

Department of Electrical & Electronics Engineering



Annual Report
2017-18

**SWAMI VIVEKANANDA INSTITUTE OF SCIENCE &
TEHCNOLOGY**

PREAMBLE

The Department of *Electrical & Electronics Engineering* of **Swami Vivekananda Institute of Science & Technology, Sonarpur** has started its glorious journey in the year 2008. The newly built department has the exposure in focusing the students' need in imparting excellence and need based technical education for building up prospective career of the students.

The department has the mission to build up the students' need with beautiful ambience, highly qualified faculty, a modern high-tech laboratory, and well stocked books on Electrical & Electronics Engineering subjects in the library and set up a placement cell keeping in view of the career opportunity of the students coming out in the year 2017.

On this year remarkable interest in higher studies, attending the conferences and seminars, paper publications etc. have been observed among the faculty members.

Availability of faculty in context to related subjects is always scarce; however one new faculty has already joined and further action has already been initiated to recruit faculties as needed.

In modernization programme, two new laboratories have been organized consisting of Solar Energy Laboratory and Internet of Thing Laboratory. Department also acquired modern instruments, like Programmable Logic Controller of Allan Bradley.

On this year, a noticeable improvement in students' attendance is observed. Many students of 2nd year and 3rd year have achieved more than 90% attendance. Students' performance in semester examinations is also on the higher side.

One of our students has secured a score of 267 in GATE.

In regard to future placement, all students of 4th year are doing training programmes at various Companies. It is expected that reputed companies would come for campus recruitment in due course, expecting better achievements during the ensuing years to come.

**Institution Name: Swami Vivekananda Institute of Science
Technology**

1.0 NAME OF THE DEPARTMENT: ELECTRICAL & ELECTRONICS ENGINEERING

2.0 YEAR OF STARTING OF THE PROGRAMME: 2008

3.0 AICTE APPROVAL DETAILS OF THE DEPARTMENT:

- (a) Date of first approval by AICTE with reference number (for 60 seats)
Ref.date ...
- (b) Date of approval by AICTE for current academic year with reference number
Ref. Eastern/1-3509288673/2018/EOA dated 04-08-2018
- (c) Approval by West Bengal University of Technology for the current academic year with reference number
Ref. 241/B.TECH/Affiliation/2017-18 dated 15-05- 2017

4.0 PROGRAMME DETAILS: *B-Tech In Electrical & Electronics Engineering*

(a) *Nature of Programme: Full time*

(b) *Duration: 4 years*

(c) *Sanction Intake: 60*

(d) *Year wise students:*

B. Tech (2017-18)	1 st Year	2 nd Year	3 rd Year	4 th Year
No of students	39	57	64	38

❖ Lateral entry – 20% in 3rd Semester

5.0 COURSE STRUCTURE:

(As per Affiliating University):

List of Subjects

Sl. No.	Subject Code	Subject
First Semester:		
1	HU101	English Language & Technical Communication
2	CH101	Chemistry – 1
3	M101	Mathematics-1
4	ES101	Basic Electrical & Electronics Engineering – 1
5	ME101	Engg. Mechanics
6	CH191	Chemistry – 1 Laboratory
7	ES191	Basic Electrical & Electronics Engineering-1 Laboratory
8	ME191	Basic Engg Drawing & Computer Graphics
9	HU181	Language Laboratory
10	XC181	Extra Curricular Activities(NSS/NCC/NSO etc)
Second Semester:		
11	CS201	Basic Computation & Principles of Computer Programming
12	PH201	Physics-1
13	M201	Mathematics-2

14	ES201	Basic Electrical & Electronic Engineering-II
15	ME201	Engineering Thermodynamics & Fluid Mechanics
16	CS291	Basic Computation & Principles of Computer Programming Laboratory
17	PH291	Physics-1 Laboratory
18	ES291	Basic Electrical & Electronic Engineering- II Laboratory
19	ME292	Workshop Practice
Third Semester:		
20	M (CS) 301	Numerical Methods
21	M302	Mathematics-III
22	EC(EE)301	Analog Electronic circuits
23	EC(EE)302	Digital Electronic circuit
24	EE-301	Electric Circuit theory
25	EE-302	Field theory
26	EC(EE)391	Analog & Digital Electronic circuit Laboratory
27	M (CS)391	Numerical Methods Laboratory
28	EE-391	Electric Circuit Theory Laboratory
29	HU-391	Technical report writing and language practice
Fourth Semester:		
30	HU-401	Values and Ethics in Profession
31	PH (EE)-401	Physics-II
32	EI(EEE)-401	Transducers & sensors
33	CH-401	Basic Environmental Engineering & Elementary Biology
34	EE-401	Electric Machine-I
35	EE-402	Electrical & Electronic Measurement
36	PH(EE)-491	Physics-II Laboratory
37	EI(EEE)-491	Transducers & sensors Laboratory
38	EE-491	Electric Machine -I Laboratory
39	EE-492	Electrical & Electronic Measurement Laboratory

Fifth Semester:		
40	HU-501	Economics for Engineers
41	EEE-501	Electric machine-II
42	EEE-502	Power system-I
43	EEE-503	Digital Signal Processing
44	EEE-504	Elective I
45	EEE-591	Electric machine-II Laboratory
46	EEE-593	Digital Signal Processing Laboratory
47	EEE-594	Elective I Laboratory
48	EEE-581	Seminar
Sixth Semester		
49	HU-601	Principles of Management
50	EEE-601	Power System-II
51	EEE-602	Control System
52	EEE-603	Power Electronics
53	EEE-604	Elective II
54	EEE-605	Elective III
55	EEE-691	Power System Laboratory
56	EEE-692	Control System Laboratory
57	EEE-693	Power Electronics Laboratory
58	EEE-694	Elective II Laboratory
Seventh Semester		
59	EEE-701	VLSI design
60	EEE-702	Digital Communication and network
61	EEE-703	Elective IV
62	EEE-704	Elective V
63	EEE-705	Elective VI
64	EEE-791	VLSI design Laboratory
65	EEE-792	Digital Communication & Network Laboratory
66	EEE-793	Elective VI Laboratory
67	EEE-781	Electrical and Electronic System Design I
68	EEE-782	Seminar on Industrial Training
69	EEE-795	Project Part I

Eighth Semester		
70	HU801A	Organizational Behavior / Project Management
71	EEE-801	Elective VII
72	EEE-802	Elective VIII
73	EEE-882	Electrical Systems Design Laboratory-II
74	EEE-881	Project Part II
75	EEE-883	Grand Viva

6.0 COURSE STRUCTURE:

List of Subjects

First Semester:

Theory		Contacts hours per week				Credit Point	Marks					
Code	Subject	L	T	P	Total		UT1/UT2	Assignment	Attendance	Total Internal	Total External	TOTAL
HU101	English Language & Technical Communication	2	0	0	2	2	15	10	5	30	70	100
CH101	Chemistry	3	1	0	4	4	15	10	5	30	70	100
M101	Mathematics-1	3	1	0	4	4	15	10	5	30	70	100
ES101	Basic Electrical & Electronics Engineering – 1	3	1	0	4	4	15	10	5	30	70	100
ME101	ENGG. MECHANICS	3	1	0	4	4	15	10	5	30	70	100
Total Theory					18	18						
Practical		Contacts hours per week				Credit Point	Marks					
Code	Subject	L	T	P	Total				Total Internal	Total External	TOTAL	
CH191	Chemistry	0	0	3	3	3			40	60	100	
ES191	Basic Electronic Engineering	0	0	3	3	3			40	60	100	
ME191	Basic Engg Drawing & Computer Graphics	1	0	3	4	3			40	60	100	
Total Practical					10	10						
SESSIONAL		Contacts hours per week				Credit Point	Marks					
		L	T	P	Total				Total Internal	Total External	TOTAL	
HU181	Language Laboratory	0	0	2	2	2			40	60	100	
XC181	Extra Curricular Activities (NCC/NSS/NSO etc)	0	0	2	2	2			40	60	100	
Total of Sessional					4	4						
Total of Semester					32	32						

List of Subjects**Second Semester:**

Theory		Contacts periods per week				Credit Point	Marks					
Code	Subject	L	T	P	Total		UT1 / UT2	Assignment	Attendance	Total Internal	Total External	TOTAL
CS 201	Basic Computation & Principles Of Computer Programming	3	1	0	4	4	15	10	5	30	70	100
PH201	Physics-1	3	1	0	4	4	15	10	5	30	70	100
M201	Mathematics-2	3	1	0	4	4	15	10	5	30	70	100
ES201	Basic Electrical & Electronic Engineering-II	3	1	0	4	4	15	10	5	30	70	100
ME201	Engineering Thermodynamics & Fluid Mechanics	3	1	0	4	3	15	10	5	30	70	100
Total Theory					20	20						
Practical		Contacts periods per week				Credit Point	Marks					
Code	Subject	L	T	P	Total		Total Internal		Total External		TOTAL	
CS291	Basic Computation & Principles Of Computer Programming	0	0	2	3	3	40		60		100	
PH291	Physics	0	0	3	3	3	40		60		100	
ES291	Basic Electrical Engineering	0	0	2	3	3	40		60		100	
ME292	Workshop Practice	1	0	3	4	4	40		60		100	
Total Practical		0	0		10	6						
Total Semester					28	21						

List of Subjects

Third Semester:

Theory		Contacts periods per week				Credit Point	Marks					
Code	Subject	L	T	P	Total		UT1 / UT2	Assignment	Attendance	Total Internal	Total External	TOTAL
M (CS) 301	Numerical Methods	2	1	0	3	2	15	10	5	30	70	100
M302	Mathematics-III	3	1	0	4	4	15	10	5	30	70	100
EC(EE) 301	Analog Electronic circuits	3	0	0	3	3	15	10	5	30	70	100
EC(EE) 302	Digital Electronic circuit	3	0	0	3	3	15	10	5	30	70	100
EE-301	Electric Circuit theory	3	1	0	4	4	15	10	5	30	70	100
EE-302	Field theory	3	1	0	4	4	15	10	5	30	70	100
Total Theory					20	20						
Practical		Contacts periods per week				Credit Point	Marks					
Code	Subject	L	T	P	Total		Total Internal		Total External		TOTAL	
EC(EE) 391	Analog & Digital Electronic circuit	0	0	3	3	2	40		60		100	
M(CS) 391	Numerical Methods	0	0	2	2	1	40		60		100	
EE-391	Electric Circuit Theory	0	0	3	3	2	40		60		100	
HU-391	Technical report writing and language practice	0	0	3	3	2	40		60		100	
Total Practical					11	7						
Total Semester					31	27						

List of Subjects

Fourth Semester:

Theory		Contacts hours per week				Credit Point	Marks					
Code	Subject	L	T	P	Total		UT 1/UT 2	Assignment	Attendance	Total Internal	Total External	TOTAL
HU-401	Values and Ethics in Profession	3	0	0	3	3	15	10	5	30	70	100
PH (EE)-401	Physics-II	3	0	0	4	4	15	10	5	30	70	100
EI(EEE)-401	Transducers & sensors	3	0	0	3	3	15	10	5	30	70	100
CH-401	Basic Environmental Engineering & Elementary Biology	3	0	0	3	3	15	10	5	30	70	100
EE-401	Electric Machine-I	3	1	0	4	4	15	10	5	30	70	100
EE-402	Electrical & Electronic measurement	3	1	0	4	3	15	10	5	30	70	100
Total Theory					21	20						
Practical		Contacts hours per week				Credit Point	Marks					
Code	Subject	L	T	P	Total		Total Internal	Total External	TOTAL			
PH(EE) 491	Physics-II Lab	0	0	3	3	2	40	60	100			
EI(EEE)-491	Transducers & sensors Lab	0	0	3	3	2	40	60	100			
EE-491	Electric Machine Lab-I	0	0	3	3	2	40	60	100			
EE-492	Electrical & Electronic measurement Lab	0	0	3	3	2	40	60	100			
Total Practical					12	8						
Total Semester					33	28						

List of Subjects

Fifth Semester:

Theory		Contacts hours per week				Credit Point	Marks					
Code	Subject	L	T	P	Total		UT1 / UT2	Assignment	Attendance	Total Internal	Total External	TOTAL
HU-501	Economics for Engineers	3	0	0	3	3	15	10	5	30	70	100
EEE-501	Electric machine-II	3	1	0	4	4	15	10	5	30	70	100
EEE-502	Power system-I	3	1	0	4	4	15	10	5	30	70	100
EEE-503	Digital Signal Processing	3	1	0	4	4	15	10	5	30	70	100
EEE-504	Elective I	3	0	0	3	3	15	10	5	30	70	100
	A) Data structure & algorithm											
	B) Computer Organization											
	C) Micro-processor & Microcontroller											
Total Theory					18	18						
Practical		Contacts hours per week				Credit Point						
	Subject	L	T	P	Total		Total Internal		Total External		TOTAL	
EEE-591	Electric machine-II	0	0	3	3	2	40		60		100	
EEE-593	Digital Signal Processing	0	0	3	3	2	40		60		100	
EEE-594	Elective I Laboratory	0	0	3	3	2	40	60	100			
	A) Data structure & algorithm											
	B) Computer Organization											
	C) Micro-processor & Microcontroller											
EEE-581	Seminar	0	0	3	3	2	40		60		100	
Total Practical					12	8						
Total Semester					30	26						

List of Subjects

Sixth Semester:

Theory		Contacts hours per week				Credit Point	Marks					
Code	Subject	L	T	P	Total		UT1 / UT2	Assignment	Attendance	Total Internal	Total External	TOTAL
HU-601	Principle of Management	2	0	0	2	2	15	10	5	30	70	100
EEE-601	Power System-II	3	1	0	4	4	15	10	5	30	70	100
EEE-602	Control System	3	1	0	4	4	15	10	5	30	70	100
EEE-603	Power Electronics	3	1	0	4	4	15	10	5	30	70	100
EEE-604	Elective – II	3	0	0	3	3	15	10	5	30	70	100
	a. Operating System											
	b. Object Oriented Programming & JAVA											
	c. Embedded Systems.											
EEE-604	Elective III	3	0	0	3	3	15	10	5	30	70	100
	a. Power Plant Engineering											
	b. Communication Engineering											
Total Theory					20	20						
Practical		Contacts hours per week				Credit Point	Marks					
Code	Subject	L	T	P	Total		Total Internal		Total External		TOTAL	
CE691	Transportation And Highway Engineering Lab	0	0	3	3	2	40		60		100	
CE692	Structural design /Drawing-II	0	0	3	3	2	40		60		100	
CE693	Computer programming in Civil Engineering	0	0	3	3	2	40		60		100	
CE694	Soil Mechanics Lab-II	0	0	3	3	2	40		60		100	
Total Practical					12	8						
Total Semester					32	28						

List of Subjects

Seventh Semester:

Theory		Contacts hours per week				Credit Point	Marks					
Cod e	Subject	L	T	P	Total		UT1 / UT2	Assi gnment	Attendance	Total Internal	Total External	TOTAL
EEE -701	VLSI design	3	1	0	4	4	15	10	5	30	70	100
EEE -702	Digital Communication and network	3	1	0	4	4	15	10	5	30	70	100
EEE -703	Elective-IV	3	0	0	3	3	15	10	5	30	70	100
	A. Electric Drive											
	B. Utilization of Electric Power											
	C. Power Plant Instrumentation & Control											
EEE -704	Elective-V	3	0	0	3	3	15	10	5	30	70	100
	A. Digital Image processing											
	B. Bio medical instrumentation											
	C. Non conventional Energy											
EEE -705	Elective-VI	3	0	0	3	3	15	10	5	30	70	100
	A. Operating system											
	B. Embedded system											
	C. AI & Soft computing											
Total Theory					17	17						
Practical		Contacts hours per week				Credit Point	Marks					
Cod e	Subject	L	T	P	Total		Total Internal		Total External		TOTAL	
EEE -791	VLSI design	0	0	3	3	2	40		60		100	
EEE -792	Digital Communication & Network	0	0	3	3	2	40		60		100	
EEE -793	Elective-VI Lab	0	0	3	3	2	40		60		100	
	A. Operating system											
	B. Embedded system											
	C. AI & Soft computing											
EEE -781	Electrical & Electronics Systems Lab-I	0	0	3	3	2	40		60		100	

EEE-782	Seminar on industrial training.	0	0	3	3	2	40	60	100
EEE-795	Project part-I	0	0	3	3	2	40	60	100
Total Practical					18	12			
Total Semester					35	29			

List of Subjects

Eighth Semester:

Theory		Contacts hours per week				Credit Point	Marks					
Code	Subject	L	T	P	Total		U T1 / U T2	Assi gnm ent	Attendance	Total Internal	Total External	TOTAL
HU-801A	Organizational Behaviour	2	0	0	2	2	15	10	5	30	70	100
EEE-801	Elective-VII	3	0	0	3	3	15	10	5	30	70	100
	A. High Voltage Engineering											
	B. Illumination Engineering											
	C. Energy management & Audit											
	D. FACTS & HVDC transmission											
CE803	Professional Elective-IV	3	0	0	3	3	15	10	5	30	70	100
	A. Software Engineering											
	B. Operation Research											
	C. DBMS											
Total Theory					8	8						
Practical		Contacts hours per week				Credit Point	Marks					
Code	Subject	L	T	P	Total		Total Internal			Total External	TOTAL	
EEE-881	Project work-II	0	0	12	12	6	40			60	100	
EEE-882	Electrical Systems Lab -II	0	0	6	6	4	40			60	100	
EEE-883	Grand viva	0	0	0	0	3	40			60	100	
Total Practical					18	13						
Total Semester					26	21						

FACULTY PROFILE:

Sl. No.	Name	Qualification	Date of Birth	Designation	Date of joining
1	Dr. Arindam Mondal	B.Sc., B.Tech, M.Tech, PhD	12/10/1980	Associate Professor & HOD	12-02-2010
2	Mr. Samrat Paul	B.Tech, M.E	06/09/1981	Assistant Professor	01-08-2012
3	Mr. Bidrohi Bhattachajee	B.E, M.Tech	10/01/1980	Assistant Professor	26-07-2016
4	Mr. Soumik Biswas	B.E, M.Tech	06/11/1987	Assistant Professor	22-07-2017
5	Dr. Krishna Roy	B. Tech, M.E, PhD	01/11/1982	Assistant Professor	13-07-2013
6	Mr. Diptarshi Bhowmick	B. Tech, M.E	26/01/1989	Assistant Professor	16-07-2013
7	Mr. Bedprakash Das	B. Tech, M.Tech	01/02/1990	Assistant Professor	26-07-2016
8	Ms. Pranami Das	B. Tech, M.Tech	29/03/1991	Assistant Professor	22-02-2015
9	Mr. Swagato Das	B.E, M.Tech	20/06/1981	Assistant Professor	16-01-2016
10	Mr. Atanu Kumar Sett	B. Tech, M.Tech	11/06/1987	Assistant Professor	01-08-2017

7.0 TECHNICAL STAFFS:

1. Mr. Ansuman Chakrabarti
2. Mr. Rajat Mukherjee
3. Mr. Subrata Hota
4. Mr. Subhasish Das

8.0 DELEGATION OF RESPONSIBILITY:

Institutional:

- Academic Council – Dr.Arindam Mondal (member)
- Examination Cell – Subrata Hota, Bedprakash Das (member)/ Rajat Mukherjee, Bidrohi Bhattacharjee(Member), Dr. Arindam Mondal(Supervisor)
- Routine Committee – Samrat Paul/Bidrohi Bhattacharjee
- Disciplinary Committee – Dr. Arindam Mondal (member)
- Anti-ragging Committee – Dr. Arindam Mondal, Samrat Paul(Member)
- Sports committee: Bedprakash Das, Subhasish Das(member)

Departmental:

- Research and Development – Bidrohi Bhattacharjee/Samrat Paul /Bedprakash Das
- University Affairs – Dr.Arindam Mondal/Rajat Mukherjee
- Students' Mentorship – Subrata Hota/Anshuman Chakrabarti
- Departmental Library – Soumik Biswas/Subhasish Das

9.0 STUDENTS ACTIVITY

- Student of Electrical & Electronics Engineering Department qualified Gate 2018 with a rank of 267.

10.0 SPACE ALLOCATION

A) Laboratories

1. Basic Electrical Laboratory	-	Room No. A119, 830 ft ²
2. Electrical Machine Laboratory	-	Room No. A110, 1660 ft ²
3. Power system Lab I	-	Room No. A117, 684 ft ²
4. Power system Lab II	-	Room No. A216, 528 ft ²
5. Circuit Theory & Network Laboratory	-	Room No. A204, 630 ft ²
6. Control system Laboratory	-	Room No. A302, 650 ft ²
7. Electrical & Electronics Measurement Laboratory	-	Room No. A304, 630 ft ²
8. Sensors & Transducers Laboratory	-	Room No A326, 540 ft ²
9. Project Laboratory	-	Room No A324, 520 ft ²
10. Power Electronics Laboratory	-	Room No A402, 650 ft ²
11. IOT & Solar Laboratory	-	Room No A307, 486 ft ²

B) Classrooms

1. 1 st year EEE Classroom	-	Room No A405, 600 ft ²
2. 2 nd year EEE Classroom	-	Room No A318, 800 ft ²
3. 3 rd year EEE Classroom	-	Room No A205, 650 ft ²
4. 4 th year EEE Classroom	-	Room No A411, 620 ft ²

C) Others

1. HOD Room	-	Room No A411, 290 ft ²
2. Faculty Room	-	Room No A411, 510 ft ²

11.0 RESOURCES:

11.1 Departmental Library: Books available – 25 nos.

11.2 LABORATORY:

Basic Electrical Engineering Laboratory-I Room No. A 119 (Ground Floor)	1.Characteristics of Fluorescent lamps
	2. Characteristics of Tungsten and Carbon filament lamps
	3. (a) Verification of Thevenin's theorem. (b) Verification of Norton's theorems.
	4. Verification of Maximum power theorem.
	5. Verification of Superposition theorem.
	6. Study of R-L-C Series circuit
	7. Study of R-L-C parallel circuit
Basic Electrical Engineering Laboratory-II Room No. A 119 (Ground Floor)	1. Calibration of ammeter and voltmeter.
	2. Open circuit and Short circuit test of a single phase Transformer.
	3. No load characteristics of D.C shunt Generators.
	4. Starting and reversing of speed of a D.C. shunt motor.
	5. Speed control of DC shunt motor.
	6. Measurement of power in a three phase circuit by two wattmeter method
Electrical Machine Lab I. Room No. A 110 (Ground Floor)	Difference connection of transformer
	Hopkinson test of DC generator
	No load and load test of DC generator
	Swinburne test of a DC motor
	Test on 1 ph. Transformer
	Test on 3 ph. Induction motor
	Test on DC Shunt motor
	Study of the characteristics of a compound DC generator (short shunt).
	Measurement of speed of DC series motor as a function of load torque.
Electrical Machine Lab II. Room No. A 110 (Ground Floor)	Alternator performance
	To determine the direct axis resistance $[X_d]$ & quadrature reactance $[X_q]$ of a 3 phase synchronous machine by slip test
	Test on single phase induction motor
	ZPFC test and potter Reactance determination
	Speed control of 3 phase squirrel cage induction motor by different methods & their comparison [voltage control & frequency control].
	Different methods of starting of a 3 phase Squirrel Cage Induction Motor & their comparison[DOL, Auto transformer &Star-Delta
	Speed control of 3 phase slip ring Induction motor by rotor resistance control
	Load test on wound rotor Induction motor to obtain the performance characteristics.
Power System Lab-I Room No. A117 (Ground Floor)	Study active and reactive power flow coupled with dc motor
	Testing on earth fault relay
	The study on i) on load time delay ii) off load time delay relay
	Polarity ratio & magnetization characteristic test of ct and pt
	Testing on under voltage relay
	Study different characteristic of over current relay
	Earth insulation tester (megger)
	Transformer oil insulation test kit
	Study the circle diagram of
Mi-power hardware lock	
Dsp, Vlsi And Power System-Ii Room No. A219 (1st Floor)	Computer set no 15 (6 no ups) Mi-Power Application Hardware Lock Setup
	Measurement Lab Room No. A304 (2nd
	Instrument workshop-Observe the construction of PMMC, Dynamometer, Electro-thermal & Rectifier type instrument, oscilloscope & Digital multimeter.

Floor)	Calibrate Moving iron & Electrodynamometer type ammeter/voltmeter by Potentiometer.
	Calibrate Dynamometer type wattmeter by Potentiometer.
	Calibration of AC Energy meter.
	Measure the resistivity of material using Kelvin Double Bridge.
	Measurement of power using Instrument Transformer
	Measurement of power in polyphase Circuits.
	Measurement of frequency by Wien bridge using Oscilloscope.
	Measurement of Inductance by Anderson bridge
	Measurement of Capacitance by De Sauty Bridge.
Circuit Theory & Network Laboratory Room No. A204 (1 st Floor)	Cathode Ray Oscilloscope 2nos
	Function Generator 2nos
	Electronics Trainer Board 3nos
	Computer Set 17 Nos. (9 No Ups)
Control System Lab Room No. A302 (2 nd Floor)	Familiarization with Control System toolbox. MATLAB Simulink Toolbox & Pspice.
	Determination of step response for 1 st order & 2 nd order system with unity feedback on CRO & calculation of Control System specification for variation of system design.
	Simulation of step response & impulse response for type 1 & type 2 system with unity feedback using MATLAB & PSPICE.
	Determination of Root locus, Bode plot, Nyquist plot using MATLAB control system toolbox for a given 2 nd order transfer function & determination of different control system specification.
	Determination of PI,PD & PID Controller action on 1 st order simulated process.
	Determination of approximate transfer function experimentally using Bode Plot.
	Evaluation of steady state error, settling time, percentage peak overshoots, gain margin, phase margin with addition of lead compensator in forward path transfer function using MATLAB & PSPICE.
Study of position control system using Servomotor.	
Power Electronics Lab Room No. A402 (3 rd Floor)	Computer Set 10 Nos (6 Nos Ups)
	Kit for Study of V-I Characteristics of SCR
	Kit for Study of V-I Characteristics of TRIAC
	Kit for Study of The Triggering of SCR Using 74121 IC
	Kit for Study of The Triggering of SCR Using UJT
	Kit for Study of Different Rectifier With Resistive Load 3nos.
	Power Supply Unit +12v,-12v,+5v.-5v Dc 3nos.
	Power Supply Unit +35v,-35v,+15v Dc 2nos.
	Analog Ammeter Pmmc Type 8nos.
	Analog Voltmeter Pmmc Type 6nos.
	Digital Ammeter 2nos.
	Digital Voltmeter 3nos.
	Digital Multimeter 5nos.
	Cathode Ray Oscilloscope 2nos.
	Digital Storage Oscilloscope 1 No.
	SCR Based Motor Control Trainer Kit- with DC Motor
	IGBT Based 3-phase V/F Motor Controller Kit- With 3phase Induction Motor
	Kit for Study of DC Chopper Drive- with DC Motor
	Kit for Study of Microcontroller based PWM Inverter using MOSFET Bridge
	Kit for Study of DSP based PWM Inverter using MOSFET Bridge
Digital Tachometer contact type	
Digital Tachometer Laser type	
Sensors & Transducers Laboratory ROOM NO. A326 (2 ND FLOOR)	Kit for study of V-I converter
	Kit for study of I-V Converter
	Kit for study of Pressure & Displacement measurement by LVDT sensor
	Kit for study of speed measurement by proximity sensor
	Kit for study of Strain Gauge Transducer

	Kit for study of Relative Humidity measurement by Capacitive Transducer
	Kit for study of Load cell behavior for tensile & compressive load
	Weight Load (100gm*2+200gm+500gm)
	Kit for study of LDR
	Kit for study of Photo voltaic cell
	Kit for study of Photo Diode
	Kit for study of Temperature sensor using AD590
	SCREWDRIVER SET (TAPARIA)
	PLIER 6”(TAPARIA)
	Digital Multimeter (2 nos.)
	Digital Illumination meter 200-200000
	Temperature sensor with Heater 50°-1300°C
Solar system & IOT Laboratory	Charge Controller 2 Nos. (12V/10AMPS)
	Solar Street Light 2 Nos. (12V/9 Watt &12Watt)
	DC LED tube Light and LED Bulb 1 No. each (12V/5Watt of each)
	DC Fan 1 No. (12V)
	AC Fan 1 No. (12V)
	Solar Battery 2 Nos. (12V/40AH & 75AH)
Project Laboratory ROOM NO. A324 (2ND FLOOR)	Solar Panel 2 Nos. (12V/50Watt & 75 Watt)
	COMPUTER SET Nos. 12
	PLC Trainer Kit
	Digital Multimeter
	Function Generator
	Digital storage Oscilloscope

12.0 FACULTY PARTICIPATIONS:

(a) Participation in parents department

i) External sponsored projects	
ii) Consultancy	
iii) Continuing education	√
iv) Collaboration (industrial/institutional)	
v) Students Projects	√
vi) Students Guidance (M.Tech/PhD)	
vii) Invited lectures (National/International)	√
viii) Professional Society Activities	√
ix) Conferences/seminars/winter/summer schools organized	√
x) Research Publications	√
xi) Text Books/Monographs published	
xii) Patents/ Awards received	√
xiii) Any financial Assistance for projects receivedment	

13.0 FDP/ QIP/ SEMINAR/INVITED TALK ORGANIZED

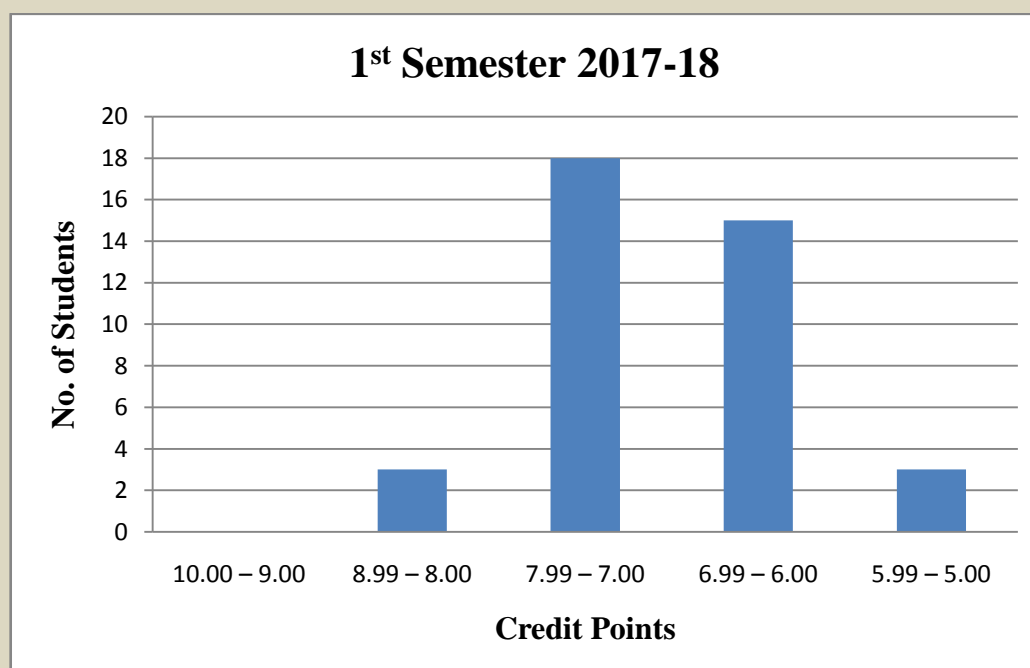
13.1 Invited Talk:

Title of Invited Talk	Convener/ Speakers	Date of Seminars/ Conferences/Workshops/Short Term Courses	No of student attained
Invited Talk On Emerging Trends In Technology	Mr. Bidrohi Bhattacharjee (Convener)/ Mr. Arijit Chakrabarti (Speaker)	9 th September, 2017	43
Invited Talk On New Generation Electrical Motor Drives	Mr. Bidrohi Bhattacharjee (Convener)/ Mr. Sankha Majumder (Speaker)	18 th April, 2018	36

14.0 STUDENTS RESULTS:

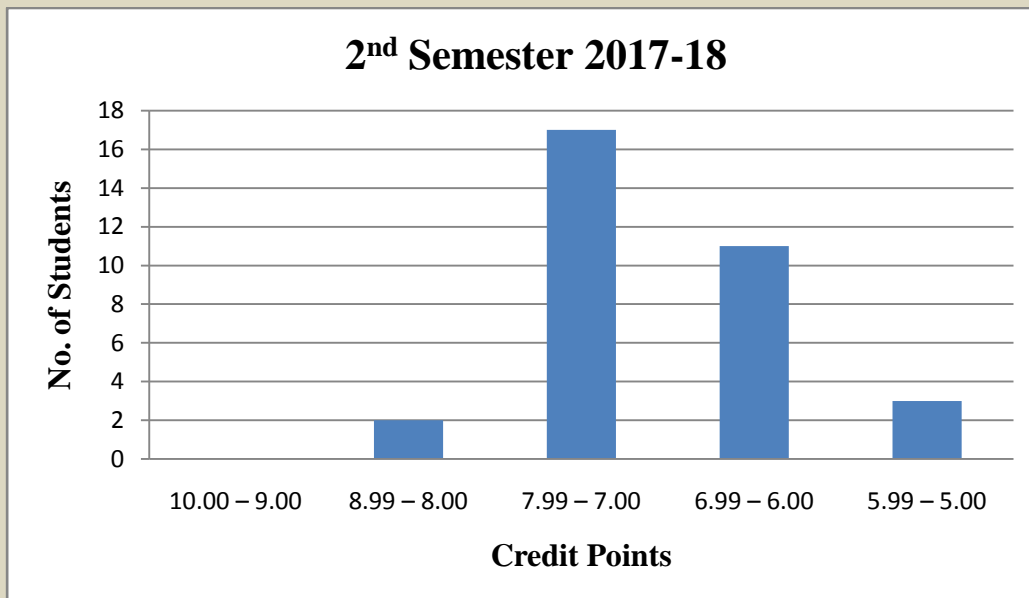
1st SEMESTER

	10.00 – 9.00	8.99 – 8.00	7.99 – 7.00	6.99 – 6.00	5.99 – 5.00
2017-18	0	3	18	15	3



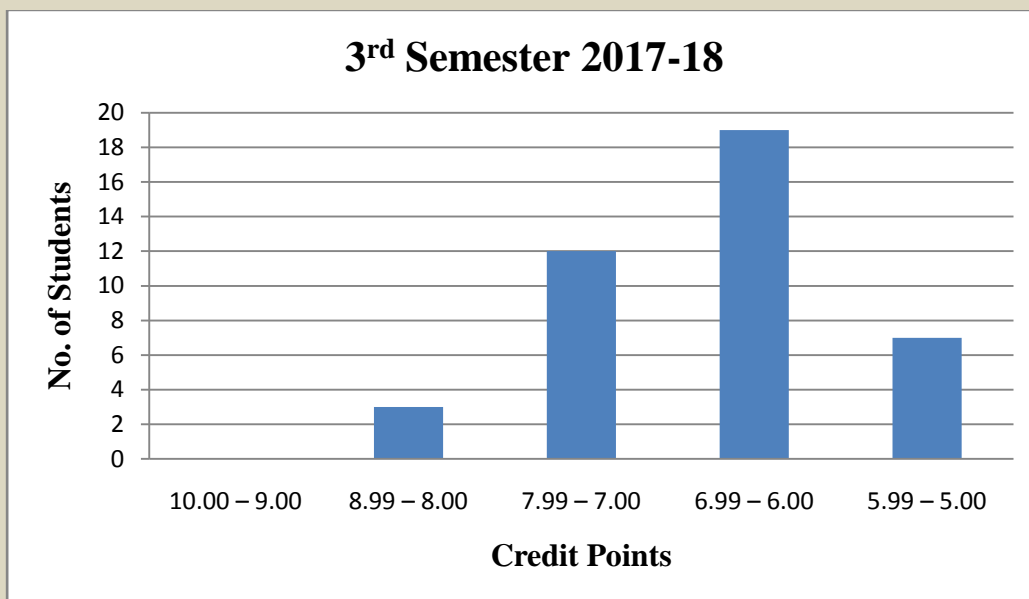
2nd SEMESTER

	10.00 – 9.00	8.99 – 8.00	7.99 – 7.00	6.99 – 6.00	5.99 – 5.00
2017-18	0	2	17	11	7



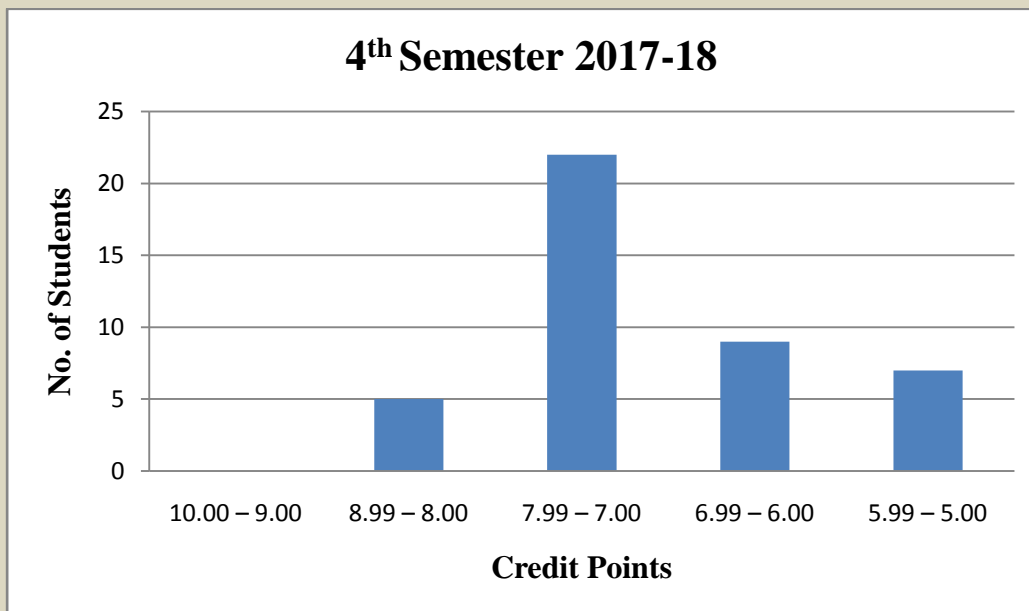
3rd SEMESTER

	10.00 – 9.00	8.99 – 8.00	7.99 – 7.00	6.99 – 6.00	5.99 – 5.00
2017-18	0	3	12	19	7



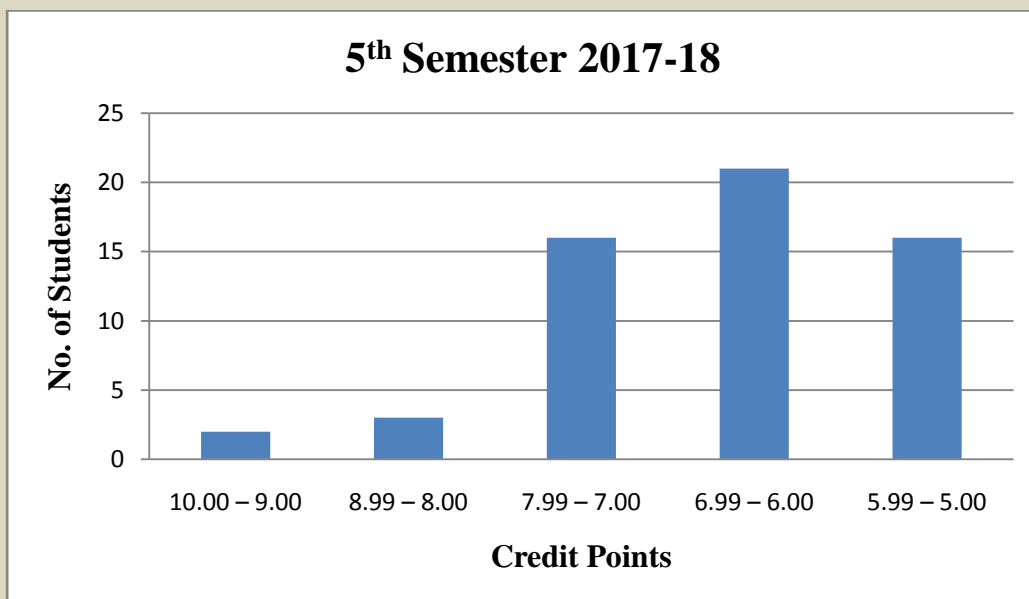
4th SEMESTER

	10.00 – 9.00	8.99 – 8.00	7.99 – 7.00	6.99 – 6.00	5.99 – 5.00
2017-18	0	5	22	9	9



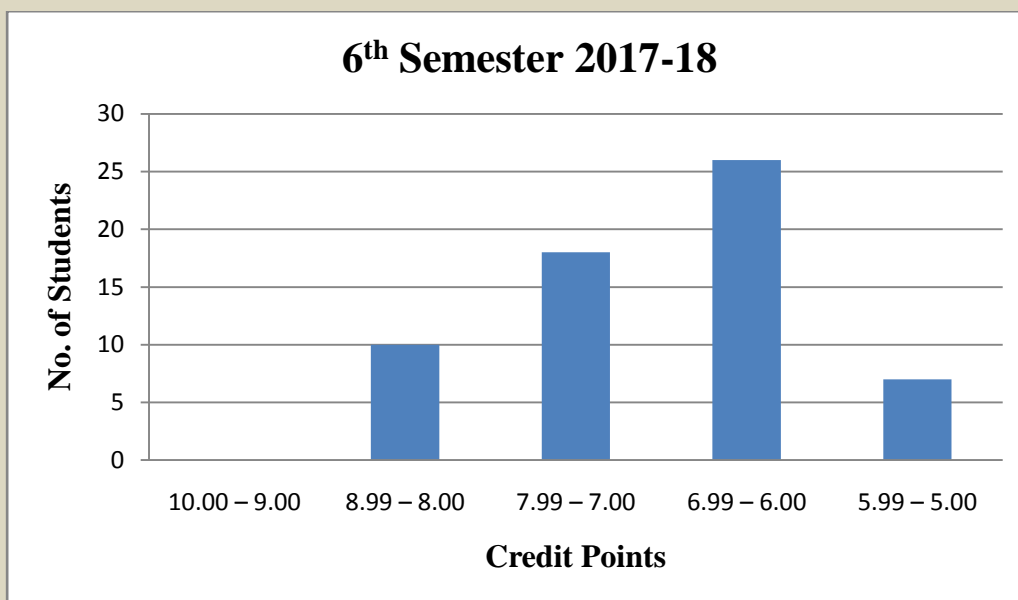
5th SEMESTER

	10.00 – 9.00	8.99 – 8.00	7.99 – 7.00	6.99 – 6.00	5.99 – 5.00
2017-18	2	13	16	21	16



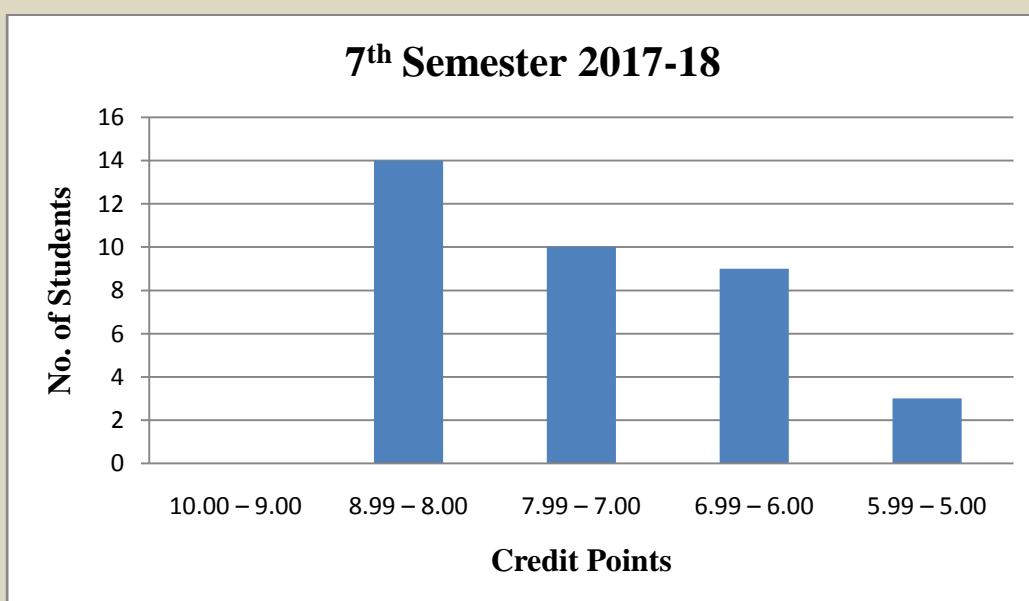
6th SEMESTER

	10.00 – 9.00	8.99 – 8.00	7.99 – 7.00	6.99 – 6.00	5.99 – 5.00
2017-18	0	10	18	26	10



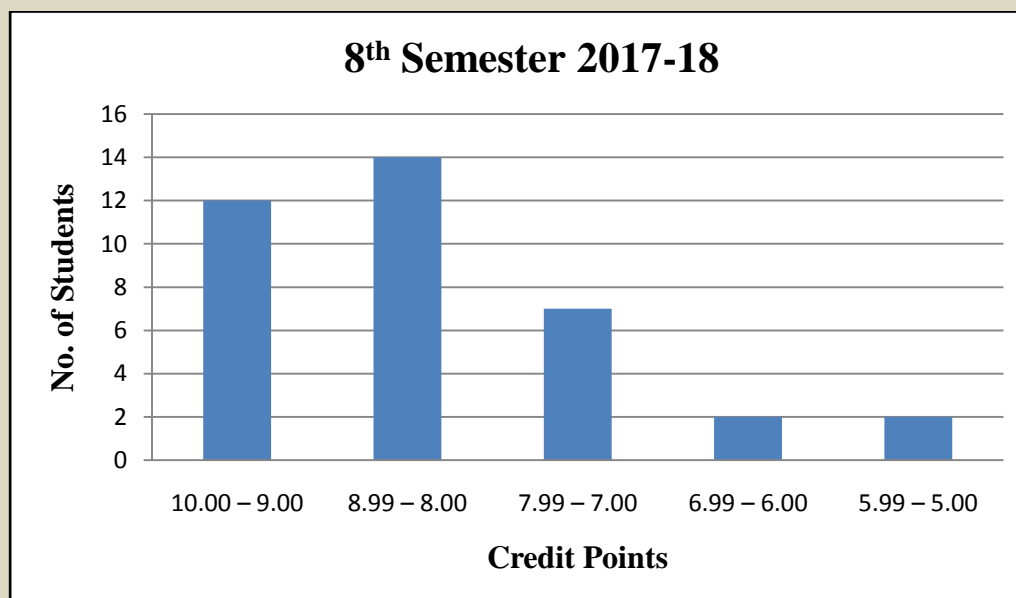
7th SEMESTER

	10.00 – 9.00	8.99 – 8.00	7.99 – 7.00	6.99 – 6.00	5.99 – 5.00
2017-18	0	14	10	9	3



8th SEMESTER

	10.00 – 9.00	8.99 – 8.00	7.99 – 7.00	6.99 – 6.00	5.99 – 5.00
2017-18	12	14	7	2	2

**15.0 INDUSTRIAL TRAINING:**

Electrical & Electronics Engineering department co-ordinates industrial Training for every student as this is compulsory according to university course curriculum.

Sl. No	Name of Students	Roll No	Training Period/duration	Name of Company
1.	1. Amartyajit Sinha 2. Anurup Sahoo 3. Anand Mondal 4. Kunal Sadhukhan 5. Indrajit Nag 6. Priyobrato Das	24102814001 24102814003 24102814002 24102814011 24102814007 24102814018	3 weeks	Damodar Valley Corporation Farraka STPS
2.	1. Arpan Paul 2. Anirban Mazumder 3. Sourav Paul 4. Sougata Paul	24102815059 24102815057 24102815071 24102815069	2 weeks	C.E.S.C Limited.
3.	1. Indrajit Nag 2. Priyobrato Das 3. Anand Mondal 4. Faisal Shamim 5. Shashi Shaw	24102814007 24102814018 24102814002 24102814005 24102814023	3 weeks	Eastern Railway, Sealdah
4.	1. Sovangi Kundu 2. Shreya Sarkar 3. Saswoti Sagarika Barick 4. Moubani Roy Sarkar 5. Arpan Paul 6. Anirban Mazumder 7. Sourav Paul 8. Anurup Sahoo	24102814026 24102814027 24102814021 24102814012 24102815059 24102815057 24102815071 24102814003	3 weeks	Eastern Railway, Howrah

5.	1. Chittrak Banerjee 2. Kingshuk Ghosh 3. Krishnendu Mitra 4. Prabir Parai 5. Sayantan Maity 6. Rahul Middy	24102814004 24102814009 24102814010 24102814014 24102814022 24102814020	3 weeks	West Bengal Power Development Corporation
6.	1. Pratik Chowdhury 2. Prosenjit Roychowdhury 3. Saurav Maity 4. Writabrato Dutta Roy	24102814015 24102814019 24102814024 24102814028	3 weeks	South Eastern Railway, Kharagpur Division
7.	1. Tanya Das 2. Debyojyoti Roy 3. Raju Das 4. Subhadip Mondal	24102815076 24102815063 24102815067 24102815073	2 weeks	Ogma Tech Lab
8.	1. Debabrata Roychowdhury 2. Pritam Ghosh 3. Himanshu Kumar	24102815062 24102814016 24102814006	2 weeks	Electronics & Telecommunication Division, South Eastern Railway, Garden Reach

16.0 STUDENT'S MENTORSHIP:

Name of Faculty	Students Roll No.	Frequency of interactions	Remarks
Dr. Arindam Mondal	24102817018 to 24102817023 (1 st Year)	Once in a month	1. Collected their certificates and testimonials 2. Problems and doubts regarding the different classes and others college activities had been discussed and necessary action had taken. 3. Encourage them to attain the regular classes and submit the assignment within schedule time. 4. Encourage them to take participation in different cultural programme, quiz and debate competition.
	24102816015 to 24102816021 (2 nd Year)	Once in a week	
	24102815001 to 24102815007 (3 rd Year)		
	24102814001 to 24102814006 (4 th Year)		
Mr. Samrat Paul	24102817024 to 24102817029 (1 st Year)	Once in a month	1. Collected their certificates and testimonials 2. Problems and doubts regarding the different classes and others college activities had been discussed and necessary action had taken. 3. Encourage them to attain the regular classes and submit the assignment within schedule time. 4. Encourage them to take participation in different cultural programme, quiz and debate competition.
	24102816022 to 24102816029 (2 nd Year)	Once in a week	
	24102815008 to 24102815014 (3 rd Year)		
	24102814007 to 24102814011 (4 th Year)		
Mr. Krishna Roy	24102817030 to 24102817035 (1 st Year)	Once in a month	1. Collected their certificates and testimonials 2. Problems and doubts regarding the different classes and others college activities had been discussed and necessary action had taken. 3. Encourage them to attain the regular classes and submit the assignment within schedule time. 4. Encourage them to take participation in different cultural programme, quiz and debate competition.
	24102816031 to 24102816034 (2 nd Year)	Once in a week	
	24102815015 to 24102815021 (3 rd Year)		
	24102814012 to 24102814017 (4 th Year)		

Mr. Bidrohi Bhattachajee	24102817036 to 24102817040 (1 st Year)	Once in a month	<ol style="list-style-type: none"> 1. Collected their certificates and testimonials 2. Problems and doubts regarding the different classes and others college activities had been discussed and necessary action had taken. 3. Encourage them to attain the regular classes and submit the assignment within schedule time. 4. Encourage them to take participation in different cultural programme, quiz and debate competition.
	24102816035 to 24102816038 (2 nd Year)	Once in a week	
	24102815022 to 24102815029 (3 rd Year)		
	24102814018 to 24102814022 (4 th Year)		
Mr. Soumik Biswas	24102817041 to 24102817044 (1 st Year)	Once in a month	<ol style="list-style-type: none"> 1. Collected their certificates and testimonials 2. Problems and doubts regarding the different classes and others college activities had been discussed and necessary action had taken. 3. Encourage them to attain the regular classes and submit the assignment within schedule time. 4. Encourage them to take participation in different cultural programme, quiz and debate competition.
	24102816039 to 24102816046 (2 nd Year)	Once in a week	
	24102815030 to 24102815037 (3 rd Year)		
	24102814023 to 24102814026 (4 th Year)		
Mr. Bedprakash Das	24102817045 to 24102817049 (1 st Year)	Once in a month	<ol style="list-style-type: none"> 1. Collected their certificates and testimonials 2. Problems and doubts regarding the different classes and others college activities had been discussed and necessary action had taken. 3. Encourage them to attain the regular classes and submit the assignment within schedule time. 4. Encourage them to take participation in different cultural programme, quiz and debate competition.
	24102816047 to 24102816054 (2 nd Year)	Once in a week	
	24102815038 to 24102815044 (3 rd Year)		
	24102814027, 24102814028 24102815057 to 24102815060 (4 th Year)		
Mr. Anshuman Chakrabarti	24102817049 to 24102817052 (1 st Year)	Once in a month	<ol style="list-style-type: none"> 1. Collected their certificates and testimonials 2. Problems and doubts regarding the different classes and others college activities had been discussed and necessary action had taken. 3. Encourage them to attain the regular classes and submit the assignment within schedule time. 4. Encourage them to take participation in different cultural programme, quiz and debate competition.
	24102816055 & 24102817001 to 24102817007 (2 nd Year)	Once in a week	
	24102815045 to 24102815051 (3 rd Year)		
	24102815061 to 24102815064 (4 th Year)		
Mr. Subrata Hota	24102817053 to 24102817055 (1 st Year)	Once in a month	<ol style="list-style-type: none"> 1. Collected their certificates and testimonials 2. Problems and doubts regarding the different classes and others college activities had been discussed and necessary action had taken. 3. Encourage them to attain the regular classes and submit the assignment within schedule time.
	24102817008 to 24102817014 (2 nd Year)	Once in a week	

	24102815052 to 24102815056 & 24102813042, 24102816001, 24102816002 (3 rd Year)		4. Encourage them to take participation in different cultural programme, quiz and debate competition.
	24102815065 to 24102815068 (4 th Year)		
Mr. Rajat Mukherjee	24102817056 to 24102817059 (1 st Year)	Once in a month	1. Collected their certificates and testimonials 2. Problems and doubts regarding the different classes and others college activities had been discussed and necessary action had taken. 3. Encourage them to attain the regular classes and submit the assignment within schedule time. 4. Encourage them to take participation in different cultural programme, quiz and debate competition.
	24102817015 to 24102817017 & 24102817060 to 24102817062 (2 nd Year)	Once in a week	
	24102816003 to 24102816010 (3 rd Year)		
	24102815067 to 24102815071 (4 th Year)		
Mr. Subhasish Das	(1 st Year)	N.A	1. Collected their certificates and testimonials 2. Problems and doubts regarding the different classes and others college activities had been discussed and necessary action had taken. 3. Encourage them to attain the regular classes and submit the assignment within schedule time. 4. Encourage them to take participation in different cultural programme, quiz and debate competition.
	(2 nd Year)		
	24102816011 to 24102816014 (3 rd Year)	Once in a week	
	24102815072 to 24102815076 (4 th Year)		

17.0 DEPARTMENTAL BUDGET:

Swami Vivekananda Institute of Science & Technology		
Sonarpur, Kolkata-700145		
Budget and Allocation Statement		
Dept of Electrical & Electronics Engineering		Rs. In Lacs
Accounts Head	2017-2018	
	Budgeted Amount.	Allocation Amount.
Capital Equipment, Software & License Fees	2.00	2.00
Library Books	1.00	1.00
Research & Development	1.00	1.00
Furniture & Fixture	0.5	0.5
Laboratory Equipments	1.00	1.00
Visiting Faculty Remuneration	0.00	0.00
Laboratory Exp. Consumable	0.25	0.25
Laboratory Maintenance	0.50	0.50
Students Projects	0.50	0.50
Journal & Periodicals	0.25	0.25
Faculty Development & Initiative	0.75	0.75
Contingency Exp	0.50	0.50
Total	8.25	

Submitted by,

Dr. Arindam Mondal

HOD (EEE)