographs
4	Furniture	Comfortable Benches/chairs, Black board, clean layout	Yes	20 Benches, 1 Chair, 1 Table, 1 Blackboard	Photographs
5	Cleanliness	Regularly cleaned and maintained	Yes	Regularly cleaning of each classroom	Register/ Contract letter
6	Safety Measures	Fire extinguisher, emergency exits, CCTV, first aid	Yes	CCTV Camera, MCBs, Fire extinguisher near entrance	Photographs
7	Network Connectivity	LAN / Wi-Fi present functional	Yes	CWAN (Wired and Wireless)	Photographs
8	Evidence of Academic Use	Photos, logs, lecture sessions	Yes	As per timetable	Timetable file

9	Display of Academic Information	Timetables, notices displayed	Yes	Notice board available near entrance	Photographs
10	Academic Ambience	Posters/charts, inspirational content	Yes	Posters/charts, inspirational content	Photographs

Table: 6.1.4 Adequate classroom B108 infrastructure checklist

[4] Class room: B109

Sr. No.	Parameter	Criteria / Norms	Available (Yes/No)	Quantity / Details	Remarks / Evidence Attached
1	Size & Seating Capacity	Minimum 33 sqm per class, 30 seats	Yes	75 Sqm	Area sheet of Institute
2	Ventilation & Lighting	Adequate lighting airflow, fans/windows functional	Yes	1 Door, 5 windows	Photographs
3	ICT Infrastructure	Projector / Internet / Audio system	Yes	Portable projector CWAN (Wired and Wireless)	Photographs
4	Furniture	Comfortable Benches/chairs, Black board, clean layout	Yes	30 Benches, 1 Chair, 1 Table, 1 Blackboard	Photographs
5	Cleanliness	Regularly cleaned and maintained	Yes	Regularly cleaning of each classroom	Register/ Contract letter
6	Safety Measures	Fire extinguisher, emergency exits, CCTV, first aid	Yes	CCTV Camera, MCBs, Fire extinguisher near entrance	Photographs
7	Network Connectivity	LAN / Wi-Fi present functional	Yes	CWAN (Wired and Wireless)	Photographs
8	Evidence of Academic Use	Photos, logs, lecture sessions	Yes	As per timetable	Timetable file

9	Display of Academic Information	Timetables, notices displayed	Yes	Notice board available near entrance	Photographs
10	Academic Ambience	Posters/charts, inspirational content	Yes	Posters/charts, inspirational content	Photographs

Table: 6.1.5 Adequate classroom B109 infrastructure checklist

[5] Class room: B111

Sr. No.	Parameter	Criteria / Norms	Available (Yes/No)	Quantity / Details	Remarks / Evidence Attached
1	Size & Seating Capacity	Minimum 33 sqm per class, 30 seats	Yes	45 Sqm	Area sheet of Institute
2	Ventilation & Lighting	Adequate lighting airflow, fans/windows functional	Yes	Entry & Exit Doors, 3 windows	Photographs
3	ICT Infrastructure	Projector / Internet / Audio system	Yes	Portable projector CWAN (Wired and Wireless)	Photographs
4	Furniture	Comfortable Benches/chairs, Black board, clean layout	Yes	20 Benches, 1 Chair, 1 Table, 1 Blackboard	Photographs
5	Cleanliness	Regularly cleaned and maintained	Yes	Regularly cleaning of each classroom	Register/ Contract letter
6	Safety Measures	Fire extinguisher, emergency exits, CCTV, first aid	Yes	CCTV Camera, MCBs, Fire extinguisher near entrance	Photographs
7	Network Connectivity	LAN / Wi-Fi present functional	Yes	CWAN (Wired and Wireless)	Photographs
8	Evidence of Academic Use	Photos, logs, lecture sessions	Yes	As per timetable	Timetable file

9	Display of Academic Information	Timetables, notices displayed	Yes	Notice board available near entrance	Photographs
10	Academic Ambience	Posters/charts, inspirational content	Yes	Posters/charts, inspirational content	Photographs

Table: 6.1.6 Adequate classroom B111 infrastructure checklist



Figure 6.1.1 Photographs_B007



Figure 6.1.2 Photograph



Figure 6.1.3 Photographs_B108



Figure 6.1.4 Photograph





Figure 6.1.5 Photographs _B111



Figure 6.1.6 Fire exting

6.2 Availability of adequate and well-equipped workshops, Laboratories and Technical manpower to meet the curriculum requirements (40)

A. Adequacy (10)

[A] Availability of adequate well-equipped workshops/Laboratories

- The Electronics and Communication Engineering Department of Government Polytechnic, Palanpur, demonstrates strong institutional support through its **well-established workshops and laboratories, which** are sufficient in number and quality to meet curriculum requirements. In alignment
 - **Adequacy and Availability of Laboratories:**
The department has ensured that laboratories are not only adequate in number but also accessible during scheduled sessions and flexible hours. This reflects effective governance and commitment to student-centric learning.
 - **Modern Equipment and Consumables:**
Laboratories are furnished with efficient, modern instruments and consumables, systematically stored and tagged for easy identification. This indicates proper financial allocation and resource management.
 - **Hands-on and Experiential Learning:**
Students are encouraged to engage in practical activities beyond scheduled sessions, fostering innovation and independent learning. This demonstrates institutional support for outcome-based education.
 - **Infrastructure and Facilities:**
Each laboratory is equipped with adequate furniture, display boards, and charts for essential student information. This reflects governance that prioritizes student welfare and academic preparedness, ensuring that infrastructure supports both teaching and learning processes.
 - **Scheduling and Utilization:**
Laboratory sessions are systematically scheduled in accordance with curriculum requirements, ensuring optimal utilization of resources. This highlights effective planning and governance practices.
 - **Financial and Administrative Support:**
The availability of modern equipment and consumables, along with proper maintenance and upgrades, reflects the institution's commitment to continuous improvement

Number of laboratories required as per AICTE Guideline: 2 Laboratory per year

Duration of course (Electronics and Communication Department): 3 years

Total number of laboratories required: 06

Total number of laboratories available in department: 09

Adequacy: Yes, Adequate

[1] List of adequate Laboratory with course incorporated

Sr. No.	Name of Laboratory	Building Name Room No.	

1	Computer Lab-1	BADP Building Ground Floor Room No: B002	
2	Computer Lab-2	BADP Building Ground Floor Room No: B008	
3	Computer Lab-3	BADP Building Ground Floor Room No: B009	
4	Computer Lab-4	BADP Building Ground Floor Room No: B014	
5	Electronics Lab-1	BADP Building Ground Floor Room No: B010	
6	Electronics Lab-2	BADP Building Ground Floor Room No: B013	

7	Electronics Lab-3	BADP Building First Floor Room No: B106	
8	Communication Lab-1	BADP Building First Floor Room No: B101	
9	Communication Lab-2	BADP Building First Floor Room No: B105	

Table: 6.2.1 Adequate Laboratory with course incorporated

[2] Facility available in Laboratory

Name of Laboratory	Location	Room area available (meter square)	Amenities
Computer Lab-1	BADP Building Ground Floor Room No: B002	25.5	<ul style="list-style-type: none"> • Computer, Internet port • CWAN (Wired and Wireless) • White board • Lab Table and Stool • Faculty Table and Faculty Chair • Display chart.
Computer Lab-2	BADP Building Ground Floor Room No: B008	75	<ul style="list-style-type: none"> • Projector installed • Computer, Internet port • CWAN (Wired and Wireless) • Smart/White board • Lab Table and Stool • Faculty Table and Faculty Chair • Display chart.
Computer	BADP Building	90	<ul style="list-style-type: none"> • Projector with motorized screen

Lab-3	Ground Floor Room No: B009		<ul style="list-style-type: none"> • Computer, Internet port • CWAN (Wired and Wireless) • White board • Lab Table and Stool • Faculty Table and Faculty Chair • Display chart.
Computer Lab-4	BADP Building Ground Floor Room No: B014	25.5	<ul style="list-style-type: none"> • Computer, Internet port • CWAN (Wired and Wireless) • White board • Lab Table and Stool • Faculty Table and Faculty Chair • Display chart.
Electronics Lab-1	BADP Building Ground Floor Room No: B010	75	<ul style="list-style-type: none"> • Equipment/Trainer kit • CWAN (Wired and Wireless) • Black board • Lab Table and Stool • Faculty Table and Faculty Chair • Cupboard and display chart.
Electronics Lab-2	BADP Building Ground Floor Room No: B013	81	<ul style="list-style-type: none"> • Equipment/Trainer kit • Computer and Internet port • CWAN (Wired and Wireless) • Black board • Lab Table and Stool • Faculty Table and Faculty Chair • Cupboard and display chart.
Electronics Lab-3	BADP Building First Floor Room No: B106	81	<ul style="list-style-type: none"> • Equipment/Trainer kit • CWAN (Wired and Wireless) • Black board • Lab Table and Stool • Faculty Table and Faculty Chair • Cupboard and display chart.
Communication Lab-1	BADP Building First Floor Room No: B101	81	<ul style="list-style-type: none"> • Equipment/Trainer kit • CWAN (Wired and Wireless) • Black board • Lab Table and Stool • Faculty Table and Faculty Chair • Cupboard and display chart.
Communication Lab-2	BADP Building First Floor Room No: B105	25.5	<ul style="list-style-type: none"> • Equipment/Trainer kit • Computer and Internet port • CWAN (Wired and Wireless) • White board • Lab Table and Stool • Faculty Table and Faculty Chair

Table: 6.2.2 Facility available in Laboratory

B. Quality of Labs/workshop (20)

[B] Quality of Laboratories/Workshop

- The Electronics and Communication Engineering Department of Government Polytechnic, Palanpur, demonstrates strong governance and institutional support through its nine (09) well-equipped laboratories, which are sufficient in number and quality to meet curriculum requirements. In line
 - **Adequacy of Laboratories and Equipment:**
The department maintains nine laboratories furnished with sufficient trainer kits and modern equipment, ensuring compliance with curriculum requirements. This reflects proper planning and allocation of financial resources to sustain academic quality.
 - **ICT and Networking Facilities:**
Computer laboratories are equipped with Local Area Network (LAN) facilities, enabling students to access digital resources and fostering collaborative learning. This demonstrates institutional support for ICT integration.
 - **Accessibility and Student-Centric Governance:**
Laboratories are kept open beyond timetable hours, allowing students to carry out project work and academic activities. This flexible access reflects governance practices that prioritize student learning outcomes and innovation.
 - **Procurement and Resource Management:**
The purchase process for equipment and computers is carried out regularly, ensuring laboratories remain updated with modern technology. This highlights transparent financial management and continuous improvement.
 - **Faculty Guidance and Academic Discipline:**
Practical sessions are conducted under the supervision of faculty members, with students required to maintain proper records and readings. This structured approach reflects governance that ensures accountability, discipline, and quality in academic delivery.
 - **Cleanliness and Maintenance:**
Laboratories are maintained with regular cleanliness practices, reflecting institutional commitment to providing a safe and conducive learning environment.
 - **Safety and Risk Management:**
Safety measures such as first-aid boxes and fire extinguishers are available in the department.

[I] Basic Laboratory details

Sr. No.	Name of Laboratory	Lab In charge	Maximum No. of Students per Batch
1	Computer Lab-1	Ms. M.K. Pedhadiya	20 students per batch in 1 st & 2 nd year
2	Computer Lab-2	Dr. L.K. Patel	and 15 students per batch in 3 rd year
3	Computer Lab-3	Mr. M.J. Dabgar	
4	Computer Lab-4	Mr. S.P. Joshiyara	
5	Electronics Lab-1	Mr. N.J. Chauhan	
6	Electronics Lab-2	Mr. R.C. Parmar	

7	Electronics Lab-3	Mr. N.J. Chauhan
8	Communication Lab-1	Dr. R.N. Patel
9	Communication Lab-2	Dr. R.N. Patel

Table: 6.2.3 Basic Laboratory details

[2] Facility available in Laboratory

Sr. No.	Parameter	Yes/No	Remarks / Evidence Available
1	Equipment available as per curriculum	Yes	Concerned Register
2	Availability of lab manual	Yes	Lab Manuals
3	Lab timetable with student allocation	Yes	Timetable file
4	Technician available per lab	Yes	One Lab Assistant in the department
5	Safety equipment present (fire extinguisher, first aid)	Yes	Available in the department
6	Internet / ICT-enabled tools (e.g. virtual labs, simulations)	Yes	In concern subject lab manuals
7	Availability of SOPs / experiment list	Yes	Chart in lab
8	Usage of laboratory equipments	Yes	Utilisation register

Table: 6.2.4 Facility available in Laboratory

[3] Laboratory equipments details (Subject wise utilization)

Sr. No.	Name of Laboratory	Building Name and Room No	List of Equipments
1	Computer Lab-1	BADP Building Ground Floor Room No: B002	<ul style="list-style-type: none"> • Computer System (LAN Connected) • Open-Source Software • VLSI Trainer kit

2	Computer Lab-2	BADP Building Ground Floor Room No: B008	<ul style="list-style-type: none"> • Computer System (LAN Connected) • Open-Source Software • 8085 microprocessor Trainer kit • Microprocessor with 8253 Trainer kit • Microprocessor Dynalog 8085 Trainer kit • Microcontroller Dynalog 8051 Trainer kit • Embedded Trainer kit • Microprocessor trainer with A to D converter CARD
3	Computer Lab-3	BADP Building Ground Floor Room No: B009	<ul style="list-style-type: none"> • Computer System (LAN Connected) • Open-Source Software • Crimping tool
4	Computer Lab-4	BADP Building Ground Floor Room No: B014	<ul style="list-style-type: none"> • Computer System (LAN Connected) • Open-Source Software
5	Electronics Lab-1	BADP Building Ground Floor Room No: B010	<ul style="list-style-type: none"> • Multimeter • Function Generator • CRO • PN/Zener/LED/LASER/Photo Diode characteristics Trainer kit • Half/Full/Bridge wave Rectifier Trainer kit • Astable/Monostable/Bistable multivibrator Trainer kit • Ohm/KVL/KCL Trainer kit • Oscillator Trainer kit • BJT/FET characteristics Trainer kit • Transistor amplifier Trainer kit • Photo transistor characteristics Trainer kit • IC555 Timer Trainer kit • RC Coupled 2 stage transistor amplifier Trainer kit • OPAMP Trainer kit • Passive filter Trainer kit
6	Electronics Lab-2	BADP Building Ground Floor Room No: B013	<ul style="list-style-type: none"> • Soldering Iron • Multimeter • LCR Meter • Function Generator • CRO • DSO • Scientific test lab (electronic workstation) • Work bench • Diode characteristics Trainer kit • Rectifier Trainer kit • RC Phase-shift/Colpitt/Hartly/ Wein-bridge/Crystal Oscillator Trainer kit • Voltage Doubler Trainer kit

			<ul style="list-style-type: none"> • Voltage Regulator Trainer kit • H Parameter of PNP Transistor in CE Trainer kit • Transistor as common collector amplifier Trainer kit • Wide b amplifier Trainer kit • Integrating & differentiating & clamping circuit Trainer kit • Network theorem & laws Trainer kit • Bread Board with Power Supplies Trainer kit • Discrete Component Trainer kit • Transistors characteristics Trainer kit • Biasing Techniques of Transistor (BJT) Trainer kit • Constant K type low/high pass filter Trainer kit • Series & parallel resonance Trainer kit • Maxwells/Wein/Schering bridge Trainer kit • Clip on meter/Clamp meter • Variac/Dimmer state/Auto Transformer Single Phase SCR, Diac & Triac Characteristics • RTD Trainer kit • Thermocouple Trainer kit • LVDT Trainer kit • Series inverter Trainer kit • IGBT Characteristic Trainer kit • Universal Chopper Trainer kit • Phase shift circuit for firing SCR using UJT Trainer kit • Optical power meter • Differential module for measurement of power • Moving iron ammeter 0-2 amp • Watt meter low power factor
7	Electronics Lab-3	BADP Building First Floor Room No: B106	<ul style="list-style-type: none"> • Multimeter • Function Generator • CRO • IC breadboard with built in power supply • Digital logic trainer with power supply • RS/D/JK flip flop form IC 7400 Trainer kit • Verification of N gate as universal gate Trainer kit • BCD to 7 segment trainer board • Digital to analog converter Trainer kit • Analog to digital converter Trainer kit • Decade counter Trainer kit • Digital trainer for verification of TT & Logic gates Trainer kit • 8 Channel analog multiplexer Trainer kit • 8 Channel analog demultiplexer Trainer kit • BCD to Decimal converter Trainer kit • Decimal to BCD Converter Trainer kit • BCD to excess-3 converter Trainer kit • Excess-3 to BCD converter Trainer kit • Half/full adder Trainer kit • 4-Bit Counters (Syn. Asyn.) Trainer kit • Digital trainer for Logic gates Trainer kit • Digital IC tester Trainer kit
8	Communication Lab-1	BADP Building First Floor Room No: B101	<ul style="list-style-type: none"> • CRO • Multimeter • Function Generator • Mobile Trainer kit • Mobile communication Trainer • CDMA mobile phone trainer • PWM trainer • Digital communication Trainer kit • Delta Modulation Demodulation Trainer kit • Pulse Code Mod De-mod Trainer kit

			<ul style="list-style-type: none"> • PAM-PPM-PWM Trainer kit • Time Division Mux Demux Trainer kit • Frequency Division Mux & Demux Trainer kit • Delta modulation Trainer kit • DSB/SSB AM receiver Trainer kit • Frequency modulation & demodulation Trainer kit • FSK Modulation Demodulation Trainer kit • PSK Modulation Demodulation Trainer kit • ASK Modulation Demodulation Trainer kit • DC regulated power supply 0-30v/2amp • Color pattern generator • Regulated power supply
9	Communication Lab-2	<p>BADP Building First Floor Room No: B105</p>	<ul style="list-style-type: none"> • CRO • DSO • Multimeter • LCR Meter • Function Generator • Antenna Trainer kit • Transmission line Trainer kit • GSM Trainer kit • ITI SMPS Trainer kit • Microwave bench with VSWR Meter • AM modulation/demodulation Trainer kit • SSB modulation & demodulation Trainer kit • DSB/SSB AM Receiver Trainer kit • AGC trainer • AM transmitter & receiver Trainer kit • FM transmitter & receiver Trainer kit • Frequency Modulation & Demodulation Trainer kit • AM-FM Radio Trainer kit • PAM-PPM-PWM Trainer kit • DC regulated multi output power supply

Table: 6.2.5 Laboratory equipments details with subject wise utilization



Figure 6.2.1 Photographs_B002

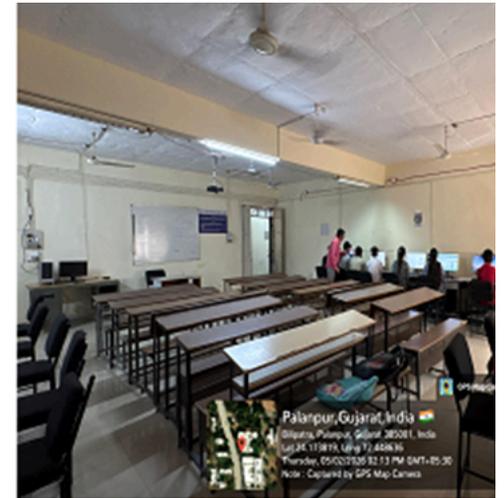


Figure 6.2.2 Photographs



Figure 6.2.3 Photographs_B009



Figure 6.2.4 Photographs





Figure 6.2.5 Fire extinguisher



Figure 6.2.6 Photographs_B010



Figure 6.2.7 Photographs_B011



Figure 6.2.8 Photographs_B101



Figure 6.2.9 Photographs_B102

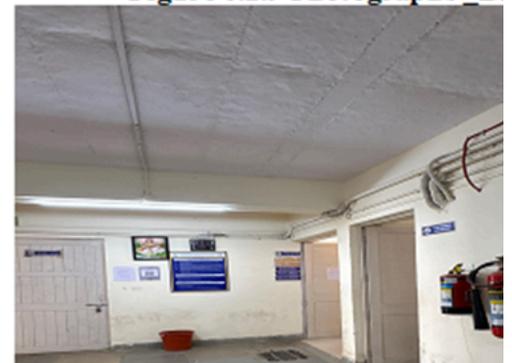




Figure 6.2.10 Photographs _B106



Figure 6.2.11 Fire extinguish

C. Technical Manpower support –Eligible and Adequate (10)

[C] Technical Manpower support eligible Adequate

The list mentions the major equipment in the department. Besides these, many other equipment items costing less than ₹30,000 are also available.

Sr. No.	Name of the Laboratory	No. of students per set-up (Batch Size)	Name of the Important equipment (costing more than Rs.30,000)	Weekly utilization status of all the courses for which the lab is utilized)	Technical Manpower support		
					Name of the technical staff	Designation	Qualification
1	Computer Lab-1 BADP Building Ground Floor Room No: B002	20 in 1 st & 2 nd year, and 15 in 3 rd year	Computer System	As per Time table.	Mr. V.S. Sama	Lab Assistant	BE in IC Engineering
2	Computer Lab-2 BADP Building Ground Floor Room No: B008	20 in 1 st & 2 nd year, and 15 in 3 rd year	Computer System	As per Time table.	Mr. V.S. Sama	Lab Assistant	BE in IC Engineering
3	Computer Lab-3 BADP Building Ground Floor Room No: B009	20 in 1 st & 2 nd year, and 15 in 3 rd year	Computer System	As per Time table.	Mr. V.S. Sama	Lab Assistant	BE in IC Engineering

4	Computer Lab-4 BADP Building Ground Floor Room No: B014	20 in 1 st & 2 nd year, and 15 in 3 rd year	Computer System	As per Time table.	Mr. V.S. Sama	Lab Assistant	BE in IC Engineering
5	Electronics Lab-1 BADP Building Ground Floor Room No: B010	20 in 1 st & 2 nd year, and 15 in 3 rd year	Function Generator	As per Time table.	Mr. V.S. Sama	Lab Assistant	BE in IC Engineering
6	Electronics Lab-2 BADP Building Ground Floor Room No: B013	20 in 1 st & 2 nd year, and 15 in 3 rd year	CRO/DSO and Function Generator	As per Time table.	Mr. V.S. Sama	Lab Assistant	BE in IC Engineering
7	Electronics Lab-3 BADP Building First Floor Room No: B106	20 in 1 st & 2 nd year, and 15 in 3 rd year	Function Generator	As per Time table.	Mr. V.S. Sama	Lab Assistant	BE in IC Engineering
8	Communication Lab-1 BADP Building First Floor Room No: B101	20 in 1 st & 2 nd year, and 15 in 3 rd year	PAM-PPM-PWM Trainer kit and Mobile Trainer kit	As per Time table.	Mr. V.S. Sama	Lab Assistant	BE in IC Engineering
9	Communication Lab-2 BADP Building First Floor Room No: B105	20 in 1 st & 2 nd year, and 15 in 3 rd year	Antenna Trainer kit and Microwave bench	As per Time table.	Mr. V.S. Sama	Lab Assistant	BE in IC Engineering

Table: 6.2.6 Laboratory equipment details technical manpower support

Sr. No	Name of the Laboratory	Number of students per set up(Batch Size)	Name of the Important Equipment(Costing more than Rs.30,000)	Weekly utilization status(all the courses for w
1	Computer Lab-1	20	Computer Syster	As per Time table
2	Computer Lab-2	20	Computer Syster	As per Time table
3	Computer Lab-3	20	Computer Syster	As per Time table
4	Computer Lab-4	20	Computer Syster	As per Time table
5	Electronics Lab-	20	Function Genera	As per Time table
6	Electronics Lab-	20	CRO/DSO and F	As per Time table
7	Electronics Lab-	20	Function Genera	As per Time table
8	Communication L	20	PAM-PPM-PWM	As per Time table
9	Communication L	20	Antenna Trainer I	As per Time table

6.3 Additional facilities created for improving the quality of learning experience in laboratories (20)

A. Facilities (10)

[A] Facilities

The Electronics and Communication Engineering Department of Government Polytechnic, Palanpur, demonstrates strong institutional support and effective governance through the provision of additional facilities that enhance the teaching–learning experience in laboratories. These initiatives reflect t

- **Regular Procurement and Upgradation:**
Laboratory equipment is procured regularly in accordance with university circulars, ensuring that facilities remain updated and well-equipped. This reflects transparent governance and effective financial resource utilization.
- **Department Library Managed by Students:**
A dedicated departmental library, managed by students, provides supplementary learning resources. This initiative encourages self-directed learning, peer collaboration, and student participation in governance.
- **High-Speed CWAN Internet Facility:**
The department provides wired and wireless CWAN internet connectivity with a bandwidth of 200 Mbps. This robust infrastructure supports seamless access to online academic resources, research databases, and collaborative platforms, demonstrating institutional support for ICT-enabled lea
- **LAN Connectivity in Laboratories:**
All laboratories are equipped with LAN facilities, ensuring reliable network access for experiments, simulations, and academic work. This reflects governance that prioritizes digital integration and resource accessibility.
- **ICT-Enabled Teaching Tools:**
Projectors with screens installed in laboratories (Room No. B008 and B009) support effective teaching–learning practices. These facilities enable faculty to deliver interactive sessions and allow students to present project work efficiently.
- **Student-Centric Governance and Support:**
By providing these additional facilities, the department ensures that students have access to resources beyond the minimum curriculum requirements. This reflects governance practices that prioritize innovation, creativity, and holistic student development.

[I] Purchase summary report of year from 2022-23 to 2025-26

 <p>GOVERNMENT POLYTECHNIC PALANPUR (B.K.) ESTD. 1984 सा विद्या या विमुक्तये</p>	<p>Government Polytechnic, Palanpur Department of Electronics & Communication</p>	 <p>Department of Electronics & Communication Government Polytechnic Palanpur</p>			
Purchase summary report of year from 2022-23 to 2025-26					
Year	Total Purchase Amount		Purchase items count		Furniture
	Equipment	IT items	Equipment	IT items	
2022-23	420432	00	47	00	11722
2023-24	126938	00	14	00	00
2024-25	74440	677842	3	11	44783
2025-26	8990	00	1	00	00
Total	630800	677842	65	11	56505

Table: 6.3.1 Departmental purchase summary

[2] Year-wise Equipment purchase detail

Year 2022-23							
Sr. No.	Expandable Register			GeM Contract No.	Item description	Order Date	CRAC Amount (Actual paid considering penalty etc..)
	Register	Page No.	Sr. No.				
1	E	13	63	GEMC-511687745186103	Metrix plus H Held 10000 KHz Digital Multimeter (Metrix plus) Model Metrix+ 171TRMS+	06-10-2022	18683
2	E	13	64	GEMC-511687701684512	Metravi Manual Digital LCD Display LCR Meter, Warranty 1 year (Metravi)Model METRAVI-451	06-10-2022	4416
3	E	13	65	GEMC-511687724579264	SCHERING BRIDGE (LINKER)Model SCHERING BRIDGE	07-01-2023	9890
4	E	13	66	GEMC-511687794982138	ITI SMPS Trainer (LINKER)Model ITI SMPS Trainer	07-01-2023	11870

5	E	14	67	GEMC-511687718480531	Strain Gauge Trainer kit (BTC Instruments) Model REX-652	07-01-2023	12477
6	E	14	68	GEMC-511687788409647	DIGITAL TO ANALOG TRAINER KIT (BTC Instruments) Model DTOA	07-01-2023	3546
7	E	14	69	GEMC-511687703126381	PSK Modulation Demodulation Trainer Kit (BTC Instruments) Model PSK Modulation Demodulation Trainer Kit	20-01-2023	6965
8	E	14	70	GEMC-511687762161725	VARIAC/ DIMMERSTATE/ AUTO TRANSFORMER Single Phase, 2Amp (LABSURGE)Model PH 258/1	17-01-2023	5200
9	E	15	71	GEMC-511687758178501	Frequency Modulation & Demodulation TRAINER (BTC Instruments) Model	17-01-2023	6965
10	E	15	72	GEMC-511687701214990	LCR Resonance Circuit with Built in Sine Wave Oscillator (BTC Instruments) Model LCR Resonance Circuit with Built in Sine Wave Oscilloscope	07-01-2023	7683
11	E	15	73	GEMC-51168776236975	Thermocouple Charterstics Apparatus (BTC Instruments) Model Thermocouple Charterstics Apparatus	17-01-2023	7462
12	E	15	74	GEMC-511687734702929	FSK Modulation Demodulation Trainer Kit (BTC Instruments) Model BTC- FSK	20-01-2023	7462
13	E	16	75	GEMC-511687764423059	Am-Fm Radio Trainer Kit (BTC Instruments) Model Am-Fm Radio Trainer Kit	17-01-2023	7960
14	E	16	76	GEMC-511687785615046	4-Bit Counters (Synchronous Asynchronous) (BTC Instruments) Model 4-Bit Counters (Synchronous Asynchronous)	17-01-2023	5472
15	E	16	77	GEMC-511687709631263	Maximum Power Transfer Theorem (BTC Instruments) Model Maximum Power Transfer Theorem	17-01-2023	3781
16	E	16	78	GEMC-511687704999223	OHMS LAW APPARATUS With Power Supply (BTC Instruments) Model GTC-027	17-01-2023	1791
17	E	17	79	GEMC-511687769798184	Pulse Width Modulation Kit (BTC Instruments) Model Pulse Width Modulation Kit	17-01-2023	7462
18	E	17	80	GEMC-511687736533145	PAM-PPM-PWM Trainer kit (BTC Instruments) Model PAM-PPM-PWM Trainer kit	17-01-2023	13432

19	E	17	81	GEMC-511687784546022	COLPITTS OSCILLATOR TRAINER (BTC Instruments) Model BTC - COLLPIT OSCILLATOR	17-01-2023	2985
20	E	17	82	GEMC-511687738110995	Discrete Component Trainer (BTC Discrete Component Trainer Kit	17-01-2023	8955
21	E	18	83	GEMC-511687718215498	DSB/SSB AM Receiver Kit (LINKER)Model DSB/SSB AM Receiver Kit	17-01-2023	18705
22	E	18	84	GEMC-511687700193534	Delta Modulation Demodulation Trainer Kit (LINKER)Model Delta Modulation Demodulation Trainer Kit	17-01-2023	10825
23	E	18	85	GEMC-511687721350332	Crystal Oscillator (BTC Instruments) Model Crystal Oscillator	17-01-2023	3447
24	E	18	86	GEMC-511687798174000	ASK MODULATION DEMODULATION TRAINER (BTC Instruments) Model AMPLITUDE SHIFT KEYING MODULATION DEMODULATION	17-01-2023	5970
25	E	19	87	GEMC-51168777573807	ANALOG TO DIGITAL TRAINER (BTC Instruments) Model BTC09	07-01-2023	3546
26	E	19	88	GEMC-511687703860557	Bread Board with Power Supplies TRAINER (BTC Instruments) Model BTC- BREAD BOARD TRAINER	17-01-2023	3940
27	E	19	89	GEMC-511687790732628	555 Timer Trainer Kit (BTC Instruments) Model 555 Timer Trainer Kit	17-01-2023	5472
28	E	19	90	GEMC-511687745528097	Frequency Division Multiplexing & Demultiplexing TRAINER KIT (LINKER)Model Frequency Division Multiplexing & Demultiplexing	17-01-2023	11810
29	E	20	91	GEMC-51168775224366	Biasing Techniques of Transistor (BJT) (BTC Instruments) Model BTC789	17-01-2023	5771
30	E	20	92	GEMC-511687721951312	UPS TRAINER (BTC Instruments) Model BTCUPS TRAINER	17-01-2023	16915
31	E	20	93	GEMC-51168771659081	FET Characteristics Apparatus (BTC Instruments) Model REX-535D	10-01-2023	4058
32	E	20	94	GEMC-511687757551010	OPERATIONAL AMPLIFIER TRAINER WITH 1 DIGITAL METER (BTC Instruments) Model OPAMP TRAINER	17-01-2023	3940
33	E	21	95	GEMC-511687716316202	H Parameter of PNP Transistor in Common Emitter Mode (BTC Instruments) Model H	18-01-2023	4776

					Parameter of PNP Transistor in Common Emitter M		
34	E	21	96	GEMC-511687751792519	VOLTAGE DOUBLER TRIPPLER CIRCUIT (BTC Instruments) Model BTC09	17-01-2023	5565
35	E	21	97	GEMC-511687789825392	SCR, Diac & Triac Characteristics Trainer (BTC Instruments) Model SCR, Diac & Triac Characteristics Trainer	17-01-2023	12312
36	E	21	98	GEMC-511687791146601	RTD TEMPERATURE TRANSDUCER TRAINER (BTC Instruments) Model RTD TEMPERATURE TRANSDUCER TRAINER	17-01-2023	9357
37	E	22	99	GEMC-511687763697444	Pulse Code Modulation Demodulation Trainer Kit (BTC Instruments) Model Pulse Code Modulation Demodulation Trainer Kit	17-01-2023	10835
38	E	22	100	GEMC-511687779200273	Unbred 20-megahertz 2 channels Analog Oscilloscope (NA) Model Unitec-OD20	07-01-2023	19998
39	E	22	101	GEMC-511687741762420	HARTLEY OSCILLATOR KIT (BTC Instruments) Model BTC-908	17-01-2023	2985
40	E	22	102	GEMC-511687727095212	RC PHASE SHIFT OSCILLATOR (BTC Instruments) Model BTC- RC PHASE SHIFT	17-01-2023	2985
41	E	23	103	GEMC-511687747281772	Wein Bridge Oscillator (BTC Instruments) Model Wein Bridge Oscillator	17-01-2023	2587
42	E	23	104	GEMC-511687750692974	PUSH PULL AMPLIFIER KIT (BTC Instruments) Model BTC- PPL	07-01-2023	2985
43	E	23	105	GEMC-511687757163770	TIME DIVISION MULTIPLEXING DEMULTIPLEXING KIT (LINKER) Model TIME DIVISION MULTIPLEXING DEMULTIPLEXING KIT	20-01-2023	12795
44	E	23	106	GEMC-511687765263840	KVL & KCL TRAINER KIT (BTC Instruments) Model SP-KVL	17-01-2023	3781
45	E	24	107	GEMC-511687716964975	ROBU. IN - Uno R3 Board without Cable compatible with Arduino (14140) (Robu.in) Model ROBU.IN - Uno R3 Board without Cable compatible with Arduino (14140)	03-03-2023	3945
46	E	24	108	GEMC-511687739675914	GWINSTEK 10 MHz to 25 MHz Frequency 2 channel function generator (GWINSTEK) Model GWINSTEK AFG-2225	28-02-2023	31970

47	E	24	109	GEMC-511687727874530	HTC Analog Digital (Mixed Signal) 100 MHz NA Digital StorageOscilloscope (HTC)Model HTC 100 MHz Digital Oscilloscope	20-03-2023	44700
Total							420432
Year 2023-24							
Sr. No.	Expandable Register			GeM Contract No.	Item description	Order Date	CRAC Amount (Actual paid considering penalty etc.)
	Register	Page No.	Sr. No.				
1	E	24	110	GEMC-511687717049199	ASTALAB EQUIPMENTS 1 Hz to 100 KHz in 6 steps Digital Trainer Kit (ASTALAB EQUIPMENT'S) Model Series current feedback in transistor amplifier AP	01-09-2023	5742
2	E	25	111	GEMC-511687712919456	ASTALAB EQUIPMENTS 1 Hz to 100 KHz in 6 steps Digital Trainer Kit (ASTALAB EQUIPMENT'S) Model Power amplifier trainer	01-09-2023	6633
3	E	25	112	GEMC-511687755658427	ASTALAB EQUIPMENTS 1 Hz to 100 KHz in 6 steps Digital Trainer Kit (ASTALAB EQUIPMENT'S) Model Opto-coupler (MCT-2E) trainer	01-09-2023	5742
4	E	25	113	GEMC-511687723023039	ASTALAB EQUIPMENTS 1 Hz to 1 MHz in 7 steps Digital Trainer Kit (ASTALAB EQUIPMENT'S) Model DECADE COUNTER trainer	02-09-2023	5544
5	E	25	114	GEMC-51168778851536	ASTALAB EQUIPMENTS 1 Hz to 100 KHz in 6 steps Digital Trainer Kit (ASTALAB EQUIPMENT'S) Model Reciprocity/Super Postion/Thevenin	27-09-2023	11300
6	E	26	115	GEMC-511687749591854	ASTALAB EQUIPMENTS 1 Hz to 1 MHz in 7 steps Digital Trainer Kit (ASTALAB EQUIPMENT'S) Model Maxwells bridge trainer kit	01-09-2023	10741
7	E	26	116	GEMC-511687764565814	ASTALAB EQUIPMENTS 1 Hz to 1 MHz in 7 steps Digital Trainer Kit (ASTALAB EQUIPMENT'S) Model DIGITAL IC TESTER	01-09-2023	10780
8	E	26	117	GEMC-511687794428477	UNI-T 4.5-digit Backlit LCD Hand Held True Rms Clamp Meter (UNI-T) Model UT211B	02-09-2023	17820

9	E	26	118	GEMC-511687751160025	ASTALAB EQUIPMENTS 1 Hz to 100 KHz in 6 steps Digital Trainer Kit (ASTALAB EQUIPMENT'S) Model Universal Chopper trainer	11-10-2023	17640	
10	E	27	119	GEMC-511687755707891	ASTALAB EQUIPMENTS 1 Hz to 1 MHz in 7 steps Digital Trainer Kit (ASTALAB EQUIPMENT'S) Model IGBT Characteristic trainer	11-10-2023	9800	
11	E	27	120	GEMC-511687795448484	ASTALAB EQUIPMENTS 1 Hz to 1 MHz in 7 steps Digital Trainer Kit (ASTALAB EQUIPMENT'S) Model DIGITAL MOSFET characteristics trainer kit	11-10-2023	4179	
12	E	27	121	GEMC-511687761016473	ASTALAB EQUIPMENTS 1 Hz to 100 KHz in 6 steps Digital Trainer Kit (ASTALAB EQUIPMENT'S) Model Norton's theorem trainer	26-10-2023	5174	
13	E	27	122	GEMC-511687702876555	ASTALAB EQUIPMENTS 1 Hz to 1 MHz in 7 steps Digital Trainer Kit (ASTALAB EQUIPMENT'S) Model Two stage "RC" coupled amplifier using Transistor	01-09-2023	5148	
14	E	28	123	GEMC-51168776635913	ASTALAB EQUIPMENTS 1 Hz to 1 MHz in 7 steps Digital Trainer Kit (ASTALAB EQUIPMENT'S) Model WHEATSTONE BRIDGE	27-09-2023	10695	
Total							126938	1

Year 2024-25

Sr. No.	Expandable Register			GeM Contract No.	Item description	Order Date	CRAC Amount (Actual paid considering penalty etc.)
	Register	Page No.	Sr. No.				
1	E	32	139	GEMC-511687744418451	Ivesty Ring Topology for Networking Trainer Kit Mobile Phone Trainer	06-09-2024	24990
2	E	32	140	GEMC-511687719258644	KITEK TECHNOLOGIES PRIVATE LIMITED NA FPGA Development and Evaluation Board Model VLS-01 (VLSI Trainer with XILINX FPGA Spartan 6)	14-10-2024	24774
3	E	32	141	GEMC-511687756696973	KITEK TECHNOLOGIES PRIVATE LIMITED NA FPGA Development and Evaluation Board, Model E87-04 (ATMEGA32 AVR Embedded Trainer Kit)	14-10-2024	24676

							Total	74440
Year 2025-26								
Sr. No.	Expandable Register			GeM Contract No.	Item description	Order Date	CRAC Amount (Actual paid considering penalty etc.)	
	Register	Page No.	Sr. No.					
1	Expandable	33	142	GEMC-51168778080969	T-SERIES Bluetooth Speaker with Total Power Rating 100-125 (T-SERIES)	08-09-2025	8990	
							Total	8990

Table: 6.3.2 Year-wise Equipment purchase detail

[3] Purchase Process documents and orders

[3.1] Purchase order

	Government Polytechnic, Palanpur સરકારી પોલીટેકનીક, પાલનપુર		 सत्यमेव जयते
	માલણ દરવાજા બહાર, પાલનપુર-૩૮૫૦૦૧ Phone : (02742) 245219 / 262115 ક્રમાંક: GPP/Local Purchase/EC/43	Outside Malan Gate, Palanpur-385001 E-mail : gp-palanpur-dte@gujarat.gov.in	
			Date : 06/01/2

Reference No.: સપોપાં/નવીબાબત /૨૦૨૨-૨૩ /GeM/ખરીદી/ ૨૦૦૦ સુધી/૨૯

Date : 08/09/2023

Purchase Order

As per above stated reference number and considering power delegated to purchase to institution head(Principal) ,it is granted to purchase following stated item from GEM portal.

DEMAND NO - 511687718480531

Sr. no.	Name of Item (with specification)	Date	Price/item	Quantity	Total Price
1	Strain Gauge Trainer kit (- Can perform practical of Strain Gauge. - On board packaging with proper circuit notation.)	5/01/2023	12540	1	12540

L. K. Patel

Principal
Principal
Government Polytechnic
Palanpur

[3.2] GeM sanction letter for Purchase

Organisation Details		Buyer Details	
Type:	State Government.	Name:	Sunilkumar J Chauhan
Ministry:		Designation:	HOD EC
Department:	Education Department Gujarat	Email ID:	hodec-gpp-pln@gujarat.gov.in
Organisation Name:	Commissionerate of Technical Education	GSTIN:	
Office Name:	Government Polytechnic Palanpur	Address:	NEAR MALAN GATE, PALANPUR BANASKANTHA GUJARAT - 385001

Financial Approval Detail	
Designation of official providing Administration approval:	PRINCIPAL GOVERNMENT POLYTECHNIC PALANPUR
IFD Concurrence / Competent Authority (HOD / Head of Office) Approval Required?	NO
Budget availability	YES
Designation of official providing Financial approval:	PRINCIPAL GOVERNMENT POLYTECHNIC PALANPUR

Seller Details	
Company Name:	BATRA TRADING COMPANY
Email ID:	batratrading.37@gmail.com
Address:	BATRA TRADING COMPANY Ambala HARYANA - 133001

Product Details						
#	Item Description	Model	Ordered Quantity	Unit	Price per Unit inclusive of all Duties and Taxes (in INR)	Total Price (inclusive of all Duties and Taxes (in INR))
1	Strain Gauge Trainer kit	REX-652	1	pieces	12540.0	12540.0
Total Order Value (in INR)						12540.0

Consignee Details						
S.No	Consignee	Item	Lot No.	Quantity	Delivery Start After	Delivery To Be Completed By
1	Sunilkumar J Chauhan hodec-gpp-pln@gujarat.gov.in NEAR MALAN GATE, PALANPUR BANASKANTHA GUJARAT - 385001	Strain Gauge Trainer kit	-	1	07-Jan-2023	22-Jan-2023

Terms & Conditions

- 1. This issues under the power delegated to Ministries/Department of the Government of India/organization/state vide Annexure to schedule the Delegation of Financial Power Rules, 1978 as amended from time to time or as per applicable delegation of financial power rules as app

Document 6.3.2 Year 2022-23 (Sr. No. 5 Equipment) GeM sanction letter

[3.3] Purchase Invoice



14/67



Invoice

SELLER DETAILS:

Address: **BATRA TRADING COMPANY**
 2759-20 TIMBER MARKET, ambala, Ambala, HARYANA,
 133001
 Email Id: BATRATRADING.37@GMAIL.COM
 Contact No : 08295848444
 GSTIN: 06AAYFB8367K1ZK

GeM Invoice No: GEM-270446
 GeM Invoice Date: 02-Feb-20

Order No: GEMC-5116877184805
 Order Date: 07-Jan-20

[Click here to download seller invo](#)

SHIPPING TO:

Consignee Name: Sunilkumar J Chauhan
 Address: NEAR MALAN GATE, PALANPUR BANASKANTHA
 GUJARAT 385001

BILL TO:

Buyer Name: Sunilkumar J Chauhan
 Address: NEAR MALAN GATE, PALANPUR BANASKANTHA
 GUJARAT 385001

Seller Tax Invoice Number	Seller Tax Invoice Date	Dispatch Mode	Dispatch Date
B607	23-Jan-2023	Manual	23-Jan-2023

Place of Supply	Place of Supply State (State/UT Code)	Supply Type	Buyer GSTIN Number
Buyer Location	Gujarat / 24	Inter-State	

Product Description	HSN Code	Measurement Unit	Supplied Qty	Unit Price	Total Price inclusive of Taxes
Strain Gauge Trainer kit	9027	pieces	1	Rs. 12540.00	Rs. 12540.00
				Taxable Amount	Rs. 10627.12
				Tax Rate (%)	18
				IGST	Rs. 1912.88
				Cess Rate (%)	0.000
				Cess Amount	Rs. 0.00
				Cess in Quantum	Rs. 0.00
				Rounding Off	Rs. 0.00
Grand Total					Rs. 12540.00

I/We hereby declare that our firm/company has been specifically excluded from the requirement to comply with GST e-invoicing provisions vide Notification number 13/2020-Central Tax dated 21 March 2020, as amended up to date. Accordingly, at present we are not covered under the ambit of GST e-invoicing provisions. We do hereby declare that once the said provisions are made applicable to us, we shall issue the duly complied e-Invoice under GST Law.

All GST invoices or documents issued by us shall be properly and timely reported under respective returns under GST Law in the

All GST invoices or documents issued by us shall be properly and timely reported under respective returns under GST by us in compliance with the notified provisions and the applicable tax collected from Buyer shall be timely and correctly paid to the respective Government by us.
In case the Input Tax Credit of GST is denied or demand is recovered from Buyer on account of any act/ omission of us in this regard, we shall be liable in respect of all claims of tax, penalty and/or interest, loss, damages, costs, expenses and liability that

Document 6.3.3 Year 2022-23 (Sr. No. 5 Equipment) Invoice

[3.4] Inspection report

GOVERNMENT POLYTECHNIC, PALANPUR

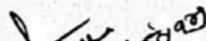
DETAILS AND INSPECTION REPORT

NAME OF ITEM	Strain gauge Trainer kit
SHORT DESCRIPTION	Strain gauge
BUYER NAME	Sunil Kumar J. Chauhan.
SUPPLIER NAME	Batra Trading Company
CONTRACT NO.	GEMC-511687718480531
CONTRACT DATE	07/01/2023
ITEM DELIVERED ON	06/02/2023
ITEM INSPECTED ON	06/02/2023 07/02/2023
RECEIVED QTY.	01
ACCEPTED QTY	01
REJECTED QTY	00
DEPT. REGISTER PAGE NO. AND ITEM NO.	Expandable Reg.No-2 (I-67, P-14)

INSPECTION REPORT

Above item received and found OK.

INSPECTED BY -



DATE - 07/02/2023

[Handwritten Signature]
SIGNATURE OF BUYER
[Handwritten Signature]
Head of ~~Electrical & Comm. Engrg. Deptt.~~
Government Polytechnic
PALANPUR-385 001 (B.K.)

Document 6.3.4 Year 2022-23 (Sr. No. 5 Equipment) Inspection report

[3.5] Payment sanction letter

FROM TO BE ATTACHED ALONG WITH THE BILLS

1 Reference Bill No - **B-607** dt **23-1-2023**
Strain gauge trainer of M/s. **Batra Trading Company**
 2 Our Order No **GEMC-51168 7718480531** dt **07-10-2023**
 3 Comparative Statement No - - dt -
 4 G S P O A 1 No - - dt -
 5 To be paid from **Conti**

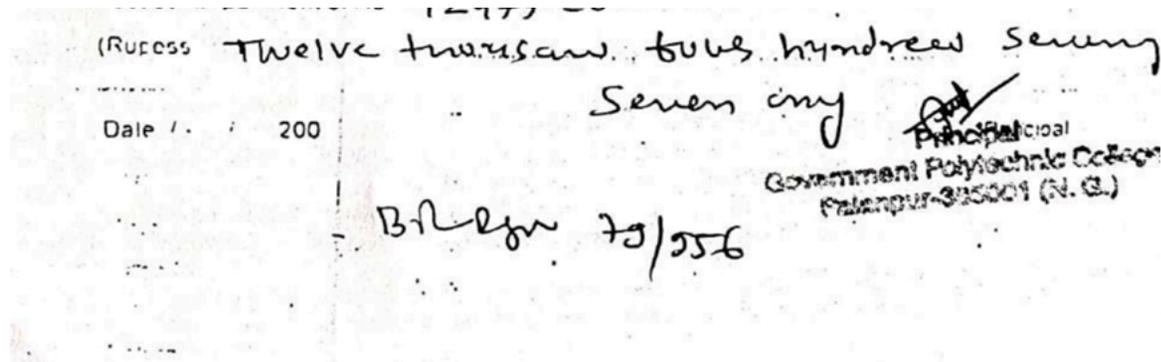
(Plan Non Plan, Equipment Furniture, Library, Contingencee) grant
 6 Certified that the Materials received are in accordance With the specification and other Conditions of the quotation/A T of Order and that the Bill is checked verified found correct
 7 Certified that the charges of sales tax Insurance, freight packing and forwarding ect if any charged in the Bill are admissible.
 8 Certified that no penalty for that supply etc. is to be deducted from the billve except as under .
 9 Certified that all the materials of this bill have been correctly entered In Dead Stock/Furniture Expendable/Consumable Register on page No. **014** at Item: **0-067**.

10 Certified that This is In Part/Full Payment.
 11 Certified that Amount relating to this bill passed as below has not been passed as below has not been passed before
 12 Recommended for Payment of Rs **12477/-** **Twelve-Thousand four Hundred Seventy-Seven-**

Shank
 Head of Department
 Government Polytechnic
 PALANPUR-365 001(B.K.)

(FOR USE OF GENERAL STORE)
 Enter in **612** Register on
 Page No **30** at Item No. **872**
 Entered By **[Signature]** Checked By :- **[Signature]**

(FOR OFFICE USE)
 Passed for payment of Rs **12477/-**



Document 6.3.5 Year 2022-23 (Sr. No. 5 Equipment) Payment sanction letter

B. Effective Utilization (5)

[B] Effective Utilization

For efficient and effective utilization of the available resources, the following measures have been implemented:

- An Equipment Utilization Register is maintained as per the format provided in the table below.
- Internet usage is monitored and regulated during working hours to ensure academic and administrative effectiveness.

[I] Lab Utilization format

		Government Polytechnic, Palanpur Department of Electronics & Communication				
Lab Utilization Register –Format						
Academic term:						
Name of laboratory and Room No.:						
Name of Subject with code:						
Sr. No.	Date	Time Duration	Semester	Batch	Name of Equipment	Name and sign of Faculty

1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						

Table: 6.3.3 Laboratory Equipment utilization format

[2] Lab Utilization report



Government Polytechnic, Palanpur
Department of Electronics & Communication



Lab Utilization Register

Accademic term: 2024-25 Even term

Name of laboratory and Room No.: Communication Lab-2 (Room No - 8105)

Name of Subject with code: (434106) Antenna & Wave Propagation

Sr. No.	Date	Time Duration	Semester	Batch	Name of Equipment	Name and Sign of Faculty
1	18/12/24	3 to 5:10	4 th EC	A1	Antenna trainer kit	A CRNP
2	01/1/25	3 to 5:10	4 th EC	A1	Antenna trainer kit	A CRNP
3	8/1/25	3 to 5:10	4 th EC	A1	Antenna trainer kit	A CRNP
4	15/1/25	3 to 5:10	4 th EC	A1	Antenna trainer kit	A CRNP
5	22/1/25	3 to 5:10	4 th EC	A1	Antenna trainer kit	A CRNP
6	29/1/25	3 to 5:10	4 th EC	A1	Antenna trainer kit	A CRNP
7	5/2/25	3 to 5:10	4 th EC	A1	Antenna trainer kit	A CRNP
8	12/2/25	3 to 5:10	4 th EC	A1	Antenna trainer kit	A CRNP
9	19/2/25	3 to 5:10	4 th EC	A1	Antenna trainer kit	A CRNP
10	5/3/25	3 to 5:10	4 th EC	A1	Antenna trainer kit	A CRNP
11	12/3/25	3 to 5:10	4 th EC	A1	Antenna trainer kit	A CRNP
12	19/3/25	3 to 5:10	4 th EC	A1	Antenna trainer kit	A CRNP
13	26/3/25	3 to 5:10	4 th EC	A1	Antenna trainer kit	A CRNP
14	2/4/25	3 to 5:10	4 th EC	A1	Antenna trainer kit	A CRNP
15	9/4/25	3 to 5:10	4 th EC	A1	Antenna trainer kit	A CRNP
16	16/4/25	3 to 5:10	4 th EC	A1	Antenna trainer kit	A CRNP
17						

C. Relevance to POs/PSOs (5)

[C] Relevance to POs/PSOs (05)

The details regarding the effective utilization of facilities created to enhance the quality of teaching-learning processes, with specific relevance to Programme Outcomes (POs) and Programme Specific Outcomes (PSOs), are presented in the table below.

[I] Year wise Equipment/Component purchase detail for additional facilities

Year 2022-23						
Sr. No.	Facility Name	Description	Reason(s) for creating facility	Utilization	Areas in which students are expected to have enhanced learning	Relevance to POs/PSOs
1	Digital Multimeter	Measurement of electrical parameters such as voltage (AC and DC), current, resistance, continuity and diode & transistor testing	<ul style="list-style-type: none"> Provides hands-on experience that reinforces theoretical concepts in electronics Enables students to verify laws and formulas through real-time measurement Helps students learn systematic fault diagnosis & troubleshoot in circuits 	<ul style="list-style-type: none"> Electronic Lab -1, 2 &3 Comm Lab -1&2 	<ul style="list-style-type: none"> Diagnose faulty components and circuits Identify wiring errors Verify theoretical calculations experimentally 	PO1 PO2 PO4 PO5 PO7 PSO1
2	Digital LCD Display LCR Meter	Accurately measurement of the electrical properties of inductance, capacitance and resistance	<ul style="list-style-type: none"> Helps students practically understand the behaviour of L, C & R beyond theoretical concepts Correct use of test instruments to verify component values for laboratory experiments and project work 	<ul style="list-style-type: none"> Electronic Lab -1, 2 &3 Comm Lab -1&2 	<ul style="list-style-type: none"> Analysing measured data Identifying tolerances Understanding of accuracy & reliability in measurements 	PO1 PO2 PO4 PO5 PO7 PSO1
3	Different Types of Connectors, Electronics Components, Semiconductor Devices and Relays	Connector, IC, Register, Inductor, Diode, Transistor, Relay	<ul style="list-style-type: none"> Supports hands-on learning Helping students develop component selection, circuit assembly, soldering, testing, and troubleshooting skills 	<ul style="list-style-type: none"> Electronic Lab -1, 2 &3 Comm Lab -1&2 	<ul style="list-style-type: none"> Component identification, testing, and debugging Ability to design, and analyse circuits using components 	PO1 PO2 PO3 PO4 PO5 PO7 PSO1 PSO2

4	Discrete Component Trainer	Resistors, capacitors, inductors, Diode, LED, Zener diode, BJT, FET with connecting/ measurement point, patch cords and multiple DC voltage outputs (+5V, ±12V, or adjustable voltages)	<ul style="list-style-type: none"> Enables students to verify theoretical concepts through hands-on experiments Provides practical exposure to circuit building, testing, and analysis using individual components Allows students to design and modify simple electronic circuits independently 	<ul style="list-style-type: none"> Electronic Lab -1, 2 &3 	<ul style="list-style-type: none"> Logical thinking to identify and rectify circuit faults Conceptual clarity and hands-on skills Awareness of proper handling, ratings, and safety precautions 	PO1 PO2 PO3 PO4 PO5 PSO1
5	Bread Board with Power Supplies Trainer	Breadboard with connecting/ measurement point, patch cords and multiple DC voltage outputs (+5V, ±12V, or adjustable voltages)	<ul style="list-style-type: none"> Enables students to verify theoretical concepts through hands-on experiments Provides practical exposure to circuit building, testing, and analysis using individual components Allows students to design and modify simple electronic circuits independently 	<ul style="list-style-type: none"> Electronic Lab -1, 2 &3 	<ul style="list-style-type: none"> Logical thinking to identify and rectify circuit faults Conceptual clarity and hands-on skills 	PO1 PO2 PO3 PO4 PO5 PSO1
6	Schering Bridge Trainer	Trainer kit with connecting/ measurement point, patch cords and multiple DC voltage outputs (+5V, ±12V, or adjustable voltages)	<ul style="list-style-type: none"> Practically perform experiments reinforcing theoretical concepts taught in class Students gain direct experience with AC bridge balancing methods, phase relationships, and impedance calculations 	<ul style="list-style-type: none"> Electronic Lab -1&2 	<ul style="list-style-type: none"> Practical knowledge of precision measurement of capacitance Ability to balance AC bridges accurately 	PO1 PO2 PO4 PSO1
7	SMPS Trainer	Adjustable output voltage and load conditions with test points and indicators	<ul style="list-style-type: none"> To provide students with real-time experience beyond theoretical classroom learning Learning how output voltage regulation is achieved under varying load and input conditions 	<ul style="list-style-type: none"> Comm Lab - 2 	<ul style="list-style-type: none"> Clear understanding of switching devices To develop technical, analytical, and troubleshooting skills 	PO1 PO2 PO4 PO5 PSO1
8	Digital to Analog Trainer	Trainer kit with connecting/ measurement point, patch cords and multiple DC voltage outputs	<ul style="list-style-type: none"> Enables students to understand how digital signals are converted into analog signals in real systems Helps bridge the gap between theoretical concepts such as binary numbers, resolution, and quantization with practical outcomes 	<ul style="list-style-type: none"> Electronic Lab - 3 	<ul style="list-style-type: none"> Better understanding of binary numbers, digital codes, and logic levels Clear insight into how digital data is transformed into continuous analog signals 	PO1 PO2 PO4 PSO1
9	Analog to Digital Trainer	Trainer kit with connecting/ measurement point,	<ul style="list-style-type: none"> Hands-on experience in observing input analog signals and 	<ul style="list-style-type: none"> Electronic Lab - 3 	<ul style="list-style-type: none"> Clear understanding of continuous signals 	PO1 PO2

		patch cords and multiple DC voltage outputs	<ul style="list-style-type: none"> corresponding digital outputs Learning the stages of sampling, quantization, and encoding 		<ul style="list-style-type: none"> & their representation in digital form Skills in interfacing ADCs with MP and MC 	PO4 PSO1
10	Frequency Modulation & Demodulation Trainer	Trainer kit with connecting/ measurement point, patch cords and AC sine wave with frequency adjustable notch	<ul style="list-style-type: none"> Hands-on exploration of FM signal generation, Spectral characteristics of FM, Demodulation techniques Helps students develop operating signal generators, oscilloscopes, measuring frequency deviation, bandwidth, and distortion skills 	<ul style="list-style-type: none"> Comm Lab -1&2 	<ul style="list-style-type: none"> Fundamental understanding, signal analysis & interpretation Experimental & analytical thinking Troubleshooting & problem-solving ability 	PO1 PO2 PO4 PSO1
11	ASK Modulation & Demodulation Trainer	Trainer kit with connecting/ measurement point, patch cords and AC sine wave with amplitude adjustable notch	<ul style="list-style-type: none"> Hands-on exploration of FSK signal generation, Spectral characteristics of FSK, Demodulation techniques Helps students develop operating signal generators, oscilloscopes, measuring amplitude skills 	<ul style="list-style-type: none"> Comm Lab -1&2 	<ul style="list-style-type: none"> Fundamental understanding, signal analysis & interpretation Learning in circuit operation & measurement Experimental & analytical thinking 	PO1 PO2 PO4 PSO1
12	PSK Modulation & Demodulation Trainer	Trainer kit with connecting/ measurement point, patch cords and AC sine wave with phase shift adjustable notch	<ul style="list-style-type: none"> Hands-on exploration of PSK signal generation, Spectral characteristics of PSK, Demodulation techniques Helps students develop operating signal generators, oscilloscopes, measuring phase difference skills 	<ul style="list-style-type: none"> Comm Lab -1&2 	<ul style="list-style-type: none"> Fundamental understanding, signal analysis & interpretation Learning in circuit operation & measurement Experimental & analytical thinking 	PO1 PO2 PO4 PSO1
13	FSK Modulation & Demodulation Trainer	Trainer kit with connecting/ measurement point, patch cords and AC sine wave with frequency adjustable notch	<ul style="list-style-type: none"> Hands-on exploration of FSK signal generation, Spectral characteristics of FSK, Demodulation techniques Helps students develop operating signal generators, oscilloscopes, measuring frequency skills 	<ul style="list-style-type: none"> Comm Lab -1&2 	<ul style="list-style-type: none"> Fundamental understanding, signal analysis & interpretation Learning in circuit operation & measurement Experimental & analytical thinking 	PO1 PO2 PO4 PSO1
14	LCR Resonance Circuit Trainer	Trainer kit with connecting/ measurement point, patch cords and AC sine wave with frequency adjustable notch	<ul style="list-style-type: none"> Hands-on exploration of RLC circuit signal characteristics resonance BW Helps students develop operating signal generators, oscilloscopes, measuring frequency skills 	<ul style="list-style-type: none"> Electronic Lab - 2 	<ul style="list-style-type: none"> Fundamental understanding, signal analysis & interpretation Learning in circuit operation and measurement Experimental & analytical thinking 	PO1 PO2 PO4 PSO1

15	Thermocouple Characteristics Trainer	Trainer kit with connecting/ measurement point, patch cords and DC voltage outputs	<ul style="list-style-type: none"> Enables students to experimentally verify circuit, transforming a fundamental analytical result into observable and measurable outcomes Experimental validation of theory & conceptual understanding Measurement and Analysis Skills 	<ul style="list-style-type: none"> Electronic Lab - 2 	<ul style="list-style-type: none"> Fundamental understanding, signal analysis & interpretation Learning in circuit operation, measurement & instrumentation proficiency Experimental & analytical thinking 	PO1 PO2 PO4 PSO1
16	AM-FM Radio Trainer	Trainer kit with connecting/ measurement point, patch cords and AC sine wave with frequency adjustable notch	<ul style="list-style-type: none"> Enables students to experimentally verify circuit, transforming a fundamental analytical result into observable and measurable outcomes Experimental validation of theory & conceptual understanding Measurement and Analysis Skills 	<ul style="list-style-type: none"> Comm Lab - 2 	<ul style="list-style-type: none"> Fundamental understanding, signal analysis & interpretation Learning in circuit operation, measurement & instrumentation proficiency Experimental & analytical thinking 	PO1 PO2 PO4 PO5 PSO1
17	4-Bit Counters (Synchronous & Asynchronous) Trainer	Trainer kit with connecting/ measurement point, patch cords and multiple DC voltage outputs (+5V, ±12V, or adjustable voltages)	<ul style="list-style-type: none"> Strengthening Digital Fundamentals Clear Distinction Between Counter Types, Timing, Delay, and Clock Analysis 	<ul style="list-style-type: none"> Electronic Lab - 3 	<ul style="list-style-type: none"> Design-Oriented Learning Instrumentation and Measurement Skills Troubleshooting and Logical Thinking 	PO1 PO2 PO4 PSO1 PSO2
18	Maximum Power Transfer Theorem Trainer	Trainer kit with connecting/ measurement point, patch cords and multiple DC voltage outputs (+5V, ±12V, or adjustable voltages)	<ul style="list-style-type: none"> Enables students to experimentally verify circuit, transforming a fundamental analytical result into observable and measurable outcomes Experimental validation of theory & conceptual understanding 	<ul style="list-style-type: none"> Electronic Lab - 2 	<ul style="list-style-type: none"> Network theorem application & validation Analytical and graphical interpretation of results Experimental planning & execution 	PO1 PO2 PO4 PSO1
19	Ohms Law Trainer	Trainer kit with connecting/ measurement point, patch cords and multiple DC voltage outputs (+5V, ±12V, or adjustable voltages)	<ul style="list-style-type: none"> Enables students to experimentally verify circuit, transforming a fundamental analytical result into observable and measurable outcomes Experimental validation of theory & conceptual understanding 	<ul style="list-style-type: none"> Electronic Lab - 1&2 	<ul style="list-style-type: none"> Network law application & validation Analytical and graphical interpretation of results Experimental planning & execution 	PO1 PO2 PO4 PSO1
20	Pulse Width Modulation Trainer	Trainer kit with connecting/ measurement point,	<ul style="list-style-type: none"> Enables students to experimentally verify circuit, transforming a 	<ul style="list-style-type: none"> Comm Lab - 1 	<ul style="list-style-type: none"> PWM application & validation 	PO1 PO2

		patch cords and AC sine wave with frequency/ amplitude adjustable notch	<ul style="list-style-type: none"> fundamental analytical result into observable and measurable outcomes Experimental validation of theory & conceptual understanding 		<ul style="list-style-type: none"> Analytical and graphical interpretation of results Experimental planning & execution 	PO4 PSO1
21	Colpitts Oscillator Trainer	Trainer kit with connecting/ measurement point, patch cords and AC sine wave	<ul style="list-style-type: none"> Enables students to experimentally verify circuit, transforming a fundamental analytical result into observable and measurable outcomes Experimental validation of theory & conceptual understanding Measurement and Analysis Skills 	<ul style="list-style-type: none"> Electronic Lab - 2 	<ul style="list-style-type: none"> Oscillator application & validation Analytical and graphical interpretation of results Experimental planning & execution 	PO1 PO2 PO4 PSO1
22	Crystal Oscillator Trainer	Trainer kit with connecting/ measurement point, patch cords and AC sine wave	<ul style="list-style-type: none"> Enables students to experimentally verify circuit, transforming a fundamental analytical result into observable and measurable outcomes Experimental validation of theory & conceptual understanding 	<ul style="list-style-type: none"> Electronic Lab - 2 	<ul style="list-style-type: none"> Oscillator application & validation Analytical and graphical interpretation of results Experimental planning & execution 	PO1 PO2 PO4 PSO1
23	555 Timer Trainer	Trainer kit with Patch points, sockets, patch cords, LED indicators and regulated DC power supply	<ul style="list-style-type: none"> Enables students to experimentally verify multivibrator circuit, transforming a fundamental analytical result into observable and measurable outcomes Experimental validation of theory & conceptual understanding 	<ul style="list-style-type: none"> Electronic Lab - 1 	<ul style="list-style-type: none"> Conceptual Understanding Improved ability to use equipment correctly and safely Ability to evaluate data & interpret results 	PO1 PO2 PO4 PO5 PSO1
24	Frequency Division Multiplexing & Demultiplexing Trainer	Trainer kit with connecting/ measurement point, patch cords and AC sine wave	<ul style="list-style-type: none"> Enables students to experimentally verify circuit, transforming a fundamental analytical result into observable and measurable outcomes Experimental validation of theory & conceptual understanding Measurement and Analysis Skills 	<ul style="list-style-type: none"> Comm Lab - 1 	<ul style="list-style-type: none"> FDM application & validation Analytical and graphical interpretation of results Experimental planning & execution 	PO1 PO2 PO4 PSO1

25	Biasing Techniques of Transistor Trainer	Trainer kit with connecting/ measurement point, patch cords and multiple DC voltage outputs (+5V, ±12V, or adjustable voltages)	<ul style="list-style-type: none"> Enables students to experimentally verify circuit, transforming a fundamental analytical result into observable and measurable outcomes Experimental validation of theory & conceptual understanding 	<ul style="list-style-type: none"> Electronic Lab - 1&2 	<ul style="list-style-type: none"> Transistor biasing application & validation Analytical and graphical interpretation of results Experimental planning & execution 	PO1 PO2 PO4 PSO1
26	FET Characteristics trainer	Trainer kit with connecting/ measurement point, patch cords and multiple DC voltage outputs (+5V, ±12V, or adjustable voltages)	<ul style="list-style-type: none"> Enables students to experimentally verify circuit, transforming a fundamental analytical result into observable and measurable outcomes Experimental validation of theory & conceptual understanding 	<ul style="list-style-type: none"> Electronic Lab - 1&2 	<ul style="list-style-type: none"> FET application & validation Analytical and graphical interpretation of results Experimental planning & execution 	PO1 PO2 PO4 PSO1
27	OPAMP Trainer	Trainer kit with connecting/ measurement point, patch cords and multiple DC voltage outputs (+5V, ±12V, or adjustable voltages)	<ul style="list-style-type: none"> Enables students to experimentally verify circuit, transforming a fundamental analytical result into observable and measurable outcomes Experimental validation of theory & conceptual understanding Measurement and Analysis Skills 	<ul style="list-style-type: none"> Electronic Lab - 1&2 	<ul style="list-style-type: none"> OPAMP application & validation Analytical and graphical interpretation of results Experimental planning & execution 	PO1 PO2 PO4 PSO1
28	Voltage Doubler & Trippler Circuit Trainer	Trainer kit with connecting/ measurement point, patch cords and multiple DC voltage outputs (+5V, ±12V, or adjustable voltages)	<ul style="list-style-type: none"> Enables students to experimentally verify circuit, transforming a fundamental analytical result into observable and measurable outcomes Experimental validation of theory & conceptual understanding 	<ul style="list-style-type: none"> Electronic Lab - 1&2 	<ul style="list-style-type: none"> Clamper circuit application & validation Analytical and graphical interpretation of results Experimental planning & execution 	PO1 PO2 PO4 PO5 PSO1
29	RTD Temperature Transducer Trainer	Trainer kit with RTD sensor, connecting/ measurement point, patch cords and Regulated power supply	<ul style="list-style-type: none"> Enables students to understand the working principle of RTDs and relationship between temperature and resistance Perform calibration and linearization 	<ul style="list-style-type: none"> Electronic Lab - 2 	<ul style="list-style-type: none"> Understanding the working principle of RTD sensors Temperature Measurement Techniques Data Interpretation, Error Analysis and Accuracy 	PO1 PO2 PO4 PO5 PSO1

30	Hartley Oscillator Trainer	Trainer kit with connecting/ measurement point, patch cords and AC sine wave	<ul style="list-style-type: none"> Enables students to experimentally verify circuit, transforming a fundamental analytical result into observable and measurable outcomes Experimental validation of theory & conceptual understanding 	<ul style="list-style-type: none"> Electronic Lab - 2 	<ul style="list-style-type: none"> Oscillator application & validation Analytical and graphical interpretation of results Experimental planning & execution 	PO1 PO2 PO4 PSO1
31	RC Phase Shift Oscillator Trainer	Trainer kit with connecting/ measurement point, patch cords and AC sine wave	<ul style="list-style-type: none"> Enables students to experimentally verify circuit, transforming a fundamental analytical result into observable and measurable outcomes Experimental validation of theory & conceptual understanding 	<ul style="list-style-type: none"> Electronic Lab - 2 	<ul style="list-style-type: none"> Oscillator application & validation Analytical and graphical interpretation of results Experimental planning & execution 	PO1 PO2 PO4 PSO1
32	Wein Bridge Oscillator Trainer	Trainer kit with connecting/ measurement point, patch cords and AC sine wave	<ul style="list-style-type: none"> Enables students to experimentally verify circuit, transforming a fundamental analytical result into observable and measurable outcomes Experimental validation of theory & understanding 	<ul style="list-style-type: none"> Electronic Lab - 2 	<ul style="list-style-type: none"> Oscillator application & validation Analytical and graphical interpretation of results Experimental planning & execution 	PO1 PO2 PO4 PSO1
33	Push pull amplifier Trainer	Trainer kit with connecting/ measurement point, patch cords and multiple DC voltage outputs (+5V, ±12V, or adjustable voltages)	<ul style="list-style-type: none"> Enables students to experimentally verify circuit, transforming a fundamental analytical result into observable and measurable outcomes Experimental validation of theory & understanding 	<ul style="list-style-type: none"> Electronic Lab - 1&2 	<ul style="list-style-type: none"> Push pull amplifier application & validation Analytical and graphical interpretation of results Experimental planning & execution 	PO1 PO2 PO4 PSO1
34	KVL & KCL Trainer	Trainer kit with connecting/ measurement point, patch cords and multiple DC voltage outputs (+5V, ±12V, or adjustable voltages)	<ul style="list-style-type: none"> Enables students to experimentally verify circuit, transforming a fundamental analytical result into observable and measurable outcomes Experimental validation of theory & conceptual understanding 	<ul style="list-style-type: none"> Electronic Lab - 1&2 	<ul style="list-style-type: none"> Law application & validation Analytical and graphical interpretation of results Experimental planning & execution 	PO1 PO2 PO4 PSO1
35	Uno R3 Board without Cable compatible with	On-board USB-to-serial interface, reset button,	<ul style="list-style-type: none"> Enables students to understanding 	<ul style="list-style-type: none"> Electronic Lab - 2 	<ul style="list-style-type: none"> Debugging and Troubleshooting 	PO1

	Arduino	Digital I/O Pins, Analog Input Pins and status LEDs	<p>Microcontroller Fundamentals</p> <ul style="list-style-type: none"> Students gain practical experience in writing, compiling, and uploading programs using the Arduino IDE Learning Hardware software Integration Enables students to design and implement mini-projects such as sensor-based systems, automation tasks, and IoT prototypes 	<ul style="list-style-type: none"> Computer Lab - 4 	<p>Skills</p> <ul style="list-style-type: none"> Project-Based Learning Exposure to Open-Source Platforms Cost-Effective Learning Facility 	<p>PO2</p> <p>PO4</p> <p>PSO1</p> <p>PSO2</p>
Year 2023-24						
1	Digital IC Tester	Tests a wide range of logic families (74xx, etc), ZIF (Zero Insertion Force) socket for easy and safe IC placement, display and regulated power supply	<ul style="list-style-type: none"> To help students quickly check whether a digital IC is working or faulty before using it in experiments Better Understanding of Digital Logic prevents loss of time caused by using defective ICs during practical sessions 	<ul style="list-style-type: none"> Electronic Lab - 3 	<ul style="list-style-type: none"> Development of Troubleshooting Skills Hands-On Laboratory Skills Observation and Analytical Skills Time Management in Experiments 	<p>PO1</p> <p>PO2</p> <p>PO4</p> <p>PSO1</p>
2	4.5-digit Backlit LCD Hand Held True rms Clamp Meter	4.5-Digit Display, Backlit LCD, True RMS Measurement, and Clamp Function	<ul style="list-style-type: none"> Accurate measurement of AC/DC voltage and current using True RMS capability Understanding True RMS Measurements Time Efficiency in Measurements 	<ul style="list-style-type: none"> Electronic Lab - 1&2 	<ul style="list-style-type: none"> Electrical Measurement Skills Hands-On Practical Skills Troubleshooting and Diagnostic Skills 	<p>PO1</p> <p>PO2</p> <p>PO4</p> <p>PO5</p> <p>PSO1</p>
3	Series current feedback in transistor amplifier Trainer	Trainer kit with connecting/ measurement point, patch cords and multiple DC voltage outputs (+5V, ±12V, or adjustable voltages)	<ul style="list-style-type: none"> Enables students to experimentally verify circuit, transforming a fundamental analytical result into observable and measurable outcomes Experimental validation of theory & conceptual understanding 	<ul style="list-style-type: none"> Electronic Lab - 1&2 	<ul style="list-style-type: none"> Feedback amplifier application & validation Analytical and graphical interpretation of results Experimental planning & execution 	<p>PO1</p> <p>PO2</p> <p>PO4</p> <p>PSO1</p>
4	Power amplifier Trainer	Trainer kit with connecting/ measurement point, patch cords and multiple DC voltage outputs (+5V, ±12V, or adjustable voltages)	<ul style="list-style-type: none"> Enables students to experimentally verify circuit, transforming a fundamental analytical result into observable and measurable outcomes Experimental validation of theory & understanding 	<ul style="list-style-type: none"> Electronic Lab - 1&2 	<ul style="list-style-type: none"> Power amplifier application & validation Analytical and graphical interpretation of results Experimental planning & execution 	<p>PO1</p> <p>PO2</p> <p>PO4</p> <p>PO5</p> <p>PSO1</p>

5	Opto-coupler Trainer	Trainer kit with connecting/ measurement point, patch cords and multiple DC voltage outputs (+5V, ±12V, or adjustable voltages)	<ul style="list-style-type: none"> Helps students learn how opto-couplers transfer signals without direct electrical contact, protecting sensitive circuits Enhances ability to design and test switching circuits, LED drivers, and relay interfaces using opto-couplers 	<ul style="list-style-type: none"> Comm Lab - 1 	<ul style="list-style-type: none"> Innovation and Project Development Troubleshooting and Diagnostic Skills Signal Analysis and Observation Switching and Control Applications 	PO1 PO2 PO3 PO4 PO5 PSO1
6	DECADE Counter Trainer	Trainer kit with connecting/ measurement point, patch cords and multiple DC voltage outputs (+5V, ±12V, or adjustable voltages)	<ul style="list-style-type: none"> Helps students learn proper use of clock signals, resets, and outputs in counting circuits Enables students to understand Flip-Flops and Counters and Digital Counting Fundamentals 	<ul style="list-style-type: none"> Electronic Lab - 3 	<ul style="list-style-type: none"> Practical Circuit Building Skills Digital Counting Fundamentals Troubleshooting and Diagnostic Skills Logic Level Understanding Problem-Solving and Critical Thinking 	PO1 PO2 PO4 PSO1 PSO2
7	Reciprocity Theorem Trainer	Trainer kit with connecting/ measurement point, patch cords and multiple DC voltage outputs (+5V, ±12V, or adjustable voltages)	<ul style="list-style-type: none"> Enables students to experimentally verify circuit, transforming a fundamental analytical result into observable and measurable outcomes Experimental validation of theory & conceptual understanding 	<ul style="list-style-type: none"> Electronic Lab - 1&2 	<ul style="list-style-type: none"> Network theorem application & validation Analytical and graphical interpretation of results Experimental planning & execution 	PO1 PO2 PO4 PSO1
8	Super Postion Theorem Trainer	Trainer kit with connecting/ measurement point, patch cords and multiple DC voltage outputs (+5V, ±12V, or adjustable voltages)	<ul style="list-style-type: none"> Enables students to experimentally verify circuit, transforming a fundamental analytical result into observable and measurable outcomes Experimental validation of theory & conceptual understanding 	<ul style="list-style-type: none"> Electronic Lab - 1&2 	<ul style="list-style-type: none"> Network theorem application & validation Analytical and graphical interpretation of results Experimental planning & execution 	PO1 PO2 PO4 PSO1
9	Thevenin Theorem Trainer	Trainer kit with connecting/ measurement point, patch cords and multiple DC voltage outputs (+5V, ±12V, or adjustable)	<ul style="list-style-type: none"> Enables students to experimentally verify circuit, transforming a fundamental analytical result into observable and measurable outcomes Experimental validation of theory 	<ul style="list-style-type: none"> Electronic Lab - 1&2 	<ul style="list-style-type: none"> Network theorem application & validation Analytical and graphical interpretation of results 	PO1 PO2 PO4 PSO1

10	Norton's Theorem Trainer	Trainer kit with connecting/ measurement point, patch cords and multiple DC voltage outputs (+5V, ±12V, or adjustable voltages)	<ul style="list-style-type: none"> Enables students to experimentally verify circuit, transforming a fundamental analytical result into observable and measurable outcomes Experimental validation of theory & conceptual understanding 	<ul style="list-style-type: none"> Electronic Lab - 1&2 	<ul style="list-style-type: none"> Network theorem application & validation Analytical and graphical interpretation of results Experimental planning & execution 	PO1 PO2 PO4 PSO1
11	Maxwells bridge Trainer	Trainer kit with connecting/ measurement point, patch cords and multiple DC voltage outputs (+5V, ±12V, or adjustable voltages)	<ul style="list-style-type: none"> Enables students to experimentally verify circuit, transforming a fundamental analytical result into observable and measurable outcomes Experimental validation of theory & conceptual understanding 	<ul style="list-style-type: none"> Electronic Lab - 1&2 	<ul style="list-style-type: none"> Maxwells bridge application & validation Analytical and graphical interpretation of results Experimental planning & execution 	PO1 PO2 PO4 PSO1
12	IGBT Characteristic Trainer	Trainer kit with connecting/ measurement point, patch cords and multiple DC voltage outputs (+5V, ±12V, or adjustable voltages)	<ul style="list-style-type: none"> Enables students to experimentally verify circuit, transforming a fundamental analytical result into observable and measurable outcomes Experimental validation of theory & conceptual understanding 	<ul style="list-style-type: none"> Electronic Lab - 1&2 	<ul style="list-style-type: none"> IGBT application & validation Analytical and graphical interpretation of results Experimental planning & execution 	PO1 PO2 PO4 PSO1
13	MOSFET characteristics Trainer	Trainer kit with connecting/ measurement point, patch cords and multiple DC voltage outputs (+5V, ±12V, or adjustable voltages)	<ul style="list-style-type: none"> Enables students to experimentally verify circuit, transforming a fundamental analytical result into observable and measurable outcomes Experimental validation of theory & understanding Measurement and Analysis Skills 	<ul style="list-style-type: none"> Electronic Lab - 1&2 	<ul style="list-style-type: none"> MOSFET application & validation Analytical and graphical interpretation of results Experimental planning & execution 	PO1 PO2 PO4 PSO1
14	Transistor two stage RC coupled amplifier Trainer	Trainer kit with connecting/ measurement point, patch cords and regulated power supply	<ul style="list-style-type: none"> Enables students to experimentally verify circuit, transforming a fundamental analytical result into observable and measurable outcome Experimental validation of theory & understanding 	<ul style="list-style-type: none"> Electronic Lab - 1&2 	<ul style="list-style-type: none"> RC coupled application & validation Analytical and graphical interpretation of results Experimental planning & execution 	PO1 PO2 PO4 PSO1
15	Wheatstone bridge Trainer	Trainer kit with connecting/ measurement point, patch cords and multiple DC voltage outputs	<ul style="list-style-type: none"> Practically perform experiments and reinforcing theoretical concepts taught in class 	<ul style="list-style-type: none"> Electronic Lab - 1&2 	<ul style="list-style-type: none"> Practical knowledge of precision measurement of resistance 	PO1 PO2 PO4

Print

		(+5V, ±12V, or adjustable voltages)	<ul style="list-style-type: none"> Students gain direct experience with AC bridge balancing methods, phase relationships, and impedance calculations 		<ul style="list-style-type: none"> Ability to balance AC bridges accurately 	PSO1
Year 2024-25						
1	Ring Topology for Networking Trainer	Trainer kit with Ring Topology Setup, Multiple Node Support, Data Flow Observation, and Power and Connectivity	<ul style="list-style-type: none"> Helps students learn the principles of ring topology, including data flow, token passing, and network structure Enables students to set up and configure network devices 	<ul style="list-style-type: none"> Electronic Lab - 2 Comm Lab - 2 	<ul style="list-style-type: none"> Problem-Solving and Analytical Thinking Troubleshooting and Fault Analysis Protocol and Configuration Understanding 	PO1 PO2 PO4 PSO1PSO2
2	VLSI Trainer with XILINX FPGA Spartan 6	Trainer kit with Xilinx Spartan-6 FPGA, On-Board I/O Interfaces, Memory, Peripheral Access and On-board regulated power supply	<ul style="list-style-type: none"> Helps students learn to write, simulate, and debug VHDL for digital circuit design, FPGA architecture, pin configuration, and I/O interfacing Reinforces theoretical concepts of VLSI design, and sequential logic with hands-on FPGA experiments 	<ul style="list-style-type: none"> Computer Lab-1 	<ul style="list-style-type: none"> HDL Language and FPGA Programming Skills Troubleshooting and Debugging Project and Design Skills Critical Thinking and Analytical Skills 	PO1 PO2 PO3 PO4 PSO1 PSO2
3	AVR Embedded Trainer	Trainer kit with AVR Microcontroller, On-Board I/O Devices, Peripheral Interfaces, and On-board regulated DC power supply	<ul style="list-style-type: none"> Helps students understanding of AVR microcontroller internal architecture, including CPU, memory (RAM, ROM/Flash), timers, and I/O ports Gain hands-on experience with LEDs, switches, relays, sensors, and displays Understand real-time control and scheduling in embedded systems 	<ul style="list-style-type: none"> Computer Lab-1 	<ul style="list-style-type: none"> Embedded System Programming skills Troubleshooting and Debugging Skills Hands-On Project Development Critical Thinking and Analytical Skills 	PO1 PO2 PO4 PSO1 PSO2
Year 2025-26						
1	General Purpose Board	GPB with Breadboard Area, Connectivity and Terminals	<ul style="list-style-type: none"> Enables students to assemble, modify, and test circuits safely, reinforcing theoretical concepts Helps students understand component behaviour, circuit connections, and signal flow in real circuits 	<ul style="list-style-type: none"> Electronic Lab - 1, 2 & 3 	<ul style="list-style-type: none"> Circuit Assembly and Wiring Digital and Analog Circuit Design Troubleshooting and Fault Analysis 	PO1 PO2 PO3 PO4 PO5 PSO1

2	Soldering iron and Desoldering pump	Hand tool that heats up to melt solder, allowing the formation of electrically and mechanically strong connections between components & PCB tracks, and remove molten solder from PCB joints	<ul style="list-style-type: none"> Enables students to learn proper handling of a soldering iron and safe soldering techniques Helps students understand the use of solder wire, flux, and soldering tips for different components Learn how to replace faulty components without damaging the PCB Enhance manual dexterity, precision, and careful handling of small components 	<ul style="list-style-type: none"> Electronic Lab - 1, 2 & 3 	<ul style="list-style-type: none"> Basic Soldering Skills Component Handling and Placement Circuit Assembly and Repair Thermal Management Awareness Hand-Eye Coordination and Precision Safety Practices Troubleshooting and Maintenance 	PO1 PO2 PO3 PO4 PO5 PO7 PSO1
3	Digital ICs, CRO Probes, Different rating Cell and Capacitors	ICs 74xx for digital logic gate, 78xx & 79xx for $\pm V$ power supply, passive probes with attenuation factors like 1x & 10x, Different Rating Cells (1.5V, 3V, 6V, 9V, 12V, etc.), Capacitance ranges from picofarads (pF) to farads (F)	<ul style="list-style-type: none"> Enables students Building, testing, and modifying real circuits Enables students Diagnosing and correcting faults in components and circuits Enables students analyse electrical signals using CRO probes Enables students selecting components (ICs, capacitors, cells) for desired functionality and motivate them for small hands-on project development 	<ul style="list-style-type: none"> Electronic Lab - 1, 2 & 3 Comm Lab - 1&2 	<ul style="list-style-type: none"> Troubleshooting & Analytical Thinking Hands-On Practical Skills Integration of Components Instrumentation & Measurement Skills Circuit Design Awareness Safety & Professional Practices Hands-On Project Development 	PO1 PO2 PO4 PSO1
4	T-SERIES Bluetooth Speaker with Total Power Rating 100-125	Speaker with Total Power Rating (100–125 W), Bluetooth Wireless Connectivity, Multi-Mode Playback, Portable Design and Enhanced Audio Features	<ul style="list-style-type: none"> Helps students learn about amplifiers, speakers, crossovers, and sound output circuitry Provides practical experience in Bluetooth pairing, signal transmission, and wireless audio streaming Hands-On Learning with Power Systems Allows students to explore various input sources like AUX, USB, memory cards, and FM radio 	<ul style="list-style-type: none"> Comm Lab - 1&2 	<ul style="list-style-type: none"> Understanding amplifiers, speaker drivers, crossovers, sound output circuitry, Bluetooth pairing, signal transmission, and wireless audio protocols Troubleshooting and Maintenance Skills Integration of Theory with Practice 	PO1 PO2 PO4 PO5 PSO

Table 6.3.4 Year-wise Equipment/Component purchase detail for additional facilities

[2] Additional Learning Resources for Students

The department provides access to a departmental library and central library, along with internet/Wi-Fi facilities, e-learning platforms such as NPTEL, ONOS, the department's Google Drive, and SWAYAM, online study materials, and well-equipped laboratory resources to support self-learning and a

The additional learning resources available to students include:

- 1. Departmental Library

- Houses reference books, textbooks, and supplementary study materials tailored to the curriculum.

- Provides easy access within the department, reducing dependency on central facilities and ensuring students can quickly consult subject-specific resources.
- Supports continuous learning and exam preparation, especially with GTU-aligned materials.

2. Department's Google Drive

- Functions as a digital academic repository containing syllabus, lab manuals, assignments, lecture notes, and GTU question papers.
- Ensures transparency and accessibility—students can retrieve materials anytime, anywhere.
- Promotes organized documentation, which is crucial for accreditation and outcome-based education.

3. Central Library

- Offers a wide spectrum of resources: books, journals, magazines, e-books, and digital learning platforms.
- Strengthens research culture by providing access to scholarly publications and databases.
- Encourages students to go beyond textbooks and engage with current trends and innovations.

4. ONOS Digital Platform

- Designed to foster innovation and research through digital tools.
- Provides opportunities for students to collaborate on projects, access advanced resources, and explore new technologies.
- Aligns with institutional goals of digital adoption and modernization.

5. SSIP Cell (Student Startup & Innovation Policy)

- Encourages students to develop entrepreneurial skills and pursue innovative ideas.
- Provides mentorship, funding opportunities, and incubation support for startups.
- Strengthens the institution's role in industry collaboration and innovation culture.

6. CWAN (Campus Wired and Wireless Network)

- Ensures seamless internet connectivity across campus.
- Facilitates access to online learning materials, research papers, and educational websites.
- Supports ICT-enabled learning, a key requirement for modern education.

7. E-learning Platforms (NPTEL & SWAYAM)

- Provide MOOCs, video lectures, and tutorials for self-paced learning.
- Enable students to learn from IITs and national-level experts, enhancing academic depth.
- Encourage lifelong learning and flexibility, aligning with global educational standards.

8. Laboratory and Computing Facilities

- Well-equipped labs allow students to conduct experiments, simulations, and hands-on projects.
- Strengthen practical knowledge and application of theory, a cornerstone of outcome-based education.
- Computing facilities support software-based learning, coding, and digital simulations.

9. Workshops, Seminars & Guest Lectures

- Provide exposure to industry practices and academic advancements.
- Enable students to interact with experts, gain insights into emerging technologies, and develop professional skills.
- Strengthen industry-academia collaboration, enhancing employability and innovation.

GPP EC Google Drive for Study Materials

Link

https://drive.google.com/open?id=12Y-TdswTtsWz4CxeDIK8owbw4Ktq6_J8&usp=drive_fs

QR Code



Sr. No.	Facility Name	Details	Reason(s) for Creating Facility	Utilization	Area in which Students are Expected to Have Enhanced Learning	Relevance to POs / PSOs
1	Department Library	Reference books, textbooks, solved examples, previous years' question papers	Easy access to subject-specific learning resources	Used for coursework and exam preparation	Conceptual understanding, self-learning	PO1 PO2 PSO1
2	Department's Google Drive	Syllabus, lab manuals, assignments, lecture notes, GTU question papers	Anytime access to academic materials	Downloading study materials and lab preparation	Independent learning, digital literacy	PO1 PO5 PSO1 PSO2
3	Central Library	Books, journals, magazines, e-books, digital databases	Support advanced learning and research	Reference for projects and research	Research aptitude, lifelong learning	PO2 PO4 PSO1 PSO2
4	ONOS Digital Platform	Online academic and innovation resources	Enhance innovation and exposure to advanced knowledge	Learning new technologies and research trends	Innovation, critical thinking	PO4 PO5 PO7 PSO2
5	SSIP Cell	Startup support, innovation mentoring, funding	Encourage entrepreneurship and innovation	Project development and startup activities	Entrepreneurship skills	PO3 PO5

						PO7 PSO2
6	CWAN (Wired and Wireless network)	Campus-wide high-speed internet	Access online educational and research resources	E-learning and research access	Self-directed learning	PO5 PO7 PSO2
7	E-learning Platforms (NPTEL, SWAYAM)	Online courses, video lectures, certifications	Supplement classroom teaching	Concept clarity and certifications	Lifelong learning	PO1 PO7 PSO2
8	Laboratory and Computing Facilities	Well-equipped labs, hardware, software, simulation tools	Hands-on experiential learning	Experiments, simulations, projects	Practical skills, problem-solving	PO1 PO2 PO7 PSO1 PSO2
9	Workshops, Seminars, Guest Lectures	Expert talks, hands-on workshops, industry interaction	Industry-academia exposure	Participation in technical events	Professional and communication skills	PO1 PO7 PSO1 PSO2

Table 6.3.5 Additional Learning Resources and Facilities for Students

Sr. No	Facility Name	Details	Reason(s) for creating facility	Utilization	Areas in which students are expected
1	Department Libræ	Reference books	Easy access to s	Used for coursew	Conceptual understanding, s
2	Department's Go	Syllabus, lab mar	Anytime access t	Downloading stu	Independent learning, digital
3	ONOS Digital Plæ	Online academic	Enhance innovat	Learning new tec	Innovation, critical thinking
4	CWAN (Wired ai	Campus-wide hig	Access online ed	E-learning and re	Self-directed learning
5	Laboratory and C	Well-equipped lal	Hands-on experie	Experiments, sim	Practical skills, problem-solvi
6	Workshops, Sem	Expert talks, han	Industry-academ	Participation in te	Professional and communica
7	Digital Multimeter	Measurement of	• Provides ha	• Electronic L:	• Diagnose faulty compor
8	Digital LCD Displ	Accurately meas	• Helps stude	• Electronic L:	• Analysing measured da

9	Different Types o	Connector, IC, R	• Supports ha	• Electronic L:	• Component identificatio
10	Discrete Compor	Resistors, capaci	• Enables stu	• Electronic L:	• Logical thinking to ident
11	Bread Board with	Breadboard with	• Enables stu	• Electronic L:	• Logical thinking to ident
12	Digital IC Tester	Tests a wide ranç	• To help stud	• Electronic L:	• Development of Trouble
13	VLSI Trainer with	Trainer kit with Xi	• Helps stude	• Computer L:	• HDL Language and FPC
14	General Purpose	GPB with Breadb	• Enables stu	• Electronic L:	• Circuit Assembly and W
15	Soldering iron an	Hand tool that he	• Enables stu	• Electronic L:	• Basic Soldering Skills •
16	Digital ICs, CRO	ICs 74xx for digit:	• Enables stu	• Electronic L:	• Troubleshooting & Analç
17	T-SERIES Bluetc	Speaker with Totç	• Helps stude	• Comm Lab ·	• Understanding amplifier

6.4 Laboratories: Maintenance and overall ambiance (10)

[A] Maintenance of Physical Facilities

The institution/department ensures systematic maintenance and optimal utilization of laboratory infrastructure through well-defined procedures:

- Regular inspection and preventive maintenance of laboratory equipment are carried out prior to the commencement of each semester as and when required.
- Minor repairs are handled internally by the Laboratory Assistant and concerned faculty members, while major repairs and servicing are outsourced through institutional procedures if required.
- Computer laboratories are maintained through periodic checking before the start of the semester by concern lab in charge assisted by laboratory assistant.
- Minor hardware and software issues are resolved by departmental staff, whereas major maintenance and repair work is outsourced by the Institute on a call basis (AMC).
- The department is supported by CWAN (Central Wide Area Network) connectivity with both wired and wireless internet facilities, which are regularly maintained to support teaching-learning, research, and administrative activities for students and faculty.
- Laboratory models, equipment, and student projects are systematically stored and preserved to ensure safety, accessibility, and long-term usability.
- A Laboratory Utilization Register is maintained for all laboratories to monitor effective usage, scheduling of practical sessions, and compliance with institutional norms.
- Major electrical and civil maintenance works related to laboratory infrastructure are carried out by the Roads & Buildings (R&B) Department, ensuring compliance with safety and quality standards.

[I] Equipment maintenance history card



GOVERNMENT POLYTECHNIC, PALANPUR
ELECTRONICS AND COMMUNICATION DEPARTMENT
EQUIPMENT HISTORY CARD



Name of Equipment	Antenna Trainer kit	Make/Model	Scientech - 2261
Category of purchase	MTE/MHRD/CSS/MODROB/Local Purchase	Serial No.	26
Purchase Order No:	CTE/CSS/AT-435/ROYAL/B-10/3/2014-15/7301	Unit Total Price	73185/-
Register (DS/Expa) Name & Registered Number	MHRD - 9/26	Warranty Period	1 Yrs
GPR No. (Institute level)	11/64	Ph. Number of supplier	9824412130 C Rajesh Chohan
Date of Purchase/ Installation	18/03/2015	Name of Supplier	Royal Electronics, Vadodara
Name of Supplier	Royal Electronics, Vadodara	Address of Supplier	Royal House, 1 Raj lexoni Society, Nr HCA Cancer Center, Atladara, Tandalya, Vadodara - 390012
Address of Supplier	Royal House, 1 Raj lexoni Society, Nr HCA Cancer Center, Atladara, Tandalya, Vadodara - 390012		
Details	Testing & Measurement/ Trainer Kit/ H/Phereferal		
Category of Equipment	Testing & Measurement/ Trainer Kit/ H/Phereferal		
Subject Used (Name Of Subject):	Antenna & Wave propagation (AWP) Code No: 333110		

Equipment Examination Details

Date	Examination Details	Status		Examined By	Remarks
		Working	Non Working		
18/03/15	Testing	✓		R.N. Patel	Working with manual & software setup of ST2261
11/04/15	Functional verification & testing	✓		R.N. Patel	Software setup is not working properly
10/07/201	Functional verification & testing	✓		R.N. Patel	H/W & s/w are fully working
13/12/15	Final verification & Testy (end of term)	✓		R.N. Patel	H/W & s/w are working
	Functional verification				

15/10/24	Rating	✓		FURNITURE A	H/W & S/W Working
26/12/25	Functional aspects of Rating all setups	✓		RNPS/ST A	H/W & S/W Working

Document 6.4.1 Equipment maintenance history card

[2] Overall Ambience of Laboratories

The department provides a learner-friendly, safe, and well-equipped laboratory environment that effectively supports curriculum delivery and experiential learning:

- The department has adequate number of laboratories, which are utilized as per the approved academic time-table to meet curriculum and practical requirements.
- All laboratories are well-equipped with adequate and functional equipment to conduct prescribed experiments as per the university syllabus.
- Each laboratory is provided with essential teaching learning facilities such as white/chalk boards, CWAN (Central Wide Area Network) connectivity with both wired and wireless internet facilities, and other instructional aides to support effective practical demonstrations.
- Soft copies of laboratory manuals through G-Drive are made available for all laboratories for easy access by students and faculty.
- Laboratories are furnished with adequate furniture, including tables, stools, and chairs, ensuring comfort and proper ergonomics for students.
- The laboratories have an effective lighting system, supplemented with sufficient natural light, creating a conducive working environment.
- Safety instructions, including Do's and Don'ts, are prominently displayed in each laboratory to ensure safe laboratory practices.
- First-aid kits and fire extinguisher are available across department to handle minor medical emergencies.
- Students are permitted and encouraged to use laboratories and computer centres beyond regular practical hours for final-year project work, promoting experiential learning and innovation.

6.5 Availability of computing facility in the department (10)

Sr. No	No Of Computer terminals	Students Computer Ratio	Details of Legal Software	Details of Net
1	75	2	• Windows Pr	• CWAN conn

6.6 Language lab (10)

Language Laboratory – Systematic Development of Communication Skills

1. Infrastructure & ICT Facilities

- The Language Lab is equipped with modern ICT infrastructure including computers, microphones, headphones, and audio-visual aids.
- Provides a user-friendly, interactive environment that supports both individual and group learning.
- Technology-enabled tools allow real-time monitoring, recording, and feedback, ensuring systematic skill development.

2. Focus on LSRW Skills

- The lab is designed to strengthen Listening, Speaking, Reading, and Writing (LSRW) skills.
- Students engage in structured exercises that improve pronunciation, fluency, comprehension, and vocabulary.
- Activities also emphasize non-verbal communication such as body language, gestures, and tone modulation.

3. Pedagogical Functions

- Supports a wide range of instructional functions:
- Recording & Playback: Students can record their speech and analyze areas of improvement.
- Test Preparation: Facilitates practice for competitive exams, interviews, and presentations.
- Teacher–Student Interaction: Enables personalized guidance and corrective feedback.
- Group Activities & Conferencing: Encourages collaborative learning and peer evaluation.

4. Professional & Global Readiness

- Enhances confidence, fluency, and clarity of communication, preparing students for professional environments.
- Builds competencies required for multinational organizations, where effective communication is a key employability skill.
- Promotes global citizenship by exposing learners to diverse accents, cultural contexts, and communication styles.

5. Experiential Learning & Innovation

- Interactive sessions simulate real-world scenarios such as interviews, group discussions, and presentations.
- Students gain hands-on experience in communication practices, bridging the gap between theory and application.
- Encourages self-learning and continuous improvement, aligning with outcome-based education principles.

[1] Facility detail

Sr. No.	Facility	Availability Status
1	Laboratory Location and Area	New Academic Building, Room No G008, 76.56sqm area
2	ICT Facilities and Furniture	30 computer terminals with LAN & Internet connectivity (ACER-17 + HCL-13)
		30 Head Phone with Mike
		30 Computer table and chair
		1 LCD Projector with screen
3	Lab register	Separately maintain
4	Software	Open-source software such as AUDACITY and other relevant online platforms/tools used for language learning and skill development

Table 6.6.1 Laboratory facility details**[2] List of Activities Conducted in the Language**

- The Language Laboratory is systematically utilized for topic-wise communication skill activities as scheduled in the academic timetable.
- Each practical session is conducted under faculty supervision using allocated ICT resources such as computers, headphones with microphones, and projector facilities.
- Activities such as role-plays, telephonic conversations, situational dialogues, and interactive speaking exercises are regularly practiced listed below.
 - Self-introduction and personal profiling
 - Speaking about family and relationships
 - Weather discussion and descriptive speaking
 - Seeking permission and making polite requests
 - Talking about hobbies and interests
 - Seeking information at public places (railway station/airport)
 - Fixing and taking appointments
 - Role-play: Conversation with cashier (college/bank)
 - Discussing holiday and travel plans
 - Shopping-related conversations and bargaining skills
 - Telephonic conversation practice
 - Admission enquiry and formal interaction
 - Greeting and wishing on social occasions
 - Speaking about favourite sports and recreational activities
 - Listening comprehension using audio clips
 - Pronunciation and accent practice
 - Group discussions and pair conversations
 - Recording and playback for self-evaluation
 - Vocabulary building exercises
 - Mock interviews and basic professional communication

[3] Websites used for Communication Practice

Lesson

Listening Level Test

<https://www.oxfordonlineenglish.com/english-level-test/listening>

Vocabulary Level Test

<https://www.oxfordonlineenglish.com/english-level-test/vocabulary>

Reading Level Test

<https://www.oxfordonlineenglish.com/english-level-test/reading>

Grammar Level Test

<https://www.oxfordonlineenglish.com/english-level-test/grammar>

English Listening Lesson

<https://www.oxfordonlineenglish.com/free-english-listening-lessons>

English Vocabulary Lessons

<https://www.oxfordonlineenglish.com/free-english-vocabulary-lessons>

Spoken English Lessons

<https://www.oxfordonlineenglish.com/free-spoken-english-lessons>

English Pronunciation Lessons

<https://www.oxfordonlineenglish.com/free-english-pronunciation-lessons>

English Writing Lesson

<https://www.oxfordonlineenglish.com/free-english-writing-lessons>

Skills

Listening

<https://learnenglish.britishcouncil.org/skills/listening/beginner-a1>

<https://learnenglish.britishcouncil.org/skills/listening/pre-intermediate-a2>

Reading

<https://learnenglish.britishcouncil.org/skills/reading>

<https://learnenglish.britishcouncil.org/skills/reading/pre-intermediate-a2>

Writing

<https://learnenglish.britishcouncil.org/skills/writing/beginner-a1>

<https://learnenglish.britishcouncil.org/skills/writing/pre-intermediate-a2>

Speaking

<https://learnenglish.britishcouncil.org/skills/speaking/beginner-a1>

<https://learnenglish.britishcouncil.org/skills/speaking/pre-intermediate-a2>

Grammar

<https://learnenglish.britishcouncil.org/skills/speaking/pre-intermediate-a2>

Vocabulary

<https://learnenglish.britishcouncil.org/vocabulary/beginner-to-pre-intermediate>

Business English

<https://learnenglish.britishcouncil.org/business-english/english-for-emails>

General English

<https://learnenglish.britishcouncil.org/general-english>

Online Activities

<https://www.cambridgeenglish.org/learning-english/activities-for-learners/?skill=grammar&rows=12>

Grammar

https://www.myenglishpages.com/site_php_files/grammar.php

Vocabulary

https://www.myenglishpages.com/site_php_files/vocabulary.php

Speaking

https://www.myenglishpages.com/site_php_files/speaking.php

Reading

https://www.myenglishpages.com/site_php_files/reading.php

Listening

https://www.myenglishpages.com/site_php_files/listening.php

Writing

https://www.myenglishpages.com/site_php_files/writing.php

Exercises and Tests

https://www.myenglishpages.com/site_php_files/exercises.php



Figure 6.6.1 Language lab photograph_G008

7 CONTINUOUS IMPROVEMENT (75)

7.1 Actions taken based on the resultsof evaluation of each of the POs and PSOs (25)

POs Attainment Levels and Actions for Improvement- (2024-25)

POs	Target Level	Attainment Level	Observations
-----	--------------	------------------	--------------

PO 1 : Basic and Discipline specific knowledge

PO 1	1.87	2.04	Target achieved.
Target level increased to 1.95 for next AY.			

PO 2 : Problem analysis

PO 2	1.32	1.59	Target achieved.
Target level increased to 1.38 for next AY.			

PO 3 : Design/ development of solutions

PO 3	1.34	1.62	Target achieved.
Target level increased to 1.40 for next AY.			

PO 4 : Engineering Tools, Experimentation and Testing

PO 4	1.44	1.62	Target achieved.
Target level increased to 1.50 for next AY.			

PO 5 : Engineering practices for society, sustainability and environment

PO 5	1.20	1.36	Target achieved.
Target level increased to 1.25 for next AY.			

PO 6 : Project Management

PO 6	1.23	1.54	Target achieved.
Target level increased to 1.28 for next AY.			

PO 7 : Life-long learning

PO 7	1.41	1.68	Target achieved.
------	------	------	------------------

Target level increased to 1.47 for next AY.

PSOs Attainment Levels and Actions for Improvement- (2024-25)

PSOs	Target Level	Attainment Level	Observations
------	--------------	------------------	--------------

PSO 1 : Demonstrate proficiency in installation and problem solving of electronics and communication equipment.

PSO 1	1.71	1.89	Target achieved.
-------	------	------	------------------

Target level increased to 1.78 for next AY.

PSO 2 : Proficiency in specialized software packages and coding useful for the analysis of electronics engineering systems and PCB design.

PSO 2	1.45	1.73	Target achieved.
-------	------	------	------------------

Target level increased to 1.51 for next AY.

7.2 Improvement in Success Index of Students without the backlog (10)

Items	Latest Passed out Batch (2022-23)	Latest Passed out Batch minus 1 (2021-22)
Success Index (from 4.2.1)	0.00	0.05

7.3 Improvement in Placement and Higher Studies (10)

Items	Latest Passed out Batch (2022-23)	Latest Passed out Batch minus 1 (2021-22)
-------	-----------------------------------	---

Placement Index (from 4.6)	0.32	0.70
----------------------------	------	------

7.4 Improvement in Academic Performance in Final year (10)

Items	Latest Passed out Batch (2022-23)	Latest Passed out Batch minus 1 (2021-22)
Academic Performance Index (from 4.3)	6.94	6.02

7.5 Internal Academic Audits to Review Complete Academics & to Implement Corrective Actions on Continuous Basis (10)

Items	2024-25 (CAYm1)	2023-24 (CAYm2)	2022-23 (CAYm3)
Internal Academic Audits	YES	YES	YES

7.6 New Facility created in the Program (10)

Items	2024-25 (CAYm1)	2023-24 (CAYm2)	2022-23 (CAYm3)
New Facility Created	YES	YES	YES

8 STUDENT SUPPORT SYSTEMS (50)

8.1 Mentoring system to help at individual level (10)

Government Polytechnic, Palanpur has established an effective student mentoring system aimed at developing technically competent diploma engineers. Faculty members provide structured, stage-wise mentoring through growth.

• **Key Strengths of the Mentoring System**

- **Career Guidance:** Students often struggle with choosing between higher studies, immediate employment, or entrepreneurship. Structured mentoring helps them make informed decisions aligned with their strength.
- **Academic Support:** Faculty mentors can identify learning gaps early, recommend remedial measures, and track progress, which directly improves performance.
- **Personal Counseling:** By offering empathetic support, mentors help students manage stress, confidence issues, or personal challenges—critical for overall well-being.
- **Parent-Teacher Meetings (PTM):** Involving parents ensures transparency and builds a support network beyond the classroom.
- **Holistic Development:** Encouraging participation in co-curricular and extracurricular activities nurtures leadership, teamwork, and communication skills alongside technical competence.

This comprehensive mentoring approach ensures students receive continuous personal, academic, and professional guidance throughout their diploma program.

Types of mentoring system:

Descriptions of mentoring system:		
Sr. No.	Type of mentoring system	Functions
1	Orientation/Induction program for first year students	<ul style="list-style-type: none"> • Familiarize new admitted students/parents with various sections, facilities, department of the institute, institute website, section heads, head of the department (HoD), faculty members and make them aware with the procedure of each section. • Acquaint students with Gujarat Technological University (GTU) teaching scheme, syllabus, Examination scheme, GTU website, and GTU norms. • Make them familiar with the other Students and Institute, a specific 2 weeks Induction Programme is arranged for first year students, which includes basic lectures on Mathematics, English and General activities like sports, puzzles games, tree Plantation, visit etc.
2	Academic guidance	<ul style="list-style-type: none"> • Share information of academic calendar, academic schedules, study material, and e-learning resources. • Identify students with less attendance and they are counselled by the mentor/HODs to improve their attendance. • In some case parents are informed by telephonically for their ward attendance. • For academically slow learners, subject teacher provides additional reading materials, model question papers, assignment etc. in order to pace them with other students.
3	Professional guidance/ Career advancement	<ul style="list-style-type: none"> • Students are encouraged to participate in competitive activities, expert lectures, seminars, online platform courses and

		<p>industrial visit for up scaling their knowledge and skill.</p> <ul style="list-style-type: none"> • Guidance is given to the students for higher studies.
4	Overall growth / development	<ul style="list-style-type: none"> • Students are encouraged to organize and participate in co-curricular/extracurricular activities under guidance of faculty members, which help them to develop leadership qualities, decision making abilities, team spirit for overall growth.
5	Student Mentoring	<ul style="list-style-type: none"> o Each mentor maintains details like parents/guardian's name, addresses, contact numbers, academic progress/results ,issues faced by students and guidance given to student etc. o Frequency of meeting: Once in a semester, also based on student's need

[Table 8.1.1 Types of mentoring system]



Government Polytechnic, Palanpur
EC Engineering department
Program:



Student Mentoring Details

[A] PERSONAL INFORMATION

Name: <u>Dave Falguni</u> Father's Name: <u>Jitendra Kumar</u> Enrollment No: <u>236260311002</u>	Gender: <u>M/F</u> Category: <u>OPEN/OBC/SC/ST</u> Birth Date: <u>13/08/2007</u>
Mobile: 1) <u>9358873508</u> [Own] 2) <u>7731024048</u> [Father] 3) <u>-</u> [Mother]	Email ID: <u>davefalguni14@gmail.com</u>
Postal Address: <u>AT-00-Deesa Chandanlek Society-2, Deesa, Dist-Ganaskantha-385551</u>	10 th Percentage: <u>64.66%</u> ACPDC Merit Rank: <u>18569</u>
Occupation (Father): <u>Business</u>	Occupation (Mother): <u>-</u>
Institute Hostel Accommodation: Yes/No <u>-</u> If YES then Block/Room No: <u>-</u> If NO then provide details of Accommodation: <u>-</u>	

[B] ACADEMICS

	SEM-1	SEM-2	SEM-3	SEM-4	SEM-5	SEM-6
SPI	7.09	7.32	4.70	8.45	8.61	
CPI	7.09	7.20	6.38	6.93	7.75	
BACKLOG	-	-	PEL	-	-	-
	-	-	Proj. C	-	-	-

Parent's Signature	<u>[Signature]</u>	<u>[Signature]</u>	<u>[Signature]</u>	<u>[Signature]</u>	<u>[Signature]</u>
Parent's Meet date	<u>21/10/2023</u>	<u>20/4/2024</u>	<u>21/9/2024</u>	<u>23/3/2025</u>	<u>20/9/2025</u>

[C] MENTORING

SEM	DATE	Mentoring Details									Sign of student
		Exam Performance	Class/Lab Attendance	Subject Learning Difficulties	Learning Material Issue (Book, E-help, Assignment)	Communication Problem	Co-curricular Activity	Exam UFM	Misbehavior in Campus	Personal (Stress / Depression / Health / Financial / Friendship / Peer Pressure / Competition / Social - emotional, Home Sickness, etc.)	
SEM-1	21/10/2023 4/11/2023	point 2,3,4,5,9 discussed - PA-2 result discussion, and follow up Exam Performance, Exam UFM, personally counselling, Appreciation									
SEM-2	20/04/2024 20/05/2024	- PA-2 result discussion - Attendance review - OUV 1 st sem result - discussion - submission follow up - OUV exam guideline - learning material provided									
SEM-3	21/3/2024 19/10/2024	- PA-2 result discussion - Attendance review - OUV 2 nd sem result discussion - submission follow up - OUV Exam guideline - learning material provided									
SEM-4	20/3/2025 21/04/2025	- OUV Sem-3 result discussion - Attendance review - PA-2 result of Sem-4 discussion - OUV Exam guideline - submission follow up - learning material provided									
SEM-5	20/9/2025 10/10/2025	- OUV Sem-4 result discussion - PA-2 result discussion - Attendance review - learning material provided - submission follow up - OUV Exam guideline									
SEM-6											

Sr. No.	Mentor Details		Student's Sign
	Name	Sign	
1	S. P. Joshiam	<u>[Signature]</u>	<u>[Signature]</u>
2			
3			

Figure 8.1.1 Sample Mentoring Form

- o Efficacy of our mentoring system:
- o Student Progression and Career Outcomes
 - o Higher Studies as a Preferred Pathway
A significant proportion of students aspire to pursue higher education, with many successfully securing admissions in Bachelor of Engineering (BE) and Bachelor of Technology (B.Tech.) programs. This reflects the learning opportunities.
 - o Successful Placements and Societal Contribution
Numerous students are selected through campus placement drives and are now contributing meaningfully to society as professional engineers. Their roles span diverse industries, where they apply technical knowledge, which enhances their personal growth but also strengthens the institution's reputation for producing competent graduates.

o **Support for Slow Learners**

Special mentoring initiatives have been implemented to support slow learners. Through personalized guidance, remedial sessions, and continuous monitoring, these students have shown remarkable improvement in and the institution's commitment to inclusive education.

8.2 Feedback analysis and reward/ corrective measures taken, if any (10)

Feedback collected for all courses: YES/NO; Specify the feedback collection process; Average Percentage of students who participate; Specify the feedback analysis process; Basis of reward/ corrective measures, if any; Indices learning and summary of the index values for all courses/teachers; Number of corrective actions taken.

A. Methodology being followed for feedback collection, analysis and its effectiveness (5)

The institute has established a well-structured and transparent feedback collection system to capture students' views on teaching-learning processes.

Direct feedback

- A clearly defined feedback process is in place at the institutional level.
- All students are actively encouraged to provide honest and constructive feedback.
- Student feedback is collected once every semester through Google forms/ hard copy at the department level.
- The standard student feedback format provided by AICTE is given below.

To be filled by individual student at the end of semester.

Sr. No.	Description	Very Poor	Poor	Good	Very Good	Excellent
		(1)	(2)	(3)	(4)	(5)
1	Has the teacher covered entire syllabus as per prescribed university/board?					
2	Has the teacher covered topic beyond syllabus?					
3	Effectiveness of teacher in terms of:					
	(a) Technical content/course content					
	(b) Communication skills					
	(c) Use of teaching aids					
4	Pace on which contents were covered					
5	Motivation and inspiration for students to learn					
6	Support for development of students' skill					

	(i) Practical demonstration					
	(ii) Hands on training					
7	Clarity of expectation of students					
8	Feedback provided on students' progress					
9	Willingness to offer help and advice to students					
Total						

If you want to give additional feedback, to improve quality of classroom teaching (if any):

Table 8.2.1 Format of student feedback form

Government Polytechnic, Palanpur

FEEDBACK FORM FOR CONCERNED FACULTY, FILLED BY STUDENTS (EC Department)

Students' Name (Optional): Sumit R. Parmhal

Name of Faculty:	<u>L.R. Patel</u>	Academic Year/Term:	<u>Summer 2022</u>
Semester:	<u>4th sem</u>	Course(Subject):	<u>O.C</u>
Date of feedback:	<u>16/6/2022</u>	Term Date:	<u>3/3 to 14/6</u>

Sr. No	Description	Very Poor	Poor	Good	Very Good	Excellent
		(1)	(2)	(3)	(4)	(5)
1	Has the teacher covered entire syllabus as per prescribed GTU? (શિક્ષક જીટીયુ નાં અભ્યાસક્રમને સંપૂર્ણપણે આવરી લે છે ?)					✓
2	Has the teacher covered latest Development/ topic beyond syllabus? (શું શિક્ષક અભ્યાસક્રમની બહારના નવા સંશોધનો /મુદ્દા આવરી લે છે ?)					✓
3	Effectiveness of teacher in terms of (શિક્ષકની વર્ગખંડમાં ભણાવવાની ક્ષમતા /કળા/ અસરકારકતા) :					
3.1	(a) Ability to teach technical course content (વિષયને યોગ્ય રીતે ભણાવવાની ક્ષમતા /ટેકનિકલ કેવી છે ?)					✓
3.2	(b) Communication skills (વાતચીત કરવાની કળા કેવી છે ?)					✓
3.3	(c) Use of teaching aids (Black board / Projector/ Smart board) (શિક્ષણ માટે સહાયક, વિવિધ સાધનોનો ઉપયોગ કેવો કરે છે ?)					✓
4	Pace on which contents/ topic/ syllabus were covered (મુદ્દા/અભ્યાસક્રમ ભણાવવાની/પુરો કરવાની સ્પીડ/ઝડપ કેવી છે ?)				✓	
5	Motivation and inspiration for students to learn (વિદ્યાર્થીઓને શીખવા માટે પ્રોત્સાહન અને પ્રેરણા આપે છે ?)				✓	
6	Ability to clear doubts of students' mind (વિદ્યાર્થીઓએ પુછેલા પ્રશ્નોનાં જવાબ આપવાની ક્ષમતા/કળા કેવી છે ?)					✓
7	Guidance on students' academic progress in classroom (વિદ્યાર્થીઓની શૈક્ષણિક પ્રગતિ માટે વર્ગમાં માર્ગદર્શન આપે છે ?)					✓
8	Willingness to offer additional academic help and career counseling (વિદ્યાર્થીઓને વધારાની શૈક્ષણિક મદદ અને કારકિર્દી માટેનું માર્ગદર્શન આપે છે ?)				✓	
9	Support for development of students' practical skill (વિદ્યાર્થીઓના પ્રેક્ટિકલ કૌશલ્યના વિકાસ માટે સપોર્ટ)					
9.1	(a) Practical demonstration (પ્રેક્ટિકલ કરાવવાની ક્ષમતા કેવી છે ?)					✓
	(b) Hands on practical to student					

9.2	(વિદ્યાર્થીઓને જાતે પ્રેક્ટિકલ કરવા દેવાની છુટ આપે છે?)					✓
Total						

કલાસરૂમ ટીચિંગ સુધારવા માટે આપનો વધારાનો પ્રતિભાવ(જો હોય તો) (additional feedback)

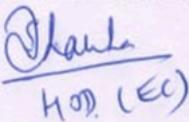

 HOD (EC)



Figure 8.2.1 Sample student feedback form

- Feedback received from students is systematically analyzed using predefined evaluation criteria.
- Each criterion is scored on a 4-point scale based on categorical responses:
 - Excellent → 5
 - Very Good → 4
 - Good → 3
 - Poor → 2
 - Very Poor → 1
- The following key parameters are evaluated with the above numerical mapping:
 - Interaction with students in the classroom
 - Coverage and quality of Course Content
 - Use of practical examples and ability to explain concepts effectively
 - Regularity and punctuality in conducting classes
 - Overall effectiveness of teaching

Indirect feedback

- The HoD maintains record about live feedback taken during the semester. The sample format is shown below.
- The Principal, Heads of Departments (HoDs), and members of the Discipline Committee regularly visit the campus and interact directly with students to understand academic-related concerns.
- During official inspections, officers appointed by the Commissionerate of Technical Education (CTE) and Gujarat Technological University (GTU) collect independent feedback from both students and faculty members.
- Continuous monitoring of academic activities is carried out by the CTE office through regular CCTV surveillance.

**Electronics and Communication /ICT Engineering Department
GP Palanpur**

Date: 19/12/24, 12:15 P.

LOG Book - Academic Monitoring (Visit of Live Academic Session)

Term Date :	01/02/2024 to 25/05/2024		
Semester/ Div :	4th, EC	Name of Present Faculty : Mr. R C Parmar	
Lab/ Lecturer Timing :	11:30 AM TO 12:30 PM	Classroom/Laboratory Room No : B-108	

1 General Observation

1.1	Lecturer/ Laboratory	Routine Lecture-Lab / Proxy lecture-Lab / Extra Lecturer-lab			
1.2	Give detail if Proxy arrangement	- NA -			
1.3	% Presence of student in a class	Present	Absent	Total	%
		06	03	09	66 %
1.4	Punctuality of teacher to attend student	Excellent			
1.5	Coverall cleanliness of this Room	Good			

2 Teaching Learning Process

2.1	Chapter No./Experiment Number	Ch-03 - (LIC)
2.2	Topic Name/ Name of experiment	Class AB Power Amplifier
2.3	Is it found as per lesson planning ?	Yes/No
2.4	Strategy of teaching (For Lecture)	Chalk : Board/White Board/ Multimedia
2.5	Languages used by teacher	English, Gujarati
2.6	Content delivery to student	Good / very Good / Excellent
2.7	Interaction with student	Yes, interacting with students
2.8	Name of Books used by teacher	Basic electronics & linear circuit by N.N. Bhargava

3 HOD 's Remarks if any

3.1	Instructions given to student	Develop habit to get extra knowledge by searching topic in U-tube and watch videos available
		→ Involvement of student in

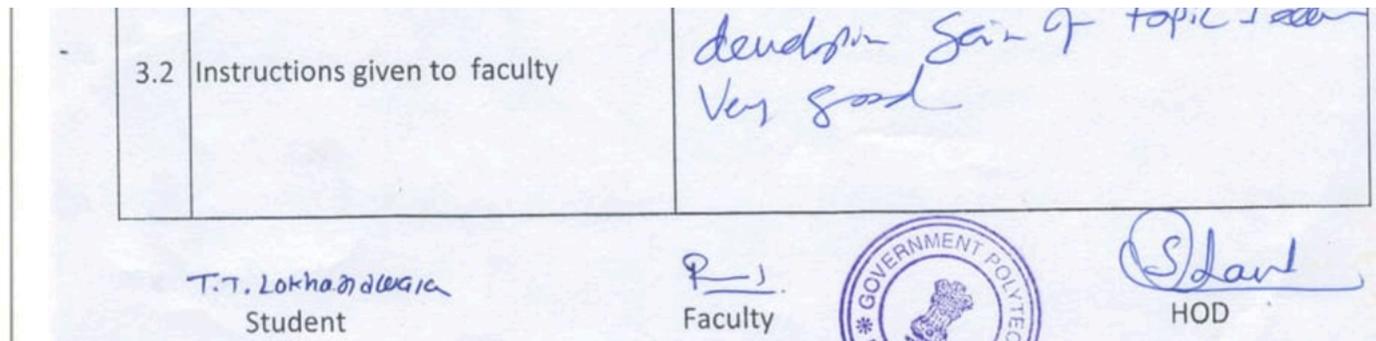


Figure 8.2.2 Sample indirect feedback forms

B. Record of corrective measures taken (5)

Process	Corrective Measures
1. Student feedback (Format enclosed in section 8.2.A) 2. Faculty self-appraisal report 3. Feedback analysis report (HOD Evaluations) 4. Faculty's Performance Appraisal report (PAR) by HOD and Principal	<ul style="list-style-type: none"> In case of poor feedback for a faculty member, he/she is counselled by HOD and advised to improve performance in related area in the next semester.
Indices Used for faculty performance evaluations	Feedback form designed by AICTE is taken as reference and the following indices are incorporated in the feedback form: <ul style="list-style-type: none"> Interaction with students in the classroom Practical examples / ability Course content Regularity and punctuality Overall performance
Number of Corrective Measures	<ul style="list-style-type: none"> Faculty Performance Review and Development Initiatives <ul style="list-style-type: none"> Structured Review Mechanism Faculty members who receive average feedback from students are

Process	Corrective Measures
	<p>invited by the Head of Department (HOD) for a formal review discussion. This structured interaction ensures transparency, where faculty are informed about the nature of the feedback and guided on specific areas requiring improvement. The process fosters accountability while maintaining a supportive environment.</p> <ul style="list-style-type: none"> ○ Guidance and Mentoring During these discussions, faculty are advised on strategies to enhance classroom delivery, student engagement, and subject expertise. Constructive suggestions are provided to help them improve their performance in subsequent semesters. The emphasis is on continuous improvement rather than criticism, ensuring faculty feel motivated to upgrade their teaching practices. ○ Faculty Development Programs (FDPs) To strengthen teaching effectiveness, faculty members with average feedback are deputed to Faculty Development Programs (FDPs) in relevant subject areas. These FDPs expose them to modern pedagogical techniques, emerging technologies, and updated curriculum requirements. Participation in such programs helps faculty upgrade knowledge, refine teaching methodologies, and align with industry expectations.

Table 8.2.2 Process of evaluation and corrective measures

Feedback Analysis Report

Academic Year 2023-24, Term - Odd, GTU Exam - Winter 2023

Dept of ECE, GP Palanpur

Contents

1 Overview	2
1.1 Report Overview & Term Details	2
1.2 Assessment Parameters & Rating Scale	2
1.2.1 Assessment Parameters	2
1.2.2 Rating Scale	2
2 Feedback Analysis (Overall)	2
2.1 Branch Analysis	3
2.2 Semester Analysis	3
2.3 Subject Analysis	3
2.4 Faculty Analysis	5
3 Parameter-wise Feedback Analysis	5
3.1 Branch Analysis (Parameter-wise)	6
3.2 Semester Analysis (Parameter-wise)	6
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5.4	Mr. L K Patel (LKP)	13
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5.5.1	Subjects Taught	14
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5.5.4	HOD Comments	14
5.6	Mr. M J Dabgar (MJD)	15
5.6.1	Subjects Taught	15



Table 8: Subject Analysis (Parameter-wise)

Sub Code	Subject	Faculty	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Score
1313201	FICT	SPJ	3.29	3.12	3.24	3.21	3.09	3.15	3.12	3.12	3.06	3.00	3.15	3.15	3.14
1313201	FICT	RNP	3.68	3.65	3.68	3.65	3.62	3.79	3.68	3.59	3.62	3.65	3.53	3.74	3.65
4300015	SY	NJC	3.85	3.74	3.79	3.74	3.68	3.74	3.82	3.79	3.79	3.76	3.59	3.71	3.75
4300015	SY	SPJ	3.60	3.56	3.60	3.60	3.60	3.67	3.63	3.63	3.60	3.67	3.61	3.63	3.62
4311601	PP	MJD	4.65	4.43	4.48	4.35	4.43	4.52	4.43	4.39	4.48	3.87	4.57	4.52	4.43
4311603	SWD	RCP	4.30	4.30	4.52	4.43	4.17	4.52	4.43	4.35	4.35	4.22	4.39	4.35	4.36
4311602	IITS	LKP	4.39	4.57	4.61	4.74	4.57	4.74	4.61	4.61	4.74	4.61	4.70	4.74	4.63
4311602	IITS	MJV	3.61	3.17	3.04	3.09	2.96	3.17	3.13	3.09	2.83	2.78	2.74	2.70	3.03
4311602	IITS	NJC	4.35	4.30	4.30	4.39	4.48	4.52	4.52	4.48	4.39	4.43	4.35	4.39	4.41

3.4 Faculty Analysis (Parameter-wise)

This section details the performance across specific feedback parameters (Q1-Q12) for each faculty member.

Table 9: Faculty Analysis (Parameter-wise)

Faculty	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Q9	Q10	Q11	Q12	Score
SPJ	3.94	3.79	3.83	3.76	3.78	3.92	4.00	3.89	3.91	3.79	3.94	3.94	3.88
MKP	4.32	4.15	4.34	4.33	4.24	4.37	4.29	4.30	4.33	4.45	4.41	4.50	4.34
RCP	4.30	4.18	4.28	4.29	4.27	4.46	4.21	4.31	4.20	4.05	4.25	4.21	4.25
LKP	4.76	4.80	4.76	4.88	4.77	4.83	4.82	4.84	4.88	4.82	4.84	4.90	4.83
RNP	4.31	4.34	4.15	4.39	4.38	4.46	4.34	4.38	4.43	4.22	4.42	4.44	4.36
MJD	4.57	4.43	4.61	4.62	4.62	4.55	4.64	4.56	4.64	4.50	4.64	4.65	4.59
SJC	4.41	3.85	4.29	4.48	4.46	4.38	4.42	4.41	4.28	4.32	4.38	4.54	4.35
NJC	4.30	4.30	4.14	4.32	4.34	4.33	4.43	4.39	4.33	4.25	4.29	4.35	4.31
MJV	3.76	3.50	3.57	3.25	3.43	3.39	3.38	3.47	3.16	3.59	3.14	3.34	3.42

4 Misc Feedback Analysis

This section contains additional analytical matrices and correlations.

4.1 Faculty-Subject Correlation Matrix

This matrix highlights the correlation between faculty members and the subjects they teach, showing the average score for each faculty-subject pair.

Table 10: Faculty-Subject Correlation Matrix

Subject Code	Subject Short	LKP	MJD	MJV	MKP	NJC	RCP	RNP	SJC	SPJ	Subject Avg
4300021	ES	-	-	-	-	-	-	-	-	4.97	4.97
4351102	ES	-	-	-	5.00	-	-	-	-	-	5.00
4351103	MRC	-	-	-	-	-	4.98	-	-	-	4.98
4351104	MWC	5.00	-	-	-	-	-	-	-	-	5.00
4351105	SP	-	-	-	-	-	-	5.00	-	-	5.00



4351108	OOPSPP	5.00	-	-	-	-	-	-	-	5.00
4351107	ECEP	-	5.00	-	-	-	-	-	-	5.00
4331101	ECN	-	-	-	-	-	4.52	-	-	4.52
4331102	EMI	-	-	-	-	-	-	-	3.78	3.78
4331103	IE	-	-	-	-	-	4.19	-	-	4.19
4331104	PEC	-	-	-	-	-	-	-	4.61	4.61
4331105	PC	-	-	-	4.19	-	-	-	-	4.19
1333201	CE	-	-	-	-	-	-	-	4.09	4.09
1333202	MMS	-	-	-	-	4.15	-	-	-	4.15
1333203	DSA	-	4.33	-	-	-	-	-	-	4.33
1333204	DMS	-	-	-	4.35	-	-	-	-	4.35
1333205	OSA	4.58	-	-	-	-	-	-	-	4.58

Academic Year 2023-24

5.2 Ms. M K Pedhadiya (MKP)

Overall Score: 4.34 / 5.0

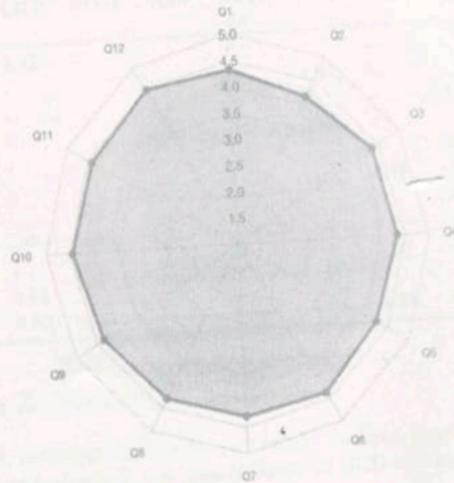


Figure 8: MKP Profile

5.2.1 Subjects Taught

Table 12: Subjects Taught - MKP

Subject	Code	Score
ES	4351102	5.00
PC	4331105	4.19
DMS	1333204	4.35
WDP	1313203	3.82



5.2.2 Strengths (Top 3 Parameters)

- Q12 (4.50): Student Progress: Feedback on student's progress
- Q10 (4.45): Motivation: Motivation and inspiration
- Q11 (4.41): Helpfulness: Willingness to offer help

5.2.3 Areas for Improvement (Lowest 3 Parameters)

- Q2 (4.15): Topics Beyond Syllabus: Has the Teacher covered relevant topics beyond?
- Q5 (4.24): Hands-on Training: Support for development of skill (Hands-on)
- Q7 (4.29): Communication Skills: Effectiveness in Communication skills

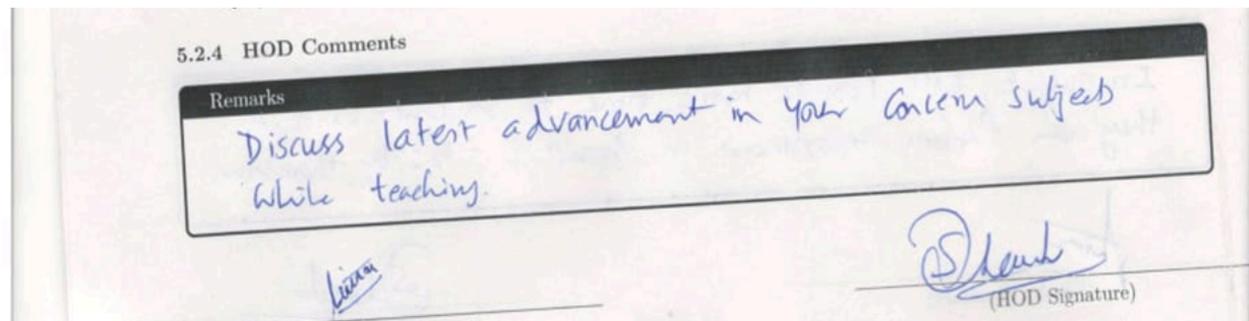


Figure 8.2.2 Sample formats of faculty evaluations.

8.3 Feedback on facilities (5)

A. Student feedback on facilities, analysis and corrective action taken (5)

- Feedback on various institutional facilities is collected online from passout students of institute.
- Based on the feedback received, the competent authority takes appropriate corrective actions to address and resolve issues related to the respective facilities.
- The prescribed format for student feedback on facilities is provided in **Annexure 8.3.1**.

STUDENT FEEDBACK OF INSTITUTE FACILITIES

Please rate the following institutional facilities.

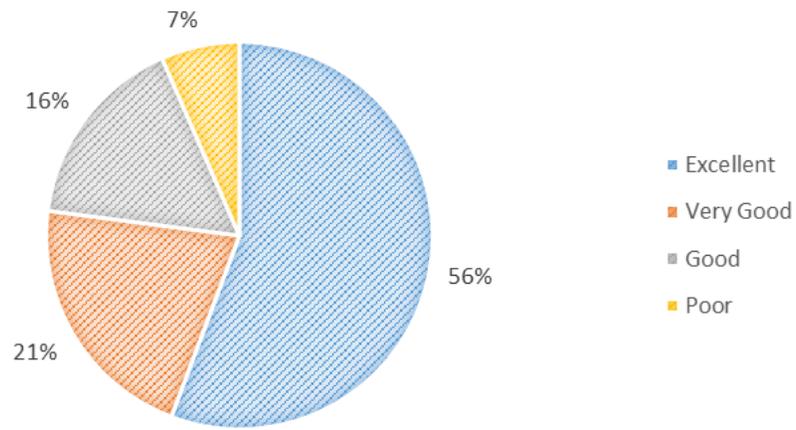
Sr. No.	Institutional facilities	Poor	Good	Very Good	Excellent
1.	Overall Class Room facility (Board/bench/fan/cleanliness)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	Overall Laboratory facility (Equipment/ ease of doing experiment)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	Seminar Room / Auditorium (Overall)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	Wi-Fi (Internet) Facility in Campus (NAMO Wi-fi)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	Library (Availability of books / Reading space/ Library staff cooperation)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	Canteen (Availability of breakfast/Tea/coffee)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- | | | | | | |
|-----|---|--------------------------|--------------------------|--------------------------|--------------------------|
| 7. | Co Curricular Activity (Industrial visit/ Seminar) (Overall in 3 years) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. | Sports/Cultural activity (Play Ground) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 9. | Drinking Water (Availability) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 10. | Toilet Block (Cleanliness) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 11. | Communication to students-Overall (Website/ Notice board/ Social Media) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 12. | Fee (College + GTU) Collection Process | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 13. | Boys/Girls Common Room (Availability/Usage) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 14. | Students counseling (Mentoring) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 15. | Transportation from College (To & Fro) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 16. | Security arrangement in campus | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 17. | Co operation/ Support system from Student Section staff | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 18. | Hostel facility (Overall) To be filled up, Only if you have stayed at institute hostel) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 19. | Suggestions for improvement (If Any) | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

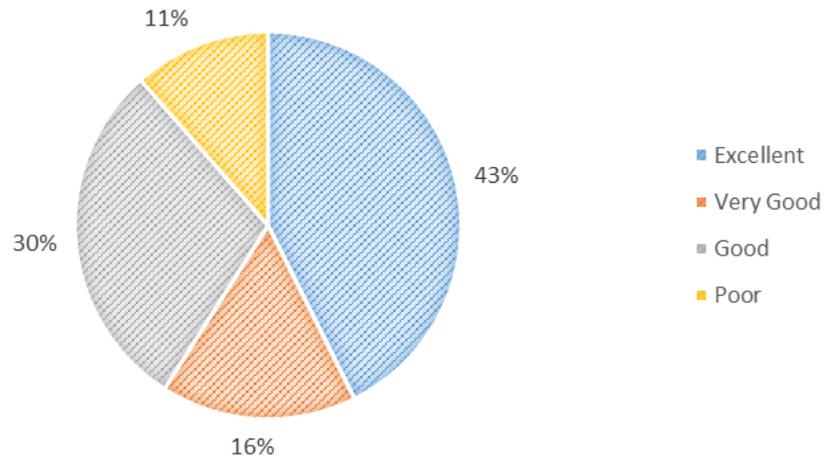
Suggestions for Improvement (if any): _____

Annexure 8.3.1 Format of student feedback on facilities form

4) WI-FI (INTERNET)



6) CANTEEN



9) DRINKING WATER (AVAILABILITY)

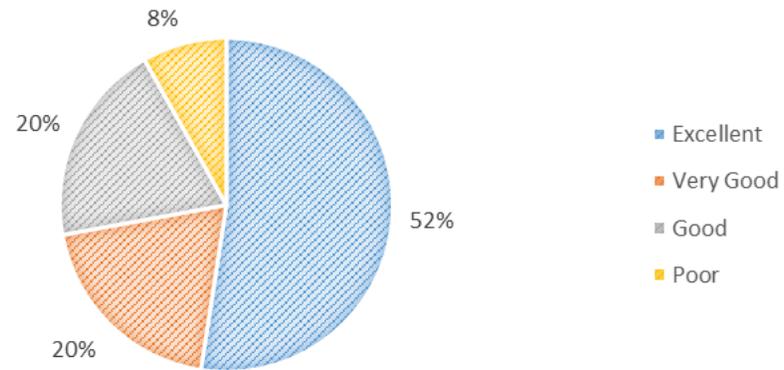


Figure 8.3.1 Analysis of Students feedback on various institutional facilities

Institutional facilities		Corrective Action
1	Wi-Fi (Internet) Facility in Campus (NAMO Wi-fi)	<ul style="list-style-type: none"> • There are two internet facility in the campus. • Namo Wi-Fi Facility has been provided by government through KCG and maintenance is done by BSNL as per government directions. • Institute have other internet facility CWAN which is maintain by institute. It wired connection has speed of 200 mbps and Wi-Fi speed of 30 to 40 mbps.
2	Canteen	<ul style="list-style-type: none"> • Agency is appointed for canteen as per Govt. norms.
3.	Drinking Water	<ul style="list-style-type: none"> • Water cooler & air conditioner maintenance correspondence is done. • RO Drinking Water Facility has been provided.
4	Cleanliness	<ul style="list-style-type: none"> • Annual cleanliness contract is given through GEM Portal. • Department wise cleanliness observed on regular basis.

5.	Hostel facilities	<ul style="list-style-type: none"> • Hostel block-A is declared “Not to be used” by R&B Department. • Students are guided for alternate facility in nearby area. • The estimates for new hostel building is submitted to DTE Gandhinagar.
6	Infrastructure Upgradation	<ul style="list-style-type: none"> • Proposal for upgradation of existing auditorium interior is submitted to R&B. • After sanctioning Proposal, upgradation work related to sitting and accoustic walls with modern PA system is ongoing.

Table 8.3.1 Corrective action taken based on feedback on facilities

8.4 Career Guidance, Training, Placement (20)

Placement activities are executed in two modes. One is through campus Interview at institute and second is mega drive for placement at District level well organised by KCG (Knowledge consortium of Gujarat) under direct guidance of Education department.

The institute has three available cells, who are contributing in enhancement of the effectiveness of training and placement.

- Training and Placement Cell
- Finishing School
- RUSA

(A) Availability

1. Training and Placement Cell

The Training and Placement Cell (TPC) at Government Polytechnic, Palanpur is clearly positioned as a cornerstone for student career readiness. Its dual focus—counseling for career development and arranging campus placen down its contributions:

Key Functions of the Training & Placement Cell

- Campus Recruitment Drives: Prestigious industries are invited to recruit diploma engineers directly from campus.
- Industrial Training & Internships: Students gain hands-on exposure to workplace practices, machinery, and professional culture.
- Skill-Building Activities: Mock interviews, aptitude tests, and personality development programs prepare students for real recruitment scenarios.
- Industry Interaction: Regular sessions with industry professionals help students understand current market trends and skill demands.
- Continuous Career Guidance: Mentors and placement officers counsel students on career pathways, higher studies, and employability skills.

Infrastructure of TPO Cell :

The TPO cell has one TPO office in LRUC building and for conducting personal interviews, one seminar room in Mechanical Building & an auditorium Hall to address large amount of students.

2.Finishing school (Soft skill component)

The Finishing School Program at Government Polytechnic, Palanpur is a remarkable initiative that complements the Training & Placement Cell by focusing on employability enhancement and life skills development. Here's a

Objectives of the Finishing School Program

- Skill Development Beyond Academics: Training in communication, soft skills, aptitude, technical competencies, teamwork, and professional ethics.
- Functional English Training: Special emphasis on improving English language proficiency for students who are academically strong but struggle with communication.
- Industry Readiness: Enhances confidence, workplace behavior, and problem-solving abilities to meet employer expectations.
- Bridging the Skill Gap: Addresses the mismatch between classroom learning and industry requirements, thereby improving placement opportunities.

Implementation & Reach

- Launched on 16th March 2017 by the Education Department, Government of Gujarat through the Knowledge Consortium of Gujarat (KCG).
- Initially piloted in ~40 colleges with 35 trainers; now expanded to 250+ colleges with 125 trainers.
- Government investment of approx. ₹15 crore has trained over 20,000 students, significantly improving employability ratios across the state.
- KCG assigned the agencies through GeM vide letter No.
 - KCG, Gujarat Letter No. KCG/Finishing School/2022-23/2202 Dt. 10/11/2022
 - KCG, Gujarat Letter No. KCG/Finishing School/2022-23/2179 Dt. 03/11/2022
 - KCG, Gujarat Letter No. KCG/Finishing School/2022-23/2307 Dt. 02/12/2022

In that connection, H Kumar's Education Institute, Ahmedabad is the assigned agency to Government Polytechnic, Palanpur.

3.Rashtriya Uchcharat Shiksha Abhiyan (RUSA)

The Rashtriya Uchcharat Shiksha Abhiyan (RUSA) project is a powerful driver of institutional strengthening, and Government Polytechnic, Palanpur's participation under Component 9 (Equity Initiative) is especially significant.

Objectives of RUSA

- Access, Equity, and Quality: Ensures planned development of higher education at the state level.
- Infrastructure Strengthening: Modernization of laboratories, classrooms, and learning facilities.
- Faculty Development: Training programs to enhance teaching quality and pedagogical innovation.
- Curriculum Enrichment: Adoption of updated syllabi and innovative teaching-learning practices.
- Digital & Inclusive Education: Promotes e-learning, research, and equitable opportunities for all students.

(B) Management

1.Training and Placement Cell

Placement team

The College is having Training and Placement Cell. Prof. N.V.Oza (Lecturer of Mechanical Engineering.) is Convener of the cell. Mr. I D Chaudhary and Mr. J B Patel functions as Co -Convener of TPO. TPO cell is assisted by departmental TPO members.

•Faculty Coordinators and Students from each department are also involved actively in the placement cell activities like arranging pre-placement orientation sessions, placement activity, database management, etc.

•Placement cell is very keen to increase placements every year and expand industry contacts. Efforts for the same are made by placement cell as well as at faculty level.

•Placement cell initiates placements by inviting recruiters through invitation email or letter to companies or by communicating over telephone.

•Faculties from departments also contribute via referring companies/person in their contacts. Placement coordinators do visit company in person and discuss as well as invite companies to hire students from the institute.

•Department placement coordinators along with respective HOD also make efforts to liaison with industries at their level in addition to the placement cell activities.

•The students are exposed to the process of placement by making aware them about mock interviews, group discussion, aptitude tests etc.

Sr. No.	Name	Designation	Department	Email Id

1	Shri N.V.Oza	Convener	Mechanical	gpptpo@gmail.com
2	Shri I.D.Chaudhary	Co-convenor	Electrical	
3	Shri J B Patel	Co-convenor	Mechanical	
4	Mr. M.J.Dabagar	Member	EC	
5	Shri A N Patel	Member	Civil	
6	Shri D P Judal	Member	Mechanical	
7	Shri Ankit Gajjar	Member	Electrical	

2.Finishing school (Soft skill component)**KCG FINISHING SCHOOL TEAM FOR MANAGEMENT**

NAME	DEPARTMENT	DESIGNATION
Dr C S Pandya	GENERAL	Coordinator
Shri Y T RANA	CIVIL	Member
Shri T D Modi	MECHANICAL	Member
Shri R M Prajapati	ELECTRICAL	Member
Shri M J Dabgar	EC	Member
Shri V A Chauhan	IC	Member
Shri Nirav Chauhan Sr Clerk	ACCOUNT	Member

3.Rashtriya Uchcharat Shiksha Abhiyan (RUSA)

NAME	DEPARTMENT	DESIGNATION
Shri C P Gelot	GENERAL	Coordinator

Shri S.N.Chauhan	MECHANICAL	Member
Shri A.R.PATEL	CIVIL	Member
Shri B.M.Patel	ELECTRICAL	Member
Shri R.C Parmar	EC	Member
Shri N.A.Modi	MECHANICA	Member

(C) Effectiveness**1.Training and Placement Cell**

Campus Interview or Placement Procedure:

- Preparation of Industry list.
- Approaching Industry as per prepared list by email and telephone.
- Getting job specific selection criteria from HR department of different companies.
- After receiving the mail about requirements from the Industry, It is to be share to all the departmental TPO Coordinators.
- Departmental TPO Coordinators will share the same information among the concern students.
- As per specified selection criteria, departmental TPO Coordinators will prepare the list of eligible students.
- If Off campus is there, the list of concern students will be provided to the concern industry by email.
- The details of Off campus placement will be shared to the concern students to be appear for the interview.
- In case of placement at our place, discussion with industry personnel about their arrival to conduct the interview process.
- After finalization of interview date, The information will be shared to concern departmental TPO Coordinators to be aware of their role and responsibility during the whole on campus selection process.
- The result will be display on TPO Notice board as well as through whatsapp group.
- Collection of Offer letter/salary slip or I-card of Students who join the concern Industry.
- Recruiter's feedback about the process and students.
- Collective data of Campus Interview held at Institute and at Placement fair.

Placement Data						
Department	Passing Year	No. of Student Pass-out	Current Status			
			No. of Student doing Job/placed	No. of Student pursue higher studies	No. of Student Entrepreneur	% Placement
Civil	2024-25	17	0	15	--	88%
	2023-24	16	0	16	--	100%
	2022-23	16	0	16	--	100%
	2021-22	29	1	26	--	93%

	2020-21	34	0	32	--	94%
Mechanical	2024-25	10	7	3	--	100%
	2023-24	9	4	5	--	100%
	2022-23	16	3	12	--	94%
	2021-22	40	3	22	--	63%
	2020-21	57	2	35	--	65%
Electrical	2024-25	23	8	14	--	96%
	2023-24	16	6	6	--	75%
	2022-23	13	3	3	--	46%
	2021-22	24	8	3	--	46%
	2020-21	47	13	10	--	49%
Electronics & Communication	2024-25	3	1	1	--	67%
	2023-24	3	2	1	--	100%
	2022-23	2	0	2	--	100%
	2021-22	4	1	2	--	75%
	2020-21	5	1	2	--	60%
ICT	2024-25	4	0	3	--	75%

Procedure for Placement Fair (District level) :

(A)Pre-Placement:

- The education department of Gujarat state decides the Month, Date and venue of the different placement fair to be held across the state.
- The education department activates the web portal for planning and real time monitoring.
- The education department frame the guidelines and communicate its to the participating Institutes.
- Formation of Placement fair team by Institute head and distribution of Office order.
- The TPO make the team of 1, 2 or 3 staff members for different route to be visited.
- The team members make the list of Industry to be visited in Banaskatha as well as nearby district.
- Registration of final year students on web portal to participate in Placement fair.
- Visit to the different industries and vacancy data collection by the team members.
- Emailing the above data to the central portal team.
- Verification of above student and Industries data uploaded by the central portal team.
- Correcting the data if any discrepancy found by communicating to the Nodal officer of Central portal team.

- Documentation of all the related information.
- Formation of different team by nodal officer and distribution of office order for placement fair execution at host institute.54
- Reporting and working at host institute as per direction of Nodal officer.

(B)During the Placement:

- Reporting at the host institute on specified dates.
- Working at host institute for smooth execution of Placement fair.

(C)Post-Placement:

- Review of Student placement.
- Record keeping of placement data.
- Uploading of offer letter on portal.
- Final account settlement.
- Surrender of grant of remaining amount.
- Feedback from industry

Effectiveness of Placement fair (District Level)

Year	Date	Venue	No. of Industry present	No. of student registered	No. of student present	No. of student appeared	No. of student Selected
2021	18-03-2021	GEC Palanpur	9	240	117	303	45
2022	23-03-2022	G P PALANPUR	8	119	116	226	82
2023	10-03-2023	G P PALANPUR	2	110(3)	54	109	22
2024	11-03-2024	DNP Arts College, Deesa	2	80(0)	38	18	6
2025	25-02-2025	G P PALANPUR	4	81	81	192	106

Sr. No	Name of Industry	Location
1	Academy For Skill Development, (For ArcelorMittal)	Hazira
2	L& T Construction,	Surat
3	SUSPA Pneumatics India Private Limited,	Ahmedabad
4	Suzuki Motor Gujarat Pvt Ltd	Hansalpur, Becharaji, Gujarat
5	Torrent Power,	Ahmedabad

6	Asahi Glass India Ltd,	Chanasma
7	TATA Passenger Vehicle	Sanand
8	Tanu Motors ,	Palanpur
9	L&T- Energy Carbonlite Solutions	Surat
10	TORRENT RENEWABLE	Surat
11	M/s Micron	Sanand
12	CMR Green Technologies Limited	Vadodara

Impact on Students

- Employability Enhancement: Students graduate with not just technical knowledge but also communication, confidence, and adaptability.
- Professional Competence: Exposure to industry practices ensures students are aligned with real-world requirements.
- Career Readiness: Structured guidance helps students transition smoothly from academics to employment or higher studies.

Why Palanpur Polytechnic Stands Out

- The institution has become a preferred destination for industries seeking talented diploma engineers.
- Its proactive placement cell ensures students receive best opportunities through collaborations with reputed companies.
- The dual approach—counseling + placement drives—creates a holistic support system for career development.

2.Finishing school (Soft skill component)

Procedure to execute training Programme

- A meeting twice in a year with members from each department is conducted for planning and fixing the duration of training.
- List of interested students are registered and on the basis of total number of registered students batches are decided/divided as per KCG guidelines..
- After getting approval of Principal, availability of empanelled trainers is asked to the assigned agency by KCG, Gujarat i.e. H Kumar's Education Institute, Ahmedabad and in adherence with the guidelines given by KCG, Gujarat, the training(s) is/are scheduled to benefit the maximum stude
- For smooth conduction and monitoring, work distribution orders are generated.
- Attendance record on daily basis and photographs of the training are kept and sent to the KCG by the assigned trainers as per existing guidelines.
- At the end of training feedback in oral and written form are taken from the students as per existing guidelines.
- Procedure of payment of honorarium to the the assigned agency by KCG, Gujarat i.e. H Kumar's Education Institute, Ahmedabad as per KCG guidelines.
- Final compiled report is submitted by the assigned agency by KCG, Gujarat i.e. H Kumar's Education Institute, Ahmedabad to the KCG as well as to the Institute on the Web Portal <https://hk.kegfinishingschool.com/>
- Certificates are being printed and sent by the agency as per guidelines and distributed to the students.
- Review meeting after each completed trainings is conducted at institute level..

Batch No.	Training Date		Component Number	Training Hours	No. of Students trained per batch	BRANCHWISE		Name of Trainer	REMARK
	From	To				Total Students			
1/2022-2023	06-FEB-2023	03-MAR-2023	ALL SETs	80	48	CIVIL	41	Mr ANAND VYAS & Ms URJA JOSHI	SET-A, B, C, D (H KUMARS EDUCATION INSTITUTE, AHMEDABAD)
						EC	06		
						ELECTRICAL	01		
2/2022-2023	06-FEB-2023	03-MAR-2023	ALL SETs	80	47	CIVIL	01	Mr ANAND VYAS & Ms URJA JOSHI	SET-A, B, C, D (H KUMARS EDUCATION INSTITUTE, AHMEDABAD)
						ELECTRICAL	14		
						MECHANICAL	32		
3/2023-2024	19-FEB-2024	16-MAR-2024	ALL SETs	80	34	CIVIL	29	Mr Divyang Gor & Ms Kuntal Gor	SET-A, B, C, D (H KUMARS EDUCATION INSTITUTE, AHMEDABAD)
						EC	05		
4/2023-2024	19-FEB-2024	16-MAR-2024	ALL SETs	80	43	MECHANICAL	23	Mr Divyang Gor & Ms Kuntal Gor	SET-A, B, C, D (H KUMARS EDUCATION INSTITUTE, AHMEDABAD)
						ELECTRICAL	20		
5/2025-2026	15-SEPT-2025	26-SEPT-2025	ALL SETs	40	47	MECHANICAL	30	Mr Prakash Detroja	SET-A, B, C, D (Life Skills) (H KUMARS EDUCATION INSTITUTE, AHMEDABAD)
						IT	17		
6/2025-2026	15-SEPT-2025	26-SEPT-2025	ALL SETs	40	48	CIVIL	41	Mr Divyang Gor	SET-A, B, C, D (Spoken English) (H KUMARS EDUCATION INSTITUTE, AHMEDABAD)
						EC	7		

7/2025-2026	15-SEPT-2025	26-SEPT-2025	ALL SETs	40	49	ELECTRICAL	29	Mr Nikhil Oza	SET-A, B, C, D (Life Skills)
						ICT	20		(H KUMARS EDUCATION INSTITUTE, AHMEDABAD)

Finishing School (Technical):

At state level there was a training to faculty of Civil, Mechanical, Electrical and IC branch which was imparted by field experts covering latest trends in industry of 2 to 5 days. The trained faculty then had delivered training to final year students as per following data.

SR. NO.	DEPARTMENT	DURATION	AREA OF TRAINING	NO. OF PARTICIPANT STUDENTS
1	ELECTRICAL	06 Days	Control Panel Wiring	14
2	MECHANICAL	10 Days	3D Solid Modelling & 3D Printing (Fs Mech-1)	10
	MECHANICAL	06 Days	CNC Programming & Machining (Fs Mech-3)	19
3	CIVIL	11 Days	Total Station	19
4	IC	05 Days	Maintenance, Calibration And Testing Of Industrial Instruments (Pressure And Flow)	03

Summary of grant utilization KCG

Sr. No	FINANCAIL YEAR	GRANT RECEIVED	TOTAL (LAST FY CLOSING+GRANT RECEIVED IN CURRENT FY)	USED GRANT	CLOSING BALANCE
1	2022-23	255500	666920	511000	155920
2	2023-24	511000	666920	511000	155920
3	2024-25	511000	666920	0	666920

4	2025-26	0	666920	383250	283670
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Role of Government Polytechnic, Palanpur

- Recognized as a Finishing School Centre, which is a privilege and a mark of trust in the institute's quality.
- The institute contributes by imparting training that enhances employability skills and life skills, preparing students for success not only in jobs but in all walks of life.
- This aligns perfectly with the institute's mentoring and placement ecosystem, creating a holistic student development model.

Impact on Students

- Confidence Boost: Students become more articulate and self-assured.
- Professional Competence: Training in ethics, teamwork, and workplace behavior makes them industry-ready.
- Career Success: Improved employability skills directly translate into better placement opportunities.

3.Rashtriya Uchchatar Shiksha Abhiyan (RUSA)

Major initiatives of RUSA:

1. Equity opportunity cell

- We established Equity Opportunity Cell (EOC) for the development of SC, ST and OBC students including gender equality.

2.Remedial classes

- Workshops are organized to train students thoroughly for taking English Proficiency exams under SCOPE.

3.Gender sensitization campaign

- Under Gender Sensitization Campaign, the college organized "Women Empowerment Week" for the awareness, safety, encouragement and empowerment of women.

4.Innovative scheme (mentoring of girl child)

- Psychometric Test for girls was conducted by a famous city based Psychiatrist who is well known for his research publications.

5.Gender counseling

- Workshop on Business Related Communication Skills was conducted for SC/ST and OBC girls.

Sr. No	EventDate	Topic	ExpertName
1	05-03-2022	LAW RELATED TO WOMEN SAFETY	MS.YASHSHVI MEHTA PANDYA
2	05-03-2022	DISADVANTAGES OF MOBILE AND INTERNET	MS.GEETA ACHARYA
3	05-03-2022	SELF EMPLOYMENT ENHANCEMENT	TITHI VAKIL
4	23-11-2022 TO	REMEDIAL CLASS	C.PGELOT C.S.PANDYA

	29-11-2022		B.B.MOR M.F.TANK R.P.CHAVDA R.H.CHAVDA V.M.PRAJAPATI N.J.CHAUHAN N.M.PATEL
5	23-11-2022	COMPETATIVE EXAM CLASS	PATEL NARESHKUMAR KARSANBHAI
6	24-11-2022	GROUP COUSELING	DR.NILAM PATEL
7	24-11-2022	EXPERT LECTURE ON BRUN HATYA	DR.NILAM PATEL
8	13-03-2023	SELF EMPLOYMENT AND ENHANCEMENT FOR GIRLS STUDENTS	MS.JALPABEN R VAIDYA
9	13-03-2023	MOTIVATIONAL TALK FOR GIRLS STUDENTS	MR.DARSHAN SOLANKI
10	15-03-2023	WOMEN EMPOWERMENT	MS.M.K.PEDHADIYA
11	17-03-2023	ICE BREAKING ACTIVITY FOR GIRLS STUDENTS	MS.MANISHABEN JOSHI
12	17-03-2023	TO ENHANCE CREATIVITY SKILLS FOR GIRLS STUDENTS	MS.RUKSHANABEN PARMAR
13	20-03-2023 TO 21-03-2023	SPOKEN ENGLISH	DR.C.S.PANDYA
14	07-08-2023 TO 09-08-2023	ENTREPRENEURSHIP DEVELOPMENT	MR.VIRENDRASINH CHAVDA
15	09-08-2023 TO	INNOVATION CREATIVITY	HITTEN PATEL

	11-8-2023		
16	17-8-2023 TO 19-8-2023	SELF EMPLOYMENT AND ENHANCEMENT	MR GAURAV PATEL
17	21-08-2023 TO 25-08-2023	KARATE WORKSHOP	Mr.NARSHBHAI PRAJAPATI
18	11-09-2024 TO 14-09-2024	YOGA WORKSHOP	MR.AASHISH B MODI
19	14-10-2024	EXPERT LECTURE ON COMPITATIVE EXAMINATION	DRASHTI S GAMI
20	10-10-2024	REMEDIAL CLASS FOR MATHEMATICS	DRASHTI S GAMI
21	11-10-2024	EXPERT LECTURE ON WOMEN EMPOWERMENT	DRASHTI S GAMI
22	11-10-2024	GROUP COUSELLING FOR GIRLS STUDENTS	DRASHTI S GAMI
23	11-10-2024	CARRIER GUIDANCE FOR STUDENTS	DRASHTI S GAMI

[Table 8.4.7 Events conducted under RUSA]

GRANT UTILIZATION YEAR WISE

SR NO	FINANCIAL YEAR	GRANT BALANCE	GRANT RECEIVED
1	2022-23	50616.79	22930.00
2	2023-24	27686.79	26500.00
3	2024-25	1186.79	1186.00

Impact on Government Polytechnic, Palanpur

- Receives RUSA grants under Component 9 (Equity Initiative), which focuses on inclusivity and bridging gaps for disadvantaged groups.
- Enables modernized labs and resources, improving hands-on learning for diploma engineering students.
- Supports faculty development workshops, ensuring teachers stay aligned with industry and academic advancements.
- Encourages innovative teaching methods like blended learning, project-based education, and digital tools.
- Enhances student performance and institutional effectiveness through systematic reforms and financial support.

Benefits for Students

- Holistic Development: Beyond technical skills, students gain exposure to research, digital learning, and inclusive practices.
- Improved Employability: Better labs, updated curriculum, and skilled faculty directly enhance career readiness.
- Equity & Inclusion: Focus on disadvantaged students ensures equal access to quality education.

8.5 Entrepreneurship Cell/Technology Business Incubator (5)

A.Availability

The Student Startup and Innovation Policy (SSIP) of the Government of Gujarat encourages innovation, entrepreneurship, and startup culture among students. Under this policy, students receive financial assistance, mentoring, incubation support, and exposure to entrepreneurial ecosystems. SSIP mot self-employment, thereby reducing dependency on traditional job opportunities and fostering an innovation-driven mindset among diploma engineering students.

Government of Gujarat has developed a policy for providing assistance to Startups/ Innovation. Under this scheme, any individual/ group of individuals having innovative idea/ Concept will be eligible and/ or Universities/ education institutions, Incubation Centre/ PSUs/ R&D Institutions/ Private and an economys technology sectors is an important indicator of technological performance for several reasons.

The Student Startup& Innovation Policy of Government of Gujarat aims to create an integrated, state-wide, university-based innovation ecosystem to support innovations and ideas of young students and provide a conducive environment for optimum harnessing of their creative pursuit.

Government Polytechnic Palanpur has started its SSIP cell in 2017. This centre is providing incubation facility for the students as it's equipped with basic modern instruments and computers with internet connectivity.

Importance of SSIP for Diploma Engineering Colleges

- Encourages Innovation: Provides a structured platform for students to convert classroom knowledge into practical solutions.
- Funding Support: Students can receive grants (up to ₹2.5 lakh per project) for prototype development, reducing financial barriers.
- Skill Development: Promotes design thinking, problem-solving, and entrepreneurship skills beyond the syllabus.
- Industry Linkages: Builds bridges between academia, industry, and government, improving employability and startup culture.
- Recognition: Successful projects gain visibility at state and national levels, motivating students and institutions.

Scope of SSIP in Diploma Colleges

- Prototype Development: Students can apply for grants to build working models of innovative ideas.
- Incubation Ecosystem: Colleges are encouraged to set up SSIP cells/incubation centres to mentor and guide students.
- Interdisciplinary Projects: Open to all branches of engineering and polytechnic programs, encouraging collaboration.
- IPR Support: Assistance for patent filing and intellectual property protection.
- Events & Hackathons: Colleges can organize innovation challenges, bootcamps, and workshops under SSIP.
- Scaling Ideas: Promising student projects can be scaled into startups with further support from state innovation hubs.

B. Management :

Following is a tem working hard to make SSIP activities to its effective utilization.

Sr No	Faculty	Deptt.	Designation in SSIP Cell
1	Dr L K Patel	EC	SSIP Coordinator
2	Mr B M Patel	EE	Member
3	Mr M J Dabgar	EC	Member
4	Mr F M Mukhi	Civil	Member
5	Mr V H Suthar	Mech	Member
6	Mr V A Chauhan	IC	Member

C.Effectiveness :

The different activates organised by SSIP cell at GP, Palanpur are as under.

Summary of SSIP Grant Sanctioned, Received, Utilized

Financial Year	Sanction(Rs.)	Received(Rs.)	Utilized(Rs.)
2022-23	900000	450000	137303.5
2023-24	1080000	540000	287013
2024 -25	1160000	0	49005
2025 – 26	1360000	0	333664.5
Total	4500000	990000	806986

POC Utilized

Year	No. Approved POC	Fund Utilized
2022-23	15	79793
2023-24	1	124889

2024 -25	12	32295
2025 – till date	4	243160
Total	32	480137

IPR Utilization

Year	No. Approved IPR	Fund Utilized
2022-23	1	12000
2023-24	0	0
2024 -25	0	0
2025 – till date	1	45000
Total	2	57000

Event Utilization

Year	No. Event organized	Fund Utilized
2022-23	18	37412
2023-24	09	13064
2024 -25	10	15710
2025 – till date	04	44416
Total	41	110602

Patent filed by students under SSIP:

Sr No	Title	IPR No	Leader Name	Financial Year	Date of filing	Granted
1	Switchboard	202021026651	Mr. Hiten Patel	2020-21	24/06/2020	22/12/2023
2	Smart Rotary Switchboard	202021044176	Mr. Hiten Patel	2020-21	10/10/2020	10/05/2022
3	Water TAP Alarm	202121004092	Nai Dhaval	2020-21	29-01-2021	25-10-2021

4	Cup and Glass Cleaning Device	202121049081	Nai Dhaval	2021-22	27/10/2021	20/02/2024
5	Multimodular Digital Stethoscope with Integrated Diagnostics and AI Assistance	202521118577	Dr Vipul Tank	2025-26	28-11-2025	Under Examination
6	Modular Stethoscope with Interchangeable Chest Piece	202521131153	Dr Vipul Tank	2025-26	24-12-2025	Under Examination

Start-up Support :

Sr No	Startup	Full name	Contact number	Email address	Domain	Startup Description (MCats)
1	Prahantam Pvt. Ltd	Mr Dhaval Nai	9638898921	naidhaval724@gmail.com	Manufacturing	Prahantam Pvt. Ltd. is an Ahmedabad-based manufacturer of automated tea cup washing machines, designed to improve hygiene and efficiency for tea vendors and hospitality businesses.
2	Zephyr Digisteth	Dr. Vipul Tank	8154976472	vipulktank@gmail.com	Healthcare & Nutrition	They are developing a compact, all-in-one medical device that assists both doctors and patients. It integrates auscultation, ECG, temperature, and blood sugar monitoring, with modular attachments like an otoscope, ophthalmoscope, and BP monitor. Designed for clinics and homes, it supports daily checkups, tele-consultations, and remote care. With AI-powered analysis, data storage, and live streaming, it enables faster, more accurate diagnoses and ensures no subtle signs are overlooked.
3	BeeRobokids Innovations Pvt Ltd	Rishabh kunjeshbhai prajapati	9687136019	prajapatirshb@gmail.com	STEM Education	BeeRobokids Innovations Pvt Ltd is a startup dedicated to empowering kids and young innovators through hands-on learning in Robotics, IoT, and emerging technologies. The platform nurtures creativity, critical thinking, and problem-solving skills, inspiring the next generation of inventors and tech leaders. By blending education with innovation, BeeRobokids aims to make future technologies accessible and engaging for young minds, fostering curiosity and lifelong learning.
4	Innovate 3D	Deepak Chaudhary	9638718578	dip9627@gmail.com	Tech	Innovate 3D is a startup dedicated to advancing 3D design, printing, and rapid prototyping. It develops cost-effective 3D printers, STEM education kits, and offers prototyping support for startups and industries. By combining innovation, research, and practical learning, Innovate

						3D makes advanced manufacturing accessible to students, creators, and businesses. Its mission is to bridge imagination and reality—empowering people to turn ideas into tangible creations and shape future possibilities.
5	Sky Print Startup	Rajput yuvraj	8160664564	rajputyuvraj224@gmail.com	Tech	Sky Print is a startup focused on creating customized drone solutions for diverse industries and applications. The company designs high-performance FPV, surveillance, and custom-built drones, along with special models like flower-dropping drones for events. It also offers drone services, training, and ready-to-fly models. With a mission to redefine aerial technology, Sky Print aims to deliver innovative, reliable, and purpose-driven drones for commercial, creative, and industrial use.
6	Sky craft	Bharat Mali	7862996203	malibharatkumar9070@gmail.com	STEM Education	Develop low-cost robotics and IoT kits that make future technologies accessible. Create activity-based learning modules that inspire curiosity and encourage experiential learning. Support teachers and schools in rural areas with training programs and ready-to-use learning resources. Foster a culture of innovation, teamwork, and entrepreneurship among young learners.

Events organized: Year 2022-2023

	Date	Event Name	Event Type	No. Participation	Venue
1	20/09/2022	Group Discussion event for first and final year students	Group Discussion	100	seminar hall Government polytechnic palanpur
2	21/09/2022	Group Discussion for STD 1 to 8	Group Discussion	675	Branch school palanpur
3	23/09/2022	Group Discussion for STD9 to 10	Group Discussion	600	Shri Vividhlaxmi VidhyamandirPalanpur
4	24/09/2022	Group Discussion for STD 9 to 11	Group Discussion	275	Shri M M Mehta english medium school Palanpur
5	26/09/2022	Group Discussion for STD 6 to 8	Group Discussion	550	Shri I J Mehta Vidhyamandir school Palanpur
6	27/09/2022	Group Discussion for STD 6 to 11	Group Discussion	320	Vimla Vidhyalay Gadh
7	30/09/2022	Group Discussion for STD 3 to 5	Group Discussion	575	Shri Rajlaxmi Primary School Palanpur

8	1/10/2022	Group Discussion for STD 5 to 8	Group Discussion	150	Ganeshpura Primary School Palanpur
9	4/10/2022	Group Discussion	Group Discussion	100	Iqra english medium
10	6/10/2022	Group Discussion for STD 6 to 8	Group Discussion	407	Shri M M Mehta english medium school Palanpur
11	10/10/2022	New Palanpur for New India	Appreciation Program	150	seminar hall Government polytechnic palanpur
12	10/1/2023	Sensetization programme	Sensetization programme	483	Iqra english medium
13	10/01/2023 to 11/01/2023	boot camp	work shop	35	Iqra english medium
14	17/01/2023	Sensetization programme	Sensetization programme	200	Chaniyanaprimeri school
15	17/01/2023 to 18/01/2023	boot camp	work shop	32	Chaniyanaprimeri school
16	10/02/2023	motivational speech for Entrepreneurship	seminar	90	seminar hall Government polytechnic palanpur
17	11/03/2023	Sensetization programme	Sensetization programme	681	Adarsh School palanpur
18	11/03/2023 to 12/03/2023	boot camp	work shop	70	Adarsh School palanpur

Year 2023-24

Sr no	Date	Event Name	Event Type	No. Participation	Venue
1	19/07/2023	Sensitization program	Sensitization program	210	Seminar Hall
2	10/08/2023	Students innovation fest 2023	Expert Talk	190	Seminar Hall
3	07-08-09/08/2023	EXPERT LECTURE ON ENTREPRENEURSHIP DEVELOPMENT	Expert lecture series by RUSHA and SSIP Cell	30	Seminar Hall
4	09-10-11/08/2023	EXPERT LECTURE ON INNOVATION & CREATIVITY	Expert lecture series by RUSHA and SSIP Cell	30	Seminar Hall

5	17-18-19/08/2023	EXPERT LECTURE ON SELF EMPLOYMENT & ENHANCEMENT	Expert lecture series by RUSHA and SSIP Cell	30	Seminar Hall
6	21-08-2023	Word entrepreneur Day(Enterpreneurship as a Career)	seminar	180	Seminar Hall
7	14-09-2023	Innovation and Startup Sensitization work shop	Seminar	250	Seminar Hall
8	05-12-2023 to 10-12-23	Startup Conclave -2023,Gandhinagar STALL	Event	3	Gandhinagar
9	8/12/2023	Startup Conclave -2023,Gandhinagar institute students visit	Event	52	Gandhinagar

Year 2024-25

Sr no	Date	Event Name	Event Type	No. Participation	Venue
1	16/04/2024	New Palanpur for New India	Event	140	G P Palanpur
2	29/11/2024	Sensitization program	Seminar	1398	Swastik Primary school palanpur
3	29/11/2024	Sensitization program	Seminar	1000	Adarsh Primary school palanpur
4	29/11/2024	Sensitization program	Seminar	500	Adarsh school palanpur (9 to12 std)
5	29/11/2024	Sensitization program	Seminar	700	silverbell school palanpur
6	29/11/2024	Sensitization program	Seminar	862	Hetiba primary school palanpur
7	29/11/2024	Sensitization program	Seminar	320	Aekta Primarieschoolpalanpur
8	30/11/2024	Sensitization program	Seminar	1500	Swastik school palanpur (9 to 12)
9	21/01/2025	One day workshop	One day workshop	20	G P palanpur
10	25/03/2025	Opening ceremony of Innovative Idea & One day seminar	One day seminar	120	G P palanpur

Year 2025- till date

Sr no	Date	Event Name	Event Type	No. Participation	Venue
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1	09/04/2025	New Palanpur for New India 3.0	Real-life problems tackled with tech-powered solutions.	250	G P Palanpur
2	06/09/2025	Sensitization program	Sensitization program	145	Shri Ram VidhyalayPalanpur
3	10/09/2025	AI tools workshop	One day workshop	72	G P Palanpur
4	18/09/2025	Sensitization program	Sensitization program	62	Gela Primary School

Outcomes of SSIP Activities

Financial Impact of SSIP Implementation (2022–2026)

- A total of ₹9.90 lakh SSIP grant was sanctioned, out of which ₹8.07 lakh has been effectively utilized for innovation, POC development, IPR filing, and events.
- 32 Proof of Concept (POC) projects were approved with ₹4.80 lakh utilized, promoting hands-on innovation and product development.
- 6 IPR applications were supported, strengthening the culture of patent awareness.
- 41 innovation and entrepreneurship events were organized with ₹1.10 lakh utilization, enhancing student exposure and participation.

The SSIP initiative has created a strong innovation ecosystem by supporting student projects, promoting entrepreneurship, strengthening IPR awareness, and organizing impactful events. The structured utilization of funds has ensured sustainable skill development, practical exposure, and real-

9 GOVERNANCE, INSTITUTIONAL SUPPORT AND FINANCIAL RESOURCES (75)

9.1 Organization, Governance and Transparency (25)

9.1.1 State the Vission and Mission of the Institute (5)

Vision :

To produce competent diploma engineers as per need of industries and entrepreneurs with ethical values.

Mission :

Government Polytechnic, Palanpur strives to impart, 1. To impart Industry oriented technical education. 2. Excellent teaching and learning environment. 3. Promote entrepreneurship activities. 4. Continual growth in every sp

9.1.2 Governing body, administrative setup, functions of various bodies, define rules procedures, recruitment and promotional policies (5)

A. Governing Body and Administrative Setup:

The governance mechanism in government systems are designed to be fair, transparent and effective. Government Polytechnic, Palanpur is administered by the Commissionerate of Technical Education which reports to the Ed whole Education Department is appended herewith at Figure 9.1

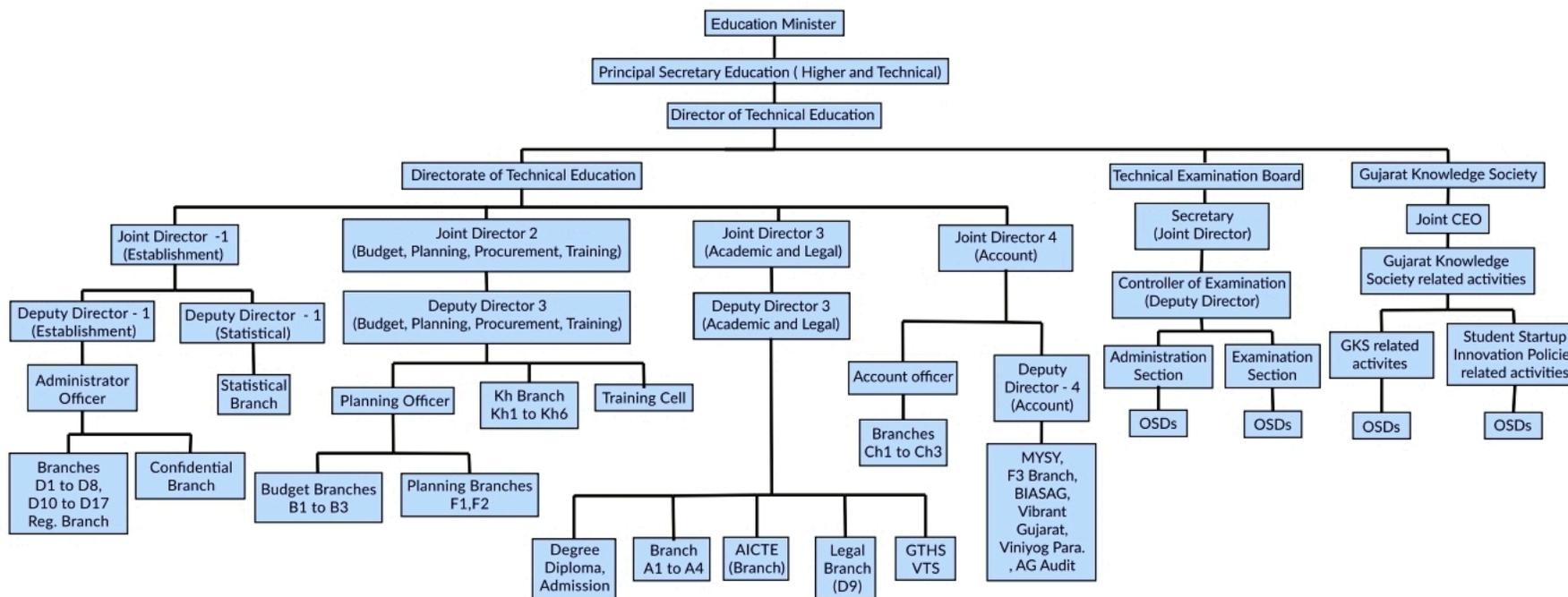


Figure.9.1 Governing Body - Organizational Chart - Education Department

Furthermore, Government Polytechnic, Palanpur follows the standard practices defined in TEIM (Technical Education Institute Manual), which is available on Commissionerate of Technical Education, Gujarat website on the [polytechnics](#)

Functions and responsibilities of Various Bodies:

- The administration of the overall Education Department, Gujarat state is decentralized.
- The key officers of the education department are Principal Secretary (Higher and Technical Education), Director-Technical Education, Joint Directors and Principals of the various Government Polytechnics.
- Principal Secretary is the highest authority for overall higher and technical education system in the state.
- Under Principal Secretary, Directorate of Technical education works to leverage various governance supports to technical institutions.
- At Directorate office, Joint Directors are appointed for responsibilities of Establishment, Budget-Planning-Procurement, Academic, Legal and Admission related matters.
- At Institute level, Principal is the highest authority for various academic and administrative matters and reports to Director of Technical Education.
- Government Polytechnic, Palanpur is affiliated with Gujarat Technological University, Ahmedabad.
- For the curriculum and evaluation methodology, institute has adopted the rules and regulations laid down by the University.
- Being important stakeholder of the University system, many faculties of the Institute contributes on various boards such as Academic Council, Board of Studies, Academic Inspection etc.

Service rules, procedures, recruitment and promotional policies:

Service rules and procedures:

- The Service rules are well defined and amended time to time by the General Administration Department (GAD), Government of Gujarat.
- Service rules including pay, pension and leaves are published in Gujarat Civil Services Rules (GCSR).
- For the pay, Government follows AICTE guidelines.
- The rules are uploaded on Finance Department website on following link : GCSR Rules: <https://financedepartment.gujarat.gov.in/rules.html>

Recruitment and Promotion policies:

- The Recruitment Rules (RR) and promotion policy concerned with academic faculties and supporting staff are framed by the Government from time to time.
- *Gujarat Gaun Seva Pasandgi Mandal (GSSSB)* is statutory body to carry out the direct recruitment for the various non-teaching positions.
- The Gujarat Public Service Commission (GPSC) is statutory body to carry out the direct recruitment for the various academic faculty positions (Principal, Head of the Department, Lecturer) in case of direct recruitment.
- All promotions are carried out as per rules through Departmental Promotion Committee (DPC) with final approval from GPSC.
- The overall mode of recruitment and promotion is as below:

100% of the sanctioned positions at the level of Lecturer carried out through direct recruitment by the GPSC based upon proposal received from education department, Gujarat state, as per AICTE norms.

For remaining cadre (Principal, Head of the Department) 50% of vacant positions are filled through direct recruitment by GPSC, while remaining 50% positions are filled through promotion by education department thr

The detailed information is available at: <https://dte.gujarat.gov.in/recruitment-rules>

B. Minutes of Meetings and Action Taken Reports:

Institute has policy to arrange meetings of head of the different committees and their members for smooth functioning of the institute. Decisions taken in the meetings are recorded in Minutes of Meetings (MoM).

C. Publication of Service Rules, Policies and Procedures:

As a Government institution, we are following Government of Gujarat Policies:

- Service Rules: Government Civil Services Rules (GCSR-2002)
<https://financedepartment.gujarat.gov.in/rules.html>
- Purchase Policy: Gujarat State Purchase Policy-2016
http://www.imd-gujarat.gov.in/Document/2016-6-7_379.pdf
- Admission Policy: Gujarat Act - 2, 2008, Dated: 07/03/2008 and 28/05/2008
<http://acpdc.co.in/advertisement/act.html>
- Academic Policy: As per Gujarat Technological University (GTU), Ahmedabad
<http://www.gtu.ac.in>
- Student's Startup and Innovation Policy: SSIP Policy published by Government of Gujarat as on 11/01/2017
<http://www.startupgujarat.in/writereaddata/Images/pdf/Student-innov-Policy-HT-Edu.pdf>

D. Awareness of Service Rules, Policies and Procedures among the employees/students:

Awareness of Service Rules, Policies and Procedures among the employees/students created through training and awareness program as shown in following details:

Employees:

- Teaching faculty training: Induction training, subjective training, interdisciplinary training, etc. are arranged by CTE training cell through FSD portal.
- Non-teaching faculty training: Administrative trainings are arranged by SPIPA.
- Institute circular and notification.
- Websites:

Government Polytechnic Palanpur (<https://gppalanpur.ac.in>)

Commissionerate of Technical Education (<https://dte.gujarat.gov.in>)

Gujarat Technological University (<https://www.gtu.ac.in>)

General Administration Department (<https://gad.gujarat.gov.in>)

Finance Department (<https://financedepartment.gujarat.gov.in>)

Students:

- o Through Induction and Awareness programs arranged at Institute.
- o Institute circular and notice board.
- o Websites:

Government Polytechnic Palanpur (<https://gppalanpur.ac.in>)

Gujarat Technological University (<https://www.gtu.ac.in>)

9.1.3 Decentralization in working and grievance redressal mechanism (5)

A. Decentralization in working:

The administration of the Institute is decentralized as shown in Figure 9.2.

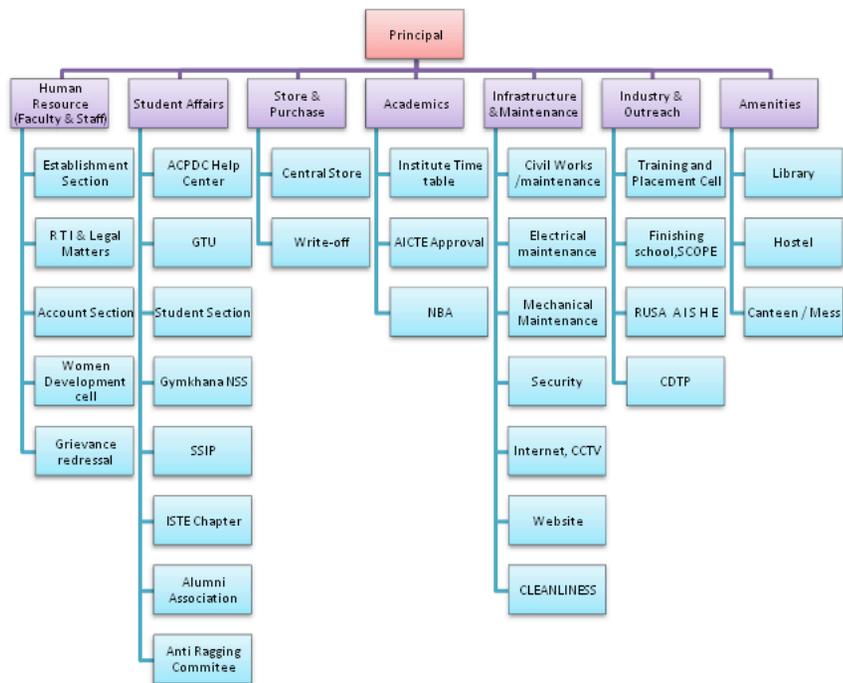


Figure 9.2 Organizational Chart – Institution level

Decentralization of work:

- Principal of the Institute is responsible for the overall academic and administrative aspects of the Institute.
- Institute also has cells for managing various institute level development activities like Establishment (for faculty and staff service matters), Students matters, Academics, Store and Purchase, Infrastructure & Maintenance
- To look after the various academic activities of each programme, Institute has nominated heads of the departments (HODs).
- All faculty and staff members of the concerned programme report to the respective Head of department for their academic activities, academic calendar and managing department level administrative portfolios, grievance
- All HODs report to the head of the Institute.
- To provide detailed guidelines for various activities of a teacher, a Technical Education Institute Manual (TIEM) has been prepared by Commissionerate of Technical Education, Government of Gujarat.
- As per the guidelines of the TEIM, various committees have been formed for the smooth working of the institutional matters as shown in the Figure 9.3 given below vide Office Order No.: GPP/EST/Work distribution/20

		Government Polytechnic, Palanpur સરકારી પોલીટેકનીક, પાલનપુર			
માલણ દરવાજા બહાર, પાલનપુર-૩૮૫૦૦૧		Outside Malan Gate, Palanpur-385001			
Phone : (02742) 245219 / 262115		E-mail : gp-palanpur-dte@gujarat.gov.in			
No. GPP/EST/Work Distribution/662			Date : 04/07/2024		
Office Order (Work Distribution)					
Following administrative/managerial duties are assigned to corresponding officers/faculties in addition to their regular job specific responsibilities for smooth functioning and overall development of the institute till further order. All are inform to maintain records with proofs and present as and when required.					
No	Activity	Convener	Co-Convener	Members	
1	Head, Human Resource (Faculty & Staff) :				
1	Establishment Section	R N Patel-EC	V H Suthar-Mech	C P Gelot-General ✓	
				B M Patel-Elect	
				R L Chaudhary-Mech	
				A R Patel - Civil	
2	E-Mail Handling e-Sarkar	S P Joshiyara-EC	V M Prajapati-Mech		
3	SATHI Karmyogi Portal	R N Patel-EC	V M Prajapati-Mech	C P Gelot-General ✓	
				V H Suthar-Mech	
				B M Patel-Elect	
				A N Patel-Civil	
				R C Parmar-EC	
				J V Kureshi-IC	
4	CAS	B B Mor-General ✓	A R Patel-Elect R N Patel-EC	K A Patel-IC	
				J B Patel-Mech	
				V P Patel-Civil	
5	IQAC	Principal	S J Chauhan-EC	All HoDs	
				A D Shah-Elect	
				D D Prajapati-Mech	
				R J Patel-Applied	
				M F Tank-General ✓	
				D N Sheth-Civil	
6	TNA / FDP Portal / Foreign NOC	A M Qureshi -Elect	N N Chaudhary -Mech		

7	RTI & Legal Matters	✓ C S Pandya-Gen	Y D Chaudhary-Mech	
8	Audit Para	R J Patel-Applied	A R Patel-Elect	Coordinators of Estab. Account & Store
9	Account Section	✓ B B Mor-Gen	T D Modi-Mech Y D Chaudhary-Mech	J V Kureshi-IC A N Patel-Civil R P Chavda- Elect S P Mahant-Mech
10	Women Development cell	M M Shah-IC	V G Patel-Mech	M K Pedhadia-EC P D Sheth-Civil S N Chauhan-Mech F M Patel - Civil
11	Internal Complaint Committee	P G Chauhan-Mech	P D Sheth-Civil	M K Pedhadia-EC
12	Grievance redressal	A D Shah - Elect	P G Chauhan-Mech	M M Shah-IC M F Tank-General ✓
13	CCC Fee Reversal	✓ M F Tank-Gen	R M Prajapati-Elect	N H Oza-Mech
14	SC-ST Cell	P G Chauhan-Mech	C M Amin-Mech	Y T Rana - Civil
15	Physical Disable Cell	N A Modi-Mech	I P Kharodiya (S.K.)	
16	RTO learning License	B N Prajapati-Mech	S P Mahant-Mech	Rotational order

2 Head, Student Affairs :

1	ACPD Help Center Awareness program	✓ M F Tank-Gen	F A Mukhi-Civil V A Chauhan-IC	Detail Order
2	GTU	B N Prajapati-Mech	V P Patel-Civil P K Bhavsar - Elect	S P Joshiyara-EC V B Chaudhary-Mech
3	Student Section	M M Shah-IC	M K Pedhadia-EC R C Parmar-EC S N Chauhan-Mech	F M Patel-Civil M R Zala-Mech N H Oza-Mech R M Prajapati-Elect P D Sheth-Civil
4	Gymkhana NSS Ek Bharat Shrestha Bharat (EBSB)	✓ J D Modi-General	M K Prajapati-Mech J N Chaudhary-App.	F M Patel-Civil D P Judal-Mech J V Kureshi - IC R M Prajapati-Elect V B Chaudhary-Mech P K Bhavsar -Elect (NSS) N J Chauhan-EC
5	ISTE Chapter	D N Sheth-Civil	H P Patel-Civil	V M Prajapati-Mech N J Chauhan-EC A V Gajjar-Elect

6	Alumni Association	A R Patel-Elect	F A Mukhi-Civil	N A Modi -Mech R N Patel-EC V A Chauhan-IC P K Bhavsar-Elect
7	VISHWA-KARMA YOJNA	D N Sheth-Civil	A N Patel-Civil	P K Bhavsar-Elect
8	MYSV	S D Dabhi-Principal (SSO)	D P Judal-Mech N N Chaudhary-Mech (Scrutiny)	V M Prajapati-Mech R L Chaudhary-Mech
9	Anti Ragging Committee Anti Ragging Squade	D D Prajapati-Mech	R P Chavda-Elect	F A Mukhi-Civil C P Gehlot - General ✓
10	Psychology Cell	A R Patel-Elect	J V Kureshi-IC	Y D Chaudhary-Mech
11	Education Loan	J B Patel-Mech	N H Oza-Mech	R P Chavda-Elect
3 Head, Store & Purchase:				
1	Central Store Purchase on GeM New items / Vikaslaxi / CSS Tendering Outsourcing etc. Physical Verification	A D Shah-Elect	T P Purohit-Elect Y D Chaudhary-Mech	N V Prajapati -Civil J N Chaudhary- Applied R L Chaudhari-Mech C S Pandya-Gen ✓ L K Patel-EC
2	Local Purchase Committee	Principal	Store Officer As Member Secretary	All HoD As A Member ✓
3	Write-off	A D Shah-Elect	N N Chaudhary-Mech N V Prajapati-Civil	A M Qureshi-Elect L K Patel-EC C S Pandya-Gen ✓ J N Chaudhary- Applied V G Patel-Girl's hostel D H Desai-Boys' hostel B N Raval-Library
4 Head, Academics:				
1	Institute Time table Institute Overload Academic Calendar	I D Chaudhary-Elect	T D Modi-Mech	Y T Rana-Civil N H Oza - Mech A M Qureshi-Elect R C Parmar-EC M F Tank-Gen ✓ J N Chaudhary- Applied
2	AICTE Approval GTU Affiliation	S J Chauhan-EC	C M Amin-Mech N J Chauhan-EC	A R Patel-Civil D H Desai-Mech R P Chavda-Elect V A Chauhan-IC J D Modi-Gen ✓ R J Patel-Applied

3	AICTE PARAKH	S J Chauhan-EC	I D Chaudhary-Elect	N V Oza-Mech R J Patel-Applied A R Patel-Civil M K Prajapati-Mech
4	NBA	N V Oza-Mech	A M Qureshi-Elect M K Pedhadiya - EC A R Patel-Civil	M K Prajapati -Mech J D Modi - Gen ✓
5	SSIP CIC3 IPR Hackathone	L K Patel-EC	B M Patel-Elect	Y T Rana-Civil V H Suthar-Mech M J Dabgar-EC V A Chauhan-IC
6	MERITE	B M Patel-Elect	B B Mor - Gen ✓	
7	CLEANLINESS	M M Shah-IC	J D Modi-General ✓ R L Chaudhary-Mech	P D Sheth-Civil V G Patel-Mech A V Gajjar-Elect P.G.Chauhan(W/S) D H Desai-Mech V A Chauhan-IC L K Patel-EC B N Raval (LRUC)
8	NEP GSIRF	M J Vadhvaniya- IC	F M Patel-Civil	C M Amin-Mech S N Chauhan-Mech H P Patel-Civil T P Purohit-Elect
9	Academic Coordinator (NEP)	M J Vadhvaniya- IC	H P Patel-Civil	M R Zala-Mech T D Modi-Mech N J Chauhan-EC
10	ABC ID	L K Patel-EC	M J Vadhvaniya-IC	B N Prajapati-Mech S P Mahant-Mech H P Patel-Civil T P Purohit-Elect
5	Head, Infrastructure & Maintenance:			
1	Civil Works /maintenance R&B (Civil) Liason For College campus Hostel campus Staff Quarters, *Fire N.O.C	D N Sheth-Civil	F A Mukhi-Civil	A N Patel-Civil (Quarters)
2	Electrical maintenance , (College + Hostels + Street) Billing R&B (Elect) liason, Solar Panel etc., Fire N.O.C	A R Patel - Elect	T P Purohit - Elect	

3	Mechanical Maintenance RO & Water Cooler, AC Maintenance, Fire Extinguisher	V H Suthar - Mech	J B Patel -Mech	N N Chaudhary-Mech
4	Quarter Allotment	D N Sheth-Civil	R J Patel-Applied	V P Patel-Civil
5	Security (Monitoring of Institutional Discipline)	B B Mor-Gen	V B Chaudhary-Mech	N V Prajapati-Civil T P Purohit -Elect N J Chauhan-EC T D Modi-Mech
6	CWAN, Lease Line / Internet, CCTV, NAMO WIFI, Video Conferencing	M J Dabgar -EC	J V Kureshi -IC	S P Joshiara-EC D H Desai-Mech A M Qureshi-Elect
7	Cogent, Website, KYC	S P Joshiara-EC	R N Patel-EC M R Zala-Mech	N V Prajapati - Civil C M Amin - Mech R M Prajapati -Elect J D Modi-General M B Valagot-Office B N Raval-Lib
		P K Bhavsar-Elect	Coordinator of AKKAM/ Electoral Literacy/ PANCHPRAKALP/ Voter Awareness/ Yoga Day	
		C S Pandya- General	Coordinator of SCOPE	
		A M Kureshi-Elect	Coordinator of Training	
		B M Patel-Elect	Coordinator of SSIP / Startup / Innovation	
		I D Chaudhary- Elect	Nodal Officer of EDC	
		J V Kureshi-IC	Coordinator of Climate Change	
		J N Chaudhary- Applied	Coordinator of Cyber Club	
		M J Vadhvaniya- IC	Coordinator of NEP2020 Conference (SOU)	
		M J Dabgar-EC R M Prajapati- Elect V A Chauhan-IC Y T Rana-Civil	Coordinator of SSIP	
		S P Joshiara-EC	Coordinator of ETRP (COGENT)	
		V B Chaudhary- Mech	G20 NODAL OFFICER	
		K A Patel-IC	ENVIRONMENTAL NODAL OFFICER	
		M M Shah-IC	CLEANLINESS NODAL OFFICER Swachhta Hh Seva Coordinator	
6	Head, Industry & Outreach:			
1	Training and Placement Cell, Placement Fair Industry Linkages MOU etc.	N V Oza-Mech	I D Chaudhary-Elect J B Patel-Mech	Y T Rana-Civil D P Judal-Mech M J Dabgar-EC A V Gajjar-Elect

2	MAY , PMKVY; DSC, D. Voc (AICTE) BISAG	S J Chauhan-EC	A V Gajjar-Elect	M J Vadhasaniya-IC D P Judai-Mech H P Patel-Civil
3	Finishing school GKS SCOPE Language Lab etc.	✓ C S Pandya – General	Y T Rana-Civil	V A Chauhan-IC M K Prajapati-Mech R M Prajapati-Elect M J Dabgar-EC N A Modi-Mech
4	RUSA A I S H E	✓ C P Gelot-Gen	S N Chauhan-Mech	A R Patel -Civil B M Patel – Elect R C Parmar-EC N A Modi-Mech
5	CDTP	P G Chauhan- Mech	P D Sheth-Civil K A Patel-IC	
6	MEDIA CELL VC DATA Inspection data (Academic)	N A Modi-Mech	V B Chaudhary-Mech	B N Prajapati-Mech S P Mahant-Mech N V Prajapati-Civil A V Gajjar-Elect N J Chauhan-EC
7	Head, Amenities			
1	Library	K A Patel-IC	S N Chauhan-Mech	
2	Hostel Rector	A D Shah-Elect	D H Desai-Boys Hostel V G Patel-Girls Hostel	K B Desai-Office Lobby Coordinator detail order
3	Canteen / Mess	D D Prajapati- Mech	I D Chaudhary-Elect	V P Patel - Civil M R Zala - Mech K A Patel - IC

Note: For Portfolio specific goals and responsibilities and related information refer TEIM for GPs.

Responsibilities of concerned conveners /members:

1. Prepare an annual action plan with clear objectives by following standard methodology considering NBA requirements as benchmark for overall development /smooth functioning of the institute.
2. Do allotment of work among members related to said portfolio.
3. Collection of previous data/documents/proofs from Ex. Convener/ In-charge if required and processed further to achieve the target as planned in action plan..
4. Motivate the team to accomplish the plan work as per annual action plan.
5. Coordinate with committee/members/representatives at regular interval to identify progress/ lagging/follow ups.Submit progress report to principal.
6. Submit confidential report of members related to efficacy of members in fulfilling goals of particular portfolio to Principal to be reflected in PAR and also helping for 360 feedback of individual faculty .
7. In absence of convener , co convener has to function as convener. If faculty name is in convener or co convener then that faculty must carried out duty as department member also.

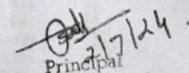

 Principal
 Govt. Polytechnic,
 Palanpur

Figure 9.3 Decentralization of work

Brief scope of works:**Human Resource (For faculty & staff):**

- Institute level overall human resource planning / administration including faculty / staff service level matters.
- Institute legal matters, RTI, educational quality assurance, Training need analysis, Annual performance Redressal.

Student matters:

- Student section related activities/ services, scholarship matters.

- For smooth conduction of the examination and liaisons with University.
- Co-and-Extracurricular activities and responsible for various student amenities.
- Strong bonding with Alumni association.
- To promote NSS / NCC activities in the Institute.
- Various issues including Admission, Ragging, and student counselling.

Academics:

- To ensure the quality of the academics at the Institute level.
- Coordination among various departments to ensure optimum utilization of the Institute level resources.
- First year academic and examination planning.
- To provide academic related data as per the needs of CTE and University.
- Taking care of the AICTE compliance, University affiliation, NBA requirements.
- To promote the innovation among the students.

Store and Purchase:

- Prepare and propose new item requirements based on the Department demands and submit to Directorate of Technical Education office.
- To purchase and planning from non-government funds.
- To take care of write-off procedure, maintenance and calibration of various equipments based on the department request.
- To audit, ensure and keep record of utilization of the equipments.

Infrastructure and Maintenance:

- Institute civil works and liaison with R and B civil/electrical related matters.
- Taking care of overall cleanliness and security of the Institute.
- To look into drinking water facility as well overall Institute ambience.

Industry and Outreach:

- To increase institute-Industry linkage.
- Media and newsletter coordination.
- To ensure the implementation of various GOI/GOG schemes effectively in Institute.
- Explore internship and training opportunities for the students.
- Skill development / Finishing school of the students

Institute Amenities:

- To ensure optimal usage of Institute amenities, like hostel, canteen, centralized computing, library, language lab etc.

B. Grievance redressal cell, Anti Ragging Committee and Prevention of Sexual Harassment Committee:

Grievance Redressal Cell:

Grievance Redressal system in Institute:

- Various cells are operative at Institute level for addressing the various grievances.
- Grievance Redress Mechanism has been institutionalized through portal.
- The administration mechanism for accountable, responsive and user-friendly approach has been established along with an efficient and effective grievance redress.

Responsibilities of the Grievance Cell

- Addressing the grievance of the students and staff.
- Implementation of the corrective steps to be taken to address the grievances and other related matters.
- To deal with issues raised in anti-ragging committee, examination committee (Related to malpractice issues), Committee against sexual harassment, Women Empowerment committee etc.

Grievance Redressal mechanism

- The students can apply on student portal.
- On receipt of specific complains/ grievance from a student, the Redressal cell meets, analyze the matter and corrective measures are taken wherever necessary.
- In case of urgent issue, one can meet concerned officer at any time.

Anti-Ragging Committee:

- For prevention and prohibition of ragging in the Institute, an Anti-Ragging Committee as mandated by AICTE, has been formed by the institute.

Institute level Anti-ragging committee

1	Head of the institution	Mr. S. D. Dabhi, Principal
2	Representative of police administration (Police Sub Inspector)	PSI, East Police Station, Palanpur
3	Local media member	BhagavatibenMaheshkumar Joshi (વિચારધારી સામીટીક)
4	NGO member	Naisargik Trust, Mr. PrakashchandrChauhan
5	Representative of parents (member)	Modi Girishbhai Amratlal
6	Representative of students belonging to the fresher's category (member)	SmitKamrajbhaiChaudhary, 1 st Electrical
7	Representative of senior students (member)	1. PanchalKrishBharatbhai, 3 rd Mechanical 2. GoswamiPrincegiriBharatgiri, 5 th Civil 3. KhatikDipakShantilal, 5 th Electrical
8	Representative of non-teaching staff member	Mr. I. P. Kharodiya, Storekeeper
9	Representative of civil administration (Mamalatdar)	Mamalatdar Palanpur City
10	Representative of faculty members (Member secretary)	Mr. D. D. Prajapati, I/C HoD Mechanical

Women Development Cell:

- Women Development Cell is a mandated body as per the Rules and Regulations laid down by AICTE/UGC and MHRD.
- The WDC works with a sole aim of creating hassle-free environment for female students and staff of the campus community thereby enhancing their self-respect and self-confidence.

9.1.4 Delegation of financial powers (5)

Delegation of Financial Powers:

Delegation of financial powers as per the State Government Rules explained as below:

- Controlling Officer – The Principal
- Drawing and Disbursing Officer (DDO) – The Principal
- All HODs are empowered to put the demand as per the requirement for the purchase of laboratory/utility equipment/books/furniture as follows:
 - Item costing above Rs. 20000/-, Head of Department sends proposal to CTE purchase committee through Principal office. CTE Purchase committee consist of domain specific senior faculties from the various Gov budget provision. (Through open tendering or Government e-Market (GeM).
 - Item costing below Rs. 20000/-, purchase is made at the Institute level by concerned department with the help of store officer after due approval from Principal office.
 - Consumables as per the requirement are purchased by the HOD with due approval of Head of the Institute.
 - All section heads are empowered to scrutinize proposals made by relevant stakeholders and then purchase with due procedure.
- The institute has specific types of Non-Government funds such as Gymkhana fund, Social gathering fund. The disbursement of these funds is done by the Principal as per recommendation of relevant committee.

9.1.5 Transparency and availability of correct/unambiguous information in public domain (5)

Transparency and Availability of Information:

Information on policies, rules, processes and its dissemination are made available to the stakeholders on Institute/CTE/University website.

- All India Council for Technical Education (AICTE) EOA letters are available on Institute website.
- The information related to admission in professional courses in Gujarat State is available on ACPDC website (<https://acpdc.gujarat.gov.in>)
- All the necessary institute information regarding the students, staff and other co-curricular activities are available on the Institute website (<https://gppalanpur.ac.in>).
- The syllabus result and other relevant information for students and staff are available on the GTU website (<http://www.gtu.ac.in>).
- The vendor related information and the online bidding process are done through GeM portal for the procurement purpose.
- As a government institute, we are fully transparent in terms of policies, selection, rules, regulations and procedures.
- Details of policies, selection, rules, regulations and procedures are available on following websites.

Directorate of Technical Education, Gujarat (<https://www.dte.gujarat.gov.in/>).

Education Department, Government of Gujarat (<http://gujarat-education.gov.in>).

Gujarat Public Service Commission (<http://gpsc.gujarat.gov.in>).

- All the information pertaining to Right to Information Act is available on institute website (<https://gppalanpur.ac.in/rti/>).

9.2 Budget Allocation, Utilization, and Public Accounting at Institute level (10)

Summary of current financial year's budget and actual expenditure incurred(for the institution exclusively)in the three previous financial years

Summary of current financial year's budget and actual expenditure incurred (for the institution exclusively) in the three previous financial years.

Total Income at Institute level:

For (2025-26) (Rupees in Lakh)

Total Income in (2025-26) Rs/-				Actual expenses in (2025-26) Rs/-	
Fee	Govt.	Grant(s)	Other Sources * (specify)	Recurring including Salaries	Non- recurring
1.57	9.00	1195.16	1.42	1152.07	0

* KCG: 142000

** KCG: 431050 CDTP: 69400 SSIP: 318826

For (2024-25) (Rupees in Lakh)

Total Income in (2024-25) Rs/-				Actual expenses in (2024-25) Rs/-	
Fee	Govt.	Grant(s)	Other Sources * (specify)	Recurring including Salaries	Non- recurring
5.36	5.03	1483.50	5.11	1455.72	0

* KCG: 511000

** CDTP: 96500 SSIP: 63755

For (2023-24) (Rupees in Lakh)

Total Income				Actual expenses	
--------------	--	--	--	-----------------	--

in (2023-24) Rs/-				in (2023-24) Rs/-	
Fee	Govt.	Grant(s)	Other Sources * (specify)	Recurring including Salaries	Non- recurring
4.53	0	1348.67	10.51	1343.54	0

* KCG: 511000 SSIP: 540000

** KCG: 511000 CDTP: 286000 RUSA: 26500 SSIP: 287013

For (2022-23) (Rupees in Lakh)

Total Income in (2022-23) Rs/-				Actual expenses in (2022-23) Rs/-	
Fee	Govt.	Grant(s)	Other Sources * (specify)	Recurring including Salaries	Non- recurring
4.21	0	1335.49	7.06	1334.67	0

* KCG: 255500 SSIP: 450000

** KCG: 511000 CDTP: 156080 RUSA: 22930 SSIP: 137303.5

Institute Utilization Table (Rupees in Lakh)

Sr. No	Item	2022-23		2023-24		Budget (Rs.)
		Budget (Rs.)	Expenses (Rs.)	Budget (Rs.)	Expenses (Rs.)	
1	Teaching and non-teaching staff salary	1241.41	1241.39	1233.00	1231.79	1292.00

2	Contingency (light bill / telephone bill, training & travel, books, building maintenance)	25.90	25.11	32.98	30.02	54.78
3	Housekeeping & Contractual servants (security service & cleanliness), visiting faculty remuneration	62.42	62.41	76.30	75.35	84.67
4	Furniture, Laboratory equipments, consumables	5.76	5.76	6.30	4.59	52.05
5	Advance (festival & food grain) for class-4 staff	0	0	0	0	0
Total		1335.49	1334.67	1348.58	1341.75	1483.50

Table 1 - CFYm1 2024-25

Total Income 1499.00				Actual expenditure(till...): 1457.30		
Fee	Govt.	Grants	Other sources(specify) KCG	Recurring including salaries	Non Recurring	Special Project
5.36	5.03	1483.50	5.11	1455.70	0	1.60

Table 2 - CFYm2 2023-24

Total Income 1363.71				Actual expenditure(till...): 1354.65		
Fee	Govt.	Grants	Other sources(specify) KCG, SSIP	Recurring including salaries	Non Recurring	Special Project
4.53	0	1348.67	10.51	1343.54	0	11.11

Table 3 - CFYm3 2022-23

Total Income 1346.76				Actual expenditure(till...): 1342.94		
Fee	Govt.	Grants	Other sources(specify) KCG, SSIP	Recurring including salaries	Non Recurring	Special Project
4.21	0	1335.49	7.06	1334.67	0	8.27

9.2.1 Adequacy of Budget Allocation (4)

Prior to each financial year, each department is preparing non-recurring budget requirement while account office is preparing the recurring budget requirement. The consolidated (recurring and non-recurring) budget requirement is prepared by the department of technical education for further approval of education department. Budget re-appropriation process is carried out at CTE level after 3rd quarter of the financial year to ensure the allocated budget is as per requirement for smooth

Details and justification of adequacy of Budget Allocation is as follows:

Sr. No	Year	Allocated Budget (Rs.)	Exp (
1	2025-26	1195.16	11
2	2024-25	1483.50	14
3	2023-24	1348.58	13
4	2022-23	1335.49	13

9.2.2 Utilization of allocated funds (4)

Sr. No	Year	Allocated Budget (Rs.)	Expen (R
1	2025-26	1195.16	115:
2	2024-25	1483.50	145:
3	2023-24	1348.58	134
4	2022-23	1335.49	133

The allocated budget by the government to the institute for last three years was satisfactory and was utilized as per the details provided in **Utilization Table**.

9.2.3 Availability of the audited statements on the institute's website (2)

In the Government Institute audit is carried out by

1. Our Head office i.e. Commissionerate of Technical Education, Gandhinagar, Gujarat State.
2. Office of Accountant General, Rajkot.

Audited statements are available on Institute website.

Last CTE and A G Audit details are as follows:

Audit	Visit Date	Period covered
CTE Audit	24-06-2024 to 26-06-2024	April-2023 to March-2024
A G Audit	06-12-2023 to 13-12-2023	December-2015 to October-2023

9.3 Department Specific Budget Allocation, Utilization (5)

EC Department

For 2025-26 (Rupees in Lakh)

As per the total staff member of faculties recurring amount has been specified for department.

Total Income: 114.79		Actual Expenditure: 114.79	
Non recurring	Recurring (Salary)	Non recurring	Recurring (Salary)
0.09	114.70	0.09	114.70

Non –Recurring Table

Non –Recurring Expenditure	Amount(Rupees in Lakh)

Computer/Equipment	0.09
Furniture	0.00
Library (books)	0.00
Total	0.09

For 2024-25 (Rupees in Lakh)

As per the total staff member of faculties recurring amount has been specified for department.

Total Income: 138.32		Actual Expenditure: 138.32	
Non recurring	Recurring (Salary)	Non recurring	Recurring (Salary)
0.74	137.58	0.74	137.58

Non –Recurring Table

Non –Recurring Expenditure	Amount(Rupees in Lakh)
Computer/Equipment	0.74
Furniture	0.00
Library (books)	0.00
Total	0.74

For 2023-24 (Rupees in Lakh)

As per the total staff member of faculties recurring amount has been specified for department.

Total Income: 151.15		Actual Expenditure: 151.15	
Non recurring	Recurring (Salary)	Non recurring	Recurring (Salary)
1.27	149.88	1.27	149.88

Non –Recurring Table

Non –Recurring Expenditure	Amount(Rupees in Lakh)
Computer/Equipment	1.27
Furniture	0.00
Library (books)	0.00
Total	1.27

For 2022-23 (Rupees in Lakh)

As per the total staff member of faculties recurring amount has been specified for department.

Total Income: 133.76		Actual Expenditure: 133.76	
Non recurring	Recurring (Salary)	Non recurring	Recurring (Salary)
3.76	130.00	3.76	130.00

Non –Recurring Table

Non –Recurring Expenditure	Amount(Rupees in Lakh)
Computer/Equipment	0.00
Furniture	3.76
Library (books)	0.00

Total	3.76
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Utilization Table (EC Department)_(Rupees in Lakh)

Sr. No	Item	2022-23		2023-24		Budget (Rs.)
		Budget (Rs.)	Expenses (Rs.)	Budget (Rs.)	Expenses (Rs.)	
1	Infrastructure Built-up	0	0	0	0	0
2	Library	0	0	0	0	0
3	Laboratory Equipment	0	0	1.27	1.27	0.74
4	Software	0	0	0	0	0
5	Furniture	3.76	3.76	0	0	0
6	Laboratory Consumables	0	0	0	0	0
7	Maintenance and Spares	0	0	0	0	0
8	R&D	0	0	0	0	0
9	Teaching & Non-Teaching staff salary	130.00	130.00	149.88	149.88	137.58
10	Miscellaneous expenses (Light, Rent, Public Advert)	0	0	0	0	0
11	Training & Travel	0.14	0.14	0.15	0.15	0.37
Total		133.90	133.90	151.30	151.30	138.69

Table 1 :: CFY 2025-26

Total Budget 114.79		Actual expenditure (till...): 114.79
Non Recurring	Recurring	Non Recurring
0.09	114.70	0.09

Table 2 :: CFYm1 2024-25

Total Budget 138.32		Actual expenditure (till...): 138.32
Non Recurring	Recurring	Non Recurring
0.74	137.58	0.74

Table 3 :: CFYm2 2023-24

Total Budget 151.15		Actual expenditure (till...): 151.15
Non Recurring	Recurring	Non Recurring
1.27	149.88	1.27

Table 4 :: CFYm3 2022-23

Total Budget 133.76		Actual expenditure (till...): 133.76
Non Recurring	Recurring	Non Recurring
3.76	130.00	3.76

9.3.1 Adequacy of Budget Allocation (2)

Prior to each financial year, each department is preparing non-recurring budget requirement while account office is preparing the recurring budget requirement. The consolidated (recurring and non-recurring) budget requireme technical education for further approval of education department. Budget re-appropriation process is carried out at CTE level after 3rd quarter of the financial year to ensure the allocated budget is as per requirement for smooth

EC Department

Details and justification of adequacy of Budget Allocation is as follows:

Sr. No	Year	Allocated Budget (Rs.)	Ex
1	2025-26	115.00	

2	2024-25	138.69	
3	2023-24	151.30	
4	2022-23	133.90	

9.3.2 Utilization of allocated funds (3)

EC Department

Sr. No	Year	Allocated Budget (Rs.)	Expen (R)
1	2025-26	115.00	115
2	2024-25	138.69	138
3	2023-24	151.30	151
4	2022-23	133.90	133

9.4 Library and Internet (20)

(It is assumed that zero deficiency report was received by the institution, Effective availability and utilization to be demonstrated)

9.4.1 Quality of learning resources (hard/soft) (10)

Library:

- The library acts as a key resource and learning center of the Institute. Library maintains records of books, Journals and Newsletters. The library issues the books to the students.
- The books are arranged in dedicated cupboards and labeled relevantly. The books related to technical courses are available in the library of all available programs.
- Books related to soft skills also available in the library. As a part of digitalized library, the Institute is having access of various E-books, Library blog and e-content.
- Details of the library and its services are mentioned in Table 9.4.1 various types of Learning resources are available in the library.
- Library contains technical as well as soft skill related books. New titles added every year are specified in Table 9.4.2
- E-Journal details are mentioned in table 9.4.3

Table 9.4.1 Details of the library and its services

Library Service	Yes
The total area of the library (in Sq. meter)	769.20 Square meter
Total seating capacity	30
Number of Books Issued Per day(average)	2
Number of visitors per day	20
Number of library staff	Total : 1 Library Officers-2
Computerization for search	Yes
Issue/return records maintained	Yes
Library Additional Services	Internet, Library Blog, e-Journals, e-Books, new arrivals display

Table 9.4.2 Titles added year wise

Year	Number of New Titles Added	Number of Volumes Added	Amount utilized (Rs)
2018-2019	113	227	86299/-
2019-2020	189	1049	63443/-
2020-2021	20	122	37699/-
2021-2022	154	170	27956/-

2022-2023	10	41	17275/-
2023-2024	07	43	26846/-
2024-2025	38	138	110635/-

Table 9.4.3 List of e-Journals

Program	NAME OF JOURNAL	Publisher Name
E.C. Engineering	Inventi Impact Antennas & Propagation	Inventi Journals Pvt. Ltd.
IT & ICT Engineering	Inventi Impact Artificial Intelligence	Inventi Journals Pvt. Ltd.
Civil Engineering	Inventi Impact Civil Structures	Inventi Journals Pvt. Ltd.
Electrical Engineering	Inventi Impact Electrical Engineering	Inventi Journals Pvt. Ltd.
Mechanical Engineering	Inventi Impact Mechanical Engineering	Inventi Journals Pvt. Ltd.
EC and ICT Engineering	Inventi Impact VLSI	Inventi Journals Pvt. Ltd.

E-Journals (Free Open Access) link available on library blog

Sr. No.	Name of Journal
1	International Journal of Advances in Applied Sciences
2	International Journal of Informatics and Communication Technology
3	International Journal of Social Networking and Virtual Communities
4	International Journal of Electronic and Telecommunications

5	Advances in Electrical and Electronic Engineering
6	Journals of Civil and Environmental Engineering
7	Advances in Automobile Engineering
8	Industrial Engineering And Management
9	International Journal of Advance Innovations, Thoughts and Ideas
10	International Journal of Sensor Networks and Data Communications
11	Irrigation & Drainage Systems Engineering
12	Journal of Applied Mechanical Engineering
13	Journal of information Technology and Software Engineering
14	Journal of Telecommunication System and Management
15	Lovotics
16	Advances in Robotics and Automation
17	Biosensors Journal
18	Global Journal of Technology and Optimization
19	Innovative energy and Research
20	International Journal of Advancements in Technology
21	Journal of Aeronautics and Aerospace Engineering
22	Journal of Architectural Engineering Technology
23	Journal of Electrical and Electronics Systems
24	Journal of Steel Structures & Construction
25	Journal of Textile science and Engineering

26	International Journal of Advance Research in Electrical, Electronics and Instrumentation Engineering
27	International Journal of Innovative Research in Computer and Communication Engineering
28	International Journal of Innovative Research in Science, engineering and Technology
29	Journal of Global Research in Computer Sciences
30	Research & Reviews : Journal of Engineering and Technology
31	Research & Reviews: Journal of Educational Studies
32	Research & Reviews: Journal of Engineering and Technology

Details of accessibility to Learning Resources center to students is mentioned in 9.4.4

Table 9.4.4 Accessibility to students for self-learning activities

Digital Library Service	Yes, (Students and Staff are registered at NDLI and ONOS)
Availability of Internet with computing facilities	Yes
The library resources for diploma students	Textbooks, General Reference Material, and Newspapers are available for reference.
User Orientation	During orientation program of 1st year, students visit Library and are Oriented to utilize effective resources. Department co-ordinates are also guiding the students for efficient use of
Library slot for students	Library slots are included in timetable

9.4.2 Internet (10)

Name of the Internet provider	Bharat Sanchar Nigam Limited(BSNL) (Broadband), Bharat Sanchar Nigam Li
Available band width	200 Mbps + 200 Mbps
WiFi availability	Total No. of Hotspots-2, No. of Access points-14, Bandwidth-200 Mbps
Internet access in labs, classrooms, library and offices of all Departments	Total 347 No. of Internet Nodes available
Security arrangements	Cyberoam CR500ia (Partially Working)

9.5 Institutional Contribution to the Community Development (5)

Government Polytechnic, Palanpur contribute their share in Community Development through following activities.

- **CDTP:** Community Development through Polytechnics (CDTP) Scheme is funded by MHRD, New Delhi. Details of CDTP activities are as follows:

Community Wing project was started at Government Polytechnic, Palanpur in the year 1994. Then the scheme is revised as CDTP (Community development through Polytechnic) in 2008. The grant allocation for the institute with the advice of advisory committee as well as executive committee.

For the implementation of CDTP Project, a survey of rural area is being done on primary basis to identify the skill based need of the society. On the basis of such survey, different short term training program is conducted. A community consultant is hired on contract base. In this scheme trainer given remuneration on hour basis and the trainees are trained without any charge means free of cost. Last three years, financial status & progress

Table:-1 Financial status & progress

Year	Recurring grant (Rs.)	Non-recurring grant (Rs.)	Total (Rs.)	Expenditure (Rs.)
2022-23	2118914.50	593700.00	2712614.50	156168.50
2023-24	2034580.00	593700.00	2628280.00	28600.00
2024-25	2077132.00	593700.00	2670832.00	96500.00

Table:-2 Skill Development Training Program for the year 2024-25

Sr. No	Course Name
1	Dress making

2	Tailoring work	
3	Beauty parlor	
4	Wiremen	
Total		

- **Driving Learning License Center:** Driving Learning License Center of RTO is functioning at institute. Online test through RTO portal is carried out and on successful completion of the test, the applicant is issued a lea

Sr No	Year	Number of learning license issued
1	2023	1824
2	2024	1576
3	2025	942

9.6 Alumni Performance and Connect (10)

Government Polytechnic Palanpur Alumni Association (GPPLAA) was established in 2020 with aim to promote brotherhood among alumni, exchange ideas, spread knowledge, stimulate thinking and help Government Polytec alumni meet is arranged in Institute.

Objectives of the Alumni Association

- To strengthen the connection between the alumni of the institution and the current students of the institution, the officers/staff/teachers and to provide/make infrastructural facilities in the institution for the educational an
- To involve the alumni of the institution in various activities conducted by the institution for institutional and social development.
- To find employment opportunities for current and former students of the institution.
- To provide scholarships for educational assistance to needy students studying in the institution.
- To give achievement/encouragement awards to brilliant students studying in the institution.
- To provide reimbursement of registration fees and travel expenses as an incentive to the students and faculty members of the institution to participate in educational activities such as conferences, workshops, technical sy

- To organize different types of activities for the welfare of the alumni of the institution.
- To organize the alumni of the institution and make them partners in achieving scientific and technological development of the nation and the world by organizing various activities.
- To organize institutional/political/national discussions and seminars to provide guidance on knowledge and career progression to the current and former students of the institution.
- To manage the funds collected in the organization in a systematic manner as per the requirement and to increase it by investing it partially/fully in appropriate places.
- To organize activities that encourages students to develop entrepreneurial qualities and contribute to technological innovation.
- To strengthen the institutions linkages with industrial organizations.
- To organize other pre-planned or incidental activities falling within the legal provisions similar to the above activities to fulfill the objectives of the organization.

Alumni committee

Sr. No	Name	Name of Department
1	Mr.A.R.Patel	EE
2	Mr.F.A.Mukhi	CIVIL
3	Mr.N.A.Modi	ME
4	Dr.R.N.Patel	EC
5	Mr.V.A.Chauhan	IC
6	Mr.P.K.Bhavsar	EE

Alumni Association Executive Committee

Sr. No	Name
1	Mr.Sureshbhai Dalabhai Dabhi
2	Mr.Mohanbhai Danabhai Parmar
3	Mr.AshokKumar Ramjibhai Patel
4	Mr.Wasimkhan Sikandarkhan Sama
5	Mr.Ishwarbhai Dahyalal Chaudhary
6	Mr.Rohitkumar Manubhai Prajapati
7	Mr.Chauhan Gautamkumar Nanjibhai

8	Mrs.Kusumben Chandrakant Rawal
9	Mr.Kirankumar Chhaganlal Desai

Alumni meetings

Sr. No	Event	Date
1	Alumni Meet-2022	26-06-2022
2	Alumni Meet-2023	05-02-2023
3	Alumni Meet-2024	19-11-2023
4	Alumni Meet-2025	19-01-2025
5	Alumni Meet-2026	11-01-2026

Annexure I
(A) PROGRAM OUTCOME (POs)

1. **Basic and Discipline specific knowledge:** Apply knowledge of basic mathematics, science and engineering fundamentals and engineering specialization to solve the engineering problems.
2. **Problem analysis:** Identify and analyse well-defined engineering problems using codified standard methods.
3. **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.
4. **Engineering Tools, Experimentation and Testing:**Apply modern engineering tools and appropriate technique to conduct standard tests and measurements.
5. **Engineering practices for society, sustainability and environment:**Apply appropriate technology in context of society, sustainability, environment and ethical practices.
6. **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.
7. **Life-long learning:**Ability to analyse individual needs and engage in updating in the context of technological changes.

(B) PROGRAM SPECIFIC OUTCOME (PSOs)

(B) PROGRAM SPECIFIC OUTCOME (PSOs)	
PSO1	Demonstrate proficiency in installation and problem solving of electronics and communication equipment.
PSO2	Proficiency in specialized software packages and coding useful for the analysis of electronics engineering systems and PCB design.

Declaration

The head of the institution needs to make a declaration as per the format given -

- I undertake that, the institution is well aware about the provisions in the NBA's accreditation manual concerned for this application, rules, regulations, notifications and NBA expert visit guidelines inforce as on date and the institutes hall fully abide by them.
- It is submitted that information provided in this Self Assessment Report is factually correct.
- I understand and agree that an appropriate disciplinary action against the Institute willbe initiated by the NBA. In case, any false statement/information is observed during pre-visit, visit, postvisit and subsequent to grant of accreditation.

Head of the Institute

Name : Shri S. D. Dabhi

Designation : In-charge Principal

Signature :



Seal of The Institution :



Place : Palanpur

Date : 17-02-2026 15:40:11