

RANE POLYTECHNIC TECHNICAL CAMPUS

No 82, Sethurappatti Village, Fatima Nagar Post, Tiruchirappalli – 620012

(Approved by AICTE, Affiliated to DOTE and DME Department accredited by NBA)

Mandatory Disclosure

1	Name of the Institution	Rane Polytechnic Technical Campus
2	Name and address of the Trust/ Society/ Company and the Trustees	Rane Foundation "Maithri" 132 Cathedral Road Chennai 600 086
3	Name and Address of the Vice Chancellor/ Principal/Director	Dr. R. Joshua Arul Kumar, 82, Sethurapatti Village, Fatima Nagar Post, Srirangam Taluk, Trichy-620012. 8220052623 r.joshuaarulkumar@ranepolytechnic.edu.in
4	Name of the affiliating University	Directorate of Technical Education, Tamil Nadu
5	Governance	
	Members of the Governing Council:	<ul style="list-style-type: none"> • L Lakshman, Managing Trustee, Rane Foundation & Chairman Emeritus, Rane Holdings Limited • L Ganesh, Trustee, Rane Foundation & Chairman, Rane Group • R Venkatanarayanan, President - Corporate Services, Rane Group • Dr V Kovaichelvan, Director, IQL, TVS Motor Company • Dr. AK Bakthavatsalam, Professor & Head , Dept. of Training & Placement, NIT Trichy • Dr. S Sundar, Director, Gnanam School of Business • Dr. K Visalakshi, Ex State Coordinator – SPCU, DOTE • Mr. K. Srinivasan, Chancellor, Shiv Nadar University • Dr. R. Joshua Arul Kumar, Principal, Rane Polytechnic & Member Secretary of GC
	Members of Academic Advisory Body	<ul style="list-style-type: none"> • Lakshmi Narasimhan , GM- HRD, Brakes India Ltd • T. Stephen, Unit Head, Worth Industries • Narayanan, GM-HR, SRF Ltd • Saravanan, Plant Head, ITC, Trichy • S. Ramanathan, DGM – Operations, RBL • R. Shivabalaji, Senior HRM, Rane – OSD • M. Vinoth Kumar, Sr. Manager, Plant Engg, RBL, Trichy • TK. Bhargavasiddu, DGM - Industry 4.0, RDC • Lawrence, Senior HRM, RBL, Trichy <p>Other Members:</p>

		<ul style="list-style-type: none"> • Prabakaran, GM, RIED • B. Rajalakshmi, Head – Educational Initiatives, Rane Foundation • R. Joshua Arul Kumar, Principal, Rane Polytechnic • R. Ranjit Kumar, HoD – DME, Rane Polytechnic • M. Syed Meeran, HoD – DMTE, Rane Polytechnic
	Frequently of the Board Meeting and Academic Advisory Body	Once in a Semester
	Organizational chart and processes	Ref. Annexure I
	Grievance Redressal mechanism for Faculty staff and students Staff & Student Grievance Redressal committee Members:	<ul style="list-style-type: none"> • J.D.Albert Stephen Raj , Asst.Prof. Chemistry - Chairman • M.Kannan , Sr.Lecturer-Chemistry - Committee Members • S.Karpaga Devi, Sr.Secretary- Office - Committee Members • S.Lakshmi, Lab Asst.Mechatronics - Committee Members
	Establishment of Anti Ragging Committee The Anti Ragging Committee details are available in the link:	http://www.ranepolytechnic.edu.in/studentragging.html
	Establishment of Grievance Redressal Committee in the Institution and Appointment of OMBUDSMAN by the University Grievance Redressal Ombudsman	D.Micheal Francis, Sr.Lecturer – Maths Dr.R.Joshua Arul Kumar, Principal
	Establishment of Internal Complaint Committee (ICC)	B.Rajalakshmi Email id : b.rajalakshmi@ranegroup.com P.V.Seethalakshmi Email id : pv.seethalakshmi@ranegroup.com
	Establishment of Committee for SC/ST	<ul style="list-style-type: none"> • M.Kannan , Sr.Lecturer • P.Arockia Samy, Sr.Lecturer • S.Karpaga Devi, Sr.Secretary • K.Mohana, Technical Asst.
	Internal Quality Assurance Cell	<ul style="list-style-type: none"> • Dr. R. Joshua Arul Kumar, Principal • R.Ranjitkumar, HOD- Mechanical • M. Syed Meeran, HOD – Mechatronics • J.Elangovan, Asst.Professor & Head – Basic Engg.

		<ul style="list-style-type: none"> • S.Kavinaesh, DME-3rd Year • M.Ellakiya, DME-3rd Year • V.Anusha, DMTE-3rd Year • V.Swaminathan, DMTE-3rd Year 					
6. Programmes							
Name of Programmes approved by AICTE	<ul style="list-style-type: none"> • Diploma In Mechanical Engineering • Diploma In Mechatronics Engineering 						
Name of Programmes Accredited by NBA Programmes Accredited Applied for Accreditation – Applied but visit not happened	Diploma in Mechanical Engineering/2016-22 Diploma in Mechatronics Engineering						
For each Programme the following details are to be given(Preferably in Tabular form):	No. of seats	Duration	Fee (as approved)	Placement Facilities	Campus placement in last three years with minimum salary ,maximum salary and average salary		
					2020-21	2019-20	2018-19
Diploma In Mechanical Engineering	180	3	35,000	100%	3.62LPA 2.29LPA 1.68LPA	2.29LPA, 1.68LPA, 1.50LPA	2.0LPA, 1.50LPA, 1.50LPA
Diploma In Mechatronics Engineering	60	3	35,000	100%	1.50LPA 2.0LPA, 1.68LPA	1.50LPA, 1.68LPA, 1.60LPA	1.50LPA 1.68LPA 1.60LPA

7. Faculty

Permanent Faculty	
Principal	R. Joshua Arul Kumar
Mechanical Engineering	<ol style="list-style-type: none"> 1. R. Ranjith Kumar, Asst Prof & HOD – Mechanical 2. D. Jockin , Sr.Lecturer 3. S. Vinoth Kumar, Sr.Lecturer 4. P. Arockia samy, Sr.Lecturer 5. R. Nagarajan, Sr.Lecturer 6. P. Dinesh kumar, Sr.Lecturer 7. S.Arul Suresh, Lecturer 8. M. Arumugam, Lecturer 9. C. Prasanth, Lecturer 10. P. Vijay,Lecturer 11. S.Vadivel Murugan, Lecturer 12. R.Hariharan, Lecturer 13. R. Thiruppathi, Lecturer 14. T. Saravanan, Lecturer

	<p data-bbox="461 40 644 69">Mechatronics</p> <p data-bbox="411 331 644 360">Basic Engineering</p>	<p data-bbox="671 58 1193 87">15. M.Syed Meeran, HOD, Mechatronics</p> <p data-bbox="671 114 1018 143">16. G. Kathiravan, Asst.Prof</p> <p data-bbox="671 170 1086 199">17. G. Senthur Balaji, Sr. Lecturer</p> <p data-bbox="671 221 1166 250">18. Y.Malkiya Manohar Singh, Lecturer</p> <p data-bbox="671 273 1038 302">19. R. Ravi Shankar, Lecturer</p> <p data-bbox="671 324 935 353">20. G. Selvi, Lecturer</p> <p data-bbox="671 376 1485 405">21. J. Elangovan, HOD-Basic Engineering and Asst.Prof (Maths)</p> <p data-bbox="671 427 1294 456">22. J. D. Albert Stephen Raj, Asst.Prof –Chemistry</p> <p data-bbox="671 479 1206 508">23. D.Michael Francis, Sr.Lecturer – Maths</p> <p data-bbox="671 530 1062 560">24. P.Arun,Sr.Lecturer – Physics</p> <p data-bbox="671 582 1134 611">25. M.Kannan, Sr.Lecturer-Chemistry</p> <p data-bbox="671 633 1230 663">26. S.Charles Jebabalan, Sr.Lecturer English</p> <p data-bbox="671 685 1102 714">27. S.Nataraj, Sr.Lecturer – Physics</p> <p data-bbox="671 736 1126 766">28. K. Ajitha, Lecturer-Mathematics</p> <p data-bbox="671 788 1246 817">29. P.Jemima Christy Berlin, Lecturer – English</p> <p data-bbox="671 840 1158 869">30. R. Stephen Raj,Lecturer. Chemistry</p>
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8. Profile of Principal



Name	R. Joshua Arul Kumar		
Date of Birth	15.08.1978		
Unique ID	8567 7629 7752		
Education Qualification	M.Tech., Ph.D		
Work Experience			
Teaching	20 Years		
Research	Nil		
Industry	Nil		
Others	Nil		
Area of Specialization	Deep Learning, Embedded Systems, Robotics & Neural networks		
Courses taught at Diploma/ Post Diploma/ Under Graduate/ Post Graduate/ Post Graduate Diploma Level	ASIC Design, Embedded System, MC based system Design, Neural networks		
Research guidance(Number of Students)			
No. of papers published in National/ International Journals/ Conferences		International	National
	Journals	3	--
	Conferences	10	2
	Book Chapter	1	--
Master (Completed/Ongoing)	Completed		
Ph.D. (Completed/Ongoing)	Completed		
Projects Carried out	Nil		
Patents (Filed & Granted)	Nil		
Technology Transfer	Nil		
Research Publications (No.of papers published in National/International Journals/Conferences)	Nil		
No. of Books published with details (Name of the book, Publisher with ISBN, year of publication, etc.)	Nil		

9. Fee

- a. Details of Fee, as approved by State Fee Committee, for the Institution

Name	Fee (as approved by the state govt)
Diploma In Mechanical Engineering	35,000 (per annum)
Diploma In Mechatronics Engineering	35,000 (per annum)

- b. Time schedule for payment of Fee for the entire Programme

Name	1 st Semester – 6 th semester
Diploma In Mechanical Engineering	17,500 (per semester)
Diploma In Mechatronics Engineering	17,500 (per semester)

- c. No. of Fee waivers granted with amount and name of students

Type of waivers	Name of the student	Granted with amount
Merit Scholarship (2019-20)	M.Thaslima Parveen – DME-VI	Rs.5000
	M.Nandha Kumar – DME-VI	Rs.5000
	N.Mohanaraj – DMTE-VI	Rs.5000
	S.Vaitheswari – DME-IV	Rs.5000
	M.Ahamed-DME-IV	Rs.5000
	A.Augustin-DMTE-IV	Rs.5000
80% and above marks in SSLC & HSC (2019-20)	Ahamed Thoufq T.Ganesh R,Dinesh Kumar	Rs.5000
Girls students in first semester (2019-20)	G.Ganga R.Priyadharshini Juliet princy Epsipa Beula	50% fee concession first semester

d. Criteria for Fee waivers/scholarship -

Fee waivers:

Criteria	Fee Concession
80% and above marks in SSLC & HSC	5000
Girls students in first semester	50% fee concession

Scholarship:

Income criteria: Less than 2 lakhs per annum	Adhidravidar (SC, ST&SCC community)
Criteria: Less than 2 lakhs per annum More than 50% marks	Post Metric (Muslim, Christian)

10. Admission

a. Number of seats sanctioned with the year of approval

Course Name	No of seats sanctioned (2021-22)
DME	180
DMTE	60

b. Number of Students admitted under various categories each year in the last three years

Course	2021-22	2020-21	2019-20
DME	98	109	95
DMTE	52	45	46

11. Admission Procedure

- a. Candidates seeking admission to the RPTC should get prescribed application from the Principal, RPTC by paying Rs.100/- in the form of Cash.
- b. Completed application form should reach the Principal, RPTC within 15 days from the date of publication of Board Examination results.

Year of Diploma	Eligibility criteria
First year (Regular)	Pass in SSLC
Second year (Lateral entry)	Pass in HSC with: Passed 10+2 examination with Physics/ Mathematics / Chemistry/ Computer Science/Electronics/Information Technology/ Biology/Informatics Practices/ Biotechnology/ Technical Vocational subject/ Agriculture/ Engineering Graphics/ Business Studies/Entrepreneurship (Any of the three).

12. Information of Infrastructure and Other Resources

SI No	Details of Infrastructure/Resources	Area	Numbers available
1	Class rooms	74 Sqm	12
2	Tutorial Rooms	42 Sqm	03
3	Laboratories	90 sqm	14
4	Drawing Halls	174 sqm	1
5	Computer centres	150 sqm	1
6	Barrier Free Built Environment for disabled and elderly persons	Available	
7	Occupancy certificate	Available	
8	Fire and Safety Certificate	Available	
9	Hostel Facilities	Only day scholar	

- **Library**

Number of Library books	3500
Volume / Titles	2400 / 2297
Journals available(Programme-wise)	DME - 8 , DMTE - 6
List of online National/ International Journals subscribed	Delnet Membership
E- Library facilities	
Volume	1000
Titles	500
Area	350 sqm
National Digital Library(NDL) subscription details	Available

- **Laboratory and Workshop**

- List of Major Instruments / Equipment/Facilities in each Laboratory/Workshop

Laboratory / Workshop	Major Equipment's
Computer Lab	1. Desktop Computer 2. Laptop 3. Printer 4. Manageable Switch Cisco 5. LCD Projector 6. Sonic wall Soho 7. Server 8. UPS 9. CCTV Camera 10. DVR 11. Pace Finger Print Reader
Basic Engineering:	
Chemistry Lab	1. Chemical Balance 2. pH Meter 3. TDS – Conductivity meter 4. Electronic weighing machine 5. Kipps Apparatus

Physics	<ol style="list-style-type: none"> 1. Micrometer (Screw Gauge) 2. Vernier Calipers 3. Sonometer 4. Deflection Magnetometer 5. Travelling Microscope 6. Solar cell Kit 7. Joule's Calorimeter 8. Copper Voltmeter 9. P-N Junction Diode 10. Spectrometer 11. Logic Gates 12. Electronic Balance
English	<ol style="list-style-type: none"> 1. Projector 2. Computers 3. DVD player
Mechanical Engineering:	
Computer Integrated Manufacturing Lab	<ol style="list-style-type: none"> 1. CNC Lathe 2. CNC Milling
Special Machines Lab	<ol style="list-style-type: none"> 1. Vertical Milling Machine 2. Cylindrical grinding machine 3. Surface grinding machine 4. Slotting machine 5. Tool and cutter grinding machine
Thermal Engineering Lab	<ol style="list-style-type: none"> 1. Open cup apparatus 2. Close cup apparatus 3. Redwood viscometer 4. Saybolt viscometer 5. Refrigeration cycle test rig 6. Air compressor test rig
Automobile Engineering Lab	<ol style="list-style-type: none"> 1. Mhors test (Petrol Engine) 2. Differential Unit 3. Synchromesh Gear box 4. Constant mesh Gear box 5. steering Assembly - rack and pinion type 6. Battery coil ignition system 7. Clutch set with puller
Foundry & Welding Lab	<ol style="list-style-type: none"> 1. Welding Machine 2. Moulding board 3. Shovel (Small) 4. Shovel (large) 5. Lathe 6. Drilling machine 7. bench grinding machine
Measurements and Metrology Lab	<ol style="list-style-type: none"> 1. Vernier 2. Micrometer 3. Vernier height gauge 4. Mechanical comparator 5. Gear tooth vernier caliper 6. Slip gauge on sine bar
Fluid Mechanics Lab	<ol style="list-style-type: none"> 1. Francis Turbine Test 2. Reciprocating Pump 3. Centrifugal Pump 4. Orificemeter 5. Bernoulli's Apparatus
Strength of Materials Lab	

	<ol style="list-style-type: none"> 1. UTM Machine 2. Rockwell Hardness testing machine 3. Impact testing machine 4. Torsion Testing Machine 5. Compression Testing machine 6. Spring testing machine
Process Automation Lab	<ol style="list-style-type: none"> 1. Pneumatic trainer kit 2. Hydraulic trainer kit
Basic Workshop Lab	<ol style="list-style-type: none"> 1. Benchwise 2. Carpentry wise 3. Pipe bending machine 4. Drilling Machine 5. Die with die stock
Mechatronics:	
Electronic Devices and circuit lab	<ol style="list-style-type: none"> 1. DC Regulated power supply 0-30V, 1A 2. High Voltage Power Supply 0-250V, 1A 3. Signal Generator 1MHz 4. Dual trace CRO 20MHz/ 30MHz 5. Digital Multimeter 6. DC Voltmeter (Analog/Digital) 7. DC Ammeter (Analog/Digital)
Electrical Circuits, Machines & Drives	<ol style="list-style-type: none"> 1. Dual power supply 2. Single phase Transformer 3. DC Shunt Motor with Loading arrangement 4. Stepper motor Control Kit 5. DC motor Speed control Kit 6. Star Delta Starter 7. Tachometer
Manufacturing Technology	<ol style="list-style-type: none"> 1. Lathe 2. Milling Machine 3. Cylindrical Grinding Machine 4. Surface Grinding Machine 5. Shaper
CAD	<ol style="list-style-type: none"> 1. Desktop Computer 2. Software - CAD Software
Analog And Digital Electronic	<ol style="list-style-type: none"> 1. DC Regulated power supply 2. IC Voltage Power Supply 3. Signal Generator 4. Dual trace CRO 5. Digital Trainer 6. Desk Top Computer
Industrial Instrumentation and Sensors	<ol style="list-style-type: none"> 1. DC Regulated power supply 2. Wheatstone bridge kit 3. Schering bridge kit 4. Strain gauge kit 5. Proximity Sensor – Inductive and Capacitive 6. IR Sensor
Microcontroller	<ol style="list-style-type: none"> 1. 8051 Microcontroller kit 2. Digital I/O Interface board 3. Seven segment LED display interface board 4. 8 bit DAC interface board 5. Stepper motor control interface board
Robotics	<ol style="list-style-type: none"> 1. Robot Off Line Simulation Software 2. Six Axis Robot 3. Computers 4. Line Follower Kit
C Programming Language	<ol style="list-style-type: none"> 1. Desktop/Laptop Computers 2. Laser Printer 3. C-Compiler and Editor
Process Control	<ol style="list-style-type: none"> 1. On-Off Level Process

	<ol style="list-style-type: none"> 2. On-Off Pressure Process 3. Temperature Process 4. LvdT Trainer Module 5. Rtd Trainer Module
Industrial Automation Practical	<ol style="list-style-type: none"> 1. Basic Pneumatic Trainer Kit 2. Electro Pneumatic trainer kit 3. Basic Hydraulic Trainer Kit 4. Electro Hydraulic trainer kit 5. PLC Module

• **List of Experimental Setup in each Laboratory/Workshop**

Laboratory / Workshop	List of Experiments
Chemistry	<ol style="list-style-type: none"> 1. Quantitative Analysis: <ul style="list-style-type: none"> • Estimation of Sulphuric Acid • Estimation of Sodium Hydroxide • Comparison of Two Hydrochloric Acid Solutions • Estimation of Mohr's Salt • Estimation of Iron • Comparison of Strengths of Two Potassium Permanganate Solutions • Estimation of Residual Chlorine of Water • Estimation of Total Hardness of Water • Determination of pH using pH meter • Water Quality testing using Total Dissolved Solids (TDS) 2. Qualitative Analysis - Salt Analysis 3. Effluent Analysis – Lead, Copper, Zinc
Physics	<ul style="list-style-type: none"> • Micrometer (Screw Gauge). • Vernier Calipers. • Parallelogram Law • Lami's Theorem • Comparison Of Viscosities • Stokes' Method • Sonometer. • Deflection Magnetometer • Refractive Index • Spectrometer • Solar Cell • Laws Of Resistances • Joule's Calorimeter • Copper Voltmeter • P-N Junction Diode • Logic Gates
Basic Workshop	<ul style="list-style-type: none"> • Fitting • Carpentry • Electrical • Plumbing
Communication Skill	<ul style="list-style-type: none"> • Listening skill • Reading skill • Speaking skill • Writing skills
Computer Application	<ul style="list-style-type: none"> • MS Office

Laboratory / Workshop	List of Experiments
Mechatronics: (M Scheme) CAD	<ul style="list-style-type: none"> • Machine & Assembly drawings in 2D only • 3D solid modeling practice • Isometric Drawing
Process Control	<ul style="list-style-type: none"> • Transient response of thermocouple • Effect of Capacity • On- off control of temperature process • On – off control of pressure process • Differential output of a thermocouple • Measurement of temperature using RTD • Measurement of temperature using thermistor • Measurement of Pressure • Characteristics of control valve • Response of PID controller • Measurement of displacement using LVDT
Robotics	<ul style="list-style-type: none"> • Robot system connection and component recognition. • Robot operation, moving the various axis continuous and intermittent motions. • Writing programs off-line <ul style="list-style-type: none"> a. Homing operation, b. Recording positions. • Write a Program for stacking the object using offline. • Write a Program for stacking the object using offline. • Write a Looping program using offline. • Writing programs on-line <ul style="list-style-type: none"> a. Homing operation, b. Recording positions. • Teaching positions via XYZ co-ordinates. • Write a Program using XYZ Coordinates. • Write a program using wait, speed commands. • Measurement of Robot work envelope. • Measurement of Robot of motion. • Measurement of Repeatability. • Practical's connected with Photo sensor/transducer. • Study of Vision system in Robot.
Process Control	<ul style="list-style-type: none"> • Transient response of thermocouple • Effect of Capacity • On- off control of temperature process • On – off control of pressure process • On off control of level process • Differential output of a thermocouple • Measurement of temperature using RTD

	<ul style="list-style-type: none"> • Measurement of temperature using thermistor • Measurement of Pressure • Characteristics of control valve • Response of PID controller • Measurement of displacement using LVDT
<p>N Scheme: Analog and Digital Electronics</p>	<ul style="list-style-type: none"> • Realization of basic gates using NAND & NOR gates. • Realization of logic circuit for De-Morgans Theorems • Test the performance of Half Adder and Full Adder. • Test the performance of Half Subtractor and Full Subtractor. • Test the performance of Decoder/Encoder. • Test the performance of RS, D, T & JK flip-flops. • Test the performance of Parity generator and checker using parity checker/ generator IC's. • Test the performance of Multiplexer/De-multiplexer using IC 4051 • Test the performance of Inverting Amplifier and Non inverting amplifier using Op-amp IC 741. • Test the performance of Summing Amplifier, Difference Amplifier. • Test the performance of Zero Crossing Detector and Voltage Comparator using Opamp IC 741 • Test the performance of Integrator and Differentiator using Op-amp IC 741. • Test the performance of A stable multivibrator using IC 555. • Test the performance of IC Voltage Regulator Power Supplies using IC 7805, IC7912. • Design the PCB of 4- bit ripple counter using FF using Software tool Multisim /Or CAD etc
<p>Industrial Instrumentation and Sensors</p>	<ul style="list-style-type: none"> • Calibration of given ammeter and voltmeter • Measurement of power and power factor of single phase load • Measurement of unknown resistance using Wheatstone bridge. • Measurement of value of unknown capacitance using Schering Bridge • Generate different type of Lissajous Patterns using CRO • Measure the force using Strain gauge experiment module • Measure the sensing range of Inductive proximity sensor • Measure the sensing range of capacitive proximity sensor • Detect the level of water in a tank using float switch and control the pump based on the level • Construct and test the circuit for Detecting

	<p>metal and non-metal object using proximity sensor</p> <ul style="list-style-type: none"> • Construct and test the circuit for Detecting the Object using IR sensor • Construct and test the circuit to Measure the temperature using temperature sensor (Thermocouple OR RTD) • Construct and test the circuit to Measure the sensing range of Analog Ultrasonic sensor module
Microcontroller	<ul style="list-style-type: none"> • 8 / 16 bit addition, Subtraction, Multiplication, division • BCD to Hex code conversion • Smallest / Biggest number • Time delay routine (Demonstrate by Blinking LEDs). • Timer/ counter of 8051 • Interfacing Digital I/O board • Interfacing DAC • Interfacing Stepper motor • Interfacing Seven segment LED display or LCD • Sending data through the serial port between microcontroller kits • Interfacing DC motor using PWM.
CAD & CAM	<ul style="list-style-type: none"> • CAD Geneva Wheel, Bearing block, Bushed bearing, Gib and Cotter joint, Screw Jack, Connecting rod • CAM – LATHE Linear and circular interpolation, Stock Removal Cycle, Canned Cycle • CAM – MILLING Linear and circular interpolation – Grooving Drilling, tapping, countersinking canned cycle Mirroring
Machine Tool Testing and Maintenance	<p>1. Machine Tool Alignment</p> <ul style="list-style-type: none"> • Conduct test for the lathe machine and prepare a test chart. • Conduct test for the shaping machine and prepare a test chart. • Conduct test for the drilling machine and prepare a test chart. • Conduct test for the surface grinding machine and prepare a test chart. • Conduct test for the milling machine and prepare a test chart. • Conduct test for the slotting machine and prepare a test chart. <p>2. Maintenance (Dismantle, inspect and assemble the following machine components)</p> <ul style="list-style-type: none"> • Lead screw and nut, Tailstock, Bench vice, Three jaw chuck, Four jaw chuck, Drill chuck
Process Automation	<p>1. Pneumatics Lab</p> <ul style="list-style-type: none"> • Direct operation of single and double acting cylinder • Operation of double acting cylinder with

	<ul style="list-style-type: none"> quick exhaust valve Speed control of double acting cylinder using metering-in and metering-out circuits Automatic operation of double acting cylinder in single cycle - using limit switch Automatic operation of double acting cylinder in multi cycle - using limit switch <p>2. Hydraulics Lab</p> <ul style="list-style-type: none"> Direct operation of double acting cylinder Direct operation of hydraulic motor Speed control of double acting cylinder metering-in and metering-out control
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Laboratory / Workshop	List of Experiments
<p>PLC Lab</p>	<ul style="list-style-type: none"> Direct operation of a motor using latching circuit Operation of a motor using 'AND' logic control Operation of a motor using 'OR' logic control On-Delay control of a motor and Off – Delay control of a motor Automatic operation of a Double acting cylinder-single cycle Automatic operation of a Double acting cylinder-single cycle - forward, Automatic operation of Double acting cylinder-Multi cycle Sequential operation of double acting cylinder and a motor
<p>Thermal and Automobile Practical</p>	<p>1. Thermal lab</p> <ul style="list-style-type: none"> Determine flash and fire point of the given oil by using open cup apparatus and closed cup apparatus. Determine the absolute viscosity of the given lubricating oil by using Redwood viscometer / Say bolt viscometer. Draw a port time diagram of two stroke petrol / diesel engines. Draw a valve timing diagram four stroke petrol / diesel engines. To conduct a load test on petrol / diesel engines. To conduct a morse test on multi cylinder petrol / diesel engines. To conduct a Heat balance test on a four stroke petrol (or) diesel engines. <p>2. Automobile lab</p> <ul style="list-style-type: none"> Dismantling, assembling of pressure plate , clutch plate and steering gear box. Dismantling, inspecting and assembling of gear box and find out the gear ratios. Dismantling, inspecting and assembling of final drive and differential units. Adjusting of backlash and correct tooth contact of crown and pinion of differential unit. Removing camshaft, replacing timing gears, removing valves and adjusting valve clearance. Removing, servicing and replacing solex

	<p>carburetor (or) MPFI system.</p> <ul style="list-style-type: none"> • Dimantling, and assembling of inline fuel injection pump (or) CRDI system and injectors. • Test a battery with specific gravity test and charge the battery with constant ampere/voltage method. Dismantling, overhauling and assembling of starter motor and alternator (or) dynamo.
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Laboratory / Workshop	List of Experiments
Robotics	<ul style="list-style-type: none"> • Position recording using Cartesian co-ordinate system - (No. of positions to be specified - 9) • Position recording using Polar co-ordinate system - (No. of positions to be specified- 9) • Pick and place the objects - No. of objects to be specified- 6) • Pick and stack the objects - (No. of objects to be specified- 6) • Spray painting practice - (Area to be specified - 300mm x 300mm) • Spot welding practice - (No. of spots to be specified - 9) • Arc welding practice – (Length of weld to be specified) • Assembling practice - (Simple assembling) • Profile cutting practice - (Complicated profile – combination of lines and arcs) • Machine loading and unloading practice with time delay - (No. of times to be specified- 9)

● **Computing Facilities**

Internet Bandwidth	100mbps
Number and configuration of System	4 - I3, I5, Dual core, Core 2 duo
Total number of system connected by LAN	165
Total number of system connected by WAN	40
Major software packages available	AUTOCAD, CNC, MS OFFICE 2010
Special purpose facilities available (Conduct of online Meetings/Webinars/Workshops, etc.)	LCD Projector, Screen, Headphone, Handy Camera, Web camera
Facilities for conduct of classes/courses in online mode (Theory & Practical)	LCD Projector, Screen, Headphone, Handy Camera, Web camera
Innovation Cell	Ref. Annexure II
Social Media Cell	Facebook , YouTube
Compliance of the National Academic Depository (NAD), applicable to PGCM/ PGDM Institutions and University Departments	Not Applicable

● **List of facilities available**

Games and Sports Facilities	Volleyball, Cricket, Kabaddi, Kho-Kho, Ball badminton, Badminton
Extra-Curricular Activities	Pencil Drawing, Painting, Spell bee, Photography
Soft Skill Development Facilities	Finishing school program, Training and Placement

● **Teaching Learning Process**

Curricula and syllabus for each of the Programmes as approved by the University	Available in our website: http://www.ranepolytechnic.edu.in/syllabus.html
Academic Calendar of the University	Annexure - III
Academic Time Table with the name of the Faculty members handling the Course	
Internal Continuous Evaluation System and place	<ul style="list-style-type: none"> • Class-in-charges to collect the feedback (written form) from the students after periodical exams both on course content and delivery by staff member. • HOD to analyze and discuss with respective staff member • Review with principal and get suggestion for further action if necessary. • Suggest the improvements to the staff through HOD. • Ensure that the suggestions are incorporated by the staff.
Student's assessment of Faculty, System in place	<ul style="list-style-type: none"> • Send Self – Assessment form (My Pride) from Principal's desk to all staff members by mail before Apr 31 every year • Ensure that all staff fill up Self- Assessment form (My Pride) before May 31 and mail it to the Principal. • Principal & Management representative will collect students' feedback forms during college hours. • HODs' will give feedback report about Staff (Teaching & Non-Teaching) to the Principal. • Students feedback, Self-Assessment form, HOD feedback & Principal feedback will be consolidated by the Principal & Management representative • Increments and Pay revision will be based on the 'performance & consolidated report' made by Principal & Management

	representative
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● **Enrolment and placement details of students in the last 3years**

Year	No. of students enrolled	No.of students placed on campus
2021-22	132	132
2020-21	185	185
2019-20	192	164

13. List of Research Projects/ Consultancy Works

Industry Linkage	1. Resource person for Finishing school program 2. IITP for Teachers
MoUs with Industries (minimum3(10))	5 Industries 1.RBL 2.ZF Rane(OSD) 3.Worth Industries 4.Siemens Centre, NIT 5.REVL

14. LoA and subsequent EoA till the current Academic Year

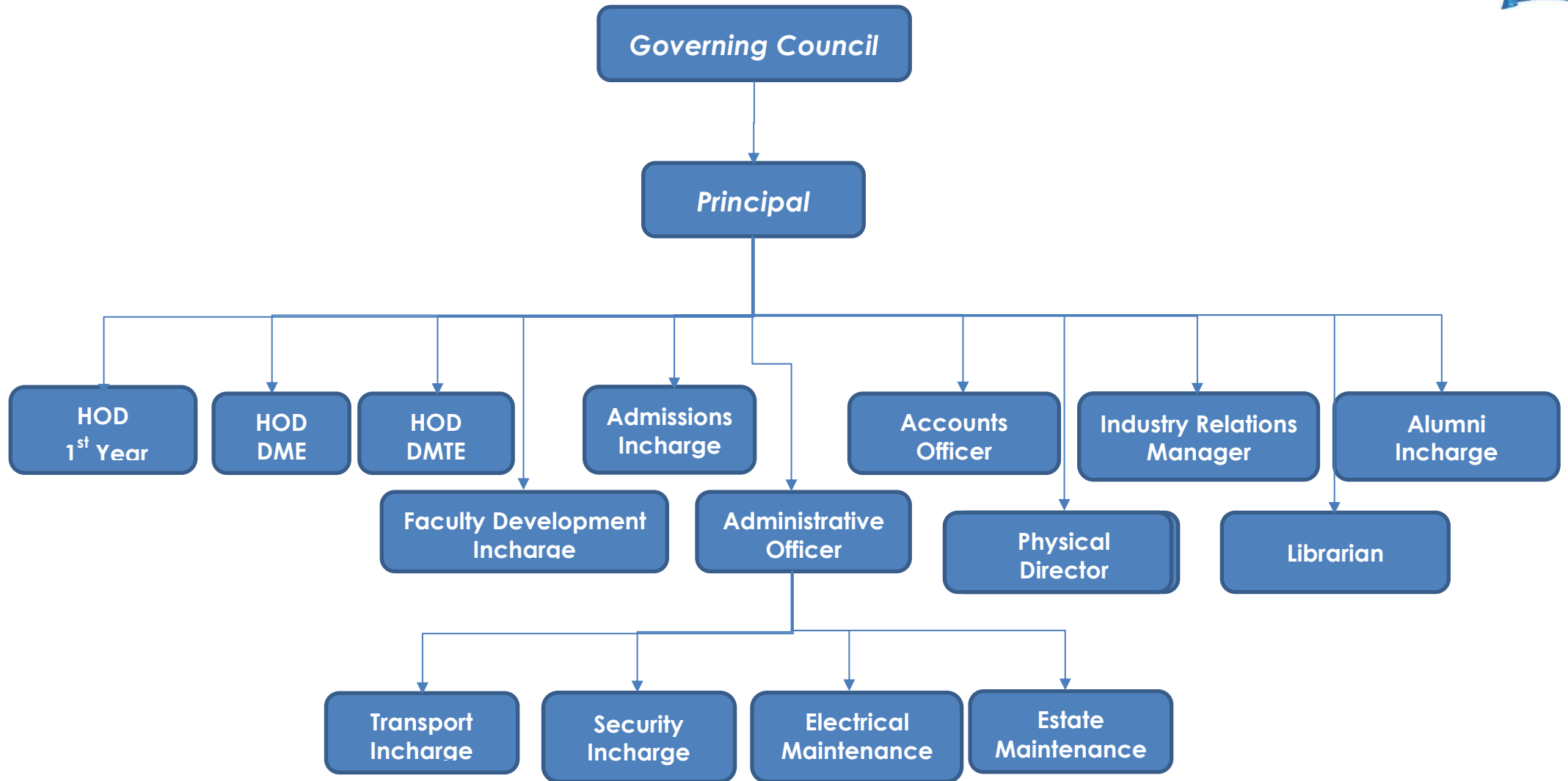
LOA and subsequent EOA (2012-21)	Available in our website: http://www.ranepolytechnic.edu.in/affiliation.html
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15. Accounted audited statement for the last three years

Audit Report (2019-2021)	Available in our website: http://www.ranepolytechnic.edu.in/aboutaudit.html
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Annexure – I

Organization Chart



Annexure – II

Innovation Cell



Date : 05-04-2022

Certificate No : 6503

Annexure – III

2021-22 Even Semester

Academic Calendar

Date and Day	Details of Activity	No. of Days	No. of Days	No. of Days
		3rd Year	2nd Year	1st Year
Monday, March 14, 2022		S1 - 1	S1 - 1	S1 - 1
Tuesday, March 15, 2022		S1 - 2	S1 - 2	S1 - 2
Wednesday, March 16, 2022		S1 - 3	S1 - 3	S1 - 3
Thursday, March 17, 2022		S1 - 4	S1 - 4	S1 - 4
Friday, March 18, 2022		S1 - 5	S1 - 5	S1 - 5
Saturday, March 19, 2022	Time table - Monday Order	S1 - 6	S1 - 6	S1 - 6
Sunday, March 20, 2022	Sunday Holiday			
Monday, March 21, 2022		S1 - 7	S1 - 7	S1 - 7
Tuesday, March 22, 2022		S1 - 8	S1 - 8	S1 - 8
Wednesday, March 23, 2022	5s - Review	S1 - 9	S1 - 9	S1 - 9
Thursday, March 24, 2022	0th Project Review - DME	S1 - 10	S1 - 10	S1 - 10
Friday, March 25, 2022	Industrial Visit - 2nd Year, 0th Project Review - DMTE	S1 - 11	S1 - 11	S1 - 11
Saturday, March 26, 2022	Time table - Tuesday Order	S1 - 12	S1 - 12	S1 - 12
Sunday, March 27, 2022	Sunday Holiday			
Monday, March 28, 2022		S1 - 13	S1 - 13	S1 - 13
Tuesday, March 29, 2022	Draft Completion of NBA SAR	S1 - 14	S1 - 14	S1 - 14
Wednesday, March 30, 2022	Class Committee Meeting -DME	S1 - 15	S1 - 15	S1 - 15
Thursday, March 31, 2022	DRM Review, Class committee Meeting- DMTE	S1 - 16	S1 - 16	S1 - 16
Friday, April 01, 2022		S2 - 1	S2 - 1	S2 - 1
Saturday, April 02, 2022	Telugu New year Day - Holiday			
Sunday, April 03, 2022	Sunday Holiday			
Monday, April 04, 2022	CAT - 1	S2 - 2	S2 - 2	S2 - 2
Tuesday, April 05, 2022	CAT - 1	S2 - 3	S2 - 3	S2 - 3
Wednesday, April 06, 2022	CAT - 1	S2 - 4	S2 - 4	S2 - 4
Thursday, April 07, 2022	Completion of NBA SAR in Portal, CAT -1	S2 - 5	S2 - 5	S2 - 5
Friday, April 08, 2022	Staff Kaizen Awareness, CAT -1	S2 - 6	S2 - 6	S2 - 6
Saturday, April 09, 2022	Industrial Visit - 1st Year, Time table - Wednesday order, PTA Meeting -1	S2 - 7	S2 - 7	S2 - 7
Sunday, April 10, 2022	Sunday Holiday			
Monday, April 11, 2022		S2 - 8	S2 - 8	S2 - 8
Tuesday, April 12, 2022		S2 - 9	S2 - 9	S2 - 9
Wednesday, April 13, 2022		S2 - 10	S2 - 10	S2 - 10
Thursday, April 14, 2022	Tamil New year Day - Holiday			
Friday, April 15, 2022	Good Friday - Holiday			
Saturday, April 16, 2022	Holiday			
Sunday, April 17, 2022	Sunday Holiday			
Monday, April 18, 2022		S2 - 11	S2 - 11	S2 - 11
Tuesday, April 19, 2022		S2 - 12	S2 - 12	S2 - 12
Wednesday, April 20, 2022		S2 - 13	S2 - 13	S2 - 13

Thursday, April 21, 2022	1st Review - DME Project	S2 - 14	S2 - 14	S2 - 14
Friday, April 22, 2022	1st Review - DMTE Projects	S2 - 15	S2 - 15	S2 - 15
Saturday, April 23, 2022	Time table - Thursday Order	S2 - 16	S2 - 16	S2 - 16
Sunday, April 24, 2022	Sunday Holiday			
Monday, April 25, 2022	Class Committee Meeting -DME	S2 - 17	S2 - 17	S2 - 17
Tuesday, April 26, 2022	Class Committee Meeting -DMTE	S2 - 18	S2 - 18	S2 - 18
Wednesday, April 27, 2022	Intra Collegiate Sports Fete	S2 - 19	S2 - 19	S2 - 19
Thursday, April 28, 2022	Intra Collegiate Sports Fete	S2 - 20	S2 - 20	S2 - 20
Friday, April 29, 2022		S2 - 21	S2 - 21	S2 - 21
Saturday, April 30, 2022	Time table - Friday Order	S2 - 22	S2 - 22	S2 - 22
Sunday, May 01, 2022	Sunday Holiday			
Monday, May 02, 2022		S3 - 1	S3 - 1	S3 - 1
Tuesday, May 03, 2022	Ramzan - Holiday, Alumni Interaction - Online			
Wednesday, May 04, 2022	CAT-2	S3 - 2	S3 - 2	S3 - 2
Thursday, May 05, 2022	5s - Review, CAT-2	S3 - 3	S3 - 3	S3 - 3
Friday, May 06, 2022	CAT-2	S3 - 4	S3 - 4	S3 - 4
Saturday, May 07, 2022	CAT-2	S3 - 5	S3 - 5	S3 - 5
Sunday, May 08, 2022	Sunday Holiday			
Monday, May 09, 2022	CAT-2	S3 - 6	S3 - 6	S3 - 6
Tuesday, May 10, 2022		S3 - 7	S3 - 7	S3 - 7
Wednesday, May 11, 2022		S3 - 8	S3 - 8	S3 - 8
Thursday, May 12, 2022	2nd Review - DME Projects	S3 - 9	S3 - 9	S3 - 9
Friday, May 13, 2022	2nd Review - DMTE Projects	S3 - 10	S3 - 10	S3 - 10
Saturday, May 14, 2022	Time table - Monday Order, PTA Meeting -2	S3 - 11	S3 - 11	S3 - 11
Sunday, May 15, 2022	Sunday Holiday			
Monday, May 16, 2022	Class Committee meeting - DME	S3 - 12	S3 - 12	S3 - 12
Tuesday, May 17, 2022	Class Committee meeting - DMTE	S3 - 13	S3 - 13	S3 - 13
Wednesday, May 18, 2022		S3 - 14	S3 - 14	S3 - 14
Thursday, May 19, 2022	5s - Review	S3 - 15	S3 - 15	S3 - 15
Friday, May 20, 2022	College Day & Sports Day	S3 - 16	S3 - 16	S3 - 16
Saturday, May 21, 2022	Time table - Tuesday Order, Industry Advisory Board Meet	S3 - 17	S3 - 17	S3 - 17
Sunday, May 22, 2022	Sunday Holiday			
Monday, May 23, 2022	MODEL - Final Year	S3 - 18	S3 - 18	S3 - 18
Tuesday, May 24, 2022	MODEL - Final Year	S3 - 19	S3 - 19	S3 - 19
Wednesday, May 25, 2022	MODEL - Final Year	S3 - 20	S3 - 20	S3 - 20
Thursday, May 26, 2022	MODEL - 2nd & 1st Year		S3 - 21	S3 - 21
Friday, May 27, 2022	MODEL - 2nd & 1st Year		S3 - 22	S3 - 22
Saturday, May 28, 2022	Holiday			
Sunday, May 29, 2022	Sunday Holiday			
Monday, May 30, 2022	MODEL - 2nd & 1st Year		S3 - 23	S3 - 23
Tuesday, May 31, 2022	MODEL - 2nd & 1st Year		S3 - 24	S3 - 24
Wednesday, June 01, 2022				
Thursday, June 02, 2022	5s - Review			
Friday, June 03, 2022				
Saturday, June 04, 2022	Governing Council Meeting			
	Sunday Holiday			