

SSEC/Elect./2021/180  
Date - 15/7/2021

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

**ODD TERM 2021-22 COURSE COORDINATOR LIST**

Sr No	Sem	Subject Name	Name of faculty – course coordinator
1.	BE1	Basic Electrical Engineering (3110005)	PROF M V GOJIYA
2.	BE3	Indian Constitution (3130007)	PROF J B SARVAIYA
3.		Control System Theory(3130905)	PROF B N VAIDYA
4.		Electrical Circuit Analysis(3130906)	PROF A K DHANDHIA
5.		Analog & Digital Electronics(3130907)	PROF T B MANIAR
6.		Design Engg IA	PROF M U GHANCHI
7.		Design Engg - II A (3150001)	PROF A A RATHOD
8.	BE 5	Contributor Personality Development Prog(3150004)	PROF A B PARMAR
9.		Professional Ethics(3150709)	PROF M K BHATT
10.		Electrical Machine- II(3150910)	PROF G N SARVAIYA
11.		Power System- II(3150911)	PROF A M UPADHYAY
12.		Signals and Systems( 3150912)	PROF M U GHANCHI
13.	BE7	Summer Internship (3170001)	PROF M K BHATT
14.		Switchgear And Protection(Core-3170908)	PROF A B PARMAR
15.		AC Machine Design (PRE III- 3170909)	PROF G N SARVAIYA
16.		High Voltage Engg (PRE IV-3170917)	PROF M V GOJIYA
17.		Power System Operation & Con (PRE V-317919)	PROF V B PANDYA
18.		Smart Grids (PRE VI- 170922)	PROF M D SOLANKI
19.		Industrial Automation (Open EI-3170925)	PROF A A RATHOD
20.	ME1	Power System Analysis (3710711) (Core)	PROF V B PANDYA
21.		Power Electronics Converters & Appl (3710713) (Core)	PROF M D SOLANKI
22.		Renew. Energy Systems (3710715) (Progr Elective 1)	PROF M V GOJIYA
23.		AI Techniques (3710721) (Progr Elective 2)	PROF J B SARVAIYA
24.	ME3	Internal Review 1 (3730002)	PROF J B SARVAIYA
25.		Waste to Energy (3730009) (Open Elective)	PROF M K BHATT
26.		Power System Transients (3730712) (Programme Elective)	PROF A K DHANDHIA

**Prof. & Head (EED)**

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

**Name of the subject (code):** Basic Electrical Engineering (3110005)

**Semester/Branch:** B.E. 2<sup>nd</sup> Semester (UG), Electrical Engineering

**Name of Concerned Department:** Electrical

**Name of faculty members:**

(i) Prof M V Gojiya (Course Coordinator) (ii) Prof M U Ghanchi (iii) Prof. A A Rathod

→ **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	04	70	30	00	30	00	20	150


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

Marks	PAT
CO1	07
CO2	13
CO3	10
CO4	-
CO5	-

Assessment Type	Attainment Levels	
	Internal Assessment	<b>Level 1</b>
<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, for all the students it is mandatory to pass PAT/RPAT exam. 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 even though the student has obtained marks more than 12 in RPAT.

Signature of the faculty members:

(i) Prof. M V Gojiya 

(ii) Prof. M U Ghanchi 

(iii) Prof. A A Rathod 

  
 Prof & HOD (Electrical)

**Shantilal 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  
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

→ 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

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

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	75% 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 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.

Signature of the faculty members:

  
B.N.Vaidya



Prof & HOD (Electrical)

**Shantilal 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 A K Dhandhia (ii) Prof V B Pandya

→ **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	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	EXP5	EXP6	EXP7	EXP8	EXP9	EXP10	EXP11	EXP12
CO1	3	2	2	3	3							
CO2												
CO3										3	3	3
CO4												
CO5						2	2	2	2			

Assessment Type	Attainment Levels	
	Internal Assessment	<b>Level 1</b>
<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 work and having completed and submitted the remedial work, he/she is eligible to get 12 marks.

Signature of the faculty members:

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

  
 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. M U Ghanchi  
 (course coordinator)

**Division/Batch** : Electrical/All  
**Subject Code** : 3130008  
**Academic Year** : 2021-22

**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 - Given by Internal Guide)**

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.

- Design Engineering 1 A Viva-Voce examination will be taken by laboratory faculty members.

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	CO3
TOTAL		80	

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

Signature of the Subject Faculty:

(i)   
Prof. M U Ghanchi  
(Course coordinator)



Prof & HOD (Electrical)



**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 remedial test and having cleared the remedial test.

*Maniar*  
(T. B. Maniar)

**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. J B Sarvaiya  
 (ii) Prof. A K Dhandhiya  
 (iii) Prof. A A Rathod  
 (Course coordinator)  
 (iv) Prof. M K Bhatt

**Division/Batch** : Electrical/All  
**Subject Code** : 3150001  
**Academic Year** : 2021-22

**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 ✓ Field Activity/observation and outcome ✓ Mind Mapping-Summarization and data analysis ✓ Observation Technique (AEIOU Summary)	20	C01
2.	Log book (Individual completed log book, duly signed by guide regularly)	10	C02
3.	Design Problem Definition ✓ Secondary research/ Prior art search ✓ Diachronic and Synchronic analysis	10	C03
4.	Canvases/Frameworks ✓ AEIOU, Mind Mapping ✓ Empathy mapping ✓ Ideation Canvas ✓ Product development	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	
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:

1. Prof. J B Sarvaiya
2. Prof. A K Dhandhiya
3. Prof. A A Rathod  
(Course coordinator)
4. Prof. M K Bhatt

*(Handwritten signatures of Prof. J B Sarvaiya, Prof. A K Dhandhiya, Prof. A A Rathod, and Prof. M K Bhatt)*

*(Handwritten signature)*

Prof & HOD  
(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 B Rathod and Prof M.D. Solanki

→ **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.**

**Assessment  
Type**

**Attainment  
Levels**

Internal  
Assessment

**Level 1**

50% of students scoring more than 50 marks in internal assessment tasks

**Level 2**

70% of students scoring more than 70 marks in internal assessment tasks

**Level 3**

80% of students scoring more than 80 marks in internal assessment tasks

Signature of the Faculty member:

Dr. A. B. Parman  
Faculty of Education



**Shantilal 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:** 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	00	00	100

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

Marks	PAT
CO1	6
CO2	6
CO3	6
CO4	6
CO5	6

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)



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

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

## Course Evaluation Plan

Name of Subject: Power System-II

Subject Code: 3150911

Academic Year: 2021-22

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

Name of Concerned Department :Electrical

Name of Faculty Member(s) :Prof. A. M. Upadhyay/Prof. V. B. Pandya

• 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

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	02	02				
CO-2							02	02	02	02
CO-3										

@ 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

  
( A. M. Upadhyay )  
Name and Signature of Faculty

  
Prof. & Head

# SHANTILAL SHAH ENGINEERING COLLEGE, BHAVNAGAR.

ELECTRICAL ENGINEERING DEPARTMENT

ME SEM. II (ELECTRICAL)

PROGRESSIVE/INTERNAL EVALUATION SCHEME FOR ACADEMIC YEAR 2020-21

**SUBJECT: (3720727) MODELLING AND ANALYSIS OF ELECTRICAL MACHINES**

COMPONENT (TOTAL MARKS)	EVALUATION METHOD	MARKS
Progressive Assessment (M) (30 marks)	Mid-Semester Theory Exam	30
Practical (30 marks)	End Semester Exam/Viva	30
Progressive Assessment (Internal) (20 Marks)	Attendance and Regularity Term Work	10 10



Prof. A. M. Upadhyay



HOD



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. Maqbul U. Ghanchi  
(course co-ordinator)



Prof & HOD (Electrical)

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

**Name of the subject (code):** Summer Internship(3170001)  
**Semester/Branch:** B.E. 7<sup>th</sup> Semester, Electrical Engineering  
**Name of Concerned Department:** Electrical  
**Name of faculty member:** M K Bhatt

**GTU Scheme for the subject:**

Teaching Scheme	Credits	Examination Marks			Total Marks			
		Theory Marks	Practical Marks	PA Marks				
L	T	P	C	ESE (E)	PA (M)	ESE Viva (V)	PA (I)	100
00	00	00	02	00	00	80	20	

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

Particulars	Marks
Report	5
Presentation	5
Relevance	5
Viva	5
<b>Total</b>	<b>20</b>

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

Signature of the faculty members:

(i) Prof M K Bhatt 



Prof & HOD (Electrical)

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

Name of the subject: Switch Gear and Protection  
 Subject Code: 3170908

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	
		Theory Marks	Practical Marks	PA (M)	ESE Viva (V)	PA (I)		
T	P	C	ESE (E)	PA (M)	ESE Viva (V)	PA (I)		
01	00	02	05	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	3	4	5	6	7	8	9		
CO2	2					2				
CO3	2									
CO4		2	2							
CO5									2	2

Assessment Type	Attainment Levels		
	Level 1	Level 2 :-	Level 3
	Internal Assessment	60% of students scoring more than 50% marks in internal assessment tools	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 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 Valuation Scheme (Internal)**

**Branch** : Electrical Engineering  
**Semester** : 7<sup>th</sup>  
**Subject** : AC Machine Design  
**Faculty** : Prof. B. N. Vaidya  
 Prof. A. B. Parmar  
 Prof. G. N. Sarvaiya  
**Term Start** : 21/06/2021

**Division/Batch** : Electrical/AI  
 1  
**Subject Code** : 3170909  
**Academic Year** : 2021-22  
**Term End** : 12/10/2021  
 (Tentative)

**Teaching and Examination Scheme:**

Teaching Scheme	Credits	Examination Marks			Total Marks			
		Theory Marks	Practical Marks					
L	T	P	C	ESE(I)	PA(M)	ESE(V)	PA(II)	
3	0	2	4	70	30	30	20	150

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

PAT will be conducted during semester. Distribution of marks nearly will be as per below

Marks	PA(M)
CO1	06
CO2	15
CO3	09
CO4	

**Note:** In PA(M) component, for all the students it is mandatory to obtain at least 12 marks in PAT. If the student obtains less than 12 marks in PAT, he/she is supposed to appear for a remedial work. After satisfactory work in remedial work he/she is eligible to get 12 marks even though the student has obtained marks more than 12 in remedial work.

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

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

Marks-->	Practical							
	0	0	0	0	0	0	0	0
CO1	1	2	3	4	5	6	7	8
CO2				4		2		2
CO3					2		2	
CO4					2		2	





# Shantilal Shah Engineering College, Bhavnagar

## Electrical Engineering Department

### Subject Evaluation Scheme

Name of the subject (code): High Voltage Engineering (3170917)  
 Semester/Branch: B.E. 7<sup>th</sup> Semester (UG), Electrical Engineering (3170917)  
 Name of Concerned Department: Electrical Engineering  
 Name of faculty members: (i) Prof M V Gojiya (ii) Prof (Dr.) Ketan P Badgujar

→ GTU Scheme for the subject: (i) Prof M V Gojiya (ii) Prof (Dr.) Ketan P Badgujar

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

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

Marks	PAT	Assignment 1	Laboratory
CO1	3	2	10
CO2	11	2	-
CO3	-	2	50
CO4	6	4	40
CO5	-	-	10

Assessment Type	Attainment Levels		
	Level 1	Level 2	Level 3
Internal Assessment	Level 1	60% of students scoring more than 50% marks in internal assessment tools	70% 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	80% 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, for all the students it is mandatory to pass PAT/RPAT exam. 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 even though the student has obtained marks more than 8 in RPAT. 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 PAT or RPAT (out of 20) whichever the case is and (ii) those of assignment.

Signature of the faculty members:

(i) Prof. M V Gojiya  (ii) Prof (Dr.) Ketan P Badgujar  Badgujar

Prof & HOD  
(Electrical) 

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

**Name of the subject:** Power System Operation and Control  
**Subject Code:** 3170919

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

**Name of Concerned Department:** Electrical

**Name of faculty member:** V B Pandya

**Academic Year:** 2021-22

▪ **GTU Scheme for the subject:**

Teaching Scheme			Credits	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
				ESE (E)	PA(M)	PA(V)	PA(I)	
3	0	0	4	70	30	0	0	100

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

Course Outcomes	30 Marks distribution			
	PAT	Quiz-1	Quiz-2	Quiz-3
CO1	5	--	--	--
CO2	--	5	--	--
CO3	10	--	--	--
CO4	--	--	5	--
CO5	--	--	--	5
<b>Total marks</b>	<b>15</b>	<b>5</b>	<b>5</b>	<b>5</b>

▪ **NOTE**

1. Question paper of Progressive Assessment Test (PAT) will be of total 30 marks and marks obtained by the students out of 30 will be converted into marks out of 15. The students who will be getting **less than 12 marks out of 30** will have to appear for remedial test.
2. There will be three quizzes each of 5 marks. The quizzes will be conducted online and contain (i) multiple choice type (ii) fill in the blank type (iii) answer in brief statement etc. questions/statements.
3. Total marks obtained by the students in PA (M) components of 30 marks will be sum of marks obtained in PAT and three quizzes as defined in above points 1. and 2.

▪ **CO Attainment Details**

Assessment Type	Attainment Levels and details	
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



Signature of the faculty



Signature of the HOD

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

Name of the subject:

Semester/Branch:

Name of Concerned Department:

Name of faculty member/s:

Smart Grid  
 7<sup>th</sup> Electrical  
 Electrical  
 Prof. M. D. Solanki

Subject Code: 3170922

**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	00	00	03	70	30	00	00	100

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

Marks	PAT	Assignment 1	Assignment 2
CO1	12		
CO2	8		
CO3		5	
CO4			5

Attainment Levels	
<b>Level 1</b>	50% of students scoring more than 50% marks in assessment tools
<b>Level 2</b>	60% of students scoring more than 50% marks in assessment tools
<b>Level 3</b>	70% of students scoring more than 50% marks in 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 members:

*M. D. Solanki*

Prof. M. D. Solanki

*KPS*

Prof & HOD (Electrical)

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

**Name of the subject (code):** Industrial Automation (3170925)  
**Semester/Branch:** B.E. 7<sup>th</sup> Semester (UG), Electrical Engineering  
**Name of Concerned Department:** Electrical Engg. (Open electives subject)  
**Name of faculty member/s:** (i) Prof A A Rathod

→ **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)	
2	0	2	3	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 Lab Manual to be submitted by the student at the end of SEM. In this Lab Manual student has to perform task in a group/individual and total max. Mark is 20.

Marks	Lab Manual 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.**

  
 (A.A. Rathod)

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

Signature of the faculty members:

(i) Prof. A A Rathod



Prof & HOD  
(Electrical)

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

Name of the subject (code): POWER SYSTEM ANALYSIS (3710711)  
 semester/Branch: M.E. 1<sup>st</sup> Semester, Electrical Engineering  
 Name of Concerned Department: Electrical Engineering  
 Name of faculty member/s: Prof V B Pandya

→ GTU Scheme for the subject:

Teaching Scheme	Credits	Examination Marks				Total Marks		
		Theory Marks		Practical Marks				
L	T	P	C	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	5		
CO2			
CO3	7	5	
CO4	8		
CO5			5

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

Marks	EXP1	EXP2	EXP3	EXP4	EXP 5	EXP 6	EXP 7	EXP 8	EXP 9	EXP 10	EXP11	EXP12
CO1	1	1	1						1			
CO2			2								2	2
CO3											2	
CO4					2	2	2	2				
CO5												

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 assignment work and having completed and submitted the remedial assignment work, he/she is eligible to get 12 marks.

Signature of the faculty member:

  
 Prof V B Pandya

Prof & HOD (Electrical)



Shantilal Shah Engineering College, Bhavnagar

Electrical Engineering Department

Subject Evaluation Scheme (Internal)

Name of the subject: Power Electronics Converters and Applications Subject Code: 2710713

Semester/Branch: M.E. 1<sup>st</sup> Electrical

Name of Concerned Department: Electrical

Name of faculty member/s: M. D. Solanki

GTU Scheme for the subject:

Teaching Scheme			Credits	Examination Marks				Total Marks
L	T	P		Theory Marks		Practical Marks		
			ESE (E)	PA(M)	PA(V)	PA(I)		
03	00	02	04	70	30	30	20	150

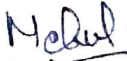
PA(M) Component Evaluation Scheme:

Subject Name	Midsem
P.E.C. & A.	30

In 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 only.

PA(I) Component Evaluation Scheme:

Regularity and Simulation	10 Marks
Performance of the student in class and Lab.	10 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): Renewable Energy System (3710715)  
 Semester/Branch: ~~B.T.E.~~ 1<sup>st</sup> Semester (PG), Electrical Engineering  
 Name of Concerned Department: Electrical

Name of faculty members: (i) Prof M V Gojiya      (ii) Prof (Dr.) Ketan P Badgujar

→ **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	00	02	03	70	30	30	20	150

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

Marks	PAT	Assignment 1	Laboratory
CO1	4		
CO2	8		
CO3	8	10	
CO4			10
CO5			10


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 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 are 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 Gojiya

  
 (ii) Prof (Dr.) Ketan P Badgujar

  
 Prof & HOD (Electrical)



Shantilal Shah Engineering College, Bhavnagar

Electrical Engineering Department

Subject Evaluation Scheme (Internal)

Name of the subject: AI TECHNIQUE

Semester/Branch: ME 1<sup>st</sup> sem.

Subject Code: 3710721

Name of Concerned Department: Electrical

Name of faculty member/s: 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)	PA(V)	PA(I)		
03	00	02	04	70	30	30	20	150

PA(M) Component Evaluation Scheme:

વિષયનું નામ	મીડ સેમ
Interconnected Power System	30

આમાં મીડ કોમ્પોનેન્ટ માં જો વિદ્યાર્થી ગેરહાજર રહે અથવા ફેઇલ થાય તો તેની અનુગામી મૂલ્યાંકન પદ્ધતિ તરીકે રેમેડીઅલ ટેસ્ટની તક આપવામાં આવશે.

PA(I) Component Evaluation Scheme:

હાજરી તથા નિયમીતતા	10 (માર્ક્સ)
સત્ર દરીમિયન વર્ગખંડ અને લેબ માં વિદ્યાર્થી નું પર્ફોર્મન્સ	10 (માર્ક્સ)

Signature of the faculty

Signature of the HOD

**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) PROF M.K. BHATT (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)		
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.

PA: 30 marks	
Marks	PAT
CO1	5
CO2	10
CO3	10
CO4	5

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, there will be 30 marks exam. If the student obtains less than 15 marks out of 30, subsequently he/she can appear for a remedial test and having cleared the remedial test he/she is eligible to get 15 marks out of 30.

(i)   
 (ii)   
 Signature of the faculty members:

  
 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) Dr. Astik Dhandhia (ii) Prof (Dr.) Ketan P Badgujar

→ **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	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	
	Internal Assessment	<b>Level 1</b>
<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:

  
 Dr. Astik Dhandhia

  
 (ii) Prof (Dr.) Ketan P Badgujar

  
 Prof & HOD (Electrical)