



MODEL ENGINEERING COLLEGE

"to evolve into an academy of excellence, to serve the emerging knowledge based society"



About the *Institution*

Model Engineering College, Thrikkakara is a premier institute of engineering that has carved a niche for itself in the field of technical education in a very short span of time. Ever since its inception in 1989, by the Government of Kerala under the aegis of the Institute of Human Resource Development for Electronics, IHRDE (now IHRD), the college has made its presence felt in the technical horizon of the state.

The College has been selected for financial assistance by TEQIP (Technical Education Quality Improvement Programme), a World Bank Project. The college is expected to receive Rs. 10 crores under this scheme. An amount of Rs. 4.3 crores have already been sanctioned. For more details log on to www.npiu.nic.in.

The college, having close rapport with reputed organizations like National Physical and Oceanographic Laboratory (Govt. of India), Electronics Research and development centre, Thiruvananthapuram, Vikram Sarabhai Space Centre, Thiruvananthapuram and Sree Chithra Thirunal Institute of Medical Science & Technology, Thiruvananthapuram, has already made significant contribution to the R & D activities in the state.

Nature of Admission

Admission to the institute is based on an All Kerala Engineering Entrance Examination conducted by The Commissioner of Entrance Examination, Government of Kerala. Of the half-lakh aspirants, only the elite make it to this institution. The college is rated the second best in the state, after the College of Engineering, Trivandrum.

Courses offered by the Institution

Four year B Tech programme in

- Electronics and Communication Engineering
- Computer Science and Engineering
- Electronics and Biomedical Engineering

Structure Of B-Tech

The B-Tech degree programme offered by this institution is an eight semester course spanning over four years. Each semester consists of five theory papers and two lab sessions. The Cochin University of Science and Technology (CUSAT) conducts examinations at the end of each semester accompanied by continuous internal evaluation. The final three semesters of the course are specifically designed for specialization where the students get to choose elective subjects.

Projects

Mini Project

A mini project, done during the 6th semester, is intended to provide the students with experience in various areas such as project planning, project design, development and maintenance. Many of the mini projects done by the students of the college have won wide acclaim in National Level Science and Technology Meets.

Seminars

A seminar, to be presented in the seventh semester, on the current cutting edge technologies helps the students to keep in pace with the changing technologies.

Main Project

The duration of the Main Project is one year, where, in the seventh semester the design of the project is to be presented. In the final semester, the project at hand is to be completed as per the project design. The projects done by the students of the college have been often applauded by the technical society of the country.

Other Facilities

Library

A fully computerized library caters to the needs of the students and faculty members. The library has a rich collection of books and periodicals, which mainly focus on Biomedical, Computer and Electronics Engineering. The library has a collection over 7,000 titles and 14,000 books. A separate section has been arranged for IEEE publications. The library provides information services such as current awareness service, selective dissemination of information service, reference service, bibliographic service etc. An amount of Rs50 lakhs is sanctioned for modernisation of the library under TEQIP Project.



Clubs

The college is home to an array of energetic clubs

IEEE

IEEE Student Chapter has an active student involvement and is one of the most dynamic associations in the college. The student chapter organizes seminars, exhibitions and all India level events like EXCEL. Talks on state of the art technologies by experts in the fields of Electronics, Computers and Biomedical Engineering, paper presentations, exhibitions, hardware design contests and software design contests are the main attractions of the event.

Young India

The junior chapter of Confederation of Indian Industry (CII), which is actively involved in various socio-economic development works. We also had representation for the annual YI Summit 2004 in Delhi.

Illuminati

This is the quiz society of the college which aims in bringing together the Whiz kids of knowledge in MEC, thereby helping in promotion of the great quizzing tradition of our college. It regularly conducts quizzes of all genres and has carved a good reputation for itself among the quizzing circles in Kerala.

Extra-Mural Club

The Music club, Quiz and Debate club and Audio Visual club come under the roof of the Extra-Mural club. It organizes special student surprises for Vishu, Onam, Christmas, New Year etc.

Eco-Friends

The MECian nature club strongly believes in the motto of “Green MEC, clean MEC”. Camps are organized regularly at places of ecological interest.

Sports Club

The intra-mural sports program includes Football, Volleyball, Basketball, Badminton, Table tennis, Cricket etc. The sports club conducts a sports meet once every year. MEC cricket team is ranked “the best” in Cochin University. We have a well equipped Health Club provided for the students.

Arts Club

It provides a platform for students to develop their creative skills. This club organizes various arts festivals in the state and country. This club is responsible to organize the annual arts festival, Sargam 2004, in the college.

National Service Scheme (NSS)

The National Service Scheme of the college cultivates in the students a spirit of social service. The society conducts regular Blood Donation Camps and has been appreciated by the IMA. Its activities also include social service camps.

The Senate

The Senate is the supreme student body, whose members are elected by and from the students with two representatives from each class.

The objectives of the senate

- To train the students of the college in their duties, responsibilities and rights
- To promote opportunities for the development of personality, leadership, efficiency, knowledge and the spirit of service.

Alumni

Enriched by students whose individual and professional achievements create an invigorating community, the alumni association keeps silicon threads of attachment between old students and Institution.

Its objectives are

- Keep old students informed of the growth and development of the institution
- Give opportunities to old students to participate in the responsible task of building up and maintaining the MECian tradition
- Help the students graduating from the college in securing employment consistent with their qualifications
- Offer meaningful industrial projects to the students and staff of this college and promote “industry-institution interaction”.
- For more details regarding XMECIans log on to **www.xmec.net**

Placement Committee

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Electronics & Communication Engineering

The Electronics Engineering Department of Model Engineering College offers premier professional training with an eye on the modern developments in electronics and information technology. It offers a four year undergraduate course in electronics and communication engineering. The department has proved to be unsurpassed within the state and has received accreditation from NBA. Teamed with an excellent infrastructure, competitive faculty and an active students chapter of IEEE, it offers an outstanding opportunity for budding professionals to polish their skills and outperform their competitors.

Objectives

- To provide a platform for students to realise, enhance, and polish their skills in the field of electronics and communication.
- To equip the engineers of tomorrow for the fast paced field of communication technology.
- To keep the students aware of the latest cutting edge technologies through talks, seminars etc.
- To reinforce into the students, through mini and main projects, the skills to work in a team.
- To establish, in each student, an uncompromising commitment to quality.

Salient Features

A syllabus encompassing the latest technologies, excellent lab facilities and an exemplary faculty are the main reasons for the prized status accorded to this course. The curriculum includes, apart from core electronics, papers on Communication Engineering, Instrumentation, Signal Processing, Process Control and Industrial Management. The vast library and high speed access to the internet make sure that the latest information in the field of Electronics is readily available.

Syllabus

- Fundamentals of Engineering
- Digital Electronics
- Solid State Electronics
- Electronic Circuits
- Communication Engineering
- Microelectronics and Linear Integrated Circuits
- Electromagnetic Field theory
- Test and Measuring Instruments
- Industrial and Power Electronics
- Communication Theory
- Digital Communication
- Microwave Techniques and Devices
- Digital System Design
- Electronic Product Design and EDA tools
- Object Oriented Programming
- Audio and Video Systems
- VLSI System Design
- Computer Networks
- Modern Communication Systems

Electives

- Digital Image Processing
- Artificial Neural Networks
- Biomedical Instrumentation
- Systems Programming
- Opto Electronics

Labs and Practicals

Analog Circuits lab

Basic principles of electronics circuits are assimilated in two sessions (semester 3 and semester 4) of circuits labs.

Digital Circuits lab

Students are trained in digital principles, basic IC's and digital system design in this session.

Industrial and Power Electronics lab

The industrial and power electronics lab gives the student opportunities to deal with different types of converters, power controlling schemes etc

Microprocessor lab (8085 and 8086)

Trains the student in basic programming techniques, I/O interfacing and peripherals device interfacing (8253, 8255, 8254, 8251, 8271, ADC, DAC etc).



Communication Systems lab

Includes experiments in communication techniques like AM and FM, pulse modulation and modulation, mixer, filtering etc. Study of PLL, filters, oscillators etc is also done.

Test Lab

Includes all the equipments required to check the practicality of the projects done.

Resources at the Electronics Department

Besides basic equipments like the versatile CROs, High frequency signal generators, Programmable power supply, DSO etc.

The labs are facilitated with

- Spectrum analyser
- DSP trainers with filter design software
- Logic analyser
- Various speed drives both AC and DC
- Programmable logic controller
- Computerized multiprocessor control stations
- High speed modems
- Image scanner
- 350 Megahertz analog CROs, 200 Mhz DSO
- Arbitrary wave generators
- Electronic CAD package
- Digitiser
- FPGA development system with related hardware and software
- PIC evaluation board and evaluation kit
- Intel 89C51 development systems



Clubs and Associations

The college is home to an array of energetic clubs and associations.

Electronics association-Mixed signals

The aim of the association is to provide a platform for exchanging and encouraging skills in electronics field. It conducts various programmes like technical quiz, paper presentation, workshops etc..

Model Amateur Radio Club (MARC)

It organise meetings and various technical programmes for developing the communication engineering skills of the students and for making HAM more popular, not only among the college students but also in the public.

Recent Projects

All student projects are focused on cutting edge technologies covering fields like microcontroller based systems, digital communication, optoelectronics, robotics, advanced networking, embedded systems, power electronics and signal processing.

Recent Main projects

1. Wavelet Based Pitch Detection Using TMS 320C 6711 DSK

Abstract: An event based pitch detector employing the dyadic wavelet transform, suitable for both low-pitched and high-pitched speakers and is robust to noise. This pitch detector also has the advantage that it is sensitive to even the non-stationary variations in the pitch period.

2. Redundancy Mechanism in Industrial Based Control Systems

Abstract: The project aims at the implementation of redundancy mechanism in industrial based control systems.

3. Embedded Internet Interface

Abstract: Implemented in UDP/IP/Ethernet using 8051 microcontroller and CS8900A Ethernet transceiver. This device provides existing data acquisition devices a new means of data transfer that is the Internet.

4. N-Tap FIR Filter using VHDL Implemented on XILINX FPGA

Abstract: The project was aimed at designing, coding and implementing an N-tap FIR filter using VHDL. We developed the architecture for a 256-tap FIR filter. The filter is flexible up to 256 tap and extensible thereafter. The programs were entered in VHDL and simulated using the ModelSim tool. The 16-tap digital filter was later synthesized using Leonardo Spectrum. The digital logic family obtained, conformed to the specifications of the Xilinx Virtex II FPGA.

5. FPGA Implementation Of AIC to DSP Processor using VHDL

Abstract: The objective of the project is to implement an AIC which can be connected to lower resolution ADCs and DACs and can be interfaced to the serial port of the DSP processor, thus reducing the net hardware costs.

6. OFDM Implementation on ADSP 2181

Abstract: Orthogonal Frequency Division Multiplexing (OFDM) is an efficient digital modulation technique used to alleviate the effects of Intersymbol Interference (ICI). The project implements OFDM using Analog Devices processor ADS2181.

7. Medical Image Compression

Abstract: It is the removal of redundant data by compression. The project adopts two different approaches where by in the first approach an adaptive implementation wavelet based EZW and SPIHT algorithms. In the second approach the contours of a every N^{th} Contour level is extracted and chain coded to produce a coarse approximation of the original image.

8. Digital Filters for PSLV Instrumentation Telemetry System

Abstract: The Polar Satellite Launch Vehicle (PSLV) uses a decentralized Instrumentation Telemetry system. The system currently employs analog signal conditioning technique for processing the measured flight parameters. The filters are implemented using the SHARC EZ-KIT which is based on the ADSP-21061 processor.

9. Software defined Radio

Abstract: We aim at implementing a software radio capable of receiving AM, FM and SSB signals in the frequency range of 0-30MHz.

Computer Science & Engineering



Under Graduate Computer Science and Engineering programme of Model Engineering College is ranked among the best technical programs in the country. It prepares them to meet the challenges faced by today's IT professional by exposing them to a wide array of cutting-edge technologies.

Objectives

- To provide every student with a strong conceptual understanding in the core areas of Computer Science.
- To enable students to engineer ingenious computing hardware and software solutions with the greatest degree of accuracy, flexibility and based on the latest engineering paradigms
- To familiarize students with the latest in software and programming tools.
- To provide the greatest amount of pragmatism in approaching an engineering solution.
- To provide students with hands-on engineering experience through laboratory courses and projects (Minor and Major).
- To coach students to work in teams and provide insight and direction into the atmosphere as might be encountered by professionals in the field.

Salient Features

The curriculum at Model Engineering College is upgraded on a regular basis to expose students to the new trends in the industry. It provides specialization in a wide range of hardware and software subjects. In order to bridge the gap between knowledge and its practical application, students are required to undertake seminars, mini project and a main project, that put them in an industry-like situation. Thus, the course produces an ideal software engineer, well equipped to meet the challenges of the rapidly changing IT industry.

Syllabus

Computer Science Specific Papers

- Computer Fundamentals
- Data Structure and Algorithms
- Data Base Management System
- System Programming
- Discrete Mathematical Structures
- Principles of Programming Languages
- Simulation and Modeling
- Operating Systems
- Compiler Construction
- AI and Expert System
- Computer Graphics
- Formal Language and Automata Theory
- Computer Communication and Networking
- Algorithm Analysis and Design
- Advanced Computer Architecture and Parallel Processing
- Software Engineering
- Object Oriented Modeling and design
- Internet Working
- Distributed Computing

Electives :

- Digital Image Processing
- Artificial Neural Networks
- Simulation and Modeling
- Electronic Commerce
- Software Architecture
- Algorithms and Complexity

Labs and Practicals

Hardware lab

Study of SMPS, graphic adapter cards, floppy disk and hard disk controllers, trouble- shooting and Maintenance. Low level Programming for 8086.

Data structures Lab

The various Data Structures are implemented through JAVA

Compiler construction Lab

Lexical Analysis, writing parsers, Symbol Tables and intermediate code generation using C, LEX and YACC



Network & OS Lab

Exercises involving system calls of a multi tasking operating system, semaphores and monitors, study of TCP/IP , client server programming and internet programming.

Computer Graphics Lab

Programming assignments on Transformations, Polygon filling, Hidden surface elimination, Shading and illumination models.

Resources at the Computer Department

MEC has excellent infrastructural facilities and well maintained laboratories.

- The Computer Science department is provided with 2 Software Development lab networked entirely and connected to Internet via a 64kbps RF link to VSNL, providing us with 24 hr internet connectivity.
- There are 150 computers with varying processing powers from 500Hz to 2.5GHz running Linux and Windows and 1 Sun Ultra Sparc Server running Solaris OS.
- Thin clients based on Linux Terminal Server Project(LTSP) with both Pentium based PCs and Sparc based java boxes as clients.
- Small Beowulf cluster and a few of our lab computers run open mosix clustering.
- Implementation of Grid computing in our lab.
- Connected to VSNL with a 64kbps RF link which provides our college with 24 hours internet connectivity to the students and staff.
- We Host our own Web Server, FTP Server and Mail Server powered by Debian. Our Lab is equipped with a SGI workstation, a RAID array, an Apple pc and a GPS which is a part of our GIS lab.

Programming Exposure

Advanced Computing Lab

Computer network of the advanced computing lab supports IPv4 and IPv6. The heterogeneous network has systems within experimental project for network monitoring and maintenance with intelligent networks. The college connects to the internet through leased lines. The first ever Wi-Fi Lab in the State with high end systems.

Microprocessor lab

The lab is equipped with 8085 and 8086 based system design kits, universal microprocessor kits, EPROM programmers, in-circuit emulators (8086/88), data acquisition cards, logic state analyzers , emulation kits, microcontroller kits etc.

Computer Hardware Lab

Equipped with 80386/486/P II based systems, Add-on cards, PC diagnostic aids, serial cards, sound blaster cards , DSP kits, PC trainer , IDE & SCSI cards and several prototype motherboards.

MACS - MEC Association of Computer Students

Macs provides a platform for students to develop their technical and management skills by coordinating group activities, taking up projects and organising seminars discussions. It also provides a forum for exchange and dissemination of ideas and information.

Recent Projects

1) Optimizing C compiler for .NET

The aim of the project is to implement a reasonable and retargetable optimizing compiler. This compiler is meant to be used along with the “ROTOR” framework and will provide for a C compiler that outputs MSIL (Microsoft Intermediate Language).

2) BIOCLUSTERS- Role of Cluster Computing in Bioinformatics

The project into the prospects of parallelising two major applications in bioinformatics on Beowulf clusters. These applications are chosen to be representatives of two problems groups that involve performing either large number of non computer intensive tasks (eg: performing BLAST searches in database) or, a single task requiring huge computational power (eg: Protein folding simulation).

3) 32 Bit Operating System

The project is an attempt to build a 32 bit protected mode operating system based on the UNIX Kernel architecture.

4) High Performance Cluster Computing—“SRISHTI”

It aims to demonstrate clusters as a viable alternative to MPPS (Massively Parallel Processors). It explores alternatives to TCP/IP in the form of GAMMA allowing a drastic reduction in network latency by eliminating a lot of the protocol overhead. It provides the basic framework for development of parallel programs based on message passing architecture. The ease of application development on the cluster is further enhanced by the indigenous Object Oriented Master Slave Library, MSLIB.

5) a. Spam Filtering Using Spam Mail Communities

This project describes an approach towards spam filtering that seeks to exploit the nature of spam messages that allow them to be classified into different communities.

b. Specialization Scores For Assymetric Web Search Queries

This is an approach to compute the specialization score for search queries, the aim of the score being to indicate how specialized the narrow topic is, to the broader topic. The approach generates scores for such queries, which can further be used to refine web searches for such queries, provided a given query could be identified to be of the form that we deal with.

c. Context Disambiguation in Web Search Results

Web searches results in many pages that are not of interest, these may be due to a word or words in the search query having different contexts, the user obviously expecting to find pages related to the context of interest. This work proposes a method for disambiguating contexts in web search results.



Electronics & Biomedical Engineering

The college is the only one of its kind to get accreditation for this B.Tech course at the national level. Being a dynamic combination of two emerging fields, this course has the broad objective of providing assistance in the struggle against illnesses and diseases by developing tools and techniques for research, diagnosis and treatment. The course is often confused with Biotechnology, which is a totally wrong notion. Here, the syllabus is structured in such a way that, emphasis is laid on electronics and instrumentation, coupled with developing expertise in the biomedical field.

Objectives

- To create, integrate, transfer and apply knowledge of engineering design in the medical field.
- To teach students how to analyse and implement practical solutions for complex interdisciplinary engineering problems.
- To give students a strong foundation for post graduate studies in the field of Electronics and biomedical engineering, biometrics, bioinformatics, and related disciplines.
- To teach students how to use state-of-the-art software tools to solve biomedical and electrical engineering problems.
- To provide students with hands-on engineering experience through laboratory courses and opportunities in industry and government laboratories.
- To cultivate the ability of the students to communicate and work effectively in teams.

Salient Features

Electronics and Biomedical Engineering programme of the college gives thrust to electronics, computing, signal processing applications along with medical instrumentation, spectrum photometry, photonics, medical imaging and medical informatics.

Syllabus

The syllabus of the course can be broadly classified as follows

- Digital Electronics
- Solid State Electronics
- Electronic Circuits
- Communication Techniques
- Microelectronics & Integrated Circuits
- Industrial and Power Electronics
- Hospital Engineering
- Biosensors and Transducers

- Analytic and Diagnostic Equipment
- Medical Imaging Techniques
- Therapeutic Equipments
- Principles of Radio Diagnostic and Therapy
- Object Oriented Programming
- Computer Networks
- Modern Medical Instrumentation
- Modelling of Physiological Systems
- Biophysics
- Biomechanics
- Biomaterials

Electives:

- Digital Image Processing
- Artificial Neural Networks
- Biomedical Laser instrumentation
- System programming
- Medical Electronics and Experts Systems
- Graphic and Volume Visualizations



Labs and Practical

Basic Electronics Lab

The lab emphasizes on the basics of electronic components and circuits. They involve rectifiers, various transistor configurations, characteristics of other active elements, integrator, differentiator, clipping and clamping circuits, filter circuits...

Electronic circuits lab

Transistor biasing circuits, amplifiers, sweep circuits, op-amp configurations, oscillator circuits, multivibrators, integrators and differentiators, voltage regulators.

Digital Electronics Lab

This involves study of basic digital gates, combinational circuits, multiplexers, flip flops, shift registers, counters, TTL and CMOS, timers, multivibrators...

Medical Electronics Lab I

Pace maker circuits, LDR circuits, thermistors, DAC/ADC, Instrumentation amplifier, Analog multiplexer, frequency meters.

Medical Electronics Lab II

PLL, frequency and amplitude modulators and demodulators, ECG simulators, sample and hold circuits, Voltage to frequency converters, power control using SCR, regulator ICs, transducers and Isolation circuits.

Bioengineering Lab

Flash ADC, ultrasound scanner, X-ray timer, ESU waveform generator, chart drive circuit, power amplifier.

Medical Systems Lab

Fixed power supply, variable powers supply, colorimeter, EEG recorder, defibrillator, ESU, electrocardiograph...

Catheterization Lab

Resources at the Biomedical Department

MEC has excellent infrastructural facilities and well maintained laboratories.

The Biomedical Department shares some labs with Electronics Department. Apart from this the department has three well maintained labs and adequate equipments.

- Besides basic equipments like the versatile CROs, high frequency signal generators, SMPS, etc., the labs are facilitated with:
- Biplane Catheterization Lab Facility
- Image Processing Systems including a Frame Grabber Unit with CCD Camera and its software, Blood Gas Analyzer, Colorimeter, Hb meter, pH meter, Flame Photometer
- Therapeutic Equipments such as EEG, ECG, Student Physiograph, Electronic BP meter, Pulse Oximeter, Computerized Cardiac Stress Testing Unit, Foetal Heart Monitor, FEM Software Package NISA III

Recent Projects

1. Low Cost Solution To Gait Cycle Digitization

Analysis of human gait cycle using specially developed potentiometric sensors at the ankle, knee and hip to measure angular displacement of land marks. Gait analysis is a valuable tool in diagnosing walking disorders.

2. Volume Visualization in Medical Imaging

It's a volume visualization system that provides a comprehensive 3-D image with several 2-D cross sectional slices given as inputs. The cross sectional images obtained from CT or MRI can be interpreted for diagnostic purposes.

3. Wavelet Analysis of ECG

It provides a better description of EEG signals. In this system time frequency representation has been used. Wavelet transforms have time frequency capabilities. Further they provide multilead analysis of the signal.

4. Microcontroller Based Speech Synthesizer

It is a compact speaking machine that is capable of speaking anything. Input is given using a conventional keyboard. It adopts a simple text to speech technique.

5. Computerized Treadmill for Cardiac Stress Testing

The project aims at computerizing the treadmill and acquiring ECG from the exercising patient. The treadmill parameters speed and elevation can be varied as per standard exercise protocols and along with ECG. These parameters are displayed in a friendly graphical interface.

6. Development of an Optical X-Y Scanner

The product developed by this project is a scanning machine for scanning soft tissue in a grid like pattern using the method of trans-illumination with laser as source.

7. REM & Analysis of Chithra Valve

Finite element analysis is a method for the analysis of stresses associated with complex structures. The project aims at modeling of heart valve and studying the stress distribution and displacement sensitivity due to loading.

8. Spectral Analysis of EEG Using FET

This project aims at comparing the EEG of a normal person and that of an Alzheimer's patient from power spectrum obtained from digitized EEG wavelets. The decimation in time algorithm is used for extracting the frequency components from the EEG signals.

9. Non Linear Analysis of EEG Signal

The aim of the project is to perform a spectral analysis of human EEG using wavelet transform. For this a multilevel wavelet transform analysis is performed. The signal is passed through a series of low pass and high pass filters and approximated detached coefficients obtained at each point are plotted.

10. Finite Element Analysis of Foot Using NISA II

Finite element analysis is one of the most popular methods for identifying and solving problems associated biomechanical structures. The highly versatile FEM package NISA II is used for the purpose.

Achievements

- **Prof. T K Mani**, Head of the Department, Electronics and Communication Engineering, won the first prize in the design contest organized by **MicroChip Inc, U.S.A** in 2004. He has also presented a research paper in the 147th meeting of **Acoustical Society of America**. He is also the recipient of **Sir C V Raman award** in 2002 for his paper “The Acoustic of Rain Drop Impact”
- The Electronics and Communication Engineering department got accreditation from **National Board of Accreditation**.
- **Rupesh Kumar R** of 1997 batch won the **Individual Excellence Award** in Infosys.
- **Vinitha Suresh** of 1993 batch won the **Innovator Asia Award** from **EDN Asia Magazine**.
- **Niyaz K Zubair** of 2005 batch is a recipient of special **KVPY Award** from **IISC Bangalore**.
- **Alphus Pathrose** of 1997 batch reached the final round of **BBC Mastermind India Quiz**.
- The students have won the top ranks in the university from 1993 onwards.
- The Dept. of Computer Science and Engineering of Model Engineering College, is proud to receive all the top three ranks of **CUSAT in year 2003**.
- At the national level, the students of this department have come out with flying colors in **GATE** with the best ranks being 32 this year and 56 last year.

- **Roshan James and Pooja Malpani**, of 2002 Batch, currently working with a leading software firm in India have bagged the **Microsoft's Most Valuable Professional Award** in 2003.
- **Mithun Koshy Alexander**, of 1999 Batch, is currently the **International Student Ambassador in Australian University**.
- **Deepak Dutt**, of 1998 Batch, has won the “**Quality Award of Excellence**” from **Nortel Networks** CEO, Frank Dunn. The purpose of the Award is recognizing employees who demonstrate behaviors that drive our Core Value of “Quality is in every aspect.” and whose innovations deliver clear customer value.
- **Preethish M. Kumar**, of 2000 Batch, **Filed 3 patents on Image Processing**.
- **Mr. Krishnaswamy** of Electronics and Biomedical Engineering 1999 batch is one of the esteemed few who have made it to the peak of the corporate world. He got an offer to be the second highest payee in India from **INTEL TECHNOLOGIES** in the year 2000. Currently working under the field of management education, he is dedicated to improving the managerial skills of students.
- **Rajeswri B.S and Shaj Ibrahim** of Electronics and Biomedical Engineering have also made their mark in the history of our college. Together they designed a **Power driven Wheel Chair with movement control system**. This system makes use of a joystick to control the direction of the wheel chair. This project was highly acclaimed by “**The Hindu**” for its innovation and enterprise.
- **Vibin Vijay** of the Electronics and Biomedical Engineering 2001 batch bagged the first prize in the **National Level Technical Exhibition** held at Veliyammal College of Engineering for his paper on the topic, **Nanomedicine**, in which chips designed using Nanotechnology are used for the prevention and cure of human diseases.



...in the **INDUSTRY**



....YES, we are there too...

- | | | |
|---------------------|-----------------------|-----------------|
| • Intel | • IBM | • Accenture |
| • DELL | • Avenir Technologies | • Mindtree |
| • Texas Instruments | • Oracle | • Reliance |
| • Toshiba | • Hewlett Packard | • Sasken |
| • Motorola | • Microsoft | • Satyam |
| • Kanbay | • Verizon | • Tata Infotech |
| • Cisco | • Ittium | • HCL |
| • Bosch | • TCS | • Mascot |
| • Johnson & Johnson | • CTS | • Hughes |
| • Ericsson | • Infosys | • SAP |
| • Analog Devices | • Siemens | • GE |
| • Philips | • Tata elxsi | • Huawei |
| • Novell | • L&T | • Inautix |
| • Lucent | • L&T emsys | • ABN Amro |
| • Honeywell | • Wipro | • EDS |

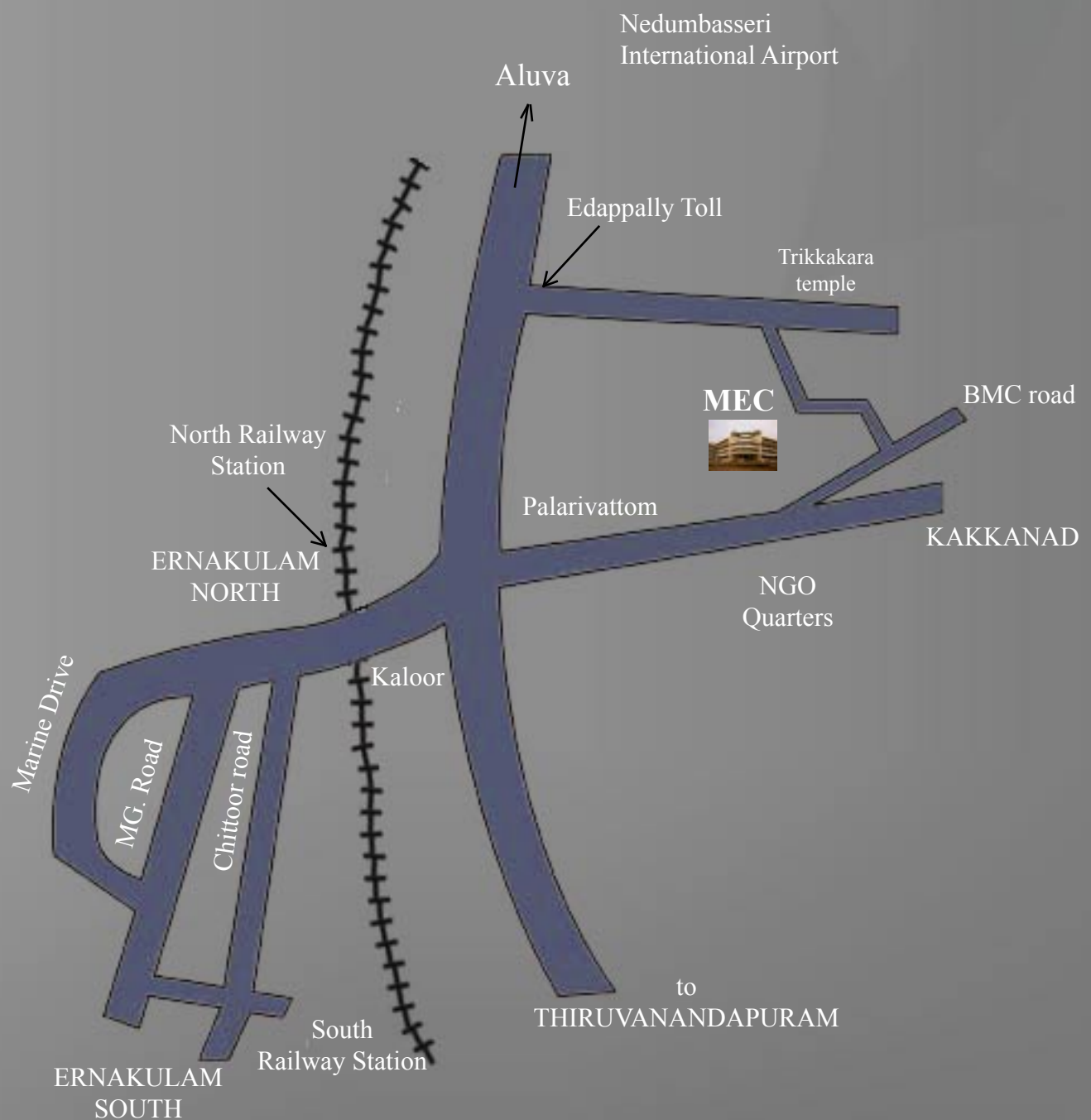
“to evolve into an academy of excellence
to serve the emerging knowledge based society”

Why Model Engineering College?

- A Govt. College, managed by IHRD, affiliated to CUSAT and recognized by AICTE
 - High academic standards
 - A high minimum of 75 working days per semester
 - Vibrant student community
 - An apolitical sense of discipline among students
 - A regular evaluation scheme with stringent minimum performance requirement
 - Syllabus that is constantly updated
 - Unlimited Internet connection
 - Labs and Library, working for substantial hours daily
 - Excellent extracurricular performance
 - Well placed alumni
 - No improvement exams
-

Model Engineering College

how to get there?



MODEL ENGINEERING COLLEGE

(Managed by IHRD, A Govt. of Kerala Undertaking)

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