

**Internal evaluation schemes for BE 3<sup>rd</sup>, 4<sup>th</sup>,  
5<sup>th</sup> and 7<sup>th</sup> semester, and ME 3<sup>rd</sup> Semester**

**Subjects**

**Electrical Department**

**Shantilal Shah Engineering College,**

**Bhavnagar**

**Note: The faculty may take online/ offline assessment as per the prevailing conditions and directives from GTU/Government for evaluation.**

**Shantilal Shah Engineering College, Bhavnagar  
Electrical Engineering Department**

**Subject Evaluation Scheme**

**Name of the subject (subject code) :** Analog & Digital Electronics (3130907)

**Semester / Branch:** B.E. 3<sup>rd</sup> Semester, Electrical Engineering

**Name of Concerned Department:** Electrical

**Name of Faculty Member:** T. B. Maniar

**GTU Scheme for the subject:**

Teaching Scheme			Credits C	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
				ESE (E)	PA (M)	ESE VIVA (V)	PA (I)	
04	00	02	05	70	30	30	20	150

**Course Evaluation Plan for PA (M) Component: Total Marks 30\***

Marks	Pat
CO1	7.5
CO2	7.5
CO3	7.5
CO4	7.5

\* If offline exam is possible than above pattern will follow otherwise online quiz or online assignment will given students.

**Course Evaluation Plan for PA (I) Component: Total Marks 30\*+20 = 50**

**For 20 Marks, submission of lab manual online or offline.**

**For 30 Marks, Offline viva / MP will be given (As GTU instructed in last semester)**

Assessment Type	Attainment Levels	
Internal Assessment	Level 1	60% of students scoring more than 50% marks in assessment tools
	Level 2	70% of students scoring more than 50% marks in assessment tools
	Level 3	80% of students scoring more than 50% marks in assessment tools

In the test of PA (M) component, if the student obtains less than 12 marks out of 30, subsequently he/she is supposed to appear for a remedial test and having cleared the remedial test.

**Shantilal Shah Engineering College, Bhavnagar**  
**Electrical Engineering Department**  
**Subject Evaluation Scheme**

**Name of the subject (code):** Control System Theory (3130905)

**Semester/Branch:** B.E. 3<sup>rd</sup> Semester, Electrical Engineering

**Name of Concerned Department:** Electrical

**Name of faculty member/s:** (i) B.N.Vaidya (ii) A A Rathod

→ **GTU Scheme for the subject:**

Teaching Scheme			Credits	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
			ESE (E)	PA (M)	ESE Viva (V)	PA (I)		
03	--	02	04	70	30	30	20	150

→ **Course Evaluation Plan for PA (M) Component: Total marks 30**

Marks	PAT	ALA
CO1	20	--
CO2		--
CO3		--
CO4	--	10
CO5	--	

→ **Course Evaluation Plan for PA (I) and ESE(V)Component: Total marks 20+30=50**

	PA(I) 20 marks	ESE(V)
Marks	LAB Assignments	Viva
CO1	20	30
CO2		
CO3		
CO4		
CO5		

Assessment Type	Attainment Levels	
Internal Assessment	<b>Level 1</b>	60% of students scoring more than 50% marks in internal assessment tools
	<b>Level 2</b>	70% of students scoring more than 50% marks in internal assessment tools
	<b>Level 3</b>	75% of students scoring more than 50% marks in internal assessment tools

(1) In the test of PA (M) component, if the student obtains less than 8 marks out of 20, subsequently he/she is supposed to appear for an additional test and having cleared that test he/she is eligible to get 8 marks for PA(M) component. ALA assignments are to be submitted for qualifying for remaining 10 marks and final marks out of 30 will be displayed.

**(2) Conduction and format and mode of PAT will be according to prevailing guidelines.**

Signature of the faculty members:

B.N.Vaidya

Prof & HOD (Electrical)

**Shantilal Shah Engineering College, Bhavnagar**  
**Electrical Engineering Department**  
**Subject Valuation Scheme**

**Branch** : Electrical Engineering  
**Semester** : 3<sup>rd</sup>  
**Subject** : DESIGN ENGINEERING 1 A  
**Faculty** : Prof. A B Parmar  
 Prof. A K Dhandhia  
 Prof. M U Ghanchi  
 (course coordinator)  
 Prof G N Sarvaiya

**Division/Batch** : Electrical/All  
**Subject Code** : 3130008  
**Academic Year** : 2020-21

**Teaching and Examination Scheme:**

Teaching Scheme			Credits	Examination Marks				Total Marks	
L	T	P		Theory Marks		Practical Marks			
			ESE(E)	PA(M)		ESE Viva (V)	PA (I)		
0	0	2	1	00	00	00	80	20	100

**Evaluation Scheme for PA (I): (20 marks)**

Marks	Particular						
	Design Thinking Introduction	Empathization Phase	Define phase	Ideation phase	Product Development Phase	Proof of concept	Feedback & Final Report
CO1	3		2				
CO2		3		2			
CO3					2	5	3

**Evaluation Scheme for ESE (V): (80 marks)**

For 3<sup>rd</sup> semester, internal Viva-Voce examination will be conducted at the end of the semester by a team of three examiners - One internal guide, one inter/own departmental faculty, one industry expert (industry expert may be optional but recommended). Internal examiners/teachers must be trained in Design Thinking through the FDP conducted by University.

Sr. No.	Particular	Sub-Head Weightage	Related CO
1.	Understanding of Design Thinking methodology/ need ✓ Importance and understanding of Design Thinking for innovation, entrepreneurship, societal solutions with various learning tools	15	CO1
2.	Observation towards Empathy ✓ Field Activity/observation and outcome ✓ Mind Mapping - Summarization and data analysis ✓ Observation Technique (AEIOU Framework)	20	CO2
3.	Log book (Individual completed log book, duly signed by guide regularly) Continuous Assessment Card for Internal Evaluation (Complete and duly signed by guide regularly)	10	CO3
4.	Understanding of Canvases/Framework ✓ AEIOU, Mind Mapping ✓ Empathy mapping ✓ Ideation Canvas ✓ Product development Canvas	15	CO2
5.	Design Problem Definition ✓ Prior art search/Secondary research ✓ Diachronic and Synchronic analysis	10	CO1
6.	Report: Compilation of work report (process report), Online Certificate generated through DE Portal, Future action plan, Question and Answer, Communication Skill, Attitude	10	C03
<b>TOTAL</b>		<b>80</b>	

Assessment Type	Attainment Levels	
<b>Internal Assessment</b>	<b>Level 1</b>	50% of students scoring more than 50%marks in internal assessment tools
	<b>Level 2</b>	60% of students scoring more than 50% marks in internal assessmenttools
	<b>Level 3</b>	70% of students scoring more than 50% marks in internal assessmenttools

Signature of the Subject Faculty:

- (i) Prof. A B Parmar
- (ii) Prof. A K Dhandhia
- (iii) Prof. M U Ghanchi  
(Course coordinator)
- (iv) Prof G N Sarvaiya

Prof & HOD (Electrical)

**Shantil Shah Engineering College, Bhavnagar**  
**Electrical Engineering Department**  
**Subject Evaluation Scheme**

**Name of the subject (code):** Electrical Circuit Analysis (3130906)

**Semester/Branch:** B.E. 3<sup>rd</sup> Semester, Electrical Engineering

**Name of Concerned Department:** Electrical

**Name of faculty member/s:** (i) Prof V B Pandya (ii) Prof A K Dhandhia

→ **GTU Scheme for the subject:**

Teaching Scheme			Credits C	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
				ESE (E)	PA (M)	ESE Viva (V)	PA (I)	
03	01	02	05	70	30	30	20	150

→ **Course Evaluation Plan for PA (M) Component: Total marks 30**

Marks	TEST/QUIZ#	ASSIGNMENT-1	ASSIGNMENT-2
CO1	7		
CO2	7		
CO3		5	
CO4			5
CO5	6		

#: As per prevailing situation in future and the instructions proclaimed time to time by Government.

→ **Course Evaluation Plan for PA (I) Component: Total marks 20**

Marks	Tut 1	Tut 2	Tut 3	Tut 4	Tut 5	Tut 6	Tut 7	Tut 8	Tut 9	Tut 10
CO1	1	1	2							
CO2						4				
CO3									2	2
CO4							2	2		
CO5				2	2					

→ **Course Evaluation Plan for Viva (E) Component: Total marks 30**

Marks	EXP1	EXP2	EXP3	EXP4	EXP 5	EXP 6	EXP 7	EXP 8	EXP 9	EXP 10	EXP11	EXP12
CO1	3	2	2	3	3							
CO2										3	3	3
CO3												
CO4												
CO5						2	2	2	2			

Assessment Type	Attainment Levels	
Internal Assessment	Level 1	60% of students scoring more than 50% marks in internal assessment tools
	Level 2	70% of students scoring more than 50% marks in internal assessment tools
	Level 3	80% of students scoring more than 50% marks in internal assessment tools

In the test of PA (M) component, if the student obtains less than 12 marks out of 30, subsequently he/she is supposed to appear for a remedial work and having completed and submitted the remedial work, he/she is eligible to get 12 marks.

Signature of the faculty members:

(i) Prof V B Pandya (ii) Prof A K Dhandhia

Prof & HOD (Electrical)

**Shantil Shah Engineering College, Bhavnagar**

**Electrical Engineering Department**

**Subject Evaluation Scheme (Internal)**

Name of Subject : Indian Constitution  
Subject Code : 3130007  
Branch : Electrical  
Semester : 3  
Name of Faculties : Prof. J.B.Sarvaiya

**GTU Scheme for the subject:-**

Teaching Scheme			Credits	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
			ESE (E)	PA(M)	ESE(V)	PA(I)		
2	0	0	0	50	0	0	0	50

**Course Evaluation Plan for PA (M) Component:**

Course Outcome	Marks
CO1	5
CO2	15
CO3	10
CO4	10
CO5	10

Signature of Subject coordinator

Signature of HOD



**Shantilal Shah Engineering College, Bhavnagar**  
**Electrical Engineering Department**  
**DRAFT COPY OF CO-PO MAPPING**

**Name of the subject:** Indian Constitution

**Subject Code:** 3130007

**Semester/Branch:** 3<sup>rd</sup> Electrical

**Name of Concerned Department:** Electrical

**Name of faculty member/s:** Prof. J.B.Sarvaiya

Sr. No.	Course Outcomes
301.1	Enhance human values and awareness about law enactment and importance of Constitution.
301.2	Understand the Fundamental Rights and Fundamental Duties of the Indian Citizen to instill morality, social values, honesty, dignity of life and their social Responsibilities.
301.3	Create Awareness of their Surroundings, Society, Social problems and their suitable solutions while keeping rights and duties of the citizen keeping in mind.

**Course Articulation Matrix**

COs	PO1: Engg. Knowledge	PO2: Problem Analysis	PO3: Design/development of solutions	PO4: Conduct investigations of complex problems	PO5: Modern tool usage	PO6: The engineer and society	PO7: Environment and sustainability	PO8: Ethics	PO9 : Individual and team work	PO10 : Communication	PO11 : Project management and finance	PO12 : Life-long learning	PSO1: Modern Software tools	PSO1: Training from COE
C801.1						1	-	2	-	-	-	-	-	-
C801.2						2	-	2	-	-	-	-	-	-
C801.3						2	-	1	-	-	-	-	-	-

**3-High; 2-Medium; 1-Weak**

Faculty members' sign

HOD (EE)

**Shantilal Shah Engineering College, Bhavnagar**  
**Electrical Engineering Department**  
**Subject Evaluation Scheme**

**Name of the subject (code):** Power Electronics (3140915)

**Semester/Branch:** B.E. 4<sup>th</sup> Semester, Electrical Engineering; (teaching in semester 5<sup>th</sup> for equivalency of subjects.)

**Name of Concerned Department:** Electrical

**Name of faculty member:** M K Bhatt

**GTU Scheme for the subject:**

Teaching Scheme			Credits C	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
				ESE (E)	PA (M)	ESE Viva (V)	PA (I)	
03	01	02	05	70	30	30	20	150

→ **Course Evaluation Plan for PA (M) Component: Total marks 30**

Marks	PAT
CO1	8
CO2	8
CO3	8
CO4	6

→ **Course Evaluation Plan for PA (I) Component: Total marks 20**

Marks	Exp 1	Exp 2	Exp 3	Exp 4	Exp 5	Exp 6	Exp 7	Exp 8	Exp 9	Exp 10
CO1	1	1								
CO2			1	1		1	1	1	1	
CO3					1	2	2	2	2	1
CO4										2

Assessment Type	Attainment Levels	
Internal Assessment	<b>Level 1</b>	60% of students scoring more than 40% marks in internal assessment tools
	<b>Level 2</b>	70% of students scoring more than 40% marks in internal assessment tools
	<b>Level 3</b>	80% of students scoring more than 40% marks in internal assessment tools

In the test of PA (M) component, if the student obtains less than 12 marks out of 30, subsequently he/she is supposed to appear for a remedial test and having cleared the remedial test he/she is eligible to get 12 marks.

Signature of the faculty members:

(i) Prof M K Bhatt

Prof & HOD (Electrical)

**Shantilal Shah Engineering College, Bhavnagar**  
**Electrical Engineering Department**  
**Subject Evaluation Scheme**

Name of the subject (code): Power System I (3140914)

Semester/Branch: 4<sup>th</sup> Semester Electrical

Name of Concerned Department: Electrical

Name of faculty member/s: Prof Astik K Dhandhia

**GTU Scheme for the subject:**

Teaching Scheme			Credits C	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
				ESE (E)	PA(M)	ESE (V)	PA(I)	
04	00	02	05	70	30	30	20	150

**Course Evaluation Plan for PA (M) Component: Total marks 30**

Marks	PAT	Assignment 1	Assignment 2
CO1	6		
CO2	8		
CO3	6		
CO4		6	
CO5			4

**Course Evaluation Plan for PA (I) Component: Total marks 20**

Marks	Exp 1	Exp 2	Exp 3	Exp 4	Exp 5	Exp 6	Exp 7	Exp 8	Exp 9	Exp 10	Exp 11
CO1				2	2						2
CO2						2			2		
CO3										2	
CO4							3	3			
CO5	2	1	1								

Assessment Methods	Attainment Levels	
<b>Internal Assessment</b>	<b>Level 1</b>	60% of students scoring more than 50% marks in internal assessment tools
	<b>Level 2</b>	70% of students scoring more than 50% marks in internal assessment tools
	<b>Level 3</b>	80% of students scoring more than 50% marks in internal assessment tools

In the test of PA (M) component, if the student obtains less than 8 marks out of 20, subsequently he/she is supposed to appear for a remedial test and having cleared the remedial test he/she is eligible to get 8 marks. Two assignments each of 5 marks are also to be submitted and final marks out of 30 will be the sum of (i) marks obtained in the test or remedial test whichever the case is and (ii) those of two assignments.

Signature of the faculty member:

(1) Prof A K Dhandhia (Course Coordinator)

Prof. & H.O.D (Electrical)

# Shantilal Shah Engineering College, Bhavnagar

## Electrical Engineering Department

### Subject Evaluation Scheme

**Name of the subject (code):** Contributor Personality Development Program (3150004)

**Semester/Branch:** B.E. 5<sup>th</sup>Semester (UG), Electrical Engineering

**Name of Concerned Department:** Electrical

**Name of faculty member/s:** (i) Prof A A Rathod

→ **GTU Scheme for the subject:**

Teaching Scheme			Credits	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
			ESE (E)	PA (M)	ESE(V)	PA(I)		
2	0	0	2	70	30	30	20	150

→ **Course Evaluation Plan for PA (M) Theory Component: Total marks 30**

In the test of PA (M) component, for all the students have to appear for PAT/RPAT Theoretical exam.

Marks	PAT
CO1	10
CO2	10
CO3	10
CO4	-

In the test of PA (M) component, for all the students it is mandatory to pass PAT/RPAT exam. If the student obtains less than 12 marks out of 30 in PAT exam, subsequently he/she is supposed to appear for a remedial test RPAT and have to clear the remedial test. He /She are eligible to get 12 marks even though the student has obtained marks more than 12 in RPAT.

→ **Course Evaluation Plan for PA (I) Practical Component: Total marks 20**

A Workbook to be submitted at the end of sem. In this workbook student has to perform task in a group or individual and total max. Mark is 20.

Marks	Workbook submission
CO1	5
CO2	5
CO3	5
CO4	5

**NOTE: All above evolution components will be conducted by offline/ online mode as per government guidelines due to COVID-19.**

<b>Assessment Type</b>	<b>Attainment Levels</b>	
<b>Internal Assessment</b>	<b>Level 1</b>	60% of students scoring more than 50% marks in internal assessment tools
	<b>Level 2</b>	70% of students scoring more than 50% marks in internal assessment tools
	<b>Level 3</b>	80% of students scoring more than 50% marks in internal assessment tools

Signature of the faculty members:

(i) Prof. A A Rathod

Prof & HOD  
(Electrical)

**Shantilal Shah Engineering College, Bhavnagar**  
**Electrical Engineering Department**  
**Subject Valuation Scheme**

**Branch** : Electrical Engineering  
**Semester** : 5<sup>th</sup>  
**Subject** : DESIGN ENGINEERING 2 A  
**Faculty** :  
     (i) Prof. M D SOLANKI  
     (ii) Prof. J B Sarviaya  
     (iii) Prof. M K Bhatt  
             (Course coordinator)  
     (iv) Prof. A A Rathod

**Division/Batch** : Electrical/All  
**Subject Code** : 2150001/3150001  
**Academic Year** : 2020-21

**Teaching and Examination Scheme:**

Teaching Scheme			Credits	Examination Marks				Total Marks	
L	T	P		Theory Marks			Practical Marks		
			ESE(E)	PA(M)		ESE Viva (V)	PA (I)		
0	0	2	1	00	00	00	80	20	100

**Evaluation Scheme for PA (I): (20 marks)**

Marks	Particular						
	Orientation with revision of Design Thinking	Empathization Phase	Problem Definition by secondary research, group work and presentation	Ideation phase	Product Development Phase	Proof of concept	Feedback & Final Report
CO1	2	1	2			1	
CO2	1	2		2		2	
CO3					2	2	3

**Evaluation Scheme for ESE (V): (80 marks)**

A Viva-Voce examination will be conducted at the end of the semester by a team of two examiners, one of whom will be an internal Faculty Member, who may have taught the subject. The other will be an external examiner to be appointed by the University. Both examiners must be trained in Design Thinking through the FDP conducted by University.

Sr. No.	Particular	Sub-Head Weightage	Related CO
1.	Observation towards Empathy <ul style="list-style-type: none"> <li>✓ Field Activity/observation and outcome</li> <li>✓ Mind Mapping-Summarization and data analysis</li> <li>✓ Observation Technique (AEIOU Summary)</li> </ul>	20	C01
2.	Log book (Individual completed log book, duly signed by guide regularly)	10	C02
3.	Design Problem Definition <ul style="list-style-type: none"> <li>✓ Secondary research/ Prior art search</li> <li>✓ Diachronic and Synchronic analysis</li> </ul>	10	C03
4.	Canvases/Frameworks <ul style="list-style-type: none"> <li>✓ AEIOU, Mind Mapping</li> <li>✓ Empathy mapping</li> <li>✓ Ideation Canvas</li> <li>✓ Product development</li> </ul>	15	C02
5.	Design Problem Definition	15	C01
6.	Compilation of work report (process report), Future action plan, Question and Answer, Communication Skill.	10	C03
TOTAL		80	

Assessment Type	Attainment Levels	
<b>Internal Assessment</b>	<b>Level 1</b>	50% of students scoring more than 50%marks in internal assessment tools
	<b>Level 2</b>	60% of students scoring more than 50% marks in internal assessment tools
	<b>Level 3</b>	70% of students scoring more than 50% marks in internal assessment tools

Signature of the Subject Faculty:

- (v) Prof. M D SOLANKI
- (vi) Prof. J B Sarviaya
- (vii) Prof. M K Bhatt  
(Course coordinator)
- (viii) Prof A A Rathod

Prof & HOD  
(Electrical)

Note: As per GTU Instruction ( mailed on 18/07/2020), subject code 2150001 has to be continued for 5<sup>th</sup> semester regular students. If there is any change by GTU in future then according to that above content might be changed.





<b>Assessment Type</b>	<b>Attainment Levels</b>	
<b>Internal Assessment</b>	<b>Level 1</b>	50% of students scoring more than 50% marks in internal assessment tools
	<b>Level 2</b>	60% of students scoring more than 50% marks in internal assessment tools
	<b>Level 3</b>	70% of students scoring more than 50% marks in internal assessment tools

Signature of the Subject Faculty:

(i) Prof. (Dr.) K. P. Badgujar (iii) Prof. G. N. Sarvaiya

Prof & HOD (Electrical)

**Shantil Shah Engineering College, Bhavnagar**  
**Electrical Engineering Department**  
**Subject Evaluation Scheme**

**Name of the subject (code):** Professional ethics (3150709)

**Semester/Branch:** B.E. 5<sup>th</sup> Semester, Electrical Engineering

**Name of Concerned Department:** Electrical

**Name of faculty member/s:** (i) Prof M K BHATT

→ **GTU Scheme for the subject:**

Teaching Scheme			Credits	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
			ESE (E)	PA (M)	ESE Viva (V)	PA (I)		
03	00	00	03	70	30	00	00	100

→ **Course Evaluation Plan for PA (M) Component: Total marks 30**

Marks	PAT(Marks)
CO1	7.5
CO2	6
CO3	6
CO4	7.5
CO5	3

Assessment Type	Attainment Levels	
Internal Assessment	<b>Level 1</b>	60% of students scoring more than 40% marks in internal assessment tools
	<b>Level 2</b>	70% of students scoring more than 40% marks in internal assessment tools
	<b>Level 3</b>	80% of students scoring more than 40% marks in internal assessment tools

In the test of PA (M) component, if the student obtains less than 12 marks out of 30, subsequently he/she is supposed to appear for a remedial test and having cleared the remedial test he/she is eligible to get 12 marks.

Signature of the faculty members:

(i) Prof M K Bhatt

Prof & HOD (Electrical)

# Shantilal Shah Engineering College, Bhavnagar.

## Electrical Engineering Department

### Course Evaluation Plan

Name of Subject: Power System-II

Subject Code: 3150911

Academic Year: 2020-21

Semester/Branch: B.E. Sem-5<sup>th</sup> (Electrical)

Name of Concerned Department : Electrical

Name of Faculty Member(s) : Prof. A. M. Upadhyay

- **GTU Scheme for the subject:**

Teaching Scheme			Credits	Examination Marks				Total Marks	
L	T	P		Theory Marks		Practical Marks			
			ESE (E)	PA(M)	ESE(V)		PA(I)		
					ESE	OEP			
04	00	02	05	70	20	20	10	20	150

- **Course Evaluation Plan for PA (M) Component: Total marks 30**

Theory Course Outcome	Progressive Assessment Test <sup>#</sup>
CO-1	10
CO-2	10
CO-3	10
CO-4	
CO-5	

# Subject to government/GTU directives issued from time to time.

- **Course Evaluation Plan for PA (I) Component: Total marks 20**

Laboratory Course Outcome	Laboratory Assignments <sup>@</sup>									
	1	2	3	4	5	6	7	8	9	10
CO-1	02	02	02	02						
CO-2					02	02	02	02		
CO-3									02	02

@ Marks obtained in each laboratory assignment from 1 to 10 will be scaled to 2 marks each for the purpose of calculation of PA(I) marks.(Out of 20 marks).

Assessment Type	Attainment Level	
Internal Assessment	Level 1	50% of students scoring more than 50% marks in internal assessment tools
	Level 2	60% of students scoring more than 50% marks in internal assessment tools
	Level 3	70% of students scoring more than 50% marks in internal assessment tools

Name and Signature of Faculty

Prof. & Head



<b>Assessment Type</b>	<b>Attainment Levels</b>	
<b>Internal Assessment</b>	<b>Level 1</b>	50% of students scoring more than 50% marks in internal assessment tools
	<b>Level 2</b>	60% of students scoring more than 50% marks in internal assessment tools
	<b>Level 3</b>	70% of students scoring more than 50% marks in internal assessment tools

Signature of the Subject Faculty:

(i) Prof. Maqbul U. Ghanchi  
(course co-ordinator)

Prof & HOD (Electrical)

**Shantil Shah Engineering College, Bhavnagar**  
**Electrical Engineering Department**  
**Subject Evaluation Scheme**

**Name of the subject (code):** Design of AC Machines (2170909)

**Semester/Branch:** B.E. 7<sup>th</sup> Semester, Electrical Engineering

**Name of Concerned Department:** Electrical

**Name of faculty member/s:** (i) Prof G N Sarvaiya (ii) Prof J K Parmar

**Academic Year:** 2020-21

**Batch:** 2017-21

→ **GTU Scheme for the subject:**

Teaching Scheme			Credits	Examination Marks						Total Marks
L	T	P		Theory Marks			Practical Marks			
			ESE (E)	PA(M)		ESE(V)		PA(I)		
PA	ALA	ESE		OEP						
03	00	02	05	70	20	10	20	10	20	150

→ **Course Evaluation Plan for PA (M) Component: Total marks 30**

→ **MCQ type examination/assignment will be conducted during semester.**

Marks	PAT
CO1	30
CO2	
CO3	
CO4	

→ **Course Evaluation Plan for PA (I) Component: Total marks 20**

	Pr01	Pr02	Pr03	Pr04	Pr05
Marks					
CO1			4		
CO2				4	
CO3	2	2	2	2	
CO4					4

Assessment Type	Attainment Levels	
Internal Assessment	<b>Level 1</b>	50% of students scoring more than 50% marks in internal assessment tools
	<b>Level 2</b>	60% of students scoring more than 50% marks in internal assessment tools
	<b>Level 3</b>	70% of students scoring more than 50% marks in internal assessment tools

In the test of PA (M) component, if the student obtains less than 12 marks out of 30, subsequently he/she is supposed to appear for a remedial test/work and having cleared the remedial test he/she is eligible to get 12 marks.

Signature of the faculty members:

(i) Prof G N Sarvaiya (ii) Prof J K Parmar

Prof & HOD (Electrical)

**Shantilal Shah Engineering College, Bhavnagar**  
**Electrical Engineering Department**  
**Subject Evaluation Scheme**

**Name of the subject (code):** Industrial Instrumentation (2170913)

**Semester/Branch:** B.E. 7<sup>th</sup> Semester, Electrical Engineering

**Name of Concerned Department:** Electrical

**Name of faculty member/s:** (i) M. D. Solanki

→ **GTU Scheme for the subject:**

Teaching Scheme			Credits C	Examination Marks						Total Marks
L	T	P		Theory Marks			Practical Marks			
				ESE (E)	PA (M)		ESE (V)		PA (I)	
		PA	ALA		ESE	OEP				
03	00	02	05	70	20	10	20	10	20	150

→ **Course Evaluation Plan for PA (M) Component: Total marks 30**

Marks	PAT	End Sen Presentation
CO1	5	2
CO2	9	2
CO3	3	2
CO4	3	2
CO5	0	2
CO6	0	0

→ **Course Evaluation Plan for PA (I) Component: Total marks 20**

Marks	Tut 1	Tut 2	Tut 3	Tut 4	Tut 5	Tut 6	Tut 7	Tut 8	Tut 9
CO1	1	1							
CO2		1	1	1					
CO3			1	1	1				
CO4				1	1	1	1		
CO5						1	1	1	
CO6									5

Assessment Type	Attainment Levels	
Internal Assessment	<b>Level 1</b>	60% of students scoring more than 50% marks in internal assessment tools
	<b>Level 2</b>	70% of students scoring more than 50% marks in internal assessment tools
	<b>Level 3</b>	80% of students scoring more than 50% marks in internal assessment tools

In the test of PA (M) component, if the student obtains less than 8 marks out of 20, subsequently he/she is supposed to appear for a remedial test and having cleared the remedial test he/she is eligible to get 8 marks. Two assignments each of 5 marks are also to be submitted and final marks out of 30 will be the sum of (i) marks obtained in the test or remedial test whichever the case is and (ii) End Semester presentation.

Signature of the faculty members:

(i) M. D. Solanki

Prof & HOD (Electrical)



# Shantilal Shah Engineering College, Bhavnagar.

## Electrical Engineering Department

### Course Evaluation Plan

Name of Subject: (2170901) Interconnected Power Systems

Subject Code: 2170901

Academic Year: 2020-21

Semester/Branch: B.E. Sem-7<sup>th</sup> (Electrical)

Name of Concerned Department : Electrical

Name of Faculty Member(s) : Prof. A. M. Upadhyay

• **GTU Scheme for the subject:**

Teaching Scheme			Credits	Examination Marks						Total Marks
L	T	P		Theory Marks			Practical Marks			
			ESE (E)	PA(M)		ESE(V)		PA(I)		
		PA	ALA	ESE	OEP					
03	00	02	05	70	20	10	20	10	20	150

• **Course Evaluation Plan for PA (M) Component: Total marks 30**

Course Outcome	Progressive Assessment Test <sup>#</sup>	Active Learning Assignment-1*	Active Learning Assignment-2*	Active Learning Assignment-3*
CO-1	10			
CO-2	10			
CO-3		3.33		
CO-4			3.33	
CO-5				3.33

# Subject to government/GTU directives issued from time to time.

\* Marks obtained in each ALA will be scaled to a denominator of 3.33 each.

• **Course Evaluation Plan for PA (I) Component: Total marks 20**

Course Outcome	Laboratory Assignments <sup>@</sup>									
	1	2	3	4	5	6	7	8	9	10
CO-1	2	2	2							
CO-2				2	2					
CO-3						2	2			
CO-4								2	2	
CO-5										2

@ Marks obtained in each laboratory assignment from 1 to 10 will be scaled to 2 marks each for the purpose of calculation of PA(I) marks.(Out of 20 marks).

Assessment Type	Attainment Level	
Internal Assessment	Level 1	50% of students scoring more than 50% marks in internal assessment tools
	Level 2	60% of students scoring more than 50% marks in internal assessment tools
	Level 3	70% of students scoring more than 50% marks in internal assessment tools

Name and Signature of Faculty Head

Prof. &

**Shantilal Shah Engineering College, Bhavnagar**  
**Electrical Engineering Department**  
**Subject Valuation Scheme (Internal)**

**Branch** : Electrical Engineering  
**Semester** : 7<sup>th</sup>  
**Subject** : Project - I  
**Batch** : 2017-21

**Division/Batch** : Electrical/All  
**Subject Code** : 2170004  
**Academic Year** : 2020-21

**Teaching and Examination Scheme:**

Teaching Scheme			Credits	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
			ESE(E)	PA(M)	ESE(V)	PA(I)		
0	0	8	8	0	0	80	20	100

**Examination Scheme for PA(I):**

Valuation will be done on the basis of performance in project.

Parameter	Maximum Marks
PPR	04
PSAR	02
Report	04
Individual Performance	04
Team Performance	06

Assessment Type	Attainment Levels	
Internal Assessment	Level 1	50% of students scoring more than 50% marks in internal assessment tools
	Level 2	60% of students scoring more than 50% marks in internal assessment tools
	Level 3	70% of students scoring more than 50% marks in internal assessment tools

Signature of the Subject Faculty:

(i) Prof. (Dr.) K. P. Badgujar (iii) Prof. G. N. Sarvaiya

Prof & HOD (Electrical)

**Shantilal Shah Engineering College, Bhavnagar**  
**Electrical Engineering Department**  
**Subject Evaluation Scheme**

**Name of the subject:** Switch Gear and Protection

**Subject Code:** 2170908

**Semester/Branch:** 7<sup>th</sup> Electrical

**Name of Concerned Department:** Electrical

**Name of faculty member/s:** (i) Prof A B Parmar

**GTU Scheme for the subject: Total marks 30**

Teaching Scheme			Credits	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
				ESE (E)	PA (M)	ESE Viva (V)	PA (I)	
04	00	02	06	70	30	30	20	150

**Course Evaluation Plan for PA (M) Component: 30**

Marks	PAT	Assignment 1	Assignment 2
CO1	8		
CO2	8		
CO3	8		
CO4	6		
CO5	0		

**Course Evaluation Plan for PA (I) Component: Total marks 20**

Marks	Pract 1	Pract 2	Pract 3	Pract 4	Pract 5	Pract 6	Pract 7	Pract 8	Pract 9	Pract 10
CO1		2			2			2		
CO2						2	2			
CO3	2									
CO4			2	2						
CO5									2	2

Assessment Type	Attainment Levels	
Internal Assessment	<b>Level 1</b>	60% of students scoring more than 50% marks in internal assessment tools
	<b>Level 2</b>	70% of students scoring more than 50% marks in internal assessment tools
	<b>Level 3</b>	80% of students scoring more than 50% marks in internal assessment tools

In the test of PA (M) component, if the student obtains less than 12 marks out of 30, subsequently he/she is supposed to appear for a remedial test and having cleared the remedial test he/she is eligible to get 12 marks.

Signature of the faculty

Signature of the HOD

**Shantilal Shah Engineering College, Bhavnagar**  
**Electrical Engineering Department**  
**Subject Evaluation Scheme**

**Name of the subject (code):** Power System Transients (3370712)

**Semester/Branch:** B.E. 3<sup>rd</sup> Semester (PG), Electrical Engineering

**Name of Concerned Department:** Electrical

**Name of faculty member/s:** (i) Prof M V Gojija      (ii) Prof (Dr.) Ketan P Badgujar

→ **GTU Scheme for the subject:**

Teaching Scheme			Credits	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
			ESE (E)	PA (M)	ESE Viva (V)	PA (I)		
03	00	00	03	70	30	00	00	100

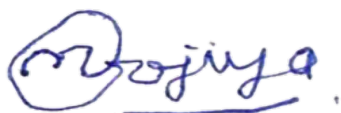
→ **Course Evaluation Plan for PA (M) Component: Total marks 30**

Marks	PAT	Assignment 1
CO1	8	
CO2	8	
CO3		10
CO4	4	

Assessment Type	Attainment Levels	
<b>Internal Assessment</b>	<b>Level 1</b>	60% of students scoring more than 50% marks in internal assessment tools
	<b>Level 2</b>	70% of students scoring more than 50% marks in internal assessment tools
	<b>Level 3</b>	80% of students scoring more than 50% marks in internal assessment tools

In the test of PA (M) component, if the student obtains less than 10 marks out of 20, subsequently he/she is supposed to appear for a remedial test and having cleared the remedial test he/she is eligible to get 10 marks. For the students it is mandatory to pass PAT/RPAT exam. An assignment of 10 marks is also to be submitted. Final marks out of 30 will be the sum of (i) marks obtained in the test or remedial test whichever the case is and (ii) those of two assignments.

Signature of the faculty members:



(i) Prof. M V Gojija

(ii) Prof (Dr.) Ketan P Badgujar

Prof & HOD (Electrical)

**Shantilal Shah Engineering College, Bhavnagar**  
**Electrical Engineering Department**  
**Subject Evaluation Scheme**

**Name of the subject:** WASTE TO ENERGY

**Subject Code:** 3730009

**Semester/Branch:** 3<sup>rd</sup> – ME - Electrical

**Name of Concerned Department:** Electrical

**Name of faculty member/s:** (i) Dr. K. P. BADGUJAR (i) Asst. Prof A A RATHOD

**GTU Scheme for the subject:**

Teaching Scheme			Credits	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
			ESE (E)	PA (M)	ESE(V)	PA(I)		
3	0	0	3	70	30	0	0	100

**Course Evaluation Plan for PA (M) Component:**

In the test of PA (M) component, for all the students have to appear for PAT/RPAT Theoretical exam.

<b>PA: 30 marks</b>	
Marks	PAT
CO1	5
CO2	10
CO3	10
CO4	5

Assessment Type	Attainment Levels	
<b>Internal Assessment</b>	<b>Level 1</b>	60% of students scoring more than 50% marks in internal assessment tools
	<b>Level 2</b>	70% of students scoring more than 50% marks in internal assessment tools
	<b>Level 3</b>	80% of students scoring more than 50% marks in internal assessment tools

In the test of PA (M) component, there will be online quiz. Each quiz will be of 10 marks. There will be total four quizzes. The three best marks out of the 4 quiz will be considered. If the student obtains less than 15 marks out of 30, subsequently he/she can appear for a remedial test/quiz and having cleared the remedial test he/she is eligible to get 15 marks out of 30.

**Signature of the faculty members:**

**Signature of the HOD**