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1. INTRODUCTION:

Amrita Vishwa Vidyapeetham is an internationally acclaimed University that aims at creating professionals who, driven by a firm commitment to excellence, yet rooted in the rich cultural heritage of our nation. This Multi-Campus University, with headquarters at Ettimadai, Coimbatore and having campuses in Amritapuri, Bangalore, Kochi and Mysore, is accredited by National Assessment and Accreditation Council (NAAC), Government of India, with ‘A’ grade. It is fast emerging as a pioneering research Institution moulding a new generation of engineers, doctors, managers, healthcare and media professionals, scientists and entrepreneurs of calibre and character.

The engineering schools at Amritapuri, Bangalore, and Coimbatore are offering under graduate and post graduate programmes in multiple disciplines of engineering. The two - year post graduate programme leads to an M.Tech. degree to which the admission is on an All India basis. Candidates who satisfy the eligibility criteria stipulated by the University can apply.

Amrita is committed to provide the best career opportunities to the students of the University by maintaining close rapport with the corporates, identifying potential recruiters and organising campus recruitment process. The meticulously planned and executed placement programme for students who have been put through the paces of a well structured training schedule has contributed to the high percentage of student placements in reputed organisations like TCS, Microsoft, Wipro, L&T, Infosys, Patni, Cognizant, Caterpillar, Hindustan Motors, HP, HCL, Accord Soft, Honey Well, I - flex , Mind Tree etc. More than 100 Companies visit the campus regularly to meet their human resource needs.

This handbook contains general information and rules relating to the M.Tech. admission 2010 and other relevant details. Candidates are required to go through the handbook thoroughly and acquaint themselves with the procedures relating to the admission. The contents of the handbook are subject to modification as may be deemed necessary by the University. The decision of the University on any issue related to the admission will be final and binding.
2. CAMPUSES & PROGRAMMES ( M.Tech ):

The various M.Tech programmes offered in the three Schools of Engineering are listed below:

Amrita School of Engineering, Amritapuri Campus
Amritapuri, Clappana (P.O), Kollam - 690 525, Kerala, India
Tel: 0476 - 2801280
Fax: 0476 - 2896178
Email: admissions@amritapuri.amrita.edu
Website: http://amritapuri.amrita.edu

Amritapuri Campus
VLIS Design
Computer Science & Engg.
Wireless Networks & Applications
Engineering Design

Amrita School of Engineering, Bangalore Campus
Kasavanahalli, Carmelaram (P.O), Bangalore – 560 035,
Karnataka, India.
Tel: 080 - 28439565 / 66
Fax: 080 - 28440092
Email: admissions@blr.amrita.edu
Website: http://blr.amrita.edu

Bangalore Campus
VLISI Design
Embedded Systems
Power Electronics

Amrita School of Engineering, Coimbatore Campus
Ettimadai (P.O), Coimbatore – 641 105,
Tamilnadu, India.
Tel: 0422 - 2656422,
Admission Enquiry: 0422 - 2652424
Fax: 0422 - 2656274
Email: admissions@amrita.edu
Website: www.amrita.edu

Coimbatore Campus
VLISI Design
Bio-Medical Engineering
Power Electronics
Embedded Systems
Computer Vision & Image Processing
Engineering Design
Integrated Design & Manufacturing
Computational Engineering & Networking
Remote Sensing & Wireless Sensor Networks
Cyber Security
Chemical Engineering
3. ELIGIBILITY:

u VLSI Design
Pass with Minimum 60% in B.E./B.Tech in any one of the following disciplines or equivalent qualification.
• Electronics & Communication Engineering
• Electrical & Electronics Engineering
• Electronics & Instrumentation Engineering
• Instrumentation & Control Engineering

u Bio-Medical Engineering
Pass with Minimum 60% in B.E./B.Tech/M.B.B.S/M.Sc./B.D.S/B.Pharm (candidates should have studied Biology and Maths. at the +2 level)

u Power Electronics
Pass with Minimum 60% in B.E./B.Tech in any one the following disciplines or equivalent qualification.
• Electronics & Communication Engineering
• Electrical & Electronics Engineering
• Electronics & Instrumentation Engineering
• Electronics & Telecommunication Engineering
• Instrumentation & Control Engineering

u Embedded Systems
Pass with Minimum 60% in B.E./B.Tech in any one of the following disciplines or equivalent qualification.
• Electronics & Communication Engineering
• Electrical & Electronics Engineering
• Computer Science Engineering
• Information Technology
• Electronics & Instrumentation Engineering
• Instrumentation & Control Engineering

u Engineering Design
Pass with Minimum 60% in B.E./B.Tech in any one of the following disciplines or equivalent qualification.
• Mechanical Engineering
• Automobile Engineering
• Production Engineering
• Manufacturing Engineering
• Metallurgical Engineering
• Industrial Engineering

Integrated Design and Manufacturing
Pass with Minimum 60% in B.E./B.Tech in any one of the following disciplines or equivalent qualification.
• Mechanical Engineering
• Automobile Engineering
• Production Engineering
• Manufacturing Engineering
• Metallurgical Engineering
• Industrial Engineering

Computer Vision and Image Processing
Pass with Minimum 60% in B.E./B.Tech in any one of the following disciplines or equivalent qualification.
• Electronics & Communication Engineering
• Electrical & Electronics Engineering
• Electronics & Telecommunication Engineering
• Instrumentation & Control Engineering
• Computer Science & Engineering
• Information Technology
• Electronics & Instrumentation Engineering
• or MCA / MSc Software Engineering

Computational Engineering and Networking
Pass with Minimum 60% in B.E./B.Tech in any branch of engg. or equivalent qualification or M.Sc. Maths/Physics/Computer Science (70% minimum).

Remote Sensing and Wireless Sensor Networks
Pass with Minimum 60% in B.E./B.Tech in any branch of engg. or equivalent qualification or M.Sc. Maths/Physics/Computer Science (70% minimum).

Cyber Security
Pass with Minimum 60% in B.E./B.Tech in any one of the following disciplines or equivalent qualification.
• Computer Science & Engineering
• Information Technology
• Electronics & Communication Engineering
u **Computer Science & Engineering**
Pass with Minimum 60% in B.E./B.Tech in any one of the following disciplines or equivalent qualification:
- Electronics & Communication Engineering
- Electrical & Electronics Engineering
- Electronics & Telecommunication Engineering
- Instrumentation & Control Engineering
- Computer Science & Engineering
- Information Technology
- Electronics & Instrumentation Engineering
  
or
- MCA / MSc in Computer Science / Software Engineering

u **Wireless Networks & Applications**
Pass with Minimum 60% in B.E./B.Tech in any one of the following disciplines or equivalent qualification:
- Electronics & Communication Engineering
- Electrical & Electronics Engineering
- Electronics & Telecommunication Engineering
- Instrumentation & Control Engineering
- Computer Science & Engineering
- Information Technology
- Electronics & Instrumentation Engineering
  
or
- MCA / MSc Computer Science / Software Engineering / Electronics Science

u **Chemical Engineering**
Pass with Minimum 60% in B.E./B.Tech in any one of the following disciplines or equivalent qualification.
- Chemical Engineering
- Chemical & Electro Chemical Engineering
- Petroleum / Petro Chemical Engineering
- Polymer Engineering
- Bio Technology

**4. SELECTION PROCEDURE:**
Admission is based on Academic Merit and Interview or Entrance Test. Candidates with valid GATE Score, are given preference.
5. HOW TO APPLY:

5.1 Application fee is **Rs. 650/-**, which covers the cost of Application form, University Brochure, and Information Hand Book. Application fee once paid will not be refunded.

5.2 Application forms for admission can be obtained as below:

- By post, from the Admission Co-ordinators of Amrita Schools of Engineering at Amritapuri, Bangalore or Coimbatore (see section 2), on a written request indicating their full communication address together with a Demand Draft for Rs.650/- drawn in favour of “Amrita School of Engineering” payable at Coimbatore. (On the back of the Demand Draft, candidate should write his / her Name and the words “For M.Tech Application”). Please keep a photocopy of the Demand Draft with you for future reference.

  OR

- From the University counters of Amrita Schools of Engineering at Amritapuri, Bangalore or Coimbatore on producing a demand draft for Rs 650/- as above.

  OR

- From the designated branches of Dhanalakshmi Bank Ltd on payment of Rs.650/-

  **Branches of Dhanalakshmi Banks where M.Tech Applications are available:**

<table>
<thead>
<tr>
<th>Branch</th>
<th>Address</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thrissur Main Branch</td>
<td>Naickanal Junction, The Round, Thrissur</td>
<td>0487-2335177</td>
</tr>
<tr>
<td></td>
<td>Kerala-680 001</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ph. 0487 - 2335177</td>
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</tr>
<tr>
<td>Emakulam Kaloor Branch</td>
<td>MES Cultural Complex Building</td>
<td></td>
</tr>
<tr>
<td>Vazhuthacaud Branch</td>
<td>Vazhuthacaud, Thiruvananthapuram</td>
<td>0471-321686</td>
</tr>
<tr>
<td></td>
<td>Kerala-695 010</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ph. 0471 - 321686</td>
<td></td>
</tr>
<tr>
<td>Coimbatore Main Branch</td>
<td>Coimbatore Main Branch, HDFC House</td>
<td>0422-2234332</td>
</tr>
<tr>
<td></td>
<td>PB No. 2951, 268 Crosscut Road</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vazhuthacaud, Thiruvananthapuram</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tamil Nadu - 641 012</td>
<td></td>
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<tr>
<td></td>
<td>Ph. 0422 - 2234332</td>
<td></td>
</tr>
<tr>
<td>Bangalore MG Road Branch</td>
<td>Bangalore MG Road, No. 9/3 First Floor</td>
<td>080-25593300</td>
</tr>
<tr>
<td></td>
<td>Nitish Broadway, MG Road,</td>
<td></td>
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<tr>
<td></td>
<td>Bangalore, Karnataka - 560 042</td>
<td></td>
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<tr>
<td></td>
<td>Ph. 080 - 25593300</td>
<td></td>
</tr>
<tr>
<td>Hyderabad Branch</td>
<td>Hyderabad, Andrapradesh - 500 001</td>
<td>040 - 4752831</td>
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<td></td>
<td>Ph. 040 - 4752831</td>
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</table>

6. ONLINE:

- Apply online through the website amrita.edu and submit the application printout in an A4 sheet along with the Demand Draft for Rs.650/- drawn in favour of Amrita School of Engineering payable at Coimbatore.

7. GENERAL GUIDELINES:

7.1 Mere submission of the application does not guarantee admission to the programme.

7.2 Admission will stand cancelled automatically if the candidate fails to join the University on
the specified date.
7.3 All the relevant original Certificates / mark statements should be submitted at the time of interview or on the stipulated date, there after
7.4 The candidate should submit the completed application at the following address:
   The Admission Co-ordinator,
   Amrita School of Engineering,
   Amrita Vishwa Vidyapeetham,
   Ettimadai (P.O), Coimbatore 641105, Tamil Nadu.
   Phone: 0422 – 2656422.
   E-mail: admissions@amrita.edu
7.5 Candidates are advised to send the filled-in applications by INDIA POST / COURIER.

8. REFUND RULES
Refund of fees will be made as per the regulations of the Govt. of India. If a student admitted to the M.Tech programme withdraws from the programme before the starting of the classes, the fees collected from the student will be refunded after deducting a processing fee of Rs. 1000/-.

If a student leaves after starting the classes, but before closing the admission, and if the seat consequently falling vacant is filled by another candidate before the last date of submission, the University will return the fees collected with proportionate deductions of monthly fees. If the vacant seat is not filled up as above, the fee will not be refunded.

No refund will be given to a student leaving after the closing of admissions. The date of closing of admissions will be announced by the University.

9. ENQUIRIES
For all enquiries related to the Amrita M.Tech. Admission - 2010, please call 0422 – 2685169/70.

10. FEE STRUCTURE:
Fee Structure for M.Tech. Degree Programme - 2010 Admission at AMRITA Campuses

<table>
<thead>
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<th>M.Tech. - VLSI</th>
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<td>1.</td>
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<td>2.</td>
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<td>3.</td>
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<td>4.</td>
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<td>5.</td>
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<td></td>
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**M.Tech. - Other Branches**

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<th>Sl No</th>
<th>Head</th>
<th>Term</th>
<th>Ettimadai</th>
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<tr>
<td>1.</td>
<td>Tuition Fee</td>
<td>Per semester</td>
<td>25,000</td>
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<tr>
<td>2.</td>
<td>University Fee</td>
<td>Annual</td>
<td>6,000</td>
</tr>
<tr>
<td>3.</td>
<td>Special Fee</td>
<td>Annual</td>
<td>12,000</td>
</tr>
<tr>
<td>4.</td>
<td>Insurance</td>
<td>One time</td>
<td>600</td>
</tr>
<tr>
<td>5.</td>
<td>Caution Deposit (Refundable)</td>
<td>One time</td>
<td>5,000</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
<td></td>
<td><strong>48,600</strong></td>
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</table>

* All M Tech programmes are strictly Residential.

**Hostel Charges**

<table>
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<th>Sl No</th>
<th>Head</th>
<th>Term</th>
<th>Ettimadai</th>
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<tbody>
<tr>
<td>1.</td>
<td>Room Rent</td>
<td>Annual</td>
<td>24,000</td>
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<tr>
<td>2.</td>
<td>Establishment</td>
<td>Annual</td>
<td>15,000</td>
</tr>
<tr>
<td>3.</td>
<td>Medical</td>
<td>Annual</td>
<td>1000</td>
</tr>
<tr>
<td>4.</td>
<td>Mess Charge</td>
<td>Annual</td>
<td>26,000</td>
</tr>
<tr>
<td>5.</td>
<td>Caution Deposit (Refundable)</td>
<td>One time</td>
<td>5,000</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL</strong></td>
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<td><strong>71,000</strong></td>
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11. M.TECH PROGRAMMES IN A NUTSHELL

DEPARTMENT: ELECTRONICS & COMMUNICATION ENGINEERING

VLSI Design

Very Large Scale Integration Design (VLSI) is a branch of Electronics Engineering that represents a vast set of skills and methodologies necessary for integrating millions of semiconductor devices into a small area inside an integrated circuit (IC). The increasing demand for better performance and shrinking sizes of modern electronic appliances such as mobile phones and laptops, is making the task of electronic design highly challenging. Currently engineers are required to bring out new designs with very short lead times. This has led to the automation of design process at all levels with a host of sophisticated software tools being used for designing and validating modern IC chips.

The M. Tech programme in VLSI Design aims to cater to the increasing demand for highly skilled VLSI professionals. A large number of our M.Tech alumni are working in leading VLSI Design houses or pursuing research programmes in many prestigious institutions in India and abroad.

The curriculum is designed to balance theoretical content and practical skills. Apart from basic courses in subjects such as Mathematics and Digital Design, the curriculum covers a wide range of areas such as HDL-based design, Analog design, Device physics, VLSI Testing, Low Power Design, VLSI Fabrication, VLSI Computer Aided Design etc. The curriculum includes extensive lab courses to impart training in use of modern VLSI Design software and implementation technologies such as FPGAs. The students are required to do an individual project during the third and fourth semesters that produce sufficient potential for an international journal paper. The Department has a dedicated VLSI Laboratory equipped with the latest Electronic Design Automation (EDA) software under the Mentor Graphics Higher Education Programme and Xilinx Virtex 5 and Spartan FPGA kits. Students also have opportunity to pursue projects either in-house or in reputed organizations such as ISRO, DRDO, Wipro, Tessolve etc.

**Core Courses**

- Probability Theory and Linear Algebra
- CMOS Digital Integrated Circuits
- Digital Hardware Modelling
- Digital Signal Processing and Processors
- Orthogonal Functions, Optimization & Graph Theory
- Solid state Devices Modelling and Stimulation
- Digital Design

**Electives**

- Low power VLSI circuits
- VLSI Signal Processing
- Block Codes: Algorithms & Implementation
- Soft Computing
- Digital Signal Processing Integrated Circuits
- Static timing Analysis of VLSI Circuits
- Embedded Controllers and Real Time Operating Systems
• Analysis & Design of Analog and Mixed Signal VLSI circuits
• Testing of VLSI circuits
• VLSI Design Laboratory
• Computer Aided Design of VLSI Circuits

Research Areas:
• Testing of VLSI Circuits
• Radio Frequency Circuit Design
• MIMO OFDM Systems Implementations
• VLSI Signal Processing for BioMedical Applications
• RF IC Design
• Embedded Systems
• Digital Image Processing
• Speech Processing

Practicals
• Digital Hardware Modelling Laboratory
• VLSI Design Laboratory

Bio-Medical Engineering

The M.Tech Programme in Bio-Medical Engineering aims to fuse technology with medical sciences so that the synergistic benefits of these two can lead to better understanding of biosystems and development of better products and devices for medical treatment and healthcare services. It prepares students in understanding basic biological and engineering processes and enables them to develop innovative approaches for the prevention, diagnosis and treatment of disease. It involves quantitative, analytical and integrative methods from the microscopic level to that of whole organisms, dealt in medical profession. The course deals with medical electronics, analytical skills to develop medical diagnosis, telemetry and processing of medical data including imaging and enhancement techniques. It promotes participation of engineers in the field of medicine.

Biomedical engineers may include doctors too for grasping engineering concepts that are applied to medicine, and engineers with an aim to undertake inter disciplinary projects with their background in engineering.

This course offers a bright career for PG doctors in hospitals as supporting experts. Ultra modern hospitals require expert medical engineers, who can interact with doctors and their machines with a view to obtain better and accurate diagnosis. Medical equipment manufacturers also require Biomedical engineers for R&D work. This course offers research opportunities in the field of biomedical
instrumentation, medical signal processing, biomaterials and bio mechanics, all over the world. With the availability of advanced hospital facilities under Amrita Vishwa Vidypeetham, students have access to latest developments in the field of medicine.

On the completion of the course, students will have the experience and expertise of having studied real life projects in a tertiary care super specialty hospital using the state-of-the-art medical and surgical equipments.

**Core Courses**
- Biomathematics
- Medical Physiology
- Signal Processing
- Biosoftware Engineering
- Biomaterials
- Bio Instrumentation
- Medical Imaging Techniques
- Biofluid Mechanics
- Bio Mechanics

**Electives**
- Ergonomics
- Biostatics
- Electromagnetics for Biomedical Engineering
- Drug Designing and Delivery Systems
- Tissue Engineering
- Soft Computing
- Medical Robotics
- Embedded Controllers for Medical Applications
- Wavelets and Applications
- Computational Medical Diagnostics
- Biomedical Nanotechnology
- Cryptography and Applications
- Medical Informatics and Telemedicine
- Biosensors
- Statistical Signal Processing

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**DEPARTMENT: ELECTRICAL & ELECTRONICS ENGINEERING**

**Power Electronics**

Power Electronics deals with application of solid state electronics for conversion and control of electric power from a few microwatts to several megawatts. The characteristics of the devices used for conversion and control are continually improved to handle megawatts of power at frequencies of the order of MHz, which leads to saving of energy and reduction in size of components. The cost of devices is coming down with increase in efficiency, reliability, and life of the devices.

The application areas include wide spectrum such as control of electric drives, AC and DC power supply, Power Quality Improvement, High Voltage DC Transmission, Electric Lighting, Flexible AC Transmission Systems, intelligent vehicle technology and tapping of clean source of power such as from wind, solar, and fuel cell etc. The latest control strategies are Digital Control Techniques using Artificial Intelligence tools.

The objective of the post graduate programme on Power Electronics is to introduce students to various types of power electronics devices and the control of electric power using these devices. The
programme is structured to cover the fundamentals and application areas through a set of core subjects and electives which the students can select based on their interest, followed by a full time project work during the fourth semester.

The Power Electronics laboratory is equipped with Digital Real Time Oscilloscopes, DSP based Digital AC motor control, LABVIEW Kit, DSP Trainer Kits, ETAP,PSCAD,EMTCD, Power Quality Analyster, Advanced FPGE Trainer Kits etc. in addition to several other measuring instruments.

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Electives</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Linear Algebra and Matrix Algebra</td>
<td>• Flexible AC Transmission Systems</td>
</tr>
<tr>
<td>• Digital Signal Processing</td>
<td>• Electric Power Quality</td>
</tr>
<tr>
<td>• Electrical Machine Analysis</td>
<td>• Power Quality Improvement</td>
</tr>
<tr>
<td>• Power Converters I</td>
<td>• Over Voltage in Power Systems</td>
</tr>
<tr>
<td>• Digital System Design</td>
<td>• Renewable Energy Technologies</td>
</tr>
<tr>
<td>• Cultural Education</td>
<td>• Energy Conservation and Management</td>
</tr>
<tr>
<td>• Digital Control Systems</td>
<td>• High Voltage DC Transmission</td>
</tr>
<tr>
<td>• Power Converters II</td>
<td>• Design for Reliability</td>
</tr>
<tr>
<td>• Electric Drives and Control</td>
<td>• Soft Computing</td>
</tr>
<tr>
<td>• Analog Signal Processing and Control System</td>
<td>• Computational Optimization Techniques</td>
</tr>
<tr>
<td>• Seminar</td>
<td>• Computational Optimization Theory – Linear and Non-Linear Methods</td>
</tr>
<tr>
<td>• Digital Signal Processors</td>
<td>• Algorithms for Power Electronics Applications</td>
</tr>
<tr>
<td>• Minor Project</td>
<td>• Special Electric Machines</td>
</tr>
<tr>
<td>• Dissertation</td>
<td>• Industrial Electronics</td>
</tr>
<tr>
<td></td>
<td>• Electromagnetic Interference and Compatibility</td>
</tr>
<tr>
<td></td>
<td>• Electrical Machine Analysis Using Finite Element Analysis</td>
</tr>
</tbody>
</table>

**Embedded Systems**

Almost all Electronics, Electrical and Mechanical systems are now controlled by a controller which is embedded as a part of the complete system. Such a system is called an Embedded System. Examples are tele-communication systems, chemical processing plants, transportation systems such as aircrafts and automobiles, bio-medical instruments and home appliances like microwave ovens and washing machines. The main characteristics of embedded systems are that they are designed to do some specific tasks in real time satisfying certain performance requirements.

Often controllers use shared networks to communicate with each other and with a large number of sensors and actuators that are scattered throughout the system. The design of embedded controllers and the intricate, automated communication networks that support them, raises many new problems both theoretical and practical, such as network protocols, compatibility of operating systems and ways to maximize the effectiveness of the embedded hardware. This programme will address many such questions and various aspects of embedded and networked control.

The newly developed Embedded Systems Laboratory with the assistance of Microsoft India is equipped with necessary Processors, Embedded PC’s, Robots and wireless networks obtained by Zigbee, Blue tooth, Wi Fi etc.
Core Courses
• Probability and Random Process
• Network Embedded Application
• Digital System Design

• Embedded Software Essentials
• Digital Signal Processing
• Cultural Education
• Computer Organization and Design using ARM Processor
• Instrumentation and control
• Sensor Networks
• Power Management In Embedded Systems
• Seminar
• Real Time Systems
• Minor Project
• Dissertation

Electives
• Mobile and Wireless Networks
• Wavelets and Applications
• Opto electronics and Fiber Optic Communications
• Image Processing
• Digital Control Theory
• Computer Control of Industrial Processes
• Embedded System for Automotive Applications
• Multicore Architecture
• Soft Computing
• Computational Optimization Techniques
• Computational Optimization Theory – Linear and Non-Linear Methods
• Simulation and Modeling
• Embedded Systems in Robotics
• DSP Processors
• Micro Electro Mechanical Systems
• Graph Theory and Algorithms
• Hardware Software Codesign

Research area:

DEPARTMENT: MECHANICAL ENGINEERING

Engineering Design

The M.Tech programme in Engineering Design is devised to enable an engineering graduate to develop specific capabilities in design, synthesis and analysis of a variety of mechanical engineering systems. The programme is planned and organized in a way that makes the student imbibe the spirit of innovative research and thought process.

Besides core courses (which are mandatory), a variety of electives are also offered to suit the taste of students so that the individual can specialize in a particular area of Engineering Design. The students are periodically assessed by teachers who are experts in chosen areas of engineering design, to ensure the quality of education. During the programme of study, the students are required to undertake design tasks which involve high degree of research orientation and insights. On the whole, the Masters Programme is committed to produce design engineers with excellent technical capabilities and calibre to solve real life problems.
This programme consists of three semesters of course work ending with a thesis work in the fourth semester. The major courses offered include theory of elasticity, tribology, vibrations, reliability, mechanical analysis and design, optimisation, etc.

Students have the opportunity to pursue their projects in major companies and national laboratories like NAL, HAL, L&T, ISRO, etc.

**Core Courses**

- Advanced Engineering Mathematics
- Theory of Elasticity
- Theory of Elasticity and Plasticity
- Mechanical Vibrations
- Optimization Techniques in Engineering
- Reliability Methods
- Mechanical Analysis and Design
- Fluid Dynamics
- Finite Element Methods
- Mechanical Behavior of Engineering Materials
- Mechanism Analysis and Synthesis
- Minor Project
- Dissertation
- Engineering Design Lab-I
- Engineering Design Lab-II

**Electives**

- Theory of Elasticity
- Mechanics of Composite Materials
- Random Vibrations
- Meso- and Micro- Manufacturing
- Design for Manufacture and Assembly
- Plasticity Modeling and Computation
- Nonlinear Vibrations
- Experimental Stress Analysis
- Modelling, Simulation and Analysis of Engineering Systems
- Theory of Plates and Shells
- MEMS (Micro-Electro-Mechanical Systems)
- Machine Condition Monitoring
- Geometric Modelling
- Integrated Design and Manufacturing
- Selection of Materials and Processes
- Product Lifecycle Management (PLM) Systems
- CAD in Product Development
- Tribology
- Boundary Element and Mesh Free Methods
- Bio-MEMS and Medical Micro-devices

**Integrated Design & Manufacturing**

The primary objective of the programme is to train the students to develop a good understanding of the excellent manufacturing practices with the automation and integration approach to design and manufacturing. Focus areas include: Computer-Aided Design (CAD); Computer-Aided Engineering (CAE); Computer-Aided Manufacturing (CAM); Robotics; Rapid Prototyping; Precision Engineering; Material Resource Planning; Tool Management; Information Management; Product Engineering, Design for Manufacture; Lean concepts in manufacturing, etc.

The programme is expected to deliver graduates with an in-depth profound knowledge in the field of manufacturing engineering with current and future importance. This will help the students to join some of the best core manufacturing companies as well as research and development institutions.

This programme consists of three semesters of course work ending with a thesis work in the fourth semester. The major courses offered include Theory of Optimization for Design and Manufacturing, Materials Science and Engineering, Theory of Elasticity and Plasticity, Analysis of Material Removal.
Processes, Computer Aided Product Development, etc. Students have the opportunity to pursue their projects in major companies, and national laboratories like NAL, HAL, L&T, ISRO, etc.

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Electives</th>
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<tbody>
<tr>
<td>• Computational Mathematics</td>
<td>• Computer Aided Product Development</td>
</tr>
<tr>
<td>• Materials Science and Engineering</td>
<td>• Manufacturing Automation</td>
</tr>
<tr>
<td>• Theory of Elasticity and Plasticity</td>
<td>• Advanced Welding Technology</td>
</tr>
<tr>
<td>• Optimization Techniques in Engineering</td>
<td>• Statistical Inference and DOE</td>
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<tr>
<td>• Analysis of Machining Processes</td>
<td>• Meso and Micro-Manufacturing</td>
</tr>
<tr>
<td>• Advanced Casting Technology</td>
<td>• Robotics</td>
</tr>
<tr>
<td>• Theory and Practice of Metal Forming</td>
<td>• Surface Engineering</td>
</tr>
<tr>
<td>• Finite Element Methods</td>
<td>• Advanced Metrology and Sensing System</td>
</tr>
<tr>
<td>• Design for Manufacture and Assembly</td>
<td>• Composite Materials and Processing</td>
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<tr>
<td>• Seminar</td>
<td>• Oil Hydraulics and Pneumatics</td>
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<td>• Minor Project</td>
<td>• Product Lifecycle Management</td>
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<tr>
<td>• Dissertation</td>
<td>• Simulation of Manufacturing Systems</td>
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<td>• Systems Engineering Lab</td>
<td>• Reliability Methods</td>
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<td>• Product Engineering Lab</td>
<td>• Logistics and Supply Chain Management</td>
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<td>• Financial Management</td>
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<td>• Lean Manufacturing</td>
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<td>• Production and Operations Management</td>
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<td>• Embedded Systems</td>
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<td>• Mechatronics</td>
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<td>• Sustainability and Environmental issues in Product Design and Manufacturing</td>
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</tbody>
</table>

DEPARTMENT: COMPUTER SCIENCE & ENGINEERING

Computer Vision & Image Processing

In recent times, Computer Vision and Image Processing has drawn a great deal of attention due to its wide spread application in the area of Defence, Satellite imaging, Remote Sensing, Surveillance, Document Processing, Medical Imaging and Entertainment Etc. A large number of researchers are working in this area of specialization and many interesting techniques and algorithms are being proposed. The issues and scope for research in these areas of specialization are so enormous that the nation has to gear up for producing the required amount of technocrats and utilise them for developing various applications especially in the areas of Defence and Space technology.

With this as the main goal, the University is offering a 2 Year Master’s programme in Computer Vision & Image Processing to provide a comprehensive expertise in this area and induce in the students the ability and skill sets to pursue research.

Apart from necessary introduction to the mathematical methods, core courses offered include Digital Signal Processing, Computer Graphic, Image Processing, Pattern Recognition and Computer Vision. This Programme is course work intensive for 3 semesters followed by a full time project in the
4th Semester. The course work is amply supported by Labs which provide hands-on experience. Students have the opportunity to pursue their project as interns in major companies and national laboratories like Honey Well, HP, ISRO, HCL and NPOL (Naval Physical and Oceanographic Laboratory). Students can also avail bright career opportunities in top Computer Companies.

<table>
<thead>
<tr>
<th>Core Courses</th>
<th>Electives</th>
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<tbody>
<tr>
<td>• Computer Graphics</td>
<td>• Digital Video Processing</td>
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<td>• Multidimensional Digital Signal Processing</td>
<td>• Embedded Systems and sensors for Image Processing</td>
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<tr>
<td>• Digital Image Processing</td>
<td>• Virtual Reality and Applications</td>
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<tr>
<td>• Image Analysis and Applications</td>
<td>• Principles of multimedia databases</td>
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<tr>
<td>• Pattern Recognition &amp; Machine Learning</td>
<td>• Document Image Analysis</td>
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<tr>
<td>• Computer Vision</td>
<td>• 3-D Modelling for Visualisation</td>
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<td>• High Level Computer Vision</td>
<td>• Cloud Computing</td>
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<td>• Medical Image Analysis</td>
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<td>• Multimedia Compression</td>
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<td>• Data Hiding</td>
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<td>• Haptic User Interfaces</td>
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<td>• Content based Image and Video Retrieval</td>
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<td>• Geographic Information Systems</td>
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<td>• Computational Intelligence for Image Processing</td>
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<td></td>
<td>• Cluster Analysis</td>
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</tbody>
</table>

Research Initiatives:
1. Application of Image Processing / Computer Vision in Medicine (AIMS)
   a) 3D Medical Image Reconstruction and Visualisation
   b) 2D / 3D Medical Image Analysis and Applications
2. Context based Indexing and Retrieval of audio / video Lectures

CENTRE FOR EXCELLENCE IN COMPUTATIONAL ENGINEERING & NETWORKING
Computational Engineering & Networking

The Centre for Excellence in Computational Engineering and Networking was established in the year 2003. The Post Graduate programmes are M.Tech. Computational Engineering and Networking, and M.Tech. Remote Sensing and Wireless Sensor Networks, which offers excellent research opportunities to the students. Computational Engineering is a broad, rapidly growing multidisciplinary area that encompasses applications in science/engineering, applied mathematics, numerical analysis, and computer science. Going from application area to computational results requires domain expertise, mathematical modeling, numerical analysis, algorithm development, software implementation, visualization and validation of results.
Computational Engineering makes use of the techniques of applied mathematics and computer science for the development of problem-solving methodologies, which act as building blocks for solutions to scientific engineering problems of ever-increasing complexity. Remote sensing is an art of identifying, observing, and measuring an object without coming into direct contact with it. Remote sensing imagery has many applications in mapping land-use and cover, agriculture, soils mapping, forestry, city planning, archaeological investigations, military observation, and geomorphologic surveying, among various other uses. The center is also actively engaged in research related with funded projects from various government agencies like ISRO, DRDO, Ministry of IT (MIT), Ministry of Human Resources Development (MHRD). Project outlay runs into several crores of rupees.

Core Courses
• Computational Linear Algebra and its Applications
• Engineering Modeling and Partial Differential Equations
• Computational Optimization Theory - Linear & Non-Linear Methods
• Advanced Data Structures and Algorithms
• Probability, Statistics and Applications
• Natural Language Processing

Electives
• Data Mining and Applications
• Computational Chemistry and Molecular Modeling
• Advanced Signal Processing Using Wavelets
• Understanding Molecular Simulation
• Level Set Methods and Applications
• Grid Generation Techniques
• Advanced Image Processing
• Kernel Methods
• PDE Constrained Optimization
• Applied Computational Linguistics
• Speech Recognition
• Multiwavelet Theory and Applications
• Parallel Programming For GPUs

Remote Sensing & Wireless Sensor Networks

This Programme was started in May 2007 with funding from ISRO, Bangalore. This is a two year programme with a total of 65 credits. The students are expected to do a major and minor project by the end of their curriculum. Promising students are given opportunities to contribute and work in live sponsored research projects running in the center. Integrating very diverse technologies like conventional remote sensing through satellite, in-situ remote sensing by the use of wireless sensor networks, wireless communication technology using software defined radio, Geographical Information Systems is the whole work of this multi-disciplinary M.Tech course.
The basic course starts with a strong foundation in mathematics. It is strengthened by courses in image processing, pattern recognition and a specific course on sensor technology, remote sensing, wireless networking and geographical information systems. The Theoretical framework is supplemented by lab exercises.

### Core Courses
- Linear Algebra - Iterative and Direct Methods
- Measurement Techniques in Remote Sensing
- Principles of Remote Sensing
- Advanced Data Structures and Algorithms
- Probability, Statistics and Applications
- Wireless Communication and Sensor Networks

### Electives
- Image Analysis and Pattern Recognition
- Telematics
- Adaptive Digital Signal Processing Using FPGA
- Wavelets and Multirate Signal Processing
- Computer Vision
- Multimedia Applications
- Remote Sensing Using Chemical Sensors
- Parallel Programming For GPUs
- Wireless Sensor Networks Designs

### Practical
- Remote Sensing and Geographical Information Systems Laboratory
- Wireless Sensor Networks Laboratory

### Research Areas
- Machine Learning
- Natural Language Processing
- Source Code Plagiarism Detection
- Speech Recognition
- Computational Drug Designing
- Remote Sensing
- GIS
- Image Processing
- Wireless Sensor Networks
- Software Radio

### Cyber Security

**TIFAC CORE in Cyber Security**

Cyber Security is a very fast moving field. Any program in security that aims to be on the forefront has to necessarily have a companion-advanced program that has a good balance between theoretical and practical aspects, analytical methods and system architectures, academic ideas and industry practices.

The Centre for Cyber Security was identified by TIFAC (Department of Science and Technology, Govt. of India) as a CORE in Cyber Security in September 2005. The TIFAC CORE gives significant thrust to the frontier areas
of Cyber Security, including technology, practice, management, and policy issues. Research areas of the TIFAC CORE are organized into four broad categories, namely: Enterprise Wide Security, Data Center Security, Language-Based Security, and Hardware and Embedded Systems Security. These categories represent four horizontal layers of security in a typical information system/network that a practitioner would normally encounter in today’s industrial settings and corporate environments. CORE also focuses on theory and practice of authentication, authorization, and access control techniques.

This M. Tech program provides a good blend of theory and industrial practice; necessary theoretical background, insight into general and technical aspects of Cyber Security, analytical methods and management practices in the field of Cyber Security are the areas receiving detailed attention. It aims at moulding the student into an Information Security professional. Practicing industry professionals and enterprise experts with little or no knowledge in Cyber Security too can be benefited from this program.

**Salient features of this programme**

Various short and semester courses in emerging areas of Cyber Security offered by eminent scientists from DRDO (India), Michigan State University, University of Buffalo, State University of New York (US).

- Student exchanges as part of European Union East Web, India4EU and Erasmus Mundus programs.

<table>
<thead>
<tr>
<th>Foundation Core Courses</th>
<th>Electives</th>
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<tbody>
<tr>
<td>Discrete Mathematics</td>
<td>Mobile &amp; Wireless Networks and Security</td>
</tr>
<tr>
<td>Design and Analysis of Algorithms</td>
<td>Complexity Theoretic Cryptography</td>
</tr>
<tr>
<td>Data Mining and Machine Learning</td>
<td>Image Processing</td>
</tr>
<tr>
<td>Programming Languages and Operating System</td>
<td>Network Security</td>
</tr>
<tr>
<td>Pattern Recognition for Computer Security</td>
<td>Digital Forensics</td>
</tr>
</tbody>
</table>

**Subject Core Courses**

- Internetworking - Protocols and Security
- Cryptography
- Cryptographic Protocols and Standards
- Database Security
- Information Theory and Coding
- Information Hiding
- Information Security and Risk Management
- Principles of Security Engineering
- Biometrics
- Security in the Enterprise
- Digital Watermarking
- HDL and Cryptographic Applications
- Cryptographic Boolean Functions
- Cryptanalysis
- Logical Foundations for Access Control
Computer Science & Engineering

The opportunities for post graduate studies in Engineering and Applied Sciences, especially in Computer Science subjects in India are insignificant by any measure. However, the nation is fast turning towards a knowledge based society. This demands a very studied and meaningful effort for generating trained, competent manpower in many critical areas. No doubt, computer science and allied areas form one discipline which requires careful attention. Computer Science itself has grown enormously in the last two decades with the introduction of concepts like distributed computing, mobile computing etc. From a futuristic perspective, the disciplines of these computing paradigms together with Artificial Intelligence form a very important aspect of computational efforts which will have potential for sustainable growth, demand and applications. This programme is motivated by a faithful assessment of the future needs of the society in this direction.

The M. Tech programme is basically envisaged as also a first level research course aimed at preparing the students to take up research and development activities in emerging areas in Computer Science, with a focus on AI and AI related topics in a distributed computing environment. This programme will serve as a preparatory course for those who opt for an academic profession or doctoral works in CSE, in addition to preparing the students in taking up jobs in the emerging areas of automated applications. The overall aim of the programme is to generate human resources capable of supporting R & D activities in critical areas like automated, secured, monitoring and surveillance systems, medical diagnostics, intelligent monitoring systems etc.

Potential for the out-going students: The area has lot of scope in terms of research activities and industry needs. The diversity of platforms available for implementation and the huge volume of data available for analysis, knowledge mining activities associated with biological systems, medical field, data related to climate changes etc. attract employment opportunities. The above mentioned areas heavily depend on AI and AI applications as applied on distributed network systems.

Core Courses
- Advanced Computer Architecture
- Advanced Algorithms and Analysis
- Operating System Design
- Probability and Random Processes
- Advanced Computer Networks
- Advanced Computation Lab
- Distributed Systems and Security
- Computational Intelligence
- Advanced Database Design

Electives
- Principles of Multimedia Systems
- Distributed Computing
- Digital Image Computing
- Compiler Design
- Principles of Neural Networks
- Computational Statistics
- Fuzzy Logic and fuzzy Systems
- Distributed Databases
- Pattern Recognition: Approaches & Applications
- Computational Models and Network Applications
- Machine Learning Applications
- Information Theory and Applications
- Data Compression Methods
- Cryptography and Network Security
- Wavelets & Applications
- Robotics
- Haptics
Building on a very successful joint project called WINSEC with about a dozen international partners, Amrita Vishwa Vidyapeetham launched the MTech program in one of the advanced topics of today, wireless networks and applications, at its Amritapuri campus, Kollam, Kerala. This MTech program includes the latest advanced topics in wireless communications, mobile computing, sensor networks, Embedded Systems, signal processing, wireless networks and applications such as landslide detection, environmental monitoring etc. The students get a hands-on experience in real-time wireless sensor networks for land slide detection using the landslide monitoring system deployed at the land slide prone area in Munnar, Kerala. Reputed researchers and well known faculty from highly ranked international universities across the world teach and guide the students. The program provides opportunities for students to get project guidance from well established research groups around the world and work on exciting, real-world installations of wireless sensor networks. There are many projects going on at the research centre (WINSEC, DST, DIT, Indo-German, Indo-Brazil etc.) and the students get a unique opportunity to work in these live projects. Upon graduation, students can find employment in a broad spectrum of industries such as computers, communication networks, Earth sciences, Environmental Sciences, Disaster Management, Bio and Nano technologies, VLSI and Embedded Systems, Transportation and Infrastructure, Structural Engineering, Agriculture and Chemical Industries.

**Core Courses**
- Design and Analysis of Algorithms
- Basics of Digital Signal Processing
- Probability and Statistical Inference
- Advanced Computer Networks
- Fundamentals of Wireless Communications
- Advanced Computer Networks Lab
- Wireless Sensor Networks
- Wireless LAN
- Embedded System Design
- Wireless Sensor Networks Laboratory
- Advanced Wireless Networks
- Distributed Network Algorithms

**Electives**
- Principles of Multimedia Systems
- Wireless Networks Applications
- Information Theory & Applications
- Security in Wireless Networks
- Principles of Telematics
- Cryptography
- Introduction to Machine Learning
- Pattern Recognition
- Image Computing on Wireless Networks
- Advanced Database Design
- Random Processes and Queueing Models
The department of chemical engineering and materials science offers a program in M.Tech Chemical Engineering. The curriculum is designed to train Chemical Engineers, keeping in view the challenges that a graduate faces in the Chemical industry, and for providing students a balanced education in various physical, chemical, and engineering subjects relevant to the field of Chemical Engineering. Emphasis is given on honing the skills of the students for research as well as industrial applications. The electives offer a rich choice of topics across the streams of industrial chemical engineering (e.g. pinch technology, process intensification, and multi-component mass transfer), materials science, biotechnology & biochemical engineering, petroleum refining & petrochemicals, polymers, and renewable energy. A significant practical component involves the innovative use of chemical engineering labs to create, optimize, and run experimental set ups. Graduates of the program would find a variety of career opportunities open, such as, as scientists in R&D labs, as process engineers, product engineers, and quality engineers/managers in chemical and allied industries, as equipment designers for chemical process engineering firms, and as managers for environmental monitoring & clearances.

**Core Courses**
- Mathematical Methods in Chemical Engineering
- Modern Separation Methods
- Process Modeling & Simulation
- Chemical Reactor Design & Analysis
- Thermodynamics of multi phase equilibria
- Statistical Design of Experiments
- Computer-Aided Simulation of Process Plants
- Transport Phenomena
- Chemical Process Control
- Graduate Seminars
- Cultural Education

**Electives**
- Process Safety Management
- Petroleum Refining
- Biochemical Process Engineering
- Polymer Materials and Structure-Property Relationships
- Computational Systems Biology
- Spectroscopy
- CFD
- Process Intensification
- Pinch Technology
- Multicomponent Mass Transfer
- Catalysis in Refining & Petrochemicals
- Petrochemical Process Technology
- Biomaterials Science
- Solar Energy
- Interfacial Science and Engineering
- Biomedical Polymers
- Advanced Material Characterization Techniques
12. LIST OF ENCLOSES TO ACCOMPANY THE APPLICATION

(please do not send originals. Send only self attested copies of Certificates.)

1. 10th Class or Equivalent Certificate
2. 12th Class Certificate
3. Degree / Provisional Certificate
4. Mark Sheets for all the Semesters / Years
5. Valid GATE Score card where applicable
6. Transfer Certificate and Conduct Certificate from the Institute last attended
7. Community Certificate for all other than OC
8. Sponsorship Certificate duly filled, if applicable
# Preference of Specialisation and Campus

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Preference of Specialisation</th>
<th>Campus</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>VLSI Design (VLSI)</td>
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<tr>
<td>2</td>
<td>Computational Engineering &amp; Networking (CEN)</td>
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<td>3</td>
<td>Bio Medical Engineering (BME)</td>
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<td>4</td>
<td>Remote Sensing &amp; Wireless Sensor Networks (RSWSN)</td>
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<td>5</td>
<td>Power Electronics (PE)</td>
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<td>6</td>
<td>Cyber Security (CYS)</td>
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<td>7</td>
<td>Embedded Systems (ES)</td>
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<td>8</td>
<td>Chemical Engineering</td>
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<td>9</td>
<td>Computer Vision &amp; Image Processing (CVIP)</td>
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<td>10</td>
<td>Computer Science &amp; Engineering</td>
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<td>11</td>
<td>Engineering Design (ED)</td>
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<td>12</td>
<td>Wireless Networks &amp; Applications</td>
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<tr>
<td>13</td>
<td>Integrated Design &amp; Manufacturing (IDM)</td>
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</tbody>
</table>

(All entries to be made in BLOCK LETTERS – enclose only copies of certificates)

I. Indicate the preference of specialization in the box below: (refer Clause 2)
APPLICATION FOR ADMISSION TO MASTER OF TECHNOLOGY (M.Tech.) COURSE - 2010

(All entries to be made in BLOCK LETTERS – enclose only copies of certificates)

1. Name of the candidate in CAPITAL letters as given in Degree or HSC certificate (leave blank space between name and initials)

<table>
<thead>
<tr>
<th>Gender : (Male /Female)</th>
<th>Blood Group:</th>
</tr>
</thead>
</table>

Date of Birth (DD/MM/YYYY) Native Place: 

Native District: State:

Mother Tongue : Nationality:

Religion: Caste: 

*Community: Marital status: 

(SC, ST, MBC, BC, OBC, OC) *(If the certificate is in vernacular, an English version of the same duly attested by a Notary Public should be attached)

2. Academic Record – Branch of study

<table>
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<tr>
<th>Semester / Year #</th>
<th>I</th>
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# - if annual pattern is followed, modify the columns suitably and enter the marks
3. Class obtained: ______________________

4. Month and Year of Passing: ______________________ /awaiting result (please give details)

5. University: ______________________ College: ______________________

6. GATE percentile (if applicable): ________ Year: ______________________

7. Subjects passed in more than one attempt: (Attach additional sheets if required)

<table>
<thead>
<tr>
<th>S.No</th>
<th>Title of the Subject</th>
<th>No. of Attempts</th>
<th>S.No.</th>
<th>Title of the Subject</th>
<th>No. of Attempts</th>
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</thead>
</table>

8. Professional Experience.

<table>
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<th>Period</th>
<th>Designation</th>
<th>Nature of work</th>
<th>Organization</th>
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9. Name of sponsoring organization, if applicable:

(A sponsorship certificate is to be submitted in the format enclosed)

10(a) Address for Communication:

PO: ______________________

District: ______________________ State: ______________________ PIN Code: [ ]

Phone No. with STD Code: ______________________ e-mail: ______________________

Mobile: ______________________

10(b) Permanent address:

PO: ______________________

District: ______________________ State: ______________________ PIN Code: [ ]

Phone No. with STD Code: ______________________ e-mail: ______________________

11(a) Father’s Name: ______________________

Age: ______________________ Date of Birth: ______________________

Occupation: ______________________ Annual income: Rs. ______________________

Office Address: ______________________

P.O.: ______________________

District: ______________________ State: ______________________ PIN Code: [ ]

Phone No. with STD Code: ______________________ e-mail: ______________________
11.(b) In the case of married female candidates, please fill up this portion:

Husband’s name: ________________________________

Age: ___________________ Date of Birth: ______________________________

Office Address: ________________________________ Annual Income: ______________________________

12. Mother’s name: ________________________________

Date of Birth: ___________________ Age: ______________________________

Occupation: ________________________________ Annual income: Rs ______________________________

(Please specify)

Office Address: ________________________________

If applicable

P.O: ________________________________ Taluk: ______________________________

District: __________ State: __________ PIN Code: ______________________________

Phone No. with STD Code: ________________________________ email: ______________________________

13. Name and address of local guardian: ________________________________

Phone No. with STD Code: ________________________________ e-mail: ______________________________

Relationship with the student: ________________________________

14. How did you come to know about AMRITA?

15. Why are you choosing AMRITA for higher studies?
DECLARATION

I, ___________________________ Son / Daughter of ___________________________
______________________________ hereby declare that the particulars given by me in the application
are true. I shall produce the original certificate at the time of admission or on demand. If, in future, any
information is found to have been furnished falsely or incorrectly or any information suppressed to
secure admission, I shall withdraw from the programme without any claim or consideration. I further
state that I have read and understood the contents of the instructions and the brochure given with the
application before filling the application.

Place: Signature of the Applicant:

Date: Name: ___________________________

DECLARATION BY PARENT/GUARDIAN

I, ___________________________ undertake the responsibility of my son/daughter/
ward ___________________________ who is seeking admission in the Amrita Vishwa
Vidyapeetham and declare that the information furnished by him/her is correct and true and that if, in
future, any information is found to have been furnished falsely or incorrectly or any information suppressed
to secure admission, I shall withdraw my son/daughter/ward from the programme without any claim or
consideration of the period of study/stage of the programme he/she has completed. I further state that
I have ensured that the candidate has read and understood the contents of instructions and the brochure
given with the application form, before filling the same.

Place: Signature of the Parent/Guardian

Date: Name: ___________________________
SPONSORSHIP CERTIFICATE

(To be issued by the Head of the Institution where the candidate is working)

This is to certify that ________________________________

has been working as ________________________________ in the Department of ________________________________ of this institution / Organization since _____________. He/She is sponsored for M.Tech VLSI Design / Power Electronics / Embedded System / CVIP / Integrated Design and Manufacturing / Engineering Design / Computational Mechanics / Computational Engineering & Networking / Cyber Security / Remote Sensing and Wireless Sensor Networks / Biomedical Engineering / Chemical Engineering degree course (full time) at Amrita School of Engineering, Amrita Vishwa Vidyapeetham, Ettimadai, Coimbatore.

It is certified that he/she will not be withdrawn by us from the programme during the period of the course.

Date: ________________________________  Signature: ________________________________

Place: ________________________________  Name: ________________________________

Designation: ________________________________

Seal
(Head of the Institution)