श्रीचन्द्रशेखरेन्द्रसरस्वतीविश्वमहाविद्यालयः

SRI CHANDRASEKHARENDRA SARASWATHI VISWA MAHAVIDYALAYA

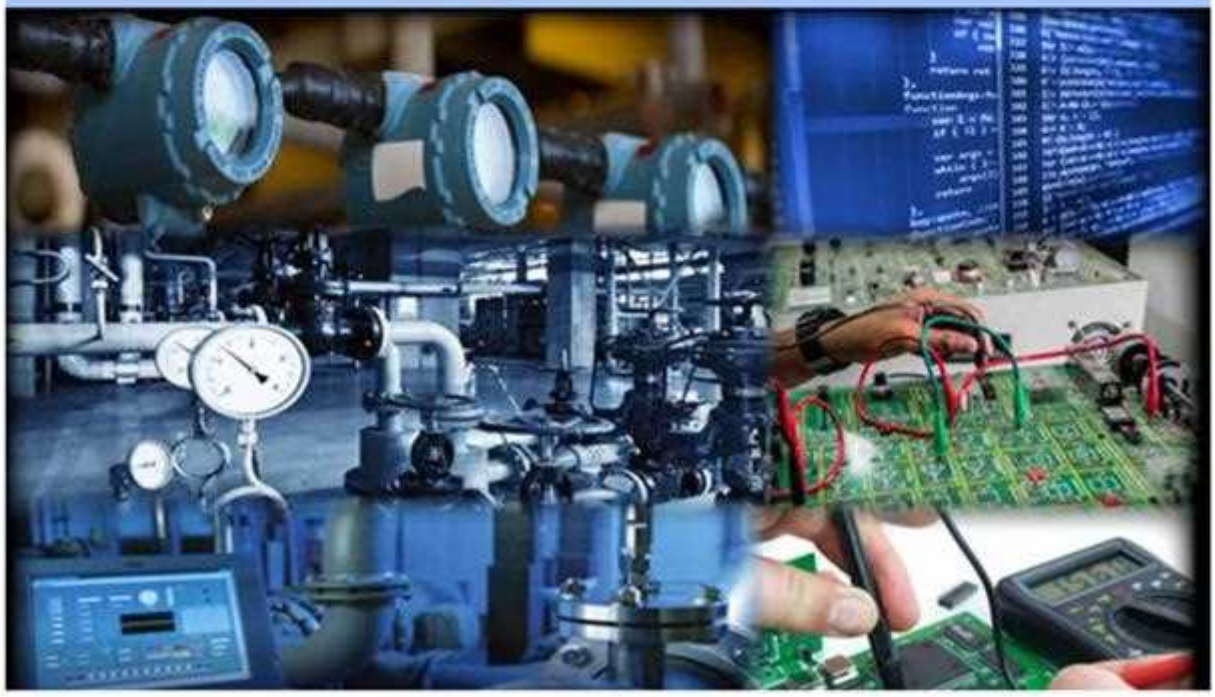
Deemed to be University (Accredited with "A" grade by NAAC)

Enathur, Kanchipuram - 631 561. Tamilnadu, India www.kanchiuniv.ac.in

Electronics & Instrumentation Engineering

DEPARTMENT PROFILE

2021-2022



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DEPARTMENT OF ELECTRONICS AND INSTRUMENTATION ENGINEERING

DEPARTMENT PROFILE 2021-2022

CONTENTS

1. ABOUT THE DEPARTMENT

The Electronics and Instrumentation Engineering department was established in the year 2009 and the first batch of students graduated from the department in the year 2013. Mechatronics course was started in the year 2014 under the umbrella of EIE in SCSVMV. These engineers carry out the task of measuring, installing, developing, maintaining and designing various instruments used in the industry. With computer aided processes and automation techniques, these engineers formulate ways to control these systems. The EIE department equips students with knowledge of instruments and there management.

Programs

The department offers Undergraduate, Postgraduate and Doctoral Course in the field of Instrumentation. The highlight of B.E program is the dual-purpose approach of learning key concepts and engaging them practical experience. Students are trained to plan, design, install, operate service and maintain complex instruments and also to make sure that high quality is maintained. Nearly 36 students are admitted each year into the Bachelors Programme through common entrance exam and marks obtained in their qualifying examination. The B.E programme is an eight semester (four year) course, the curriculum being updated regularly with inputs from industries and reputed educational institutions. The department with its state of the art laboratories and young and dynamic faculty is involved in providing quality education at UG level.

The department consists of nine faculty members who have experience in teaching, industry and research. This department has an experienced and energetic team of experts in field like measurements and instruments, control systems, process control, embedded systems, electronic devices, signal processing, VLSI design. A research coordination committee chaired by the Head of the department, along with two faculty members, carries out academic research in the department.

Students are encouraged to undergo industrial training during the course of their academic program in order to have practical implementation of the various concepts learnt in the classroom. The EIE department arranges industrial visits, technical seminars and workshops.

2. VISION AND MISSION

VISION

Academic Excellence and to be in dynamic equilibrium with Contemporary Industry.

MISSION

- To develop students with strong foundation in fundamentals.
- To establish a laboratory with latest technologies.
- To provide continuous help to students to develop their overall personality, skills, confidence and character.

3. OBJECTIVES

- **Curriculum**

The Aim of the department is grounding in fundamentals among the students with latest trends in the industry by creating new lab such as virtual instrumentation lab, where they can stimulate a real industry situation in virtual model and study the working process. The Process Control lab will make the students to have clear understanding about process stations, flow meters, and control valve design. This is accomplished through course and laboratory practicals and students are required to choose their own elective during final year to specialize in their chosen area.

- **Co Curriculum**

Students are taken to various industries to know practical ideas about the field of Robotics and Instrumentation Engineering. Instrumentation branch also deals with measurements and control. The department mainly focus on areas of Microprocessors, Microcontrollers, Robotics, Biomedical, Transducer and measurements, Virtual Instrumentation, Programmable Logic Controllers, MEMS etc., All the labs are well equipped with state of the art equipment and latest software packages like MATLAB, PLC, Xlinx, Multisim and LAB VIEW for the accessibility of students.

The department conducts career development programs with objective of improving the communication skills, personality development and tips for facing the interview, technical writing etc., by inviting external experts for lectures. As a result of this effect, the students are faring well in the campus interviews and University examinations. The department monitors the students' progress regularly and providing necessary counseling at various levels towards achieving better results.

- **Extra Curriculum**

The students are encouraged to take active part in cultural programs, seminars, paper presentations, quiz programs, sports etc., The department also understands the importance of practical exposure to the students and periodically arranges industrial visits and Inplant/Internship training in industries under various domains. The department also conducted a every year **"AAVISHKAR"** the National level Symposium is conducted. Workshops, Guest lecturers are arranged to improve the skills of the students in various domains. During September 15th, Engineers' day is celebrated every year by inviting industrial experts to share their experience and ideas.

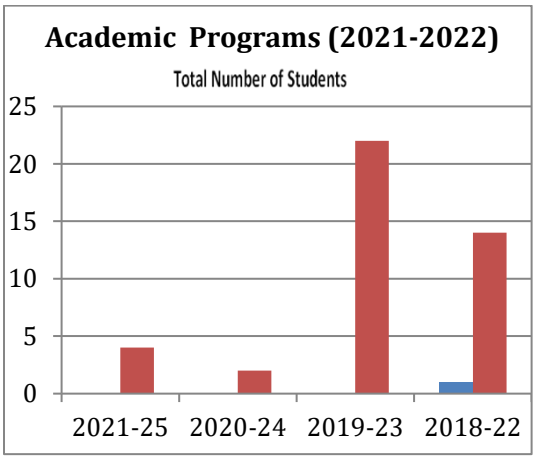
- **Program Educational Objectives**

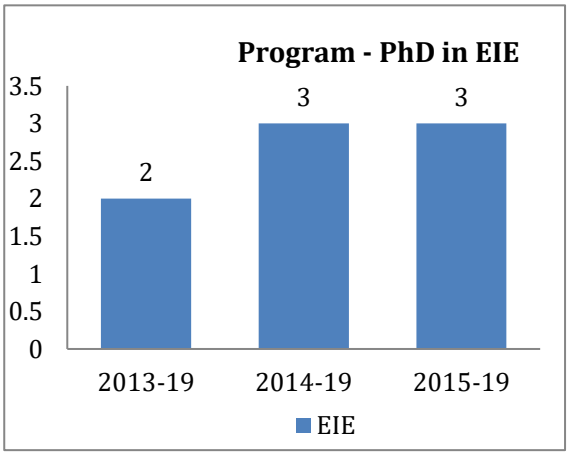
1. To design, develop product and application with multidisciplinary engineering expertise.
2. To use latest engineering tools to enhance the productivity in the field of automation.
3. Complex problem solving skill to innovate and research by applying multi-disciplinary environment (mechanical, electrical, instrumentation and computer knowledge).
4. Provide professional, social and ethical responsibilities.
5. To pursue higher education.

4. ACADEMIC PROGRAMS (2021-2022)

PROGRAM	SANCTIONED STRENGTH	YEAR	BATCH	TOTAL NUMBER OF STUDENTS STRENGTH
UG EIE	01	I	2021-25	Nil
		II	2020-24	Nil
		III	2019-23	Nil
		IV	2018-22	01
UG MECHATRONICS	42	I	2021-25	04
		II	2020-24	02
		III	2019-23	22
		IV	2018-22	14
RESEARCH (Ph.D in EIE dept)	08	-	2013-19	02
			2014-19	03
			2015-19	03

ACADEMIC PROGRAMS (2021-2022)





5.CURRICULUM

Department of Electronics and Instrumentation Engineering Courses Offered	
Bachelor of Engineering	1. Electronics and Instrumentation Engineering 2. Mechatronics Engineering

COURSE	LABORATORY	ELECTIVE SUBJECTS
Electronics and Instrumentation Engineering	• Electronic Devices and Circuits Lab • Microprocessor and Microcontroller Lab • Analog and digital communication Lab • Transducer and Industrial Instruments Lab • Virtual Instrumentation Lab/Computer Control Lab • Industrial Process Control Lab	• Analog Communication • Power Plant Instrumentation • Analytical Instrumentation • Fiber optics and Laser Instrumentation • Robotics and Automation • Advanced Control System • Digital Communication • Embedded Systems • Programmable Logic Controller • Wireless Sensor Network • Neural Network and Fuzzy Logic Network • Virtual Instrumentation • Computer Aided Instrumentation • Instrumentation and control in Iron and Steel Industries • MEMS and Nano Technology • Instrumentation and control in Petro Chemical Industries • Instrumentation and control in Food Processing • Nuclear Instrumentation • Machine Vision • Aircraft Instrumentation • Bio Medical Instrumentation

COURSE	LABORATORY	ELECTIVE SUBJECTS
Mechatronics Engineering	• Electronic Devices and Circuits Lab • Microprocessor and Microcontroller Lab • Analog and digital communication Lab • Transducer and Industrial Instruments Lab • Virtual Instrumentation Lab/Computer Control Lab • Industrial Process Control Lab	• Theory of Machines • Metrology and Measurements • Refrigeration and AirConditioning • Internal Combustion Engines • Machine Design • Finite Element Analysis • Design of Jigs and Fixtures • Rapid Manufacturing Technology • CIM • Process Planning and Cost Estimation • Mechanical Vibration and noise control • Machine Vision • Autotronics • Design of Mechatronics Systems

BIRDS EYE VIEW – EIE CURRICULUM

Electronics and Instrumentation Engineering – 2018 Regulation								
Year	**First Year**		**Second Year**		**Third Year**		**Fourth Year**	
	Semester I	**Semester II**	**Semester III**	**Semester IV**	**Semester V**	**Semester VI**	**Semester VII**	**Semester VIII**
Theory	English	M-2***	M-3***	Digital Signal Processing	PEC 1**	PEC 2**	Robotics and Automation	PEC 6**
	M-1***	Engg. Chemistry	Electronic Devices and Circuits	Industrial Instrumentation	OEC 1*	OEC 2*	PEC 3**	PEC 7**
	Engg. Physics	Basic Electrical Engineering	Signals and Systems	Principles of Communication	Control System	PLC and Data Acquistion Systems	PEC 4**	OEC 4**
	Programming for Problem Solving		Electrical Measurements	Thermodynamics	Process Control Instrumentation	Principle of Management and Professional Ethics	PEC 5**	
			Sensors and Actuator	Linear Integrated Circuits	Power Electronics and Industrial Drives	Microprocessors & Microcontrollers	OEC 3*	
			Object Oriented Programming Using C++	Digital Electronics	Power Plant Instrumentation	Industrial Chemical Process		
Lab	Physics Lab	Chemistry Lab	Electronic Devices and Circuits Lab	Linear Integrated Circuits & Digital Electronics Lab	Control System Lab	Microprocessor and Microcontroller Lab	Internship and Industrial Visit	

	Programming for Problem Solving Lab	Basic Electrical Engineering Lab	Electrical Measurements Lab	Thermal Engineering Lab	Power Electronics and Industrial Drives Lab	Virtual Instrumentation Lab	Project Work Phase –I	Project Work Phase –II
	Workshop/ Manufacturing Practices	Engineering Graphics & Design	Object Oriented Programming Using C++ Lab	Transducer and Industrial Instruments Lab	Industrial and Process Control Lab	PLC Lab	Instrumentation System Design Lab	

***OEC – Open Elective Course **PEC – Professional Elective Course ***M -Mathematics**

BIRDS EYE VIEW –CURRICULUM

Mechatronics Engineering– 2018 Regulation								
Year	First Year		Second Year		Third Year		Fourth Year	
	Semester I	Semester II	Semester III	Semester IV	Semester V	Semester VI	Semester VII	Semester VIII
Theory	English	M-II***	M-III***	Strength of Materials and Fluid Mechanics	PEC I**	PEC II**	Robotics & Automation	PEC VI**
	M-I***	Engineering Chemistry	Electronic Devices and Circuits	Industrial Instrumentation	OEC I*	OEC II*	PEC III**	PEC VII**
	Engineering Physics	Basic Electrical Engineering	Engineering Mechanics	Materials Engineering	Control Systems	Principles of Management and Professional Ethics	PEC IV**	OEC IV*
	Programming for Problem Solving	Environmental Sciences and Engineering	Manufacturing Technology for Mechatronics	Thermodynamics	Analytical Instrumentation	Microprocessors and Microcontrollers	PEC V**	
			Sensors & Actuators	Linear Integrated Circuits	Fluid Power Systems	PLC & Data Acquisition System	OEC III*	
			Object Oriented Programming Using C++	Digital Electronics	Power Electronics and Industrial Drives	CAD & CAM	Robotics Automation & Process control Lab	
Lab	Physics Lab	Chemistry Lab	Electronic Devices and Circuits Lab	Linear Integrated Circuits & Digital Electronics Lab	Fluid Power Control Lab	Microprocessors and Microcontrollers Lab	Internship and Industrial Visit	
	Programming for Problem Solving Lab	Basic Electrical Engineering Lab	Manufacturing Process Lab	Thermal Engineering Lab	Power Electronics and Industrial Drives Lab	CAD & CAM Lab	Project Phase I	Project Phase II
	Workshop/ Manufacturing Practices	Engineering Graphics & Design	Object Oriented Programming Using C++ LAB	Strength of Materials and Fluid Mechanics Lab	Machine Drawing Lab	PLC & Virtual Instrumentation Lab		

***OEC – Open Elective Course **PEC – Professional Elective Course ***M –Mathematics**

B.E- EIE (FULL TIME) - CURRICULUM

(For candidates admitted during the year 2018 onwards)

Semester Wise Structure of Curriculum

[L = Lecture, T = Tutorial, P = Practical & C = Credit]
[IA = Internal Assessment, EA = External Assessment & TM = Total Mark]

Semester I (First year)

SL.No	Category	Code	Course Title	L	T	P	C	IA	EA	TA
1.	HSMC	CHSEN18T10	English#	2	1	-	3	40	60	100
2.	BSC	CBSMAA8T20	Mathematics I(Calculus & Differential Equations) #	3	1	-	4	40	60	100
3.	BSC	CBSPH18T30	Engineering Physics#	3	-	-	3	40	60	100
4.	ESC	CESCS18T40	Programming for Problem Solving	2	1	-	3	40	60	100
5.	BSC	CBSPH18P50	Physics Lab#	-	-	3	2	40	60	100
6.	ESC	CESCS18P60	Programming for Problem Solving Lab	-	-	3	2	40	60	100
7.	ESC	CESME18P70	Workshop/Manufacturing Practices$	-	-	3	2	40	60	100

Science and Humanities $Mechanical Engineering **Total Credits: 19**

Semester II (First year)

SL.No	Category	Code	Course Title	L	T	P	C	IA	EA	TA
1.	BSC	CBSMAF8T10	Mathematics – II (Linear Algebra, Transform Calculus and Numerical methods) #	3	1	-	4	40	60	100
2.	BSC	CBSCH18T20	Engineering Chemistry#	3	-	-	3	40	60	100
3.	ESC	CESEE18T30	Basic Electrical Engineering@	3	-	-	3	40	60	100
4.	MC*	CMCCH28T50	Environmental Sciences and Engineering*#	2	0	0	2*	40	60	100
5.	BSC	CBSCH18P60	Chemistry Laboratory#	-	-	3	2	40	60	100
6.	ESC	CESEE18P70	Basic Electrical Engineering Lab	-	-	3	2	40	60	100
7.	ESC	CESME18P50	Engineering Graphics & Design$	-	-	3	3	40	60	100

Science and Humanities @ Electrical Engineering $Mechanical Engineering **Total Credits: 17+2***

Semester III (Second year)

SL.No	Category	Code	Course Title	L	T	P	C	IA	EA	TA
1.	BSC	BEIF183T10	Mathematics –III (Probability and Statistics) #	3	1	-	4	40	60	100
2.	PCC	BEIF183T30	Electronic Devices and Circuits	3	0	-	3	40	60	100
3.	PCC	BEIF183T40	Signals and Systems	2	1	-	3	40	60	100
4.	PCC	BEIF183T50	Electrical Measurements@	3	0	-	3	40	60	100
5.	PCC	BEIF183T60	Sensors and Actuator	3	0	-	3	40	60	100
6.	ESC	BEIF183T20	Object Oriented Programming Using C++&	3	0	-	3	40	60	100
7.	MC*	BETF183MC2	Sanskrit & Indian Culture*	2	-	-	2*	40	60	100
8.	MC*	BETF183MC3	Soft Skill**-I	-	-	-	1*	40	60	100
9.	PCC	BEIF183P80	Electronic Devices and Circuits Lab	-	-	3	2	40	60	100
10.	PCC	BEIF183P90	Electrical Measurements Lab@	-	-	3	2	40	60	100
11.	ESC	BEIF183P70	Object Oriented Programming Using C++ Lab&	-	-	3	2	40	60	100

Science and Humanities @ Electrical Engineering &Computer Engineering **Total Credits: 25+3***

Semester IV (Second year)

SL.No	Category	Code	Course Title	L	T	P	C	IA	EA	TA
1.	PCC	BEIF184T10	Digital Signal Processing	2	1	-	3	40	60	100
2.	PCC	BEIF184T20	Industrial Instrumentation	3	0	-	3	40	60	100
3.	PCC	BEIF184T30	Principles of Commnication	3	0	-	3	40	60	100
4.	ESC	BEIF184T40	Thermodynamics$	3	0	-	3	40	60	100
5.	PCC	BEIF184T50	Linear Integrated Circuits	3	0	-	3	40	60	100
6.	PCC	BEIF184T60	Digital Electronics	3	0	-	3	40	60	100
7.	MC*	BETF184MC4	Soft Skill**-II	-	-	-	1*	40	60	100
8.	PCC	BEIF184P70	Linear Integrated Circuits & Digital Electronics Lab	-	-	3	2	40	60	100
9.	ESC	BEIF184P80	Thermal Engineering Lab$	-	-	3	2	40	60	100
10.	PCC	BEIF184P90	Transducer and Industrial Instruments Lab	-	-	3	2	40	60	100

$Mechanical Engineering **Total Credits: 24+1***

Semester V (Third year)

SL.No	Category	Code	Course Title	L	T	P	C	IA	EA	TA
1.	PEC	BEIF185E	Professional Elective – I	3	0	-	3	40	60	100
2.	OEC	BEIF185OE	Open Elective –I	3	0	-	3	40	60	100
3.	PCC	BEIF185T10	Control System	2	1	-	3	40	60	100
4.	PCC	BEIF185T20	Process Control Instrumentation	2	1	-	3	40	60	100
5.	PCC	BEIF185T30	Power Electronics and Industrial Drives	3	0	-	3	40	60	100
6.	PCC	BEIF185T40	Power Plant Instrumentation	3	0	-	3	40	60	100
7.	Optional OEC*	BEIF18OO	Japanese Primer/French Primer/ Germen Primer	-	-	1	2*	40	60	100
8.	MC*	BETF185MC05	Soft Skill*-III	-	-	-	1*	40	60	100
9.	PCC	BEIF185P60	Control System Lab	-	-	3	2	40	60	100
10.	PCC	BEIF185P70	Power Electronics and Industrial Drives Lab	-	-	3	2	40	60	100
11.	PCC	BEIF185P80	Industrial and Process Control Lab	-	-	3	2	40	60	100

*Not for CGPA

Total Credits: 24+3*

Semester VI (Third year)

SL.No	Category	Code	Course Title	L	T	P	C	IA	EA	TA
1.	PEC	BEIF186E	Professional Elective – II	3	0	-	3	40	60	100
2.	OEC	BEIF186OE	Open Elective –II	3	0	-	3	40	60	100
3.	PCC	BEIF186T10	PLC & Data Acquisition System	3	0	-	3	40	60	100
4.	HSMC	BEIF186T30	Principle of Management and Professional Ethics	3	0	-	3	40	60	100
5.	PCC	BEIF186T20	Microrprocessor and Microcontroller	3	0	-	3	40	60	100
6.	PCC	BEIF186T40	Industrial Chemical Process	3	0	-	3	40	60	100
7.	Optional OEC*	BEIF18OOE	Japanese Primer/French Primer/ Germen Primer	-	-	1	2*	40	60	100
8.	MC*	BETF18MC06	Soft Skill**-IV	-	-	-	1*	40	60	100
9.	PCC	BEIF186P70	Microrprocessor and Microcontroller Lab	-	-	3	2	40	60	100
10.	PCC	BEIF186P80	Virtual Instrumentation Lab	-	-	3	2	40	60	100
11.	PCC	BEIF186P90	PLC Lab	-	-	-	2	40	60	100

***Not for CGPA** Total Credits: 21+3*

Semester VII (Fourth year)

SL.No	Category	Code	Course Title	L	T	P	C	IA	EA	TA
1.	PCC	BEIF187T10	Robotics and Automation	3	0	-	3	40	60	100
2.	PEC	BEIF187E	Professional Elective –III	3	0	-	3	40	60	100
3.	PEC	BEIF187E	Professional Elective –IV	3	0	-	3	40	60	100
4.	PEC	BEIF187E	Professional Elective –V	3	0	-	3	40	60	100
5.	OEC	BEIF187OE	Open Elective –III	3	0	-	3	40	60	100
6.		BEIF187P60	Internship and Industrial visit ***	-	-	-	2	40	60	100
7.		BEIF187Z70	Project Work Phase –I	-	-	-	2	40	60	100
8.	PCC	BEIF187P80	Instrumentation System Design Lab	-		3	2	40	60	100

******Industrial visit (minimum 5 Visits from I to VI sem) and minimum 5 weeks Internship should be carried out.** Total Credits: 22

Semester VIII (Fourth year)

SL.No	Category	Code	Course Title	L	T	P	C	IA	EA	TA
1	PEC	BEIF188E	Professional Elective –VI	3	0	-	3	40	60	100
2.	PEC	BEIF188E	Professional Elective – VII	3	0	-	3	40	60	100
3.	OEC	BEIF188OE	Open Elective –IV	3	0	-	3	40	60	100
4.		BEIF188Z40	Project Work Phase –II	-	-	-	10	40	60	100

Total Credits: 19

CREDIT ANALYSIS

	I	II	III	IV	V	VI	VII	VIII	TOTAL
HSMC	3					3			**6**
BSC	9	9	4						**22**
ESC	7	8	5	5					**25**
PCC			16	19	18	15	5		**73**
PEC					3	3	9	6	**21**
OEC					3	3	3	3	**12**
MC		2*	3*	1*	3*	3*		-	**12***
PROJECT							2	10	**12**
Internship & Industrial Visit							2		**2**
	19	**17+2***	**25+3***	**24+1***	**24+3***	**24+3***	**21**	**19**	**173**

***Not included in total credits**

LIST OF PROFESSIONAL ELECTIVES

Professional Elective Course -1 **SEMESTER 5**

S.No	Sub.Code	Subject Name
1	BEIF185EA0	Analytical Instrumentation
2	BEIF185EB0	Instrumentation and Control in Iron and Steel Industries
3	BEIF185EC0	Digital Instrumentation
4	BEIF185ED0	Digital Image Processing.

Professional Elective Course -2 **SEMESTERS 6**

S.No	Sub.Code	Subject Name
1	BEIF186EE0	Virtual Instrumentation
2	BEIF186EF0	Advanced Control Systems
3	BEIF186EG0	Instrumentation and Control in Paper and Pulp Industries
4	BEIF186EH0	Energy Management and Industrial Safety

Professional Elective Course -3 **SEMESTER 7**

S.No	Sub.Code	Subject Name
1	BEIF187EI0	Embedded Systems
2	BEIF187EJ0	Neural Network and Fuzzy Logic
3	BEIF187EK0	Instrumentation and Control in Food Processing Industries
4	BEIF187EL0	Optimal Control Systems

Professional Elective Course -4 **SEMESTER 7**

S.No	Sub.Code	Subject Name
1	BEIF187EM0	Computer Control of Process
2	BEIF187EN0	Process Equipment Design
3	BEIF187EO0	Mechatronics
4	BEIF187EP0	Non Linear Control Systems

Professional Elective Course -5 **SEMESTER 7**

S.No	Sub.Code	Subject Name
1	BEIF187EQ0	Aircraft Instrumentation
2	BEIF187ER0	Engineering Economics
3	BEIF187ES0	Fiber Optics and Laser Instrumentation
4	BEIF187ET0	Digital Control Systems

Professional Elective Course -6 **SEMESTER 8**

S.No	Sub.Code	Subject Name
1	BEIF188EU0	Automotive Instrumentation
2	BEIF188EV0	VLSI Design
3	BEIF188EW0	Autotronics
4	BEIF188EX0	Real Time Embedded System Design

Professional Elective Course -7 **SEMESTER 8**

S.No	Sub.Code	Subject Name
1	BEIF188EY0	Biomedical Instrumentation
2	BEIF188EZ0	Machine Vision
3	BEIF188EA1	MEMS
4	BEIF188EB1	Wireless Communication

SEMESTER BASED OPEN ELECTIVES

Open Elective Course -1 **SEMESTER 5**

S.No	Sub.Code	Subject Name
1	BEIF185OEB	Green and Smart Buildings
2	BEIF185OEC	Operational Research
3	BEIF185OEA	Electric Hybrid Vehicle Technology
4	BEIF185OED	Material Science

Open Elective Course -2 **SEMESTER 6**

S.No	Sub.Code	Subject Name
1	BEIF186OEE	Radar and Navigation
2	BEIF186OEF	Human Resources Management
3	BEIF186OEG	Waste Water Management
4	BEIF186OEH	Computer Aided Design

Open Elective Course -3 **SEMESTER 7**

S.No	Sub.Code	Subject Name
1	BEIF187OEI	Data Communication and Network Systems
2	BEIF187OEJ	Energy Harvesting Technology
3	BEIF187OEK	Disaster Management
4	BEIF187OEL	Battery Technology

Open Elective Course -4 **SEMESTER 8**

S.No	Sub.Code	Subject Name
1	BEIF188OEL	Data Compression Techniques
2	BEIF188OEM	Satellite Communication
3	BEIF188OEN	Entrepreneurship Development
4	BEIF188OEO	IoT in Automation

Optional Open Elective Course - Foreign Language

S.No	Sub.Code	Subject Name
1	BEIF18OOEA	Japanese Primer
2	BEIF18OOEB	French Primer
3	BEIF18OOEC	Germen Primer

SEMESTERWISE STRUCTURE OF CURRICULUM
2018 ONWARDS
(L- Lecture, T- Tutorial, P- Practical and C-Credit)

COURSE: Mechatronics Engineering

I Semester

S.No	Subject Category	Name of the Subject	L	T	P	C
1	HSMC	English	3	1	-	3
2	BSC	Mathematics I (Calculus & Differential Equations)	3	1	-	4
3	BSC	Engineering Physics	3	1	-	3
4	ESC	Programming for Problem Solving	3	1	-	3
5	BSC	Physics Lab	-	-	3	2
6	ESC	Programming for Problem Solving Lab	-	-	3	2
7	ESC	Workshop/Manufacturing Practices	-	-	3	2
		TOTAL	12	4	9	19

II Semester

S.No	Subject Category	Name of the Subject	L	T	P	C
1	BSC	Mathematics II (Linear Algebra, Transform Calculus and Numerical methods)	3	1	-	4
2	BSC	Engineering Chemistry	3	1	-	3
3	ESC	Basic Electrical Engineering	3	1	-	3
4	BSC	Chemistry Lab	-	-	3	2
5	ESC	Basic Electrical Engineering Lab	-	-	3	2
6	ESC	Engineering Graphics and Design	-	-	3	3
7	MC*	Environmental Science and Engineering	-	-	-	2*
		TOTAL	9	3	9	17+2*

III Semester

S.No	Subject Category	Name of the Subject	L	T	P	C
1	BSC	Mathematics III (Probability and Statistics)	3	1	-	4
2	PCC	Electronic Devices and Circuits	3	-	-	3
3	PCC	Engineering Mechanics	2	1	-	3
4	PCC	Manufacturing Technology for Mechatronics	3	-	-	3
5	PCC	Sensors and Actuators	3	-	-	3
6	ESC	Object Oriented Programming using C++	3	-	-	3
7	MC*	Sanskrit and Indian Culture	2	-	-	2*
8	PCC	Electronic Devices and Circuits Lab	-	-	3	2
9	PCC	Manufacturing Process Lab	-	-	3	2
10	ESC	Object Oriented Programming using C++ Lab	-	-	3	2
11	MC*	Soft Skills 1	-	-	1	1*
		TOTAL	19	2	10	25+3*

* Not for CGPA

IV **Semester**

S.No	Subject Category	Name of the Subject	L	T	P	C
1	PCC	Strength of Materials and Fluid Mechanics	3	-	-	3
2	ESC	Industrial Instrumentation	3	-	-	3
3	PCC	Materials Engineering	3	-	-	3
4	PCC	Thermodynamics	3	-	-	3
5	PCC	Linear Integrated Circuits	3	-	-	3
6	PCC	Digital Electronics	3	-	-	3

7	PCC	Linear Integrated Circuits and Digital Electronics Lab	-	-	3	2
8	PCC	Thermal Engineering Lab	-	-	3	2
9	PCC	Strength of Materials and Fluid Mechanics Lab	-	-	3	2
10	MC*	Soft Skills -II	-	-	1	1*
		TOTAL	18	-	10	24+1*

* Not for CGPA

V Semester

S.No	Subject Category	Name of the Subject	L	T	P	C
1	PEC	Professional Elective I	3	-	-	3
2	OEC	Open Elective I	3	-	-	3
3	PCC	Control Systems	2	1	-	3
4	ESC	Analytical Instrumentation	2	1	-	3
5	PCC	Fluid Power Systems	3	-	-	3
6	PCC	Power Electronics and Industrial Drives	3	-	-	3
7	PCC	Fluid Power Control Lab	-	-	3	2
8	PCC	Power Electronics and Industrial Drives Lab	-	-	3	2
9	PCC	Machine Drawing Lab	-	-	3	2
10	MC*	Soft Skills -III	-	-	1	1*
		TOTAL	16	2	10	24+1*

* Not for CGPA

VI Semester

S.No	Subject Category	Name of the Subject	L	T	P	C
1	PEC	Professional Elective II	3	-	-	3
2	OEC	Open Elective II	3	-	-	3
3	HSMC	Principles of Management and Professional Ethics	3	-	-	3
4	PCC	Microprocessors and Microcontrollers	3	-	-	3
5	PCC	PLC & Data Acquisition System	3	-	-	3
6	PCC	CAD / CAM	2	1	-	3
7	PCC	Microprocessors and Microcontrollers Lab	-	-	3	2
8	PCC	CAD / CAM Lab	-	-	3	2
9	PCC	PLC & Virtual Instrumentation Lab	-	-	3	2
10	Optional OEC*	French Primer / Japanese Primer / German Primer	-	-	1	2*
11	MC*	Soft Skills - IV	-	-	1	1*
		TOTAL	17	1	10	2+3*

* Not for CGPA

VII Semester

S.No	Subject Category	Name of the Subject	L	T	P	C
1	PCC	Robotics & Automation	3	-	-	3
2	PEC	Professional Elective III	3	-	-	3
3	PEC	Professional Elective IV	3	-	-	3
4	PEC	Professional Elective V	3	-	-	3
5	OEC	Open Elective III	3	-	-	3

6	PCC	Robotics Automation & Process control Lab	-	-	3	2
7		Internship and Industrial Visit **	-	-	-	2
8		Project Work Phase -1	-	-	-	2
		TOTAL	15	-	3	21

** Industrial visit (minimum 5 visits from I to VI sem) and minimum 5 weeks Internship should be carried out

VIII Semester

S.No	Subject Category	Name of the Subject	L	T	P	C
1	PEC	Professional Elective VI	3	-	-	3
2	PEC	Professional Elective VII	3	-	-	3
3	OEC	Open Elective IV	3	-	-	3
4		Project Work Phase -II	-	-	-	10
		TOTAL	9	-	-	19

- BSC – Basic Science Course
- ESC - Engineering Science Course
- HSMC – Humanities, Social Science including Management Course
- OEC – Open Elective Course
- PEC – Professional Elective Course
- PCC – Professional Core Course
- MC * - Mandatory Course (Credit Not included for CGPA)

PROFESSIONAL ELECTIVE COURSES

S.No	Subject Category	Name of the Subject	L	T	P	C
1	PEC I (V Sem)	Theory of Machines	3	-	-	3
2		Metrology and quality control	3	-	-	3
3		Refrigeration and Air Conditioning	3	-	-	3
4		Internal Combustion Engines	3	-	-	3
5	PEC II (VI Sem)	Virtual Instrumentation	3	-	-	3
6		Energy Management and Industrial Safety	3	-	-	3
7		Process Control Instrumentation	3	-	-	3
8		Principles of Communication	3	-	-	3
9	PEC III (VII Sem)	Embedded Systems	3	-	-	3
10		Power Plant Instrumentation	3	-	-	3
11		Neural Networks and Fuzzy Logic Control	3	-	-	3
12		Battery Technology	3	-	-	3
13	PEC IV (VII Sem)	Machine Design	3	-	-	3
14		Finite Element Analysis	3	-	-	3
15		Design of Jigs and Fixtures	3	-	-	3
16		Total Quality Management				
17	PEC V (VII Sem)	Rapid Manufacturing Technologies	3	-	-	3
18		Computer Integrated Manufacturing CIM	3	-	-	3
19		Process Planning and Cost Estimation	3	-	-	3
20		Mechanical Vibration and noise control	3	-	-	3
21	PEC VI (VIII Sem)	Machine Vision	3	-	-	3
22		Autotronics	3	-	-	3
23		Design of Mechatronics Systems	3	-	-	3
24		Flexible manufacturing systems	3	-	-	3
25	PEC VII (VIII Sem)	Micro Electro Mechanical Systems (MEMS)	3	-	-	3
26		VLSI Design	3	-	-	3
27		IOT in Automation	3	-	-	3
28		Digital control System	3	-	-	3

OPEN ELECTIVE COURSES

S.No		Name of the Subject	L	T	P	C
1	**OEC I (V Sem)**	Electrical and Mechanical Measurements	3	-	-	3
2		Operation Research	3	-	-	3
3		Green and Smart Buildings	3	-	-	3
4		Electric Hybrid Vehicle Technology	3	-	-	3
5	**OEC II (VI Sem)**	Biomedical Instrumentation	3	-	-	3
6		Human Resource Management	3	-	-	3
7		Waste water Engineering	3	-	-	3
8		Radar and Navigation	3	-	-	3
9	**OEC III (VII Sem)**	Aircraft Instrumentation	3	-	-	3
10		Energy Harvesting Technologies	3	-	-	3
11		Disaster Management	3	-	-	3
12		Data Communication and network Systems	3	-	-	3
13	**OEC IV (VIII Sem)**	Nano Technology	3	-	-	3
14		Big Data Analytics	3	-	-	3
15		Satellite Communication	3	-	-	3
16		Data Compression Techniques	3	-	-	3
17		Entrepreneurship Development	3	-	-	3
18	**Optional OEC - Foreign Language**	French Primer	-	-	1	2
19		Japanese Primer	-	-	1	2
20		German Primer	-	-	1	2

6. ADMISSION DETAILS (2021-2022)

IV YEAR-EIE (2018-2022 BATCH)

S.NO	REG.NO	NAME	GENDER	REGION - WIDE
1	11189G001	KASHIGARI SRAVAN KUMAR	MALE	TELANGANA

ADMISSION DETAILS 2021-2022

I YEAR MECHATRONICS (2021-2025 BATCH)

S.NO	REG.NO	NAME	GENDER	REGION - WIDE
1	11219H001	P ANANTHA PADMANABBAN	MALE	PUDUCHERRY
2	11219H002	CHITTALURI SAI PHANICHANDRA	MALE	TELANGANA
3	11219H003	DHULLIPALLA DATTA SAI	MALE	TELANGANA
4	11219H004	SRI SAI SHRAVANI VOLETI	FEMALE	ANDHRA PRADESH

ADMISSION DETAILS 2021-2022

II YEAR MECHATRONICS (2020-2024 BATCH)

S.NO	REG.NO	NAME	GENDER	REGION - WIDE
1	11209H001	RAGHUL V	MALE	TAMILNADU
2	11209H002	KUDARAVALLI VENKATA SAI LAKSHMAN	MALE	ANDHRA PRADESH

ADMISSION DETAILS 2021-2022

III YEAR MECHATRONICS (2019-2023 BATCH)

S.NO	REG.NO	NAME	GENDER	REGION - WIDE
1	11199H001	ADURI.HARI DATTA RAJA RAM	MALE	ANDHRA PRADESH
2	11199H002	APPIKATLA VIJAY	MALE	ANDHRA PRADESH
3	11199H003	T.V.S.AVINASH	MALE	TAMIL NADU
4	11199H004	KAMATAM.BAAVESH REDDY	MALE	ANDHRA PRADESH
5	11199H005	S.BARATH KANNAA	MALE	TAMILNADU
6	11199H006	R.DEVANAND	MALE	TAMILNADU
7	11199H007	DINESH KUMAR.K	MALE	TAMILNADU
8	11199H008	G. LOHITH KUMAR	MALE	ANDHRA PRADESH
9	11199H009	G.SRI DURGA RAJESWARI	FEMALE	ANDHRAPRADESH
10	11199H010	HARI RAMANAN S	MALE	TAMIL NADU
11	11199H011	JAMBULA JAYA SURYA REDDY	MALE	TELANGANA
12	11199H012	K.SAI KALYAN	MALE	ANDHRA PRADESH
13	11199H013	MANU MAHAADEV G	MALE	TAMIL NADU
14	11199H015	P.SAKTHIVEL	MALE	TAMILNADU
15	11199H016	SK. YASEEN	MALE	ANDHRAPRADESH

16	11199H017	SHRINIVAS A	MALE	TAMILNADU
17	11199H018	S.CHAITANYA VENKAT	MALE	ANDHRA PRADESH
18	11199H019	SRIHARI B R	MALE	TAMILNADU
19	11199H020	THAMARAI SELVAN .D	MALE	TAMIL NADU
20	11199H021	ABHINAV KUMAR.V	MALE	TELANGANA
21	11199H022	VENKAT ACHYUTH MANTRALA	MALE	ANDHRA PRADESH
22	11199H023	GURRAM SAI SANDEEP	MALE	ANDHRA PRADESH

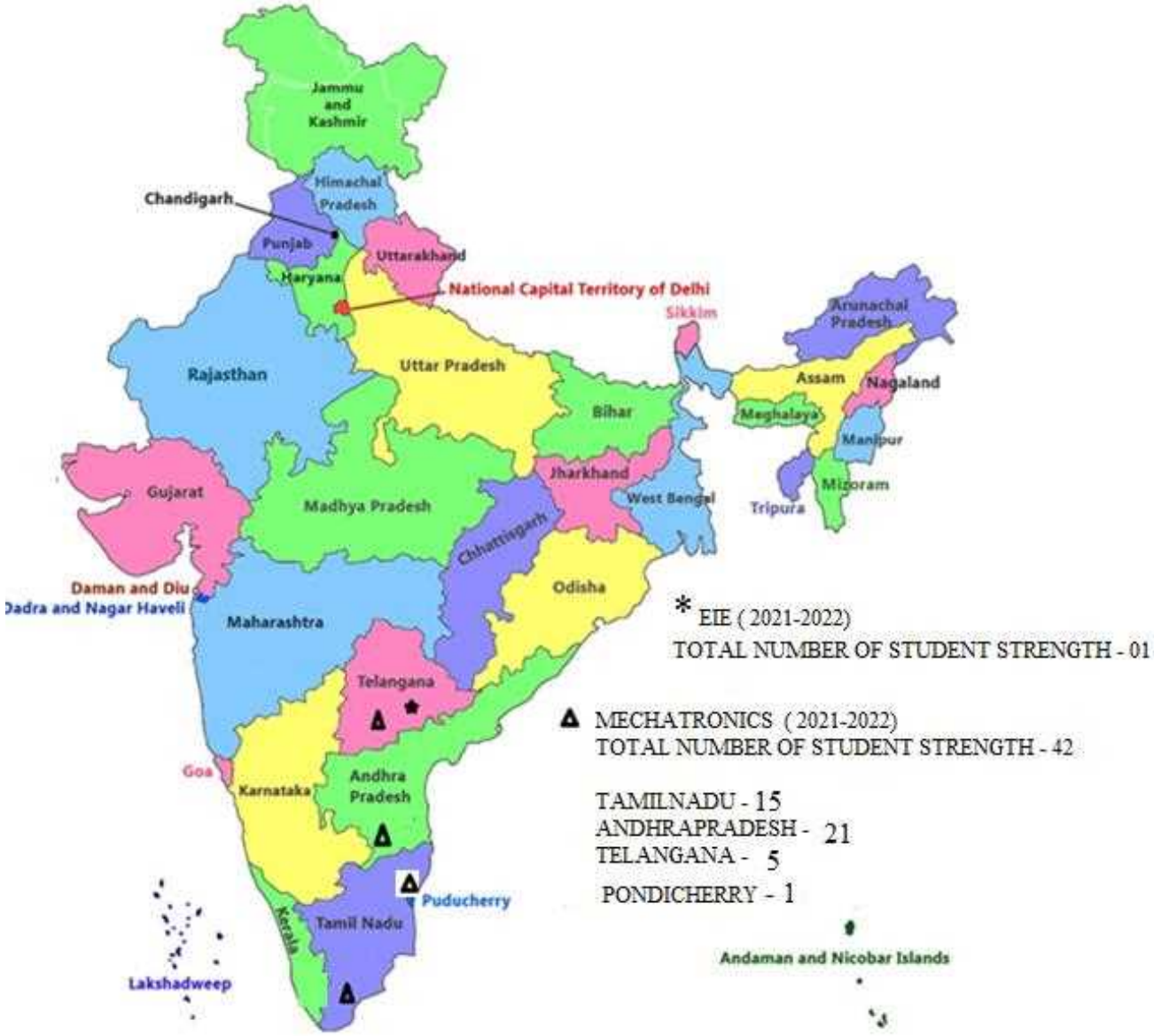
ADMISSION DETAILS 2021-2022

IV YEAR MECHATRONICS (2018-2022 BATCH)

S.NO	REG.NO	NAME	GENDER WISE	REGION - WIDE
1	11189H001	ADITHYA MANOHAR RAVI	MALE	ANDRAPRADESH
2	11189H002	S ASWIN	MALE	TAMILNADU
3	11189H003	BORLAA SIVAKALYANI	FEMALE	ANDRAPRADESH
4	11189H004	R S KAILASH	MALE	TAMILNADU
5	11189H005	KAVVAM SAIJYOTHISH REDDY	MALE	ANDRAPRADESH
6	11189H006	KOVVALI N B S SUBRAHMANYA LOKESH PREETHAM	MALE	ANDRAPRADESH
7	11189H007	MOCHARLA RUTHVIK SAI	MALE	ANDRAPRADESH

8	11189H008	PILLALAMARRI SRINIVASA SANJAY	MALE	ANDRAPRADESH
9	11189H009	RAMANNAGARI NITISH	MALE	ANDRAPRADESH
10	11189H010	S RAVINNDHAR	MALE	TAMILNADU
11	11189H011	REPALA KIREETI	MALE	TELANGANA
12	11189H012	SAMAYAM HEMANTH SAI	MALE	ANDRAPRADESH
13	11189H013	V SELVA KUMAR	MALE	TAMILNADU
14	11189H014	SURIMANI NITEESH	MALE	ANDRAPRADESH

EIE - (In the academic year 2021-22)
(TOTAL NUMBER OF STUDENTS including I, II, III & IV Years)
EIE – 01
MECHATRONICS – 42



7. FEES STRUCTURE (2021-2022)

REGULAR

Courses	Year/Sem	Year of admission	Without Scholarship	Scholarship		
				25%	35%	50%
B.E/B.Tech (IT) All Branches	I/II	2021-22	60000	45000	39000	30000
	II/IV	2020-21	60000	45000	39000	30000

Courses	Year/Sem	Year of admission	Without Scholarship	Scholarship			
				10%	25%	35%	50%
B.E/B.Tech (IT) All Branches	III/VI	2019-20	60000	54000	45000	39000	30000

Courses	Year/Sem	Year of admission	Term Fee	Total
B.E/B.Tech (IT) All Branches	IV/VIII	2018-19	56500	56500

Courses	Year/Sem	Year of admission	Term Fee	Computer Fee	Total
M.E (Power System)	I/II	2021-22	36000	5000	41000
M.E (Engineering Design)	I/II	2021-22	36000	5000	41000

B.E (Lateral Entry)

Courses	Year of admission	Year	Sem	Tuition Fee	Development Fee	Total
B.E/B.Tech(IT) ALL BRANCHES	2021-22	II	IV	60000	-	60000
B.E/B.Tech(IT) ALL BRANCHES	2020-21	III	VI	60000	-	60000

Courses	Year of admission	Year	Sem	Term Fee	Development Fee	Total
B.E/B.Tech(IT) ALL BRANCHES	2019-20	IV	VIII	60000	-	60000

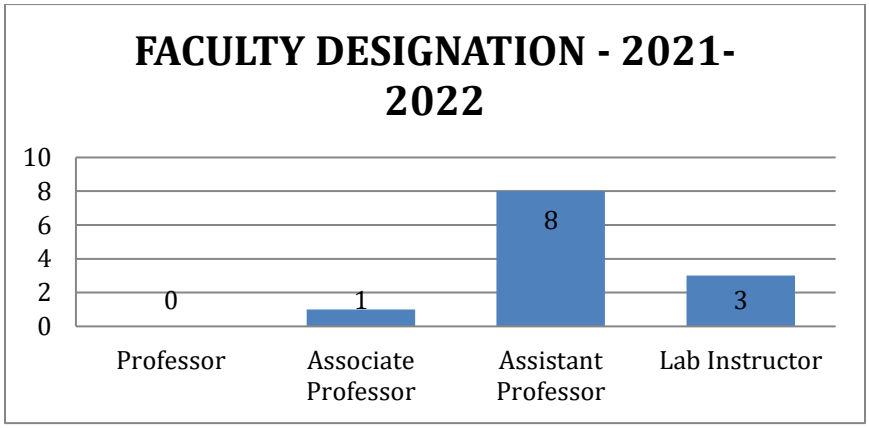
8. FACULTY POSITION – (2021-2022)

S.No	Name	Qualification	Designation
1.	Mr.V.Swaminathan	B.E., M.Sc. (Engg)	HOD / Associate Professor
2.	Mrs.K.Saraswathi	M.E., (Ph.D)	Assistant Professor (Gr II)
3.	Dr.T.Sundar	M.E., M.B.A., Ph.D	Assistant Professor (Gr I)
4.	Dr.R.Janani	M.Tech., M.B.A., Ph.D	Assistant Professor (Gr II)
5.	Dr.T.Lakshmibai	M.E., M.C.A., Ph.D	Assistant Professor (Gr I)
6.	Dr.G.P.Sivakumar	M.Tech., Ph.D	Assistant Professor (Gr II)
7.	Mr.S.S.Saravana Kumar	M.Tech., (Ph.D)	Assistant Professor (Gr I)
8.	Mrs.K.Sugapriya	M.Tech., (Ph.D)	Assistant Professor (Gr I)
9.	Mr.N.C.A.Boovarahan	M.E., (Ph.D)	Assistant Professor (Gr I)
10.	Mr.G.Subramaniyan	B.E., M.E	Sr. Lab Instructor
11.	Mrs.V.Komala	DECE	Lab Instructor
12.	Mr.K.Vinayagamoorthy	DECE	Lab Instructor

2021-2022

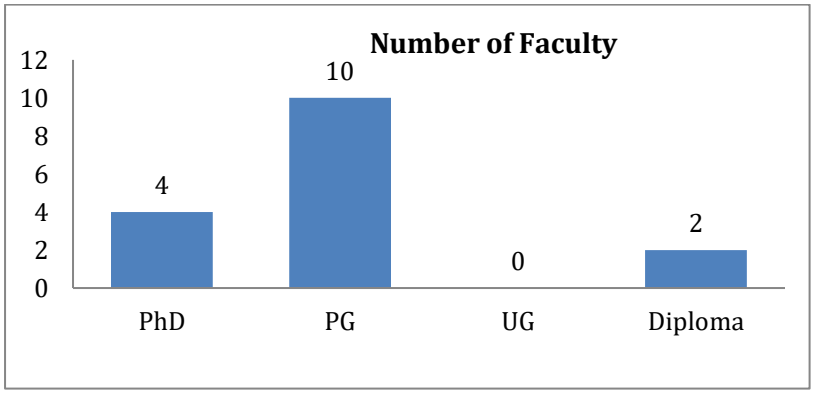
Designation

Designation	Professor	Associate Professor	Assistant Professor	Lab Instructor
Faculty strength	-	1	8	3



Qualification

Qualification	PhD	PG	UG	Diploma
Number of Faculty	4	10	-	2



9. FACULTY PROFILE

Mr. V. Swaminathan
Associate Professor,

Area: Electrical Engineering
Affiliation: Department of Electronics and Instrumentation Engineering, Sri Chandrasekharendra Saraswathi Viswa Maha Vidyalaya (SCSVMV), Enathur, Kanchipuram.
Email:swami_1949@rediffmail.com, swaminathan.v@kanchiuniv.ac.in

Education

B.E	**Electrical Engineering**	**Allagappa Chettaiar College of Engineering and Technology, 1971**
M.Sc (Engg.)	Power Systems	Regional Engineering College, Trichy, 1973

Other Details:

Course

- Electrical Engineering, Electric Design, Transmission and Distribution, Power Plant Instrumentation, Circuit Theory, Principles of Management and Professional Ethics, Measurement and Instrumentation

Research Interests

- Electric Motors and Drives.

Other Professional Experiences

- Manager Engineering Services in Kolar Gold Fields, 1973-1996.
- Manager Production in Hydromet India Limited 1996-2002.
- Life Member in Instrumentation Society of India.

Mrs. K. Saraswathi
Assistant Professor,
Area: Electronics and Instrumentation
Affiliation: Department of Electronics and Instrumentation Engineering, Sri Chandrasekharendra Saraswathi Viswa Maha Vidyalaya (SCSVMV), Enathur, Kanchipuram.
Email: ksaraswathi@kanchiuniv.ac.in

Education

B.E.	**Electronics and Instrumentation Engineering**	**Bharathidasan University, 2003**
M.E	Electronics and Control	Sathyabhama University, 2012
Ph.D (Pursing)	Control Systems	SCSVMV

Other Details:

Course

- Computer control of Processes, PLC Programming, Power Plant Instrumentation, Aircraft Instrumentation, Analytical Instrumentation

Research Interests

- Control systems, Fuzzy Logic Control, Process Control.

Publications in Journals

- K. Saraswathi (Dec-2021), "TUNING OF DECENTRALIZED PID CONTROLLER BY DECOUPLER FOR TITO SYSTEM", in Journal of Xidian University.

Other Professional Experiences

- Member of Universal Association of Computer and Electronics Engineers AM1004277.
- IAENG – International Association of Engineers M189993.
- ICSES -International Computer Science and Engineering Society #4063.

Dr.T. Sundar
Assistant Professor,
Area: Electronics and Instrumentation Engineering,
Affiliation: Department of Electronics and Instrumentation Engineering, Sri Chandrasekharendra Saraswathi Viswa Maha Vidyalaya (SCSVMV), Enathur, Kanchipuram.
Email: sundart@kanchiuniv.ac.in, sundar_151@yahoo.co.in

Education

DEEE	Diploma in Electrical and ElectronicsEngineering	Board of Technical Education, 2000
B.E.	Instrumentation and Control Engineering	Madras University, 2003
M.E	Applied Electronics	Anna University, 2011
Ph.D	Advanced Instrumentation Systems	SCSVMV University,2019

Other Details:

Course

- Instrumentation and Control in Petrochemical Industries, Industrial Chemical Process, Automotive Instrumentation, Measurement and Instrumentation Digital Electronics.

Research Interests

- Buck Boost Converter, Solar Photovoltaic System

Publications in Journals&Conference

- T.Sundar **"REVIEW ON DESIGN OF RENEWABLE ENERGY SOURCE",** An International Level Lecture Series On Wavelet Transforms And Image Processing", Post Graduate Department Of Mathematics Al Ameen College, Edathala-683564, 09-08-2021.
- T.Sundar, **"STUDY ON CHARGING METHODOLOGY USED IN ELECTRIC VEHICLES",** International Conference On Influence And Usability Of Contemporary Science And Technology Tools For Society I TECHSCI 2021, ICFAI UNIVERSITY, RAIPUR, 08-10-2021.
- T.Sundar, **"ELECTRIC VEHICLES CHARGER IMPLEMENTATION AND ANALYSIS",** International Virtual Conference On Progress In Mathematics Towards Industrial Applications , Ramapuram Campus, Chennai, (PMTIA-2021), The Department Of Mathematics, SRM Institute Of Science & Technology, Ramapuram Campus, Chennai, 29-10-2021

Other Professional Experiences

- Worked as Project Development Engineer, in ISYS Global Solution from 2003-2007.
- Worked as Lecturer in Lord Venkateswara Engineering College from 2007 to 2010.
- Member of Universal Association of Computer and Electronics Engineers AM10100054528.
- IAENG – International Association of Engineers 145755

Janani .R
Assistant Professor,
Area: Electronics and Instrumentation Engineering,
Affiliation: Department of Electronics and Instrumentation Engineering,
Sri Chandrasekharendra Saraswathi Viswa Maha Vidyalaya (SCSVMV), Enathur, Kanchipuram.
Email: janani.rajaraman@kanchiuniv.ac.in

Education

B.E.	**Electronics and Instrumentation Engineering**	**Madras University, 2004**
M.Tech	Advanced Communication Systems	SASTRA University, 2006
MBA	Human Resources Management	Pondicherry University, 2014
Ph.D	Process Control Instrumentation	SCSVMV University

Other Details:

Course

- Process Control Instrumentation, Microprocessor and Microcontroller, Virtual Instrumentation, Control Systems, Advanced Control Systems, Digital Electronics.

Research Interests

- Controller Design for SISO and MIMO systems
- 8051 Microcontroller Programming and Arduino Programming
- Virtual Instrumentation and PLC Programming

Publications in Journals

Janani. R International Advanced Research Journal in Science, Engineering and Technology Vol. 8, Issue 9, September 2021DOI: 10.17148/IARJSET.2021.8942
© IARJSET This work is licensed under a Creative Commons Attribution 4.0 International License 249Study and Simulation Design of various Three Mode Controller for an Interacting System

International Conference

Study And Simulation Design Of Various Three Mode Controller For An Interacting System At International Conference On Advancements In Engineering, Management, Science And Technology 10/09/2021 to 11/09/2021

Other Professional Experiences

- Worked as Project Engineer in WIPRO Technologies from 2006 to 2008.
- IEEE – IEEE Member (Madras Section)

- Member of Universal Association of Computer and Electronics Engineers AM1003980
- IAENG – International Association of Engineers 142975.

Dr. T. Lakshmibai
Assistant Professor,

Area: Communication Systems
Affiliation: Department of Electronics and Instrumentation Engineering, Sri Chandrasekharendra Saraswathi Viswa Maha Vidyalaya (SCSVMV), Enathur, Kanchipuram.
Email: tlakshmibai@kanchiuniv.ac.in

Education

DECE	**Diploma in Electronics and Communication Engineering**	**Board of Technical Education, 1985**
MIE	Electronics and Telecommunication	Institution of Engineers(INDIA), 1990
PGDCA	Post Graduate Diploma in Computer Application	Pondicherry University, 2001
MCA	Computer Applications	Madurai Kamaraj University,2004
M.E.	Communication Systems	Anna University of Technology, Trichy, 2010
Ph.D	Wireless Communication (Cognitive Radio)	SCSVMV University, 2019

Other Details:

Course

- Power Electronics and Drives, Linear Integrated Circuits, Circuit Theory, Analog and Digital Communication.

Research Interests

- Cognitive Radio, Wireless Communication, Sensors and Actuators.

Papers Presented

International Conference

- T. Lakshmibai (2022), "Design and Development of Automatic Water Dispenser using Arduino", in. Third International Conference on Materials, Computing and Communication Technologies (ICMCCT 2022), conducted at Annai Vailankanni College of Engineering, Azhagappapuram Post, Tamil Nadu on 20-06-22. **Best Paper Award**

- T. Lakshmibai (2021), "IOT Enabled Smart Visible Light Communication using LIFI Technology", in. Second International Conference on Emerging Trends in Materials, Computing and Communication Technologies (ICETMCCT 2021), conducted at Annai Vailankanni College of Engineering, Azhagappapuram Post, Tamil Nadu from 09-12-21 to 10.12.21.

- T. Lakshmibai (2021), "Temperature Based Automatic Fan Speed Control Using Arduino", in. 3rd International Conference on Engineering, Science, Medicine, & Management ICESMM-2021, organized by IIRM - International Institute of Research in Multidisciplinary - Skill Development Trust, Chirala, Andhra Pradesh, India on 14-11-21. **Best Presentation Award**

- T. Lakshmibai (2021), "Internet of Things based Intelligent Garbage Level Monitoring System", in International Virtual Conference on Advances in Computer Engineering & Communication Technology ICACET 2021, organized by Aditya College of Engineering & Technology,

Surampalem, A.P from 22-10-21 to 23-10-21.

- T. Lakshmibai (2021), "Design and experimental study of Automatic Colour Sorting by a robotic arm system", in International Conference on Artificial Intelligence and its emerging areas "NEC-ICAIEA-2K21, organized by Department of Computer Science and Engineering in association with CSI, Narasaraopeta Engineering college, Narasaraopet, Andra Pradesh from 16-07-21 to 17-07-21. **Best Paper Award**

- T. Lakshmibai (2021), "Mathematical Modelling and analysis of VSI fed Induction motor drive using PSIM software", in .International Virtual Conference on Science, Engineering & Technological Innovations at Bangkok, Thailand, "ICSETI 2021, organized by Kryvyi Rih National University, Automation, Computer Science and Technology dept, Ukraine, Research Culture Society, India from 10-07-21 to 11-07-21.

Publications in Journals

- T. Lakshmibai (2022), "Design and Development of Automatic Water Dispenser using Arduino", in International Journal of Scientific Research in Science, Engineering and Technology (IJSRSET), Volume 9, Issue 12/8215 - Published: June 20, 2022, pp 157 – 166.

- T. Lakshmibai (2022), "Solar Tracking Scheme with Panel Cleaning Arrangement for Effectual Power Generation", in International Journal of Research Publication and Reviews (IJRPR)| ISSN 2582-7421, Volume 3, no 5, pp 3804-3807, May 2022.

- T. Lakshmibai (2021), "Mathematical Modelling and analysis of VSI fed Induction motor drive using PSIM software", in International Journal for Innovative Research in Multidisciplinary Field (IJIRMF), Volume - 7, Conference Special Issue - 27, July - 2021.

Other Professional Experiences

- IEI – Institution of Engineers(India) M123226-0
- ISTE – The Indian Society for Technical Education LM11427
- UACEE – Universal Association of Computer & Electronics Engineers AM1004286
- IAENG – International Association of Engineers M145695
- IIRM - International Institute of Research in Multidisciplinary SDT-2021-115(Honorary Membership):LM115

Dr. G. Padmanabha Sivakumar
Assistant Professor (Stage-II)
Area: Embedded Systems
Affiliation: Department of Electronics and Instrumentation Engineering, Sri Chandrasekharendra Saraswathi Viswa Maha Vidyalaya (SCSVMV), Enathur, Kanchipuram.
Email: gpskumar@kanchiuniv.ac.in

Education

B.E	**Electronics and Instrumentation Engineering**	**SCSVMV University, 2009**
M.Tech	Embedded Systems	SRM University, 2011
Ph.D	Embedded Systems	SCSVMV University, 2019

Other Details:

Course

- Embedded Systems, Microprocessor and Microcontroller, Analog and Digital Electronics, Electronics Devices and Circuits, Linear Integrated Circuits,Principles of Management.

Research Interests

- Embedded Systems, Microcontroller Programming, Amplifier Circuits.

Publications in Journals

- G Padmanabha Sivakumar, K Sai Jyothish "Voice Controlled Multipurpose Robot with UV Sterilizer", International Journal of All Research Education and Scientific Methods (IJARESM), ISSN: 2455-6211Volume 10, Issue 6, June -2022, Impact Factor: 7.429. (UGC CARE)
- G Padmanabha Sivakumar, "Comparison of Class E & Class F3 amplifier Induction Heating systems" International Journal of Scientific Research in Engineering and Management (IJSREM)Volume: 06 Issue: 06 | June-2022 Impact Factor: 7.185, ISSN: 2582-3930.
- Translation –NPTEL- To Telugu – 2 Assignments Completed.

Other Professional Experiences

- Worked as Assistant Systems Engineer in Tata Consultancy Services, Chennai from 2011 to 2012
- IAENG – International Association of Engineers M141292
- IEICE – Institute of Electronics, Information and Communication Engineers M1783629

Mr. S. S. Saravana Kumar
Assistant Professor,

Area: Communication Systems,
Affiliation: Department of Electronics and Instrumentation Engineering,
Sri Chandrasekharendra Saraswathi Viswa Maha Vidyalaya (SCSVMV),
Enathur, Kanchipuram.
Email: saravanakumar@kanchiuniv.ac.in

Education

DECE	**Diploma in Electronics and Communication Engineering**	**Board of Technical Education, 2005**
B.E.	Electronics Communication Engineering	Anna University, 2008
M.Tech	VLSI Design	Hindustan University, 2011
Ph.D (Pursing)	Wireless Networks	SCSVMV University

Other Details:
Course

- Digital Electronics, Analog and Digital Communication, Signals & System, VLSI Design, Digital Signal Processing.

Research Interests

- OFDMA in Wireless Networks, Wireless Communication

Publications in Journals

- S.S. Saravana Kumar (2022), "Advanced Foot Step Power Generation System", International Journal of Research Publication and Reviews
- S.S. Saravana Kumar (2022), "Automatic Floor Cleaning Robot Using Arduino", International Journal of Research Publication and Reviews

Other Professional Experiences

- Worked as Assistant Professor in GATES Institute of Technology from 2011 to 2012
- Member of Universal Association of Computer and Electronics Engineers
- IAENG – International Association of Engineers

Mrs. K. Sugapriya
Assistant Professor,

Area: Electronics and Communication.
Affiliation: Department of Electronics and Instrumentation Engineering, Sri Chandrasekharendra Saraswathi Viswa Maha Vidyalaya (SCSVMV), Enathur, Kanchipuram.
Email: dhivyasuga@gmail.com,ksugapriya@kanchiuniv.ac.in.

Education

B.E.	**Electronics and Communication Engineering**	**Anna University, 2005**
M.Tech	Applied Electronics	Dr. M.G.R University, 2008
Ph.D (Pursing)	Communication Engineering	SCSVMV

Other Details:
Course

- Analog and Digital Communication Systems, Principles of Communications, Digital Signal Processing, Signals and Systems, Robotics and Automation

Research Interests

- Communication Systems, Microstrip Patch Antenna Design.

Publications in Journals

- K.Sugapriya, S. Omkumar, "Tuning of dual frequency resonance analysis of circular and rectangular patch UWB antenna used for wireless sensor networks" International Journal of Health Sciences,Volume 6, Issue 1,pp. 12858- 12867,2022.(SCOPUS)

Other Professional Experiences

- Worked as a Lecturer in Priyadharshini Engineering College from 2005-2006 and 2008-2010
- IAENG – International Association of Engineers M214407

Mr. N. C. A. Boovarahan
Assistant Professor,

Area: Communication Systems
Affiliation: Department of Electronics and Instrumentation Engineering, Sri Chandrasekharendra Saraswathi Viswa Maha Vidyalaya (SCSVMV), Enathur, Kanchipuram.
Email: ncaboovarahan@kanchiuniv.ac.in

Education

B.E.	**Electronics Communication Engineering**	**Anna University, 2010**
M.E	Electronics Communication Engineering	SCSVMV University, 2014
Ph.D (Pursing)	Wireless Communication	SCSVMV University

Other Details:
Course

- Analog and Digital Communication Systems, Information Coding Theory, Electronic Devices and Circuits, Principles of Communications, Microprocessor and Microcontroller.

Research Interests

- Wireless Communication, Massive MIMO.

Publications in Journals

- N.C.A.Boovarahan (November 2021), "Security Characteristics of 5G Communication Networks", in International Journal of Research Publication and Reviews
- N.C. A. Boovarahan (April 2022), "Smart vehicle automation with automobile black box using IOT", in International Journal of Research Publication and Reviews

Other Professional Experiences

- IAENG – International Association of Engineers M141657

Mr. G. Subramaniyan
Senior Lab Instructor,
Area: Electronics and Communication
Affiliation: Department of Electronics and Instrumentation Engineering,
Sri Chandrasekharendra Saraswathi Viswa Maha Vidyalaya (SCSVMV),
Enathur, Kanchipuram.

Education

DECE	**Diploma in Electronics and Communication Engineering**	**Board of Technical Education, 1992**
B.E	Electronics and Communication Engineering	SCSVMV Univeristy, 2012
M.E.	Embedded Systems and Technology	Anna University, 2014

Other Details:
Lab

- Transducers and Industrial Instruments Lab, Power Electronics and Industrial Drives Lab, Industrial Process Lab, Programmable Logic Controller Lab

Other Professional Experiences

- Lab Instructor in Dept of ECE, Arulmigu Meenakshi Amman Engineering College during 1998-2010.

Mrs. V. Komala
Lab Instructor,
Area: Electronics and Communication
Affiliation: Department of Electronics and Instrumentation Engineering,
Sri Chandrasekharendra Saraswathi Viswa Maha Vidyalaya (SCSVMV),
Enathur, Kanchipuram.

Education

DECE	**Diploma in Electronics and Communication Engineering**	**Board of Technical Education, 1990**

Other Details:

Lab

- Microprocessor and Microcontroller Lab, Digital Electronics Lab, Linear Integrated circuits Lab.
- Electronics and Devices Lab

Other Professional Experiences

- DynaVision Limited, Chennai as Technical Assistant 1991-1998
- Lab Instructor in Dept of ECE, SCSVMV 1999-2008

Mr. K. Vinayagamoorthy
Lab Instructor,
Area: Electronics and Communication
Affiliation: Department of Electronics and Instrumentation Engineering,
Sri Chandrasekharendra Saraswathi Viswa Maha Vidyalaya (SCSVMV),
Enathur, Kanchipuram.

Education

DECE	**Diploma in Electronics and Communication Engineering**	**Board of Technical Education, 2007**

Other Details:

Lab

- Microprocessor and Microcontroller Lab, Analog and Digital Communication Lab, Digital Electronics Lab, Linear Integrated circuits Lab.
- Programmable Logic Control Lab, Virtual Instrumentation Lab, Control Systems Lab, Simulation Lab.

Other Professional Experiences

- Lab Instructor in Dept. of ECE, Arulmigu Meenakshi Amman Engineering College during 2007-2012.

10.STUDENTS PROFILE

IV YEAR - EIE (2018-2022 BATCH)

S.No	Student Name Register Number Date of Birth	Father Name	Permanent Address	E-mail id	Mobile Number
1	Kashigari Sravan Kumar 11189G001 24/05/2001	Kashigari Raghuveera Sharma	Village- Rekula Choudapur Nawabpet Mandal Mahabub Nagar Telangana-509340	**Register_number@kanchiuniv.ac.in	9346866293

I YEAR - MECHATRONICS (2021-2025 BATCH)

S.No	Student Name Register Number Date of Birth	Father Name	Permanent Address	E-mail id	Mobile Number
1	P Anantha Padmanabban 11219H001 05/12/2003	P A Prasad	8 C Block Housing board Bhoomiyanpet Puducherry 605005	**Register_number@kanchiuniv.ac.in	9600331797
2	Chittaluri Sai Phanichandra 11219H002 01/07/2004	Ch.Srinivasa Rao	4-8-64,Prakash nagar,Khammam(U),Telangana		9494107497
3	Dhullipalla Datta Sai 11219H003 12/09/2003	D.Srinivas	11-2-471/2,sevenhills sadan,F.no.101,Namala gundu,Sitaphalmandi,sec-Bad-61,Telangana		9849741370
4	Sri Sai Shravani Voleti 11219H004 06/04/2004	V.Sudhakar	49-20-7/2/6 7f 401 Lakshmi Ramaneeyam,Lalitha Nagar,Visakhapatnam-530016		7702008192

II YEAR - MECHATRONICS (2020-2024 BATCH)

S.No	Student Name Register Number Date of Birth	Father Name	Permanent Address	E-mail id	Mobile Number
1	Raghul .V 11209H001 28/12/2002	Venkatesan. K	no.8a/33, vaithiyar st, kanchipuram, tamil nadu. pin-631 502	**Register_number@kanchiuniv.ac.in	8637432746
2	Kudaravalli Venkata Sai Lakshman 11209H002 02/12/2002	Kudaravalli Srinivasa Rao	Fortune homes 305, d.no. 1-1/1 vanukuru penanamaluru mandalam andhra pradesh-521151		9491962682

III YEAR - MECHATRONICS (2019-2023 BATCH)

S.No	Student Name/ Register number/ Date of Birth	Father Name	Permanent Address	E-mail id	Mobile Number
1	Aduri Hari Datta Raja Ram 11199H001 20/04/2002	Aduri Sree Rama Murthy	9/177/2 beside vivekananda telugu medium school indrapalem kakinada east godavari dist andra pradesh	**Register_number@kanchiuniv.ac.in	7330662359
2	Appikatla Vijay 11199H002 01/12/2001	Appikatla Pardhasaradhi	3-116, Avanigadda Krishna dist Vijayawada Anshra pradesh-521121		7981668922
3	Avinash. T. V. S 11199H003 22/01/2002	P. Radha krishnan	4-a, Thilakan nagar 3rd streetEennore Thiruvallore dist-600057		9444249614
4	K. Baavesh Reddy 11199H004 18/08/2002	K. Pramod kumar reddy	13/07/794/4 Vinayaka nagar municipal office back side tataiah ginda Thirupathi		7093122267

5	Barath Kannaa. S 11199H005 08/02/2002	Sampath Kumar. S. V	No.30,ezhil nagar, Sedhukarai, Gudiyattam, Vellore dist, Tamil nadu. Pin-632 602		9677640145
6	Devanand. R 11199H006 29/01/2002	S. Ravi	5-158, Kagithapattarai Rajakulam post Lalapet Walajahpet taluk Vellore dist-632405		9944275034
7	Dineshkumar. K 11199H007 19/04/2001	Kanniyappan. A	109-161, Perumal koil street Panavaram post Mangalam, banavaram Vellore dist-632505		9787826475
8	Gangaraju Lohith Kumar 11199H008 13/04/2002	G. Maheshwar Raju	105-a, 3rd cross Keshavayana gunta Bairagipetta Tirupathi Andhra Pradesh-517501		9398612751
9	Gundampati Sri Durga Rajeswari 11199H009 08/06/2001	Pradhuyumna Kumar	H no 87/07/ 5104 Nagireddy revenue Colony Kurnool 518001		9963876235 Father
10	Hari Ramanan. S 11199H010 10/08/2001	Sivakumar. V	22/8c Sri vinayaka apats Kannika colony 1st street Nanganallur Chennai		8825503634
11	Jambula Jaya Surya Reddy 11199H011 06/03/2002	Jambula Venkata Krishna Reddy	14-03-122/2 Jayanagar Colony ballepally Khammam Telangana		9848408106

12	Ketagani Sai Kalyan 11199H012 06/08/2001	Ketagani Tata Rao	Flat no 504- kancharla Plaza opp veternary Hospital kannuru Vijayawada -krishna dist Andhra Pradesh		9666369494
13	Manu Mahaadev. G 11199H013 16/12/2000	Ganesh. J	Flat no 5 santhosh Apartments dr Ramaswamy salai K K nagar Chennai 78		9442990070
14	Sakthivel. P 11199H015 10/01/2001	Punniyakoti. K	Plot no 100 Thiruveethipallam Vignesh nagar Kanchipuram 631502		9443118688
15	Shaik. Yaseen 11199H016 30/04/2002	Shaik Imthiyaz	Pallavi street raghava pet Sullurpet Nellore		8121546605
16	Shrinivas. A 11199H017 05/11/2001	Anand. S	2A Balaji nagar Extension reddiyar nagar Korattur Chennai		940510376
17	Singamsetti Chaitanya Venkat 11199H018 17/02/2002	Singamesetti Srinivasa Rao	D-2-174 Undavalli Guntur AP		9704755326
18	Srihari. B. R 11199H019 23/06/2001	Ramakrishnan. N	39, Sriram nagar Thndalam Walajapet-632401		8056726626

19	Thamarai Selvan. D 11199H020 20/09/2002	Dimitrao. K	no.26-70, Gangadhara Swamy madalaya street Pichanoor Gudiyattam Vellore-632602		7904932633
20	Vuppala Abhinav Kumar 11199H021 27/04/2002	Vuppala Ajay Kumar	H no 5/1/145 Sahebnagar Vanasthalipuram Hyderabad		7794093779
21	Venkat Achyuth Mantrala 11199H022 16/06/2002	Sai Venugopal Mantrala	D.no.2-435,road no.2, Balaji nagar, Bapanna dora colany, Ramanayya peta, Kakinada, E.G. Dist,		701374856

IV YEAR - MECHATRONICS (2018-2022 BATCH)

S.No	Student Name/ Register number/ Date of Birth	Father Name	Permanent Address	E-mail id	Mobile Number
1	Adithya Manohar Ravi 11189H001 08/06/20011	Ravi Rama Chan dra Murthy	Falt No.201, Akash Residency New Indira Nagar Tirupati Chittoor DIST-517502	**Register_number@kanchiuniv.ac.in	938/1297825
2	S Aswin 11189H002 11/11/2000	Suresh. K	19, Thiyagusetti Street Parangipettai Cuddalore-608502		6382933580
3	Borlaa Sivakalyani 11189H003 12/3/2001	Borlaa Ravi Kumar	No.18-7-13-8, Sai Baba Temple Street Kuddur Nagar Kedareswarapeta Vijayawada-520003		9666429957
4	R S Kailash 11189H004 19/10/2000	Suresh. R	37, V.K Iyer Road Ra Puram Chennai-600028		9840596725
5	Kavvam Saijyothish	Kavvam Narasimha	19-4-121-1d, Geetha Colony Tirupati Andhra		7993021139

	Reddy 11189H005 30/08/2011	Reddy	Pradesh-517501		
6	Kovvali N B S Subrahmanya Lokesh Preetham 11189H006 3/5/2000	Kovvali Surya Kumar	5-36-4-4, Sri Vastha Apartments 2nd Floor Flat No.202, Purushothapuram Colony Visakhapatnam-530027		9010594297
7	Mocharla Ruthvik Sai 11189H007 23/11/2000	Mocharla Srinivasa Rao	Vidyanagar 7th Line Mulaguntapadu Andhra Pradesh-523101		6384387365
8	Pillalamarri Srinivasa Sanjay 11189H008 5/12/2000	Pillalamarri Venkata Subbarama Sastry	7-9, Srinagar Pagolui Challapalli Challapalli Mandal Andhra Pradesh-521126		9052361098
9	Ramannagari Nitish 11189H009 9/8/2000	Ramannagari Venkataramana Reddy	3-30, Kotha Nemuro Kotha Nennuru Ramachandrapuram Kattakindavenkatapuram Chittoor Andhra Pradesh-517561		7780309782
10	S Ravinndhar 11189H010 29/04/1999	A. Shanmugam	16, New Street Kolathur Pillaipakkam Kanchipuram-602105		9600356896
11	Repala Kireeti 11189H011 15/05/2002	Repala Venkateshwarrao	4-4-6-503, Ruthwik Paradise Opp Pvr Gardens Naidupeta Bypass Khammam Rural Telangana-507003		8184994633
12	Samayam Hemanth Sai 11189H012 14/12/2000	S. Kishore Kumar	D.No.6-1-296-502, Varadaraja Nagar Tirupati Chittoor Dist Andhra Pradesh-517501		8897739306
13	V Selva Kumar 11189H013 9/3/2000	Veerathilagam. V	No.12, Rannuva Veera Salai Sevilimedu Kanchipuram-631502		9894150250
14	Surimani Niteesh 11189H014 29/10/2000	Surimani Ravi	D.No. 7-33, Sri Nagar Colony Tirupati Andhra Pradesh-517507		9908837018
15	Arun Kumar 11189H015	S. jothi	N0.201, Adavanthal Kannar Street Vasanthapuram Vellore -632001		7871849420

11. FINANCIAL REPORT

Budget proposal for the financial year 2021-22

Name of the Dept: EIE

	Recurring		Q1	Q2	Q3	Q4		
	S.No	**Expenditure head**	**Apr - Jun**	**Jul - Sep**	**Oct - Nov**	**Dec - Mar**	Total	**Annexure No.**
	1	Academic expenses	-	7,000	5,000	5,000	17,000	1
	2	Laboratory expenses	-	5,000	7,000	5,000	17,000	2
	3	Printing & Stationery	1,300	1,780	2,080	2,080	7,240	3
	4	Seminar & Meeting expenses	-	7,000	-	7,000	14,000	4
	5	Research activities	30,000	30,000	-	-	60,000	5
	6	Repairs & Maintenance	-	32,000	8,000	10,000	50,000	6
	7	Others (provide details in Annex)	-	-	-	-	-	7
			31,300	82,780	22,080	29,080	165,240	

	CAPITAL		Q1	Q2	Q3	Q4		
	S.No	**Expenditure head**	**Apr - Jun**	**Jul - Sep**	**Oct - Nov**	**Dec - Mar**	Total	**Annexure No.**
	1	Books	-	1500	2500	2500	6500	8
	2	Computers and Software	-	-	-	-	-	9
	3	Furniture	-	-	-	-	-	10
	4	Lab equipments	-	5000	5000	-	10000	11
	5	Others (details to be provided by dept)		-	-	-	-	12
			-	**6500**	**7500**	**2500**	**16500**	

INCOME / EXPENDITURE

Total income for the academic year 2021 -22
(Tution fees amount paid by the students)

First year	60,000 * 02 * 4	4.8 Lakhs
Second year	60,000 * 02 * 2	2.4 Lakhs
Thrid year	60,000 * 02 * 21	25.2 Lakhs
Final year	60,000 * 02 * 15	18 Lakhs
	Total Income	50.4 Lakhs

Expenditure for Annual salary of all EIE staff members = (515261*12 = 6183132)

HOD/EIE

12. TIME TABLE

ODD SEMESTER - TIME TABLE – 2021-22

II YEAR MECHATRONICS Online class schedule

PROGRAM : B.E.(MECHATRONICS) YEAR / SEMESTER :II/III
SECTION : A

DAYS	1	2	3	4	5	6	
	9.00 – 10.00	**10.00 – 11.00**	**11.00 – 12.00**	**12.00 – 1.00**	**2.00- 3.00**	**3.00 – 4.00**	
MONDAY	-	EM	EM	-	S&A	S&A	
TUESDAY	Sanskrit and Indian Culture	MTM	MTM	-	M	M	
WEDNESDAY	S&A	S&A	EDC LAB (11.30 to 1.30)	EDC LAB (11.30 to 1.30)	EDC	EDC	
THURSDAY	-	OOPS	OOPS	-	MTM	MP LAB	
FRIDAY	-	EDC	EDC	-	OOPS LAB	OOPS LAB	Soft Skill – I 5.00 to 6.00PM
SATURDAY	-	M	M	-	EM	EM	

S. CODE	Subject abbreviation	SUBJECT	FACULTY	HOURS	DEPT
BMTF183T10	M	Mathematics III (Probability and Statistics)	Dr.Konda Srinivasa Rao	4	MATHS
BMTF183T30	EDC	Electronic Devices and Circuits	Mrs. K.Sugapriya	4	EIE
BMTF183T40	EM	Engineering Mechanics	Mr. G. Venkatakoteshwara Rao	4	MECH
BMTF183T50	MTM	Manufacturing Technology for Mechatronics	Dr. S. D. Sathishkumar	4	MECH
BMTF183T60	S&A	Sensors & Actuators	Dr.Janani.R	4	EIE
BMTF183T20	OOPS	Object Oriented Programming Using C++	Mr.A.Niranjan	4	ECE
BMTF183MC2	S & IC	Sanskrit and Indian Culture	Sanskrit Dept	2	Sanskrit
BMTF183P80	EDC Lab	Electronic Devices and Circuits Lab	Mrs.K.Saraswathi	2	EIE
BMTF183P90	MP Lab	Manufacturing process Lab	Dr. S.D. Sathishkumar	2	MECH
BMTF183P70	OOPs Lab	Object Oriented Programming Using C++ Lab	Mr.A.Niranjan	2	ECE

ODD SEMESTER - TIME TABLE – 2021-22

III YEAR MECHATRONICS Online class schedule

PROGRAM : B.E.(Mechatronics) YEAR / SEMESTER :III/V
SECTION :A

DAYS	1	2	3	4	5	6	
	9.00 – 10.00	**10.00 – 11.00**	**11.00 – 12.00**	**12.00 – 1.00**	**2.00- 3.00**	**3.00 – 4.00**	
MONDAY	-	EMM	EMM	-	CS	CS	
TUESDAY	-	TM	TM	-	FPS	FPC LAB	Soft Skill –III 5.00 to 6.00PM
WEDNESDAY	PEID	PEID	PEID LAB	PEID LAB	AI	AI	
THURSDAY		CS	CS		EMM	EMM	
FRIDAY	PEID	PEID	AI (11.30 to 1.30)	AI (11.30 to 1.30)	MD Lab	MD Lab	
SATURDAY	-	FPS	FPS	-	TM	TM	

S. CODE	Abbreviation	SUBJECT	FACULTY	HOURS	DEPT
BMTF185EA0	TM	Professional Elective- I(Theory of Machines)	Dr.	4	MECH
BMTF185OEA	EMM	Open Elective – I(Electrical and Mechanical Measurements)	Dr.T.Sundar	4	EIE
BMTF185T10	CS	Control System	Mr.S S Saravanakumar	4	EIE
BMTF185T20	AI	Analytical Instrumentation	Mrs. K.Saraswathi	4	EIE
BMTF185T40	PEID	Power Electronics and Industrial Drives	Dr. T.Lakshmibai	4	EIE
BMTF185T30	FPS	Fluid Power Systems	Dr. S. Vijayabhaskar	4	MECH
BMTF185P70	FPC Lab	Fluid Power Control Lab	Dr. G.Harish	2	MECH
BMTF185P80	PEID	Power Electronics and Industrial Drives Lab	Dr. T.Lakshmibai	2	EIE
BMTF185P90	MD Lab	Machine Drawing Lab	Dr. G.Harish	2	MECH

ODD SEMESTER - TIME TABLE – 2021-22

IV MECHATRONICS Online class schedule

PROGRAM : B.E.(MECHATRONICS) YEAR / SEMESTER :IV/VII
SECTION : A

DAYS	1	2	3	4	5	6
	9.00 – 10.00	**10.00 – 11.00**	**11.00 – 12.00**	**12.00 – 1.00**	**2.00- 3.00**	**3.00 – 4.00**
MONDAY	-	AI	AI	-	BT	BT
TUESDAY	-	CIM	CIM	-	TQM	TQM
WEDNESDAY	-	BT	BT	-	RA	RA
THURSDAY	-	TQM	TQM	-	AI	AI
FRIDAY	-	RA	RA	-	CIM	CIM
SATURDAY		RA LAB			PROJECT WORK PHASE- I	

S. CODE * Temparary	Subject abbreviation	SUBJECT	FACULTY	HOURS	DEPT
MECH07T1	RA	Robotics & Automation	Dr.G.P. Sivakumar	4	EIE
MECH07T2	BT	Professional Elective-III(Battery Technology)	Mr.N C A Boovarahan	4	EIE
	TQM	Professional Elective-IV(Total Quality Management)	Mr. R. Balakumar	4	MECH
MECH07T4	CIM	Professional Elective-V(Computer Integrated Manufacturing)	Dr. K. Mohan	4	MECH
MECH07T5	AI	Open Elective-III(Aircraft Instrumentation)	Dr.T.Lakshimibai	4	EIE
MECH07P1	RA LAB	Robotics Automation & Process Control Lab	Dr. T.Sundar	2	EIE
MECH07P2	PW-I	Project Work Phase- I	Mrs.K.Sugapriya	2	EIE

ODD SEMESTER - TIME TABLE – 2021-22

IV YEAR EIE Online class schedule

PROGRAM : B.E.(EIE) YEAR / SEMESTER :IV/VII
SECTION : A

DAYS	1	2	3	4	5	6
	9.00 – 10.00	**10.00 – 11.00**	**11.00 – 12.00**	**12.00 – 1.00**	**2.00- 3.00**	**3.00 – 4.00**
MONDAY	-	AI	AI	-	BT	BT
TUESDAY	-	OCS	OCS	-	CCP	CCP
WEDNESDAY	-	BT	BT	-	RA	RA
THURSDAY	-	CCP	CCP	-	AI	AI
FRIDAY	-	RA	RA	-	OCS	OCS
SATURDAY		ISD LAB		-	PROJECT WORK PHASE- I	

S. CODE * Temparary	Subject abbreviation	SUBJECT	FACULTY	HOURS	DEPT
EIE07T1	RA	Robotics & Automation	Dr.G.P. Sivakumar	4	EIE
EIE07T2	OCS	Professional Elective-III(Optimal Control System)	Dr.Janani.R	4	EIE
EIE07T3	CCP	Professional Elective-IV(Computer Control of Process)	Mrs.K.Saraswathi	4	EIE
EIE07T4	AI	Professional Elective-V(Aircraft Instrumentation)	Dr.T.Lakshimibai	4	EIE
EIE07T5	BT	Open Elective-III(Battery Technology)	Mr.N C A Boovarahan	4	EIE
EIE07P1	ISD LAB	Instrumentation System Design Lab	Dr.Janani.R	2	EIE
EIE07P2	PW-I	Project Work Phase- I	Mrs.K.Sugapriya	2	EIE

EVEN SEMESTER - TIME TABLE – 2021-22

II YEAR MECHATRONICS Online class schedule

PROGRAM : B.E.(MECHATRONICS) YEAR / SEMESTER :II/IV
SECTION : A

DAYS	1	2	3	4	5	6
	9.00 – 10.00	**10.00 – 11.00**	**11.00 – 12.00**	**12.00 – 1.00**	**2.00- 3.00**	**3.00 – 4.00**
MONDAY		SMFM	SMFM		TE Lab	TE Lab
TUESDAY		LIC	LIC		TD	TD
WEDNESDAY		LIC & DE LAB	LIC & DE LAB		DE	II
THURSDAY		SMFM Lab	SMFM Lab		SMFM	ME
FRIDAY		DE	DE		TD	LIC
SATURDAY		ME	ME		II	II

S. CODE	Subject abbreviation	SUBJECT	FACULTY	HOURS	DEPT
BMTF184T10	SMFM	Strength of Materials and Fluid Mechanics	Dr.A.Tamilarasan	3	Mech
BMTF184T20	II	Industrial Instrumentation	Mr.G.Subramaniyan	3	EIE
BMTF184T30	ME	Materials Engineering	Mr.R.Ellappan	3	Mech
BMTF184T40	TD	Thermodynamics	Dr.P.ChengaReddy	3	Mech
BMTF184T50	LIC	Linear Integrated Circuits	Mr.N C A Boovarahan	3	EIE
BMTF184T60	DE	Digital Electronics	Dr. Janani	3	EIE
BMTF184P70	LIC & DE LAB	Linear Integrated Circuits & Digital Electronics Lab	Dr.T.Lakshmibai	2	EIE
BMTF184P80	TE LAB	Thermal Engineering Lab	Mr.R.Ellappan	2	Mech
BMTF184P90	SMFM LAB	Strength of Materials and Fluid Mechanics Lab	Dr.P.ChengaReddy	2	Mech
BETF184MC4	SOFT	Soft Skill –II **	-	-	

EVEN SEMESTER - TIME TABLE – 2021-22

III YEAR MECHATRONICS Online class schedule

PROGRAM : B.E.(Mechatronics) YEAR / SEMESTER :III/VI
SECTION : A

DAYS	1	2	3	4	5	6
	9.00 – 10.00	**10.00 – 11.00**	**11.00 – 12.00**	**12.00 – 1.00**	**2.00- 3.00**	**3.00 – 4.00**
MONDAY		CAD Lab	CAD Lab		POM	POM
TUESDAY		PLC	CAD		VI	BMI
WEDNESDAY		BMI	BMI		POM	MPMC
THURSDAY		MPMC Lab	MPMC Lab		PLC	PLC
FRIDAY		VI	VI		PLC Lab	PLC Lab
SATURDAY		MPMC	MPMC		CAD	CAD

S. CODE	Subject abbreviation	SUBJECT	FACULTY	HOURS	DEPT
BMTF186EE0	VI	Professional Elective II - Virtual Instrumentation	Mrs.K.Saraswathi	3	EIE
BMTF1860EE	BMI	Open Elective II – Bio Medical Instrumentation	Dr.T.Sundar	3	EIE
BMTF186T30	POM	Principles of Management and Professional Ethics	Dr.G.P.Sivakumar	3	EIE
BMTF186T20	MPMC	Microprocessors and Microcontrollers	Mr.S.S.Saravana	3	EIE
BMTF186T10	PLC	PLC & Data Acquisition System	Dr.T.Lakshmibai	3	EIE
BMTF186T40	CAD	CAD / CAM	Dr. S. Vijayabhaskar	3	MECH
BMTF186P70	MPMC Lab	Microprocessors and Microcontrollers Lab	Mr.S.S.Saravana	2	EIE
BMTF186P80	CAD Lab	CAD / CAM Lab	Dr. S. Vijayabhaskar	2	MECH
BMTF186P90	PLC Lab	PLC & Virtual Instrumentation Lab	Dr.T.Sundar	2	EIE
BEIF1800EA/ EB/EC	OEC	French Primer / Japanese Primer / German Primer	-	-	-
BETF18MC06	Soft Skill	Soft Skill - IV**	-	-	-

EVEN SEMESTER - TIME TABLE – 2021-22

IV MECHATRONICS Online class schedule

PROGRAM : B.E.(MECHATRONICS) YEAR / SEMESTER :IV/VIII
SECTION : A

DAYS	1	2	3	4	5	6
	9.00 – 10.00	**10.00 – 11.00**	**11.00 – 12.00**	**12.00 – 1.00**	**2.00- 3.00**	**3.00 – 4.00**
MONDAY		MEMS			FMS	
TUESDAY		FMS			NT	
WEDNESDAY		NT			MEMS	
THURSDAY		MEMS			FMS	
FRIDAY		NT			Project Phase - II	
SATURDAY		Project Phase - II			Project Phase - II	

S. CODE	Subject abbreviation	SUBJECT	FACULTY	HOURS	DEPT
MECT08T01	FMS	Professional Elective VI - Flexible Manufacturing System	DR. S. D. Sathishkumar	6	MECH
MECT08T02	MEMS	Professional Elective VII - MEMS	Dr.T.Lakshmibai	6	EIE
MECT08T03	NT	Open Elective IV – Nano Technology	Mr.S.S.Saravana Kumar	6	EIE
MECT08P01	Project - II	Project Phase II	Mrs.K.Sugapriya	-	EIE

EVEN SEMESTER - TIME TABLE – 2021-22

IV YEAR EIE Online class schedule

PROGRAM : B.E.(EIE) YEAR / SEMESTER :IV/VIII
SECTION : A

DAYS	1	2	3	4	5	6
	9.00 – 10.00	**10.00 – 11.00**	**11.00 – 12.00**	**12.00 – 1.00**	**2.00- 3.00**	**3.00 – 4.00**
MONDAY		MEMS	MEMS		AI	AI
TUESDAY		AI	AI		IOT	IOT
WEDNESDAY		IOT	IOT		MEMS	MEMS
THURSDAY		MEMS	MEMS		AI	AI
FRIDAY		IOT	IOT		Project Phase - II	Project Phase - II
SATURDAY		Project Phase - II	Project Phase - II		Project Phase - II	Project Phase - II

S. CODE	Subject abbreviation	SUBJECT	FACULTY	HOURS	DEPT
EIE08T01	AI	Professional Elective VI - Automotive Instrumentation	Mrs.K.Saraswathi	6	EIE
EIE08T02	MEMS	Professional Elective VII - MEMS	Dr.T.Lakshmibai	6	EIE
EIE08T03	IOT	Open Elective IV- IOT in Automation	Dr.G.P.Sivakumar	6	EIE
EIE08P01	Project - II	Project Phase II #	Mrs.K.Sugapriya	-	EIE

ODD SEMESTER - TIME TABLE – 2021-22

LAB Schedule

DAYS	1	2	3	4	5	6
	9.00 – 10.00	**10.00 – 11.00**	**11.00 – 12.00**	**12.00 – 1.00**	**2.00- 3.00**	**3.00 – 4.00**
MONDAY						
TUESDAY						
WEDNESDAY		EDC LAB Mrs.V.Komala and Mr.K.Vinayakamoorthy				
THURSDAY					PEID LAB Mr.G.Subramaniyan and Mr. K.Vinayakamoorthy	
FRIDAY					Process Control Lab(6.00 to 9.00PM) Mr.G.Subramaniyan	
SATURDAY		ISD LAB Mrs.V.Komala and Mr.K.Vinayakamoorthy RA LAB Mr.G.Subramaniyan			DE LAB Mr.G.Subramaniyan and Mrs.V.Komala	

EVEN SEMESTER - TIME TABLE – 2021-22

LAB Schedule

DAYS	1	2	3	4	5	6
	9.00 – 10.00	**10.00 – 11.00**	**11.00 – 12.00**	**12.00 – 1.00**	**2.00- 3.00**	**3.00 – 4.00**
MONDAY						
TUESDAY						
WEDNESDAY		LIC and DE Lab (Mechatronics) Mrs.V.Komala and Mr.K.Vinayakamoorthy				
THURSDAY		MPMC Lab (Mechatronics) Mrs.V.Komala and Mr.K.Vinayakamoorthy				
FRIDAY					PLC Lab (Mechatronics) Mrs.V.Komala ,Mr.K.Vinayakamoorthy and Mr.G.Subramaniyan	
SATURDAY		MPMC Lab (CSE) Mrs.V.Komala and Mr.K.Vinayakamoorthy				
		Process Control Lab (EEE) Mr.G.Subramaniyan				

Coordinator: K.Saraswathi and T.Sundar

FACULTY INDIVIDUAL TIME TABLE ODD SEMESTER 2021-22

Mrs.K.Saraswathi

	1	2	3	4	5	6
	9.00 – 10.00	**10.00 – 11.00**	**11.00 – 12.00**	**12.00 – 1.00**	**2.00- 3.00**	**3.00 – 4.00**
MONDAY						
TUESDAY					CCP	CCP
WEDNESDAY			EDC Lab(11.30 to 1.30)	EDC Lab(11.30 to 1.30)	AI	AI
THURSDAY		CCP	CCP			
FRIDAY			AI(11.30)	AI (1.30)		
SATURDAY						

Subject abbreviation	SUBJECT	FACULTY	HOURS	DEPT
AI	Analytical Instrumentation	Mrs.K.Saraswathi	4	EIE
CCP	Professional Elective-IV(Computer Control of Process)	Mrs.K.Saraswathi	4	EIE
EDC Lab	Electronic Devices and Circuits Lab	Mrs.K.Saraswathi	2	EIE

Dr.T.Sundar

	1	2	3	4	5	6
	9.00 – 10.00	**10.00 – 11.00**	**11.00 – 12.00**	**12.00 – 1.00**	**2.00- 3.00**	**3.00 – 4.00**
MONDAY		EMM	EMM			
TUESDAY						
WEDNESDAY						
THURSDAY					EMM	EMM
FRIDAY						Process Lab (EEE) 6.00-9.00
SATURDAY		RA LAB	RA LAB			

Subject abbreviation	SUBJECT	FACULTY	HOURS	DEPT
EMM	Open Elective – I(Electrical and Mechanical Measurements)	Dr.T.Sundar	4	EIE
RA LAB	Robotics Automation & Process Control Lab	Dr. T.Sundar	2	EIE
Process Lab	Process Control Lab (EEE – PT)	Dr. T.Sundar	3	EIE

Dr.Janani.R

	1	2	3	4	5	6
	9.00 – 10.00	**10.00 – 11.00**	**11.00 – 12.00**	**12.00 – 1.00**	**2.00- 3.00**	**3.00 – 4.00**
MONDAY					S&A	S&A
TUESDAY		OCS	OCS			
WEDNESDAY	S&A	S&A				
THURSDAY						
FRIDAY					OCS	OCS
SATURDAY		ISD LAB	ISD LAB			

Subject abbreviation	SUBJECT	FACULTY	HOURS	DEPT
S&A	Sensors & Actuators	Dr.Janani.R	4	EIE
OCS	Professional Elective-III(Optimal Control System)	Dr.Janani.R	4	EIE
ISD LAB	Instrumentation System Design Lab	Dr.Janani.R	2	EIE

Dr.T.Lakshmibai

	1	2	3	4	5	6
	9.00 – 10.00	**10.00 – 11.00**	**11.00 – 12.00**	**12.00 – 1.00**	**2.00- 3.00**	**3.00 – 4.00**
MONDAY		AI	AI			
TUESDAY						
WEDNESDAY	PEID	PEID	PEID LAB	PEID LAB		
THURSDAY					AI	AI
FRIDAY	PEID	PEID				
SATURDAY						

Subject abbreviation	SUBJECT	FACULTY	HOURS	DEPT
PEID	Power Electronics and Industrial Drives	Dr. T.Lakshmibai	4	EIE
PEID Lab	Power Electronics and Industrial Drives Lab	Dr. T.Lakshmibai	2	EIE
AI	Professional Elective-V(Aircraft Instrumentation)	Dr.T.Lakshimibai	4	EIE

Dr. G P Sivakumar

	1	2	3	4	5	6
	9.00 – 10.00	**10.00 – 11.00**	**11.00 – 12.00**	**12.00 – 1.00**	**2.00- 3.00**	**3.00 – 4.00**
MONDAY						
TUESDAY		POC	POC			
WEDNESDAY					RA	RA
THURSDAY					POC	POC
FRIDAY		RA	RA			
SATURDAY						

Subject abbreviation	SUBJECT	FACULTY	HOURS	DEPT
RA	Robotics & Automation	Dr.G.P. Sivakumar	4	EIE
POC	Principles of Communication (IT Dept)	Dr.G.P. Sivakumar	4	EIE
BE	Basic Electronics (Unit – 4 & 5)	Dr.G.P. Sivakumar	5	EIE

Mr.S S Saravanakumar

	1	2	3	4	5	6
	9.00 – 10.00	**10.00 – 11.00**	**11.00 – 12.00**	**12.00 – 1.00**	**2.00- 3.00**	**3.00 – 4.00**
MONDAY		DE and MP	DE and MP		CS	CS
TUESDAY						
WEDNESDAY					DE and MP	DE and MP
THURSDAY		CS	CS			
FRIDAY						
SATURDAY		DE and MP			DE LAB	DE LAB

Subject abbreviation	SUBJECT	FACULTY	HOURS	DEPT
CS	Control System	Mr.S S Saravanakumar	4	EIE
DE Lab	Digital Electronics Lab (CSE Dept)	Mr.S S Saravanakumar	2	EIE
DE and MP	Digital electronics and M icroprocessors	Mr.S S Saravanakumar	5	EIE

Mrs. K.Sugapriya

	1	2	3	4	5	6
	9.00 – 10.00	**10.00 – 11.00**	**11.00 – 12.00**	**12.00 – 1.00**	**2.00- 3.00**	**3.00 – 4.00**
MONDAY						
TUESDAY		S&A	S&A			
WEDNESDAY			EDC (11.30 to 1.30)	EDC (11.30 to 1.30)		
THURSDAY					S&A	S&A
FRIDAY		EDC	EDC			
SATURDAY					PROJECT WORK PHASE- I	PROJECT WORK PHASE- I

Subject abbreviation	SUBJECT	FACULTY	HOURS	DEPT
EDC	Electronic Devices and Circuits	Mrs. K.Sugapriya	4	EIE
S&A	Sensors and Actuator**(ECE DEPT)**	Mrs. K.Sugapriya	4	EIE
PW-I	Project Work Phase- I	Mrs.K.Sugapriya	2	EIE
IS & IV	Internship and Industrial Visit	Mrs.K.Sugapriya	-	EIE

Mr.N C A Boovarahan

	1	2	3	4	5	6
	9.00 – 10.00	**10.00 – 11.00**	**11.00 – 12.00**	**12.00 – 1.00**	**2.00- 3.00**	**3.00 – 4.00**
MONDAY		BE	BE		BT	BT
TUESDAY					BE	BE
WEDNESDAY		BT	BT			
THURSDAY		DE	DE			
FRIDAY			BE		DE	DE
SATURDAY						

Subject abbreviation	SUBJECT	FACULTY	HOURS	DEPT
BT	Professional Elective-III(Battery Technology)	Mr.N C A Boovarahan	4	EIE
DE	Digital Electronics (CSE Dept)	Mr.N C A Boovarahan	4	EIE
BE	Basic Electronics (Unit – 1, 2 & 3)	Mr.N C A Boovarahan	5	EIE

FACULTY INDIVIDUAL TIME TABLE EVEN SEMESTER 2021-22

Mrs.K.Saraswathi

	1	2	3	4	5	6
	9.00 – 10.00	**10.00 – 11.00**	**11.00 – 12.00**	**12.00 – 1.00**	**2.00- 3.00**	**3.00 – 4.00**
MONDAY					AI	
TUESDAY		AI			VI	
WEDNESDAY						
THURSDAY					AI	
FRIDAY		VI				
SATURDAY		PC Lab				

Subject abbreviation	SUBJECT	FACULTY	HOURS	DEPT
VI	Professional Elective II - Virtual Instrumentation	Mrs. K.Saraswathi	3	EIE
AI	Professional Elective VI - Automotive Instrumentation	Mrs.K.Saraswathi	6	EIE
PC Lab	Process Control Lab – EEE	Mrs.K.Saraswathi	2	EIE

Dr.T.Sundar

	1	2	3	4	5	6
	9.00 – 10.00	**10.00 – 11.00**	**11.00 – 12.00**	**12.00 – 1.00**	**2.00- 3.00**	**3.00 – 4.00**
MONDAY		BEE			DE	
TUESDAY						BMI
WEDNESDAY		BMI				
THURSDAY						BEE
FRIDAY		DE			PLC LAB	
SATURDAY		DE			EA	

Subject abbreviation	SUBJECT	FACULTY	HOURS	DEPT
BMI	Open Elective II – Bio Medical Instrumentation	Dr.T.Sundar	3	EIE
PLC Lab	PLC & Virtual Instrumentation Lab	Dr.T.Sundar	2	EIE
BEE	Basic Electronics Engineering	Dr.T.Sundar	3	EIE
DE	Digital Electronics	Dr.T.Sundar	5	EIE
EA	Extracurricular Activity	Dr.T.Sundar	1	EIE

Dr.Janani.R

	1	2	3	4	5	6
	9.00 – 10.00	**10.00 – 11.00**	**11.00 – 12.00**	**12.00 – 1.00**	**2.00- 3.00**	**3.00 – 4.00**
MONDAY						
TUESDAY						
WEDNESDAY						
THURSDAY						
FRIDAY		DE				DE
SATURDAY						

Subject abbreviation	SUBJECT	FACULTY	HOURS	DEPT
DE	Digital Electronics	Dr.Janani.R	3	EIE

Dr.T.Lakshmibai

	1	2	3	4	5	6
	9.00 – 10.00	**10.00 – 11.00**	**11.00 – 12.00**	**12.00 – 1.00**	**2.00- 3.00**	**3.00 – 4.00**
MONDAY		MEMS	MEMS			
TUESDAY		PLC				
WEDNESDAY		LIC & DE LAB			MEMS	MEMS
THURSDAY		MEMS	MEMS		PLC	PLC
FRIDAY						
SATURDAY						

Subject abbreviation	SUBJECT	FACULTY	HOURS	DEPT
PLC	PLC & Data Acquisition System	Dr.T.Lakshmibai	3	EIE
MEMS	Professional Elective VII - MEMS	Dr.T.Lakshimibai	6	EIE
LIC & DE LAB	Linear Integrated Circuits & Digital Electronics Lab #	Dr.T.Lakshimibai	2	EIE

Dr. G P Sivakumar

	1	2	3	4	5	6
	9.00 – 10.00	**10.00 – 11.00**	**11.00 – 12.00**	**12.00 – 1.00**	**2.00- 3.00**	**3.00 – 4.00**
MONDAY					POM	POM
TUESDAY					IOT	IOT
WEDNESDAY		IOT	IOT		POM	
THURSDAY						
FRIDAY		IOT	IOT			
SATURDAY						

Subject abbreviation	SUBJECT	FACULTY	HOURS	DEPT
IOT	Open Elective IV- IOT in Automation	Dr.G.P. Sivakumar	6	EIE
POM	Principles of Management and Professional Ethics	Dr.G.P. Sivakumar	3	EIE

Mr.S S Saravanakumar

	1	2	3	4	5	6
	9.00 – 10.00	**10.00 –11.00**	**11.00 – 12.00**	**12.00 – 1.00**	**2.00- 3.00**	**3.00 – 4.00**
MONDAY						
TUESDAY					NT	NT
WEDNESDAY		NT	NT			MPMC
THURSDAY		MPMC Lab	MPMC Lab			
FRIDAY		NT	NT			
SATURDAY		MPMC	MPMC			

Subject abbreviation	SUBJECT	FACULTY	HOURS	DEPT
NT	Open Elective IV – Nano Technology	Mr.S S Saravanakumar	6	EIE
MPMC	Microprocessors and Microcontrollers	Mr.S.S Saravanakumar	3	EIE
MPMC Lab	Microprocessors and Microcontrollers Lab	Mr.S S Saravanakumar	2	EIE

Mrs. K.Sugapriya

	1	2	3	4	5	6
	9.00 – 10.00	**10.00 – 11.00**	**11.00 – 12.00**	**12.00 – 1.00**	**2.00- 3.00**	**3.00 – 4.00**
MONDAY					ES	
TUESDAY		MPMC				
WEDNESDAY						
THURSDAY						
FRIDAY		ES				
SATURDAY		MPMC				

Subject abbreviation	SUBJECT	FACULTY	HOURS	DEPT
MPMC	Microprocessor and Microcontroller – CSE	Mrs. K.Sugapriya	4	EIE
ES	Embedded System – IT	Mrs. K.Sugapriya	4	EIE
EL	Electronics	Mrs. K.Sugapriya	5	EIE
Project - II	Project Phase - II	Mrs.K.Sugapriya	-	EIE

Mr.N C A Boovarahan

	1	2	3	4	5	6
	9.00 – 10.00	**10.00 – 11.00**	**11.00 – 12.00**	**12.00 – 1.00**	**2.00- 3.00**	**3.00 – 4.00**
MONDAY					ED&C	ED&C
TUESDAY		LIC	LIC			
WEDNESDAY					LIC	
THURSDAY						
FRIDAY			ED&C			
SATURDAY						

Subject abbreviation	SUBJECT	FACULTY	HOURS	DEPT
ED&C	Electric Drives and Controls for Electric Vehicles	Mr.N C A Boovarahan	3	EIE
LIC	Linear Intergrated Circuit	Mr.N C A Boovarahan	3	EIE
MPMC Lab	Microprocessors and Microcontroller Lab	Mr.N C A Boovarahan	2	EIE

13.SEMINARS/WORKSHOPS/CONFERENCES/SYMPOSIUMS/TRAINING PROGRAMS ORGANIZED

DEPARTMENTAL ACTIVITIES

S.NO	Name of the Department	Programme Organized	Date
1	EIE	Guest Lecture: Title: Power generation in combined cycle Gas operated power plant and Role of engineers in Industry Resourse Person: Mr.Bavanandhi Rajan, Senior Engineer, Commissioning in Instrumentation. & Controls, M/S. Dubai Electricity and Water Authority- Govt. of Dubai- Dubai	21/07/2021 (10 am to 12.00 noon)
2	EIE	54th Engineers' Day Function: Chief Guest: Mr. T. Paneerselvam, ndc, DRDS, Scientist 'G', Additional Director, CVRDE, DRDO, Chennai. Guest Special address, Title- "Technologies for Main Battle Tanks"	15/09/2021
3	EIE	Fancy Dress Competition	14/11/2021
4	EIE	Virtual Industrial Tour – Merino Industries at Hapur (UP) and Reliance Refinery, Jam nagar, Gujarat.	22/03/2022
5	EIE	Ugadi Fest-2022	01/04/2022

AAVISHKAR the National Level Technical Symposium is conducted by EIE Department, SCSVMV every year.

- AAVISHKAR tag line is "**Discover an Engineer in U**". The in –depth abbreviation says

  A-Analyze,

  A-Anticipate,

  V-View,

  I-Innovate,

  S-Stimulate,

  H-Hoist,

  K-The Kharismatic,

  A-Avatar of Engineer

  & R-To Reality

- This is a wonderful platform for student eternity to show their technical & presentation skills in various technical concepts.
- The technical paper presentation of the AAVISHKAR includes the innovative topics like Augmented Reality, Internet of Things Embedded Systems Wireless network system, Space recognition sensor, Bio-medical instrumentation, Light fidelity etc.,
- Technical papers received from inter University and the end cultural programs will steal the heart of the audience.

DEPARTMENTAL MEETINGS

SL.NO	MEETINGS	DATE
1	IV Year EIE& Mechatronics Class committee meeting(On Line Mode)	25/08/2021
2	III Year Mechatronics Class committee meeting(On Line Mode)	23/08/2021& 12/02/2022
3	II Year Mechatronics Class committee meeting(On Line Mode)	6/09/2021
4	Alumnimeeting (On Line Mode)	19/09/2021
5	Parents-Teachersmeeting (On Line Mode)	05/09/2021
6	Doctral Committee Meeting Mr N C A Boovarahan & Mr S S Saravanakumar	12/03/2022

RESEARCH COLLOQUIUM

S.NO	NAME	DATE	TITLE
1	Dr T Lakshmibai	29/07/2021	Telemedicine and digital healthcare : Oppurtunities & Threats in today's COVID 19 Scenario
2	Dr E Deenadalayan	26/08/2021	TYPE 2 FUZZY LOGIC
3	Dr T Sundar	30/09/2021	Electric Vehicles technology and charging infrastructure
4	Dr G P Sivakumar	28/10/2021	Discussion on "NPTEL Translation Process : Need and Importance"
5	N.C.A. Boovarahan	22/06/2022	"Enhancement In Channel State Information For Massive Mimo System Using Mccdma Technique"
6	Saravanakumar	24/06/2022	Interference Reduction and Load Balancing for Cellular Networks using OFDMA Technique

14. PROJECT DETAILS

PROJECT PHASE -1

S.No	Register Number	Name of the Student	Title of the Project	Project Type	Name of the Guide
1	11189G001	Kashigari Sravan Kumar	Design Of Suitable Controllers For Interacting And Non Interacting Liquid Level Systems Using Labvie	software	Mrs.K.Saraswathi
1	11189H001	Adithya Manohar Ravi	self powered smart mask	software	Dr.G.P.Sivakumar
2	11189H002	S Aswin	Automatic traffic controlling virtually using LabVIEW.	software	Dr.Janani.R
3	11189H003	Borlaa Sivakalyani	Measurement Of Humidity And Temperature For Automated Fan Control Using Raspberry Pi And Python Coding	software	Dr.T.Lakshmibai
4	11189H004	R S Kailash	GaFbot- Garbage fetching robot	software	Mrs.K.Sugapriya
5	11189H005	Kavvam Saijyothish Reddy	Electricity generation from airconditioner	software	Dr.G.P.Sivakumar
6	11189H006	Kovvali N B S Subrahmanya Lokesh Preetham	Virtual Personal Assistant	software	Mr.S.S.Saravanakumar
7	11189H007	Mocharla Ruthvik Sai	door security system through face recognition using matlab	software	Mrs.K.Sugapriya

8	11189H008	Pillalamarri Srinivasa Sanjay	Design and implementation of black box in auto mobile using AWS	software	Mr.N.C.A.Boovarahan
9	11189H009	Ramannagari Nitish	GSM based agriculture motor control using aurdino	software	Mrs.K.Saraswathi
10	11189H010	S Ravinndhar	Intelligent Braking System Using Ultrasonic Sensor	software	Mr.S.S.Saravanakumar
11	11189H011	Repala Kireeti	Three wheel electric vehicle to E-bike hoverboard conversion	software	Dr.T.Sundar
12	11189H012	Samayam Hemanth Sai	Electrical energy generation using gym equipment	software	Dr.T.Sundar
13	11189H013	V Selva Kumar	Autonomous Vehicle Using LIDAR Sensor	software	Dr.T.Lakshmibai
14	11189H014	Surimani Niteesh	Bottle Shifting Using Robotic Arm Using Labview	software	Dr.Janani.R
15	11189H015	Arun Kumar J S	Smart Car Parking Using Arudino Microcontroller	software	Mr.N.C.A.Boovarahan

PROJECT PHASE -1

ABSTRACT DETAILS

Name of the Student(s)	Abstract
Kashigari Sravan Kumar 11189G001	The main objective of this project work is to study the various conventional three mode controller algorithm for an interacting and non-interacting liquid level two tank system. For controlling any chemical process, a mathematical model is identified, suitable controller is designed and simulated to get the desired process behavior. For this purposes, a lab scale interacting and non-interacting liquid tank system is considered. The mathematical transfer function model is obtained and various conventional PID controller algorithm are simulated, the efficiency of the methods are demonstrated in simulation using LabVIEW software. The closed loop performance measure are calculated and tabulated. The simulation results shows that the conventional PID controller algorithm has good setpoint tracking and performance
R. Adithya Manohar 11189H001	Usage of a face mask has become mandatory in many countries after the outbreak of SARS-CoV-2, and its usefulness in combating the pandemic is a proven fact. There have been many advancements in the design of a face mask and the present treatise describes a face mask in which a simple textile triboelectric nanogenerator (TENG) serves the purpose of filtration of SARS-CoV-2. The proposed mask is designed with multilayer protection sheets, in which the first two layers act as triboelectric (TE) filter and the outer one is a smart filter. The conjugated effect of contact electrification, and electrostatic induction of the proposed smart mask are effective in inactivating the span of virus-ladden aerosols in a bidirectional way. Five pairs of triboseries fabrics i.e. nylon
Aswin S 11189H002	As the problem of urban traffic congestion spreads & occurrence of road accidents increase, there is a pressing need for the introduction of advanced technology and equipment to improve the traffic control algorithms to better accommodate this increasing demand. The simplest way for controlling a traffic light is using timer for each phase. Another way is touse electronic sensors in order to detect vehicles, and produce signal that cycles. In this project work, I propose, an automatic controlling of traffic in all the direction based on time interval and also make the system to work as per the traffic density and it can be extended to 8 image processing techniques and even use of google map to make decision more reliable considering the factor traffic density.
Siva Kalyani 11189H003	In present scenario, availability of electricity is found to reach crucial stage. To protect and safeguard one's future we need to save the energy. As a slogan suggest "One unit saved is one unit generated". The project is a standalone automatic fan speed controller that controls the speed of an electric fan according

	to our requirement. Use of embedded technology makes this closed loop feedback control system efficient and reliable. Arduino microcontroller allows dynamic and faster control. Liquid crystal display (LCD) makes the system user friendly. The sensed temperature and fan speed level values are simultaneously displayed on the LCD panel. It is very compact as it is constructed by using few components and can be interfaced for several applications including air-conditioners, water-heaters, snow-melters, ovens, heat-exchangers, mixers, furnaces, incubators, thermal baths and veterinary operating tables. Arduino micro controller is the heart of the circuit as it controls all the functions. The temperature sensor LM35 senses the temperature and converts it into an electrical signal, which is forwarded to the microcontroller. The sensed and set values of the temperature are displayed on the 16x2-line LCD. The microcontroller drives Transistor to control the fan speed. This project uses regulated 12V, 5A power supply. This project is useful in process industries for maintenance and controlling of Boilers temperature
R S Kailash 11189H004	In today's society, robotics and automatic systems are developing rapidly. In this project, a Mobile Manipulator will be designed and simulated using CoppeliaSim (robotics simulation software). The model of the robot is Differential Drive. SLAM (Simultaneous Localization and Mapping) technique will also be integrated with the robot so that the robot can navigate autonomously without any support from humans. EKF (Extended Kalman Filter) or PF (Particle Filter) algorithm will be used for localization.
K.Sai Jyothi sh Reddy 11189H005	Air Conditioners are the most used items in India. Since the initial capital cost of solar systems is still quite high , when it comes to generate power for a domestic use and energy saving and energy generating is a major issue for mankind .This paper presents method of generating power by a Air Conditioner . The generated power can be either used or can be stored in a battery for powering some other devices.This technique is based on the principle of mutual induction. We used power generative assembly which is fitted to the output unit of Air Conditioner for the production of electricity. The electricity generative Air Conditioner works on the faraday's law of electromagnetic induction. When Air Conditioner is in working period, by using Air Conditioner rotation energy rotates the magnets which placed around the copper winding in the power generative assembly. With the help of power generative assembly we produced electricity from the Air Conditioner in it's working period. By using this assembly we produce electricity more effectively and efficiently.
K. Lokesh Preetham 11189H006	The project aims to develop a personal-assistant for windows-based systems. It's an inspiration from virtual assistants like Cortana and Siri. It has been designed to provide a user-friendly interface for carrying out a variety of tasks by employing certain well-defined commands. Users can interact with the assistant through voice commands as input. As a personal assistant, this

	assists the end-user with day-to-day activities like general human conversation, searching queries in google, searching for videos, retrieving images, live weather conditions, word meanings, searching for medicine details and entertainment purposes like opening social media apps. The user statements/commands are analysed with the help of python coding to give an optimal solution. With the python programming language, a script most commonly used by the developers can be used to build assistant to perform task designed by the users.
Mocharla Ruthvik Sai 11189H007	The idea of remotely connecting and monitoring real world things through the internet connection developed a thought about Internet of Things (IoT). This concept can be suitably included to make our house smarter, safer, energy efficient and automated. This project focuses on building a safe, automated system by using the internet connection that will smartly control the appliances like Lights, Fan, TV, AC, Heaters, vehicles etc. in our home, Industries, Offices, Schools& Colleges anytime and anywhere in the world. It sends alerts about the status of particular device on Smartphone App, Message on Mobile Phone, by E-mail and also gets all this information on the Cloud Server objective behind the project is to operate home appliances by the use of voice commands, text commands and also from the database of cloud server with high level of security by the use of Relays and Sensors over the Internet. The main purpose of this project is to create a Smart automation in very affordable price, so that even middle-class family can afford it comfortably. After completing this home automation system, we would be able to control the electrical appliances using the voice commands that would be given in different languages. The main backbone behind this project is Google Assistant that would be used to control home appliances. I've preferred Google Assistant because it supports almost every language and furthermore, an Android Application would also be designed for Controlling the appliances.
P. Srinivasa Sanjay 11189H008	Build a smart integrated iot system for automobile to share the parameter of automobile on cloud (AWS). To make an integrated circuit which transfers analog data to the Wi-Fi module ESP8266 on cloud under a Wi-Fi network and then to analyze the data on cloud and further the data can be utilized and represents on an LCD screen. After completion of all process in software we can implement the whole process in vehicle (Two-wheeler). The prototype of an Automobile Black Box System that can be installed used to record the movement parameter of a vehicle mainly used for accident analyzes purposes and for safety measures The main purpose of this paper is to develop a prototype of the Automobile Black Box System ABBS that can be installed into any vehicle all over the world. This prototype can be designed with minimum number of circuits. The ABBS can contribute to constructing safer vehicles, improving the treatment of crash victims, helping insurance companies with their vehicle crash investigations, and enhancing road status

	in order to decrease the death rate.
Ramannagar i Nitish 11189H009	Social distancing is of key importance during the current pandemic. It helps limit the spread of covid by observing distance between disease spreading individuals. Now it is not possible to station a person 24×7 at each queue to monitor social distancing violations. Banks, Public Offices, Malls, Schools, Theatres etcusually see long queues for hours every day. To ensure social distancing in queues we hereby design a social distancing monitoring robot.
S.Ravindhar 11189H010	The braking system was designed and applied on a car to make the driving process safety using embedded system design. Most of the accident occurs due to the delay of the driver to hit the brake, so in this project work braking system is developed such that when it is active it can apply brake depending upon the object sensed by the ultrasonic sensor and speed of vehicle. Currently, vehicles are often equipped with active safety systems to reduce the risk of accidents, many of which occur in the urban environments. The most popular include Antilock Braking Systems (ABS), Traction Control and Stability Control. All these systems employ different types of sensors to constantly monitor the conditions of the vehicle, and respond in an emergency situation. An intelligent mechatronic system includes an ultrasonic wave emitter provided on the front portion of a car producing and emitting ultrasonic waves frontward in a predetermined distance. An ultrasonic receiver is also placed on the front portion of the car operatively receiving a reflective ultrasonic wave signal. The reflected wave (detected pulse) gives the distance between the obstacle and the vehicle and RPM counter gives speed of vehicle. The microcontroller is used to control the braking of the vehicle based on the detection pulse information to push the brake pedal and apply brake to the car stupendously for safety purpose. Keywords: Ultrasonic Sensor, Intelligent Mechatronic system, RPM counter, Microcontroller
R. Kireeti 11189H011	In the 21st century, the electric vehicle is considered the green transportation tool. An electric vehicle has achieved great attention from many people and researchers, leading to intensive and extensive series. The electric vehicle provides different advantages over conventional internal combustion engines, mainly in terms of local emissions, higher efficiency, and decreased dependency upon fuels or oils.The electric vehicle is the best and promising way for reducing the greenhouse effects that occur due to the usage of fuels. An electric vehicle uses one or more traction motors for propulsion.The growing demand for electric bikes and electric vehicles around the world will always help to reduce air pollution, noise pollution, and many others. Controller, Hub motor, and battery are the three main components of the electric bike.

S.Hemanth Sai 11189H012	As energy usage across the world continues to rise, there is strong need to develop new methods for energy conservation and power generation, particularly approaches that have less environmental impacts. Although human power is not ideal in terms of life cycle costs, there are promising application areas for human power in emerging regions where electric power is either not available or not affordable. There is also untapped potential for harnessing human power at most fitness facilities. The man has needed and used energy at an increasing rate for his sustenance and well-being ever since he came on earth for few million years ago. Due to this lot of energy resources have been exhausted and wasted. Proposal for the utilization of waste energy of power generation by gym pulley is very much relevant and important for highly populated countries like India and china the people are crazy about the gym. The world is facing energy crisis with the difference in demand and supply and limited number of natural resources. So, there is a need for saving energy and requirement an alternate energy source which is cheap and feasible. The aim is to concentrate on how electrical energy can be generated from gym equipment/exercise equipment. In urban areas people are very much health conscious and spend average one hours' time in gym for his physical fitness. This project harnessed the mechanical energy of the machine and converted it to electrical energy using a generator-based system.
V. Selva Kumar 11189H013	To make an autonomous vehicle (self-driving Vehicle) many features as to be taken care, like obstacle avoiding, obstacle ranging, traffic signals, classifying vehicles, tracking, parking etc. One of the most important features for an autonomous vehicle is finding obstacles and ranging it. Many approaches have been presented for an autonomous vehicle on last few years and most widely used approach is using stereo vision or 2D/3D technology. One of the most used stereo Vision technologys is using LIDAR (Light Imaging Detection and Ranging) sensor. LIDAR, a detection sensor which works on principle of radar, but uses light from a laser. LIDAR plays a vital role in obstacle detection and ranging and radar is used for parking the vehicle.In order to provide an overview of this technology, it has been decided to focus on the L Increasing population is the major issue of transportation nowadays here developed an automated driving system which drives the car automatically. it help prevent traffic accidents and save people's time by fundamentally changing car. It developed a technology for car that drives it automatically here designed an automated vehicle that is focused to give automated driving experience to the human driver. This car is capable of sensing the surroundings, navigating and fulfilling the human transportation capabilities without any human input. Lidar is used for sensing the surroundings. It continuously tracks the surrounding and if any obstacle is detected vehicle senses and moves around and avoids the obstacle. The advantages of an autonomous car are fewer traffic collisions, increased

	reliability, increased roadway capacity, reduced traffic congestion, as human life has to be secured and safe, efficient, cost-effective and comfortable means of transport.
Surimani Niteesh 11189H014	Robotics is a sub-domain of engineering and science that includes mechanical engineering, electrical engineering, computer science and others. This project uses LabVIEW as a software tool because LabVIEW is systems engineering software for applications that require test, measurement, and control with rapid access to hardware and data insights. We can change the parameters in the LabVIEW software. For this intelligent system, various algorithms-based approaches are implemented so as to execute the task i.e. image processing, coordinate determination, movement of the end effectors using various servo as well as DC motors, etc. The virtual intelligent system can be utilized in various industrial applications where the quality is expected at a high rate with other dominant parameters. The simulation work of the system has been carried out with LabVIEW. This method of bottle shifting is used in many industries.
J.S. Arun Kumar 11189H015	Increasing vehicles day by day create a huge problem in traffic .Searching for the free parking lot is one of the daily task for peoples of any country. The people waste a lot of their valuable time in searching for the parking lot. The main motive of this paper is to develop a system by which peoples can access the real time data about the presence of parking lot nearer to the user wherever they want. In this system we have used Ultrasonic sensors to detect the nearer Parking space,LCD Display used to know the status of parking lot and Arduino Microcontroller is used to read the sensors.By developing this system we can minimize thesearching time, fuel consumption and reduce the pollution.Smart car parking project aims at providing a confusion free and easy parking. This projecthelps the drivers of the cars to park their vehicles with minimum wastage of time with accurate information of the availability of the space to park. Smart car parking is an automated, flexible, user friendly and highly efficient technology as the booking of parking slot for the driver's vehicle is made possible

PROJECT PHASE – II

S.No	Register Number	Name of the Student	Title of the Project	Project Type	Name of the Guide
1	11189G001	Kashigari Sravan Kumar	IOT Based Industrial Automation	Hardware	Mrs.K.Saraswathi
1	11189H001	Adithya Manohar Ravi	Hand controlled robotic vehicle.	Hardware	Dr.G.P.Sivakumar
2	11189H002	S Aswin	Automatic floor cleaning robot	Hardware	Mr.S.S.Saravanakumar
3	11189H003	Borlaa Sivakalyani	Automatic water Dispenser using Arduino NANO	Hardware	Dr.T.Lakshmibai
4	11189H004	R S Kailash	Heater Monitoring In Flash Drier Machine	Hardware	Mrs.K.Sugapriya
5	11189H005	Kavvam Saijyothish Reddy	Voice controlled UV sterilizing robot	Hardware	Dr.G.P.Sivakumar
6	11189H006	Kovvali N B S Subrahmanya Lokesh Preetham	Foot Step Power Generation System	Hardware	Mr.S.S.Saravanakumar
7	11189H007	Mocharla Ruthvik Sai	Regenerative Breaking system	Hardware	Mrs.K.Sugapriya
8	11189H008	Pillalamarri Srinivasa Sanjay	Smart Vehicle Automation With Automobile Blackbox using IOT	Hardware	Mr.N.C.A.Boovarahan
9	11189H009	Ramannagari Nitish	Social Distance Monitoring Robot:QUEUE LINE	Hardware	Mrs.K.Saraswathi
10	11189H010	S Ravinndhar	Intelligent breaking system using the	Hardware	Mr.N.C.A.Boovar

			ultrasonic sensor		ahan
11	11189H011	Repala Kireeti	Sanitization robot using arduino	Hardware	Dr.T.Sundar
12	11189H012	Samayam Hemanth Sai	Electrical Energy Generation Using GYM Equipment	Hardware	Dr.T.Sundar
13	11189H013	V Selva Kumar	Industrial Ultrasonic line follower robot with obstacle avoidance	Hardware	Dr.T.Lakshmibai
14	11189H014	Surimani Niteesh	Soil Moisture Sensor Base Irrigation Over GSM using Microcontroller	Hardware	Mrs.K.Sugapriya
15	11189H015	Arun Kumar J S	IOT based smart car parking system	Hardware	Mr.N.C.A.Boovar ahan

PROJECT PHASE -II
ABSTRACT DETAILS

Name of the Student(s)	Abstract
Kashigari Sravan Kumar 11189G001	Internet of things (IOT) is rapidly increasing technology in industries. IOT is the network which is enclosed with sensors, network connectivity, electronics and software's which menables to receive and transmit the data. In this project we are developing a system which will automatically control and measure process variables such as temperature, Flow, level and monitor the industrial applications and generate alerts and alarm or take intelligent decisions using IOT by giving all set values to the system. IOT can build powerful industrial systems and applications by using wireless devices.
Adithya Manohar Ravi 11189H001	This system is very beneficial for disabled people as it allows movement of a robotic vehicle on the basis of hand movements. The person just has to move his hand in order to move the vehicle in forward, backward, left or right direction. So the user does not have to press any buttons. The system includes a receiver circuit designed which will be mounted on a top of a glove which the user has to wear. The circuit on the vehicle includes RF receiver, 8051 microcontroller and Driver IC to operate the motors. The receiver circuit that is on the top of a glove includes ATmega family

	microcontroller interfaced to the accelerometer. The commands that are detected by the IC on this circuit are sent to the RF transmitter which then forwards the commands to the RF receiver. The RF receiver then sends the commands to 8051 microcontroller which processes the commands so that the vehicle moves in the specified direction.
S Aswin 11189H002	In the modern era, the Automatic Floor Cleaner is required. Thus, the cleaner is designed in such a way that it is capable of cleaning the area reducing the human effort just by starting the cleaning unit. In the paper, main focus is to build and program it in such a way, that it can move around freely and clean a specific area. It cleans the floor using brushes attached with the motor and with help of cleaning fluid while moving. It uses Ultrasonic sensors to detect the obstacles and hence change its direction while moving and also preventing the cleaner to fall from height. This paper details the development of Automatic Floor Cleaner. The project is used for domestic and industrial purpose to clean the surface automatically. When it is turned ON, it starts cleaning while moving all around the surface (floor or any other area) as it passes over it. The cleaning liquid can also be changed into sanitizer in order to sanitize the room, hospital or any other place.
Borlaa Sivakalyani 11189H003	Water pumps are very useful in the water supply, the first wooden pumps are came into existence in 1700s, the other pumps which came into the existence in mid 1800s and these pumps are known as metal piston type pumps which are driven by steam. The first submersible pumps are came into existence in 1920s, whereas now in 2020's things been automated including the pumps we use. Automatic Water Dispenser is containing a series of many functions like controlling the water level, showing the level of water, showing the value of temperature, and automatic ejection of water. The sensor placed in the project senses the object placed in front of it and its output is applied to the Arduino which executes a program and the resulting signal of the Arduino that corresponds to the temperature is applied to the motor which runs the water dispenser machine accordingly. The sensed temperature of water and its level will be displayed simultaneously in the LCD panel also. Use of embedded technology makes this closed loop feedback control system more efficient and reliable. The sensed temperature and level of water values are simultaneously displayed on the LCD panel. If all the manual taps are replaced with a smart one that opens and closes on its own automatically not only the water can be saved but also have a healthier lifestyle since the tap won't be operated by human being hands. So this project Automatic Water Dispenser using Arduino that can automatically give water when a glass is placed under it.
R S Kailash 11189H004	Flash Drier Machine is a very critical machine used in the battery manufacturing process. Lead paste is applied on lead plates and passed through Flash Drier Machine to dry this paste applied onto the lead plates. Heaters in Flash Drier Machine generate the heat needed to dry these plates. The heat generated by the heater is proportional to the amount of current supply. When the plate is rejected in QC check , most of the time it's the lead paste not drying as per specification . So,

	monitoring the amount of current supplied to the heater can reduce the amount of battery plates getting rejected and be cost efficient.
Kavvam Saijyothish Reddy 11189H005	Most of simulated Intelligence will eventually command to robotics. Most neural networking, physical language processing, idol recognition, oratory recognition/synthesis research goal at eventually league their technology into the summary of robotics – the source of a fully humanoid robot. The field of artificial intelligence has been around nearly as long as AI - however the sector has created very little progress. This is often solely natural, since the sector not solely makes an attempt to beat intelligence, however additionally the body that embodies it is a formidable task. It's solely comparatively recently that robots have begun to use a degree of computing in their work - severalrobots needed human operators, or precise steering throughout their missions. Slowly, robots have become additional and additional autonomous. Artificial intelligence is Associate in nursing fully fascinating field that interests most of the people. Robot should have Sensing, Movement, Energy and Intelligence characteristics. This project deals with one of the application of vehicles. In this project, one moving object is developed such it's stirred as per commands area unit given by the voice recognition app which command is received by the microcontroller mistreatment wireless communication. This project is provided with DC motor, Voice Recognition module, Microcontroller at the side of the facility offer unit. Vehicle finds it applications within the time period. Robots have broad application in healthcare. Such robots include roving machines mounted with ipads to provide physician tele-presence, surgical assistance robots such as the Da Vinci system, drones for delivery of emergency or other medical equipment, assistive and therapeutic robotic devices used to increase the individual's capability or rehabilitate, empathic robots used in the care of the older or physically/mentally limited individual, and industrial robots such as those used to sterilize patient rooms or for supply delivery. Other robots are in the research and development stage now and still other applications of robotics in healthcare are being considered for the future. The world of service robots is in its infancy.
Kovvali N B S Subrahmanya Lokesh Preetham 11189H006	The aim of this project is to develop a simple power generating system.Human power transport has been in existence since time immemorial in the form of walking, running & swimming. However, modern technology has led to machine to enhance the use of human power in more efficient manner. In this context, pedal power is an excellent source of energy and has been in use since the 19 th century making use of most powerful muscles in the body. 95% of the exertion put into pedal power is converted into energy. Pedal power can be applied to wide range of job is a simple, cheap and convenient source of energy. However, human kinetic energy can be useful in a nos. of ways but it can also be used to generate electricity based on different approaches and many organizations are already implementing human power technologies to generate electricity to power small electronic appliances.
Mocharla	We are slowly reaching the age of electric vehicles. The major issue behind the mass use of electric vehicles is the battery charging time and lack of charging stations. So

Ruthvik Sai 11189H007	here, we propose a regenerative braking system with a power monitor. This system allows a vehicle to generate energy each time brakes are applied as well as track the amountof power generated. The stronger the brakes, the more power is generated. We use a friction-lining arrangement in a brake drum. As a drum rotates the friction lining does not tough the drum as soon as brakes are applied, the friction lining touches the drum from inside and moves the motors connected to the lining in the same direction, thus generating electricity using motors as a dynamo. In addition, we use circuitry to track the voltage generated with each press along with the count of brake press. Thus, this system allows for charging car batteries each time brakes are applied, thus providing a regenerative braking system. It moves us another step ahead towards a pollution-free transportation system.
Pillalamarri Srinivasa Sanjay 11189H008	In this project, the proposed system will be dealing with Global PositioningSystem (GPS) interfaced with varioussensor management system concluded as cloud-vehicle black box system Wireless black box is basically a device that willindicate all the parameters of a vehicle crash and will also store and display itsparameterswithrespectivetimelinesuchasdate,time,temperature,location,vibrationetc. Whenever the accidentheld themessagewillsentfromthe systembuiltinside thecartothe registeredmobile numberssuchasemergency numbersofpolicestations,hospitals,family members,owneretc.
Ramannagari Nitish 11189H009	Social distancing is of key importance during the current pandemic. It helps limit the spread of covid by observing distance between disease spreading individuals.Now it is not possible to station a person 24×7 at each queue to monitor social distancing violations.Banks, Public Offices, Malls, Schools, Theatres etcusually see long queues for hours every day. To ensure social distancing in queues we hereby design a social distancing monitoring robot.
S Ravinndhar 11189H010	The braking system was designed and applied on a car to make the driving process safety using embedded system design. Most of the accident occurs due to the delay of the driver to hit the brake, so in this project work braking system is developed such that when it is active it can apply brake depending upon the object sensed by the ultrasonic sensor and speed of vehicle. Currently, vehicles are often equipped with active safety systems to reduce the risk of accidents, many of which occur in the urban environments. The most popular include Antilock Braking Systems (ABS), Traction Control and Stability Control. All these systems employ different types of sensors to constantly monitor the conditions of the vehicle, and respond in an emergency situation. An intelligent mechatronic system includes an ultrasonic wave emitter provided on the front portion of a car producing and emitting ultrasonic waves frontward in a predetermined distance. An ultrasonic receiver is also placed on the front portion of the car operatively receiving a reflective ultrasonic wave signal. The reflected wave (detected pulse) gives the distance between the obstacle and the vehicle and RPM counter gives speed of vehicle. The microcontroller is used to control the braking of the vehicle based on the detection pulse information to push the brake pedal and apply brake to the car stupendously for safety purpose.
Repala	Robots have broad application in healthcare. Such robots include roving machines

Kireeti 11189H011	mounted with ipads to provide physician tele-presence, surgical assistance robots such as the Da Vinci system, drones for delivery of emergency or other medical equipment, assistive and therapeutic robotic devices used to increase the individual's capability or rehabilitate, empathic robots used in the care of the older or physically/mentally limited individual, and industrial robots such as those used to sterilize patient rooms or for supply delivery. Other robots are in the research and development stage now and still other applications of robotics in healthcare are being considered for the future. The world of service robots is in its infancy. As robots take care of our more intimate needs, such as personal caregiving, human to robot and robot to human interactions will become a central focus of study and philosophical discussion. There is much unknown regarding the ultimate acceptability of robots in intimate settings, or at work. Comfort with robots may depend on multiple variables, such as the individual, culture, particular application, or industry. Trust is at the core of the use of autonomous robots in healthcare, and safety must be proven.
Samayam Hemanth Sai 11189H012	As energy usage across the world continues to rise, there is strong need to develop new methods for energy conservation and power generation, particularly approaches that have less environmental impacts. Although human power is not ideal in terms of life cycle costs, there are promising application areas for human power in emerging regions where electric power is either not available or not affordable. There is also untapped potential for harnessing human power at most fitness facilities. The man has needed and used energy at an increasing rate for his sustenance and well-being ever since he came on earth for few million years ago. Due to this lot of energy resources have been exhausted and wasted. Proposal for the utilization of waste energy of power generation by gym pulley is very much relevant and important for highly populated countries like India and china the people are crazy about the gym. The world is facing energy crisis with the difference in demand and supply and limited number of natural resources. So, there is a need for saving energy and requirement an alternate energy source which is cheap and feasible. The aim is to concentrate on how electrical energy can be generated from gym equipment/exercise equipment. In urban areas people are very much health conscious and spend average one hours' time in gym for his physical fitness. This project harnessed the mechanical energy of the machine and converted it to electrical energy using a generator-based system.
V Selva Kumar 11189H013	Robots are becoming important in various fields. Robots can help humans in places where human access is limited, like deep-sea exploration, hazardous waste site, and thermal/nuclear power plants. Path tracing and obstacle avoiding robots are intelligent robots that can perform desired tasks in unstructured environments by finding and avoiding them without any human guidance.The purpose of this project is to design autonomously driven car, which can perform path tracing and obstacle avoiding controlled by microcontroller. Line follower is an intelligent robot which detects a visual line embedded on the floorand follows it. The path is predefined and can be either visible like a black line on a white surface with a high contrasted color. In order to detect these lines IR sensors is used to detect the line which the robot has to follow. The robot movement is automatic and can be used for long distance

	application. Line follower is modified by giving obstacle detection which detect the obstacle by using ultrasonic sensor. These robots were useful in industries to carry materials from one place to other without any human help.
Surimani Niteesh 11189H014	India is the crop growing based country. Our ancient publics entirely depended on the farming realizing. Agriculture is a cause of living of mainstream Indians and has great control on the economy of the country. In dry zones or in situation of lacking rainfall, irrigation comes to be difficult. This project analyses into the design of the irrigation system based on 8051.This Embedded development is to intention and growth a low cost feature which is established on inserted stage for aquatic irrigation system. This mission uses soil moisture sensors to sense the water amount present in farming. The project uses 8051 that processes the information and acts according to the data. The goal of the operation was to prove that the programmed irrigation can be used to decrease aquatic use.
Arun Kumar J S 11189H015	As of late, huge vehicles are going through trouble finding a parking area because no appropriate data is available on whether the leaving space is full or void. Altogether this can cause a clog, contamination, and fuel failure. Because of these conditions, there could likewise be trouble in controlling the stopping the board. By utilizing a microcontroller keen stopping framework (given IoT), stopping issues are regularly settled. The Web of things might be a new subject that assumes a pivotal part in our everyday lives. IoT decreases human work, exertion, time, and mistakes because of human carelessness. Subsequently, an Embedded IoT Smart Parking System is proposed which is intended to shape it simpler for stopping clients to encourage data on the stockpile of unfilled and filled stopping spaces and can likewise book stopping openings utilizing electronic applications. There are numerous stages to execute a microcontroller-based Smart Parking System i.e., prerequisites frameworks, prototyping advancement, prototyping assessment, composing, testing, and assessment framework. This method utilizes equipment like, Arduino-UNO, Wi-Fi module, LCD to show the stopping openings accessible and booking affirmation, infrared sensors which are utilized at each press stopping and tells the space accessibility, By Smart Parking Application, it's relied upon to help to stop administration clients to ask data and discover void stopping openings through booking inside the application all together that it'll be more proficient as expected and stopping the board will be more controlled.

15. PUBLICATIONS

JOURNAL (2021-2022)

S.No	Name of the Faculty	Title of the Article	Journal Details	Indexing
1	K.Saraswathi	Tuning Of Decentralized Pid Controller By Decoupler For Tito System	Journal Of Xidian University,Volume 15, Issue 11, November-2021,Page No: 311 - 318	Ugc Care Scopus
		"PLC Based Automatic Sequential Batch Process System	International Journal Of Research Publication And Reviews, Volume 3, Issue 6, 2022.	UGC
2	N C A Boovarahan	Security Characteristics Of 5g Communication Networks	International Journal Of Research Publication And Reviews, Volume 2, No 11, Nov 2021	UGC
		Smart Vehicle Automation With Automobile Black Box Using IOT	International Journal Of Research Publication And Reviews, Volume 3 No 4, April 2022	
3	K. Sugapriya	Tuning Of Dual Frequency Resonance Analysis Of Circular And Rectangular Patch Uwb Antenna Used For Wireless Sensor Networks	International Journal Of Health Sciences	Scopus
4	S. S. Saravana Kumar	Automatic Floor Cleaning Robot Using Arduino	International Journal Of Research Publications And Reviews	Refereed Journal
		Advanced Foot Step Power Generation System	International Journal Of Research Publications And Reviews	Refereed Journal
5	G P Sivakumar	Voice Controlled Multipurpose Robot with UV Sterilizer	International Journal of All Research Education and Scientific Methods (IJARESM), ISSN: 2455-6211Volume 10, Issue 6, June - 2022, Impact Factor: 7.429.	UGC CARE
		Comparison of Class E & Class F3 amplifier Induction Heating systems	International Journal of Scientific Research in Engineering and Management (IJSREM)Volume: 06 Issue: 06 | June-2022Impact Factor: 7.185, ISSN: 2582-3930	UGC CARE

6	Dr.T.Lakshmibai	Design and Development of Automatic Water Dispenser using Arduino	International Journal of Scientific Research in Science, Engineering and Technology (IJSRSET), Volume 9, Issue 12/8215 - Published: June 20, 2022, pp 157 – 166	UGC CARE
		Solar Tracking Scheme with Panel Cleaning Arrangement for Effectual Power Generation	International Journal of Research Publication and Reviews (IJRPR)| ISSN 2582-7421, Volume 3, no 5, pp 3804-3807, May 2022.	UGC CARE
		Mathematical Modelling and analysis of VSI fed Induction motor drive using PSIM software	International Journal for Innovative Research in Multidisciplinary Field (IJIRMF), Volume - 7, Conference Special Issue - 27, July - 2021.	UGC CARE

NATIONAL CONFERENCE (2021-2022)

S.No	Name of the Faculty	Title of the Article	Conference Details
		NIL	

INTERNATIONAL CONFERENCE (2021-2022)

S.No	Name of the Faculty	Title of the Article	Conference Details
1	T.Sundar	Review On Design of Renewable Energy Source	International Level Lecture series on 'Wavelet Transforms And Image Processing' from 9th August to 12th August 2021, Post Graduate Department of Mathematics Al Ameen College, Edathala-683564
		Study on charging methodology used in electric vehicles	International Conference on Influence and Usability of Contemporary Science & Technology Tools for Society (I- Tech Sci 2021) – 2021, ICFAI University, Raipur. 8th & 9th of October 2021,
		Electric Vehicles Charger Implementation and Analysis	International virtual Conference on "Progress in Mathematics towards Industrial Applications (PMTIA-2021)" , Department of Mathematics, SRMIST, Ramapuram, Chennai - 600089 29th & 30th of October 2021, ISBN: 978-81-953432-9-4
2	Dr.T.Lakshmibai	Design and Development of Automatic Water Dispenser using Arduino	Third International Conference on Materials, Computing and Communication Technologies (ICMCCT 2022) Best Paper Award

		IOT Enabled Smart Visible Light Communication using LIFI Technology	Second International Conference on Emerging Trends in Materials, Computing and Communication Technologies (ICETMCCT 2021)
		Temperature Based Automatic Fan Speed Control Using Arduino	3rd International Conference on Engineering, Science, Medicine, & Management ICESMM-2021, Best Presentation Award
		Internet of Things based Intelligent Garbage Level Monitoring System	International Virtual Conference on Advances in Computer Engineering & Communication Technology ICACET 2021
		Design and experimental study of Automatic Colour Sorting by a robotic arm system	in International Conference on Artificial Intelligence and its emerging areas "NEC-ICAIEA-2K21, Best Paper Award
		Mathematical Modelling and analysis of VSI fed Induction motor drive using PSIM software	.International Virtual Conference on Science, Engineering & Technological Innovations at Bangkok, Thailand

16. PROFILE OF DEPARTMENT LIBRARY

S.NO	ACC.NO	TITLE OF BOOKS
1.	B111409	Electronic Devices & Circuits : Principles & Applications
2.	B111563	Electronic Devices & Circuit Theory
3.	B111643	Industrial Electronics : Application For Programmable Controllers, Instrumentation
4.	B111770	Digital Signal Processing
5.	B112188	Electronic Devices and Circuits
6.	B112192	Signals and Systems
7.	B112472	Digital Signal Processing
8.	B113012	Millman's Electronic Devices and Circuits
9.	B114237	Power Electronics: Circuits, Devices and Applications
10.	B114238	Programmable Logic Controllers :Principles and Applications
11.	B114241	Process Control Instrumentation and Technology
12.	B114247	Measurement Systems: Application and Design
13.	B114251	Embedded Systems :Architecture, Programming and Design
14.	B114255	Digital Electronics
15.	B114256	Computer Control of Process
16.	B114260	Instrumental Methods of Analysis
17.	B114263	Process Control Systems and Instrumentation
18.	B114273	Digital Signal Processing
19.	B114277	Biomedical Instrumentation

20.	B114281	Control Systems Engineering
21.	B114282	Sensors and Transducers
22.	B114284	Transducers and Instrumentation
23.	B114287	Programmable Logic Controllers
24.	B114292	Power Electronics
25.	B114298	Industrial Instrumentation and Control
26.	B114303	Biomedical Instrumentation and Measurements
27.	B114304	Digital Instrumentation
28.	B114308	Linear Integrated Circuits
29.	B114315	Industrial Instrumentation
30.	B114317	Digital Control Systems
31.	B114322	Process Control : Modeling, Design and Simulation
32.	B114328	Control System Design
33.	B96611	Control Systems
34.	B110741	Elements of Electronic Instrumentation and Measurement
35.	B110754	Modern Electronic Instrumentation and Measurement Techniques
36.	B111206	Principles of Industrial Instrumentation
37.	B111327	Matlab Demystified: Basic Concepts and Applications
38.	B61537	Applied Electronics-Vol. 1:Electronic Devices and Circuits
39.	B6902	Digital Logic and Computer Design
40.	B105529	Digital Electronics: An Introduction to Theory and Practice
41.	B103935	Modern Control Engineering
42.	B58919	Power Electronics

43.	B62316	Course In Electrical ,Electronic Measurements And Instrumentation
44.	B55219	Digital Signal Processing: Principles, Algorithms and Applications
45.	B61055	Elements of Management
46.	B62328	Instrumentation Measurement and Analysis
47.	B64043	Direct Current Machines
48.	B65174	Control Systems: Principles and Design
49.	B61428	Principles of Management
50.	B40440	Signals and Systems
51.	B56749	Solid State Electronic Devices
52.	B63765	Handbook of Biomedical Instrumentation
53.	B96622	Microprocessors and Microcontrollers
54.	B100556	Microcontroller & Applications
55.	B66386	Digital Signal Processing: A Computer Based Approach
56.	B57364	Text Book Of Electrical Technology- Vol.3: Transmission , Distribution and Utilization
57.	B94387	Signals and Systems: Analysis and Using Transform Methods and Matlab
58.	B7024	Microprocessor Architecture Programming and Applications with the 8085
59.	B6201	Circuit Theory : Analysis and Synthesis
60.	B103655	Microprocessors Theory and Applications : Intel and Motorola
61.	B102774	An Embedded Software Primer
62.	B100237	Transformers and Induction Machines
63.	B94243	Verilog HDL: A Guide to Digital Design and Synthesis

64.	B98544	Course in Mechanical Measurements and Instrumentation
65.	B113624	Microprocessor and Microcontroller
66.	B114294	Chemical Process Control: An Introduction to Theory and Practice
67.	EIE - 1	Advanced Control Theory
68.	115980	Circuit & Networks : Analysis & Synthesis
69.	115982	Engineering Ethics : Includes Human Values
70.	115986	Perry's Chemical Engineers' Handbook (Reference Document)
71.	115987	Fundamentals of Digital Image Processing
72.	115989	Handbook of Analytical Instruments
73.	115997	Digital Electronics
74.	B57318	Electronic Devices and Circuits: Applied Electronics. Vol 1
75.	B58677	Microelectronics
76.	B60332	Electronic Communications
77.	B66513	Digital Signal Processing
78.	B67480	Digital Instrumentation
79.	B67841	Neural Engineering: Computation, Representation and Dynamics in Neurobiological Systems
80.	B95139	Measurement & Instrumentation Principles
81.	B97252	Integrated Electronics : An Analog and Digital Circuits and Systems
82.	B97275	Automatic Control Systems
83.	B97578	Digital Signal Processing : A Computer Based Approach
84.	B97885	Higher Engineering Mathematics
85.	B98868	Neural Networks : A Comprehensive Foundation

86.	B100569	Microprocessor Architecture, Programming and Applications with The 8085
87.	B103793	Electronic Instrumentation
88.	B105705	Electronic Circuits : Discrete & Integrated
89.	B109081	Neural Networks for Pattern Recognition
90.	B111571	Introduction to Digital Signal Processing
91.	B113352	Let Us C
92.	B113795	Linear Integrated Circuits
93.	B114756	Fuzzy sets & Fuzzy Logic
94.	B118186	Embedded Systems Design : An Introduction to Processes, Tools & Techniques
95.	B118200	Industrial Instrumentation
96.	B118224	Programming in Matlab For Engineers
97.	B118245	Instrumentation & Control
98.	B118272	Electrical Measurements & Measuring Instruments
99.	B118293	Biomedical Instrumentation
100.	B118302	Computer Control of Process
101.	B118312	Discrete – Time Control Systems
102.	B118314	Gate 2012 : Instrumentation Engineering
103.	EIE – 2	Sweep Through Your Interviews by G.Vidya Shankar, Published by New Century Book House (P) Ltd., Chennai.
104.	B118502	Modern VLSI Design
105.	B118998	Robotic Engineering: An Integrated Approach
106.	B118999	Transducer Engineering

107.	B119001	Digital Electronics: Principles & Applications
108.	B119004	Introduction to Robotics
109.	B119005	Matlab & its Applications in Engineering
110.	B119011	Elements of Robotics Systems
111.	B119012	Microprocessors & Microcontrollers: Architecture, Programming & Interfacing Using 8085,8086,8051
112.	B119016	Signals & Systems
113.	B119021	Principles of Nano- Optics
114.	B119402	Microprocessor 8086 Programming & Interfacing
115.	B119426	Advanced Microprocessor
116.	B119462	Signals & Systems
117.	B119707	Microcontrollers: Principles & Applications
118.	B119718	Problems & Solutions of Control Systems: With Essential Theory
119.	B119721	Electric Circuit Theory
120.	B119726	Microcontrollers Architecture, Programming, Interfacing and System Design
121.	B119730	Microcontrollers & Applications
122.	B119737	Mastering Matlab – 7
123.	B119945	Industrial Robotics: Technology, Programming
124.	B119947	Nano & Micro materials
125.	B119948	Theory of Applied Robotics: Kinematics, Dynamics Control
126.	B119950	Aircraft Instruments: Principles & Applications
127.	B119954	Aircraft Systems
128.	B119955	Aircraft Safety: Accident Investigations Analysis & Applications

129.	B119962	Programmable Logic Control: Principles & Applications
130.	B119964	Process Control: Concepts, Dynamics & Applications
131.	B119967	Robotics: Control, Sensing, Vision & Intelligence
132.	B119972	Power Plant Instrumentation
133.	B119974	Robotics Technology & Flexible Automation
134.	B119975	VLSI Technology
135.	B120252	Foundations of Mems
136.	B120256	Robotics
137.	B120339	Digital Electronics
138.	EIE – 3	Gate – IE
139.	B61722	Drydens Outline of Chemical Technology
140.	B108471	8051 Microcontroller
141.	B110757	Process Control
142.	B113505	Electronic Communications Systems: Fundamentals Through Advanced
143.	B114267	Process Control Engineering
144.	B119395	Fundamentals of Neural Networks: Architectures, Algorithms, & Applications
145.	B123641	Analytical Instruments
146.	B123671	Fundamentals of Industrial Instrumentation & Process Control
147.	B123715	Virtual Instrumentation Using Labview: Principles & Practices of Graphical Programming
148.	B123825	Digital Signal Processing
149.	B125704	Virtual Instrumentation Using Labview

150.	B126553	Principles of Communication
151.	EIE - 4	Automatic Process Control (ECKMAN)
152.	EIE - 5	Elements of Fuels, Furnaces & Refractories (O.P Gupta)
153.	EIE - 6	Process Control (Harriot)
154.	EIE – 7	Process Systems Analysis and Control (COUGHANOWR)
155.	EIE - 8	Unit Operations Of Chemical Engineering (Mccabe, Smith, Harriott)
156.	EIE – 9	Computer Control Process (Shanthi Sasidharan)
157.	EIE -10	Programmable Logic and Distributed Control Systems
158.	130134	Fundamentals Of Micro Fabrication: The Science of Miniaturization (Madou, Marc)
159.	123892	Mems & Microsystems Design & Manufacture (Hsu, Tai-Ran)
160.	103806	MEMS (Mahalik, Nitaigur Premchand)
161.	117973	Foundation of Mems (Liu, Chang)
162.	B52231	Text Book of Electrical Technology – Vol.2 AC And DC Machines
163.	B55325	Fundamentals of Electrical Drives
164.	B56508	VLSI Design
165.	B66502	Thyristorised Power Controllers
166.	B67483	Electrical Machines: Dc Machines, AC Machines & Polyphase Circuits
167.	B100167	Power Electronics: Circuits, Devices and Applications
168.	B113802	Electronics & Microprocessors
169.	B117124	Electronics Devices & Circuits
170.	B119420	Analog & Digital Communication

171.	B120322	Microprocessors & Microcontrollers
172.	B122695	Digital Communications
173.	B123931	Principles of Communication
174.	B128828	CMOS VLSI Design: Circuits & Systems Perspective
175.	B130394	Analog & Digital Communication
176.	B134285	First Course on Electrical Drives
177.	B135945	Digital Signal Processing

17. LABORATORIES AND EQUIPMENTS

ELECTRONICS LAB

S.No	Name of The Equipment	Quantity	Total Cost
1	Digital Multimeter	03	5,913.00
2	Dual Power Supply/1018273	09	50,117.00
3	Fixed Power Supply	05	26,100.00
4	Function Generator(2Mhz)	07	41,780.00
5	Ammeter (0-1)Ma	03	
	(0-10)Ma	08	
	(0-30)Ma	03	
	(0-50)mA	05	
	(0-100)mA	05	
	(0-500)µA	05	
	Ammeter Total	29	14,760.00
6	Voltmeter (0-3)V	08	
	(0-10)V	03	
	(0-30)V	10	
	Voltmeter Total	21	10,300.00
7	Galvanometer (30-0-30)	03	1,600.00
8	Digital Ic Trainer Kit	03	12,825.00
9	Digital Ic Trainer Kit (With Out Fg)	03	12,150.00
10	Digital Ic Trainer Kit (With Fg)	03	15,120.00
11	Ic Tester	01	31,500.00
12	Decade Resistance Box	05	8,407.00
13	Decade Inductance Box	05	13,775.00
14	Decade Capacitance Box	05	12,825.00
15	CRO 20 MHZ	08	1,48,682.00
Total Amount			4,05,854.00

ELECTRONICS LAB

YEAR OF PURCHASE: 2010-2011

S.No	Name Of The Equipment	Quantity	Date Of Purchase
1	Digital Multimeter	03	10-11-2010
2	Dual Power Supply	05	09-12-2010
3	Function Generator(2mhz)	03	09-12-2010
4	Ammeter	20	09-12-2010
5	Voltmeter	15	09-12-2010
6	Digital Ic Trainer Kit	03	09-12-2010
7	Decade Resistance Box	05	09-12-2010
8	Decade Inductance Box	05	09-12-2010
9	Decade Capacitance Box	05	09-12-2010
10	CRO	03	15-12-2010

YEAR OF PURCHASE: 2011-2012

S.No	Name Of The Equipment	Quantity	Date Of Purchase
1	Dual Power Supply	04	05-07-2011
2	Function Generator(2mhz)	04	22-08-2011
3	CRO	05	14-07-2011

YEAR OF PURCHASE: 2012-2013

S.No	Name Of The Equipment	Quantity	Date Of Purchase
1	Digital IC Trainer Kit(With Out FG)	03	06-10-2012
2	Digital IC Trainer Kit (With FG)	03	06-10-2012

YEAR OF PURCHASE: 2013-2014

S.No	Name Of The Equipment	Quantity	Date Of Purchase
1	Ammeter	09	10-12-2013
2	Voltmeter	06	10-12-2013

Lab In charge: Mrs.K.Sugapriya & Mr.S.S.Saravana Kumar

Lab Instructor: Mrs.V.Komala

MICROPROCESSOR & MICROCONTROLLER LAB

S.No	Name of The Equipment	Quantity	Total Cost
1	Microprocessor 8085 Kit	11	46,577.00
2	Microprocessor 8086 Kit	05	29,325.00
3	Microcontroller 8051 Kit	05	23,460.00
4	ADC Interface Card	03	5520.00
5	DAC Interface Card	04	9184.00
6	8255 Interface Board	03	3885.00
7	Stepper motor Card With Stepper motor	03	8745.00
8	Key Board And Display Interface Board	02	5200.00
9	Traffic Light Control	01	1150.00
Total Amount			1,33,046.00

YEAR OF PURCHASE 2011-2012

S.No	Name of The Equipment	Quantity	Date Of Purchase
1	Microprocessor 8085 Kit	6	21-11-2011
2	Microprocessor 8086 Kit	5	21-11-2011
3	Microcontroller 8051 Kit	5	21-11-2011
4	ADC Interface Card	2	21-11-2011
5	DAC Interface Card	2	21-11-2011
6	8255 Interface Board	1	21-11-2011
7	Stepper motor Card With Stepper motor	2	21-11-2011

YEAR OF PURCHASE 2012-2013

S.No	Name of The Equipment	Quantity	Date Of Purchase
1	Microprocessor 8085 Kit	5	14-07-2012
2	ADC Interface Card	1	14-07-2012
3	DAC Interface Card	2	14-07-2012
4	Stepper motor Card With Stepper motor	1	14-07-2012
5	Key Board And Display Interface Board	1	14-07-2012
6	Traffic Light Control	1	14-07-2012

YEAR OF PURCHASE 2021-2022

S.No	Name of The Equipment	Quantity	Date Of Purchase
1	Microprocessor 8086 Kit	2	08-07-2021

Lab Incharge: Mr.G.P.Sivakumar & Mr.N.C.A.Boovarahan Lab Instructor: Mrs.V.Komala

COMPUTER CONTROL AND VIRTUAL INSTRUMENTATION LAB

S.No	Name of The Equipment	Quantity	Total Cost
1	COMPUTER(HP make processor 4GB RAM) (key board ,mouse, LED monitor)	26	9,99,727.00
2	NI soft ware	1 Package	3,16,638.00
3	CDAQ -9174 chassis	2	93,366.00
4	NI-9219(AI module) (24 –bit)	1	68,707.00
5	NI-9263(AO module) (16-bit)	1	26,094.00
6	NI-9421(DI module)	1	6,703.00
7	NI-9472(DO module)	1	6,703.00
8	NI-9205(AI module)(16-bit)	1	55,062.00
9	UPS 10 KV (20 Batteries)	1	1,15,238.00
10	MICRO LOGIX 1200 4 channel analog combo module,SMPS	1	24,700.00
11	16 I/O MICRO LOGIX 1000,SMPS	4	69,600.00
12	RS LOGIXS MICRO STARTER (soft ware)	1	8,710.00
13	Batch process module	1	25,000.00
14	Bottle filling module(conveyor type)	1	26,500.00
15	Bottle filling module(disc type)	1	26,500.00
TOTAL AMOUNT			18,69,248.00

COMPUTER CONTROL AND VIRTUAL INSTRUMENTATION LAB

YEAR OF PURCHASE 2011-2012

S.No	Name of The Equipment	Quantity	Date Of Purchase
1	COMPUTER(HP make processor 4GB RAM) (key board ,mouse, LED monitor)	25	30-01-2012
2	COMPUTER(HP make) (key board ,mouse)	1	

YEAR OF PURCHASE 2012-2013

S.No	Name of The Equipment	Quantity	Date Of Purchase
1	NI soft ware	1	29-06-2012
2	CDAQ -9174 chassis	2	29-06-2012
3	NI-9219(AI module) (24 –bit)	1	29-06-2012
4	NI-9263(AO module) (16-bit)	1	29-06-2012
5	NI-9421(DI module)	1	29-06-2012
6	NI-9472(DO module)	1	29-06-2012
7	NI-9205(AI module)(16-bit)	1	29-06-2012
8	UPS 10 KV (20 Batteries)	1	16-07-2012
9	MICRO LOGIX 1200 4 channel analog combo module,SMPS	1	02-08-2012
10	16 I/O MICRO LOGIX 1000,SMPS	2	02-08-2012
11	16 I/O MICRO LOGIX 1000,SMPS	2	30-08-2012
12	RS LOGIXS MICRO STARTER (soft ware)	1	30-08-2012
13	Batch process module	1	05-11-2012
14	Bottle filling module(conveyor type)	1	05-11-2012
15	Bottle filling module(disc type)	1	05-11-2012

Computer Control Lab Incharge: Mrs.K.Saraswathi

Lab Instructor: Mr.G.Subramaniyan

Virtual Instrumentation Lab Incharge: Ms.Janani.R

Lab Instructor: Mr.K.Vinayagamoorthy

INDUSTRIAL AND PROCESS CONTROL LAB

S.No	Name of The Equipment	Quantity	Total Amount
1	Control Value Trainer(VCVT-03a)	1	1,03,450
2	Level Control With Interacting And Non Interacting(VIN1-T02)	1	1,20,230
3	Temperature Process Control(VTPAW321ce)	1	59,770
4	Flow Process Station (VFPS-021)	1	2,30,120
5	Level Process Station (VLPS-011)	1	1,95,980
6	Pressure Process Station (VPPS-041)	1	1,65,640
7	Tuning Of Controllers (ITB Pcs-02)	1	30,980
8	Air Compressor	1	40,000
9	Computer (Hcl Make,2 Gb Ram Mouse, Key Board, Led Monitor)	6	1,62,000
TOTAL AMOUNT			11,08,000

YEAR OF PURCHASE 2011-2012

S.No	Name of The Equipment	Quantity	Date Of Purchase
1	Control Value Trainer(VCVT-03A)	1	29-09-2011
2	Level Control With Interacting And Non Interacting(VIN1-T02)	1	29-09-2011
3	Temperature Process Control(VTPAW321CE)	1	29-09-2011
4	Flow Process Station (VFPS-021)	1	15-12-2011
5	Level Process Station (VLPS-011)	1	15-12-2011
6	Pressure Process Station (VPPS-041)	1	15-12-2011
7	Tuning Of Controllers (ITB PCS-02)	1	15-12-2011
8	Air Compressor	1	12-10-2011
9	COMPUTER (HCL make,2 GB RAM Mouse, key board, LED monitor)	6	15-12-2011

Lab Incharge: Mr.T.Sundar

Lab Instructor: Mr.G.Subramaniyan

TRANSDUCER AND INDUSTRIAL INSTRUMENTS LAB

S.NO	NAME OF THE EQUIPMENT	Quantity	TOTAL COST
1	Thermocouple Module (ITB005CE)	1	7596.55
2	Rtd Module(ITB006CE)	1	7210.58
3	Thermistor Module(ITB06ACE)	1	8043.92
4	Displacement Measurement Trainer Using Lvdt(ITB012CE)	1	11302.72
5	Pressure Measurement Trainer(ITB016CE)	1	13052.74
6	LDR / PHOTO DIODE / PHOTO Transistor Trainer(ITBO27CE)	1	6245.66
7	PH Measurement(VMET02)	1	8021.08
8	Conductivity Measurement Trainer(VMET05)	1	53305.75
9	Strain Measurement Trainer(ITB017CE)	1	9074.63
10	Discharge Coefficient Of Orifice Plate (VFMT03)	1	35289.76
11	Discharge Coefficient Of Venturi Meter (VFMT03A)	1	40333.66
12	Level Measurement Trainer(VLMT02)	1	70571.47
13	Speed Measurement By Stroboscope(strobometer)	1	40267.66
14	Torque Measurement Trainer(ITB013CE)	1	13684.32
15.	Digital Multimeter, Model No 19	8	11,232.00
16.	Energy Meter	1	720.00
17.	Multi Range Wattmeter	2	5000.00
18.	AC Ammeter (10)Amps	2	900.00
19.	AC Voltmeter	2	900.00
20.	Load 10 Holder Lighting Lamp Load In Wheeled Mesh Enclosure	1	6000.00
TOTAL			3,62,161.00

TRANSDUCER AND INDUSTRIAL INSTRUMENTS LAB

YEAR OF PURCHASE 2011-2012

SL.NO	NAME OF THE EQUIPMENT	QUANTITY	DATE OF PURCHASE
1	Thermocouple Module (ITB005CE)	1	19-04-2011
2	Rtd Module(ITB006CE)	1	19-04-2011
3	Thermistor Module(ITB06ACE)	1	19-04-2011
4	Displacement Measurement Trainer Using Lvdt(ITB012CE)	1	19-04-2011
5	Pressure Measurement Trainer(ITB016CE)	1	19-04-2011
6	LDR / PHOTO DIODE / PHOTO Transistor Trainer(ITBO27CE)	1	19-04-2011
7	PH Measurement(VMET02)	1	19-04-2011
8	Conductivity Measurement Trainer(VMET05)	1	19-04-2011
9	Strain Measurement Trainer(ITB017CE)	1	28-04-2011
10	Discharge Coefficient Of Orifice Plate (VFMT03)	1	28-04-2011
11	Discharge Coefficient Of Venturi Meter (VFMT03A)	1	28-04-2011
12	Level Measurement Trainer(VLMT02)	1	28-04-2011
13	Speed Measurement By Stroboscope(strobometer)	1	28-05-2011
14	Torque Measurement Trainer(ITB013CE)	1	28-05-2011
15	Digital Multimeter, Model No 19	8	05-07-2011

YEAR OF PURCHASE 2013-2014

SL.NO	NAME OF THE EQUIPMENT	QUANTITY	DATE OF PURCHASE
1	Energy Meter	1	10-12-2013
2	Multi Range Watt Meter	2	10-12-2013
3	AC Ammeter (10)Amps	2	10-12-2013
4	AC Voltmeter	2	10-12-2013
5	Load 10 Holder Lighting Lamp Load In Wheeled Mesh Enclosure	1	10-12-2013

Lab Incharge: Mrs.T.Lakshmibai

Lab Instructor: Mr.K.Vinayagamoorthy

18. GUEST LECTURES AND VISITING FACULTY DETAILS

S.No.	Name of the expert & Address	Topic	Date
1	Mr.Bavanandhi Rajan, Senior Engineer, Commissioning in Instrumentation. & Controls, M/S. Dubai Electricity and Water Authority- Govt. of Dubai- Dubai	Power generation in combined cycle Gas operated power plant and Role of engineers in Industry	21.07.2021 (10 am to 12.00 noon)

19. STUDENT ACTIVITIES

IN-PLANT TRAINING

S.No.	Register No.	Name of the student	Duration	Place / Industry
1	11199H019	Srihari B R	04/08/2021- 14/08/2021	RANIPET/ Nidec India Precision Tools Ltd.
2	11189H004	Mr. Kailash	18 days 29/11/2021 to 17/12/2021	Hyundai Motor India Ltd
3	11199H003	Mr. Avinash	18 days 29/11/2021 to 17/12/2021	Hyundai Motor India Ltd

INTERNSHIP

S.No.	Register No.	Name of the student	Duration	Place / Industry
1	11199H013	Manu Mahaadev G	31-05-2021 to 30-07-2021	Mechathon Engineering Pvt Limited
2	11189H012	S. Hemanth Sai	5/06/2021 to 30/07/2021	Virtual/AI-My Assessment
3	11189H002	S Aswin	12/08/2021	Virtual/Quant Masters Technologies Pvt.Ltd

4	11189H008	P Srinivasa Sanjay	05/08/2021 to 05/10/2021	Uniscient Engineering Pvt Ltd
5	11189H005	K Sai Jyothish	5-09-2021 TO 30-11- 2021	Ratnam Industries
6	11199H018	S Chaitanya Venkat	21-09-2021	Virtual/Pantech Solutions
7	11199H002	A Vijay	09-11- 2021 to09-12- 2021	Virtual/Pantech Solutions
8	11199H023	G Sai Sandeep	2-12-2021 to 2-01-2022	Virtual/Pantech Solutions
9	11199H021	Abhinav kumar V	25/01/2022 to 12/02/2022	Raspberrypi and applications
10	11199H011	Jaya surya Reddy()	02/02/2022 to 03/03/2022	Electric Vehicle Design
11	11199H021	Abhinav kumar V	02/02/2022 to 03/03/2022	Electric Vehicle Design
12	11199H002	Appikatla vijay	02/02/2022 to 01/04/2022	Virtual mode

13	11199H023	Gurram saisandeep	02/02/2022 to 01/04/2022	Virtual mode
14	11199H001	A.Hari Datta Raja Ram	12/04/2022 to 12/05/2022	Pantech
15	11199H003	T.V.S.Avinash	12/04/2022 to 12/05/2022	Pantech
15	11199H005	Barath Kannaa	24/04/2022 to 26/05/2022	BOSCH Ltd
16	11199H019	Sri Hari B R	27/04/2022 to 25/05/2022	BHEL, BAP Ranipet.
17	11199H020	Thamarai selvan D	24/04/2022 to 26/05/2022	BOSCH Ltd.

INDUSTRIAL VISITS

S.No.	**Department**	**Name of the Company**	**Date**
1	EIE & Mechatronics Engineering	Ratnam industries	05/09/2021
2	EIE & Mechatronics Engineering	Hyundai Motor India Ltd	29/11/2021
3	EIE & Mechatronics Engineering	**Virtual Industrial Visit** -MERINO Industries located at Hapur (Uttar Pradesh) near New Delhi	2/03/2022

Paper presented by the Students

S.No.	Name of the student	Paper presentation	Place	Date
	NIL			

Seminars / Conferences / Workshop / Training attended by the Students

Sl. No.	Name of the students	Nature of the events	Place	Date
1	NIL			

20. STUDENS FEEDBACK

FEED BACK 2021-22

ODD SEM

EIE DEPT

Student Feedback Staff wise Summary (Odd Sem2021)

S.no	Prefix	Name	Sem	Subject_Name	Excelent	Very Good	Good	Average	Poor	NoOf Stud	Point	Score
1	Ms.	K.SARASWATHI	3	Electronic Devices and Circuits Lab	0	1	0	0	0	1	8	80.00
2	Ms.	K.SARASWATHI	5	Analytical Instrumentation	1	0	0	0	0	1	10	100.00
3	Ms.	K.SARASWATHI	5	Analytical Instrumentation	13	2	5	0	0	20	176	88.00
4	Ms.	K.SARASWATHI	7	Professional Elective-IV(Computer Control of Process)	1	0	0	0	0	1	10	100.00
5	Dr.	JANANI R	7	Professional Elective-III(Optimal Control System)	1	0	0	0	0	1	10	100.00
6	Dr.	JANANI R	7	Instrumentation System Design Lab	1	0	0	0	0	1	10	100.00
7	Dr.	G P SIVAKUMAR	5	PRINCIPLE OF COMMUNICATION	4	5	2	0	0	11	92	83.64
8	Dr.	G P SIVAKUMAR	5	Basic Electronics	6	15	20	2	0	43	308	71.63
9	Dr.	G P SIVAKUMAR	7	Robotics & Automation	1	0	0	0	0	1	10	100.00
10	Dr.	G P SIVAKUMAR	7	Robotics & Automation	8	3	0	0	0	11	104	94.55
11	Dr.	SUNDAR.T	5	Open Elective – I(Electrical and Mechanical	10	4	5	1	0	20	166	83.00

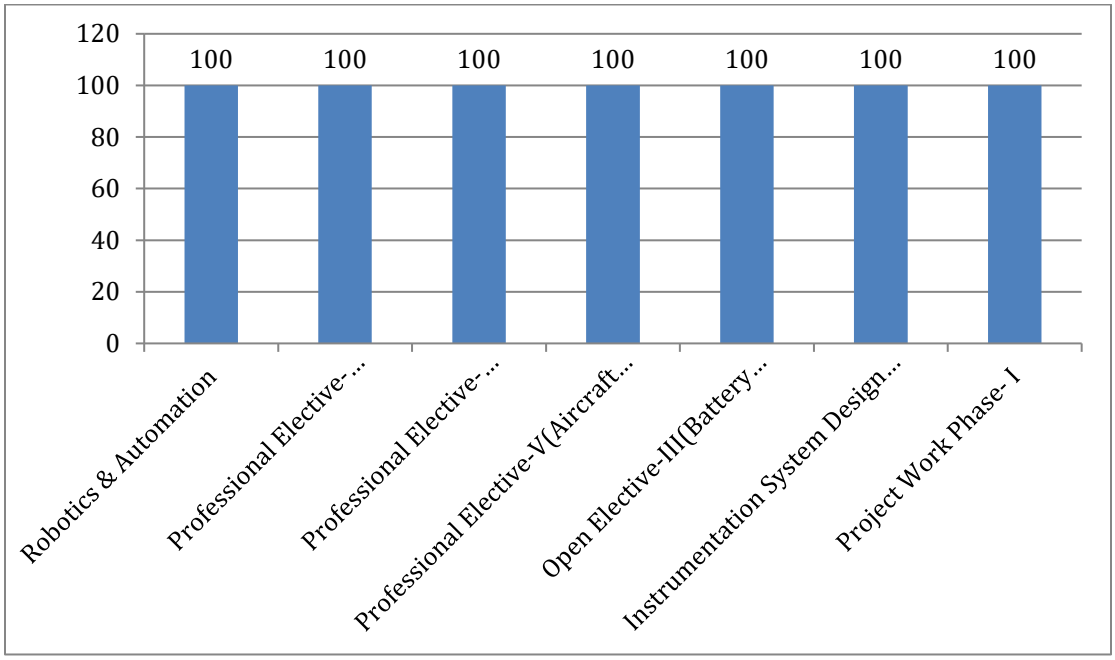
				Measurements								
12	Dr.	SUNDAR.T	5	Open Elective – I(Electrical and Mechanical Measurements)	0	1	0	0	0	1	8	80.00
13	Dr.	SUNDAR.T	7	Robotics Automation & Process Control Lab	7	2	2	0	0	11	98	89.09
14	Dr.	SUNDAR.T	7	PROCESS CONTROL LAB	3	0	0	0	0	3	30	100.00
15	Dr.	T.LAKSHMIBAI	5	Power Electronics and Industrial Drives	12	2	6	0	0	20	172	86.00
16	Dr.	T.LAKSHMIBAI	5	Power Electronics and Industrial Drives	1	0	0	0	0	1	10	100.00
17	Dr.	T.LAKSHMIBAI	5	Power Electronics and Industrial Drives Lab	10	3	7	0	0	20	166	83.00
18	Dr.	T.LAKSHMIBAI	5	Power Electronics and Industrial Drives Lab	1	0	0	0	0	1	10	100.00
19	Dr.	T.LAKSHMIBAI	7	Professional Elective-V(Aircraft Instrumentation)	1	0	0	0	0	1	10	100.00
20	Dr.	T.LAKSHMIBAI	7	Open Elective-III(Aircraft Instrumentation)	9	1	1	0	0	11	104	94.55
21	Mr.	SARAVANA KUMAR.S.S	3	DIGITAL ELECTRONICS LAB	5	7	2	1	0	15	122	81.33

22	Mr.	SARAVANA KUMAR.S.S	3	DIGITAL ELECTRONICS LAB	0	0	1	0	0	1	6	60.00
23	Mr.	SARAVANA KUMAR.S.S	3	Digital electronics and microprocessors	2	0	1	0	0	3	26	86.67
24	Mr.	SARAVANA KUMAR.S.S	5	Control System	10	5	5	0	0	20	170	85.00
25	Mr.	SARAVANA KUMAR.S.S	5	Control System	1	0	0	0	0	1	10	100.00
26	Mrs.	K.SUGAPRIYA	3	Electronic Devices and Circuits	0	1	0	0	0	1	8	80.00
27	Mrs.	K.SUGAPRIYA	7	Project Work Phase- I	1	0	0	0	0	1	10	100.00
28	Mrs.	K.SUGAPRIYA	7	Project Work Phase- I	7	2	1	1	0	11	96	87.27
29	Mrs.	K.SUGAPRIYA	7	Sensor and Actuators	18	4	1	0	0	23	218	94.78
30	Mr.	BOOVARAHAN	3	DIGITAL ELECTRONICS	4	8	3	0	0	15	122	81.33
31	Mr.	BOOVARAHAN	3	DIGITAL ELECTRONICS	0	0	1	0	0	1	6	60.00
32	Mr.	BOOVARAHAN	5	Basic Electronics	7	11	24	1	0	43	306	71.16
33	Mr.	BOOVARAHAN	7	Professional Elective-III(Battery Technology)	8	2	1	0	0	11	102	92.73
34	Mr.	BOOVARAHAN	7	Open Elective-III(Battery Technology)	1	0	0	0	0	1	10	100.00

Student Feedback Class wise Summary IV year (EIE) (2018-2022)

S.No	Name	Sem	Subject Name	No of Students	%
1	Dr.G.P. Sivakumar	7	Robotics & Automation	1	100
2	Dr.Janani.R	7	Professional Elective-III(Optimal Control System)	1	100
3	Mrs.K.Saraswathi	7	Professional Elective-IV(Computer Control of Process)	1	100
	Dr.T.Lakshimibai		Professional Elective-V(Aircraft Instrumentation)		
5	Mr.N C A Boovarahan	7	Open Elective-III(Battery Technology)	1	100
6	Dr.Janani.R	7	Instrumentation System Design Lab	1	100
7	Mrs.K.Sugapriya	7	Project Work Phase- I	1	100

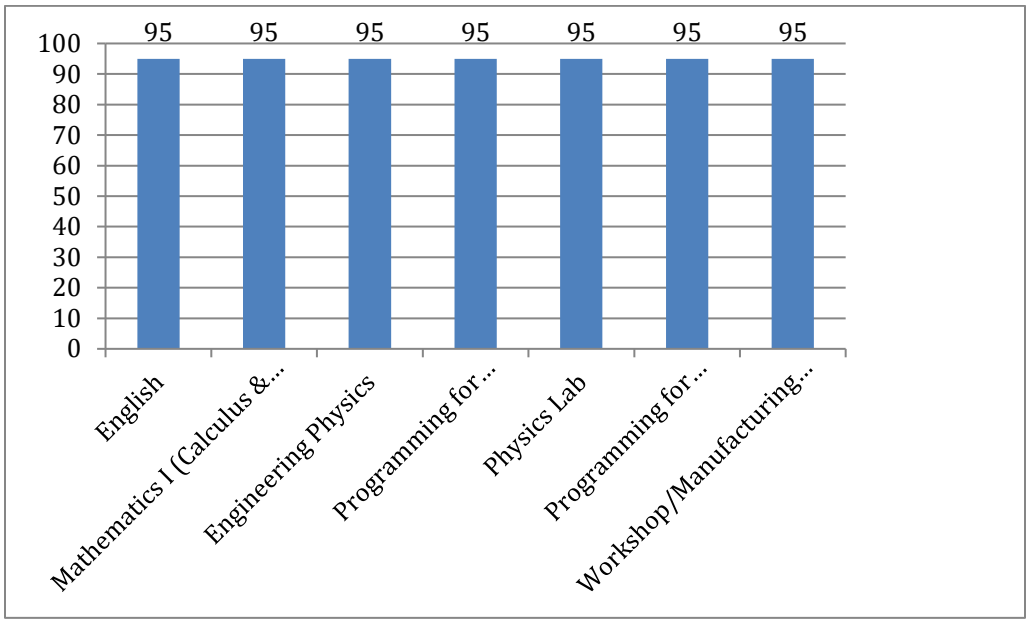
Student Feedback Class wise Summary IV year (EIE) (2018-2022)



Student Feedback Class wise Summary - I Year (Mechatronics) (2021-2025)

S.No	Name	Sem	Subject Name	No of Students	%
1	Mrs.M.VIJAYALAKSHMI	1	English	4	95
2	Mrs.D.VIJAYALAKSHMI	1	Mathematics I (Calculus & Differential Equations)	4	95
3	Mr.M.SUNDARRAJAN	1	Engineering Physics	4	95
4	Mrs.D.GAYATHRI	1	Programming for Problem Solving	4	95
5	Mr.M.SUNDARRAJAN	1	Physics Lab	4	95
6	Mrs.D.GAYATHRI	1	Programming for Problem Solving Lab	4	95
7	Mr.S.D.SATHISHKUMAR	1	Workshop/Manufacturing Practices	4	95

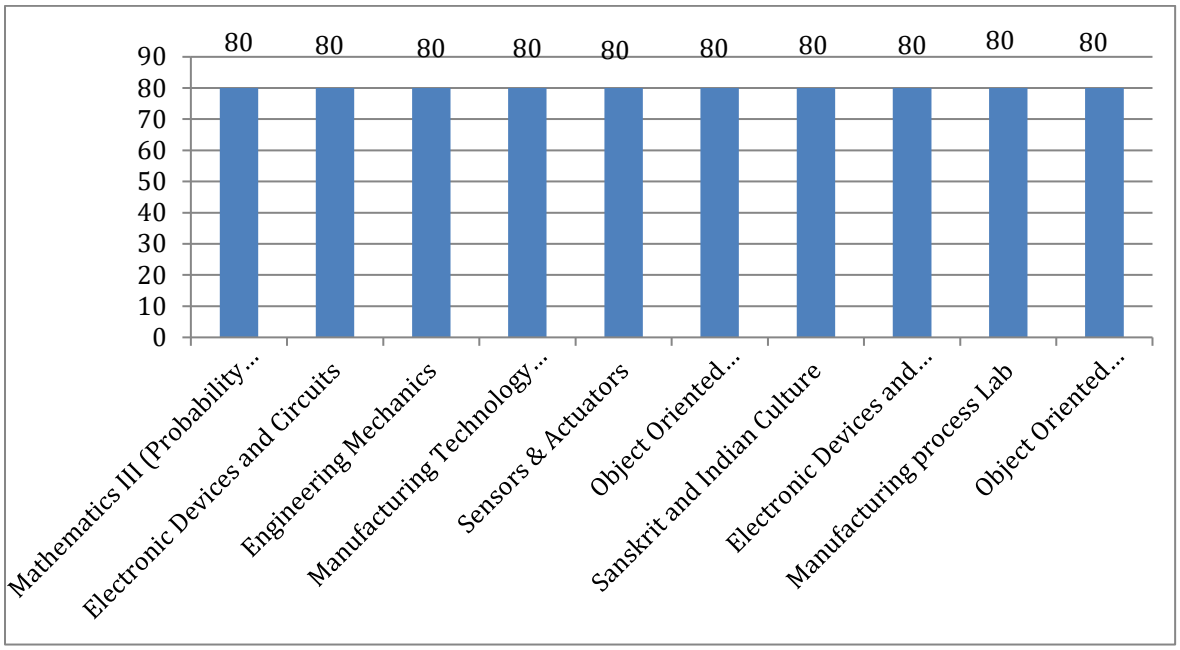
Student Feedback Class wise Summary - I Year (Mechatronics) (2021-2025)



Student Feedback Class wise Summary - II Year (Mechatronics) (2020-2024)

S.No	Name	Sem	Subject Name	No of Students	%
1	Dr.Konda Srinivasa Rao	3	Mathematics III (Probability and Statistics)	1	80
2	Mrs. K.Sugapriya	3	Electronic Devices and Circuits	1	80
3	Mr. G. Venkatakoteshwara Rao	3	Engineering Mechanics	1	80
4	Dr. S. D. Sathishkumar	3	Manufacturing Technology for Mechatronics	1	80
5	Dr.Janani.R	3	Sensors & Actuators	1	80
6	Mr.A.Niranjan	3	Object Oriented Programming Using C++	1	80
7	Sanskrit Dept	3	Sanskrit and Indian Culture	1	80
8	Mrs.K.Saraswathi	3	Electronic Devices and Circuits Lab	1	80
9	Dr. S.D. Sathishkumar	3	Manufacturing process Lab	1	80
10	Mr.A.Niranjan	3	Object Oriented Programming Using C++ Lab	1	80

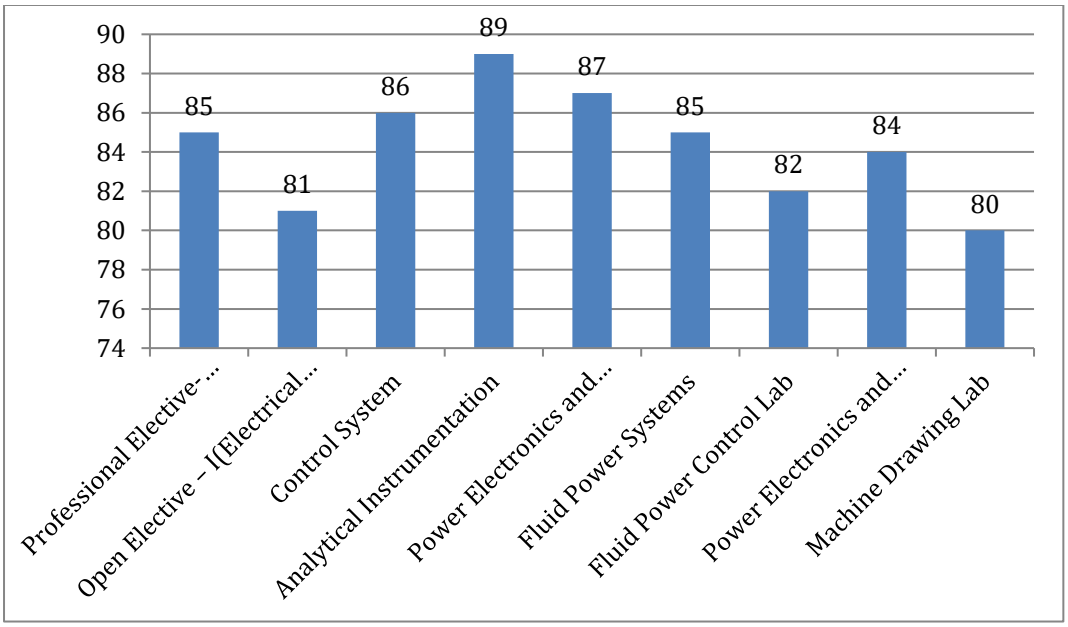
Student Feedback Class wise Summary - II Year (Mechatronics) (2020-2024)



Student Feedback Class wise Summary - III Year (Mechatronics) (2019-2023)

S.No	Name	Sem	Subject Name	No of Students	%
1	Dr. R. Vnayagamoorthy	5	Professional Elective- I(Theory of Machines)	22	85
2	Dr.T.Sundar	5	Open Elective – I(Electrical and Mechanical Measurements)	22	81
3	Mr.S S	5	Control System	22	86
4	Mrs. K.Saraswathi	5	Analytical Instrumentation	22	89
5	Dr. T.Lakshmibai	5	Power Electronics and Industrial Drives	22	87
6	Dr. S. Vijayabhaskar	5	Fluid Power Systems	22	85
7	Dr. G.Harish	5	Fluid Power Control Lab	22	82
8	Dr. T.Lakshmibai	5	Power Electronics and Industrial Drives Lab	22	84
9	Dr. G.Harish	5	Machine Drawing Lab	22	80

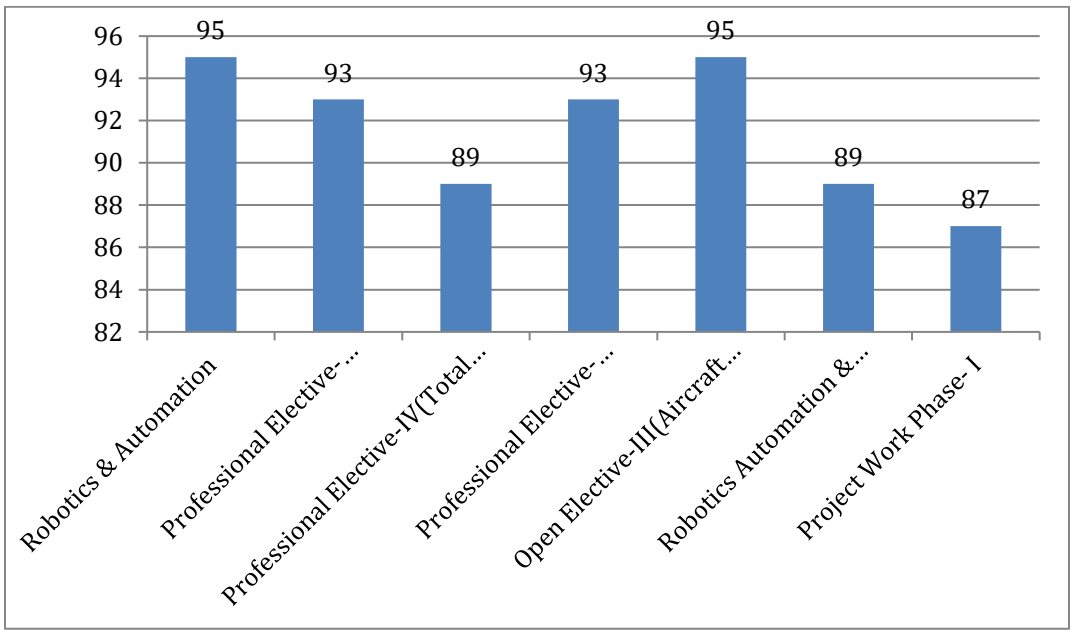
Student Feedback Class wise Summary - III Year (Mechatronics) (2019-2023)



Student Feedback Class wise Summary - IV Year (Mechatronics) (2018-2022)

S.No	Name	Sem	Subject Name	No of Students	%
1	Dr.G.P. Sivakumar	7	Robotics & Automation	11	95
2	Mr.N C A Boovarahan	7	Professional Elective-III(Battery Technology)	11	93
3	Mr. R. Balakumar	7	Professional Elective-IV(Total Quality Management)	11	89
4	Dr. K. Mohan	7	Professional Elective-V(Computer Integrated Manufacturing)	11	93
5	Dr.T.Lakshimibai	7	Open Elective-III(Aircraft Instrumentation)	11	95
6	Dr. T.Sundar	7	Robotics Automation & Process Control Lab	11	89
7	Mrs.K.Sugapriya	7	Project Work Phase- I	11	87

Student Feedback Class wise Summary - IV Year (Mechatronics) (2018-2022)



FEED BACK 2021-22

EVEN SEM

EIE DEPT

Student Feedback Staff wise Summary (Odd Sem2021)

S.no	Prefix	Name	Sem	Subject_Name	Excelent	Very Good	Good	Average	Poor	NoOf Stud	Point	Score
1	Ms.	K.Saraswathi	6	Professional Elective II - Virtual Instrumentation	12	1	3	0	0	16	146	91.25
2	Ms.	K.Saraswathi	6	Professional Elective II - Virtual Instrumentation	1	0	0	0	0	1	10	100.00
3	Ms.	K.Saraswathi	8	Process Control Lab	10	4	2	0	0	16	144	90.00
4	Ms.	K.Saraswathi	8	Professional Elective VI - Automotive Instrumentation	1	0	0	0	0	1	10	100.00
5	Dr.	Janani R	4	Digital Electronics	0	1	0	0	0	1	8	80.00
6	Dr.	Janani R	4	Digital Electronics	1	0	0	0	0	1	10	100.00
7	Dr.	G P Sivakumar	6	Principles of Management and Professional Ethics	1	0	0	0	0	1	10	100.00
8	Dr.	G P Sivakumar	6	Principles of Management and Professional Ethics	10	3	3	0	0	16	142	88.75
9	Dr.	G P Sivakumar	8	Open Elective IV- IOT in Automation	1	0	0	0	0	1	10	100.00

10	Dr.	Sundar.T	4	Basic Electronics Engineering	4	0	1	0	0	5	46	92.00
11	Dr.	Sundar.T	4	Basic Electronics Engineering	4	0	1	0	0	5	46	92.00
12	Dr.	Sundar.T	6	Open Elective II – Bio Medical Instrumentation	10	3	3	0	0	16	142	88.75
13	Dr.	Sundar.T	6	PLC & Virtual Instrumentation Lab	1	0	0	0	0	1	10	100.00
14	Dr.	Sundar.T	6	Digital Electronics	19	14	14	0	0	47	386	82.13
15	Dr.	Sundar.T	6	Open Elective II – Bio Medical Instrumentation	1	0	0	0	0	1	10	100.00
16	Dr.	Sundar.T	6	PLC & Virtual Instrumentation Lab	11	2	3	0	0	16	144	90.00
17	Dr.	T.Lakshmibai	4	Linear Integrated Circuits & Digital Electronics Lab	0	1	0	0	0	1	8	80.00
18	Dr.	T.Lakshmibai	4	Linear Integrated Circuits & Digital Electronics Lab	0	0	1	0	0	1	6	60.00
19	Dr.	T.Lakshmibai	6	PLC & Data Acquisition System	12	1	3	0	0	16	146	91.25
20	Dr.	T.Lakshmibai	6	PLC & Data Acquisition System	1	0	0	0	0	1	10	100.00
21	Dr.	T.Lakshmibai	8	Professional Elective VII -	10	0	2	0	0	12	112	93.33

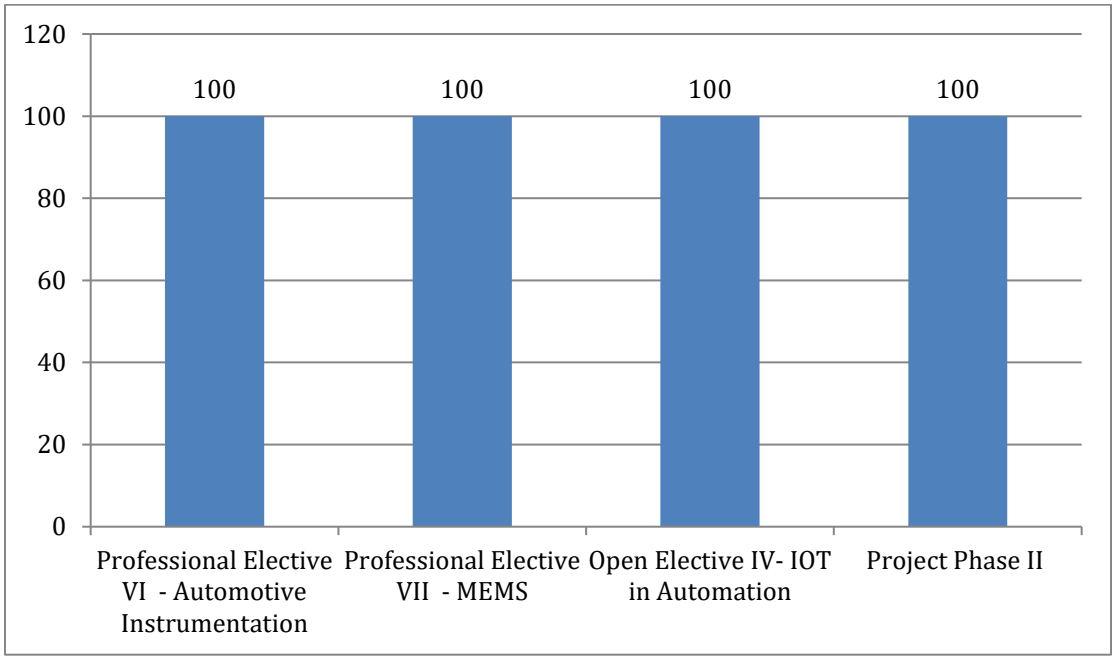
				MEMS								
22	Dr.	T.Lakshmibai	8	Professional Elective VII - MEMS	1	0	0	0	0	1	10	100.00
23	Mr.	Saravana Kumar.S.S	6	Microprocessors and Microcontrollers	11	2	3	0	0	16	144	90.00
24	Mr.	Saravana Kumar.S.S	6	Microprocessors and Microcontrollers Lab	11	2	3	0	0	16	144	90.00
25	Mr.	Saravana Kumar.S.S	6	Microprocessors and Microcontrollers	1	0	0	0	0	1	10	100.00
26	Mr.	Saravana Kumar.S.S	6	Microprocessors and Microcontrollers Lab	1	0	0	0	0	1	10	100.00
27	Mr.	Saravana Kumar.S.S	8	Open Elective IV – Nano Technology	10	0	2	0	0	12	112	93.33
28	Mrs.	K.Sugapriya	2	Electronics	1	0	0	0	0	1	10	100.00
29	Mrs.	K.Sugapriya	4	Microprocessor and Microcontroller	0	0	1	0	0	1	6	60.00
30	Mrs.	K.Sugapriya	4	Microprocessor and Microcontroller	3	3	3	0	0	9	72	80.00
31	Mrs.	K.Sugapriya	6	Embedded System	7	13	1	0	0	21	180	85.71
32	Mrs.	K.Sugapriya	8	Project Phase II	1	0	0	0	0	1	10	100.00

33	Mrs.	K.Sugapriya	8	Project Phase II	9	1	2	0	0	12	110	91.67
34	Mr.	Boovarahan	4	Linear Integrated Circuits	1	0	0	0	0	1	10	100.00
35	Mr.	Boovarahan	4	Electric Drives and Controls for Electric Vehicles	4	0	1	0	0	5	46	92.00
36	Mr.	Boovarahan	4	Electric Drives and Controls for Electric Vehicles	1	1	0	0	0	2	18	90.00
37	Mr.	Boovarahan	4	Linear Integrated Circuits	0	1	0	0	0	1	8	80.00
38	Mr.	Subramaniyan	4	Industrial Instrumentation	1	0	0	0	0	1	10	100.00
39	Mr.	Subramaniyan	4	Industrial Instrumentation	0	1	0	0	0	1	8	80.00

Student Feedback Class wise Summary IV year (EIE) (2018-2022)

S.No	Name	Sem	Subject Name	No of Students	%
1	Mrs.K.Saraswathi	8	Professional Elective VI - Automotive Instrumentation	1	100
2	Dr.T.Lakshmibai	8	Professional Elective VII - MEMS	1	100
3	Dr.G.P.Sivakumar	8	Open Elective IV- IOT in Automation	1	100
4	Mrs.K.Sugapriya	8	Project Phase II	1	100

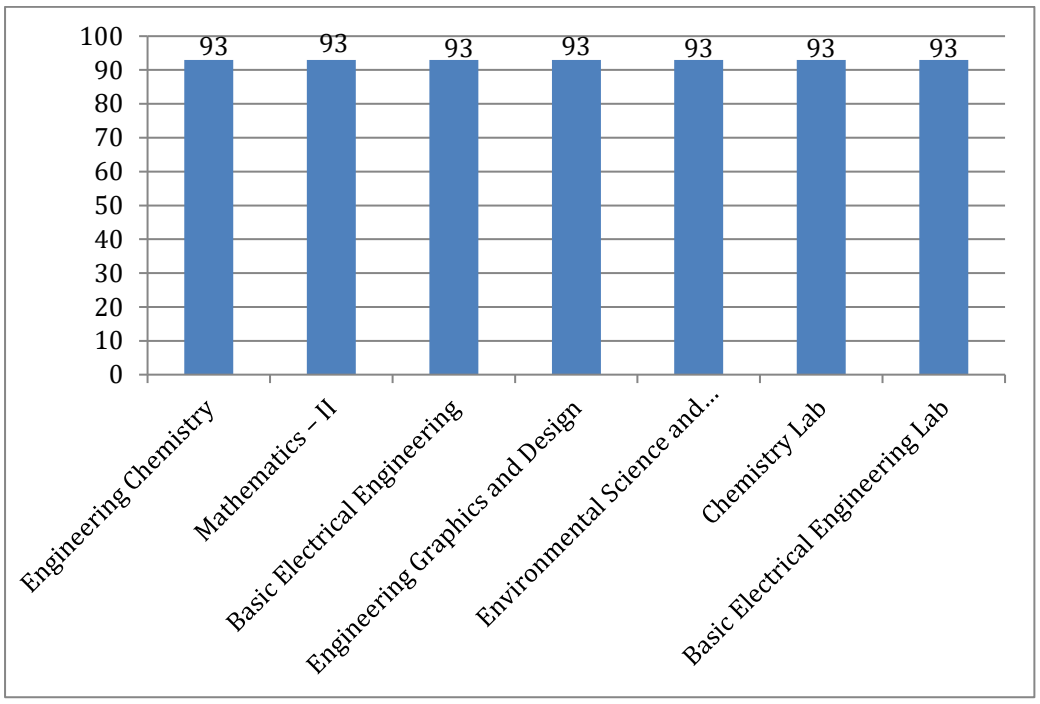
Student Feedback Class wise Summary IV year (EIE) (2018-2022)



Student Feedback Class wise Summary - I Year (Mechatronics) (2021-2025)

S.No	Name	Sem	Subject Name	No of Students	%
1	Mrs. K.INDUMATHY	2	Engineering Chemistry	4	93
2	Dr. BALAJI P	2	Mathematics – II	4	93
3	Mrs.S.LAVANYA	2	Basic Electrical Engineering	4	93
4	Mrs. P.VITHYA	2	Engineering Graphics and Design	4	93
5	Mrs. S.RENUKADEVI	2	Environmental Science and Engineering	4	93
6	Mrs. K.INDUMATHY	2	Chemistry Lab	4	93
7	Mrs. S.RENUKADEVI	2	Basic Electrical Engineering Lab	4	93

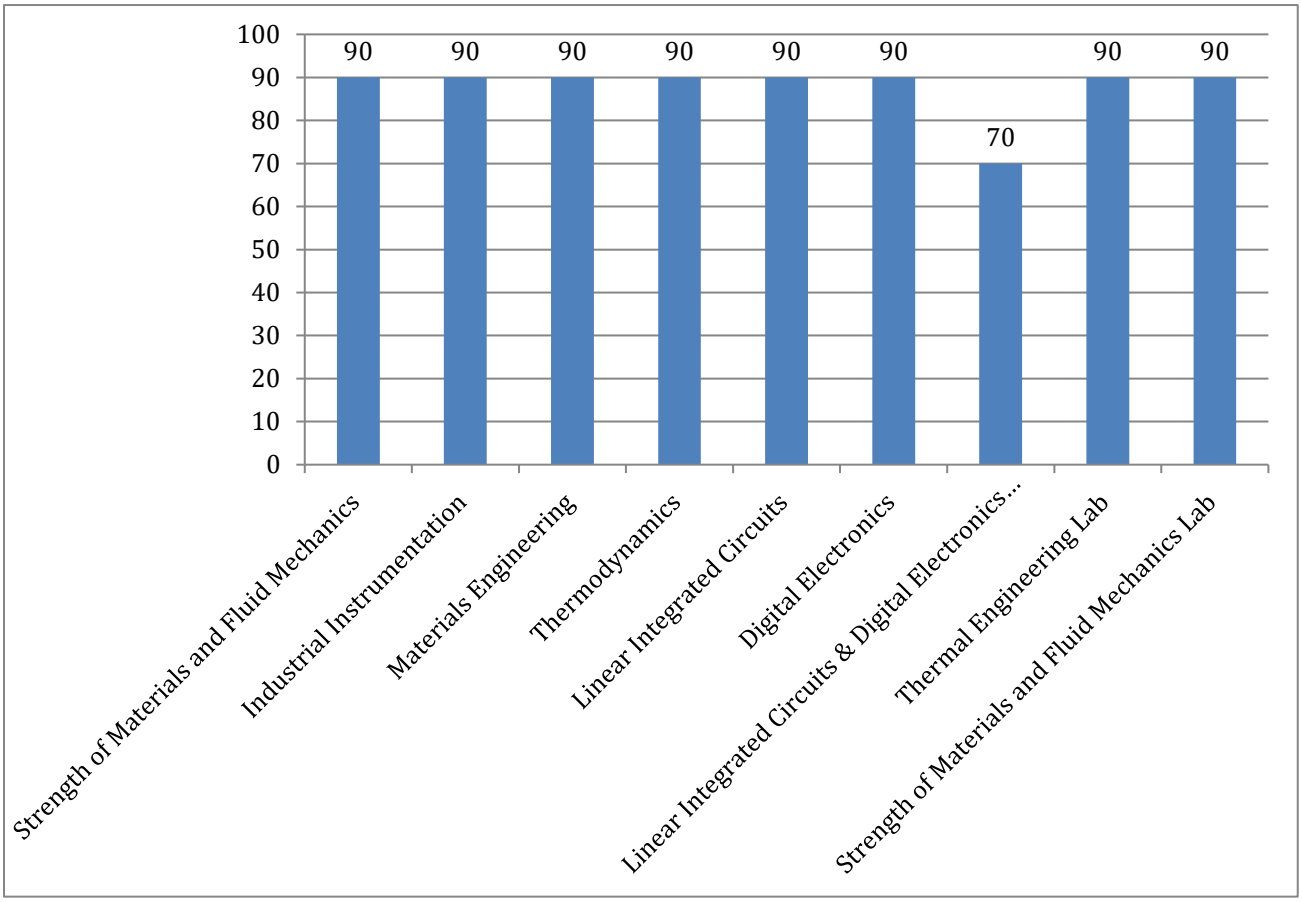
Student Feedback Class wise Summary - I Year (Mechatronics) (2021-2025)



Student Feedback Class wise Summary - II Year (Mechatronics) (2020-2024)

S.No	Name	Sem	Subject Name	No of Students	%
1	Dr.A.Tamilarasan	4	Strength of Materials and Fluid Mechanics	2	90
2	Mr.G.Subramaniyan	4	Industrial Instrumentation	2	90
3	Mr.R.Ellappan	4	Materials Engineering	2	90
4	Dr.P.ChengaReddy	4	Thermodynamics	2	90
5	Mr.N C A	4	Linear Integrated Circuits	2	90
6	Dr. Janani	4	Digital Electronics	2	90
7	Dr.T.Lakshmibai	4	Linear Integrated Circuits & Digital Electronics Lab #	2	70
8	Mr.R.Ellappan	4	Thermal Engineering Lab	2	90
9	Dr.P.ChengaReddy	4	Strength of Materials and Fluid Mechanics Lab	2	90

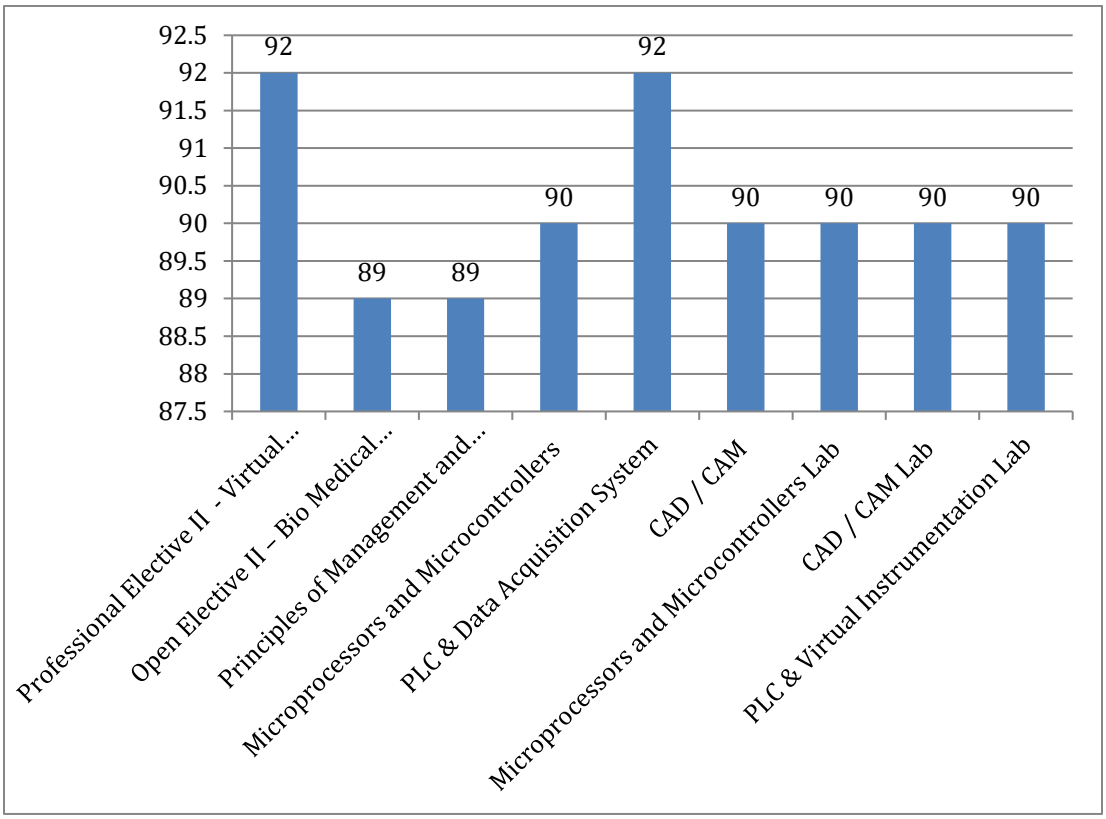
Student Feedback Class wise Summary - II Year (Mechatronics) (2020-2024)



Student Feedback Class wise Summary - III Year (Mechatronics) (2019-2023)

S.No	Name	Sem	Subject Name	No of Students	%
1	Mrs.K.Saraswathi	6	Professional Elective II - Virtual Instrumentation	22	92
2	Dr.T.Sundar	6	Open Elective II – Bio Medical Instrumentation	22	89
3	Dr.G.P.Sivakumar	6	Principles of Management and Professional Ethics	22	89
4	Mr.S.S.Saravana Kumar	6	Microprocessors and Microcontrollers	22	90
5	Dr.T.Lakshmibai	6	PLC & Data Acquisition System	22	92
6	Dr. S. Vijayabhaskar	6	CAD / CAM	22	90
7	Mr.S.S.Saravana Kumar	6	Microprocessors and Microcontrollers Lab	22	90
8	Dr. S. Vijayabhaskar	6	CAD / CAM Lab	22	90
9	Dr.T.Sundar	6	PLC & Virtual Instrumentation Lab	22	90

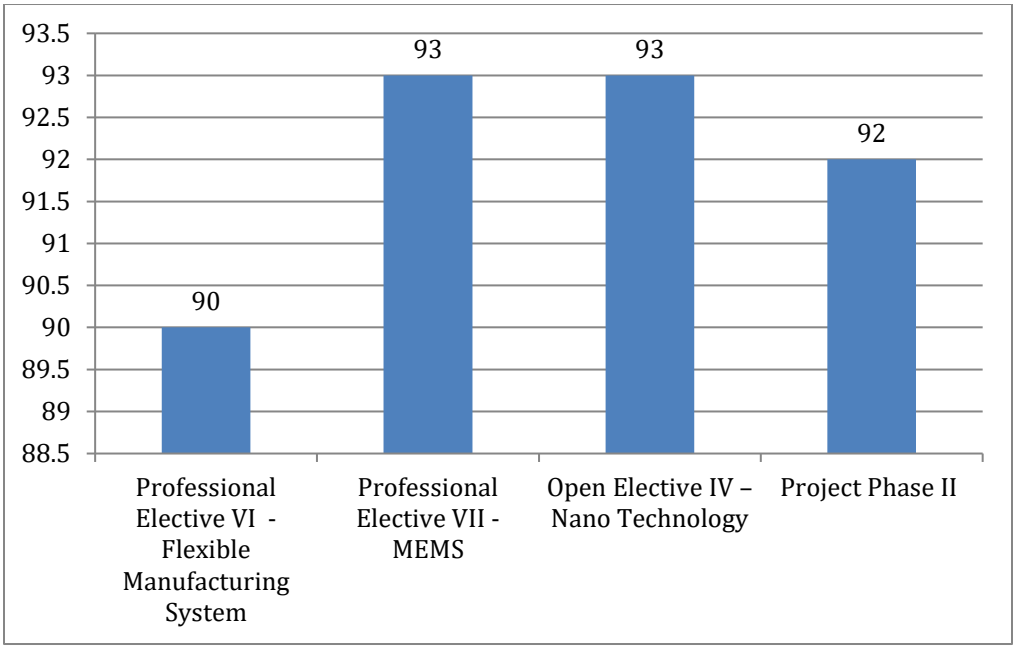
Student Feedback Class wise Summary - III Year (Mechatronics) (2019-2023)



Student Feedback Class wise Summary - IV Year (Mechatronics) (2018-2022)

S.No	Name	Sem	Subject Name	No of Students	%
1	DR. S. D. Sathishkumar	8	Professional Elective VI - Flexible Manufacturing System	15	90
2	Dr.T.Lakshmibai	8	Professional Elective VII - MEMS	15	93
3	Mr.S.S.Saravana Kumar	8	Open Elective IV – Nano Technology	15	93
4	Mrs.K.Sugapriya	8	Project Phase II	15	92

Student Feedback Class wise Summary - IV Year (Mechatronics) (2018-2022)



21. RESULT ANALYSIS (2021-2022)

OVER ALL PASS PERCENTAGE FOR ODD SEMESTER (2021-2022)

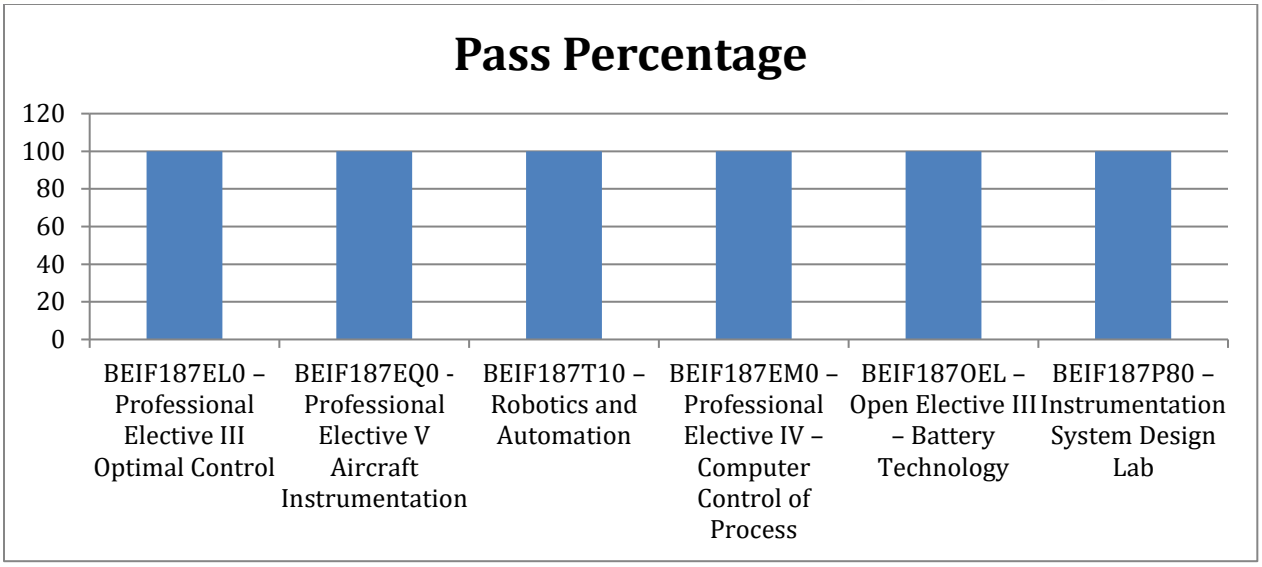
ELECTRONICS AND INSTRUMENTATION ENGINEERING

YEAR/SEM	BATCH	PASS PERCENTAGE
4th year/7th sem	2018-2022	100%

OVER ALL PASS PERCENTAGE FOR ODD SEMESTER (2021-2022)

4th year/7th sem

SL.NO.	SUBJECT	%
1	BEIF187EL0 – Professional Elective III Optimal Control	100
2.	BEIF187EQ0 - Professional Elective V Aircraft Instrumentation	100
3.	BEIF187T10 – Robotics and Automation	100
4.	BEIF187EM0 – Professional Elective IV – Computer Control of Process	100
5.	BEIF187OEL – Open Elective III – Battery Technology	100
6.	BEIF187P80 – Instrumentation System Design Lab	100



OVER ALL PASS PERCENTAGE FOR EVEN SEMESTER (2021-2022)

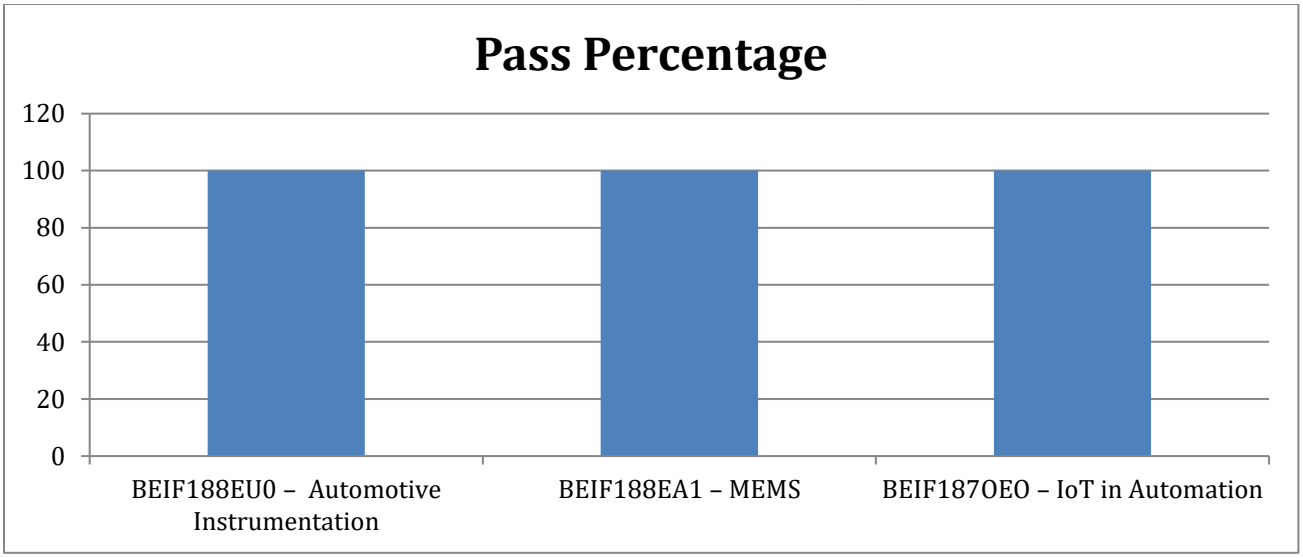
ELECTRONICS AND INSTRUMENTATION ENGINEERING

YEAR/SEM	BATCH	PASS PERCENTAGE
4th year/8th sem	2018-2022	100%

OVER ALL PASS PERCENTAGE FOR EVEN SEMESTERS (2021-2022)

4th year/8th sem

SL.NO.	SUBJECT	%
1.	BEIF188EU0 – Professional Elective VI Automotive Instrumentation	100
2.	BEIF188EA1 – Professional Elective VII Mems	100
3.	BEIF187OEO – Open Elective IV – IoT in Automation	100



OVER ALL PASS PERCENTAGE FOR ODD SEMESTER (2021-2022)

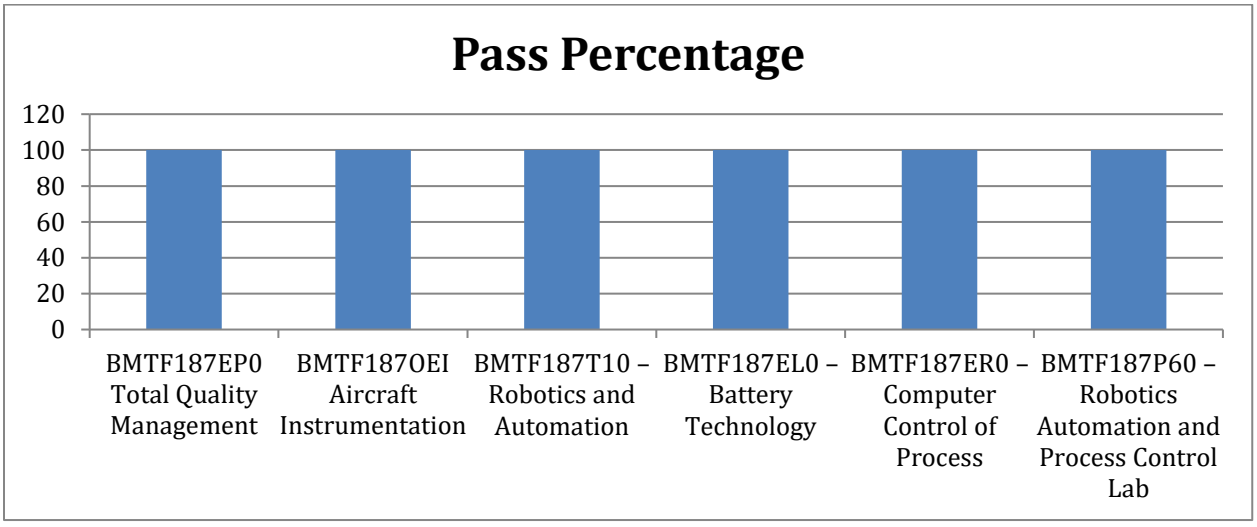
MECHATRONICS ENGINEERING

YEAR/SEM	BATCH	PASS PERCENTAGE
4th year/7th sem	2018-2022	100%
3rd Year /5th Sem	2019-2023	100%
2ND Year /3rd Sem	2020-2024	100%
1st Year/1st Sem	2021-2025	75%

OVER ALL PASS PERCENTAGE FOR ODD SEMESTER (2021-2022)

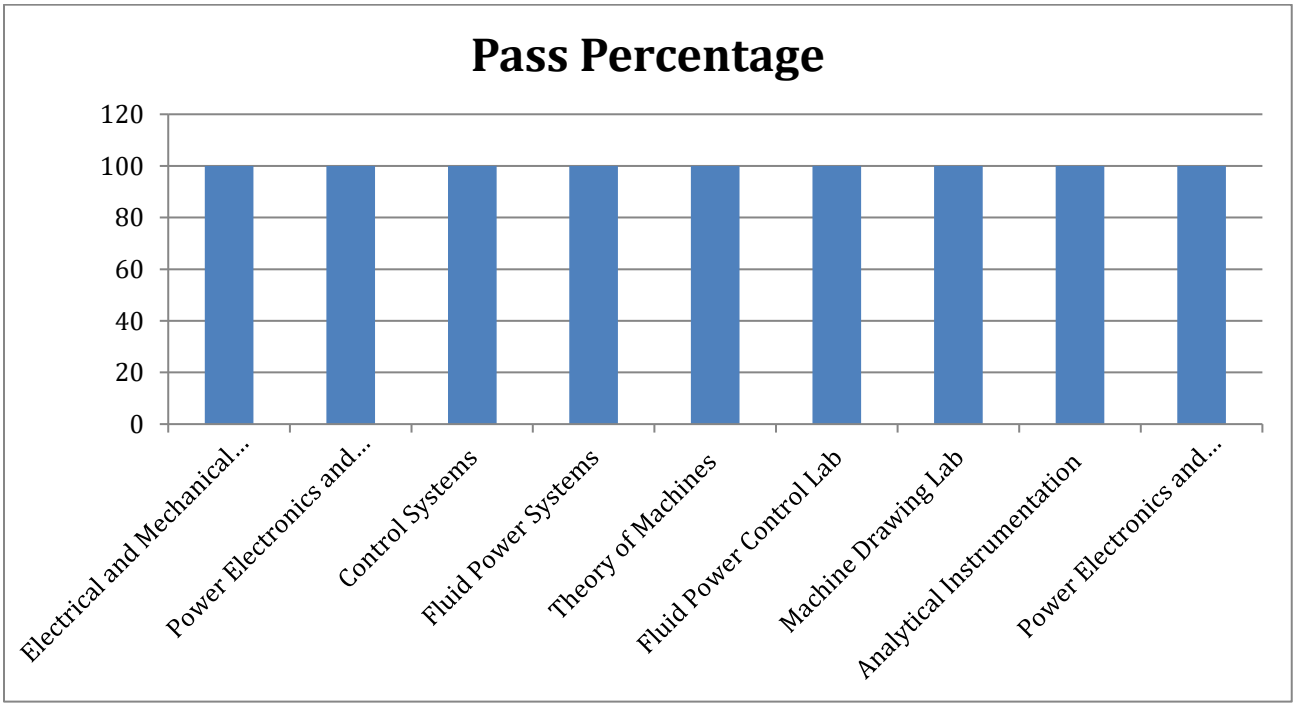
4th year/7th sem

S.NO.	SUBJECT	Pass Percentage
1	BMTF187EP0 – Professional Elective – Total Quality Management	100
2.	BMTF187OEI – Open Elective III – Aircraft Instrumentation	100
3.	BMTF187T10 – Robotics and Automation	100
4.	BMTF187EL0 – Professional Elective III – Battery Technology	100
5.	BMTF187ER0 – Professional Elective V – Computer Control of Process	100
6.	BMTF187P60 – Robotics Automation and Process Control Lab	100



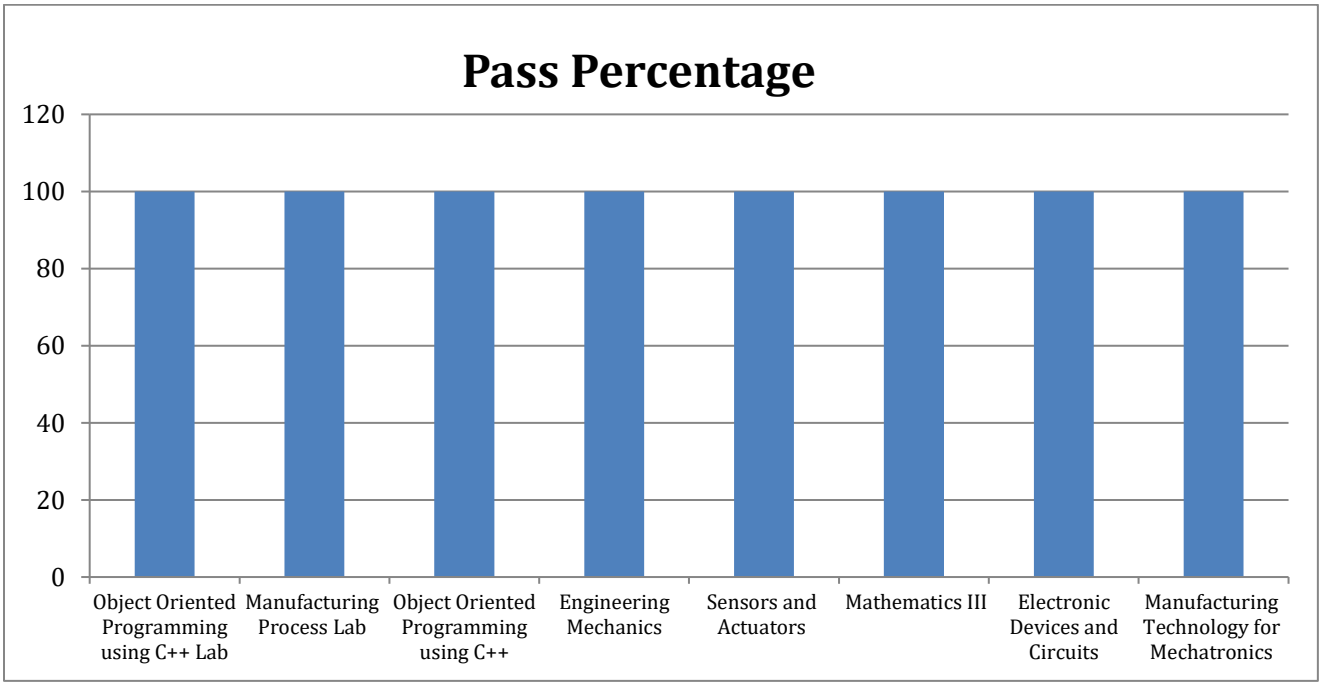
3rd year/5th sem

S.NO.	SUBJECT	Pass Percentage
1	BMTF185OEA – Open Elective – Electrical and Mechanical Measurements	100
2.	BMTF185P80 – Power Electronics and Industrial Drives Lab	100
3.	BMTF185T10 – Control Systems	100
4.	BMTF185T30 – Fluid Power Systems	100
5.	BMTF185EA0 – Professional Elective 1 – Theory of Machines	100
6.	BMTF185P70 – Fluid Power Control Lab	100
7.	BMTF185P90 – Machine Drawing Lab	100
8.	BMTF185T20 – Analytical Instrumentation	100
9.	BMTF185T40 – Power Electronics and Industrial Drives	100



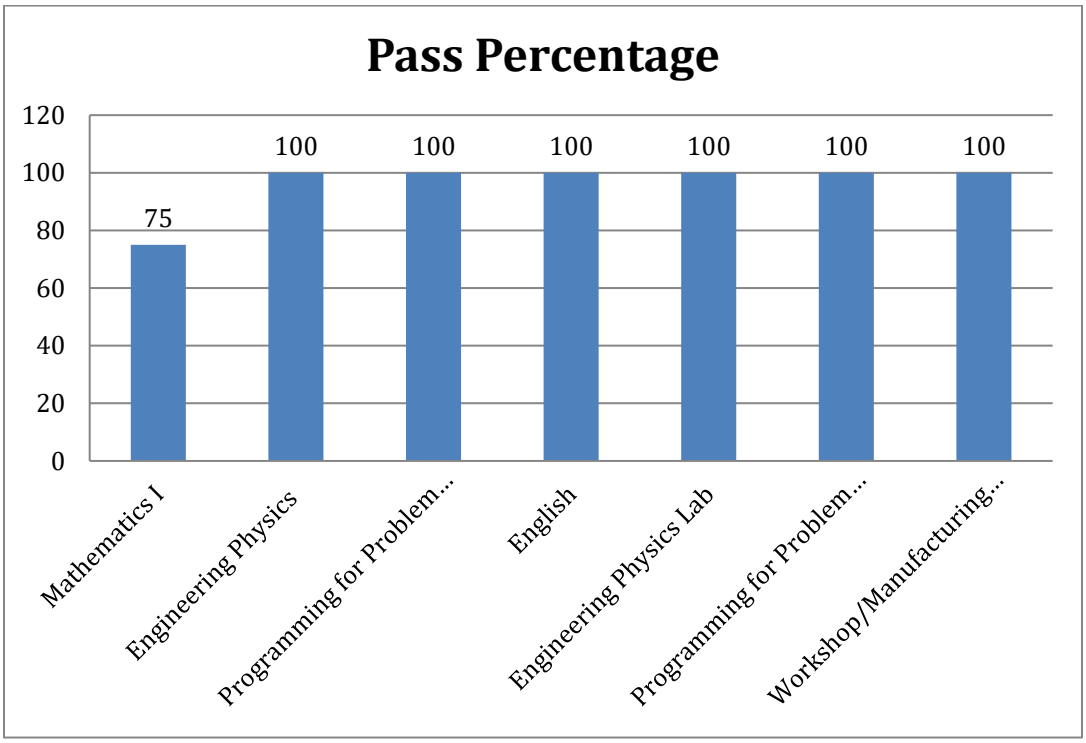
2nd year/3rd sem

S.NO.	SUBJECT	Pass Percentage
1	BMTF183P70 – Object Oriented Programming using C++ Lab	100
2.	BMTF183P90 – Manufacturing Process Lab	100
3.	BMTF183T20 - Object Oriented Programming using C++	100
4.	BMTF183T40 – Engineering Mechanics	100
5.	BMTF183T60 – Sensors and Actuators	100
6.	BMTF183P80 – Electronics Devices and Circuits Lab	100
7.	BMTF183T10 – Mathematics III	100
8.	BMTF183T30 – Electronic Devices and Circuits	100
9.	BMTF183T50 – Manufacturing Technology for Mechatronics	100



1st year/1st sem

S.NO.	SUBJECT	Pass Percentage
1	CBSMAA8T20 – Mathematics I	75
2.	CBSPH18T30 – Engineering Physics	100
3.	CESCS18T40 - Programming for Problem solving	100
4.	CHSEN18T10 – English	100
5.	CBSPH18P50– Engineering Physics Lab	100
6.	CESCS18P60- Programming for Problem solving Lab	100
7.	CESME18P70 – Workshop/Manufacturing practices	100



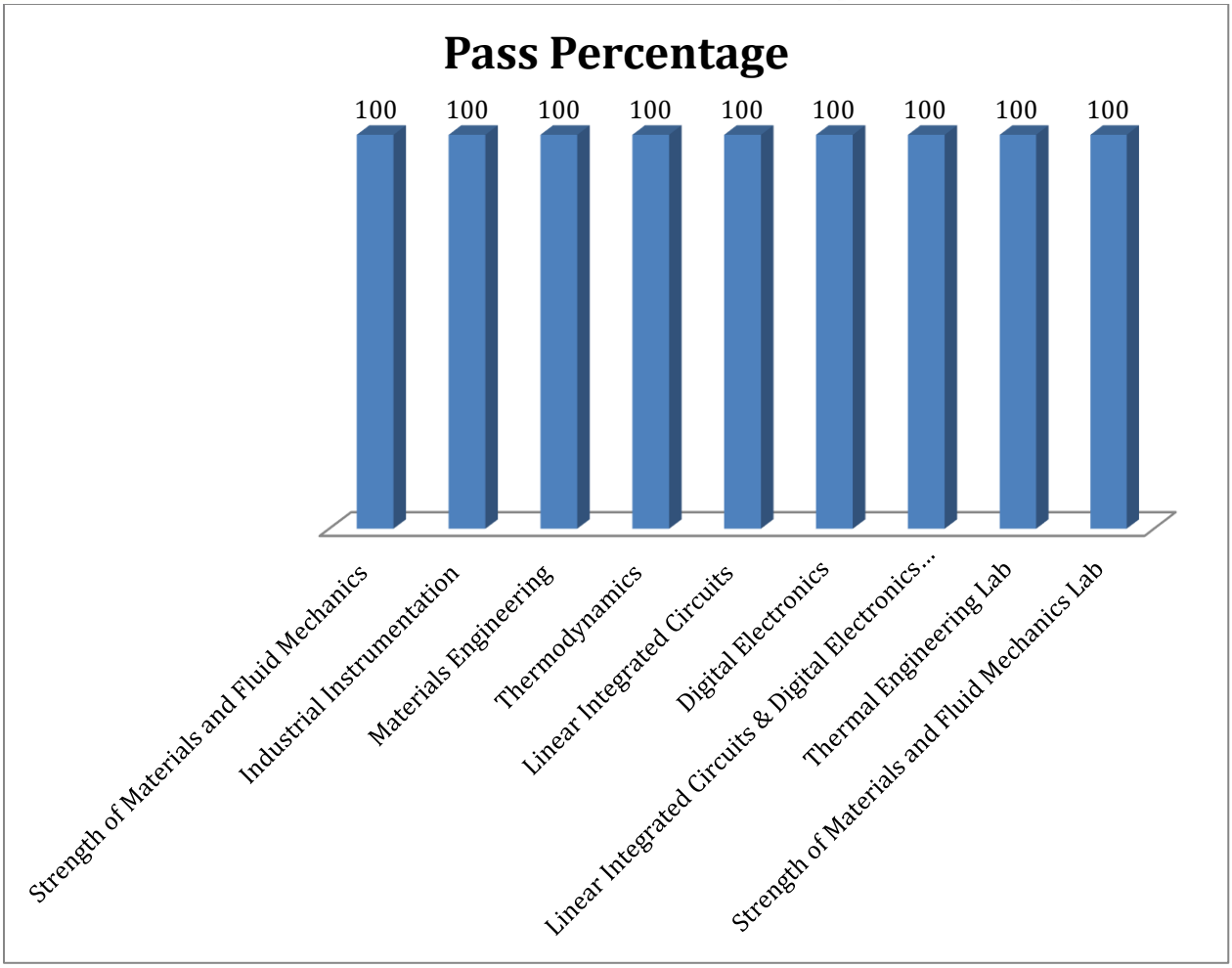
OVER ALL PASS PERCENTAGE FOR EVEN SEMESTER (2021-2022)

MECHATRONICS ENGINEERING

YEAR/SEM	BATCH	PASS PERCENTAGE
4th year/8th sem	2018-2022	100%
3rd Year /6th Sem	2019-2023	95%
2ND Year /4th Sem	2020-2024	100%
1st Year/2ndSem	2021-2025	100%

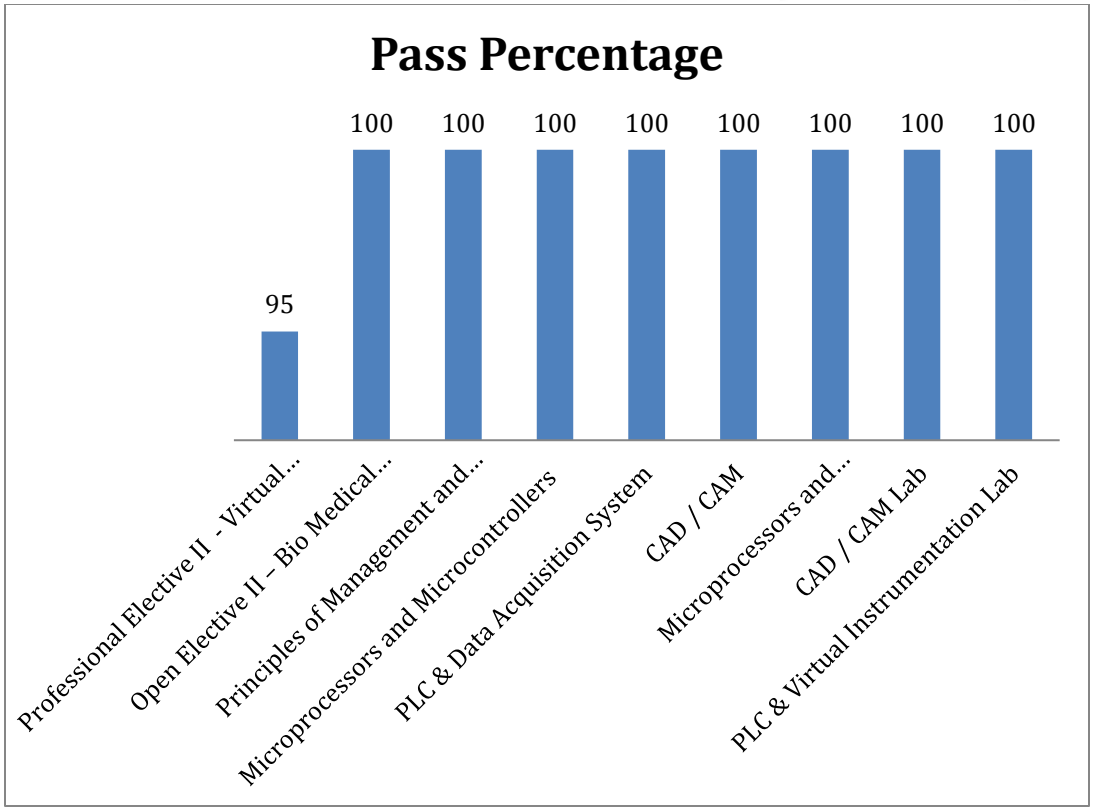
2rd year/4th sem

S.No	S. CODE	SUBJECT	Pass Percentage
1	BMTF184T10	Strength of Materials and Fluid Mechanics	100
2	BMTF184T20	Industrial Instrumentation	100
3	BMTF184T30	Materials Engineering	100
4	BMTF184T40	Thermodynamics	100
5	BMTF184T50	Linear Integrated Circuits	100
6	BMTF184T60	Digital Electronics	100
7	BMTF184P70	Linear Integrated Circuits & Digital Electronics Lab	100
8	BMTF184P80	Thermal Engineering Lab	100
9	BMTF184P90	Strength of Materials and Fluid Mechanics Lab	100



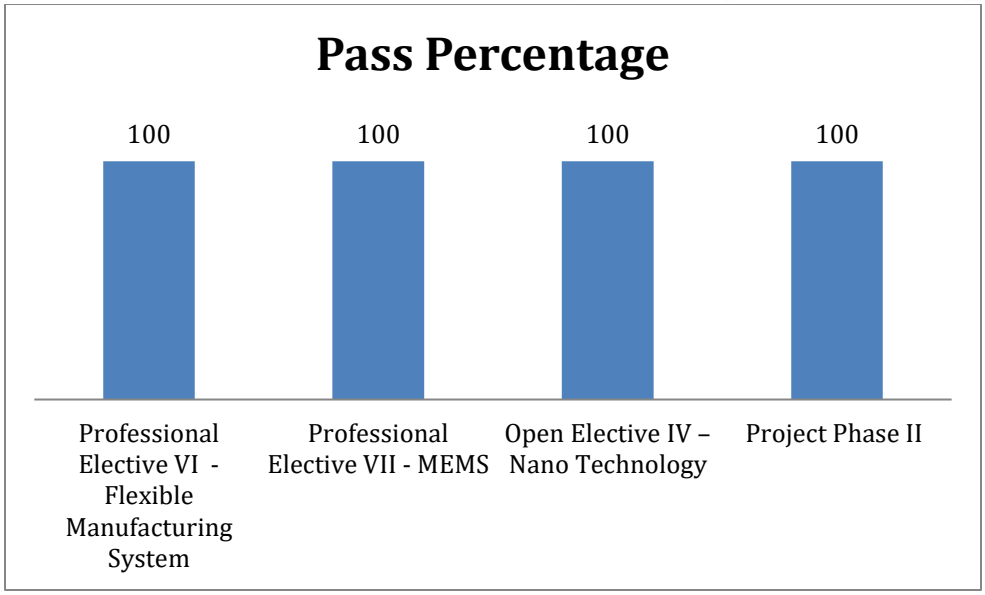
3rd year/6rd sem

S.No	S. CODE	SUBJECT	Pass Percentage
1	BMTF186EE0	Professional Elective II - Virtual Instrumentation	95
2	BMTF1860EE	Open Elective II – Bio Medical Instrumentation	100
3	BMTF186T30	Principles of Management and Professional Ethics	100
4	BMTF186T20	Microprocessors and Microcontrollers	100
5	BMTF186T10	PLC & Data Acquisition System	100
6	BMTF186T40	CAD / CAM	100
7	BMTF186P70	Microprocessors and Microcontrollers Lab	100
8	BMTF186P80	CAD / CAM Lab	100
9	BMTF186P90	PLC & Virtual Instrumentation Lab	100



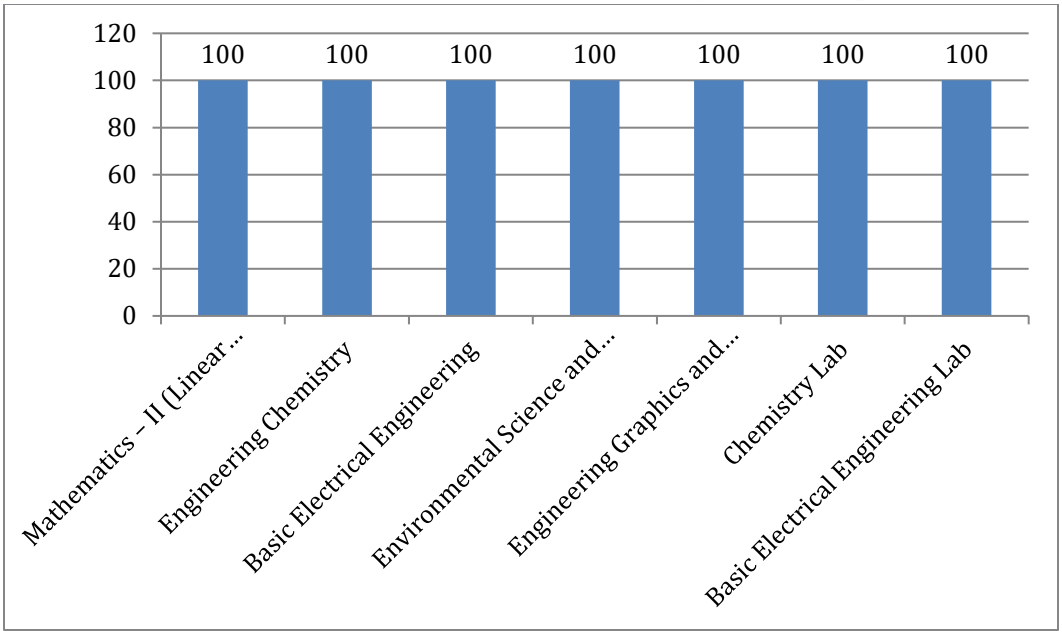
4th year/8rd sem

S.No	S. CODE	SUBJECT	Pass Percentage
1	MECT08T01	Professional Elective VI - Flexible Manufacturing System	100
2	MECT08T02	Professional Elective VII - MEMS	100
3	MECT08T03	Open Elective IV – Nano Technology	100
4	MECT08P01	Project Phase II	100



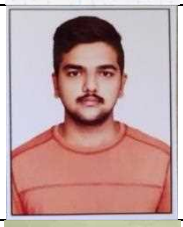
1tst year/2nd Sem

S.No	S. CODE	SUBJECT	Pass Percentage
1	CBSMAF8T10	Mathematics – II (Linear Algebra, Transform calculus and Numerical Methods)-	100
2	CBSCH18T20	Engineering Chemistry	100
3	CESEE18T30	Basic Electrical Engineering	100
4	CESEE18P70	Environmental Science and Engineering	100
5	CESME18P50	Engineering Graphics and Design -	100
6	CBSCH18P60	Chemistry Lab	100
7	CESEE18P70	Basic Electrical Engineering Lab	100


120
100
80
60
40
20
0
100
100
100
100
100
100
100
Mathematics – II (Linear ...
Engineering Chemistry
Basic Electrical Engineering
Environmental Science and...
Engineering Graphics and...
Chemistry Lab
Basic Electrical Engineering Lab

22. PLACEMENT ACTIVITY DETAILS

EIE &MECHATRONICS PLACEMENT DETAILS (2018-2022 Batch)

Register Number	Name	Company	Salary Per Annum	Job Role	Photo
11189H002	Aswin S	Futurense , Cognizant, TCS,	8 LPA, 4 LPA, 3.36 LPA	Data Engineer, GenC, ASE Trainee	
11189H008	Pillalamarri Srinivasa Sanjay	National Autoplast Pvt., Ltd.	2LPA	Production Engineer	
11189H010	Ravinndhar. S	National Autoplast Pvt., Ltd.	2LPA	Production Engineer	
11189H014	SurimaniNiteesh	Wipro, Infosys	3.5LPA,3.6LPA	Project Engineer, System Engineer	
11189H015	Arun Kumar J S	National Autoplast Pvt., Ltd.	2LPA	Production Engineer	

LIST OF COMPANIES VISITED FOR PLACEMENT

Cognizant

KIRAN UDYOD PVT. LIMITED

CSL
Chemtron Science Laboratories Pvt. Ltd.

SUTHERLAND

VALCO MELTON


Tech
Mahindra


BOSCH
Invented for life


eHelium


CMC Limited
Your IT Partner

23. WORK COMPLETION REPORT

(To be submitted by faculty before proceeding on vacation/any other leave at end of semester)

YEAR 2021-22

I, **K.SARASWATHI,** confirm that I have

a. Completed the teaching work assigned to me for this semester and completed the syllabus **YES/~~NO~~**

b. I have conducted the required evaluation components for all courses and the results (mark Statement) have been handed over to the department **YES/~~NO~~**

c. I have completed all other administrative tasks assigned to me for this semester. **YES/~~NO~~**

d. I have reported all my research-related/even participation activities in the department intranet software(LMS), and I understand that this data will be used for preparation of department activity reports **YES/~~NO~~**

e. I have returned all department library books and no books are pending against my name. **YES/~~NO~~**

f. I have submitted leave applications for all leaves taken by me this semester, and there no pending applications **YES/~~NO~~**

Signature of Staff: _____

Date: _____

I, **T.SUNDAR,** confirm that I have

a. Completed the teaching work assigned to me for this semester and completed the syllabus **YES/~~NO~~**

b. I have conducted the required evaluation components for all courses and the results (mark Statement) have been handed over to the department **YES/~~NO~~**

c. I have completed all other administrative tasks assigned to me for this semester. **YES/~~NO~~**

d. I have reported all my research-related/even participation activities in the department intranet software(LMS), and I understand that this data will be used for preparation of department activity reports **YES/~~NO~~**

e. I have returned all department library books and no books are pending against my name. **YES/~~NO~~**

f. I have submitted leave applications for all leaves taken by me this semester, and there no pending applications **YES/~~NO~~**

Signature of Staff: _____

Date: _____

I, **JANANI.R,** confirm that I have

a. Completed the teaching work assigned to me for this semester and completed the syllabus **YES/~~NO~~**
b. I have conducted the required evaluation components for all courses and the results (mark Statement) have been handed over to the department **YES/~~NO~~**
c. I have completed all other administrative tasks assigned to me for this semester. **YES/~~NO~~**
d. I have reported all my research-related/even participation activities in the department intranet software(LMS), and I understand that this data will be used for preparation of department activity reports **YES/~~NO~~**
e. I have returned all department library books and no books are pending against my name. **YES/~~NO~~**
f. I have submitted leave applications for all leaves taken by me this semester, and there no pending applications **YES/~~NO~~**

Signature of Staff: _____

Date: _____

I, **T.LAKSHMIBAI,** confirm that I have

a. Completed the teaching work assigned to me for this semester and completed the syllabus **YES/~~NO~~**
b. I have conducted the required evaluation components for all courses and the results (mark Statement) have been handed over to the department **YES/~~NO~~**
c. I have completed all other administrative tasks assigned to me for this semester. **YES/~~NO~~**
d. I have reported all my research-related/even participation activities in the department intranet software(LMS), and I understand that this data will be used for preparation of department activity reports **YES/~~NO~~**
e. I have returned all department library books and no books are pending against my name. **YES/~~NO~~**
f. I have submitted leave applications for all leaves taken by me this semester, and there no pending applications **YES/~~NO~~**

Signature of Staff: _____

Date: _____

I, **G.P.SIVAKUMAR,** confirm that I have

a. Completed the teaching work assigned to me for this semester and completed the syllabus **YES/~~NO~~**
b. I have conducted the required evaluation components for all courses and the results (mark Statement) have been handed over to the department **YES/~~NO~~**
c. I have completed all other administrative tasks assigned to me for this semester. **YES/~~NO~~**
d. I have reported all my research-related/even participation activities in the department intranet software(LMS), and I understand that this data will be used for preparation of department activity reports **YES/~~NO~~**
e. I have returned all department library books and no books are pending against my name. **YES/~~NO~~**
f. I have submitted leave applications for all leaves taken by me this semester, and there no pending applications **YES/~~NO~~**

Signature of Staff: _____

Date: _____

I, **S.S.SARAVANAKUMAR,** confirm that I have

a. Completed the teaching work assigned to me for this semester and completed the syllabus **YES/~~NO~~**
b. I have conducted the required evaluation components for all courses and the results (mark Statement) have been handed over to the department **YES/~~NO~~**
c. I have completed all other administrative tasks assigned to me for this semester. **YES/~~NO~~**
d. I have reported all my research-related/even participation activities in the department intranet software(LMS), and I understand that this data will be used for preparation of department activity reports **YES/~~NO~~**
e. I have returned all department library books and no books are pending against my name. **YES/~~NO~~**
f. I have submitted leave applications for all leaves taken by me this semester, and there no pending applications **YES/~~NO~~**

Signature of Staff: _____

Date: _____

I, **K.SUGAPRIYA,** confirm that I have

a. Completed the teaching work assigned to me for this semester and completed the syllabus **YES/~~NO~~**
b. I have conducted the required evaluation components for all courses and the results (mark Statement) have been handed over to the department **YES/~~NO~~**
c. I have completed all other administrative tasks assigned to me for this semester. **YES/~~NO~~**
d. I have reported all my research-related/even participation activities in the department intranet software(LMS), and I understand that this data will be used for preparation of department activity reports **YES/~~NO~~**
e. I have returned all department library books and no books are pending against my name. **YES/~~NO~~**
f. I have submitted leave applications for all leaves taken by me this semester, and there no pending applications **YES/~~NO~~**

Signature of Staff: _____

Date: _____

I, **N.C.A.BOOVARAHAN,** confirm that I have

a. Completed the teaching work assigned to me for this semester and completed the syllabus **YES/~~NO~~**
b. I have conducted the required evaluation components for all courses and the results (mark Statement) have been handed over to the department **YES/~~NO~~**
c. I have completed all other administrative tasks assigned to me for this semester. **YES/~~NO~~**
d. I have reported all my research-related/even participation activities in the department intranet software(LMS), and I understand that this data will be used for preparation of department activity reports **YES/~~NO~~**
e. I have returned all department library books and no books are pending against my name. **YES/~~NO~~**
f. I have submitted leave applications for all leaves taken by me this semester, and there no pending applications **YES/~~NO~~**

Signature of Staff: _____

Date: _____

24. WORK PLAN- ACADEMIC PLANS FOR ENSUING SEMESTER

(For the Academic Year **2022-2023**)

Name of the Faculty: K.SARASWATHI, AP-II/EIE

Teaching, Learning and Evaluation related activities
● Teaching of the courses assigned **ODD SEMESTER** 1. Control Systems - III Yr Mechatronics 2. Principles of Commuvnications - III Yr B.Tech-IT 3. PLC and VI Lab – IV Yr Mechatronics **EVEN SEMESTER** Will be assigned by HOD ● Continues Assessment (Internal test), Assignments for the above said subjects will be conducted at regular intervals. **Completed Work for the year 2021-2022** ● All the odd & even semester subject syllabus, internal evaluvation and assessments are completed ● Prepared PLC and VI Lab manual for IV Year Mechatronics students.
Co-curricular, Extension, Professional development related activities
● Planned to arrange an Industrial Visit to Process Industry. ● Planned to attend Refresher courses and Conferences. **Completed Work for the year 2021-2022** ● Actively participated in Online FDP Programs.
Research, Publications and Academic contributions
● Planned to Present papers in IEEE Conferences. **Completed Work for the year 2021-2021** ● Published papers in SCOPUS journals.

Signature of the Faculty **HOD/EIE**

For the Academic Year 2022-2023 - Work Plan

Name of the Faculty: T.Sundar, Assistant Professor/EIE

Teaching, Learning and Evaluation related activities
● Teaching of the courses assigned **ODD SEMESTER** 1.Sensors and Actuator -II Yr Mechatronics 2. Robotics Automation and Process Control Lab – IV Yr Mechatronics 3. Process Control Lab – IY Yr EEE (PT) **EVEN SEMESTER** Will be assigned by HOD ● Continues Assessment (Internal test), Assignments for the above said subjects will be conducted at regular intervals. ● Prepare new syllabus and Lab manual for Robotics Automation and Process Control Lab. **Completed Work for the previous year 2021-2022** ● Prepared Digital Electronics Lab manual, Process Control Lab and Microprocessor and Microcontroller Lab for students. ● All the odd & even semester subject syllabus, internal evaluation and assessments are completed.
Co-curricular, Extension, Professional development related activities
● To arrange an Industrial Visit to Core Company. ● To arrange a Short term Program on Relevant to Instrumentation and Mechatronics. ● To arrange a Workshop, Seminar and Guest Lecture. ● To attend Refresher courses and Conferences **Completed Work for the previous year 2021-2022** ● Actively participated in Webinar, Workshop, Seminar, Lecture Series, FDP and Conference.
Research, Publications and Academic contributions
● Planned to Present papers in IEEE Conferences. **Completed Work for the previous year 2021-2022** ● Presented a paper in the International Conference. ● Successfully completed in ATAL FDP , Short Term Course and Webinar

Signature of the Faculty **HOD/EIE**

For the Academic Year 2022-2023 - Work Plan

Name of the Faculty: Ms.Janani. R, Assistant Professor/EIE

Teaching, Learning and Evaluation related activities
Subjects assigned **ODD SEMESTER** 1. Programmable Logic Controller - Final Year CSE **EVEN SEMESTER** Will be assigned by HOD **Completed Work for the previous year 2021-2022** All the odd and even semester subject syllabus, internal evaluation and assessments are completed
Co-curricular, Extension, Professional development related activities
● To organize two days FDP in Virtual Instrumentation, PLC and SCADA Based Automation ● Instruct students to join and undergo NPTEL Certificate exam as well as SWAYAM courses ● Registered for Domain Certification in NPTEL **Completed Work for the previous year 2021-2022** ●
Research, Publications and Academic contributions
● Publish papers in SCI Indexed Journals. ● Articles in International Conference. **Completed Work for the previous year 2021-2022** ●

Signature of the Faculty **HOD/EIE**

For the Academic Year 2022-2023 - Work Plan

Name of the Faculty: Dr.T.Lakshmibai, Assistant Professor/EIE

Teaching, Learning and Evaluation related activities

Subjects assigned

ODD SEMESTER

1. Battery Technology — Final Year Mechactronics
2. Power Electronics & Industrial Drives — Third Year Mechactronics
3. Power Electronics & Industrial Drives Lab — Third Year Mechactronics

EVEN SEMESTER

Will be assigned by HOD

To prepare fresh study materials, question bank for Battery Technology

Completed Work for the previous year 2021-2022

All the odd and even semester subject syllabus, internal evaluation and assessments are completed

Co-curricular, Extension, Professional development related activities

- To organize FDP in Sensors, PLC Based Automation
- Encouraged students to join and undergo NPTEL Certificate exam as well as SWAYAM courses

Completed Work for the previous year 2021-2022

- Participated in International Conferences for Paper Presentation and won Best Paper Award and Best Presentation Award.
- Arranged Online Virtual tour, webinars, Ugadifest 2022 and guest lectures
- Conducted Engineers' day function and released a magazine names "Injeneers Navapravasthana"

Research, Publications and Academic contributions

- Publish papers in Indexed Journals.
- Articles in International Conference.

Completed Work for the previous year 2021-2022

- Presented papers in the International conferences.
- Completed one month orientation program conducted by Teaching Learning Centre, Ramanujan College, University of Delhi, under the aegis of Ministry of Education, Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching from 20.12.21 to 19.01.21 and obtained A+ grade.

Signature of the Faculty **HOD/EIE**

For the Academic Year 2022-2023 - Work Plan

Name of the Faculty: Dr.G Padmanabha Sivakumar, Assistant Professor/EIE

Teaching, Learning and Evaluation related activities
● Teaching of the courses assigned **ODD SEMESTER** 1 Embedded Systems – IV Yr Mechatronics 2.OOPS – II Yr Mechatronics 3.OOPS Lab- IIyr Mechatronics **EVEN SEMESTER** Will be assigned by HOD ● Continues Assessment (Internal test), Assignments for the above said subjects will be conducted at regular intervals. ● . **Completed Work for theprevious year 2021-2022** ● Prepared lecture notes of Embedded Systems and Industrial Automation subject for the benefit of EIE department students. ● All the odd & even semester subject syllabus, internal evaluation and assessments are completed.
Co-curricular, Extension, Professional development related activities
● To arrange a Workshop and Guest Lecture. ● To attend Refresher courses and Conferences **Completed Work for the previous year 2021-2022** ● NPTEL Translation for 2 Different assigned subjects . ● Attended Online webinar and work shops**.** ● Actively participated in FDP's conducted through online.
Research, Publications and Academic contributions
● Planned to publish papers in Scopus. **Completed Work for the previous year 2021-2022** ● Published 2 papers in UGC Journals.

Signature of the Faculty **HOD/EIE**

For the Academic Year 2022-2023 - Work Plan

Name of the Faculty: Mr.S. S. Saravana Kumar, Assistant Professor/EIE

Teaching, Learning and Evaluation related activities
● Teaching of the courses assigned **ODD SEMESTER** 1. Robotics & Automation – IV Yr Mechtronics 2. Digital Electronics – II Yr CSE 5. Project Phase I – IV Yr Mechatronics **EVEN SEMESTER** Will be assigned by HOD ● Continues Assessment (Internal test), Assignments for the above said subjects will be conducted at regular intervals. **Completed Work for theprevious year 2021-2022** ● Prepared Microprocessor and Microcontroller Lab manual for III Year Mechatronics students. ● All the odd & even semester subject syllabus, internal evaluation and assessments are completed.
Co-curricular, Extension, Professional development related activities
● Planned to arrange a Workshop and Guest Lecture. ● Planned to arrange Industrial Visit. ● Planned to attend Refresher courses and Conferences **Completed Work for the previous year 2021-2022** ● Actively participated in FDP's conducted through online.
Research, Publications and Academic contributions
● Planned to Present papers in IEEE Conferences. ● Planned to publish papers in Scopus. **Completed Work for the previous year 2021-2022** ● Successfully completed in ATAL FDP, Short Term Course and Webinar.

Signature of the Faculty **HOD/EIE**

For the Academic Year 2022-2023 - Work Plan

Name of the Faculty: K.SUGAPRIYA, AP/EIE

Teaching, Learning and Evaluation related activities
● Teaching of the courses assigned 1. Electrical and Mechanical Measurements-III year Mechatronics 2. Digital Electronics Lab-II Year CSE 3. Digital Electronics and Microprocessor-II year M.Sc Physics The Assessment (Internal test) for the above said subjects will be conducted at regular intervals. **Completed Work for the year 2021-2022** ● All the odd & even semester subject syllabus, internal evaluvation and assessments are completed
Co-curricular, Extension, Professional development related activities
● Planned to guide to do the mini project to III year students. **Completed Work for the year 2021-2022** ● Actively participated in FDP conducted through online. ● Arranged project phase-I phase-II for final year students.
Research, Publications and Academic contributions
● Paper published in scopus journal. ● Planned to Present papers in IEEE Conferences.

Signature of the Faculty **HOD/EIE**

For the Academic Year 2022-2023 - Work Plan

Name of the Faculty: N.C.A. Boovarahan, Assistant Professor/EIE

Teaching, Learning and Evaluation related activities
● Teaching of the courses assigned **ODD SEMESTER** 1. Aircraft Instrumentation – IV yr Mechatronics 2. Electronic Devices & Circuits – II yr Mechatronics 3.Electronic Devices & Circuits Lab- II yr Mechatronics Continues Assessment (Internal test), Assignments for the above said subjects will be conducted at regular intervals. PrepareLab manual for Digital Electronics Lab. **Completed Work for theprevious year 2021-2022** ● Prepared Linear Integrated Circuits Study Material. ● All the odd & even semester subject syllabus, internal evaluation and assessments are completed.
Co-curricular, Extension, Professional development related activities
. ● To arrange a Workshop and Guest Lecture. ● To attend Faculty Development Program. **Completed Work for the previous year 2021-2022** ● Participated Online ATAL FDPs in coordination with AICTE. ● Actively participated in online workshop.
Research, Publications and Academic contributions
● Paper Published in IJRPR (UGC) ● Journal

Signature of the Faculty **HOD/EIE**

25. DETAILS OF ADDITIONAL RESPONSIBILITIES OF THE STAFF

Additional Responsibilities for the Academic Year 2021-22

S.No	Description Work	Faculty In charge
1.	Educational Tour, Industrial Visit, Internship Training, Workshop, Guest Lectures	All Faculties
2.	Placements	Mr.S.S.Saravanakumar
3.	IQAC	Mrs.K.Saraswathi
4.	Time Table In charge	Mrs.K.Saraswathi & Dr.T.Sundar
5.	Internal Test and University exam related works	Dr.T.Lakshmibai & Dr.T.Sundar
6.	Department Activity	Mrs.K.Sugapriya
7.	Result Analysis & Feedback	Dr.Janani R & Mr.K.Vinayagamoorthy
8.	Department Library	Dr.G.P.Sivakumar & Mr.K.Vinayagamoorthy
9.	Research Coordinator	Mr.N.C.A. Boovarahan
10.	Student Attendance & Staff Attendance	All Faculties
11.	Web Updating	Mr.S.S.Saravanakumar
12.	Department Work (File Maintenance, Stationary, Letters)	Mrs.V.Komala & Mr.G.Subramaniyan
13.	Department Profile book	Mrs.K.Sugapriya & Mr.G.Subramaniyan
14.	Department Maintenance & Department Related outside/ External work	Mr.G.Subramaniyan & Mr.K.Vinayagamoorthy
15.	Office Work	Mrs.V.Komala & Mr.K.Vinayagamoorthy

26. DETAILS OF CLASS COMMITTEE MEETINGS HELD SO FAR

MINUTES OF CLASS COMMITTEE MEETING OF II YEAR MECHATRONICS CONDUCTED THROUGH ON ONLINE MODE ON 06.09.2021 at 5.00PM.

16.09.2021

From
Prof.V.Swaminathan
HOD/EIE
SCSVMV

To
Dr.G.Sriram
Dean (E&T)
SCSVMV

Dear Sir,

SUB:

MINUTES OF CLASS COMMITTEEMEETING CONDUCTED THROUGH ONLINE MODE (Google Meet) ON 06.09.2021at 5.00 PM.

Members attended:

HOD : Prof. V.SWAMINATHAN

Staff Present:

1. .T.Lakshmibai (Class in Charge)
2. Dr.T.Sundar

Student Present:

V.Raghul

HOD explains the present situation and the measures to be followed if University resumes is as follows:

1. First year classes conducted through online mode with MCQ pattern for end semester exams and the same is continued for second year also due to the persistence of pandemic condition.
2. Online mode of classes though having its own pros and cons, Staff members are placing added efforts for the students to gain more knowledge.
3. On answering the question "When will University reopens?", Government of Tamil Nadu recently mentioned that classes can be conducted subject to the condition that every staff and students should be double vaccinated.
4. For the hostel also the govt norms is to be followed for keeping the distance between the beds.

5. Also, the final vaccination certificate of staff and students is to be submitted to the University.
6. Whenever the classesresume, it is planned to conduct previous semester labs simultaneously with the current semester labs.
7. The upgradation of University play ground ie football, Cricket, tennis courts even gym also is described.
8. About installment fees payment also explained.
9. All the important dates in the Academic schedule were informed and the work plan was initiated.

II internal test	-	07.10.2021 to 11.10.2021
University Model Practicals	-	01.11.2021 to 03.11.2021
Last working day	-	13.11.2021
Practical exams start from	-	15.11.2021 to 18.11.2021
Theory exams start from	-	25.11.2021
Next (Even) sem starts from	-	16.12.2021

T.Lakshmibai **Prof. V.Swaminathan**

Class in Charge **HOD/EIE**

28.08.2021

MINUTES OF CLASS COMMITTEE MEETING OF III YEAR MECHATRONICS CONDUCTED ONLINE (GOOGLE MEET) 23.08.2021 at 02.00 PM.

Students Present:

1. III Year Mechatronics

Staff Present : 1. T. SUNDAR
2. S. S. SARAVANA KUMAR (Class-in-charge)

HOD : Mr.V.SWAMINATHAN

The following points were discussed:

1. The important dates in the Academic schedule were informed to the students (Online Class Schedule)
2. The students are advised to maintain good attendance percentage and they are informed not to miss the online classes.
3. The students are comfortable with the current semester Theory subjects.
4. Students are advised to register for online SWAYAM courses.

S. S. Saravana Kumar **Prof. V.Swaminathan**

Class in Charge **HOD/EIE**

31.08.2021

MINUTES OF CLASS COMMITTEE MEETING OF IV YEAR EIE & MECHATRONICS CONDUCTED THROUGH ON ONLINE MODE ON 25.08.2021 at 2.00PM.

Students Present:

1. IV Year EIE
2. IV Year Mechatronics

Staff Present :

1. Dr.T.SUNDAR
2. Mrs. K.SUGAPRIYA (EIE & Mechatronics Class-in-charge)

HOD : Mr.V.Swaminathan

The following points were discussed:

1. The students are comfortable with the current semester theory subjects.
2. It is informed to the students about semester exam schedule and placement training programme.
3. The importance of various training programme offered through online were informed.
4. The students are advised to plan for Internship and Industrial Training.
5. Students are advised to concentrate on online class, real time mini-projects carrier guidance programme.

K.Sugapriya **Prof. V.Swaminathan**

Class in Charge **HOD/EIE**

21.09.2021

From
Prof.V.Swaminathan
HOD/EIE
SCSVMV

To
Dr.G.Sriram
Dean (E&T)
SCSVMV

Dear Sir,

SUB:

MINUTES OF ALUMNIMEETING CONDUCTED THROUGH ONLINE MODE(Google Meet) ON 19.09.2021at 4.00 PM.

Members attended:

HOD : Prof. V.SWAMINATHAN

Staff Present:

Dr.T.Sundar&Dr.T. Lakshmibai (Coordinators)
Mrs. K. Saraswathi
Dr.Janani R
Dr.G.P.Sivakumar
Mr.S.S.Saravanakumar
Mrs.K. Sugapriya
Mr.N.C.A.Boovarahan
Mr.K.Vinayagamoothy

Alumni Present:

Shaik Mohammad Aziz
Vadanala Vinushna
Vikram A
Adithya Manohar Ravi
Pillalamarri Srinivasa Sanjay
Avinash T V S
Jambula Jaya Surya Reddy
Venkat Achyuth Mantrala
Gurram Sai Sandeep
Neeraj Thatavarthi
Monsoor Aslam
Aparna Dharmalingam
Arvind Ganesan
Sree Harsha
Komal Jha
Ajay Kumar
Sivaramakrishnan Mahadevan
Gayathri Prasanna Narayanan
Sankara Narayanan.N
Ramesh Pavithra

Sai Pradeep
Rohith Rajan
Bharath Ram
Pavan Ramesh
Dinesh Kumar S
Srinivasaraghavan S
Viswanadh Sekhar
Akshaya Kumar Swaminathan
Manoj Thambidurai
Satya Varma
Kratika Vashishth
Kashyap Velpuru

During the discussion HOD described the following:

10. At the start of function, the welcome speech was given by Dr.T. Lakshmibai.
11. HOD explainedabout the University/Department facing challenges during the pandemic period. March 8th, 2020, convocation held and everyone(ex-students) enjoyed during that function and suddenly on 17th march 2020, University was about to close by the government directions for the covid 19.
12. Also briefed about placements, exam pattern, infrastructure enhancement, playground and Gym modification and Library renovation etc.,
13. BE Honors degree (Sensor Technology) facility is included for EIE &Mechatronics students.
14. And as of now, four of our faculties completed PhD degree.
15. Alumni profile is to be created and all of them to come forward to help/guide for carrier growth, higher studies and projects to the junior students.

Alumni shared their experience and suggestions as follows:

1. Ms. Kratiga Vasisth (EIE): A bold girl, expresses her joy in the meet and she motivated the juniors.
2. Mr. Srinivasa Raghavan (Mechatronics): Robotic operating System (ROS) can be included in the curriculum since it is important for Mechatronics students.
3. Mr. Aksay Kumar (EIE): Either Software/Hardware, more practical sessions to be included (PLC, control valves etc., experiments).
4. Ajay Kumar (EIE): Explained how he struggled to become entrepreneur and motivated others to become entrepreneur. Also, he is willing to take PLC training classes.
5. Mr. Kayshap Velpuru (EIE): Just completed PG in ML, Deep learning and Data Science and working in Germany itself. If any student requires any support/guidance for higher education in abroad, he is happy to help them. He elaborated the responsibilities in studying in abroad and to tackle the things. Curriculum is really tough, once if you start can realize that it is not as easy as

sounds, but I wouldn't say it is impossible. Take a stubborn decision before applying to any domain of study, whether you want, why, if really interested in that domain like that.

6. Mr.T.Manoj (Mechatronics): Working as a SCADA developer at Bangalore. If anybody wants to learn SCADA, then ignitions platform will be the good start. Some online classes are available by foreign Universities, step by step learning can be given. Ignition is the latest SCADA and growing fast. If students complete these courses and add in their resume will give the advantage of getting jobs easily. Pollution based companies searches these types of engineers. IoT platform also can give facility for SCADA development.
7. Mr. Komal Jha (EIE): More software related courses for automotive industry are needed for students.
8. Mr. Arvind Ganesan (EIE): Working in Lucas TVS – manufacturing starter, Actuators etc., He motivated the students for their carrier growth.
9. Mr. Bharathram (EIE): In current scenario, Udemy website like manufacturing courses are available to learn. Many industries like to select in interviews that who have completed a specific required certificate course.
10. Mr. Sankar Narayanan (Mechatronics): Working as software related XML coding. Now world is moving towards digital because of pandemic and it will continue. So along with hardware, I suggest students must learn software also.
11. Mr. Sree Harsha (EIE): In east southern Asia, needs automation in their industries, but only semi automation (72 to 80%) is used for MNC projects. He is working at Amaraja Batteries in automation side. Willing to provide industrial visit to juniors.
12. Ms.Aparna (Mechatronics): Doing her PG in functional safety engineering in Germany focusing automotive safety. She suggested that instead of giving MCQ pattern questions students may be given a case study project activity to complete. It will be useful and quite new rather writing theory.
13. Mr.Pavan Ramesh (Mechatronics): A entrepreneur after completing his MBA in HR motivated students in this line.
14. Ms. Vinushna (Mechatronics): Doing contract writer for online application. Also writing poems, blogs etc., Electro infinity club to be continued for the juniors to share ideas, what to do and needs interaction with seniors easily. Clubs also useful for the discussion about carrier growth.
15. Finally Dr.T.Sundar proposed Vote of thanks.

HOD / EIE

18.09.2021

From
Prof.V.Swaminathan
HOD/EIE
SCSVMV

To
Dr.G.Sriram
Dean (E&T)
SCSVMV

Dear Sir,

SUB:

MINUTES OF PARENTS-TEACHERSMEETING CONDUCTED THROUGH ONLINE MODE(Google Meet) ON 05.09.2021at 6.00 PM.

Members attended:

HOD : Prof. V.SWAMINATHAN

Staff Present:

Dr.T. Lakshmibai & Dr.T. Sundar(Coordinators)
Mrs.K. Sugapriya (Class in Charge)
Mr.S.S.Saravanakumar (Class in Charge)
Mrs. K. Saraswathi

Parents Present:

IV Year – 3 Parents
III Year – 17 Parents
II Year – 1 Parent

HOD explainsto the Parents about a clear picture of the University classes / physical mode restartsareas follows:

16. At the start of function, the welcome speech was given by Dr.T. Sundar.
17. March 17, 2020 is the day that nature starts to play its game, brought severe health hazards and created pandemic situation. In the same march month EIE dept planned to celebrate the technical symposium named Aaviskar' 20, that was stopped in sudden because of this pandemic condition.
18. Slowly online classes were started for the 2020 odd semester. The same was followed for 4 months from June to September 2020 as per Govt directions.
19. Previously in physical mode of teaching the students gain more knowledge because of staff student direct eye contact.
20. The online mode of education has its own pros and cons. Some of the students after saying good morning,may switch off / mute / video off / andin their own way. In some

places who are not using wifi facing certain network problems, data card after using for a long period 50% data utilized gets slow down and these are some technical issues that noticed cannot solve.

21. Coming to the timings, previously 50 minutes was allotted per period and during the pandemic condition,classes are conducted for 2 hours viz 10 to 12 noon or 2 to 4 pm along with Saturday class. It is noticed that from student side, staff side and parent side: Staff side continuous 2 hours teaching makes vocal problem to them but, 100% of syllabus was completed because there is no intervention and above 95% of attendance was registered for each student.
22. In this methodology of teaching, knowledge incorporated with the student was not as expected that much because of peripheral way of study.
23. Also, with MCQ pattern for end semester examination, students are badly missing the basic fundamental concepts of study and not interested to learnderivation and descriptive partsin depthin engineering. Scoring marks is not important than the knowledge. Hence, parents should support their wards to concentrate fundamentals.
24. Lab classes are also conducted in the even semester along with theory classes through online mode combining the previous odd semester laboratory subjects.
25. Currently from July 2021 onwards the same procedure is followed and the mode of examination is not yet decided.
26. Academic schedule was informed to the parents. As per academic calendar, first internal examinations were completed and second internal exam will be held in the end of September for III- & IV-year students and in the first week of October for II year.

Last working day for ODD semester:	29.10.2021(III & IV year) 13.11.2021 (II year)
Practical exam and Project Viva voce:	01.11.2021 to 05.11.2021 (III & IV year)
Practical exam:	15.11.2021 to 18.11.2021 (II year)
Theory exam:	15.11.2021(III & IV year) 25.11.2021(II year)

27. Regarding Placements, interview has already started for CTS, TCS, Accenture and some core companies. Students are registering in the portal and started to attend the same. Hence placement wise absolutely no problem.
28. Even with 8.5 CGPA, students should have Communication/soft skill, team leadership, positive thinking, passion and interest. So, parents should motivate them and also, we have arranged for motivational talks by alumni.

29. Tamil Nādu government directed to start the classes from September 1st onwards. But UGC, AICTE directions are also to be followed. In that it is given that, the student should be allowed to the classes only if he is fully (double) vaccinated.
30. Already cleaning and sanitizing work has started in the hostel. In the hostel, kitchen renovation work is going on. A committee with staff members was framed to monitor the hostel and mess periodically.
31. Double vaccinated students alone are allowed to stay in the hostel. First one week they have to stay in the hostel room alone and next week they are permitted to move anywhere inside the campus, but not allowed to go outside the campus.
32. In hostel, it is planned that 1 or 2 students per room is allowed to stay if the room size is 5/4 = 20 sq m^2, it will be 2 members not more than that is banned.
33. Theory classes will be decided to continue through online mode itself and for practical classes 20 students per session are allowed to do practical by physical mode.
34. It will be decided whether the end semester exams may be either by physical mode / online mode during October first week by our authorities.
35. Regarding the fee payment, University allows the student to use installment basis fees payment method for the sake of parent's convenience.
36. The previous semester practical can also be planned to conduct during Sundays after the college work resumes for students.

The following are the points received by parent's discussion:

1. One parent thanked for being arranged on teachers' day, September 5th. Also, conveyed the gratitude to the staff members.
2. This is very good digital interactive session and informing all the updates is good.
3. He requested that along with soft skill practice, carrier growth class are also to be included. HOD answered that alumni and external experts are giving talks to motivate the students regarding this.
4. During the talk of one parent, lots of efforts are taken by the University for arranging aptitude classes, spoken English class, soft skill, even this year a special meeting for placement and number of motivational sessions. Thanks for all these initiatives.
5. The way of organizing the labs is really well and my doubt is, my ward vaccinated with one dose and he will be having the schedule for 2nd dose during November only, but I want to send him to college even if it reopens in the October itself. Any possibility? Sitting in the house will not give any knowledge. For the primary level it is ok. But for the next level they need the professors badly. HOD answered that the government norms and protocols of the University is strictly to be followed. Even for staff members also double vaccination is compulsory and circular regarding this already mailed to the staff.

6. Another parent says that thanks for the sincere efforts. Gives us confidence the way you explained about quarantine for 15 days in hostel and campus. The way to arrive these protocols and how you are ensuring the sanitation are giving assurance of comfort.
7. Also, he added, my prayer to give all the necessary strength so that every student get benefit by coming to college at the earliest.
8. During his speech he said, one madam, given comforts and taken care beyond her work to one student for that student's grandfather down with Covid 19. Heartfelt thanks to her and this service is to be continued by all.
9. HOD answered that we are treating the students as our children. We are for them; we appreciate if they achieve something and may scold sometimes for their betterment only.
10. Further HOD told that, during this period, a marvelous change has been done for cricket, football, volley ball courts, even Gym also. Honorable Vice Chancellor initiated this work and it seems to be an international playground.
11. Finally Dr.T.Lakshmibai proposed Vote of thanks.

HOD / EIE

27. MAINTENANCE OF STAFF RECORDS

Staff Leave Particulars

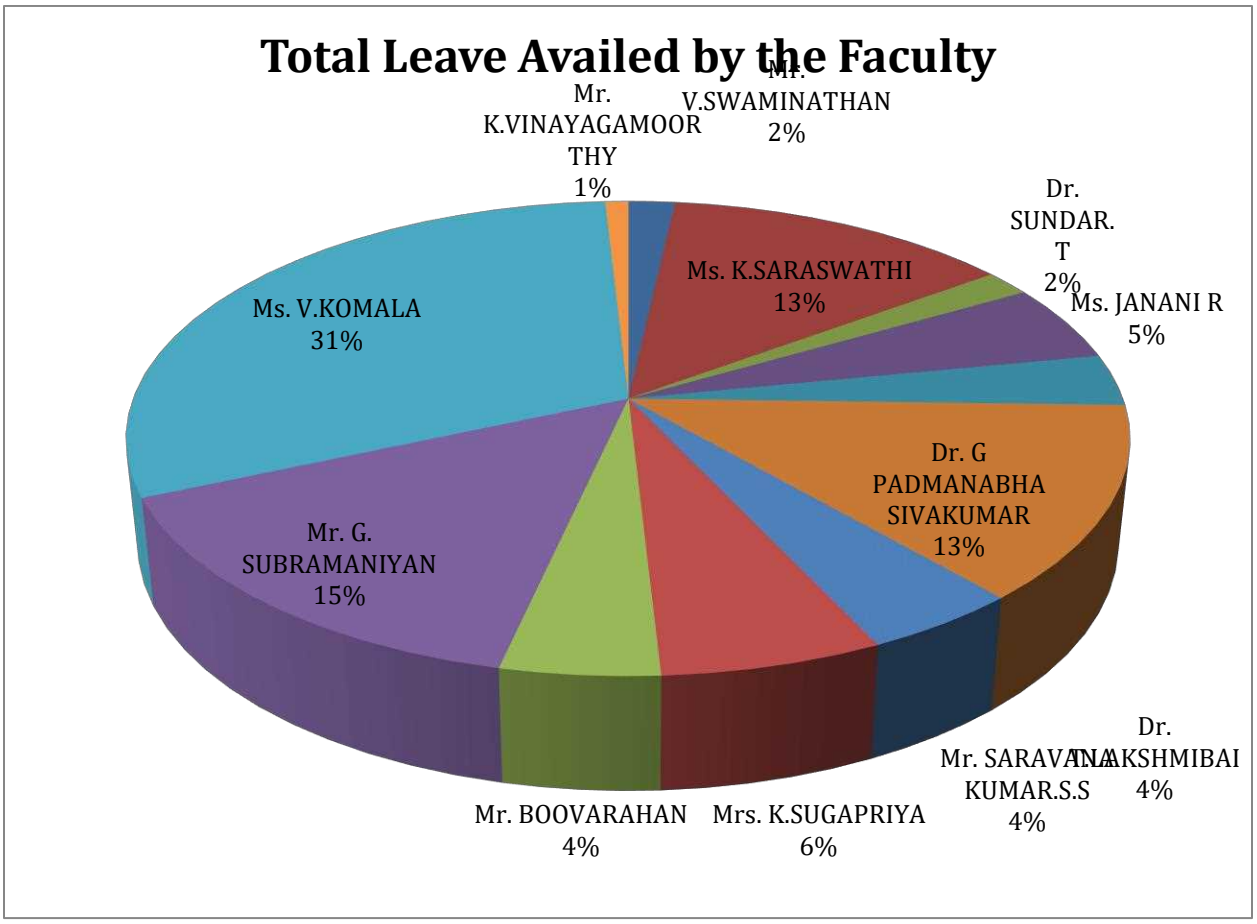
From 01/07/2021 to 30/06/2022

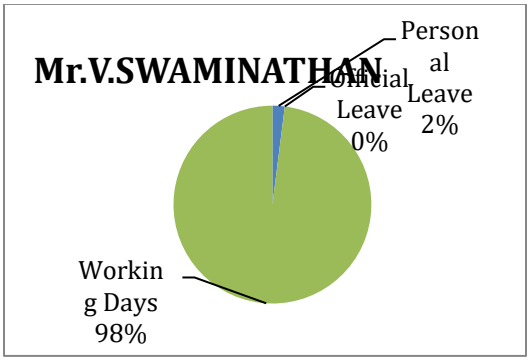
S. N	NAME	DESIGNATION	CL	EL	ML	RH	CH	OD	DL	PA	MA	VA	LOP	TOT
1	Mr. V.SWAMINATHAN	Associate Professor & HOD	2.0	-	-	-	-	-	-	-	-	-	-	2.0
	Ms. K.SARASWATHI	Assistant Professor (Stage-II)	5.0	10.0	-	-	-	-	-	-	-	-	-	15
3	Dr. SUNDAR.T	Assistant Professor	2.0	-	-	-	-	-	4.0	-	-	-	-	10
4	Ms. JANANI R	Assistant Professor	6.0	-	-	-	-	-	4.0	-	-	-	-	10
5	Dr. T.LAKSHMIBAI	Assistant Professor	4.0	-	-	-	-	-	-	-	-	-	-	4
6	Dr. G PADMANABHA SIVAKUMAR	Assistant Professor	6.0	9.0	-	1	-	-	-	-	-	-	-	16
7	Mr. SARAVANA KUMAR.S.S	Assistant Professor	5	-	-	-	-	-	-	-	-	-	-	5
8	Mrs. K.SUGAPRIYA	Assistant Professor	7	-	-	-	-	-	-	-	-	-	-	7
9	Mr. BOOVARAHAN	Assistant Professor	-	-	5	-	-	-	-	-	-	-	-	5
10	Mr. G. SUBRAMANIYAN	Sr.Lab Instructor	5	12.0	-	-	-	-	-	-	-	-	-	17
11	Ms. V.KOMALA	Lab Instructor	5.0	15.0	15.0	-	-	-	-	-	-	-	-	35
12	Mr. K.VINAYAGAMOORTHY	Lab Instructor	1.0	-	-	-	-	-	-	-	-	-	-	1

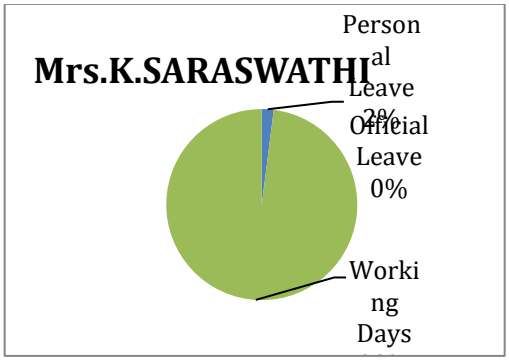
CL – Casual Leave, RH – Restricted Holidays, DL – Duty Leave, ML – Medical Leave, EL – Earned Leave, CH – Compensatory Leave, OD – On other Duty, LOP – Loss of Pay, PA – Paternity Leave, MAL – Maternity Leave, VA – Vacation, SL – Study Leave, WH – Weekly Off, TOT - Total.

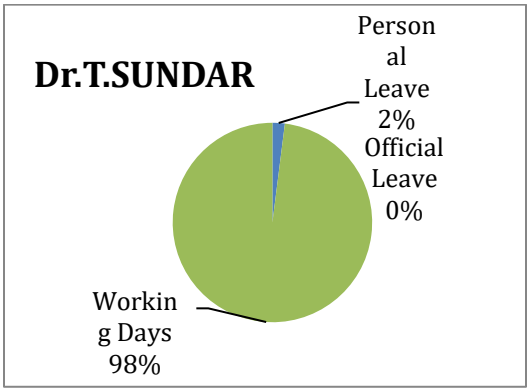
Signature of HOD

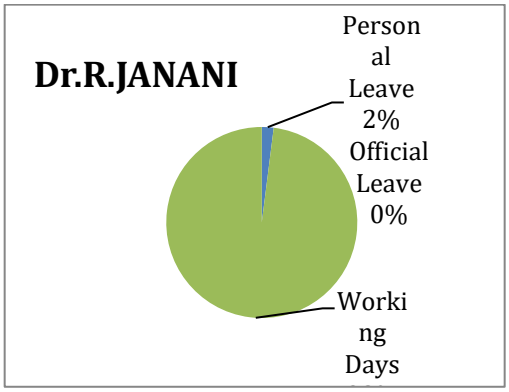
TOTAL LEAVE AVAILED BY THE STAFF

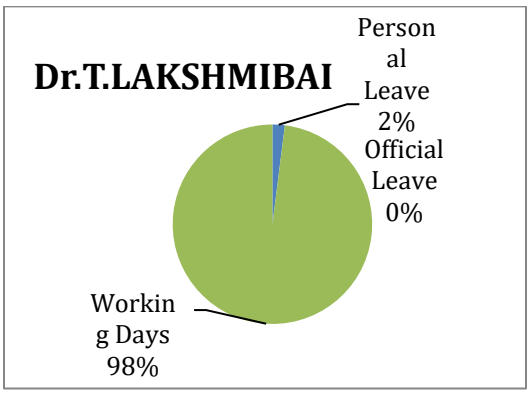


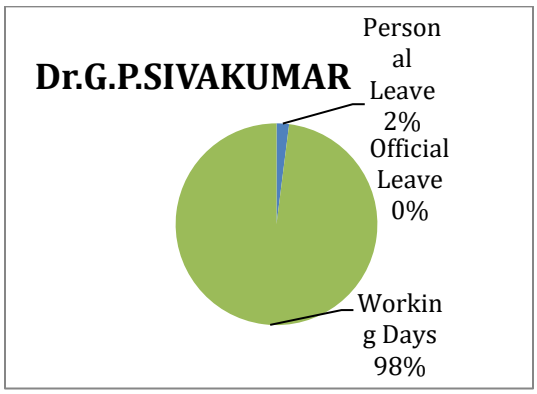

Mr.V.SWAMINATHAN
Personal Leave 2%
Official Leave 0%
Working Days 98%

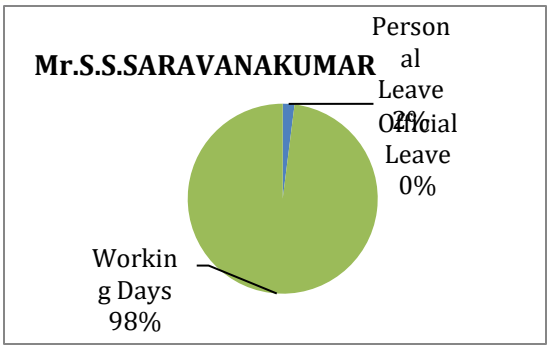

Mrs.K.SARASWATHI
Personal Leave 2%
Official Leave 0%
Working Days

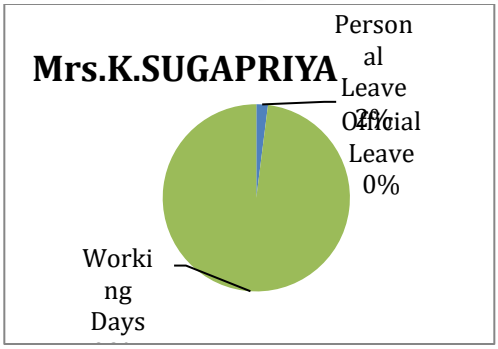

Dr.T.SUNDAR
Personal Leave 2%
Official Leave 0%
Working Days 98%

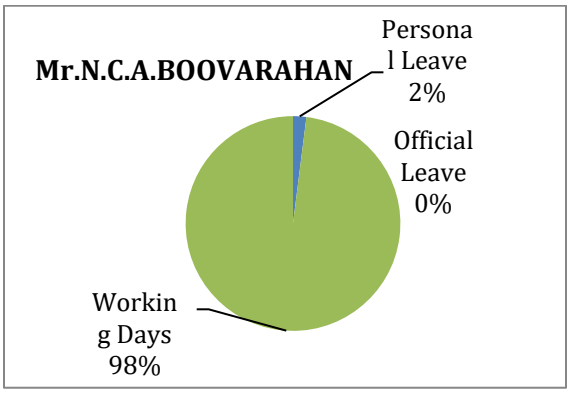

Dr.R.JANANI
Personal Leave 2%
Official Leave 0%
Working Days


Dr.T.LAKSHMIBAI
Personal Leave 2%
Official Leave 0%
Working Days 98%


Dr.G.P.SIVAKUMAR
Personal Leave 2%
Official Leave 0%
Working Days 98%


Mr.S.S.SARAVANAKUMAR
Personal Leave 2%
Official Leave 0%
Working Days 98%


Mrs.K.SUGAPRIYA
Personal Leave 2%
Official Leave 0%
Working Days


Mr.N.C.A.BOOVARAHAN
Personal Leave 2%
Official Leave 0%
Working Days 98%

28. WORK ALLOTMENT DETAILS

Academic Year – 2021 -2022

Sl.No	Year / Dept	Class in Charge & Mentor
1.	I Year Mechatronics	Dr.T.Sundar
2.	II Year Mechatronics	Dr.T.Lakshmibai
3	III Year Mechatronics	Mr.S.S.Saravana kumar
4	IV Year EIE	Mrs.K.Sugapriya
5	IV Year Mechatronics	Mrs.K.Sugapriya

HOD/EIE

29. MENTOR LIST

From,

Mr.V.Swaminathan,

The Head of the Department,

Department of Electronics and Instrumentation Engineering,

Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya,

Enathur, Kanchipuram – 631561.

Tamilnadu, India.

This is to certify that the number of mentors and number of students assigned to each mentor in the Academic year 2021-22 is as follows

Programme Code & Programme Name	B.E – EIE & Mechatronics
Number of students assigned to each mentor	5
Number of mentors	9

The complete list of mentors and students assigned to each mentor for the academic year 2021-2022 is enclosed.

Details

The approved list of mentors and their allotted mentees for the academic year 2021-2022			
S.No	**Mentor Name**	**Mentee Reg. No**	**Mentee Name**
1.	Mrs.K.Saraswathi	11189G001	KASHIGARI SRAVAN KUMAR
2.	Dr.T.Sundar	11219H001	P ANANTHA PADMANABBAN
3.	Dr.T.Sundar	11219H002	CHITTALURI SAI PHANICHANDRA
4.	Dr.T.Sundar	11219H003	DHULLIPALLA DATTA SAI
5.	Dr.T.Sundar	11219H004	SRI SAI SHRAVANI VOLETI
6.	Dr.T.Lakshmibai	11209H001	RAGHUL V
7.	Dr.T.Lakshmibai	11209H002	KUDARAVALLI VENKATA SAI LAKSHMAN
8.	Dr.T.Lakshmibai	11199H001	ADURI.HARI DATTA RAJA RAM
9.	Dr.T.Lakshmibai	11199H002	APPIKATLA VIJAY
10.	Dr.T.Lakshmibai	11199H003	T.V.S.AVINASH
11.	Dr.G.P.Sivakumar	11199H004	KAMATAM.BAAVESH REDDY
12.	Dr.G.P.Sivakumar	11199H005	S.BARATH KANNAA

13.	Dr.G.P.Sivakumar	11199H006	R.DEVANAND
14.	Dr.G.P.Sivakumar	11199H007	DINESH KUMAR.K
15.	Dr.G.P.Sivakumar	11199H008	G. LOHITH KUMAR
16.	Mr.S.S.Saravana Kumar	11199H009	G.SRI DURGA RAJESWARI
17.	Mr.S.S.Saravana Kumar	11199H010	HARI RAMANAN S
18.	Mr.S.S.Saravana Kumar	11199H011	JAMBULA JAYA SURYA REDDY
19.	Mr.S.S.Saravana Kumar	11199H012	K.SAI KALYAN
20.	Mr.S.S.Saravana Kumar	11199H013	MANU MAHAADEV G
21.	Mr.S.S.Saravana Kumar	11199H015	P.SAKTHIVEL
22.	Mr.N.C.A.Boovarahan	11199H016	SK. YASEEN
23.	Mr.N.C.A.Boovarahan	11199H017	SHRINIVAS A
24.	Mr.N.C.A.Boovarahan	11199H018	S.CHAITANYA VENKAT

25.	Mr.N.C.A.Boovarahan	11199H019	SRIHARI B R
26.	Mr.N.C.A.Boovarahan	11199H020	THAMARAI SELVAN .D
27.	Mr.N.C.A.Boovarahan	11199H021	ABHINAV KUMAR.V
28.	Mr.N.C.A.Boovarahan	11199H022	VENKAT ACHYUTH MANTRALA
29.	Dr.T.Sundar	11199H023	GURRAM SAI SANDEEP
30.	Mrs.K.Saraswathi	11189H001	ADITHYA MANOHAR RAVI
31.	Mrs.K.Saraswathi	11189H002	S ASWIN
32.	Mrs.K.Saraswathi	11189H003	BORLAA SIVAKALYANI
33.	Mrs.K.Saraswathi	11189H004	R S KAILASH
34.	Dr.R.Janani	11189H005	KAVVAM SAIJYOTHISH REDDY
35.	Dr.R.Janani	11189H006	KOVVALI N B S SUBRAHMANYA LOKESH PREETHAM
36.	Dr.R.Janani	11189H007	MOCHARLA RUTHVIK SAI
37.	Dr.R.Janani	11189H008	PILLALAMARRI SRINIVASA SANJAY
38.	Dr.R.Janani	11189H009	RAMANNAGARI NITISH
39.	Mrs.K.Sugapriya	11189H010	S RAVINNDHAR

40.	Mrs.K.Sugapriya	11189H011	REPALA KIREETI
41.	Mrs.K.Sugapriya	11189H012	SAMAYAM HEMANTH SAI
42.	Mrs.K.Sugapriya	11189H013	V SELVA KUMAR
43.	Mrs.K.Sugapriya	11189H014	SURIMANI NITEESH
44.	Mrs.K.Sugapriya	11189H015	ARUN KUMAR

HOD/EIE

V.SWAMINATHAN

30. DISPATCH REGISTERS AND OTHER ADMINISTRATIVE RECORDS

File no.	File Name	Left Rack no	Middle Rack no	Right Rack no
1.	Internal Marks	2	-	-
2.	Exam Time Table	2	-	-
3.	COE Circular /letter	2	-	-
4.	Nominal Roll	2	-	-
5.	Results (2009-13)	2	-	-
6.	Dean Circular	-	-	2
7.	Registrar Circular	-	-	2
8.	Dean Letter	-	-	2
9.	Technical Recommendation	1	-	-
10.	Indent	1	-	-
11.	Bills/Bills settlement	1	-	-
12.	Supplier List	1	-	-
13.	CAO Circular/ Letter	1	-	-
14.	Library Circular/book list	-	2	-
15.	BOS/Academic Council	-	2	-
16.	Class Time Table	-	2	-
17.	Conference/Seminar/Workshop	-	1	-
18.	Other Dept Circular	-	-	2
19.	Staff Personal	-	1	-
20.	Internal Circular	-	-	2
21.	Students Mentor	-	2	-
22.	Model Questions	4	-	-
23.	Budget	1	-	-
24.	UGC	-	2	-
25.	Syllabus-EIE	-	2	-
26.	Notice Board Circular	4	-	-
27.	Purchase	1	-	-
28.	BOM (HOD Room)	-	-	-
29.	Equipment Servicing Letter	-	-	1
30.	Department Activities	-	1	-
31.	Industry Visit Letter	-	1	-
32.	Quotations	-	-	1
33.	Lab Manuals/others	-	4	-
34.	Staff Attendance/CL/EL/ML/OD Forms	-	1	-
35.	Invitations/Poster	4	-	-
36.	All Stock Register	-	-	4
37.	Profile book & feedback book	3		

38.	Fees Challon Details		2	
39.	Student Attendance Details		2	
40.	Finance Officer Letter/Circular			2
41.	AICTE		2	
42.	Bonafide Letter		2	
43.	Students profile (2009-2013)		3	
44.	Dept. Library books Details(Library shelf)			
45.	Minutes of Meeting			2
46.	Guest Lecture Letters/Address			2
47.	Nodal officer Circular/letter/ Research&Publication/ SJCAR/ SJAC			2
48.	Results (2010-14 Batch)	2		
49.	NAAC		2	
50.	Guest Lecture Feedback		3	
51.	Industrial Visit Feedback		3	
52.	Bills, Purchase order/demo bill for lab			1
53.	Internal Test Questions		4	
54.	Physical stock	4		
55.	Resume-Teaching &Non-Teaching		1	
56.	Instrumentation Society		1	
57.	Students Profile(2011-15 batch)		3	
58.	Results (2011-2015 batch)	2		
59.	Parents' Permission letter for Educational Tour		1	
60.	AAVISHKAR	4		
61.	Anti-Ragging			2
62.	Elective Selection		3	
63.	Results(2012-2016)	2		
64.	Placement Circular/Letter			2
65.	Students Profile(2012-16 batch)		3	
66.	Task Force		3	
67.	Industry-Academia Meet	1		
68.	Consultancy			5
69.	List of Publications-Staff			5
70.	Circuit branch syllabus		2	
71.	Dept Guest Lecture /Seminar /Symposium/IV/FDP/All Functions. With Reference to Circular no:039/2013-14			5
72.	Staff Profile		1	
73.	Ph.D Details			3
74.	Curriculum Feedback		3	
75.	Student Feedback Information		2	
76.	B.E Mechatronics Details		2	

77.	Students Profile (2013-2017 batch)		3	
78.	Results (2013-2017)	2		
79.	Parents-Teachers Meet		2	
80.	Students Performs Report		2	
81.	Annual Report		2	
82.	Results-EIE(2014-2018 BATCH)	2		
83.	Results-MCT(2014-2018 BATCH)	2		
84.	National Conference EIE-NCICA		1	
85.	Research Scholar files			3
86.	Project Details			3
87.	Syllabus-ME-Electronic and Control		5	
88.	IQAC		5	
89.	Research Colloquium			3
90.	Staff official details			3
91.	Students profile/EIE-(2014-2018 batch)		3	
92.	Students profile/Mechatronics-(2014-2018 batch)		3	
93.	Admission Details			5
94.	Results-EIE(2015-2019 BATCH)	2		
95.	Results-MCT(2015-2019 BATCH)	2		
96.	Alumini Meet		3	
97.	Internship/In plant/Other Training Program			2
98.	Students profile/EIE-(2015-2019 batch)		3	
99.	Students profile/Mechatronics-(2015-2019 batch)		3	
100.	Certificate Course		2	
101.	International Conference		1	
102.	Results MCT (2016-2020 Batch)	2		
103.	Results EIE (2016-2020 Batch)	2		
104.	Students profile/EIE-(2016-2020 batch)		3	
105.	Students profile/Mechatronics-(2016-2020 batch)		3	
106.	Students profile/ EIE & Mechatronics-(2017-2021 batch)		3	
107.	MOU			2
108.	Students Feedback		3	
109.	Work shop /Robotics		1	
110.	Results- EIE (2017-2021 batch)	2		
111.	Results-Mechatronics (2017-2021 batch)	2		
112.	IEEE Project Expo		1	

113.	Students profile/ EIE & Mechatronics- (2017-2021 batch)		3	
114.	Results- EIE (2018-2022 batch)	2		
115.	Results-Mechatronics (2018-2022 batch)	2		

31. APPENDIX

APPENDIX - 1

SRI CHANDRASEKHARENDRA SARASWATHI

VISWA MAHAVIDYALAYA

SCSVMV

(Deemed to be University U/S 3 of UGC Act 1956)

Accredited with "A" Grade by NAAC

Enathur, Kanchipuram - 631561

REGULATIONS FOR

B.E (Electronics & Instrumentation Engineering)

FULL TIME PROGRAMME

CHOICE BASED CREDIT SYSTEM

(For Candidates admitted from the year 2014 onwards)

DEPARTMENT OF

ELECTRONICS & INSTRUMENTATION ENGINEERING

CHOICE BASED CREDIT SYSTEM FOR BE (EIE) FULL-TIME PROGRAMME

CREDITS

Theory courses: Courses with 4/3 credits will be assigned 3 Lectures and 2/1 Tutorial hours per week.

Practical courses: Courses with 2 credits will be assigned 3 hours of lab/practical work per week

Each semester curriculum shall normally have a blend of theory and practical courses. In the first year the total number of credits will be 25 for each Semester. For semester III to VII, the average credits per semester will be 25 and for semester VIII, the credits will be 18. For the award of the degree, a student has to earn a minimum of 196 credits.

DURATION OF THE PROGRAMME

A student is normally expected to complete B.E (EIE) programme in four years and in any case, not more than seven years from the time of admission.

REGISTRATION FOR COURSES

A newly admitted student will automatically be registered for all the courses prescribed for the first year, without any option.

All other students shall submit a completed registration form indicating the list of courses intended to be credited during the next semester. This registration will be done a week before the last working day of the current semester. Late registration, with the approval of the Dean on the recommendation of the Head of the Department, along with a late fee will be done, up to the last working day.

Registration for the project work shall be done only for the final semester.

ASSESSMENT

The break-up of Assessment and Examination marks for Theory subjects are as follows.

Continuous Internal Assessment comprising of tests, assignments, seminars, group discussion and attendance	:	40 Marks

End semester Examination	:	60 Marks

The break-up of the Assessment and Examination marks for Practical are as follows.

Continuous Internal Assessment comprising of tests, Observation, Record work and attendance	:	40 Marks
End semester Examination	:	60 Marks

The project work will be assessed for 40 marks by a Committee consisting of the Guide and the Head of the Department. The Head of the Department said be the Chairman. 60 marks are allotted for the project viva voce examination at the end of the semester.

WITHDRAWAL FROM A COURSE

A student can withdraw from the course at any time before a date fixed by the Head of the Department prior to the second assessment, with the approval of the Dean on the recommendation of the Head of the Department.

TEMPORARY BREAK OF STUDY

A student can take a one-time temporary break of study covering the current year/semester and/or the next semester with the approval of the Dean on the recommendation of the Head of the Department, not later than seven days after the completion of the mid-semester test. However, the student must complete the entire program within the maximum period of seven years.

SUBSTITUTE ASSESMENT

A student, who has missed, for genuine reasons accepted by the Head of the Department, one or more of the assessments of a course other than the end semester examination, may take a substitute assessment for any one of the missed assessments. The substitute assessment must be completed before the comment of the end semester before examination.

A student who wishes to have a substitute assessment for a missed assessment must apply to the Head of the Department within a week from the date of the missed assessment.

ATTENDANCE REQUIREMENTS

To be eligible to appear for the examination in a particular course, a student must put in a minimum of 80% of attendance in the course. However, if the attendance is 70% or above but less than 80% in any course, the authorities can permit the student to appear for the examination in the course on payment of the prescribed condonation fee.

A student who withdraws from or does not meet the minimum attendance requirement in the course must re-register for and repeat the course.

PASSING AND DECLARATION OF EXAMINATION RESULTS

All assessments of all the courses on the absolute mark basis will be considered and passed by the results passing board in accordance with the rules of the University. Thereafter, the Controller of Examinations shall convert the marks for each course to the corresponding letter grade as follows, compute the grade point average & cumulative grade point average and prepare the grade cards.

90 to 100 marks	-	Grade 'S'
80 to 89 marks	-	Grade 'A'
70 to 79 marks	-	Grade 'B'
60 to 69 marks	-	Grade 'C'
55 to 59 marks	-	Grade 'D'
50 to 54 marks	-	Grade 'E'
less than 50 marks	-	Grade 'F'
Insufficient attendance	-	Grade 'I'
Withdrawn from the course	-	Grade 'W'

A student who obtains less than 50 marks out of 100 in the subject or less than 24 out of 60 in External exam or is absent for the examination will be awarded Grade 'F'.

A student who earns a grade of S,A,B,C,D or E for a course is declared to have successfully completed that course and earned the credits for that course. Such a course cannot be repeated by the student.

A student who obtains letter grade F in a course has to reappear for the examination in that course.

The following grade points are associated with each letter grade for calculating the grade point average.

S – 10; A-9; B-8; C-7; D-6; E-5; F-0

A student can apply for revaluation of one or more of his /her examination answer papers within a week from the date of issue of Grade sheet to the student on payment of the prescribed fee per paper. The application must be made to the Controller of Examinations with the recommendation of the Head of the Department.

After results are declared, Grade cards will be issued to the students. The Grade card will contain the list of courses registered during the year/semester, the grades scored and the grade point average (GPA) for the year/semester.

GPA is the sum of the products of the number of credits of a course with the grade point scored in that course, taken over all the courses for the Year/Semester , divided by the sum of the number of credits for all courses taken in that year/semester. CGPA is similarly calculated considering all the courses taken from the time of admission.

After successful completion of the program, the Degree will be awarded with the following classification based on CGPA:

For First Class with Distinction, the student must earn a minimum of 196 credits within four years from the time of admission, pass all the courses in the first attempt and obtain a CGPA of 8.25 or above.

For First Class, the student must earn a minimum of 196 credits within five years from the time of admission and obtain a CGPA of 6.5 or above.

For Second Class, the student must earn a minimum of 196 credits within seven years from the time of admission.

ELECTIVES

Apart from the various Core courses offered in the curriculum of the branch of specialization, a student can choose a electives from a list of electives offered by the Department and from other Departments with the approval of the Head of the Department and the Head of the Department offering the course.

Examination Pattern for Sanskrit & Indian Culture paper

There will not be any External examination for Sanskrit and Indian Culture paper. Performance of students will be assessed through tests and assignments conducted by the same Department. The internal assessment pattern is as follows.

First test	30 Marks
Second test	30 Marks
Assignment (G.D + Seminar + Attendance + Class test)	40 Marks
	---
Total	100 Marks
Total Marks	100Marks
Passing Minimum marks	50%

In the last semester (B.E. - VI) marks are allotted for test (50) and project work (50). A Candidate shall be declared to have passed the examination, if he/she has secured a minimum mark of 50.

APPENDIX - 2

Fee Structure for Ph.D – July 2021/January 2022

Part Time - Mathematics, Management Studies, Education and Library & Information Science			
Fee Structure	**First Year**	**Second and Third Year**	**Fourth Year Onwards**
Admission Fee	Rs.2,000	-	-
Course Fee	Rs.25,000	Rs.25,000	Rs.25,000
Caution Deposit (Refundable)	Rs.10,000	-	-
Doctoral Committee Fee	Rs.15,000	Rs.15,000	-
Special Fee	Rs.2,000	Rs.2,000	Rs.2,000
Total Fees	Rs.54,000	Rs.42,000	Rs.27, 000

Part Time - Engineering, Physics, Chemistry, Computer Science Applications and Ayurveda			
Fee Structure	**First Year**	**Second and Third Year**	**Fourth Year Onwards**
Admission Fee	Rs.2,000	-	-
Course Fee	Rs.25,000	Rs.25,000	Rs.25,000
Caution Deposit (Refundable)	Rs.10,000	-	-
Doctoral Committee Fee	Rs.15,000	Rs.15,000	-
Special Fee	Rs.7,000	Rs.7,000	Rs.7,000
Total Fees	Rs.59,000	Rs.47,000	Rs.32,000

Other Fees	
Synopsis Submission – Rs.5,000 Thesis Submission – Rs.15,000 First / Second Extension of Period of Research– Rs.5,000	Thesis Resubmission Fees – Rs.15,000 Change of Guide / Category / Topic – Rs.10,000 Methodology Examination Fees – Rs.1000/- per paper

Part Time - Sanskrit, Tamil, Hindi and English and Full Time - All Departments			
Fee Structure	**First Year**	**Second and Third Year**	**Fourth Year Onwards**
Admission Fee	Rs.2,000	-	-
Course Fee	Rs.2,000	Rs.2,000	Rs.2,000
Caution Deposit (Refundable)	Rs.1,000	-	-

Doctoral Committee fee	Rs.5,000	Rs.5,000	-
Special Fee	Rs.2000	Rs.2000	Rs.2000
Total Fees	Rs.12,000	Rs.9,000	Rs.4,000

Other Fees

Synopsis Submission – Rs.2,500 Thesis Submission – Rs.7,500 First / Second Extension of Period of Research– Rs.2,500	Thesis Resubmission Fees – Rs.7,500 Change of Guide / Category / Topic – Rs.5,000 Methodology Examination Fees – Rs.500/- per paper

APPENDIX - 3

PUBLICATIONS OF STAFF MEMBERS

Journal of Xidian University https://doi.org/10.37896/jxu15.11/036 ISSN No:1001-2400

TUNING OF DECENTRALIZED PID CONTROLLER BY DECOUPLER FOR TITO SYSTEM

[1]K.Saraswathi and [2]Dr S.Vijayaraghavan
[1]Research scholar, Dept of EIE, SCSVMV University, Enathur Kanchipuram
[2]Assistant Professor, SCSVMV University, Enathur Kanchipuram Department of ECE.

Abstract

In a design based on the linear control has the action likes saturated range limits and the regions belongs the saturation points are neglected with an effect of integrator effects wind up unit. These results in the low- frequency oscillations and leads to instability and to reduce the possibility for saturation over the control signal with the linear quadratic optimal control schemes, which maximizes the error tracking and control signal over a weighted objective function. The proposed frame work helps with the design of new methodology like Multiple Input Multiple Output (MIMO) with the design of digital PID controllers with Multivariable system using analogous built with features such as the computational input time delay. The design structure uses Two Input Two Output (TITO) system, where the interaction effect between the loops can be minimized using the introduction of Decoupler.

The frame work is implemented using the MATLAB R2014b software. An output responses for the centralized and decouple were analyzed.

Keywords: decentralized, PID controller, TITO, MIMO, Cross Controllers

1. Introduction

The divide control architecture will be the predictable outcome of the decoupling and the controller system. The decoupler, together with single-circle controllers, integrates the multivariable controller. This course of action could be applied as another structure. Be that as it may, sometimes, connection between factors or framework elements can block the elaboration of one of past decentralized techniques, and plan details are not met [1]. The working and controlling of a non-connecting four tank framework which has been structured utilizing Lab VIEW and can be executed progressively by interfacing with Hardware's. The issues in a MIMO framework is it will non-direct and it will influence the Stability of the framework. The intention of decoupling is to compensate for the impact of communications induced by cross coupling of the procedure aspects [7]. The control of a nonlinear evaporator propeller unit, which is a 3x3 multivariable endeavor with remarkable connectivity, hard imperatives and rate limits forced on the actuators. A control by decoupling mechanism is adapted to organize a multivariable PID controller for this unit. The PID controller is gotten because of approximating a perfect decoupler including essential activity [3]. An expectation based computerized overhaul procedure is created to direction the full MIMO simple PID controller, to such an extent that the conditions of the carefully updated shut circle tested information framework with the MIMO advanced PID controller are near those of the comparably structured closed-loop systemwith the refined MIMO simple PID controller. The previously mentioned advanced upgrade procedure is additionally adjusted dependent on the prescient control strategy to adapt to MIMO simple frameworks with input delay [4]. Next, the ideally tuned MIMO simple controller is discovered utilizing the computerized upgrade technique. At last, the previously mentioned computerized update method is additionally stretched out with the prescient control procedure to manage MIMO frameworks having the computational input-delay. Therefore, by expanding the quantity of tests in that window, the proposed control calculation would be fit for joining data of output blunders and control input from past time tests into the development of the present control activity [5]. The PID parameters proposed by these techniques are continually tuned by the conduct of the reactions until some ideal reactions are accomplished. This paper portrays the MIMO System , PID Controller ,issues in MIMO Controller. Fundamental target to configuration, decoupling, plan of decoupler, decentralized controller structure of decoupled decentralized controller, plan of concentrated controller and correlation of Performance Indices. Next session 2 talks about the writing study, the session 3 examines about the plan of structure of TITO Systems, connections in TITO framework, and decentralized controller remains the predominant controller in industry applications. Session 4 examines about the outcome examination and end.

श्रीचन्द्रशेखरेन्द्रसरस्वतीविश्वमहाविद्यालयः
(विश्वविद्यालयानुदानयोगस्य १९५६ विधेः तृतीयविधिमनुसृत्य मानितविश्वविद्यालयत्वेन प्रकटीकृतः)
SRI CHANDRASEKHARENDRA SARASWATHI VISWA MAHAVIDYALAYA
(SCSVMV)
(Deemed to be University u/s 3 of the UGC Act 1956)
(Accredited with 'A' Grade by NAAC)
Enathur, Kanchipuram - 631 561.

REVIEW ON DESIGN OF RENEWABLE ENERGY SOURCE

T.SUNDAR
Assistant Professor
Department of Electronics and Instrumentation Engineering
SRI CHANDRASEKHARENDRA SARASWATHI VISWA MAHAVIDYALAYA
Enathur, Kanchipuram - 631561
sundart@kanchiuniv.ac.in

ABSTRACT

The requirement of renewable energy source is the vital need in the pandemic situation caused in the world. There is a need to control pollution caused by the non renewable Sources used to overcome the economical development. In this constraint there is a need to develop and design many more renewable source models of equipment used in the real time to achieve the needs of the public. Here a brief review on the existing renewable energy source developed is discussed and comparative study with its economical benefits was analyzed. The importance of renewable energy source should be extended to make the world with prosperity and natural living mode. To fulfill this criteria more and many optimal designs of renewable energy sources should be developed.

Keywords: Renewable energy, Optimization model, Sensitivity

1. Introduction

The world energy requirement depends to a large extention liquid petroleum. Estimates indicate the earth's oil reserves range from 1.75×10^{9} to 3.3×10^{9} t (Barbieri and Ferracci, 1999). Though only about one-third of the reserve has been extracted and consumed, yet a pessimistic picture indicates that 50% of the reserve would be consumed, shortly after the turn of the century(WEC, 1998). And more so, increased utilization using commercial sources in a highly populated country like India and China, result in a considerable amount of emission. To avert the negative impact of commercial energy source utilization, alternate sources need to be identified. India, a tropical country with a vast geographical area is richly endowed with renewable energy sources like solar, wind, and biomass. The contribution from renewable energy sources was around 65% during the early 1950s. Over the years, renewable energy consumption has been steadily declining and in 1997-1998, the contribution from renewable energy sources was around 35%. Forest defined as woodlands with more than 10% crown cover occupy about 20% of the Indian land area. Deforestation has led to a major decline. About one-fifth of the forests standing today are extremely degraded. Half a million hectares or 0.8% of total forest area was deforested in 1986. To counteract this, India has a rapidly growing afforestation programme. The afforestation activities resulted in a total of 11.5 million hectares as of 1986. An- other 5.6 million hectares were afforested between 1986 and 1989 raising the total planted area to 17.1 million hectares. This could be one reason for the declining trend in renewable energy utilization. The other reasons being ready availability of the commercial sources at a subsidized rate, easy maintainability and continuous supply. If the present trend continues, it is expected that by 2020-2021, the contribution from renewable energy sources would be only 15%. Attempts are being made to find strategies for increased utilization of renewable energy sources. The India's Energy Challenge is shown in Figure 1.

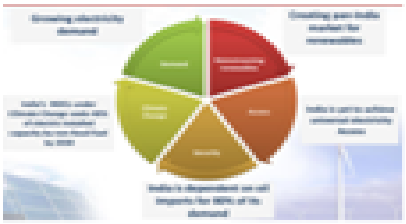


Fig.1 India's Energy Challenge

श्रीचन्द्रशेखरेन्द्रसरस्वतीविश्वमहाविद्यालयः
(विश्वविद्यालयानुदानयोगस्य १९५६ विधेः तृतीयविधिमनुसृत्य मानितविश्वविद्यालयत्वेन प्रकटीकृतः)
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29th and 30th October 2021

Electric Vehicles Charger Implementation and Analysis

T. Sundar

Department of Electronics and Instrumentation Engineering
Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya
Enathur, Kanchipuram – 631561, Tamilnadu, India
sundart@kanchiuniv.ac.in

Abstract

The development of eco friendly behavior to survive is the essential need in global world. The eco friendly behavior is lacking in present situation, which should be developed is the necessary need of today to ensure the future world existence. The main cause of the non eco friendly behavior is due to the pollution which exploited the nature resources lead to many distractions in the global. It is the need to control pollution and to save the nature to have healthy and prosperous future, in content of this here a briefly discussion on renewable sources such as electric vehicle technologies and fuel cell batteries used as efficiencies charging methods. Many types of charging methodology and batteries used in electric vehicles and implemented are discussed. Different types of technologies used in various model of vehicles and there charging levels according to the need is discussed and tabulated.

Keywords: Electric vehicle, Plug-in electric vehicles, Battery charger, Charging infrastructure, Vehicle-to-grid, Grid-to- vehicle, Charging methods.

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Study and Simulation Design of various Three Mode Controller for an Interacting System

Janani R[1]

[1] Assistant Professor – Electronics and Instrumentation Engineering, Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Enathur, Tamilnadu

Abstract: The main objective of this research work is to study the various conventional three mode controller algorithm for an interacting and non-interacting liquid level two tank system. For controlling any chemical process, a mathematical model is identified, suitable controller is designed and simulated to get the desired process behaviour. For this purposes, a lab scale interacting and non-interacting liquid tank system is considered. The mathematical transfer function model is obtained and various conventional PID controller algorithm are simulated, the efficiency of the methods are demonstrated in simulation using Matlab/Simulink software. The closed loop performance measure are calculated and tabulated. The simulation results shows that the conventional PID controller algorithm has good setpoint tracking and performance

Keywords: interacting system, non-interacting system, conventional PID, SISO system.

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Design and Development of Automatic Water Dispenser using Arduino

Dr. T. Lakshmibai[1], Borlaa. Sivakalyani[2]
[1]Assistant Professor, Department of EIE, Sri Chandrasekarendra Saraswathi Viswa MahaVidyalaya, (SCSVMV), Kanchipuram, Tamil Nadu, India
[2]Student, Department of EIE, Sri Chandrasekarendra Saraswathi Viswa MahaVidyalaya, (SCSVMV), Kanchipuram, Tamil Nadu, India

ABSTRACT

Water pumps are very useful for the water supply. In 1700s wooden pumps are used for the water supply, and then metal piston type pumps came into existence in mid 1800s. The first submersible pumps are used in 1920s, whereas in 2020s the automated pumps changed the people's life easier. This proposed Automatic Water Dispenser system performs a series of functions like controlling the water level, displaying the level of the water in the tank, indicating the value of water temperature, and automatic ejection of water.

Automatic Water Dispenser contains a temperature sensor, Arduino and 2 Ultrasonic sensors one for water level measurement and other to sense the presence of the water container. This proposal is built to assists the users in day-to-day activity.

The sensor senses the Container (object) which is placed in front of it. The sensed signal is applied to the Arduino to execute a program that operates a motor which runs the water dispenser machine accordingly. The sensed temperature of water and its level will be displayed simultaneously in the LCD panel also. The proposed system is more efficient and reliable. If all the manual taps are replaced with a smart one that opens and closes automatically, will not only save the water but also provides a healthier lifestyle, since the tap won't be touched by human hands. So, the AutomaticWater Dispenser using Arduino can automatically supply water when a glass is placed below the tap.

Keywords: Arduino Nano Micro controller, Temperature sensor LM35 &Ultrasonic sensor, float sensor,Relay, DC motor.

I. INTRODUCTION

In day to day life intelligent systems are used in a wide range and these are embedded in design. There are some physical elements which are needed to be controlled in day to day life in order for them to perform their expected task. The Automatic water dispenser has a series of functions to maintain each parameter of water such as water level, showing thevalue of temperature & level of water and automatic water ejection. A control system therefore can be defined as a device or set of devices that manages, commands, directs or regulates the

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Solar Tracking Scheme with Panel Cleaning Arrangement for Effectual Power Generation

T.Lakshmibai

Sri Chandrasekharendra Saraswathi Viswa MahaVidyalaya

ABSTRACT

The main objective of the paper is to give an innovative idea to tackle the energy demand in the growing countries. Renewable sources of energy are solar, wind and geothermal which are inexhaustible. Solar energy is used for several applications indeed which is abundant in nature. Solar energy is harvested using solar panels, but its efficiency can be affected by the factors like dust, temperature and humidity etc., Solar Panel's electrical parameters are more sensitive to dust density formed on the panel surface and will affect the energy transmission thereby reduces the efficiency. To mitigate this problem, it is essential to clean the panels at regular intervals. Hence dust cleaning arrangement is proposed which consists of IR LED, Photo diode is used to remove the dust formed in the panel. By taking voltage and current values of the panel with and without dust for several days, weeks and months. Efficiency comparison is made with the noted values. The proposed cleaning model incorporates effective, non-abrasive cleaning which avoids variances in the solar power generation due to the dust deposition on the panel. By the regular cleaning, the average efficiency is increased around 1.6 to 2.2% is increased. Thus, the proposed model increase the efficiency.

Keywords: Arduino MEGA, Photovoltaic (PV) panel; Solar Tracking scheme, Sensors, Humidity & Temperature (DHT 11) Sensor, NodeMCU (IoT)

INTRODUCTION

Arduino based automatic solar panel cleaning system is for those area where dust effect on solar panel. The reasons the efficiency of solar energy can be decreased is such that dust from environment, bird shit or any other small obstruction. The system will clean the solar panel as per the preprogrammed schedule.

As designed, the motor will convert electrical power into mechanical output which will rotate the iron frame and coupling point. By rotating automatically it will clean the solar panel for a certain period of time. For the first step the wiper will move to forward side of the solar panel and after that it will reverse back to the solar panel. Then it will take a delay time of 24 seconds in our prototype model (which will take 24 hours in real implementation). After that the system will again clean the solar panel by following the above methodology. User can change the delay time of cleaning system as per required time the system will run. The system will run with Arduino based software code in which the delay time can be increased or decreased.

PROPOSED SYSTEM MODEL

The maximum efficiency of a solar panel is extracted using two combined techniques. The first one is to implement with a microcontroller-based Solar-tracking system. The system checks the position of the sun and controls the movement of a solar panel so that radiation of the sun comes normally to the surface of the solar panel and the second is to install an MPPT charge controller which makes the inverter to work at maximum power point. So that under any climatic conditions maximum power is extracted. By this way efficient use of both solar panel and solar-energy from sun is achieved.

Proposed scheme aims for extracting maximum power from solar panel by using light sensors (LDR'S). From the status of LDRs the panel rotates with the help of 3.5V dc motor to the direction where the sunlight is more. The output from panel is derived to an DC-DC Boost Converter which is used to increase the voltage without change in current rating there by increasing the battery charging condition. The battery storage can be utilized to drive loads in case of failure of supply and used in day times from panel after boost converter. The panel is also provided with temperature and humidity (DHT 11) sensor, Voltage and Current sensors. The sensors sense the respective parameters and the obtained data is sent to the monitoring unit as well as displayed on LCD screen. When the Temperature is high enough the microcontroller switch on the Fan by using the power derived from the solar Panel. The whole setup is provided by a dust sensor which senses the dust on the panel. The dust sensor and LDRs used in the proposed system helps to increase the efficiency of the solar panel.

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Mathematical Modelling and analysis of VSI fed Induction motor drive using PSIM software

T. LAKSHMIBAI
Assistant Professor, Department of Electronics and Instrumentation Engineering,
Sri Chandrasekharendra Saraswathi Viswa Mahavidyalaya, Kanchipuram. 631561,
Tamilnadu, India.

Abstract: *Almost all industries use induction motor with variable speed drive for their applications. Three phase induction motors are well suited for all the loads both for constant speed and adjustable speed for their efficient operation. The main aim of this paper is to elaborate the speed control method for three phase induction motor using power electronics inverters. A mathematical model for adjustable speed induction motor drive fed from Voltage Source Inverter was designed and the performance was analysed by simulating the proposed model using PowerSim (PSIM) software. Stator Voltage control method is used as induction motor speed control and is easily achieved by using PWM Voltage source inverter. Simulation results are attained by using PSim software for the efficacy of the proposed model. The performance analysis of three phase induction motor fed by VSI was done in terms for Three phase currents, torque and speed waveforms and VSI output voltages by simulating the circuit in the PSim software.*

Keywords: *Power Sim (PSim) software, Voltage source Inverter, Three Phase Induction motor, speed.*

1. INTRODUCTION :

A circuit which converts dc power into ac power with chosen output voltage and frequency is termed as an inverter [1-2]. Inverters are mainly used for industrial applications for varying speed ac drives, stand-in power supplies for aircraft, UPS for computers, HVDC transmission lines etc. [3]. Inverters can be generally classified into two types.

1. Voltage Source Inverter (VSI) 2. Current Source Inverter (CSI)

In VSIs that are using thyristors requires forced commutation for turn off process. But VSIs those are built with GTOs, power transistors, power MOSFETs or IGBTs are using self-commutation with base or Gated drive signals working for the turn on and turn off control. [4-5].

MATLAB/Simulink model is used in this paper to derive a switching function model for voltage source inverter [7]. For designing Pulse Width Modulated (PWM) inverter Modulation function theory is applied that effectively utilizing Iterative Harmonic and Inter harmonics Analysis (IHIA) [8]. The steady state and dynamic characteristics are compared with the standard three phase induction motor by simulating the designed model with Matlab/Simulink [9]. The squirrel cage induction motor characteristics is tested with three methods viz measurement of stator resistance, Induction motor modelling and rotor side [9]. This is simple and cost benefit method [10].

2. MODELING OF VARIABLE FREQUENCY DRIVE :

Three Phase Induction Motor:

Linear and nonlinear models are provided for squirrel-cage and wound-rotor induction machines. The linear model for Symmetrical 3-phase squirrel-cage induction machine is described.

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Comparison of Class E & Class F3 amplifier Induction Heating systems

G. Padmanabha Sivakumar

[1]Assistant Professor, EIE Department, Sri Chandrasekharendra Saraswathi Viswa Maha Vidyalaya

Abstract - This document deals with the modelling, simulation and comparison of class E and class F3 amplifier systems. The power frequency AC is converted into DC using diode rectifier with c-filter. The voltage across the capacitor filter is applied to class E/ class F3 amplifier system. The circuit parameters of class E and class F3 are designed and simulation studies are performed. The results of the above mentioned systems are compared in terms of output power and THD. The simulation results indicate that the performance of class F3 amplifier system is superior to class E amplifier system and class F3 amplifier has advantages like single power switch and higher output power.

Key Words: Induction Heating, Dynamic Response, Zero Voltage Switching (ZVS), Power Amplifier.

1.INTRODUCTION

The non-optimum operation of the amplifier occurs when the zero-voltage switching (ZVS) condition is satisfied, but the zero-voltage-derivative switching (ZDS) is not equal to zero at the switch turns ON instant. The concept of nonoptimum operation of the Class-E amplifier was defined in the beginning of the Class-E history [3][5]. The first research on non-optimum operation has been done by Raab [7]. In this paper, the degree of freedom for the design amplifier was increased, and the ZDS condition was removed. The mixed-mode power amplifiers are the good choice for obtaining high-power and high-conversion efficiency. The optimum conditions of the mixed-mode power amplifier families with a shunt capacitor have been presented in [9]–[10]. But the exact analysis on switch mode PAs are not presented. However, all of the Class-E/F amplifier analyses focus on how to achieve the optimum operation. Many power electronic devices only need to ZVS or zero-current switching (ZCS) condition [1]. In order to reach a Class E/F power amplifier with good performance, some methods have been suggested and implemented. The first method employs the push/pull topology to Class E/F in order to short odd harmonic like inverse Class F (demonstrated Class E/F PA). This configuration improved the amplifier performance such as maximum operating frequency and caused the reduction of maximum switching voltage to have maximum output power capability [11], which only in the ZVS is considered. But the non-optimum condition in the push/pull topology is considered with linear shunt capacitance. The second method is harmonic tuning in which a resonance network is inserted between the aforementioned methods, some Class E/F amplifiers consist of resonance networks tuned at nonharmonic frequencies.

In this paper, the simulink results of the Class-E/F3 power amplifier with a shunt capacitor at the non-optimum operation are presented. For the verification of our analytical expressions, design examples of the Class-E/F3 ZVS amplifier are presented. The design equations, switch, and output waveforms are obtained as a function of the phase shift and DC supply voltage. By changing the peak switch voltage and the peak switch current, the phase shift is changed, so these two parameters canbe considered as a design specification.

The analytical results are in good agreement with the measurement and simulation results. For nonoptimal operation, design instructions for one type of Class E/F3 amplifier are provided. The design specifications in this example are operating frequency, input DC supply voltage, load resistance, and peak switch voltage. Only three factors, such as operating frequency, input DC supply voltage, and load resistance, can be specified in the nominal circuit. The example procedures offered here, on the other hand, include four parameters. In the design process, other parameters such as peak switch voltage or peak switch current might be considered. The MOSFET is used to create this power amplifier. The MOSFET has been demonstrated to be a proper device from the standpoint of breakdown voltage.

2. IH System

The block diagram of the existing induction heating system is shown in the Fig1. DC is converted into high frequency AC using class-E amplifier.

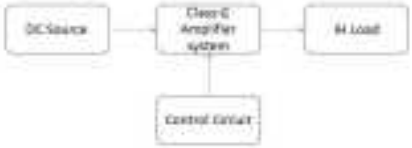

Fig -1: Block diagram of the Class E amplifier IH system

The block diagram of proposed system is shown Fig2. Low frequency AC is converted into DC using the uncontrolled rectifier. The output of the rectifier is converted into high frequency AC using the class F3 amplifier.

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Voice Controlled Multipurpose Robot with UV Sterilizer

G Padmanabha Sivakumar[1], K Sai Jyothish[2]

[1]Assistant Professor, EIE Department, Sri Chandrasekarendra Saraswathi Viswa Maha Vidyalaya [SCSVMV], Kanchipuram, India
[2]Mechatronics Engineering, Sri Chandrasekarendra Saraswathi Viswa Maha Vidyalaya [SCSVMV], Kanchipuram, India

ABSTRACT

Last year, the whole world suffered from a coronavirus outbreak. Outbreaks of the virus are highly contagious and life-threatening. One of the key steps to contain an outbreak of infectious disease and combat a pandemic is the disinfection of contaminated surfaces. Maintaining a safe and clean public space can be very difficult, especially if different people are frequently exposed to emotions. Public areas and high five surfaces are manually disinfected with a handheld disinfectant. Manual disinfection is labor intensive and increases the risk of infection when the cleaning agent is exposed to a contaminated surface. Robots can be used for disinfection. Disinfection of contaminated surfaces by robots is efficient, reduces the risk of infection and avoids the cost of manual cleaning. Excessive use of strong disinfectants can also cause serious health problems. This pandemic has led us to design and build safe, human-friendly mobile UVC disinfection robots for public and personal use. UVC rays can reach tight spaces that can easily be overlooked during manual cleaning. Disinfection robots provide an efficient and effective solution for disinfecting high-risk and high-contact surfaces without the need for human intervention.

I. INTRODUCTION

Primarily, being a fantasy and acts to nurture a machine that believes like a human being. Therefore, speech and recognition of respondents can be an important part of this fantasy. This fantasy becomes relatively realistic, including the expansion of terms and the investigation of false rational facts. The goals of this project play an important role in bringing imagination. Mastering the device and atmosphere, including speech, makes human life the simplest and easiest. The project can be a simple design for this retreat. This voice is received by the arm, processed, sent to the robot, and finally output. Basically, language is used for the nature of people. With the recent development of communication technology, language is becoming important in many ways. In the end, some interfaces went up more than necessary. We are just talking about communicating with computers. The project also explains that the ultimate goal of disinfection and sterilization is to inactivate or eliminate microorganisms and avoid the spread of airborne and infectious diseases.

Contaminated surfaces increase the risk of transmission of the disease by contact or spread of the pathogen through the air. Proper disinfection and sterilization will help reduce the potential for transmission of the disease. Surface disinfection plays an important role in disease prevention and infection. Effective and frequent disinfection of the environment ensures a safe life. Ultraviolet light is one of the best solutions for disinfection. Surface disinfection in hospitals and elsewhere is a very prominent example of UV germicidal irradiation (UVGI). UVC lights have a wide range of uses in the fields of disinfection and hygiene [20]. One of the prominent uses of UV light is the sterilization of surgical and medical devices. Low pressure mercury lamps, which are a cheaper method for producing disinfectant UV light, can also be used for this purpose. However, due to the high frequency of replacement, using UV light is economical and environmentally friendly. The UV emission spectrum is divided into three regions called UVA, UVB, and UVC. Nevertheless, UVC radiation has a wavelength of 100280 nm and its energy is large enough to destroy bacteria, so it is used in the process of sterilization. UVC light is so useful in the field of sterilization that it can be used as an important factor in fighting the new coronavirus.

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Automatic Floor Cleaning Robot Using Arduino

S. S. Saravana Kumar

Assistant Professor
Sri Chandrasekharendra Saraswathi Viswa Maha Vidyalaya (SCSVMV University).

ABSTRACT

In the modern era, the Automatic Floor Cleaner is required. Thus, the cleaner is designed in such a way that it is capable of cleaning the area reducing the human effort just by starting the cleaning unit. This paper explains the way to build and program so that the robot can move around freely and clean a specific area. It cleans the floor using brushes attached with the motor and with help of cleaning fluid while moving. It uses Ultrasonic sensors to detect the obstacles and hence change its direction while moving and also preventing the cleaner to fall from height. This paper details the development of Automatic Floor Cleaner. The project is used for domestic and industrial purpose to clean the surface automatically. When it is turned ON, it starts cleaning while moving all around the surface (floor or any other area) as it passes over it.

Keywords:Aurduino, Google Assistant,SSID,Blynk.

1. Introduction

Automation is part of every economy whether developing or developed nations. It facilitates dynamics in the field of technology and so automation is an inevitable and necessary part of every country. In order to overcome the time and human intensity associated with floor cleaning automated floor cleaning systems have been purposed. This paper discuss the automatic floor cleaning process using obstacle avoidance principle with the help of ultrasonic sensor and Arduino UNO. The controller is used to drive the motors and the cleaning units and a three sensors are used to avoid the obstacles. This can be useful in improving the lifestyle of mankind and also be extended to vacuum cleaning.

2. System Model

Arduino UNO

The Arduino UNO is a standard board of Arduino. Here UNO means 'one' in Italian. It was named as UNO to label the first release of Arduino Software. It was also the first USB board released by Arduino. It is considered as the powerful board used in various projects. Arduino.cc developed the Arduino UNO board. Arduino UNO is based on an ATmega328P microcontroller. It is easy to use compared to other boards, such as the Arduino Mega board, etc. The board consists of digital and analog Input / Output pins (I/O), shields, and other circuits. The Arduino UNO includes 6 analog pin inputs, 14 digital pins, a USB connector, a power jack, and an ICSP (In-Circuit Serial Programming) header. It is programmed based on IDE, which stands for Integrated Development Environment. It can run on both online and offline platforms.

Ultrasonic Sensor

Ultrasonic sensors (also known as transceivers when they both send and receive) work on a principle similar to radar or sonar which evaluate attributes of a target by interpreting the echoes from radio or sound waves respectively. Ultrasonic sensors generate high frequency sound waves and evaluate the echo which is received back by the sensor. Sensors calculate the time interval between sending the signal and receiving the echo to determine the distance to an

* S. S. Saravana Kumar. Tel.: +91 99405 17232.
E-mail address: sssk.saravana@gmail.com

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Advanced Foot Step Power Generation System

S. S. Saravana Kumar

Assistant Professor
Sri Chandrasekharendra Saraswathi Viswa Maha Vidyalaya (SCSVMV University).

ABSTRACT

The production of electric power from the foot step movement of the peoples and the pressure exerted during walking which is fritter away, is the main theme of this paper. The mechanical power transformation into electrical power as the pressure exerted by the footstep and by using transducers is basically called as "Foot step power generation system". Power is produced by the power generating floor and it is basically the production of electrical energy from kinetic energy. As today electricity demand is increasing and it is unable to overcome this global issue by using the traditional power generating sources. Demand and supply gap is the major issue of energy crisis. The main aim is to overcome the power crisis throughout the world although it is not enough to fulfill over excessive demand of electrical energy but it will be able to change and decrease reliance on old method of generating electricity. This system can be installed at homes, schools, colleges, where the people move around the clock. When people walk on the steps or that of platform, power is generated by using weight of person. The control mechanism carries piezoelectric sensor, this mechanical energy applied on the piezoelectric crystal into electrical energy. When there is some vibrations, stress or straining force exert by foot on flat platform. It can be used for charging devices.

Keywords:Piezoelectric sensor, IN4007, LM7805 & LED, Relay, Lead Acid Battery.

1. Introduction

The aim behind the work is to install a power generating system in order to overcome the power crisis throughout the regions. Human power transport has been in existence since time immemorial in the form of walking, running & swimming. However, modern technology has led to machine to enhance the use of human power in more efficient manner. In this context, pedal power is an excellent source of energy and has been in use since the 19'th century making use of most powerful muscles in the body. 95% of the exertion put into pedal power is converted into energy. Pedal power can be applied to wide range of job is a simple, cheap and convenient source of energy. However, human kinetic energy can be useful in a nos. of ways but it can also be used to generate electricity based on different approaches and many organizations are already implementing human power technologies to generate electricity to power small electronic appliances. Piezoelectricity is the electric charge that accumulates in certain solid materials in response to applied mechanical stress.

In this paper, piezoelectric sensor is most important thing and plays a vital role in the smart systems development. It has become an essential part in the current day to day technologies. This article discusses about foot step power generating system using piezoelectric transducer. This system is responsible for power generating system based on piezoelectric effect.

2. System Model

To give better voltage and current, three PZT are connected in series .A force sensor and voltmeter is connected to this series combination. As varying forces are applied on this connection and corresponding voltages are noted. Voltage and current generated across the series connection is measured. The voltage and current generated across the parallel connection is measured. From series connection obtained current is poor and from parallel connection obtained voltage is poor. To overcome this problem rectifier in series-parallel connection is used.

* S. S. Saravana Kumar. Tel.: +91 99405 17232.
E-mail address: sssk.saravana@gmail.com

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Textile UWB 5G Antenna for Human Blood Clot Measurement

K. Sugapriya* and S. Omkumar

Sri Chandrasekharendra Saraswati Viswa MahaVidyalaya, Kanchipuram, Tamilnadu, 631561, India
*Corresponding Author: K. Sugapriya. Email: priya_k842005@yahoo.co.in
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Abstract: The antenna plays an essential role in the medical industry. The short-range 5th Generation (5G) communication can be used for seamless transmission, reception, patient monitoring, sensing and measuring various processes at high speeds. A passive Ultra Wide Band (UWB) antenna, used as a sensor in the measurement of Prothrombin Time (PT) i.e., blood clot is being proposed. The investigated micro-strip patch UWB antenna operating in the frequency range of 3.1 to 10.6 GHz consists of a circular patch with a diamond-shaped slot made of jeans substrate material with good sensing properties is accomplished by adjusting the copper thickness of the patch. Due to the turbidity in blood plasma, PT measurement is the repetitive approach to get accurate value. In order to solve this issue, an antenna is designed, fabricated and analysed to obtain the accurate PT measurements from blood plasma. The blood clotting is observed by electromagnetic emitted voltage converted into the frequency range of 5 to 10 GHz and voltage range of 0.66 to 0.87 mV. The circular UWB antenna is constructed employing jean's substrate with a partial ground plane to improve the S-parameter, gain,

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SRI CHANDRASEKHARENDRA SARASWATHI VISWA MAHAVIDYALAYA
(SCSVMV)
(Deemed to be University u/s 3 of the UGC Act 1956)
(Accredited with 'A' Grade by NAAC)
Enathur, Kanchipuram - 631 561.

Tuning of dual frequency resonance analysis of circular and rectangular patch UWB antenna used for wireless sensor networks

K. Sugapriya
Research Scholar, SCSVMV, Kanchipuram, Tamilnadu, India
Email: dhivyasuga@gmail.com

S. Omkumar
Asso. Prof. /ECE, SCSVMV, Kanchipuram, Tamilnadu, India
Email: omkumar1234@gmail.com

Abstract---In our modern digital world, communication plays a most important role in research of new designs and novel findings. The proposed analysis is based on Ultra-wide band microstrip patch antenna with two methods of circular and rectangular patch. The design analysis and comparison of various antenna parameters are used for wireless sensor networks. The V-shaped slot is introduced on top of the circular patch and the horizontal T-shaped slot on rectangular patch using jeans substrate material, the design gives good resonance frequency of 9.5GHz and 7.7GHz for wireless communication networks. At resonance the receiver of UWB antenna has a frequency sensing element and the antenna parameters were analyzed using High Frequency Structural Simulator. From the analysis, gain of an antenna, VSWR, return loss as well as radiation pattern, Specific Absorption Rate SAR values are in the acceptable range. The VSWR value of both rectangular and circular patch is 1.05, return loss below -11dB determined in order to avoid surface wave propagation, the specific absorption rate SAR value should be below 2W and gain of each antenna consists of positive value. Hence the antenna meets the requirement suitable for wireless sensor network application.

Keywords---UWB, T-slot, Specific Absorption Rate value and Jean's substrate.

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Security Characteristics of 5G Communication Networks

N.C.A.Boovarahan

Assistant Professor , SCSVMV Deemed to be University, Enathur , India, 631561.

ABSTRACT

5G will deliver ubiquitous internet services, enabling huge IoT connectivity, and delight users and gadgets with high mobility in an ultra-reliable and cost-effective manner. The shift to IP-based communication in 4G has already aided the development of new business opportunities; however, 5G is viewed as a new ecosystem that connects practically all parts of society to the network, including vehicles, household appliances, health care, industry, businesses, and so on.However, this evolution will offer a new set of risks and security weaknesses, posing a significant threat to both current and future networks. 5G will connect vital electricity infrastructures to the network, for example, and security breaches in such critical infrastructures might have disastrous consequences for both the infrastructures and the society that 5G serves. As a result, security of 5G and systems connected via 5G must be considered from the beginning of the design process. The design concepts of 5G are briefly discussed here in order to elaborate on the security issues of 5G.

Keywords: 3GPP, LTE, SDN, MIMO

1.OVERVIEW OF 5G SECURITY ARCHITECTURE

A security architecture, according to the ITU-T, logically divides security aspects into independent architectural components. This provides for a more methodical approach to end-to-end security of new services, making it easier to plan new security solutions and analyze the security of current networks. The recent 3GPP technical specification release established the 5G security architecture, which includes multiple domains. The security architecture, with the exception of domain (VI), is depicted in Figure 1 and consists of the following primary domains.

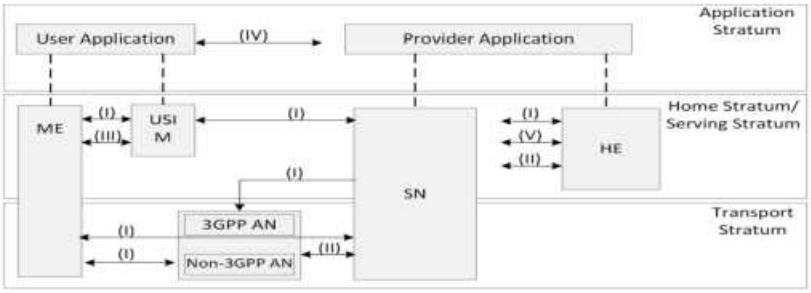

Fig.1 Overview of the system architecture

NAS (I) Network Access Security: The set of security capabilities that allow a UE to authenticate and access network services in a secure manner. The security of 3GPP and non-3GPP access technologies, as well as the transmission of security context from the SN to the UE, are all covered under access security.

NDS (II) Network domain security: A set of security features that allow network nodes to communicate signals and user plane data in a secure manner.

UDS (III) User domain security: Security characteristics that allow for secure user access to UE.

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Smart Vehicle Automation with Automobile Black box Using IOT

N C A Boovarahan

Assistant Professor, SCSVMV Deemed to be University,Enathur, Kanchipuram 631561

ABSTRACT

Build a smart integrated IOT system for automobile to share the parameter of automobile on cloud (AWS). To make an integrated circuit which transfers analog data to the Wi-Fi module ESP8266 on cloud under a Wi-Fi network and then to analyse the data on cloud and further the data can be utilized and represents on a LCD screen. After completion of all process in software we can implement the whole process in vehicle (Two Wheeler). The prototype of an automobile black box system that can be installed used to record the movement parameter of a vehicle mainly used for accident analyses purposes and for safety measures.

Keywords: ESP8266, AT Mega 328P controller, GSM Module.

Introduction

In this paper, the proposed system will be dealing with Global Positioning System (GPS) interfaced with various sensor management system concluded as cloud-vehicle black box system Wireless black box is basically a device that will indicate all the parameters of a vehicle crash and will also store and display its parameters with respective timeline such as date, time, temperature, location, vibration etc. Whenever the accident held the message will sent from the system built inside the car to the registered mobile numbers such as emergency numbers of police stations, hospitals, family members, owner etc. We have used various types of sensors like temperature sensor (DTH11), which is used to measure temperature and humidity. Vibration sensor measures vibrations felt by the car during accident. Alcohol sensors are located on the steering wheel which will indicate whether the driver is drunk. Gyroscopic sensor is used to indicate tilt during the accident. All the parameters sensed by the sensors will send the signal to AT Mega 328P Controller. GSM module, ESP8266 module, GPS module are some of the devices used in our project which helped in accomplishing the output. The advantages of the proposed system is to extract the precise geo location data set with high accuracy and can also monitor the number of clients accessing/connected to the created server page through serial communication. The physical dimensions of the proposed system are in compact level.

1.1 Objective

The main objective of the project is to develop an automated WIFI enabled black box system integrated with sensor management system. In this proposed system we are designing a system which is based on IP (Internet Protocol) technology, which helps in detection of crash with respective real time sensor data and monitor its stats from any part the world. Wi-Fi IP protocol with cloud DNS is a technique used in the proposed system.

2. Details of Esp8266 Wi-Fi Module

ESP8266 is a Wi-Fi SOC (system on a chip) produced by Expressive of Systems. It is ahighly integrated chip designed to provide full internet connectivity in a small package. thischip set used in connectivity or establish a network locally. And also used to extract local ipaddress. ESP8266 can be used as an external Wi-Fi module, using the standard AT Commandset Firmware by connecting it to any microcontroller using the serial UART, or directly serveas a Wi-Fi-enabled micro controller, by programming a new firmware using the provided SDK.The GPIO pins allow Analog and Digital IO, plus PWM, SPI, I2C, etc. This board has beenaroundforalmostayearnow,andhasbeenusedmostlyinIoTcontexts,wherewewanttoaddconnectivityforexample toanIDE project.Awide adoptionhasbeenfacilitated. This is the first and simplest board using the ESP8266. It allows to attach serial lines,and only breaks out two GPIO pins for native usage. This is the second-generationboard,breakingoutmoreGPIOpins,andusingadifferentantenna,plusanexternal antenna connector. Several libraries have been developed to use ESP8266 as a moduleforIDE.

2.1 Block Diagram of Esp8266

TheESP8266usesa32bitprocessorwith16-bit instructions.ItisHarvardarchitecture which mostly means that instruction memory and data memory are completelyseparate.

The ESP8266 has on die program Read-Only Memory (ROM) which includes some library code and a first stage boot loader. All the rest of the code must be stored in external Serial flash memory (provides only serial access to the data - rather than addressing individual bytes, the user reads or writes large contiguous groups of bytes in the address space serially). Depending on your ESP8266, the amount of available flash memory can vary.

* *Corresponding author.* Tel.: +0-000-000-0000 ; fax: +0-000-000-0000.
E-mail address: author@institute.xxx