News letter of K.Ramakrishnan college of Technology Issue 4 (December 2019)



K. RAMAKRISHNAN COLLEGE OF TECHNOLOGY

ISO 9001:2015 Certified Institution Accredited by NAAC with A+ Grade



ABOUT THE INSTITUITION

K.Ramakrishnan College of Technology, Tiruchirapalli, situated in the famous temple town Samayapuram, is a premiere organization striving to bring in constructive transformation in young aspirants by imparting technical, behavioral and value based education where we focus on empowering the students to get placed in World Class Corporate and introducing rich corporate culture to meet the hurdles and challenges of corporate sector and also augment the knowledge of students, foster their talents and broaden their outlook towards life by enhancing their personality, communication and bringing in entrepreneurial skills. We believe in educating, enhancing and empowering the student community to face the challenges of morrow and to be the front-runners in job market. We, at K.Ramakrishnan College of Technology, ensure that our students are equipped with the skill sets required to surmount the challenges of the competitive world.

VISION

To serve the society by offering top-notch technical education on par with global standards.

MISSION

We will strive to: Be a center of excellence for technical education in emerging technologies by exceeding the needs of the industry and society. Be an institute with world class research facilities. Be an institute nurturing talent and enhancing competency of students to transform them an all-round personality respecting moral and ethical values.

CHAIRMAN's MESSAGE

Education enables a person to face new challenges, achieve progress and lead a successful life. We, therefore, at K.Ramakrishnan College of Technology, would like to encourage all students to thrive for the best to make them knowledgeable in their relevant branches of engineering with high self -esteem and discipline. Education in our Institution is not only for academic brilliance but also for an ambiance where our ancient cultural heritage and human skills are enhanced. Our institution has set specific objectives and planned activities for achieving excellence in all spheres of technical education. The service of the institution in creating personally mature, professionally equipped and service-oriented graduates is really worth mentioning. We strongly believe in academic excellence and do not compromise on teaching standards or discipline. These three things are the springboards on which we operate. People who feel good about themselves produce good results and people who produce good results feel good about themselves. We also believe in total learning and sharing. Have a visit to K.Ramakrishnan College of Technology and feel good to get good education.



Dr.K.Ramakrishnan Chairman







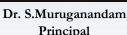
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EXECUTIVE DIRECTOR MESSAGE

Engineers play the most vital and important role in nation building. They create new inventions using best engineered technologies to make human life more comfortable, secure and productive. In modern times, nations which have rich engineering and experienced management domains are flourishing economically and are providing better lives to their people We have excellent potential to grow in diversified areas and excel in Engineering and Management fields. We need enormous number of engineers and managers to write next story of success.

PRINCIPAL MESSAGE

Technical Education is the backbone of every nation and is the stepping stone for a country to move into the niche of a developed nation. The main focus of the Institution is to empower students with sound knowledge, wisdom, experience and training both at the academic level of Engineering and in the highly competitive global industrial market. The infrastructure facilities and state-of-the-art equipment combined with a galaxy of competent, talented and dedicated faculty contribute to an enjoyable and an easy learning experience. We wish the best for all our students, and the members of the institution who reiterate their aims at providing the best in academic and extra-curricular fields. We must believe that success is inevitable where these exist- Foresightedness, Firm Determination, Hard work and Discipline.



UG COURSES

- **B.E–** Civil Engineering *
- * **B.E-** Computer Science and Engineering
- **B.E-** Electrical and Electronics Engineering *
- * **B.E-** Electronics and Communication Engineering
- * **B.E-** Mechanical Engineering

COURSES OFFERED

PG COURSES

- M.E- Computer Science and Engineering
- M.E Power Electronics and Drives
- M.E Embedded System Technologies
- M.E VLSI Design

Ph.D COURSES

Computer Science and Engineering









OTHER FACILITIES







Principal

Dr.S.Kuppusamy **Executive Director**

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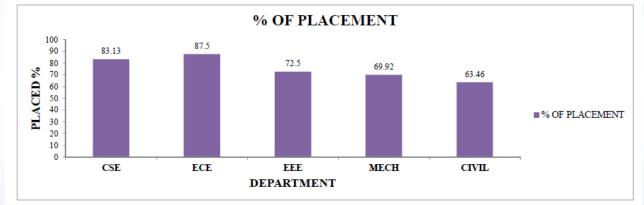
PLACEMENT

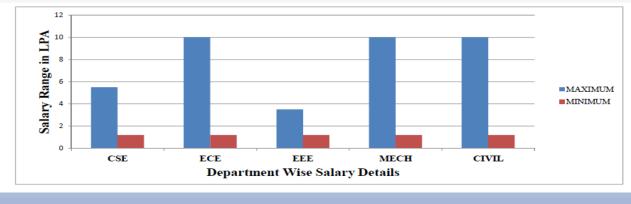
The Training and Placement Cell organizes a number of training programs for the students of all semesters with the help of inhouse experts and experts drawn from professional agencies. The activities have proved exceptionally useful in shaping the career of students.



OVERALL PLACEMENT RECORD - 2019

C NO		DEPT NO. OF STUDENTS GRADUATED	BLACED COUNT	A OF BLACEMENT	SALARY	
S.NO.	DEPT	NO. OF STUDENTS GRADUATED	PLACED COUNT	% OF PLACEMENT	MAXIMUM	MINIMUM
1	CSE	83	69	83.13	5.50 LPA	1.20 LPA
2	ECE	80	70	87.5	10 LPA	1.20 LPA
3	EEE	80	58	72.5	3.50 LPA	1.20 LPA
4	MECH	123	86	69.92	10 LPA	1.20 LPA
5	CIVIL	104	66	63.46	10 LPA	1.20 LPA
OVE	RALL	470	349	74.26	10 LPA	1.20 LPA





RESEARCH AND DEVELOPMENT

R Nambi Manavalan of Civil Department published a paper titled "Assessment of the native habitats of Panthera tigris and identification of suitable sites for captive breeding of this species in Tamil Nadu using GIS" in International Journal of Advanced Research in Engineering and Technology (IJARET), vol. 10, no. 1. pp 136-153. 2019

T. Avudaiappan, V. Vijayan, S. Sundara Pandiyan, M. Saravanan S. Dinesh published a paper titled "Potential Flow Simulation through Lagrangian Interpolation Meshless Method Coding" in Journal of Fluid Mechanics

T. Avudaiappan, R. Balasubramanian, S. Sundara Pandiyan, M. Saravanan, S. K. Lakshmanaprabu, K. Shankar published a paper titled "Medical Image Security Using Dual Encryption with Oppositional Based Optimization Algorithm" in Journal of Medical Systems

T. Vetriselvi, N. P. Gopalan, G. Kumaresan published a paper titled "Key Term Extraction using a Sentence based Weighted TF-IDF Algorithm" in Journals of the MECS Publisher

R.Jaiganesh of EEE Department published a paper titled "Hierarchical Classifier for Breast Cancer Diagnosis" in Journal of Advanced Research in Dynamical and Control Systems, Volume11, 607-611.

Dr.A.Rajkumar, R.Jaiganesh published a paper in International Journal of Mechanical and Production Engineering Research and Development (IJMPERD) ISSN(P): 2249-6890; ISSN(E): 2249-8001 Vol. 9, Special Issue 1, Jan 2019, 562-570

P.Sabarish, A.T.Sankara Subramanian, A.Anton Amala Praveen of EEE Department published a paper on "A Novel wearable therapeutic aid with intelligent information processing systems" in Material Science and Engineering.

R.Jaiganesh of EEE Department published paper on "Solar powered air conditioner using BLDC motor" in Material Science and Engineering.

A.T.Sankara Subramanian and M.D.Udayakumar of EEE Department published a paper on "Intelligent system to monitor and diagnose performance deviation in Industrial Equipment" in Material Science and Engineering.

R.Jaiganesh of EEE Department published a paper on "Extraction and conversion of exhaust heat from automobile engine in to electrical energy" in Material Science and Engineering.

A.T.Sankara Subramanian of EEE Department published a paper on "Recognition of fault and security of three phase induction motor by means of programmable logic controller" in Material Science and Engineering.

M.D.Udayakumar and P.Sabarish published a paper on "An advanced control technique for a Grid-Tied Hybrid Renewable energy system with Reciprocated sinusoidal PWM methodology" in Material Science and Engineering

Dr.Kavitha of ECE Department published a paper on "Performance Analysis on Quantum- Dot Cellular Automata" in International Journal of Recent Technology and Engineering

Dr.Vijayan of Mechanical Department published a paper on "Pressure Vessel Design using PV-ELITE Software with Manual Calculations and Validation by FEM" in Journal of Engineering Technology

Dr.Vijayan of Mechanical Department published a paper on "Optimization of CO2 laser cutting parameters on austenite stainless steel using grey relational analysis" in International Journal of Mechanical Engineering and Technology

Dr.Vijayan of Mechanical Department published a paper on "Synthesis of Sio2 Nano Particles by using Sol-Gel Route" in International Journal of Mechanical Engineering and Technology .

Dr.Vijayan of Mechanical Department published a paper on "Heat transfer enhancement in mini Compact heat exchanger by using Alumina nanofluid" in International Journal of Mechanical Engineering and Technology.

Dr.S.Saravanan of Mechanical Department published a paper on "Spherical activated-carbon nanoparticles derived from biomass green tea wastes for anode material of lithium-ion battery" in Materials Letter.

Mr.Navaneethakrishnan, Lakshmanan, Arul and Parkunam of Mechanical Department published a paper on "Experimental analysis on passive cooling of flat photovoltaic panel with heat sink and wick structure" in Energy source, Part A: Recovery, Utilization, and Environmental Effects.

S.Dinesh of Mechanical Department published a paper on "Taguchi's maethodology of optimizing turning parameters over chip thickness ratio in machinig P/M AMMC" in SN applied sciences .

ACADEMIC ACIEVEMENTS

GRADUATION DETAILS (2015-2019 BATCH):

	2015-2019 BATCH							
Department	No. of Students Admitted	No. of Suc- cessful Stu- dents	Successful Rate	First Class With Distinction	First Class	Second Class		
CIVIL	141	104	73.76%	2	84	18		
CSE	109	83	76.15%	2	78	3		
EEE	100	80	80.00%	1	65	14		
ECE	120	80	66.67%	1	73	6		
MECH	139	123	88.49%	1	101	14		
OVERALL	609	470	77.18%	7	401	55		



NPTEL COURSES PARTICIPATION & ACHIEVEMENT:

Depart-	Stude	nt Partici	ipation	Faculty Participation		
ment	2016-17	2017-18	2018-19	2016-17	2017-18	2018-19
CIVIL	***	***	15	***	3	12
CSE	9	18	19	11	5	7
EEE	*	10	9	*	8	14
ECE	3	14	60	15	28	30
MECH	21	6	38	1	9	9
OVER- ALL	33	48	141	27	53	72

UNIVERSITY RANK (2014-2018 BATCH)

Department	Student Name	CGPA	Rank
	REVATHY SURESH	8.90	25
CIVIL	SELVA SANGEETHA V	8.76	37
	SWETHA M	8.65	48
CSE	PRAGATHI.B	8.64	44
CSE	NEYA KARNIKA.R	8.63	48
DDD	G.GEETHANJALI	8.93	19
EEE	N.B.BHARATH	8.67	44

Course Run—Jan –April 2019						
Present Gold Elite Silver Successful Participation						
128	2	29	8	66	23	





ACADEMIC PERFORMANCE:

Academic year	Semester	No. of Students Appeared	No.of Students Passed	Percentage of Pass	All Over Tamil Nadu Rank	In Trichy
2018-2019	NOV / DEC - 2018	2200	1237	56.23	41	3
2017-2018	APR / MAY - 2018	2390	1749	73.18	32	3
2017-2018	NOV / DEC - 2017	2406	1392	57.86	68	5
2016-2017	APR / MAY - 2017	2343	1969	84.04	16	2
2010-2017	NOV / DEC - 2016	2348	2091	89.05	10	3
2015-2016	APR / MAY - 2016	2250	1934	85.96	24	2
2015-2010	NOV / DEC - 2015	2259	1858	82.25	16	1
2014 2015	APR / MAY - 2015	2019	1776	87.96	13	2
2014-2015	NOV / DEC - 2014	2024	1560	77.08	32	2
2012 2014	APR / MAY - 2014	1764	1401	79.42	38	3
2013-2014	NOV / DEC - 2013	1771	1484	83.79	5	2
2012 2012	APR / MAY - 2013	1195	966	80.84	30	3
2012-2013	NOV /DEC - 2012	1200	831	69.25	43	3

ACTIVITIES ORGANISED BY DEPARTMENTS

GUEST LECTURES ARRANGED:

Department	Year/ Sem	Subject	Resource Person
CIVIL	II Yr/IV Sem	Soil Mechanics	Dr.K.Muthukumaran
CSE	III Yr/ VI Sem	Artificial Intelligence	Dr.U.Srinivasalu Reddy, Assistant Professor, NIT,Trichy
CSE	III Yr/ VI Sem	Distributed System	Dr.G.R.Gangadharan, Associate Professor, NIT,Trichy
CSE	IV Yr/ VIII Sem	Entreprenership for Engineers	Mr.R.Venkatesh, Co-ordinator,EDC, CARE Business School
EEE	II Yr / IV Sem	Electrical Machines—II	Dr.P.Raja, Associate Professor/EEE, NIT, Trichy
ECE	II Yr/IV Sem	Maxwell Equation & Wave Equation	Dr.C.Muthuchidambaranathan Professor/ECE NIT Trichy
ECE	IV Yr/ VIII Sem	Advancement in Wireless Networks	Dr.M.Bhuvaneswari AP/ECE, Anna University, Trichy,BIT Campus
ECE	II Yr/IV Sem	Recent Trends in Communication	Dr.N.Gunavathi, AP/ECE NIT Trichy
ECE	IV Yr/ VIII Sem	Recent Trends in Wireless Com- munictaion	Dr.C.Muthuchidambaranathan Professor/ECE NIT Trichy
MECH	III Yr/ VI Sem	Unconventional machining Process	Dr.Duraiselvam Professor, Dept of Production Engg, NIT, Trichy
MECH	II Yr/IV Sem	Kinematics of Machinery	Mr.D.Raj Kumar Asst. Professor Care College Of Engineering Trichy
MECH	III Yr/ VI Sem	Finite Element Analysis	Mr.D.Raj Kumar Asst. Professor Care College Of Engineering Trichy
MECH	II Yr/IV Sem	Kinematics of Machinery	Mr.D.Raj Kumar Asst. Professor Care College Of Engineering Trichy

Handen in Engineering

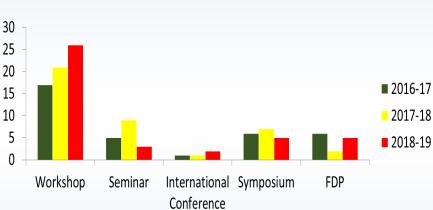
Collaborate... Educate

PROFESSIONAL BODY MEMBERSHIPS & EVENTS ORGANISED:

Professional Body	Count
IEEE	25
ISTE	132
IETE	241
IE(I)	97
CSI	3
SAE(I)	198
ICI	166
SEMCE(I)	11

EVENTS ORGANISED:

Encod	ACADEMIC YEAR			
Event	2016-17	2017-18	2018-19	i
Workshop	17	21	26	
Seminar	5	9	3	-
International Conference	1	1	2	-
Symposium	6	7	5	
FDP	6	2	5	



Society of Automotive Engineers IN

Department of Civil Engineering organised an event "STAAD Pro -FDP" on 19-02-2019 in association with ICI, Mr. Harsha Vardhan acted as the Resource person.

An one day workshop on "Analysis and Design of Pre Engineered Building (PEB) using STADD Pro" was organised by Civil Engineering department in association with ICI on 16-02-2019.

A three day workshop on "Total Station" was organised by Civil Engineering department from 11-02-2019 to 13-02-2019

A three day workshop on "Total Station" was organised by Civil Engineering department from 11-02-2019 to 13-02-2019 in association with ICI and Ladder Survey Institute.

Department of Civil Engineering organised an event "Sketch Up" in association with ICI on 06-09-2019.

A Workshop on "FILTER DESIGN & THD ANALYSIS FOR AC-DC CONVERTER US-ING MATLAB" conducted on 27-09-2019 by EEE Department in association with IEI

A Workshop on "SIMULATION AND DESIGN OF PCB USING PROTEUS" conducted on 01-02-2019 by EEE Department in association with IEI.

52nd Engineer's Day Celebration was carried out by Department of ECE in association with IE(I) on 13-09-2019 and 14-09-2019







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EVENTS ORGANISED (Continued:

An FDP on "Modern Trends in Image Processing" organised by ECE Department in association with IEEE Madras Section on 21-02-2019 and 22-02-2019

A Two Days National Workshop on "Design & Simulation of RF & Microwave device ANSYS Tool" was organised by ECE Department in association with IETE Students forum on 01-03-2019 and 02-03-2019.

An One day workshop on "Metamaterial antenna design and analysis" was organised by ECE department association on 24-01-2019.

An Inter departmental event "Sparkles-19" was organised by ECE department from 01-03-2019 to 07-03-2019 in association with ISTE Student and Staff chapter.

An one day workshop on "3D Printing" was organised by Mechanical Department on 25-01-2019.

A two day workshop in association with ICMR was organised by Mechanical Department on 13-02-2019 and 14-02-2019.

An one day workshop on "Stir Casting" was organised by Mechanical Engineering Department on 18-02-2019.

An One day workshop on "Automobiles" was organised by Mechanical Engineering Department on 01-03-2019.

ACHIEVEMENT IN SMART HACKATHON (ORGANISED BY AICTE):

Year	Total no.of Projects submitted	No. of projects selected for Finale
2019	17	5
2018	11	4
2017	6	5

SAUR URJA VEHICLE CHAMPIONSHIP:

Year	Achieved	Location
2018	2 nd out of 18 teams & Cash price ₹ 40,000	Gwalior, Madhyapradesh
2019	6 th out of 20 teams	Coimbatore, Tamilnadu













SPORTS FACILITIES & ACHIEVEMENTS

FACILITIES:

Sports Complex with following court:

- Basket Ball Court
- Volley Ball Court
- Tennis Clay Court
- Two Ball Badminton Court
- Table Tennis Court
- Football Ground
- Cricket Ground
- Cricket Net Practice
- Hockey Ground
- Kabadi Court

Zonal Level Events	2017-18	2018-19	2019-20
Badmition (Men)	Winner	Winner	Runner
Basket Ball(Women)	Winner	Winner	Runner
Volley ball (Men)	Winner	Winner	***
Hockey	Runner	Winner	Winner
Table Tennis(Men)	Runner	Winner	Winner
Ball Badmition (Men)	Winner	Runner	***
Volley ball (Women)	Winner	Runner	***
Football	Runner	***	***
Table Tennis(Women)	Runner	Runner	Runner
Athlethics(Overall)	Second	Second	Second
Athlethics(Overall)-W	***	***	Second
Chess (Women)	***	***	Runner
Hand Ball (Men)	***	Runner	***
TAKEWONDO(Men)	***	Runner	***
KHO-KHO(Men)	***	Runner	***



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CULTURAL AND CO CURRICULAR ACTIVITIES

Fine arts club of our college actively engaged in providing the students with an extensive range of cultural and co-curricular activities. Keeping in line with this commitment our college organizes Enthusia every year. It is the much awaited events with multiple events in dance, music, fashion, drama, literary and various other technical and cultural fields and offers a plethora of opportunities to the students to showcase their talents



INDEPENDENCE DAY & REBUPLIC DAY CELEBRATIONS

The Independence Day at K.Ramakrishnan college of technology was an event that stirred up the patriotic feelings of everyone present on the occasion. The Chief guest hoisted the flag and delivered the speech exhorting students to take India as a bright future and the day.

The Republic Day was marked by the unfurling of the national flag by the Chief guest. In his speech, the chief guest mentioned the significance of the day to students and staff. Stu-dents, and staff gathered on the occasion and celebrated the day with gusto and a determi-nation to take to K.Ramakrishnan College of Technology to newer heights.



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NATIONAL SERVICE SCHEME / YOUTH RED CROSS / RED RIBBON CLUB ACTIVITES

S.No	Date of the Programme	Name of the Programme	No of Participation
1	28.1.19-29.1.19	Polio drop	20
2	23.4.18-24.4.19	Road safety Programme	25
3	3.7.19	Tobacoo Awarness program	150
4	15.8.19	Tree plantaion	-
5	21.8.19	Celebration of national youth day	83
6	28.8.19	Clean our college campus	50
7	27.11.19	Nilavembu kasayam	15



ACKNOWLEDGMENT

We thank all the faculty members, administrative staff and students of K. Ramakrishnan college of Technology for their help and cooperation in bringing out the newsletter

EDITORIAL BOARD

Mr. A.T.SANKARA SUBRAMANIAN, AP /EEE, K.RAMAKRISHNAN COLLEGE OF TECHNOLOGY, TRICHY-621 112

CONTACT

K.RAMAKRISHNAN HEALTH AND EDUCATIONAL TRUST

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