

Annual report -2021-22

1. Name of the Institution

- · JSPM'S Bhivarabai Sawant Institute of Technology & Research, Wagholi, Pune
- Gat no:720/1&2, Nagar Road, WagholiPune-412207



· AddressincludingTelephone,Mobile: 020-65217050

Gat no:720/1&2, Nagar Road, WagholiPune-412207

- MOBILE NO: 9922914761
- E-Mail: principalbsiotr@gmail.com

2. Name and address of the Trust

Address: Jayawant Shikshan Prasarak Mandal, Sawant Corner, S.No 84/2E/1/5,3rd Floor, Katraj Chowk, Katraj, Pune 411046Mobile; (020)-22933423,22934344,22934347,22934084 E-Mail: info@jspm.edu.in

3. Name and Address of the Principal

- · Name; Dr. Nagaraj Kalyanappa Timalapur (Principal)
- Address including Telephone: Survey no 720 Pune Nagar road Ta: Haweli(excludingCorporation Area) Dist: Pune Pincode: 412207,
- Mobile: 9922914761
- · E-Mail: principal@jspmbsiotr.edu.in

4. Name of the affiliating University

· Savitribai Phule Pune University, Pune

5. Members of Academic Advisory Body

Role: AMC is centralized (Institute level) committee responsible for drafting, regulating and implementing different academic policies. It is meant for smooth & uniform conduction of academics throughout the institute.

Governing Board			
Sr.No.	Name	Designation	
1	Dr. T.K.Nagaraj	Principal	
2	Dr. Arun G. Patil	Dean Academics	
3	Dr. Yogesh S. Angal	Member	
4	Dr. Nilam Ghuge	Member	
5	Dr. Gayatri Bhandari	Member	
6	Prof. Vidya Jagtap	Member	
7	Prof. P.V.Jatti	Member	

AMC is headed by Academic Coordinator along with Co-coordinator. The representative fromeach department acting as Departmental Academic Coordinator is the member of AMC. All coordinators are involved in policy making process. Class teachers & Teacher Guardians are pillars of AMC. All Teachers are responsible for implementing the same.



6. Student Feedback on Institutional Governance/ Faculty performance

Objective of Feedback:

The Institute is affiliated to Savitribai Phule Pune University (SPPU). The syllabus is framed by the university as per the statutory provisions. This task is assented to selected institutes to frame the syllabus. Such institute conduct syllabus revision workshop in which Teachers, Invited Industry Experts, Senior Professors share their views and finalize the draft of the syllabus. This syllabus is then approved by BOS/Academic Council/Executive Council of the Savitribai Phule Pune University, Pune. Syllabus implementation workshops are again conducted by selected institutes in which the concerned subject teachers participate. In this workshop the extent of the contents to be covered for all units and laboratory work are finalized. The syllabus so framed is implemented in the institutes. The feedback of the stakeholders namely Student, Parent. Alumni and Employer is obtained which help the institution to design curricular and extra circular activities to enhance the learning and develop skills of the students

Student Feedback Questions

- 1. How do you rate the curriculum being implemented at the institute is upgrading your knowledge level?
- 2. Quality of the teaching methods and techniques being used to implement the designed curriculum
- 3. How do you rate the quality of industry expert lectures/seminar to understand the concepts?
- 4. Is the level of present curricula sufficient in solving actual industrial problems?
- 5. Are the industrial visits, guest lectures, workshops, add-on courses helping you to development Engineering skills?
- 6. How do you rate teaching –learning methods and techniques in participative learning?
- 7. Is the experimental learning in laboratories helping you to understand the concepts?
- 8. Is the curriculum being implemented helpful in developing human values and etiquettes in you?
- 9. How do you rate the curriculum for creative and innovativeness?
- 10. Do you think the curriculum is sufficient enough to make you an employable engineer?

Parent Feedback Questions

- 1. Is your ward capable to use his/her knowledge to get/perform the job?
- 2. How much your ward is capable to analyses the things related to stream/Branch?
- 3. How well he/her is able to face new problems and challenges?
- 4. Does your ward use modern engineering tools, techniques and software?

- 5. Does your ward behave in responsible manner?
- 6. How much he/she is careful about safety, society, health and environment?
- 7. How well does he/she follow the discipline, time and ethics?
- 8. How well your ward is able to work in group of people?
- 9. How well he/she is able to handle his work and financial matters?
- 10. Does the designed Curricula/Syllabus help ward in catering needs of society, economy and environment? If no, suggest necessary additions in curricula/Syllabus.

Alumni Feedback Questions

- 1. Do you think that your experience at BSIOTR laid the foundation to compete professionally as an engineer?
- 2. Do you think that your experience at BSIOTR laid the foundation to apply the problem solving skills you learned at BSIOTR to meet the challenging demands and increasing responsibilities of a successful engineering career
- 3. Do you think that your experience at BSIOTR laid the foundation to model/formulate/solve engineering problems?
- 4. Do you think that your experience at BSIOTR laid the foundation to be a lifelong learner?
- 5. Do you think that your experience at BSIOTR laid the foundation to think creatively and critically?
- 6. Do you think that your experience at BSIOTR laid the foundation to continue to learn in your profession, using modern technology and communication skills?
- 7. Do you think that your experience at BSIOTR laid the foundation to function effectively in multidisciplinary teams?
- 8. Do you think that your experience at BSIOTR laid the foundation to be a leader in solving important problems for your employer and for society?
- 9. Do the designed Curricula help you in catering needs of society, economy and environment? If no, suggest necessary additions in curricula.
- 10. Does the designed syllabus help you in solving actual industrial problems? If no, suggest necessary additions in Syllabus.

Employer Feedback Questions

- 1. Has the graduate ever been engaged in effectively applying engineering/ technology in their profession
- 2. Compete professionally as an engineer
- 3. Successfully apply their learned skills throughout their professional pursuits

- 4. Can they Model/formulate/solve engineering problems & develop cost effective solutions for organization?
- 5. An ability to design and conduct experiments, as well as to analyze and interpret data
- 6. Awareness of the value of continuous improvement, with a focus on quality and a commitment to life long learning:
- 7. Ability to effectively articulate ideas in both written and oral communications:
- 8. Ability to work effectively as a member of a multi-discipline project team:
- 9. Do the designed Curricula help in catering needs of the organization? If no, suggest necessary additions in curricula?
- 10. Does the designed syllabus help the graduate in solving actual industrial problems? If no, suggest necessary additions in Syllabus?

Purpose of Feedback:

- 1. Alumni Feedback is taken from Alumni for the academic year. The analysis helped the institute in development of curriculum.
- 2. Feedback about Faculty is taken from students twice a semester. The various parameters on which teaching is assessed are: Communication Skills, Quality of Teaching/ Academic input, Subject Knowledge, Content and Method of Delivery, Resourcefulness, Readiness of teacher, Accessibility and Availability of Teacher in Campus/ Department. Feedback is signed by the Director and conveyed to the faculty by respected Head of the Department. Counseling of faculty having feedback count less than sixty percent is carried out by Head of the Department as well as by the Dean academics for his/ her improvement.
- 3. An Institute level Parent Teacher meeting is conducted once every semester. During the meeting, parents are made aware about their wards' attendance, academic performance for the semester as well as about the various learning processes conducted in the institute. In academic year 2021-22, Suggestions given by parents were taken into consideration for further actions. Also this helped in identifying the parents who would help in providing support to the institute in terms of Projects, internship and placement etc.
- 4. Feedback about Institute is also taken from all students once in a year. This includes the feedback about the facilities and the infrastructure of the institute.
- 5. Various companies visit the campus of the institute for the placement of the students. Based on this feedback, Guest lectures, workshops, seminars are organized for students to help them to be ready for industry



Internal Quality Assurance Cell: IQAC cell of BSIOTR, Wagholi

2

~

Sr.No	Name of Member	Designation	Designation in IOAC
1	Dr.T. K. Nagaraj	Principal	Chairperson
2	Dr.Ravi Joshi,	Director, Planning and Development, JSPM	Member (MR)
3	Er.Rajendra Nimbargi	Sr. Manager Quality & M.R. Helvoet Rubber & Plastics technologies (I) Pvt. Ltd.Pune	Member (Industrialist)
	Mr.Prashant Mane	Director, Phoenixgen Pvt Ltd, Pune	Member (Employer)
4	Mr.Vijay Gadad,	Manager, Honeywell International India Pvt Ltd, Pune	Member Local Society
6	Mr. Santosh Jathar	Parent	Member (Parent)
7	Dr.Arun Patil	Dean academic	Member (Teaching)
8	Dr.N.N.Ghuge,	HOD, Electrical Engineering	Member (Teaching)
9	Dr.P.S.Kachare,	HOD, Mechanical Engineering	Member (Teaching)
10	Dr.Y.S.Angal,	HOD, Electronics and Tele Engg	Member (Teaching)
11	Mrs.Vidya Jagtap,	HOD, Information Technology	Member (Teaching)
12	Dr.Gayatri Bhandari	HOD, Computer Engineering	Member (Teaching)
13	Dr.Swati Godse	HOD, Engineering Science	Member (Teaching)
14	Dr.A.L. Wanare	Professor	Member (Teaching)
15	Mr.Ganesh Lahote	Training and Placement Officer	Member (Teaching)
16	Mr. Pritam Anuse	Office Superintendent	Member Admin
17	Mr.Sachin Kawathe	Sr. Clerk	*Member Admin
18	Mr.Darshan Patiln	Enzigma Pvt Ltd, Pune	Member (Alumni)
19	Miss.Nikita Mane,	Student, E&TC	Member Student
20	Mr.Gaurav Thakur	Student, E&TC	Member Student
21	Mr.P.V.Jatti	Associate Professor	Coordinator/Director IQAC

7. Programmes

Name of UG and PG Programs approved by AICTE & Accreditation status

Sr. No.	Programs	Level	Sanctioned Intake	NAAC Accreditatio n	NBA Accreditation
01	Computer Engg	UG	120	A some dite d	Eligible ,notapplied
02	Information Technology	UG	60	byNational Assessmen	Applied PeerTeam Visit
03	Electrical Engg	UG	60	t and	pending
04	Electronics & Telecom Engg	UG	60	on Council,	
05	MechanicalEngg	UG	120	Bangaluru	Eligible ,notapplied
06	Computer Engg	PG	24		Not Eligible
07	Electronics & Telecom Engg	PG	24		Not Eligible

8. Campus placement:

416 students placed in different industries offering salary package from 1.8 to 7.5 lakhs per annum out of 546 final year outgoing students placed.

Total placement percentage in 2021-22 is above 76%

9. Number of Students admitted in 2021-22:

Programme name		Prog C	gramme Code	Number o sanctio	f seats ned	N	umber of Students admitted
UG							
Computer Engineeri	ng	631	124510	480			618
Information Technol	ogy	631	124610	240			309
Electrical Technolog	y	631	129310	240			251
Electronics and							
Telecommunicaiton		631	137210	240			253
Mechanical Enginee	ring	631	161210	480			358
PG							
Computer Engineeri	ng	631	124510	48			12
ETC- VLSI & Embede	d system	631	124510	48			1
				1776	5	1802	
Year	Number	of sea	ts earma	rked for res	erved cat	egoi	y as per GOI or
			Sta	ate Governm	ent rule		
	SC		ST	OBC	Gen		Others
2021-22 178			92	434	776		296
l	idents	admitted	l from the res	erved cat	egor	'y	
2020-21	SC		ST	OBC	Gen		Others
	223		8	440	921		210

10. Information of Infrastructure and Other Resources Available

• Number of Class Rooms/Tutorial rooms with size/Laboratories/Drawing Halls /Computer Centers with capacity of each:

	For existing intake			
	No	DS.	Ar	ea
Particulars	Required	Available	Required	Available
Class Rooms	30	31	1980	2100
Tutorial Rooms	8	8	264	374
Tutorial Rooms(PG)	2	4	66	182
Laboratories	56	57	3696	3958
Laboratories(PG)	2	2	132	141
Research Laboratory(PG)	1	1	120	142
Drawing hall	1	1	132	132
Workshop	1	1	200	532
Seminar Hall(UG&PG)	4	5	462	674
Computer Centre	1	1	150	150
Library and Reading Room	1	1	600	600

• Instructional Area (Carpet Area) in Sq.M.

10. Administrative Area (Carpet Area) in Sq.M.					
	Forexistingintake				
Particulars	No	s.	Area		
	Required	Available	Required	Available	
Principal/Director Office	1	1	20	42	
Board Room	1	1	30	30	
Office all inclusive	1	1	150	150	
Department Offices	5	6	100	120	
Cabins for Head of Departments	5	6	50	60	
Faculty Area	5 Sqm per Faculty		675	926	
Examinations Control Office	1	1	30	32	
Placement office	1	1	50	77	
Central Stores	1	1	30	44	
Maintenance	1	1	10	10	
Security	1	1	10	10	
House Keeping	1	1	10	10	
Pantry for Staff	1	1	10	10	

	For existing intake				
Particulars	No	DS.	Area		
	Required	Available	Required	Available	
Toilets(Ladies &Gents)		23	150	350	
Girls Common Room	1	1	75	100	
Boys Common Room	1	1	75	75	
Cafeteria	1	1	150	210	
Stationery Stores & Reprography	1	1	10	10	
First Aid Cum Sick Room	1	1	10	10	

• Amenities Area (Carpet Area) in sqm

• Central Examination Facility, Number of rooms and capacity of each:

• Available in institution as per requirement of Savitribai Phule Pune University, Pune

• Online examination facility (Number of Nodes, Internet bandwidth, etc.)

Internet and WI-FI facility:	Internet Facility Details:100 Mbps leased lineContent Ratio: 1:1(Gold) (ISP provider –TATA Telecom),Date of Updating: 01/09/2017 Aircell Backup line:10Mpbs
---------------------------------	---

11. Library:

• Number of Library books/ Titles/ Journals available

	UG Details			
Sr.No.	Program	Title	Volume	Journals(Nat/Int)
1	Computer Engineering	708	3966	12
2	Information Technology	471	1963	6
3	Mechanical	520	2558	12
4	Electrical Engineering	469	2368	06
5	E &TC Engg.	614	2655	06
6	General Science	480	890	06
	PG Details			
1	ME E&TC	91	429	8
2	MECOMP	114	513	6
	Total	3467	15342	62

12. Library Facility:

Sr.	Particular	Availability
1	Total area of the library	600SQ. MTR
2	Seating capacity of the library	150
3	Reprographic facility	Yes
4	Working hours of Library (Regular time)	8.30amto 5.00pm
	Working hours of Library(Extended time during Exams)	8.30amto 2.00am
5	Library net working facility	Yes
6	Usage data of the library(interms of books issued to the	10 books for faculty
	faculty	5 books for student
7	Annual library budget (% of annual student fee	7 %
	collected)	
8	News Paper Facility	6
9	Book Bank Scheme Reference Room	1
10	Digital Library	1

National Digital Library (NDL) subscription details

- National Digital Library Membership: Yes
- The JSPM'S BSIOTR College have NDL Membership

13. Laboratory and Workshop

List of Major Equipment/Facilities in each Laboratory:

Department of Information Technology:

List Major Equipment of Information Technology Department				
Particular	Quantity	Rate	Total Amount	
IBM Server X 3-400 M3				
tower server	1	84,000.00	84,000.00	
CPU	56	9,750.00	546,000.00	
Monitors LED 18.5"	56	5,857.00	327,992.00	
Digital Trainer kits	15	5,450.00	81,750.00	
8086 kits	5	12,875.00	64,375.00	
Digital Trainer kits for CMOS & TTL	15	5,200.00	78,000.00	
HCL Computers	25	18,571.43	464,285.75	
IBM Rational software architecture	30	5,833.33	175,000.00	
COMPUTER(ACER)	20	20,250.00	405,000.00	
Accer Variation Core I5 6th Gen.	25	35,628.00	8,65,700	
D link 48 ports DES-1210- 52	4	15,047.60	60,190.40	
10 KVA Online UPS	1	1,08,000	2,28,416	
Battery 65AH	16	4,700		
Rack	1	4,000		

Department of Computer Engineering:

Sr. No.	Equipment	Specifications	Quantity
1	Computer P4	Model : Intel DC 2.8 GHz, 1 GB DDR2 RAM, 320 GB HDD, Keyboard, Mouse , Monitor 18.5" LCD	240
2	Computers i5	Model : Intel i5 Processors 3.2 GHz , 4 GB DDR3 RAM , 320 GB HDD , k/b , mouse , 18.5" LCD Monitor	20
3	Smart Board	Interactive Intelligent Panel 55"	01
4	Printers	CANON LASER , DOT MATRIX , HP Wireless	23
5	Switch	24-Port D-Link switch	14
6	LCD Projectors	HITACHI/CANON Projector CP-RX79	4
7	Begal Bone Processors	Begal Black Bone ARM Cortex –A8 Processor	10
8	Study Card	Traffic PIO: study card	2
9	Study Card	PIO-ELESIM: Study card	2
10	Study Card	PIO-Stepper: study card	2
11	Study Card	PIO-DAC with SMPS	2
12	8086Microprocessor Kits	DYNA -86L, with display and SMPS, CC- SET: Cable Connector, Keyboard	20
13	Study Card	8255 Study card	4
14	Study Card	8253 Study card	4
15	Study Card	8251 Study card	4
16	Study Card	8279 study card	4
17	Study Card	PIO-DAC01	4
18	Study Card	PIO-STEPPER study card	4
19	Wireless Router	ADSL Router DLink	2
20	Graphics Card	ASUS NVidia GeForce Graphics card	30

Department of E&TC Engineering:

Sr. No./ Name of the Lab	Name Of Instrument	Quantity	Total Cos	st in Rs.
1. WTALab	AMITECH make Antenna Training Lab 5 MHz – 2 GHz with 30 antennas(Model ATS20)	01	2,94,975/-	3,68,475/-
	Satellite Communication Trainer	01	73,500/-	
	100 kHz high precision LCR-Q Meter	01	1,22,625/-	
	Optical Time Domain Reflectometer (OTDR) Model MTS 6000 Make JDSU	01	2,85,600/-	
2. TMTLab	25 Mhz to 4 GHz one channel Vector Network Analyzer Model site Master ss331D. Make Anritsu	01	4,39,950/-	10,43,937/-
	Data Acquisition Trainer	01	81,774/-	
	PLC Trainer Kit	01	1,13,988/-	
3. PG Lab II	3 GHz spectrum Analyzer with tracking generator (Model PsA 3000 + TG Make Ed Corp.)	01	3,15,000/-	3,15,000/-
4. Project Lab	3 GHz spectrum analyzer with tracking generator (DX 2001)	01	2,70,000/-	
	PCB Design Set up(Coater+Exposure+Etcher+Drillin g Machine+Circular Saw+Accessories)	01	1,18,000/-	3,88,000/-
5. Communic				
ation Lab	3G Mobile Trainer Kit	01	67,837/-	67,837/-
	NI MY RIO Embedded system kit	01	1,19,537.26/-	
6. Research Lab	EasyIO:Easy Input & Output platform for Matlab/Simulink with Magnetic Levitation add on plant with accessories	01	80,000/-	1,99,537.2 6/-
			TOTAL	23,82,786.26/

Department of Electrical Engineering:

	Department of Electrical Engineering			
	List	of Major Equipments		
Lab	Name: Switchgear And Protection La	b		
Sr. No	Equipment	Specifications	Quantity	
1	SWITCHGEAR TESTING KIT	SWITCHGEAR TESTING KIT	1	
2	3 PHASE ALTERNATOR PROTECTION DEMO PANEL	3 PHASE ALTERNATOR PROTECTION DEMO PANEL	1	
3	TRANSMISSION LINE DISTANCE PROTECTION DEMO PANEL	TRANSMISSION LINE DISTANCE PROTECTION DEMO PANEL	1	
4	3 PHASE TRANSFORMER PROTECTION DEMO PANEL	3 PHASE TRANSFORMER PROTECTION DEMO PANEL	1	
5	IDMT RELAY	IDMT RELAY	1	
6	AIR CIRCUIT BREAKER	AIR CIRCUIT BREAKER	1	
Lab	Name: Electrical Measurements And	Instrumentation Lab	l	
Sr. No.	Equipment	Specifications	Ouantity	
1	Experimental kit for Anderson's Bridge	Experimental kit for Anderson's Bridge	1	
2	Earth Tester	Earth Tester	1	
3	3 phase loading rehostat , delta or star, 440 V, 12 Amp	3 phase loading rehostat , delta or star, 440 V, 12 Amp	1	
4	Two element type wattmeter, LPF 3 phase, 440 V, 10A	Two element type wattmeter, LPF 3 phase, 440 V, 10A	3	
5	Two element type wattmeter, 200 V, 5 amp	Two element type wattmeter, 200 V, 5 amp	3	
6	Loading rehoatat, 230 V, 20 A, 10 step	Loading rehoatat, 230 V, 20 A, 10 step	1	
7	1 phase, SPDT knief switch	1 phase , SPDT knief switch	2	
8	Demonstration model of different types of meter	Demonstration model of different types of meter	4	
9	3 phase inductive load. 440 V, 12 Amp	3 phase inductive load. 440 V, 12 Amp	1	
10	3 phase variac, 440 V, 25 Amp	3 phase variac, 440 V, 25 Amp	1	
11	Wattmeter UPF, 1 phase, 440V, 10Amp	Wattmeter UPF, 1 phase, 440V, 10Amp	3	
12	Wattmeter LPF, 3 phase, 300V, 5A	Wattmeter LPF, 3 phase, 300V, 5A	1	
13	3 phase dimmerstate	3 phase dimmerstate	1	

14	Level measurement using Bubbler method	Lev	el measurement using Bubbler method	1
15	Displacement measurement transducer using LVDT	Displacement measurement transducer using LVDT		1
16	Experiment kit for study of Kelvins Double Bridge	Exp Bric	eriment kit for study of Kelvins Double lge	1
17	Experimental kit of LVDT	Exp	erimental kit of LVDT	1
18	100 KV, 100 MVA transformer with control panel for 100 mm sphere gap assembly	100 pan	KV, 100 MVA transformer with control el for 100 mm sphere gap assembly	1
Lab	Name: Power Electronics Lab			
Sr. No.	Equipment		Specifications	Quantity
1	Expt. Kit V-I charact. Of SCR & Triac		Expt. Kit V-I charact. Of SCR & Triac	4
2	V-I characteristic of MOSFET, IGBT		V-I characteristic of MOSFET, IGBT	4
3	1-Ø half controlled converter(R &RL load)		1-Ø half controlled converter(R &RL load)	3
4	1-Ø full controlled converter(R &RL lo	oad)	1-Ø full controlled converter(R &RL load)	3
5	3-Ø converter		3-Ø converter	3
6	Step-down chopper circuit		Step-down chopper circuit	4
7	3-Ø VSI 120° & 180° mode		3-Ø VSI 120° & 180° mode	2
8	Firing circuit for 3-Ø converter		Firing circuit for 3-Ø converter	3
9	1-Ø or 3-Ø AC voltage regulator		1-Ø or 3-Ø AC voltage regulator	3
10	1-Ø PWM bridge inverter		1-Ø PWM bridge inverter	2
11	Commutation ckt. Of SCR		Commutation ckt. Of SCR	3
12	Digital multimeter		Digital multimeter	8
13	CRO		CRO	4
14	Powerscope		Powerscope	4
15	Function Generator		Function Generator	3
16	3-Ø Semiconverter		3-Ø Semiconverter	3
17	PSIM-software		PSIM-software	1
18	Power Scope		Power Scope	4
Lab	Name: Industrial Drives and Control	Lab	(PECD Lab)	
Sr.				
INO.	Equipment		Specifications	Quantity
1	A) Control panel for DC motor with flywheel		A) Control panel for DC motor with flywheel	1
2	B) 3 HP/220V/1500RPM Shunt DC Me with flywheel	otor	B) 3 HP/220V/1500RPM Shunt DC Motor with flywheel	1
3	C) 1 Phase 230 V / 10A / RESISTIVE LOAD-10 STEPS		C) 1 Phase 230 V / 10A / RESISTIVE LOAD-10 STEPS	1
4	A) 1 PHASE FULL WAVE Controled Rectifier	A) 1 PHASE FULL WAVE Controled Rectifier		1

5	B) 0.5 HP/180V/1500RPM/SHUNT DC Motor with BDA	B) 0.5 HP/180V/1500RPM/SHUNT DC Motor with BDA	1
6	A) 3 PHASE FUL WAVE Controlled Rectifier	A) 3 PHASE FUL WAVE Controlled Rectifier	1
7	B) 0.5 HP/180V/1500RPM/SHUNT DC Motor with BDA	B) 0.5 HP/180V/1500RPM/SHUNT DC Motor with BDA	1
8	A) VFD DRIVE AND CONTRO PANEL WITH RPM METER & SENSOR	A) VFD DRIVE AND CONTRO PANEL WITH RPM METER & SENSOR	1
9	B) 1 HP /415V/1430RPM/3 PHASE SQUIREL CAGE INDUCTION MOTOR WITH BDA	B) 1 HP /415V/1430RPM/3 PHASE SQUIREL CAGE INDUCTION MOTOR WITH BDA	1
10	A) CONTROL PANEL FOR 3 PH SQUIREL CAGE INDUCTION MOTOR BRAKING	A) CONTROL PANEL FOR 3 PH SQUIREL CAGE INDUCTION MOTOR BRAKING	1
11	B) 3 HP/415V/1440RPM/3 PHASE SQUIREL CAGE INDUCTION MOTOR WITH FLYWHEEL	B) 3 HP/415V/1440RPM/3 PHASE SQUIREL CAGE INDUCTION MOTOR WITH FLYWHEEL	1
12	C) 3 PHASE 8A VARIAC	C) 3 PHASE 8A VARIAC	1
13	A) BLDC MOTOR CONTROL PANEL	A) BLDC MOTOR CONTROL PANEL	1
14	B)0.5HP/48V/3000RPM BLDC MOTOR WITH BDA	B)0.5HP/48V/3000RPM BLDC MOTOR WITH BDA	1
15	DIGITAL TACHOMETER CONTACT TYPE	DIGITAL TACHOMETER CONTACT TYPE	2
16	DIGITAL TACHOMETER NON CONTACT TYPE	DIGITAL TACHOMETER NON CONTACT TYPE	2
16 Lab	DIGITAL TACHOMETER NON CONTACT TYPE Name: Electrical Machines Lab	DIGITAL TACHOMETER NON CONTACT TYPE	2
16 Lab Sr.	DIGITAL TACHOMETER NON CONTACT TYPE Name: Electrical Machines Lab	DIGITAL TACHOMETER NON CONTACT TYPE	2
16 Lab Sr. No.	DIGITAL TACHOMETER NON CONTACT TYPE Name: Electrical Machines Lab Equipment	DIGITAL TACHOMETER NON CONTACT TYPE Specifications	2 Quantity
16 Lab Sr. No. 1	DIGITAL TACHOMETER NON CONTACT TYPE Name: Electrical Machines Lab Equipment 2 hp 1500 RPM DC shunt motor coupled to 2KW ,220V ,5A 1500dc Shunt generator	DIGITAL TACHOMETER NON CONTACT TYPE Specifications 2 hp 1500 RPM DC shunt motor coupled to 2KW ,220V ,5A 1500dc Shunt generator	2 Quantity 1
16 Lab Sr. No. 1	DIGITAL TACHOMETER NON CONTACT TYPE Name: Electrical Machines Lab Equipment 2 hp 1500 RPM DC shunt motor coupled to 2KW ,220V ,5A 1500dc Shunt generator PF meter 440 v , 10 A 3Phase	DIGITAL TACHOMETER NON CONTACT TYPE Specifications 2 hp 1500 RPM DC shunt motor coupled to 2KW ,220V ,5A 1500dc Shunt generator PF meter 440 v , 10 A 3Phase	2 Quantity 1 2
16 Lab Sr. No. 1 2 3	DIGITAL TACHOMETER NON CONTACT TYPE Name: Electrical Machines Lab Equipment 2 hp 1500 RPM DC shunt motor coupled to 2KW ,220V ,5A 1500dc Shunt generator PF meter 440 v , 10 A 3Phase hp 1440 rpm mounted on ms channel with mechanical loading IM	DIGITAL TACHOMETER NON CONTACT TYPE Specifications 2 hp 1500 RPM DC shunt motor coupled to 2KW ,220V ,5A 1500dc Shunt generator PF meter 440 v , 10 A 3Phase hp 1440 rpm mounted on ms channel with mechanical loading IM	2 Quantity 1 2 1
16 Lab Sr. No. 1 2 3 4	DIGITAL TACHOMETER NON CONTACT TYPE Name: Electrical Machines Lab Equipment 2 hp 1500 RPM DC shunt motor coupled to 2KW ,220V ,5A 1500dc Shunt generator PF meter 440 v , 10 A 3Phase hp 1440 rpm mounted on ms channel with mechanical loading IM Dc series motor with load 3 hp 1500 rpm	DIGITAL TACHOMETER NON CONTACT TYPE Specifications 2 hp 1500 RPM DC shunt motor coupled to 2KW ,220V ,5A 1500dc Shunt generator PF meter 440 v , 10 A 3Phase hp 1440 rpm mounted on ms channel with mechanical loading IM Dc series motor with load 3 hp 1500 rpm	2 Quantity 1 2 1 1 1
16 Lab Sr. No. 1 2 3 4 5	DIGITAL TACHOMETER NON CONTACT TYPE Name: Electrical Machines Lab Equipment 2 hp 1500 RPM DC shunt motor coupled to 2KW ,220V ,5A 1500dc Shunt generator PF meter 440 v , 10 A 3Phase hp 1440 rpm mounted on ms channel with mechanical loading IM Dc series motor with load 3 hp 1500 rpm DC shunt motor with load 3 hp 1500 rpm	DIGITAL TACHOMETER NON CONTACT TYPE Specifications 2 hp 1500 RPM DC shunt motor coupled to 2KW ,220V ,5A 1500dc Shunt generator PF meter 440 v , 10 A 3Phase hp 1440 rpm mounted on ms channel with mechanical loading IM Dc series motor with load 3 hp 1500 rpm DC shunt motor with load 3 hp 1500 rpm	2 Quantity 1 2 1 1 1 1
16 Lab Sr. No. 1 2 3 4 5 6	DIGITAL TACHOMETER NON CONTACT TYPE Name: Electrical Machines Lab Equipment 2 hp 1500 RPM DC shunt motor coupled to 2KW ,220V ,5A 1500dc Shunt generator PF meter 440 v , 10 A 3Phase hp 1440 rpm mounted on ms channel with mechanical loading IM Dc series motor with load 3 hp 1500 rpm DC shunt motor with load 3 hp 1500 rpm Rheostat of different specifications	DIGITAL TACHOMETER NON CONTACT TYPE Specifications 2 hp 1500 RPM DC shunt motor coupled to 2KW ,220V ,5A 1500dc Shunt generator PF meter 440 v , 10 A 3Phase hp 1440 rpm mounted on ms channel with mechanical loading IM Dc series motor with load 3 hp 1500 rpm Rheostat of different specifications	2 Quantity 1 2 1 1 1 1 26
16 Lab Sr. No. 1 2 3 4 5 6 7	DIGITAL TACHOMETER NON CONTACT TYPE Name: Electrical Machines Lab Equipment 2 hp 1500 RPM DC shunt motor coupled to 2KW ,220V ,5A 1500dc Shunt generator PF meter 440 v , 10 A 3Phase hp 1440 rpm mounted on ms channel with mechanical loading IM Dc series motor with load 3 hp 1500 rpm DC shunt motor with load 3 hp 1500 rpm Rheostat of different specifications AC voltmeter portable meter 0-150V, 0- 300V, 0-600V, 0-150/300V	DIGITAL TACHOMETER NON CONTACT TYPE Specifications 2 hp 1500 RPM DC shunt motor coupled to 2KW ,220V ,5A 1500dc Shunt generator PF meter 440 v , 10 A 3Phase hp 1440 rpm mounted on ms channel with mechanical loading IM Dc series motor with load 3 hp 1500 rpm DC shunt motor with load 3 hp 1500 rpm Rheostat of different specifications AC voltmeter portable meter 0-150V, 0- 300V, 0-600V, 0-150/300V	2 Quantity 1 2 1 1 1 1 26 16
16 Lab Sr. No. 1 2 3 4 5 6 7 8	DIGITAL TACHOMETER NON CONTACT TYPE Name: Electrical Machines Lab Equipment 2 hp 1500 RPM DC shunt motor coupled to 2KW ,220V ,5A 1500dc Shunt generator PF meter 440 v , 10 A 3Phase hp 1440 rpm mounted on ms channel with mechanical loading IM Dc series motor with load 3 hp 1500 rpm DC shunt motor with load 3 hp 1500 rpm Rheostat of different specifications AC voltmeter portable meter 0-150V, 0- 300V, 0-600V, 0-150/300V DC Ammeter portable meter 0-10A, 0-5A, 0-15A, 0-20A	DIGITAL TACHOMETER NON CONTACT TYPE Specifications 2 hp 1500 RPM DC shunt motor coupled to 2KW ,220V ,5A 1500dc Shunt generator PF meter 440 v , 10 A 3Phase hp 1440 rpm mounted on ms channel with mechanical loading IM Dc series motor with load 3 hp 1500 rpm DC shunt motor with load 3 hp 1500 rpm Rheostat of different specifications AC voltmeter portable meter 0-150V, 0- 300V, 0-600V, 0-150/300V DC Ammeter portable meter 0-10A, 0-5A, 0-15A, 0-20A	2 Quantity 1 2 1 1 1 1 26 16 20

10	Single phase transformer2 KVA 230/115 V	Single phase transformer2 KVA 230/115 V	3
11	Single phase dimmerstat4A 0-270V 50 Hz, 10A 0-270V 50 Hz	Single phase dimmerstat4A 0-270V 50 Hz, 10A 0-270V 50 Hz	4
12	control panel for Dc Shunt motor	control panel for Dc Shunt motor	1
13	control panel for Dc Seriest motor	control panel for Dc Seriest motor	1
14	control panel for 3 phase induction motor	control panel for 3 phase induction motor	1
15	3 phase slip ring IM 3 HP 1440 rpm /415 V with loading arrangement	3 phase slip ring IM 3 HP 1440 rpm /415 V with loading arrangement	1
16	rotor resistance starter for the above motor	rotor resistance starter for the above motor	1
17	control panel for slip ring IM	control panel for slip ring IM	1
18	control panel for motor generator set	control panel for motor generator set	1
19	lamp bank loading arrangement 3 phase 415V 10A/phase	lamp bank loading arrangement 3 phase 415V 10A/phase	1
20	lamp bank loading arrangement 1 phase 230V 10A/phase	lamp bank loading arrangement 1 phase 230V 10A/phase	1
21	3hp 230 V 1500 rpm shunt wound Dc motor coupled to 2KVA 1500 rpm 50 hz alternator	3hp 230 V 1500 rpm shunt wound Dc motor coupled to 2KVA 1500 rpm 50 hz alternator	1
22	3 phase inductive load 415V,10 A	3 phase inductive load 415V,10 A	1
23	Control panel for mototset machine terminal board for above motor	Control panel for mototset machine terminal board for above motor	1
24	3phase 230V/1500rpm /shunt wound dc motor coupled to 2KVA 1500rpm alternator with copling	3phase 230V/1500rpm /shunt wound dc motor coupled to 2KVA 1500rpm alternator with copling	1
25	control panel motor alternator set	control panel motor alternator set	1
26	synchronous motor 3HP 415V,coupled tp 2.2kW shunt generator	synchronous motor 3HP 415V,coupled tp 2.2kW shunt generator	1
27	single phase IM 1 HP 230 V 1440 rpm with loading arrangment	single phase IM 1 HP 230 V 1440 rpm with loading arrangment	1
28	synchronization panelstroboscope with alternator & synchronizing panel	synchronization panelstroboscope with alternator & synchronizing panel	1
29	3 phase synchronous motor with loading arrangement	3 phase synchronous motor with loading arrangement	1
30	Synchronous motor starting panel	Synchronous motor starting panel	1
31	control panel for motor set	control panel for motor set	1
32	working demonstration model for performance characteristic of stepper motor	working demonstration model for performance characteristic of stepper motor	1
33	digital tachometer	digital tachometer	5
34	digital multimeter	digital multimeter	8

35	dissamble synchronous motor	dissamble synchronous motor	1
36	dissamble induction motor squirrel cage	dissamble induction motor squirrel cage	1
50	type	type	1
37	disassemble DC shunt motor	disassemble DC shunt motor	1
38	CRO 30 MHZ	CRO 30 MHZ	4
39	AC Ammeter 0-1A, 0-15A, 0-10/20A, 0- 15/30A, 0-5/10A, 0-5A, 0-10A	AC Ammeter 0-1A, 0-15A, 0-10/20A, 0- 15/30A, 0-5/10A, 0-5A, 0-10A	28
40	dissamble induction motor squirrel cage type dissamble induction motor squirrel cage type 1	dissamble induction motor squirrel cage type dissamble induction motor squirrel cage type 1	4
Lab	Name: PLC Lab	•	
Sr.			
No.	Equipment	Specifications	Quantity
1	PLC trainer kit (Delta)	PLC trainer kit (Delta)	1
2	Overhead tank water level control interface	Overhead tank water level control interface	1
3	Alarm Announciator	Alarm Announciator	1
4	DOL/star-delta starter interface with PLC	DOL/star-delta starter interface with PLC	1
5	VFD AC motor control	VFD AC motor control	1
6	DC motor speed control	DC motor speed control	1
7	Position Control(Pressure) interface with PLC	Position Control(Pressure) interface with PLC	1
8	Temperature controller using PLC	Temperature controller using PLC	1
9	Speed Control	Speed Control	1
10	PLC programming trainer kit (Siemens logo PLC)	PLC programming trainer kit (Siemens logo PLC)	1
11	PLC programming trainer kit (Siemens logo PLC)	PLC programming trainer kit (Siemens logo PLC)	1
12	SCADA Application Software	SCADA Application Software	1
13	PLC based water level control systems (Siemens logo PLC)	PLC based water level control systems (Siemens logo PLC)	1
14	Alarm Announciator control trainer	Alarm Announciator control trainer	1
15	Star-Delta Starter trainer	Star-Delta Starter trainer	1
16	AC motor speed control trainer	AC motor speed control trainer	1
17	PLC based water level control trianer	PLC based water level control trianer	1
18	PLC based linear bottle filling plant	PLC based linear bottle filling plant	1
Lab	Name: HVE Lab		
Sr. No.	Equipment	Specifications	Quantity
1	30 Kv,100 MA Testing Kit With Jig	30 Kv,100 MA Testing Kit With Jig	1
2	Horn Gap Apparatus & Rod Gop Apparatus	Horn Gap Apparatus & Rod Gop Apparatus	1
3	11 Kv Disc Insulator	11 Kv Disc Insulator	1
4	Capacitor Divider	Capacitor Divider	1

5	Corona Cage Without Transformer	Corona Cage Without Transformer	1		
Lab	Lab Name: Computer Lab				
Sr.					
No.	Equipment	Specifications	Quantity		
1	Computer P4	Model : Intel DC 2.8 GHz, 1 GB DDR2 RAM, 320 GB HDD, Keyboard, Mouse, Cabinet Essys Monitor 18.5" LCD	51		
2	LCD Projector	HITACHI Projector CP-RX79	7		
3	PLC & SCADA	DVP, Allen Bradley, Siemens make	5		
Lab	Name: Control System Lab				
Sr.			_		
No.	Equipment	Specifications	Quantity		
1	Pot char kit	Pot char kit	2		
2	Potentiometer as an Error Detector	Potentiometer as an Error Detector	2		
3	Standard specification AC servo motor, study of AC servo motor	Standard specification AC servo motor, study of AC servo motor	2		
4	Study of DC servo motor	Study of DC servo motor	2		
5	Study of lead Network kit	Study of lead Network kit	2		
6	Study of lag Network kit	Study of lag Network kit	2		
7	Study of Level control loop kit	Study of Level control loop kit	1		
8	Digital Multimeter	Digital Multimeter	12		
9	Study of synchro transformer & Receiver kit	Study of synchro transformer & Receiver kit	2		
10	Study of synchro error Detector	Study of synchro error Detector	2		
11	Study of PID controller	Study of PID controller	1		
12	Experimental dertermination of dc motor parameters of mathematical modeling transfer function & charactersitics	Experimental dertermination of dc motor parameters of mathematical modeling transfer function & charactersitics	1		
13	PID control of level/pressure/temp. control system analog type	PID control of level/pressure/temp. control system analog type	1		
14	Experimental dertermination of tansfer function of two tank system	Experimental dertermination of tansfer function of two tank system	1		
15	Experimental dertermination of transfer function of PWM servo amplifier	Experimental dertermination of transfer function of PWM servo amplifier	1		
Lab	Lab Name: Analog & Digital Electronics Lab				
Sr.					
No.	Equipment	Specifications			
	1 MUZ Eunotion Concretor	Digital Storage Oscilloscope			
2			2		
3	Digiatl trainer kit (20 Pin x 4 Zif socket)	Digiatl trainer kit (20 Pin x 4 Zif socket)	4		
4	Dual Power Supply	Dual Power Supply	2		
5	Digital Storage Oscilloscope	Digital Storage Oscilloscope	5		

6	Single Power Supply	ngle Power Supply Single Power Supply		10
7	Dual Power Supply	Dual Power Supply		10
8	IC Tester	IC Tester		
Lab	Lab Name: Microprocessor & Microcontroller Lab			
Sr. No.	Equipment	Specifications	Οι	antity
1	Intel 8085 up based triner kit	Intel 8085 µp based triner kit	X -	5
2	PIO-RT/TC ,PIO based thermocouple card	PIO-RT/TC ,PIO based thermocouple card		2
3	Study card for the study of 8255	Study card for the study of 8255		2
4	Power supply SMPS	Power supply SMPS		5
5	Stepper motor,12 V,2kg, for STP-PIO card	Stepper motor,12 V,2kg, for STP- PIO card		1
6	8253 kit,interfacing card compatible with 8085 kit	8253 kit, interfacing card compatible with 8085 kit		1
7	8051 trainer kit	8051 trainer kit		8
8	ADC kit	ADC kit		2
9	DAC kit	DAC kit		2
10	Stepper motor Interfacing	Stepper motor Interfacing		2
11	Stepper motor	Stepper motor		2
12	Dyna 51 B trainer kit	Dyna 51 B trainer kit		2
13	DYNA-PICEB	DYNA-PICEB		10
14	DYNA-PICEB	DYNA-PICEB		10
15	DYNA-PIO-DCM	DYNA-PIO-DCM		1
16	Atmega 328p based development board	Atmega 328p based development board		1
17	Atmega 328p based development board	Atmega 328p based development board		1
Lab	Name: Material Science Lab			
Sr.				
No.	Equipment	Specifications		Quantity
1	Hysterisis loop B-H curve	Hysterisis loop B-H curve		1
2	Megger (0-500 V) hand driven	Megger (0-500 V) hand driven		1
3	Gauss meter	Gauss meter		1
4	Micro meter(0-30 mm)	Micro meter(0-30 mm)		1
5	Thermocouple study unit	Thermocouple study unit		1
6	alloys	Experiment kit resistivity of high resistive alloys		1
7	Kit for measurement of Dielectric strength of oil	Kit for measurement of Dielectric strength of oil		1
8	Kit for measurement o electric strength	Kit for measurement o electric strength		1
9	Kit for measurement of schering Bridge	Kit for measurement of schering Bridge	e	1

10	Kit for KVAR capacity of power capacitor	titor Kit for KVAR capacity of power capacitor	
11	Sphere gap assembly	Sphere gap assembly	
12	kit to obtain characterstics of different thermocouples	kit to obtain characterstics of different thermocouples	1
Lab	Name: Power System Lab		
Sr.	E arritor and		Orregentiter
10.	Equipment	Specifications	Quantity
1	medium and long transmission line	medium and long transmission line	1
2	Study of VAR compensation using capacitor	Study of VAR compensation using capacitor	1
Lab	Name: Network Analysis Lab		·
Sr.			
No.	Equipment	Specifications	Quantity
1	Fixed Induction Box	Fixed Induction Box	1
2	Kit for RLC series and parallel Resonance	Kit for RLC series and parallel Resonance	1
3	Kit for Z & Y parameters	Kit for Z & Y parameters	1
4	Kit for RL series circuit	Kit for RL series circuit	1
5	Kit for superposition Theorem In ac circuit	Kit for superposition Theorem In ac circuit	1
6	Kit for TheveninTheorem In ac circuit	Kit for TheveninTheorem In ac circuit	1
7	Kit for Reciprocity Theorem In ac circuit	Kit for Reciprocity Theorem In ac circuit	1
8	Ac ammeter (0-1 A)	Ac ammeter (0-1 A)	3
9	Ac ammeter (0-500 m A)	Ac ammeter (0-500 m A)	3
10	Variac auto transformer	Variac auto transformer	1
11	DC Ammeter(0-1 A)	DC Ammeter(0-1 A)	3
12	DC Ammeter(0-500 mA)	DC Ammeter(0-500 mA)	3
13	Fixed resistance box	Fixed resistance box	1
14	Capacitance Box	Capacitance Box	1
15	Dual Power Supply	Dual Power Supply	4
Lab	Name: RES Lab		
Sr. No.	Equipment	Specifications	Quantity
1	SOLAR PV MODULE (SERIES- PARALELL COMBINATION) KIT	SOLAR PV MODULE (SERIES- PARALELL COMBINATION) KIT	1
2	SUN TRACKING SYSTEM MODULE	SUN TRACKING SYSTEM MODULE	1
3	WIND ENERGY TRAINER KIT	WIND ENERGY TRAINER KIT	1

Sr. No.	Particular	Cost of Equipment	Name of the Laboratory
1		63112/-	Applied Thermodynamics
2	Digital bomb calorimeter	57422/-	Applied Thermodynamics
3	Separating & Throttling Calorimeter	180000/-	Applied Thermodynamics
. 4	Plotter	73500/-	Computer Aided Design
5	Autodesk Product Design Suite for Education	317167/-	Computer Aided Design
6	Creo 1.0 university Plus site edition	115877/-	Computer Aided Design
7	Ansys Version 14,32000 nodes.	30000/-	Computer Aided Design
8	Master CAM X5	305000/-	Computer Aided Design
9	СРИ	405000/-	Computer Aided Design
10	Monitor	104000/-	Computer Aided Design
11	CPU	202500/-	Computer Aided Design
12	Monitor	52000/-	Computer Aided Design
13	Master CAM X9. Milling 10, Turnining 10, Multiaxis 10	465350/-	Computer Aided Design
. 14	Universal vibration apparatus with 12 experiments.	73822/-	Dynamics of Machinery
. 15	Whirling of Shaft	51064/-	Dynamics of Machinery
. 16	Shock Absorber Test Rig. Continuous Variable Speed	99120/-	Dynamics of Machinery
. 17	Pressure Measurement Apparatus (Transferred to FM Lab)	39800/-	Fluid Mechanics
. 18	Gear Pump Test Rig with S.S.Tank & Oil	56000/-	Industrial Fluid Power
. 19	Advanced Hydraulic Trainer	172000/-	Industrial Fluid Power
. 20	Customized Electro pneumatic Trainer with Compressor	121200/-	Industrial Fluid Power
. 21	Testing of Pressure Relief Valve with Air Compressor	41200/-	Industrial Fluid Power
. 22	Cut section of the four cylinder & four stroke diesel engine (Motorized)	63112/-	Internal Combustion Engine
. 23	Four cylinder four stroke petrol engine in cut section	58748/-	Internal Combustion Engine
. 24	Exhaust Gas Analyzer Indus Make 5 Gases	252000/-	Internal Combustion Engine
. 25	Computerized Variable compression ratio engine test rig with multi-fuel system	716400/-	Internal Combustion Engine

Department of Mechanical Engineering:

. 26	Computerised 4 Stroke Multicylinder petrol Engine With hydraulic dynamometer	855000/-	Internal Combustion Engine
. 27	Computerised 3 cyl. 4 stroke Diesel Engine Testrig with eddy current dynamometer	1147500/-	Internal Combustion Engine
. 28	Fuel Supply system Demo model Petrol Engine	58300/-	Internal Combustion Engine
. 29	X-Y Position Control System	96500/-	Mechatronics
. 30	Linear Conveyor Control System	46250/-	Mechatronics
. 31	PLC Trainer a. kit with water level module	96000/-	Mechatronics
. 32	Allen Bradley software CD	49250/-	Mechatronics
. 33	Study of actuator kit	69875/-	Mechatronics
. 34	Data Acquisition System	59875/-	Mechatronics
. 35	Flow transducer trainer	59875/-	Mechatronics
. 36	Rotary table positioning system	49250/-	Mechatronics
. 37	Universal Testing Machine 40 ton	540000/-	Metallurgy
. 38	Rockwell cum Brinell Hardness Tester 150 kg	48150/-	Metallurgy
. 39	Charpy and Impact Machine 300 J	81000/-	Metallurgy
. 40	Magnetic Crack detector machine with powder	103500/-	Metallurgy
. 41	Standard metallurgical microstructure test - Microscope	81000/-	Metallurgy
. 42	Universal Testing Machine 40 ton	473891/-	Metallurgy
. 43	Jominy End Quech Test for Hardenability	78047/-	Metallurgy
. 44	Monochromatic light unit with optical flat and specimen	45900/-	Metrology and Quality Control
. 45	Tool Makers Microscope	65000/-	Metrology and Quality Control
. 46	Pneumatic Comparator	48510/-	Metrology and Quality Control
. 47	Poratable Surface Roughness Tester	146250/-	Metrology and Quality Control
. 48	Floating Carriage Micrometer	85500/-	Metrology and Quality Control
. 49	Auto Collimeter	175500/-	Metrology and Quality Control
. 50	Profile projector Model 3001	130500/-	Metrology and Quality Control
. 51	Diesel Engine Power Plant Demonstration Kit	182000/-	Power Plant Engineering

	Air Conditioning Test Rig	81281/-	Refrigeration and Air
. 52	An conditioning rest Kig	01201/-	Conditioning
	Vapor Compression Test Rig	81281/-	Refrigeration and Air
. 53	vapor compression rest Kig	01201/	Conditioning
	Ice Plant Test Rig	86062/-	Refrigeration and Air
. 54		00002/	Conditioning
	Vapor Absorption Test Rig	81281/-	Refrigeration and Air
. 55		01201/	Conditioning
	Heat Pump Test Rig	81281/-	Refrigeration and Air
. 56		01201/	Conditioning
	Air Conditioning Test Rig (Window	65025/-	Refrigeration and Air
. 57	A/c)	05025/-	Conditioning
	Refrigeration Fault Trainer	71718/-	Refrigeration and Air
. 58		/1/10/	Conditioning
. 59	Friction Clutch apparatus	52593/-	Theory of Machine
. 60	Epicyclic Gear Train Apparatus	57375/-	Theory of Machine
. 61	Impact of Jet Apparatus	43000/-	Turbo Machines
. 62	Pelton wheel Turbine Test Ring	105000/-	Turbo Machines
. 63	Kaplan Turbine Test Ring	475000/-	Turbo Machines
. 64	Centrifugal Pump Test Ring	9000/-	Turbo Machines
. 65	Centrifugal Pump Test Ring	71000/-	Turbo Machines
	Total Cost		10699719/-

14. Workshop:

Workshop consists of following equipment / machines:

Sr. No.	Name of Equipment / Machine	Quantity		
1.	CNC Lathe	01		
2.	Lathe Machines	17		
3.	Milling Machine	01		
4.	Drilling Machine	01		
5.	Surface Grinding Machine	01		
6.	Power Hacksaw Machine	01		
7.	Bench Grinder Machine	01		
8.	Arc Welding Machine	01		
9.	Spot Welding Machine	01		
10.	Wood Working Machine	02		

15. Computing Facilities:

The institution has IT facilities including WI-FI and sufficient number of computers and required number of peripherals. The facility available facilitates ICT enabled teaching-learning process and evaluation, research activities, and administration. The departments are having system software and application software, both licensed and open source software. The following table describes the computing facility available:

Internet and WI-FI	Internet Facility Details:100 Mbps leased line			
facility:	Content Ratio: 1:1(Gold)			
	(ISP provider –TATA Telecom),			
	Date of Updating: 01/09/2017			
	Aircell Backup line:10Mpbs			
	1. Windows XP			
System Software	2. Windows Vista			
	3. Windows 7			
	4. Windows 8			
	5. Windows 8.1			
	6. Windows 10			
	7. Windows Server			
	8. Ubuntu 14.04 (Open Source)			
	9. Fedora 19/20 (Open Source)			
	10. Windows Server 2008 R2 Standard			
Application Software's	1. Exchange Server Standard Turbo C++ 4.5			
	2. Adobe Flash MS Office 2013			
	3. Oracle 9i			
	4. Microsoft Visual Studio 2008			
	5. Microsoft Visual Studio 2012			
	6. Microsoft Visual Studio Express			
	7. Microsoft Office			
	8. MATLAB 6.0			
	9. Proteus 11			
	10. MATLAB Tool Boxes 5			
	11. Chips scope pro software			
	12. Embedded System Development software			
	13. DSP Application Software			
	14. Xilinx 14.1			
	15. Chips scope pro software			
	16. DSP Application Software			
	17. Tally ERP 9			
	18. Pro-E			
	19. Auto CAD			
	20. Master CAM			
	21. Ladders Programming Triton			
	22. NI Academic Site License			
	23. NI Multisim Circuit			
	24. Micro wind 3.1			
	25. CAD FEKO			
	26. EZNEC			
	27. Code Block			

16. List of facilities available

Games and Sports Facilities:

- Sports Facilities: Grounds for outdoor games and facilities for indoor games are available.
- The institute has adequate sports facilities and cultural centers for holistic development of students.
- The details of the facilities available are as follows:
 - Basketball court with size- 28mx15m meters
 - Volley ball courts with size- 18mx9m 3).
 - Football cum cricket field with size- 90mx45m meters.
 - A Kho-Kho ground.
 - Indoor games facilities like Carrom and table tennis are made available to he students.

College has a well-equipped gymnasium with facilities such as machine exercises, free weight exercises, etc, Physical Education Director is appointed to train the students participating in various zonal, all

• India and Inter-university level tournaments.







Extra-Curricular Activities and Soft Skill Development Facilities

- To ensure quality sustenance and enhancement the college periodically conducts the performance audit of the departments which includes course review, Review of Teaching – learning methodologies, Result analysis, Research output, Faculty Development Programs attended/conducted and Extension activities, Co-curricular and extra-curricular activities conducted during the year.
- In order have overall development of the students and generate teamwork and leadership skills the institute gives an opportunity to students to participate in co-curricular and extra-curricular activities.
- Students are encouraged to participate in co-curricular and extra-curricular activities organized by the institute and at other institutes by providing financial assistance and transport facilities. Good number of students has participated in various activities and has won prizes. The college has registered Alumni Association. Alumni assist the institution financially or non- financially by way of internships, Guest Lectures, Workshops, Industrial Visits, Campus Drives, etc.
- **Department Level students Associations:** These associations are fully represented by the students guided by a faculty member. These associations take initiative for promotion of activities related to academics, skill enhancement programmes curricular and extra-curricular activities. Students are encouraged to take decisions, plan and execute the programs to develop decision making and leadership skills.
- FDP for the faculty members should be arranged for design of the curriculum for the revised syllabus.

- Value-added courses and training programmes should be conducted to improve the employability of the graduating students.
- Training and placement activities to be conducted to improve the students skill sets Various soft skill programs should be arranged in Institute to Improve the Students communication and soft skills
- Industry visits should be encouraged to give an exposure of industrial applications and practices.

• Student Support and Progression

- Students are given scholarships by the Government as per the Government rules for various categories. Institution also provides scholarship to the students namely, Academic Excellence Scholarship, JSPM's Scholarships. In case of
- Exceptional cases fees are waived partly for students coming from economically weaker sections on their request. The institution has dedicated Training and Placement Cell comprising of Training and Placement Officer
- (TPO), Departmental Training and Placement Co-coordinators (TPC) and student coordinators. Various programs such as guidance for competitive exams and higher studies, career counseling, personal counseling, soft skill development, etc. are conducted. Field projects and internships are facilitated for the students through MOU's signed with industries for experiential learning and hands-on training. A good number of students have qualified in competitive exams for higher studies and recruitment by various Government departments. A satisfactory number of students are placed in core and IT industries through campus drives.

• Teaching Learning Process

- Curricula and syllabus for each of the Programmes as approved by the University
- Academic Calendar of the University
- Academic Time Table with the name of the Faculty members handling the Course
- Teaching Load of each Faculty
- Internal Continuous Evaluation System and place:

• Evaluation and Analysis

• Continuous assessment of the student is carried out by conducting Class/ Unit tests /mock online

- Tests/mock oral/mock practical exam to ascertain the attainment level of the students and thereby identify slow learners and advanced learners.
- External evaluation is done through in-semester, oral/practical and end semester written exam conducted by university.
- Remedial lectures are conducted for slow learners and opportunities are created for advanced learners to showcase their innovative ideas.
- Feedback from various stakeholders is taken for corrective measures to improve the effectiveness of curriculum delivery.

Internal continuous Evaluation Systems and Place

• Continuous assessment of the student is carried out by conducting Class/ Unit tests /mock online tests/mock oral/mock practical exam to ascertain the attainment level of the students and thereby identify slow learners and advanced

Savitribai Phule Pune University

(Formerly University of Pune)



Circular No. 278 of 2021

Revised Dates of Commencement and Conclusion of Engineering, Architecture and Pharmacy for the Academic Year 2021-2022 For Affiliated Colleges/Recognised Institutes

It is hereby informed that, the revised dates of commencement and conclusion of the Courses, under the faculty of Engineering, Architecture and Pharmacy for the academic year 2021-22 shall be as under :

	Name of the Courses		Revised 2021 - 2022			
Name of the Faculty		Year	First Term		Second Term	
			Commencement	Conclusion	Commencement	Conclusion
Science & Technology	Engineering	TE, BE	02/08/2021	30/11/2021	03/01/2022	26/04/2022
	B.Architecture	III, IV & V	15/06/2021	04/12/2021	03/01/2022	30/04/2022
		п	20/08/20201	10/12/2021	03/01/2022	30/04/2022
	B. Pharmacy	III & IV	17/08/2021	18/12/2021	03/01/2022	10/05/2022
		п	23/08/2021	18/12/2021	03/01/2022	10/05/2022
	M. Pharmacy	п	23/08/2021	18/12/2021	03/01/2022	15/05/2022

NOTE

1. All Programmes shall be conducted in Online Mode until further notice.

2. In view of prevailing COVID-19 situation in the Country, Colleges / Institutes shall required to follow the guidelines / instructions issued by the Government of Maharashtra from time to time.

fammes Deputy Registrar (P.G. Admission)

Ganeshkhind, Pune-07 Ref. No. PGS/ 3578 Date: 29/09/2021 learners. External evaluation is done through in-semester, oral/practical and end semester written exam conducted by Savitribai Phule University.

- Remedial lectures are conducted for slow learners and opportunities are created for advanced learners to showcase their innovative ideas. Feedback from various stakeholders is taken for corrective measures to improve the effectiveness of curriculum delivery.
- Institute has dedicated and experienced faculty members. Continuous internal evaluation of the student's performance is carried out through assignments, tests, mini-projects, etc. Internal evaluation and end-semester evaluation is used to ascertain the attainment of COs, POs and PSOs. Reforms are made in these internal assessment evaluation methods whenever required. Any grievances related to examination and evaluation is addressed properly. The institute has clearly stated its learning outcomes and accordingly implements the curriculum. On completion of each course, the attainment level of Course Outcomes is evaluated and efforts are taken on students to achieve high level attainment of Program and Program Specific Outcomes.



• Student's assessment of Faculty, System in place:

- Alumni Feedback is taken from Alumni for the academic year. The analysis helped the institute in development of curriculum for 'Autonomy'.
- Feedback about Faculty is taken from students twice a semester. The various parameters on which teaching is assessed are: Communication Skills, Quality of Teaching/ Academic input, Subject Knowledge, Content and Method of Delivery, Resourcefulness, Readiness of teacher, Accessibility and Availability of Teacher in Campus/ Department. Feedback is signed by the Director and conveyed to the faculty by respected Head of the

- Department. Counseling of faculty having feedback count less than 60 % (out of 100) is carried out by Head of the Department as well as by the Director for his/ her improvement.
- An Institute level Parent Teacher meeting is conducted once every semester. During the meeting, parents are made aware about their wards' attendance, academic performance for the semester as well as about the various learning processes conducted in the institute. In academic year 2020-21, Parent Teacher meeting for the first semester was conducted. Suggestions given by parents were taken into consideration for further actions. Also this helped in identifying the parents who would help in providing support to the institute in terms of Projects, internship and placement etc.
- 4. Feedback about Institute is also taken from all students once in a year. This includes the feedback about the facilities and the infrastructure of the institute. 5. Various companies visit the campus of the institute for the placement of the students. Based on this feedback, Guest lectures, workshops, seminars are organized for students to help them to be ready for industry.

The Institution ensures effective implementation of planned curriculum in accordance with syllabus prescribed by the affiliating University aided with ICT enabled facilities and e-resources. The curriculum is planned taking into consideration the current industry requirements and the technological advancements. In order to bridge the gap, Certificate programs, workshops, seminars, add-on, value added courses are

conducted by in-house faculty members and invited professionals and industry experts. To cope up with the changing technologies, new courses are introduced and electives are offered which facilitates academic flexibility

17. Publications:

Total 102 papers published by faculty members during academic year 2021-22 at Different National international journals.

18. Workshop Seminars:

10 Workshop/seminars on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the year.

19. Professional Development Programmes,

Total 90 faculty members have attended FDP/Orientation / Induction Programmes, Refresher Course, Short Term Course etc. during the academic year.

20. Industry Linkage:

Total 426 Collaborative linkage activity has been carried out during the year like transfer of knowledge, industrial visits, internships and projects

21. MoUs with Industries:

53 active MOUs signed with different industries during the year for collaboration of different activities, like campus interviews, industrial sponsored projects, staff and students training, expert lectures etc.

22. Best Practices

The institution has taken initiatives to shift learning from traditional "teacher centric" to the "student centric" approach. Following are some of the efforts been taken to make learning more student- centric:-

1. Experiential learning: -

Students are encouraged to undertake internship programs, hands on training, industrial training, sponsored projects in order to make them industry ready graduates. Further institute organizes industrial visits, field trips for the students to make them aware of the current market working trends and technologies. Various technical events like model making, robot making, circuit-designing, 3D- sculpt making, etc. are arranged.

2. Participative learning

Students are recurrently motivated to participate in curricular, cocurricular and extracurricular activities so that they become industry ready confident candidates and an amalgam of knowledge and persona.Different departments organize paper presentation, mini- projects, project, and postermaking competitions for the students to promote participative learning. "Cynosure" is a national level technical event organized annually by the institute. This is a platform created to promote awareness of advancements in respective fields and showcase technical expertise and talent of the students. To realize student participation, institute engages students in a number of modern teaching learning methodologies like role play, group discussions, brain storming sessions, etc.

Role play-

Here group of students simulate a scenario by assuming specific roles. Students work through a situation and try to enact a concept/scenario by making the concept live by conversing the dialogues between their groupmembers. This technique is an excellent mechanism of participative learning since students play their specific role and interact with their peers in order to accomplish their assigned task.

Brainstorming sessions –

Random cases pertaining to day to day issues faced by industry, real life scenarios; technical, non-technical aspects, etc. are explored to nurture the student's problem solving skills.

Group Discussions-

To develop students into future leaders in industry, institute inspires students to participate in a number of group discussions.

Paper presentation:-

Students are exposed to latest trends and practices in industry through case studies and research work presented in the form of research papers.

Project competitions: Institute conducts in-house and outbound competitions pertaining to all. Disciplines by assigning a task in the form of competition.



ZE.

PRINCIPAL J S.P.M.'S Bhivarabal Sawant Institute of Technology & Research Wagholi, Pune- 412207