

CURRICULUM VITAE



Name : **Dr. K. KANNAN**
Age and Date of Birth : 58 Years, 27.04.1965

Address for communication : Dean Academic and
Coordinator, Teaching Learning Center
CARE College of Engineering,
Tiruchirappalli 620 009
Email: drkannan2010@gmail.com
Mobile: **9442616597, 9344094339**

Google scholar id: <https://scholar.google.com/citations?user=ieb1ml0AAAAJ&hl=en>

Scopus index: <https://www.scopus.com/authid/detail.uri?authorId=57197342215>

YouTube Channel: <https://www.youtube.com/@dr.k.kannan198/featured>

INTERNATIONAL CERTIFICATION

1. Completed **IUCEE International Engineering Educator Certification Program (IIEECP)** with Distinction in January 2019.
2. The International Society for Engineering Pedagogy Certification as **IGIP International Engineering Educator** on 10 January 2021

MEMBERSHIP IN PROFESSIONAL BODIES

1. Life Member of Indian Society of Technical Education (ISTE) LM21337 from 05.02.1996
2. Member of Institution of Engineers India, M1723485 from 12.04.2021

EDUCATIONAL QUALIFICATION

Degree	Specialization	Year of pass	College Studied	University
Ph.D.	NO _x Emission Control in Direct Injection Diesel Engine	October 2010	National Institute of Technology - Trichy	Anna University Chennai
M.E	Design and Production of Thermal Power Equipment	December 1992	Regional Engineering College, Trichy	Bharathidasan University, Trichy
B.E	Mechanical Engineering	April 1987	A.C. College of Engineering and Technology, Karaikudi	Madurai Kamaraj University, Madurai

TEACHING EXPERIENCE (TOTAL 34+ YEARS)

Position	Period		Duration	Name of the Institution
	From	To		
Dean Academic and Coordinator Teaching Learning Center	04.04.2024	Till date		CARE College of Engineering, Tiruchirappalli
Professor and Coordinator Teaching Learning Center	19.06.2023	03.04.2024		
Professor and IQAC Coordinator	04.02.2019	31.04.2023	8 Years	Anjalai Ammal Mahalingam Engineering College, Kovilvenni
Professor & HOD, TPO	13.09.2017	03.02.2019		
Professor and TPO	01.02.2017	12.09.2017		

Professor	18.04.2015	31.01.2017		
Dean	16.03.2015	17.04.2015		
Principal	08.02.2012	13.02.2015	3 Year	Pandian Saraswathi Yadav Engineering College, Arasanoor, Sivagangai (Dt)
Principal	01.06.2011	31.01.2012	8 Months	Bharathiyar College of Engg. & Tech., Karaikal.
Professor	01.12.2009	31.05.2011	1 Year & 5 Months	Anjalai Ammal Mahalingam Engineering College, Kovilvenni
Assistant Professor	14.03.2005	31.11.2009	4 years & 9 months	
Principal	01.08.2001	28.02.2005	3 years & 6 months	Mount Zion College of Engineering and Technology, Pudukkottai
Assistant Professor	01.07.1993	31.07.2001	8 years	R.V.S College of Engineering and Technology, Dindigul
Associate Lecturer/ Lecturer	02.02.1988	30.06.1993	5 years & 5 months	Srinivasa Polytechnic & Mookambigai College of Engineering, Keeranur
Associate Lecturer	03.08.1987	29.01.1988	6 months	CCMR Polytechnic, Thanjavur

PATENT PUBLISHED

1. K. Kannan et al, "Design and Implementation of an Autonomous Vacuum Cleaner Robot Mechanism", 19.10.2023

JOURNAL PAPERS PUBLISHED

1. K. Kannan, M. Udayakumar," Modeling of Nitric Oxide Formation in Single Cylinder Direct Injection Diesel Engine Using Diesel-Water Emulsion", American Journal of Applied Science 6(7):1313-1320, 2009 ISSN 1546-9239
2. K. Kannan, M. Udayakumar," NOx and HC emission control using water emulsified diesel in single cylinder diesel engine", ARPN Journal of Engineering and Applied Sciences, Vol.4 No.8, October 2009, pp 59-62
3. K. Kannan, M. Udayakumar," Experimental study of the effect of fuel injection pressure on diesel engine performance and emission", ARPN Journal of Engineering and Applied Sciences, Vol. 5, No. 5 May 2010, pp 42-45
4. K. Kannan, M. Ramji, A. Shahul Hameed, V. Sivasankar, G. Sureshbabu, "Aerodynamic Analysis of VOLVO Intercity 9400 Bus Using CFD", International Journal of Advanced Research in Science, Communication and Technology (IJARSCT) Volume 3, Issue 2, March 2021, p 369 – 376
5. K. Kannan, N. Harikrishnan, A. Ragul, P. Vasantha Kumar, U. Veermani, "Thermal Analysis of Bajaj Pulsar Disc Brake", International Journal of Advanced Research in Science, Communication and Technology (IJARSCT), Volume 3, Issue 2, March 2021, p 306 – 312
6. K. Kannan, "Study of Performance and Emission Characteristics DI Diesel Engine using Diesel-Water Emulsion", Journal of Research and Applications of Thermal Engineering, 2022, Volume 5 Issue 3, DOI: <https://doi.org/10.5281/zenodo.7436898>

CONFERENCE PAPERS PRESENTED

1. K. Kannan, M. Udayakumar, "NOx emission from diesel engine and in-cylinder control methods- a comparison" National Conference on Air Pollution Monitoring and Control, Anjalai Ammal Mahalingam Engineering College, Kovilvenni, pp 22-28
2. K. Kannan, M. Udayakumar, Thermodynamic Model and Experimental Studies On DI Diesel Engine Using Biodiesel, National Conference Emerging Trends in Mechanical Engineering, AVC College of Engineering, Mailaduthurai. pp 94-105

3. K. Kannan, "Simulation of NO_x formation in DI diesel engine for water-diesel emulsified fuel combustion", International Conference on Emerging Research and Advances in Mechanical Engineering ERA 2009, Velammal Engineering College, Chennai, pp. 80-85
4. K. Kannan, "Effect of Injection Pressure and Water Injection on BSFC, and HC Emission in Diesel Engine" National Conference of Advances in Mechanical Engineering – AME 2011, Anjalai Ammal Mahalingam Engineering College, Kovilvenni, pp 92-101

WORKSHOP CONDUCTED

1. Workshop on Computational Fluid Dynamics from 22 to 26, May 2017 at Anjalai Ammal Mahalingam Engineering College, Kovilvenni
2. Workshop on Outcome Based Education and NBA Processes from 10 to 12, April 2019 at Anjalai Ammal Mahalingam Engineering College, Kovilvenni
3. Conducted webinar on 05.08.2020 in the topic, "Teaching and Learning of Gen. Z Students" to the Engineering College faculty member in TN (75 members participated)
4. Conducted webinar on 11.08.2020 in the topic, "Bloom's Taxonomy and DDA of Lectures" to the Engineering College faculty member in TN (80 members participated)
5. Conducted Workshop of AICTE Examination Reforms on 29.01.2021 for the faculty members of Anjalai Ammal Mahalingam Engineering College, 50 faculty members participated.
6. Three-day training program on Creating Experiential Learning in Class Room Teaching for 102 faculty members of Anjalai Ammal Mahalingam Engineering College, Kovilvenni in four batches.

FACULTY DEVELOPMENT PROGRAMS CONDUCTED

1. FDP in ME3391 Engineering Thermodynamics from 28.08.2023 to 01.09.2023 at CARE College of Engineering, Tiruchirappalli
2. FDP on Implementing Outcome Based Education and NBA Accreditation from 23 to 25 May 2019 at SSM Institute of Engineering and Technology, Dindigul
3. Conducted Faculty Development and Training Program on ME 6404 Thermal Engineering from 28.11.2016 to 02.12.2016 at Anjalai Ammal Mahalingam Engineering College, Kovilvenni
4. Conducted Anna University approved Faculty Development and Training Program on ME 6301 Engineering Thermodynamics from 29 May to 4 June, 2017 at Anjalai Ammal Mahalingam Engineering College, Kovilvenni

NPTEL AND ONLINE COURSES COMPLETED

1. Completed four-week NPTEL Online Course "**Design Thinking a Primer**", February-March 2020
2. Completed 3.5 hours **CBT Cognitive Behaviour Therapy Certification** online course in May 2019 @UDEMY
3. Completed four-week **NPTEL Online Course "Designing Leaner Centric MOOCs"**, July-August 2019
4. Completed four-week NPTEL online course "**Outcome based Pedagogic Principles for Effective Teaching**" Feb-Mar 2022
5. Completed four-week NPTEL online course "**Effective Engineering Teaching in Practice**" Jan-Feb 2022
6. Completed four-week NPTEL online course "**Teaching and Learning in Engineering (TALE)**" Jan – Feb 2024
7. Completed eight-week NPTEL online course "**Yoga and Positive Psychology for Managing Career and Life**" Jan – March 2024

YOUTUBE VIDEO LECTURES AVAILABLE ONLINE (More than 500)

SI No	Subject	No of Videos
1	Fluid Mechanics and Machines	51
2	Engineering Thermodynamics	54
3	Engineering Thermodynamics (Tamil)	78
4	Gas Dynamics and Jet Propulsion	34
5	Heat and Mass Transfer	62
6	Design of Transmission System	47
7	Operations Research	55
8	GATE Mechanical	63
9	UPSC ESE	48
10	Outcome Based Education	24
11	Thermal Engineering	
	Gas Power cycles	13
	Steam Nozzles	14
	Steam Turbines	8
	Internal Combustion Engines	18
12	Thermal Engineering (Part II)	
	Steam Boiler	8
	Refrigeration and air conditioning	13
	Air Compressor	7
		597

BOOKS PUBLISHED

Title of the book	ISBN Number	Year of Publication	Name of the publisher
Turbomachines	NIL	1998	Surya Publications, Dindigul
Heat and Mass Transfer	978-81-941922-7-5	2004 & 2020	Anuradha Publications, Chennai
Operations Research	81-89638-07-6	2005	Anuradha Publications, Chennai
Gas Dynamics and Jet Propulsion	978-81-8472-188-1	2011& 2016	Anuradha Publications, Chennai
Thermal Engineering	978-81-8472-225-3	2012	Anuradha Publications, Chennai
Fluid Mechanics and Machines	978-81-8209-549-6	2018	Vijay Nicole Imprints, Chennai
Thermal Engineering (Regulation 2021)	978-93-91677-16-9	2023	Anuradha Publications, Chennai
Engineering Thermodynamics	In press		Vijay Nicole Imprints, Chennai

RESOURCE PERSON FOR FDP/WEBINAR

1. Webinar on Elements of Heat and Mass Transfer for the III Year Mechanical Students of MAM College of Engineering, Trichy on 04.06.2021
2. Delivered online guest lecture on Review of ME8693 Heat and Mass Transfer on 21.05.2021 to Mechanical students of Velammal Institute of Technology, Chennai.
3. Delivered online guest lecture on Hydraulic Turbines for the Students of Mechanical Engineering, Faculty of Engg and Technology, Jain Deemed to be University, Bangalore on 13.05.2021.

4. Resource person for FDP on ME 8493 Thermal Engineering – I conducted by Arasu Engineering College, Kumbakonam on 14.12.2020
5. Resource person for webinar on “Active Learning Techniques using Case Study” on 05.09.2020 to the faculty members of M.Kumarasamy Engineering College, Karur.
6. Delivered a lecture on Hydraulic machines on 30.01.2.19 to II-year Mechanical students of Periyar Centenary Polytechnic College, Vallam.
7. Delivered a lecture on Rankine cycle and Psychrometry to II Year Mechanical students of Kings College of Engineering, Punalkulam on 04.08.17

PROFESSIONAL TRAINING

1. Successfully completed **Online Orientation Training Programme for Mentors** organized from 05 to 09 July 2021 NITTTR, Chennai under National Initiative for Technical Teacher Training.
2. Attended FDP on “**Integrated Approach in Achieving Holistic, Sustainable and Quality Enhancement in Higher Education Institutions**” conducted under Margdarshan Scheme of AICTE by SASTRA Deemed University, Thanjavur from 21.12.2020 to 26.12.2020
3. Attended Workshop on **Examination Reforms** conducted by AICTE, New Delhi on 15, 16 & 18 Jan 2021
4. Attended Eighth International Conference on Transformation in Engineering Education (Virtually) between 7th and 8th January 2021
5. Attended AICTE Sponsored STTP on “**Assessment in Engineering Education – A Pedagogical Approach**” from 4.1.2021 to 9.1.2021 conducted by Velammal Institute of Technology, Chennai.
6. Attended FDP on “**NAAC and NBA Accreditation Criteria**” under Margadharsan Scheme conducted by SASTRA, Thanjavur between 21.12.2020 to 26.12.2020
7. Attended Short Term Training Program through ICT Mode on NBA Accreditation from 22 to 26 April 2019 at National Institute of Technical Teachers Training and Research, Kolvata.
8. Completed **IUCEE International Engineering Educators’ Certification Program** conducted Indo Universal Collaboration for Engineering Education, July 2018 to January 2019
9. Attended AICTE-QIP sponsored one-week short term training program on “**Pedagogical Innovation and Research Directions in STEM Education**” from 25.02.2019 to 02.03.2019 at Thiagarajar College of Engineering, Madurai
10. Attended Sixth International Conference on Transformation in Engineering Education on 7th and 8th January 2019 at Malla Reddy Engineering College, Hyderabad
11. Attended workshop on “**Quality Initiatives in Technical & Higher Educational Institutions (in compliance with NBA & NAAC Accreditation)**” from 16 – 18, May 2018 at Engineering Staff College of India, Hyderabad.
12. Attended Three-day workshop on “**IUCEE International Engineering Educator Pre-Certification Workshop**” from March 6 – 8, 2018 at SR Engineering College, Warangal.
13. Attended One day Workshop on “**Outcome Based Education (OBE): National & International Accreditation**” on 7 January 2018 at Thiagarajar College of Engineering, Madurai.
14. Attended three-day workshop on,” **ACADEMIC LEADERSHIP**” under Mission 10X organized by WIPRO Technologies, Chennai, during 27th - 29th July 2011
15. Trained **LEAD AUDITOR ON ISO 9001 QUALITY MANAGEMENT SYSTEM** organized by TUV Rheinland, Coimbatore.
16. Attended two-day workshop on, “**HIGH IMPACT TEACHING SKILLS**” under Mission 10X organized by WIPRO Technologies on 9th & 10th February 2009.
17. Advanced Level International Workshop on “**Nano science and Technology**” held between 23 and 27 February, 2009 organized by Anna University, Chennai.
18. One day programme on **5S – Japanese concept of good housekeeping** on 4th April, 2008 organized by Confederation of Indian Industries, Trichy held at Hotel Sangam, Trichy
19. Workshop on “**Recent Developments in Mechanical Engineering towards Research & Development**” held on February 03, 2008 organized by Professional Education Development Center, Anna University, Trichirappalli.

20. 19th National Conference on **IC Engines and Combustion** organized by Annamalai University between 21.12.2005 and 23.12.2005
21. Workshop on **Advances in computational Fluid flow and Heat transfer** organized by Annamalai University between 17.10.2005 and 18.10.2005
22. Workshop on **Energy conversation possibilities in industries** organized by Velammal Engineering College, Chennai on 6.8.2005
23. National conference on **Air Pollution monitoring and Control** organized by Anjalai Ammal Mahalingam Engineering College, Kovilvenni on 28 & 29 April 2005
24. Part time Training Programme on **“Basic Course on CFD-CFX 5.7.1”** at Centre for Energy & Environmental Science and Technology (CEESAT), National Institute of Technology, Tiruchirappalli between 01.03.2005 to 05.03.2005
25. ISTE- STTP on **Automotive Electronics for Fuel Economy and Pollution Control** at Department of Automobile Engineering, Anna University, MIT campus, Chennai between 18.06.2001 and 30.06.2001
26. One-week intensive workshop on Computational **Fluid Dynamics** at Department of Mechanical Engineering, Vellore Engineering College, Vellore between 23.04.2001 and 28.04.2001
27. Refresher course on **Turbomachinery** at Department of Mechanical Engineering, Sree Nidhi Institute of Science and Technology, Hyderabad between 1.5.2000 and 6.5.2000
28. Three-day workshop on **Emerging Trends in Thermal Power Plant Design** at Department of Mechanical Engineering, Shanmuga College of Engineering, Thanjavur between 27.01.2000 and 29.01.2000
29. One day Business Meet on **Biomass Based Power Project** organized by Gandhigram Rural Institute, Deemed University, Gandhigram on 26.02.1998
30. ISTE course on **Strategic Planning and Institutional Development** at Technical Teachers Training Institute, Chennai between 11.05.1994 and 15.04.1994

PROFESSIONAL EXPERIENCE FROM OTHER ENGINEERING COLLEGES

1. In **Mookambigai College of Engineering and Srinivasa Polytechnic**
 - a. I was member of Evaluation Cell which was responsible for academic activities like framing class timetable, conducting class tests and sending progress report to the parents.
 - b. I was in-charge of Thermal Engineering Laboratory.
2. In **RVS College of Engineering and Technology**
 - a. I was in-charge of Thermal Engineering Laboratories where I have developed the Metallurgy laboratory, Instrumentation Laboratory and Turbo machines laboratory
 - b. I was in-charge of Madurai Kamaraj University examinations and coordinated the conduct of university examinations and I used to act as Chief Superintendent in the absence of the Principal
 - c. I was acting as Chief Superintendent for the Anna University Entrance Examinations
3. In **Mount Zion College of Engineering and Technology** as its Principal I developed the Electronics department laboratories viz., Electrical Machines lab and various Electronics laboratories
4. In **Anjalai Ammal Mahalingam Engineering College**
 - a. I was acting as Management Representative of ISO from 19.10.2005 and coordinated 3 surveillance audits and 2 recertification audits and organized the internal audits.
 - b. I was acting as Coordinator for admission of BE/BTECH and MCA students for the years 2006, 2007, 2008, 2009, 2010, 2016, 2017 and 2018.
 - c. I was acting as Head of Mechanical Engineering Department from 24.08.2008 to 31.05.2011
 - d. As Training and Placement Officer, conducted HR Conclave and improved the placement of students
 - e. As Coordinator IQAC, trained the faculty member on OBE. Applied for NAAC accreditation and obtained B Grade
5. In **Pandian Saraswathi Yadav Engineering College**

- a. I established quality management system and obtained ISO 9001:2008 certifications for the Institution.
- b. Organized National Conference on Emerging Trends in Engineering and Tech during 2013
- c. Organized International Conference of Emerging Trends in Engineering and Tech during 7-8, March 2014

DECLARATION

I declare that the above said information are true and correct to the best of my knowledge and belief.

