

For Each Post Graduate Programme give the following

Department: Mechanical Engineering.

i) Title of the Program. M.E. (Computer Aided Design)*

ii) Curricula and Syllabi

➤ Autonomous Curriculum - Enclosed Annexure-IV

➤ www.annauniv.ac.in - Curriculum - Enclosed

Annexure-IV

ii) Faculty Profile.

S.NO	NAME	DESIGNATION	SUBJECT TEACHING
1	MYLSAMY.G	Prof.	Computer Aided Graphics
2.	NAGARANI.J	Prof.	Robotics
3	SANTHANAM.K	Sr.Lect	Mechanical Vibration

* No Admission made for 2008-2009 because of poor response for admission

• **Laboratory facilities Exclusive to the PG Programme**

S.No	Name of the Equipment	Qty	Cost
1.	CAD Workstation	07	7,00,000
2.	CAM Software for Tool path generation for planner machining, contour machining, Drilling, Turning, etc., and Post Processing Modules for Different CNC Controllers	10	10,00,000
3.	Bench model	01	1,00,000
4.	Vision & image processing software	02	1,00,000
5.	SOLIDE WORKS	02	1,00,000
6.	ADAMS Software	02	2,60,000
7.	NSC Nastran	05	5,00,000
8.	Library Books for CAD	-	2,40,000

SPECIAL PURPOSE

❖ Software all design tools in case

S.No	Software, All Design Tools in case
1	Adams, Ansys, Pro-E, Catla, Solid Edge
2	Auto CAD.

Research focus/ areas:

S.No	List of Typical Research Projects
1	Optimization of design and analysis of shaft coupling using Fem

S.No	Industries Involved In PG Projects
1	NIL

S.No	Publications based on PG Projects(last 3 Years)
Year2006-2007	
1	Kinematics Analysis Of Draglink Quick Return Mechanism Using Adams.
2	Failure Analysis Of Spur Gear In Dismatic Foundry by using Finite Element Method.
3	Design and Analysis Of Composite Leaf Spring For Automobile application using FEA.
4	Critical Failure Analysis of Fuel Injection Tube.
5	Analysis and simulation of Linear seat recliner.
6	Analysis and Optimization Of Air Conditioning System For Different Shaped Rooms.
7	Flow analysis in Multi cylinder IC Engine Exhaust manifold.
8	Analysis of failure on single stage high pressure pump shaft using FEA Analysis.
9	Performance analysis of IC Engine fins.
10	Analysis of composite material propeller shaft for automotive vehicle
11	Finite Element Analysis of orthogonal metal cutting
Year2007-2008	
1	Optimization of design and analysis of shaft coupling using Fem

❖ **Placement Status**

S.No	Batch	Total No of Students	No of Students Placed
1	2008-2009	-	-

- **Fees Structure** - Rs.22,500 /- Per Sem
- **Hostel Facilities** - Available
- **Contact Address of Coordinator of the PG Programme.**

Name	Dr.P.SOMASUNDARAM
Address	Prof./ Mech K.S.Rangasamy College of Technology, K.S.R. Kalvi Nagar, Thokkavadi (PO), Tiruchengode – 637 209, Namakkal (DT)
Telephone	9842136616
E-Mail	somuannauniv@hotmail.com

Department: Mechanical Engineering.

i) Title of the Program. M.E (Engineering Design)

ii) Curricula and Syllabi

➤ **Autonomous Curriculum - Enclosed Annexure-IV**

➤ **Autonomous - Enclosed Annexure-IV**

ii) Faculty Profile.

S.NO	NAME	DESIGNATION	SUBJECT TEACHING
1.	Dr.P.SOMASUNDARAM	Prof.	Design Heat exchangers
2.	KRISHNAMOORHTY K.	Prof.	Engineering System Design
3.	MYLSAMY K.	Prof	Computer Application in Design

• Laboratory facilities Exclusive to the PG Programme

S.No	Name of the Equipment	Qty	Cost
1.	CAD Workstation	07	7,00,000
2.	CAM Software for Tool path generation for planner machining, contour machining, Drilling, Turning, etc., and Post Processing Modules for Different CNC Controllers	10	10,00,000
3.	Bench model	01	2,00,000
4.	Vision & image processing software	02	1,00,000
5.	SOLIDE WORKS	02	1,00,000
6.	ADAMS Software	02	2,60,000
7.	NSC Nastran	05	5,00,000
8.	Library Books for Engineering Design	-	1,00,000

SPECIAL PURPOSE

• Software all design tools in case

S.No	Software, All Design Tools in case
1.	Auto CAD 2005
2.	Pro E – Wildfire – 2.0
3.	CATIA
4.	ANSYS
5.	Adams & Nastran

- **Academic Calendar and frame work**
AUTONOMOUS ACADEMIC CALENDER

Programme	II Year M.E.		I Year M.E.	
	Important Dates		Important Dates	
	ODD	EVEN	ODD	EVEN
Class Reopening	17.06.09	09.12.09	02.09.09	21.01.10
Unit Test I	21.07.09	11.01.10	02.10.09	22.02.10
Unit Test II	02.09.09	22.02.10	05.10.09	23.03.10
Unit Test III	01.10.09	25.03.10	03.11.09	29.01.10
Last Instruction Day	16.10.09	15.04.10	13.11.09	05.05.10
University Exams	13.11.09	18.05.10	24.12.09	25.05.10

Research focus/ areas:

S.No	List of Typical Research Projects
1	FEA of composite laminates and simulation by classical lamination theory
2	Design optimization of mechanical components by composite decision support problem technique
3	Analysis of heat transfer rate of water with and without twisted tape insert in double pipe heat exchanger
4	Robust design of centrifugal pump using design of experiments and F.E.A.
5	Experimental study on castellated beam chassis with static loading
6	Structural analysis of the top plate assembly of a hydraulic press
7	Failure mode and effective analysis of foundry in machining unit
8	Design of exhaust manifold to improve performance of a high speed diesel engine
9	Design and optimization for tooling using AutoCAD software
10	Mechanical behavior of stir- casting AL-SI composite by FEA analysis
11	Design and analysis of two stage reduction gear box in cranes
12	Design and heat transfer analysis in grooved pipes
13	Evaluation of interlaminar fracture behavior of glass fiber epoxy composites
2008-2009	
1	Experimental Investigation of surface roughness, hardness and finite element analysis of residual stress for roller burnished component
2	Heat transfer analysis of annular circular and elliptical fins using finite element method
3	Simulation study of laminar flow heat transfer characteristics of tube in tube heat exchanger using passive techniques
4	Aerodynamic design and analysis of a car body
5	Weight and cost reduction of material handling equipment (Hot Coke Car)
6	Transient heat transfer analysis of internally grooved tubes
7	Recycling of glass fiber composite material
8	Thermal analysis of aluminum metal matrix composite brake disc using finite

	element method
9	CFT analysis of multicylinder diesel engine exhaust manifold
10	Job shop scheduling using particle swarm optimization
11	Fin design for maximum thermal dissipation using fem

S.No	Industries Involved In PG Projects
1	RAM PRESSES,C-6,Sanganoor Road, Ganapathy,Coimbatore.

S.No	Publications based on PG Projects(last 3 Years)
2007-2008	
1	FEA of composite laminates and simulation by classical lamination theory
2	Design optimization of mechanical components by composite decision support problem technique
3	Analysis of heat transfer rate of water with and without twisted tape insert in double pipe heat exchanger
4	Robust design of centrifugal pump using design of experiments and F.E.A.
5	Experimental study on castellated beam chassis with static loading
6	Structural analysis of the top plate assembly of a hydraulic press
7	Failure mode and effective analysis of foundry in machining unit
8	Design of exhaust manifold to improve performance of a high speed diesel engine
9	Design and optimization for tooling using AutoCAD software
10	Mechanical behavior of stir- casting AL-SI composite by FEA analysis
11	Design and analysis of two stage reduction gear box in cranes
12	Design and heat transfer analysis in grooved pipes
13	Evaluation of interlaminar fracture behavior of glass fiber epoxy composites
2008-2009	
1	Aerodynamic Design & analysis of a car body
2.	Job Shop Scheduling using PSO
3.	Optimization of Process planning Function using genetic algorithm and simulated annealing
4.	Fin design for Maximum Thermal Dissipation using FEM
5.	Simulation study of Heat Transfer and Pressure Drop Characteristics using Passive Techniques in Tube in Tube Heat Exchanger
6.	Heat transfer analysis and optimization of Fins using finite element Method
7.	CFD Analysis of Two cylinder diesel engine exhaust manifold
8.	Transient heat transfer analysis of internally grooved tubes
9.	Weight & cast Reduction of material handling Equipment (Hot coke cat)
10.	Recycling of glass fiber composite materials
11.	Experimental Investigation of surface parameters for roller burnishing component of mild steel

• **Placement Status**

S.No	Batch	Total No of Students	No of Students Placed
1	2008-09	11	11

- **Admission Procedure**

TANCET	Management Quota
65%	35%

- **Fees Structure** - Rs.22,500 /- Per Sem
- **Hostel Facilities** - Available
- **Contact Address of Coordinator of the PG Programme.**

Name	Dr.A.KUMARAVEL
Address	Prof./ Mech K.S.Rangasamy College of Technology, K.S.R. Kalvi Nagar, Thokkavadi (PO), Tiruchengode – 637 209, Namakkal (DT)
Telephone	9443553626

Department: Electrical and Electronics Engineering.

i) Title of the Program : M.E. (Power Electronics and Drives)

ii) Curricula and Syllabi

➤ **Autonomous - Curriculum - Enclosed Annexure-IV**

ii) Faculty Profile

S. No	Name	Designation	Subject Teaching
1	Dr. SANA VULLAH M Y.	Prof.	Analysis of Power Converters
2	Prof. M.K. ELANGO	Prof.	FACTs Controllers
3	MUNIRAJ C.	SL	Analysis of Inverters

- **Laboratory facilities Exclusive to the PG Programme**

S. No	Name of the Equipment	Cost (Rs.)
1	Single Phase Bridge Converter with RL Load (PEC 14 M14FW)	11,036.00
2	Single Phase Series Inverter [ITB PEC14M6]	8,640.00
3	Single phase cyclo converter [PEC 14M 14CY]	11,036.00
4	Commutation (Chopper) Circuit Module [PEC 14M14CH]	11,036.00
5	MP Based Triggering for 3 phase converter	14,200.00
6	Isolation Transformers 230V, 50Hz (3 Nos.)	15,000.00
7	Single phase Mc- Murray BED Ford inverter	9,600.00
8	D.C Shunt Motor control with 3 phase full converter	23,400.00
9	(0 – 30v) 2A Dual output Digital Display Regulated D.C. Power	29,000.00

	Supply (4 Nos.)	
10	1 MHz Function Generator (4 Nos.)	30,600.00
11	3 phase Induction Motor control with IGBT PWM-V/F Inverter Control (ITB-PEC-16Hvz)	23,600.00
12	SCR Based Voltage and Current Commutated Chopper (2 Nos.)	27,590.00
13	Single phase series inverter	12,415.00
14	Microprocessor based three phase thyristor triggering circuit	30,172.50
15	Three phase MC Murray Bedford Inverter	21,551.25
16	Three phase cyclo converter (ITB PEC 14 HV11)	32,760.00
17	Three phase half & fully controlled bridge converter	25,860.00
18	2.1 HP, 3 phase A.C Induction Motor	6,596.25
19	SCR, MOSFET, IGBT & TRIAC Static char. Module	25,860.00
20	P-IV, 40 GB HDD, 1 GB RAM, 3.0 GHz. (30 Nos.)	7,50,000.00

SPECIAL PURPOSE

S. No	Software, All Design Tools in Case
1	MATLAB 7.3
2	LABVIEW
3	PSIM
4	MI POWER
5	AU POWER

Academic Calendar and frame work

Research Focus / Areas:

S. No	List of Typical Research Projects
1	Embedded control for fuel saving
2	Intelligent technique to hot rolling mills
3	Embedded controller for process control
4	Intelligent controller for load frequency control
5	AC-DC load flow analysis
6	Optimizing active & reactive power demand using neural network
7	Unit commitment problem by intelligent control
8	Intelligent technique to bidirectional DC-DC converter
9	Intelligent technique to AC drives
10	Direct control of SRM drive
11	High performance Direct torque control of induction motor
12	Investigation of comp rite insulators for outdoor applications
13	Study on pulsed power technique to produce metal Nano powders.

S. No	Industries Involved in PG Projects
1.	Paavai Alloys and Steel Rolling Mills, Tiruchengode
2.	SPB (P) Ltd, Erode.
3.	Vi Micro Systems, Chennai
4.	Micron Technologies, Coimbatore
5.	Triunfotech, Coimbatore
6.	Darien Electronics, Chennai

S. No	Publications based on PG Projects (Last 3 Years)
1.	Power factor Correction of Electronic Ballast Discharge Lamp
2.	Design and implementation of Resonant Converter for Speed Control of induction motor
3.	Sliding mode Fuzzy based Controller For a Buck Converter
4.	Design and implementation of Current fed Dual Bridge Converter With No Deadtime
5.	Design of Neuro Fuzzy Controller for Boost Converter
6.	Design of Common Mode EMI Filter For an Inverter Fed AC System
7.	A novel Approach of ZVS DC-DC Converter
8.	Reference Model Based Adaptive Fuzzy Logic for Speed Control of a DC Motor
9.	Real and reactive Power Control for a unified Power flow controller
10.	Modeling of multilevel inverter for large induction motor drive
11.	Neuro-Fuzzy based direct torque Control of induction motor
12.	Digital Control of Single Phase inverter for UPS application
13.	Single Phase active Power filters for multiple nonlinear loads
14.	A time domain current detection algorithm for shunt active Power filter
15.	Unified Power flow Controller for damping Power System Oscillations
16.	Simulation of Switched Reluctance motor using MATLAB/ SIMULINK
17.	Real time speed control of D.C drives using micro controller
18.	Fuzzy logic techniques applied to control speed of the induction motor
19.	New family of ZCS PWM Converters using a New ZCS PWM auxiliary circuit
20.	Power factor Correction using a series active filter
21.	A digitally Control Switch Mode Power Supply based on Matrix Converter
22.	The TCSC Controller design for Power System Stability improvement
23.	A Variable Speed wind energy conversion scheme for connection to weak ac system
24.	A Neural network based Space Vector PWM Controller for Voltage-fed inverter induction motor drive
25.	Harmonics Reduction and Analysis in a cascade Multimedia inverter
26.	Direct torque control of induction motor with stator flux compensator
27.	Fuzzy logic control based design of a maximum power tracking for wind energy conversion applications
28.	Harmonics reduction of multilevel inverter using space vector modeling technique
29.	Grid interfacing voltage sag compensator

● **Placement Status**

S. No	Batch	Total No. of Students	No. of Students Placed
1	2005-2007	16	16
2	2006-2008	10	10
3	2007-2009	05	05

● **Admission Procedure**

TANCET	Management Quota
65%	35%

- **Fees Structure** - Rs.22,500 /- Per Sem

- **Hostel Facilities** - Available

Contact Address of Co-ordinator of the PG Programme

Name	Dr. M.Y.SANA VULLAH
Address	Dean / EEE, K. S. Rangasamy College of Technology, K.S.R. KALVINAGAR Tiruchengode – 637 215
Telephone	04288-274741-744.
E-Mail	mys.sanavullah@yahoo.com

Title of the Program : M.E. (Applied Electronics)

i) Curricula and Syllabi

➤ **Autonomous - Curriculum - Enclosed Annexure-IV**

ii) Faculty Profile

S.No	Name	Designation	Subject Teaching
1.	Dr.JAYANTHI K.B	Prof.	Embedded systems
2.	CHITRA N	Prof.	Advanced Digital Signal Processing
3.	RAJASEKARAN.C	Asst.Prof.	Advanced Microprocessor and Microcontroller

• **Laboratory Facilities Exclusive to the PG Programme**

S.No	Name of the Equipment	Quantity	Cost (Rs.)
1.	DSP trainer kits TMS320C6713	3	73,774
2.	DSP Trainer TMC320C5416	6	60,000
3.	8086 trainer kit	5	30,000
4.	8051 Microcontroller	5	50,000
5.	80196 based & Evaluation kit	6	62,640
6.	PIC Microcontroller kits	4	46,552
7.	ARM Development Board &	4	50,000
8.	Universal programmer	1	45,000
9.	Xilinx Foundation Series software	Multi-user	43,430
10.	Universal VLSI (FPGA/CPLD) Trainer kit	15	58,186
11.	Xilinx CPLD (XCR 3128x1) cool runner KIT	1	15,515
12.	Xilinx FPGA Spartan III kit	1	9,698
13.	XILINX FPGA Virtex-E piggyback board	1	13,578
14.	Altera FPGA Cyclone FPGA Board	1	7,272

15.	Altera CPLD Board	1	4,366
16.	Universal VLSI (FPGA/CPLD) Trainer kit	10	1,51,880
17.	Tanner	10	4,75,000
18.	Personal Computers	25	6,37,500

SPECIAL PURPOSE

S.No	Software, All Design Tools in Case
1	MatLab Software
2	Orcad Software
3	Multisim Software
4	Tanner Software
5	Code Composer Studio
6	Cadance Software

- **Academic Calendar and frame work**

AUTONOMOUS ACADEMIC CALENDER

Programme	II Year M.E.		I Year M.E.	
	Important Dates		Important Dates	
	ODD	EVEN	ODD	EVEN
Class Reopening	17.06.09	09.12.09	02.09.09	21.01.10
Unit Test I	21.07.09	11.01.10	02.10.09	22.02.10
Unit Test II	02.09.09	22.02.10	05.10.09	23.03.10
Unit Test III	01.10.09	25.03.10	03.11.09	29.01.10
Last Instruction Day	16.10.09	15.04.10	13.11.09	05.05.10
University Exams	13.11.09	18.05.10	24.12.09	25.05.10

Research Focus / Areas:

S. No	List of Typical Research Projects
1	Medical Image Processing
2	Wireless Networks
3	Embedded Systems

S.No	Industries Involved in PG Projects
1	Covansys(India) Private Limited, Chennai.
2	Vi Micro Systems, Chennai.
3	Maruthi Medical Centre and Hospitals, Erode.
4	Coral Rewinding India Private Limited, Erode.

S.No	Publications based on PG projects (Last 3 Years)
2006-2007	
1.	Network Security Using Elliptic Curve Cryptography
2.	Implementation Of Speed Field Oriented Control Of 5 ϕ AC Induction Motor

	Using TMS320F2407A Processor
3.	Weighted Pseudorandom Hybrid BIST
4.	Ultrasound Carotid Artery Image Segmentation
5.	Automatic Boundary Extraction Of Carotid Artery In Ultrasound Image Using Wavelet & Fuzzy
6.	Wavelets For Segmentation Of Common Carotid Artery Using Ultrasound Images
7.	The Performance Of Efficient Image Enhancement Technique By Decimation Method
8.	Cryptanalysis Of Two Group Key Management Protocol For Multicasting
9.	Safety-Automation Of Car Using Embedded Microcontrollers
10.	Optimal Block Design for Asynchronous Wake-Up Schedules in Multi-hop Wireless Networks
11.	Adaptive Multirate Wide Band Speech Coding Using CELP
12.	Extraction Of Common Carotid Artery Intima Media Complex Based On Snakes
13.	Temporal Kalman filter for boundary extraction of carotid artery using ultrasound images
2007-2008	
1.	Reverberant Speech Enhancement Using Two Stage Algorithm
2.	Ad Hoc On Demand Distance Vector Routing Protocol Using Gossip Approach In MANET
3.	Space vector Modulation for Direct Torque control and Harmonics Elimination of Five-Phase Induction Motor with harmonics elimination and optimal switching sequence
4.	Iterative Channel Estimation and Multiuser Detection in Multipath DS-CDMA Channels
5.	Condition Monitoring of Stator Winding Insulation Using Genetic Algorithm
6.	Area efficient FIR filters for high speed FPGA implementation
7.	Vehicle detection using normalised colour and edge map
8.	Real Time Acoustic Feedback Path Modelling Using Active Noise Control Systems
9.	Markov Chain Monte-Carlo Simulation For Image Denoising
10.	Analysis of Various Clustering Algorithms on Medical Image Segmentation
11.	Improved Silence Suppression for Activity Deduction in Noisy Signals
12.	Adaptive Prediction in Lossless Sequence Compression
13.	The wavelet transform based image enhancement through the joint exact histogram specification
14.	Tracking of time varying channels using two step LMS type Adaptive Algorithm
2008-2009	
15.	An Improved Autocan Design Approach For Sequential Circuits
16.	Text Extraction And Recognition From Mixed Images
17.	Multicue Image Segmentation Using Pde-Based Flooding Technic
18.	A High Speed, Secure Data Acquisition System Using Advanced Risc Machine
19.	Unauthorized Person Identification Using Rfid

• **Placement Status**

S.No	Batch	Total No. of Students	No. of Students Placed
1	2006 –2007	13	13

2	2007 –2008	14	14
3	2008 –2009	05	05

- **Admission Procedure**

TANCET	Management Quota
65%	35%

- **Fees Structure** - Rs. 22,500 /- Per Sem
- **Hostel Facilities** - Available

- **Contact Address of Coordinator of the PG Programme.**

Name	Dr.JAYANTHI K.B.
Address	Professor & Head of the Department K. S. Rangasamy College of Technology K.S.R. Kalvi Nagar Thokkavadi (PO) Tiruchengode – 637 215 Namakkal (DT).
Telephone	04288 – 274741
E-Mail	ksrctt@yahoo.co.in

Title of the Program : M.E. (VLSI Design)

I) Curricula and Syllabi

➤ **Autonomous - Curriculum - Enclosed Annexure-IV**

ii) Faculty Profile

S.No	Name	Designation	Subject Teaching
1	Dr.M.VASUDEVAN	Prof.	Low Power VLSI
2	NANDAKUMAR.R	Asst.Prof.	ASIC Design
3	SARAVANAN.S	Senior Lect.	CAD of VLSI

- **Laboratory facilities Exclusive to the PG Programme**

S.No	Name of the Equipment	Quantity	Cost (Rs.)
1.	Xilinx Foundation Series software	Multi-user	43,430
2.	Universal VLSI (FPGA/CPLD) Trainer kit	13	58,188

3.	Xilinx CPLD (XCR 3128xl) cool runner KIT	1	15,515
4.	Xilinx FPGA Spartan III kit	1	9,698
5.	Xilinx daughter Board (XC35400)	10	4556
6.	XILINX FPGA Virtex-E piggyback board	1	13,578
7.	Altera FPGA Cyclone FPGA Board	1	7,272
8.	Altera CPLD Board	1	4,366
9.	DSP trainer kits TMS320c6713	3	73,774
10.	8086 trainer kit	5	30,000
11.	80196 based & Evaluation kit	6	62,640
12.	PIC Microcontroller kits	4	46,552
13.	Universal Programmer	1	45,000
14.	Code composer studio	1	22,000
15.	Personal Computers	18	4,59,000

Special Purpose

S.No	Software, All Design Tools in Case
1.	Mat-Lab
2.	Multisim Software
3.	Tanner Software
4.	Cadance Software
5.	Xilinx foundation series Software
6.	Code composer studio

- Academic Calendar and frame work

AUTONOMOUS ACADEMIC CALENDER

Programme	II Year M.E.		I Year M.E.	
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Class Reopening	17.06.09	09.12.09	02.09.09	21.01.10
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Last Instruction Day	16.10.09	15.04.10	13.11.09	05.05.10
University Exams	13.11.09	18.05.10	24.12.09	25.05.10

Research Focus / Areas:

S. No	List of Typical Research Projects
1	Low Power VLSI
2	Testing of VLSI
3	Hardware software course simulation
4	Mixed Signal VLSI Design

S.No	Industries Involved in PG Projects
1.	Silicon Labs School for advanced Studies and Research, Bangalore.
2.	Maruthi Medical Centre's and Hospitals, Erode.

S.No	Publications based on PG projects (Last 3 Years)
2006-2007	
1.	A high efficiency fully digital power delivery system
2.	Energy management for battery powered reconfigurable systems
3.	A combined gate replacement and input vector control approach for leakage current reduction
4.	Test power reduction using first- level supply gating
5.	A call admission control scheme for packet data in cellular communication
6.	Optimization techniques for FPGA-based wave-pipelined DSP blocks
7.	Direct torque control of five phase induction motor using TMS320F2407 digital signal processor
8.	Effect of autoscan on fault diagnosis

2007-2008	
1.	Design of path delay testing in FPGAs
2.	A channel decoder for 3GPP2 applications
3.	Design of phase difference based logic registers
4.	Automatic Test Development Methodology For VCO Modulating Transceiver Architecture
5.	Realization of Sequential logic circuit using Bit serial operation
6.	An Illogical Switching Power Clampdown Technique For A Low Power Multiplier
7.	FPGA implementation of Whirlpool hash function
8.	Implementation of Floating point Divider on FPGA for SOCs
9.	Detection of untestable fault in sequential circuits
10.	Design of automatic test program generation for microprocessor
11.	Analysis of the Performance of SPIHT and TSIHT Algorithm on image compression
12.	Implementation of Ultrasound image segmentation with shape prior technique using FPGA
13.	Implementation of Data Clustering in VLSI for Image Segmentation
14.	An Interpolation processor implementation for Soft-decision Reed-Solomon decoding.
15.	A Quasi-Cyclic LDPC Decoder implementation with FPGA
16.	FPGA implementation of nonzero clock skew circuits
17.	Design of Asynchronous Null Convention Logic FPGA
18.	An Advanced Logic BIST System For Don't Care Masking

2008-2009	
19.	Simulation Based Fault Injection Techniques With Saboteurs And Mutants
20.	Design of Reconfigurable Instruction Cell Array For Communication Systems
21.	VLSI Based Design Of Generalized Voronoi Diagram Construction In Mobile Robot Navigation
22.	Implementation Of Generic Cellular Simultaneous Recurrent Network Using Kalman Filter
23.	Implementation Of A Scalable Encryption Algorithm Using FPGA

24.	Design And Synthesis Of FFT Processor Using Low Power Multiplier
25.	Boundary Extraction Of Medical Images With Canny Segmentation Using VHDL
26.	Variable Step Size In Multi Channel Active Noise Control Systems
27.	Improved Cmos Dynamic Logic With High Performance And Low Power For 4-Bit Multiplier
28.	Low Power Adaptive FFT Architecture In Mc-Cdma Receiver
29.	Low Power Design Logic For High Speed Floating Point Units
30.	Feature Detection In Retinal Images Using Image Processing
31.	Design Of A Low-Power, High Performance, 8x8 Bit Multiplier Using A Shannon Based Adder Cell
32.	Noise Reduction In Computed Tomography Image Based On Wavelet Transform
33.	Design Of Blocked XOR Precomputation Based Content Addressable Memory Using Low Power
34.	Bist Pattern Generation With Lt-RTPG And 3-Weight Weighted Random Bist
35.	Golomb-Like Coding For Selective Trigger Scan Architecture
36.	Deeply Pipelined Floating-Point Cores For High Speed Arithmetic Evaluation

- **Placement Status**

S.No	Batch	Total No. of Students	No. of Students Placed
1	2005 – 2006	NA	
2	2006 – 2007	18	18
3	2007 – 2008	18	18
4	2008–2009	18	18

- **Admission Procedure**

TANCET	Management Quota
65%	35%

- **Fees Structure** - Rs. 22,500/- Per Sem

- **Hostel Facilities** - Available

• **Contact Address of Coordinator of the PG Programme.**

Name	Dr.M.VASUDEVAN
Address	Professor/ Department of ECE K. S. Rangasamy College of Technology K.S.R. Kalvi Nagar Thokkavadi (PO) Tiruchengode – 637 215 Namakkal (DT).
Telephone	04288 – 274741
E-Mail	ksrctt@yahoo.co.in

Title of the Program : M.E. (Industrial Safety Engineering)

I) Curricula and Syllabi

➤ **Autonomous - Curriculum - Enclosed Annexure-IV**

ii) Faculty Profile.

S.NO	NAME	DESIGNATION	SUBJECT TEACHING
1.	Dr.KARTHIKEYAN T.	Prof.	Reliability Engineering
2.	SUNDARARAJU V.	Prof.	OHSAS 18000 & ISO 14000
3.	ILANGKUMARAN M.	Asst.Prof.	Fire Engineering & Explosion control
4.	CHANDRALEKHA S.	Lecturer	Safety in Construction

• **Laboratory facilities Exclusive to the PG Programme**

S.No	Name of the Equipment	Qty	Cost (Rs.)
1.	Noise(Sound) level meter	1 No	6,750
2.	Lux Meter	1 No	3,240
3.	Fire extinguisher set	1 No	6,163
4.	Face shield with top & crow, Ear muff, Ear Plug & Leather guard, Traffic Cone with rubber base	1 No	1,679
5.	Goggles	2 pairs	170
6.	Gum Boot	4 pairs	1,590
7.	Apron	1 No	60
8.	Gloves (Neoprene & Antistatic)	3 pair	188
9.	Helmet	5 No	326
10.	Safety Poster	5 No	478
11.	Full Body Harness	1 No	630
12.	3M Speed Glass	1 No	8,600
13.	First aid kit	1 No	700
14.	Breathing apparatus	1 No	49,725
15.	Multi Gas detector	1 No	34,425
16.	Metal detector	1 No	4,590
17.	Fire man axe	1 No	689

18.	Wind Sock	1 No	2,008
19.	Friction tester	1 No	Under progress
20.	Impact tester	1 No	Under progress
21.	Exhaust gas analyzer	1 No	Under progress
22.	High volume sampler	1 No	Under progress
23.	Software : CISION, FETI & Failure Mode analysis	1 No	Under progress

S.No	Publications based on PG Projects (last 3 years)
1.	On Site Emergency Plan for Borg Warner
2.	Risk indexing and safe operating procedure for construction Industry
3.	Hazard and operability study in LPG installation area for a steel plant
4.	Job safety analysis & Hazard identification in the process (Crushing, grinding, Pressing & High temperature tunnel kiln)
5.	Study on Hazard Identification and Environment Health and Safety Assessment in Asbestos Usage Industries
6.	Study on health hazards and environmental safety in asbestos sheltered industries
7.	Analysis of carbon monoxide poisoning from a blast furnace gas in a steel industry
8.	Safe Material handling aspects during construction of cement plant
9.	Hazard identification and risk assessment – Hazop study
10.	Job safety analysis (JSA) in acid storage and treatment plant (ASTP)

- **Contact Address of Coordinator of the PG Programme.**

Name	Dr.T.Karthikeyan
Address	Prof./ MCT K. S. Rangasamy College of Technology, K.S.R. Kalvi Nagar, Thokkavadi (PO), Tiruchengode – 637 215, Namakkal (DT).
Telephone	04288 274741

Department: Computer Science and Engineering.

i) Title of the Programme : M.E. (Computer Science & Engineering)

ii) Curricula and Syllabi

➤ **Autonomous - Curriculum - Enclosed Annexure-IV**

iii) Faculty profile

S.No	Name	Designation	Subject Teaching
1	Dr.DURAI SWAMY K.	Prof.	Computer Architecture
2	BABISARASWATHI R.	Prof.	Computer Networks
3	KANAGAVALLI R.	Prof.	Data Structures

• Laboratory facilities exclusive to the PG Programme

S.No	Name of the Equipment	Qty	Cost (Rs.)
1	Intel Piv Dp Xeon 3.0GHz 2mb 800fsb 4*512 Mb Ddr Ram 2*150 Gb Sata Hdd 1.44mb Fdd Cd Rom 104 Keys Std Keyboard Mouse 2btn Ps2(W/Scroll) (3)	Server 3	2,80,000
2	Nodes 1: Intel core 2 duo @ 1.86 GHz, Mother Board, 2*512 MB DDR RAM,80 GB HDD, 17” LCD Monitor, USB (or) PS/2 Optical scroll 3 button mouse with mouse pad, MM Keyboard. (55)	Client 55	1428000
	Nodes 2: Pentium IV @ 3.0 GHz, ASUS mother Board , 2*256 MB DDR RAM,80 GB HDD, 15” LCD Monitor, USB (or) PS/2 Optical scroll 3 button mouse with mouse pad, MM Keyboard, 1.44 FDD (5)	Client 05	124000
3	Samsung Laser	Printer 1	9000
4	Dot Matrix	Printer 2	2100
5	2*20.0 KV, 08 hours backup	UPS 1	410000

Special Purpose

S.No	Software, All Design Tools in Case
1	Win Runner
2	Junit
3	NS2 Simulator

• Academic Calendar and frame work

AUTONOMOUS ACADEMIC CALENDER

Programme	II Year M.E.		I Year M.E.	
	Important Dates		Important Dates	
	ODD	EVEN	ODD	EVEN
Class Reopening	17.06.09	09.12.09	02.09.09	21.01.10
Unit Test I	21.07.09	11.01.10	02.10.09	22.02.10
Unit Test II	02.09.09	22.02.10	05.10.09	23.03.10
Unit Test III	01.10.09	25.03.10	03.11.09	29.01.10
Last Instruction Day	16.10.09	15.04.10	13.11.09	05.05.10
University Exams	13.11.09	18.05.10	24.12.09	25.05.10

• **Research Focus / Areas**

S.No	List of Typical Research Projects:
1	Implementation of Puma (Protocol for unified multicasting through Announcement) in MANET
2	A Tool for testing of inheritance in object oriented software
3	MAC Protocols a performance a and Minimizing Exposed Node Problem in IEEE 802.11 MAC for MANET
4	Fragment Class Analysis for testing of Multithreading and Exception Handling in Java Software
5	Fragment Class Analysis for testing of inheritance in Java Software
6	Class Analysis Testing of Object Oriented Language
7	Retrieval of objects in video similarity based on graph matching
8	Efficient resource allocation for wireless multicast.

S.No	Industries Involved in PG Projects
1	ISRO, Karagpur
2	ATHEEVA Technologies, Kerala
3	HCL Info Systems, Noida

S.No	Publications based on PG Projects (last 3 Years)
1	Dynamic sample selection in peer to peer networks
2	Efficient application of an association rule mining algorithm on an encoded temporal database
3	Location based routing method mobile ad-hoc network
4	Extended visual cryptography using complementary share participant verification
5	Hiding association rule mining with restricting consequences
6	Automatic identification of novel intrusions using the most prominent technique to real network data
7	Locally linear regression for pose invariance face recognition
8	Minimal Distributed detection in clustered wireless sensor networks
9	Image restoration using space rariant Gaussian scale mixtures in over complete pyramids

• **Placement Status**

S.No	Batch	Total No.of Students	No.of Students Placed

1	2006-2007	25	25
2	2007-2008	21	19
3	2008-2009	19	19

- **Admission Procedure**

TANCET	Management Quota
65%	35%

- **Fees Structure** - Rs.22,500 /- Per Sem

- **Hostel Facilities** - Available

- **Contact Address of Co-Ordinator of the PG Programme**

Name	Dr. K.Duraiswamy
Address	DEAN (AC) K. S. Rangasamy College of Technology, K.S.R. KALVINAGAR Tiruchengode- 637 215.
Telephone	04288 -274741, 274745
E-Mail	ksrctt@yahoo.co.in

Department: Centre for Nano Science and Technology

Title of the Program: M.Tech (Nano Science and Technology)

I) Curricula and Syllabi

- **Autonomous - Curriculum - Enclosed Annexure-IV**

ii) Faculty Profile

S.No	Name	Designation	Subject Teaching
1	Dr. V. RAJENDRAN	Prof.	MEMS and NEMS, Nano Science and Technology
2	Dr. N. MEENAKSHI SUNDARAM	Prof.	Nanobiotechnology, Nanodevices
3	Dr. N. GOBI	Asst.Prof.	Advanced Characterisation Techniques
4	Dr. K. SAMINATHAN	Asst.Prof.	Advanced Materials Technology
5	Mr. B. SARAVANAKUMAR	Lect.	Quantum Mechanics

- **Laboratory facilities Exclusive to the PG Programme**

S.No	Name of the Equipment	Qty	Cost (Rs.)
1.	Atomic force Microscopy (AFM)	1	31,80,800

2.	Ball Mill	1	4,24,003
3.	BET surface area & pore size analyzer	1	17,50,104
4.	Digital Balance – 0.01 mg	1	1,23,613
5.	Digital Balance-1mg	1	29,120
6.	Digital micrometer (0 – 25 mm)	1	6,032
7.	Digital Storage Oscilloscope Wave Runner 104 Mxi	1	5,13,704
8.	Digital ultra Low temperature full visibility bath	1	61,776
9.	Digital Vernier Caliper -15 cm	1	6,032
10.	Double Distillation Unit- All Quartz Double Distiller unit demountable with low level water cutoff system	1	71,240
11.	Electrospinning set up	1	2,86,000
12.	Flame Retardant & water repellent tester	1	50,000
13.	Fume exhaust Hood Clean	1	69,680
14.	High pressure & high temperature hydrothermal autoclave	1	8,21,600
15.	Hot Air Oven Universa	2	37,140
16.	INSERF Constant temperature bath	1	41,184
17.	INSERF Digital B O D Incubator	1	84,240
18.	Kanthal chamber type super temperature furnace	1	4,58,706
19.	Magnetic stirrer with hot plat	5	19,510
20.	Mini model Spray Pyrolyser	1	9,82,800
21.	Online in situ high temperature furnace	1	9,90,000
22.	Particle size analyzer	1	15,14,532
23.	pH/Ion Selective Electrode and Meter	1	1,82,897
24.	Sonicator	1	1,99,750
25.	Transducer, Probes and Accessories	1	3,39,680
26.	Ultrapure Water Purification System for Pyrogen free Water	1	1,75,357
27.	Ultrasonic Atomiser	1	1,63,795
28.	Ultrasonic Pulser Receiver	1	4,95,600
29.	Water Incubator Shaker Labline	1	69,960

Special Purpose

S.No	Software, All Design Tools in Case
1	NEMS/MEMS & Molecular Software (Simulation studies)
2	NANO X'plore for Nano design and simulation

- **Academic Calendar and frame work**
AUTONOMOUS ACADEMIC CALENDER

Programme	II Year M.E.		I Year M.E.	
	Important Dates		Important Dates	
	ODD	EVEN	ODD	EVEN
Class Reopening	17.06.09	09.12.09	02.09.09	21.01.10
Unit Test I	21.07.09	11.01.10	02.10.09	22.02.10

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Unit Test III	01.10.09	25.03.10	03.11.09	29.01.10
Last Instruction Day	16.10.09	15.04.10	13.11.09	05.05.10
University Exams	13.11.09	18.05.10	24.12.09	25.05.10

S.No	Industries Involved in PG Projects
1	DISIR (Dalmia Institute of Scientific and Industrial Research), Orissa.
2	IGCAR (Indira Gandhi Centre for Atomic Research) Kalpakkam
3	Regional Research Laboratory Trivandrum (In Process)

S.No	Publications based on PG projects (Last 3 Years)
	Nil

- **Placement Status**

S.No	Batch	Total No of Students	No of Students Placed
1	2007 – 2008	NA	NA

- **Admission Procedure**

TANCET	Management Quota
65%	35%

- **Fees Structure** - Rs. 22,500 /- Sem

- **Hostel Facilities** - Available

- **Contact Address of Coordinator of the PG Programme.**

Name	Dr. V.RAJENDRAN
Address	DIRECTOR R&D and Nano Science and TEchnology K. S. Rangasamy College of Technology, K.S.R. KALVINAGAR Tiruchengode – 637 215.
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