PROSPECTUS 2007 – 2008

POST GRADUATE AND RESEARCH PROGRAMMES

M.Tech. / M.Sc. /M.S.(By Research)/Ph.D.

NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI
TIRUCHIRAPPALLI – 620015, TAMIL NADU

I. GENERAL INFORMATION

The National Institute of Technology, Tiruchirappalli (NITT) was started (as RECT) in the academic year 1964-65, for the promotion of technical education and training of personnel to meet the needs of our country. Currently, the Institute is a Deemed University fully funded by the Central Government. With students admitted from all the states of the country, this institution has an all India character. Further, the faculty recruited on all India basis also add to this character.

Ever since its establishment in April 1964, the institution has registered speedy progress and offers, at present, as many as ten Under-graduate and twenty three Post-graduate programmes, M.S.(by research) in all Engineering departments and Ph.D. programmes in all departments. The Institute has excellent faculty, well-equipped laboratories with facilities for advanced study and research and a modern Central Library. Residential facilities are provided for all the students and staff in the campus and all amenities like Hospital, Middle School, Post and Telegraph Office, Bank, Shopping Centre, Cafeteria, Officer's Club, Ladies Club, Recreation Centre are available.

Well known as a centre of learning and culture, as also of commerce and agriculture, Tiruchirappalli has made a mark in the industrial map of India with industries like the Bharat Heavy Electricals Limited, Ordnance Factory, Railway Workshop, Steel Rolling Mills, Kaveri Engineering Industries, Trichy Distilleries, SIMCO Meters and a number of small and medium scale industries. Situated on the south bank of Cauvery River, Tiruchirappalli is at the geographical centre of Tamil Nadu and is connected with other important centers by road, rail and air. The Institute is built on a spacious campus of 800 acres located on the north of the Tiruchirappalli / Thanjavur road about 18 kms. from Tiruchirappalli town and adjoining the Bharat Heavy Electricals Industrial Complex.

Website:	www.nitt.edu
Fax	91-431-2500133
TELEPHONES	
Office Group I	2501801 to 2501810 (10 Lines)
Group II (DID facility)	2501811 to 2501815 (5 Lines)

II. ACADEMIC AUTONOMOUS STATUS

The University of Madras, with the approval of the University Grants Commission and the Government of Tamilnadu, conferred Autonomous Status on the National Institute of Technology (formerly Regional Engineering College), Tiruchirappalli from the academic year 1978-79 in respect of its Post-graduate courses in Civil Engineering, Mechanical Engineering, Electrical and Electronics Engineering, Electronics and Communication Engineering, Metallurgical and Materials Engineering, Chemical Engineering, Applied and Basic Sciences and Management Engineering. With this conferment and recognition, the Institute has autonomy in such matters as framing its own syllabi and devising its own methods of evaluation and examinations for all its Post-graduate courses.

In 1982, when the Bharathidasan University was established at Tiruchirappalli, the Institute became affiliated to the new University continuing the autonomous status in respect of its Post-graduate programmes. Students who were admitted to the various Autonomous Post-graduate programmes of the Institute during the period

1978-82 were awarded degrees by the University of Madras with the name of the Regional Engineering College, Tiruchirappalli indicated on the Degree Certificates. For students admitted in 1982 the Degrees are awarded by the Bharathidasan University, Tiruchirappalli. The Institute has acquired the "Deemed University" status from 28.07.2003 and degrees are awarded by the institute itself.

III. PROGRAMMES OF STUDY

The Institute offers courses of study in the following specializations.

M.Tech. Programmes (Full Time) (Four Semesters)

Sl.No.	PROGRAMMES OFFERED	DEPARTMENT
1.	Energy Engineering	Chemical Engg.
2.	Plant Design	Chemical Engg.
3.	Process Control & Instrumentation	Chemical Engg. and Instrumentation & Control Engg.
4.	Transportation Engg. & Management	Civil Engg.
5.	Structural Engineering	Civil Engg.
6.	Environmental Engineering	Civil Engg.& Chemical Engg.
7.	Computer Science	Computer Science & Engg.
8.	Power Systems	Electrical & Electronics Engg.
9.	Power Electronics	Electrical & Electronics Engg.
10.	Communication Systems	Electronics & Communication Engg.
11.	VLSI System	Electronics & Communication Engg.
12.	Thermal Power Engineering	Mechanical Engg.
13.	Industrial Safety Engg.	Mechanical Engg.
14.	Welding Engineering	Metallurgical & Materials Engg.
15.	Materials Science	Metallurgical & Materials Engg.
16.	Manufacturing Technology	Production Engg.
17.	Industrial Engineering	Production Engg.
18.	Non Destructive Testing	Physics

Eligible Degree for M.Tech. Programmes

Sl.No.1 Bachelor's Degree in Chemical / Mechanical / Electrical and Electronics / Metallurgical /Electro-Chemical Engineering and Technology/Production.

Sl.No.2. Bachelor's Degree in Chemical / Electro-Chemical Engineering and Technology.

Sl.No.3 Bachelor's Degree in Chemical / Electrical and Electronics/ Instrumentation and Control/ Electronics & Instrumentation/ Instrumentation / Mechanical / Electro-Chemical Engineering.

Sl.No.4 Bachelor's Degree in Civil / Transportation / Highway Engineering.

Sl.No.5 Bachelor's Degree in Civil / Civil and Structural Engineering.

Sl.No.6 Bachelor's Degree in Civil / Chemical / Mechanical Engineering

Sl.No.7 Bachelor's Degree in Computer Science / Information Technology/ Electrical & Electronics / Electronics & Communication / Instrumentation & Control Engineering /Electronics & Instrumentation.

Sl.No.8 Bachelor's Degree in Electrical and Electronics Engineering.

Sl.No.9 Bachelor's degree in Electrical and Electronics Engineering.

Sl.No.10 Bachelor's Degree in Electronics and Communication Engineering.

Sl.No.11 Bachelor's Degree in Electrical and Electronics / Instrumentation & Control / Electronics & Communication / Computer Science & Engineering / Electronics & Instrumentation Engineering / Information Technology.

Sl.No.12. Bachelor's Degree in Mechanical / Production Engineering.

Sl.No.13 Bachelor's Degree in Civil/Chemical/Electrical/Fire/Mechanical/Mining/Instrumentation & Control/Petroleum/Production Engineering .

Sl.No.14 Bachelor's Degree in Metallurgical / Mechanical / Production Engineering.

Sl.No.15 Bachelor's Degree in Metallurgical/ Mechanical / Production / Ceramics / Polymer Science / Electro-Chemical Engineering / Master's Degree in Physics / Chemistry / Materials Science / Applied Physics / Applied Chemistry / Polymer Science/ Applied Science.

Sl.No.16. Bachelor's Degree in Mechanical / Production Engineering.

Sl.No.17 Bachelor's Degree in Industrial / Production / Mechanical Engineering.

Sl.No.18 Bachelor's Degree in Metallurgical / Mechanical / Production Engineering / Master's Degree in Physics / Applied Physics / Electronics / Applied Electronics / Materials Science / Medical Physics. Sponsored candidates with a minimum of 2 years experience in the field of N.D.T. are also eligible for admission. The candidates should enclose a letter from the Head of the Institution / Industry that they will provide all facilities to carry out project work in the third and fourth semesters. It is an unique progamme in the country in which faculty are from NDT and WRI divisions of B.H.E.L., Tiruchirappalli. The laboratory classes are conducted in the B.H.E.L. Campus. Field work in each semester will be arranged and it has to be carried out in one of the NDE expertised centres like B.H.E.L. /IGCAR/IISc / CSIR at the expense of the students.

M.Sc.Programmes (Full Time) (Four Semesters)

S.No.	PROGRAMMES OFFERED	DEPARTMENT
1.	Applied Chemistry	Chemistry
2.	Operations Research and Computer Applications	Computer Applications
3.	Applied Physics	Physics

Eligible Degree for M.Sc. Programmes:

Sl.No.1 Bachelor's Degree in Chemistry / Applied Science.

Sl.No.2 Bachelor's Degree in Mathematics / Statistics / Computer Science / Applied Science.

Sl.No.3 Bachelor's Degree in Physics /Applied Physics /Applied Science .

M.S. (by Research) Programme (Full-Time and Part-Time)

All engineering departments (depending on areas of sponsored research)

Eligible Degree – Bachelor's Degree in appropriate branch of engineering

Ph.D. Programme (Full – Time and Part-Time)

In all departments of the institute except Department of Humanities.

Eligible Degree – Master's Degree in Engineering / Sciences / Management **–** for admission to Ph.D. in Engineering / Sciences / Management

Minimum Qualification: Minimum 60% marks or 6.5 CGPA in the qualifying examination for general category and a mere pass for SC/ST candidates. Candidates in the final semester of the qualifying degree programme are eligible to apply. Mark sheets covering up to VII semester B.Tech./III Sem. M.Sc./V Sem.B.Sc./III Sem. M.Tech. should be enclosed. Provisional certificates, in such cases, along with the Mark sheet from the final semester should be submitted by August 14,2007.

IV. STIPENDS / FELLOWSHIPS: Limited number of GATE stipends is available, subject to Institute / AICTE guidelines. Financial support to M.S. candidates (Full-Time) will be offered in areas of sponsored research. Limited number of Institute stipends for M.S. Candidates (Full Time) is under consideration. Limited number of Ph.D. (Full-Time) stipends is available, subject to Institute / MHRD guidelines.

V. BRIEF DESCRIPTION OF THE PG PROGRAMMES

M.TECH. DEGREE PROGRAMMES

1. ENERGY ENGINEERING

The main objective of this course is to strive for efficient production, utilization and management of energy. The various aspects connected with resources, economics, management and technology will be presented and will be followed by discussions. Main emphasis will be given to the identification of appropriate technologies for the efficient production, distribution and use of energy.

This is an interdisciplinary programme with faculty drawn from Departments of Chemical Engineering, Architecture, Electrical & Electronics Engineering and Mechanical Engineering of the Institute for delivering lectures and organizing experimental work. Guest lectures by experts from B.H.E.L., and other industries are arranged. Candidates admitted to this course are eligible to apply for the MNES scholarship (Rs. 5000/- per month and a contingency grant of Rs. 2400/- for the entire period) provided they have a minimum valid GATE score of 75%.

2. PLANT DESIGN

With the rapid development of chemical industries based on petroleum, coal and alcohol, process design of chemical process equipment has assumed importance. The design and fabrication of heat, mass and momentum transfer equipments will be taught along with chemical reaction engineering and process development. This specialization leads to employment in private and public sectors, heavy chemicals and petroleum industries, design and manufacturing units and research institutions.

3. PROCESS CONTROL & INSTRUMENTATION

In every industry with great focus on quality, controls and instrumentation has acquired significant importance. Emphasis is laid on the dynamics of various process equipment and their control. Recent trends in Distributed Control Systems and multivariable control will be dealt with extensively.

This is an interdisciplinary programme. Faculty from Chemical Engineering Department and Instrumentation and Control Engineering Department will deliver lectures and organize practical classes.

4. TRANSPORTATION ENGINEERING AND MANAGEMENT

While rapid strides have been made in the design and construction of roads, only recently an awareness is felt that Transportation and Traffic Management needs a scientific approach to effect savings in cost and time of transportation. In this course, both engineering and management aspects of transportation systems with emphasis on road transportation are dealt with. The course includes subjects such as Transport Management Economics, Transportation and Land Use Planning, Financial and Personnel Management, Traffic Engineering and Pavement Design. Computer knowledge is imparted in the areas of CAD in Transportation Engineering, Computer Simulation and Geographical Information Systems. Almost all the subjects have IT content and hands on training on computers will be given.

The students have wide scope for placement in Multi-National companies specializing in Transportation Consultancy, Govt. Organizations such as Highways and Railways, Educational Institutions, etc. Professionals working in the transport field can also upgrade their knowledge with the latest techniques.

5. STRUCTURAL ENGINEEING

Structural Engineering is a core specialization in Civil Engineering. There is a growing demand for specialists in Structural Engineering. The aim of this course is to fulfill this need. Practicing engineers will find the course very useful and interesting. It will enable them to update their knowledge in the field of structural behavior and design. The curriculum has been so designed as to give exposure to the students on areas of structural analysis, design, detailing and construction. The course also includes the use of general purpose application oriented computer software in the field of Structural Engineering using finite element analysis and optimization techniques. The students have ample scope for placement in construction industries and educational institutions.

6. ENVIRONMENTAL ENGINEERING

Environmental engineering is the branch of engineering that is concerned with protecting the environment from the potentially deleterious effects of human activity, protecting human beings from the effects of adverse environmental factors and improving environmental quality for human health and well being. The objective of the course in environmental engineering is to graduate professional engineers with leadership qualities in engineering aspects of land and water management and environmental assessment, and skills in water supply, wastewater treatment, land reclamation and solute transport. Such engineers should be able to converse scientifically with biologists, ecologists and resource managers, have analytical, synthesis and numerical skills, and have experience in computing, field and laboratory techniques relating to natural resources. With these skills, graduates will be able to play a leading role in developing engineering solutions to a wide range of problems and opportunities within an ecologically sustainable context. The course has been designed to meet the requirements of industry, consultancy services, academic and R & D organizations related to Environmental Management, treatment of effluents, control of emissions and remediation of contaminated environment. The programme provides ample choice of

electives to enable students to develop deeper in to various aspects related to this discipline, i.e. Environmental Monitoring and Modeling, Environmental Impact Assessment, Environment Biotechnology, Industrial Air & Water Pollution Control, Ecology, Clean Technology and Hazardous Waste Management.

7. COMPUTER SCIENCE

The M.Tech. Programme in Computer Science is aimed at providing a comprehensive overview of the recent developments in the various frontier areas of computer science including Computer Architecture, Software Systems, Parallel and Distributed Computing and Networking Technology. To provide a sound basis, sufficient amount of theoretical input is also given to the students. Another feature of the programme is that the students will have ample opportunity to carry out software development using the modern computing facilities available in the campus. Students who successfully complete the programme can be employed immediately as Systems Analysts Software Engineers or Computer Engineers in the industry. Alternatively, they can pursue higher studies in institutions of repute in India and abroad.

8. POWER SYSTEMS

This specialization aims at training graduate engineers in the field of Power Systems. It deals with the state of the art techniques in Power System analysis, operation, control, stability, planning, reliability and forecasting. The course also covers subjects on High Voltage DC Transmission, Industrial Electronics and Controls, Power Electronics and FACTs controllers. Elective courses on Fuzzy logic, Renewable Energy Systems, which are very much needed for today's power system engineers are also offered. Projects of practical relevance in these areas are carried out by the students in the third and fourth semester of the course. Students would extensively use versatile software packages such as ETAP, Labview, Proteus Professionals, Power System Block Set, ANN, SIMULINK and other MATLAB tools. This specialization will lead to employment in Electricity Boards and other public and private power industries, Software companies and R & D organizations dealing with computer applications to power systems.

9. POWER ELECTRONICS

This post graduate programme is designed for training graduate engineers in the field of Power Electronics and Drives. Starting from power converters, the programme deals with Advanced Power Electronics circuits, Programmable Digital controllers for power electronics applications, flexible AC transmission Systems and number of elective courses such as Modeling and analysis of Electrical Machines, Embedded Control of Electrical Drives etc. Students would extensively use versatile software packages such as Lab view, Proteus Professionals, Power system Block set, ANN, SIMULINK and other MATLAB tools and also would be given extensive training in Power Electronics and Drives laboratory equipped with modern measuring instruments and facilities for building various control circuits. This specialization will lead to employment in public and private power industries, Software companies and R&D organizations engaged in the development of software tools for simulation of power electronic circuits and systems.

10. COMMUNICATION SYSTEMS

The communication technology in the country has registered a remarkable growth during recent years and is surging ahead to capture a fair share of the global market. The requirement is now for highly qualified and motivated communication professionals who can keep pace with latest developments in the field. The Post-graduate programme in Communication Systems is designed to meet the various requirements. The focus of the programme is on a thorough and in-depth study of communication theory from a signal processing perspective as exemplified by course like Advanced Digital Signal Processing, Coherent Optical Communication, High Speed Communication Networks and Wireless Personal Communication. A broad theoretical base is provided through courses like Linear Operators and Integral Equations, Probability and

Stochastic Process and Signal Detection and Estimation. The students also undergo laboratory programmes on the design arid implementation of communication subsystems based on DSP modules Fiber-Optic devices and MIC Components besides devoting a major part of the Third semester and the entire fourth semester for project work.

11. VLSI SYSTEM

The advent of VLSI circuits with complexities of the order of a few tens of millions gates in a single IC has enabled the implementation of a complete system on a single chip (SOC). This has opened up several issues in the design, implementation and testing of systems in SOCs containing either analog and digital blocks or embedded systems containing RISC and DSP blocks. In order to cater to the requirements of the advanced SOC design, M.Tech. programme in VLSI system places equal importance on imparting both theoretical and practical knowledge on the design, development and testing of systems using VLSI CAD tools. These include FPGA CAD tools from Xilinx and Altera, Modelsim, Leonardo Spectrum, Place & Route tools, Mixed Simulation Tools such as Pspice and Saber, PCB layout tools such as ORCAD and ASIC design tools.

Since the course is open to all graduates from circuit branches, the curriculum consists of some core courses which impart the basic concepts on the VLSI system and has a number of electives which enable them to diversify in a particular area based on their background, skill and interest.

12. THERMAL POWER ENGINEERING

This programme is designed to provide a sound and in-depth training in various aspects of design, manufacture, testing, control and evaluation of Thermal Power Equipment. Thermal Power Plants have an increasingly dominant role to play in the vital power generation sector. The course content aims at developing the necessary analytical and technical competence among engineers in this area.

13. INDUSTRIAL SAFETY ENGINEERING

The Factories act stipulates requirements for ensuring safety in industry. The revised and updated provisions of the Act obligate the employment in industry of full-time Safety Officers who should be adequately qualified as such.

The aim of the course in Industrial Safety Engineering is to train personnel who already possess a first degree in engineering by providing them the scientific know-how and orientation in theory and practice in the area of safety, health and hygiene to make them fit into managerial positions. The course is specially suited to sponsored personnel from industry.

14. WELDING ENGINEERING

The M.Tech. (Welding Engineering) programme has been organized in collaboration with Welding Research Institute of B.H.E.L, Tiruchirappalli. This course has been designed to meet the requirement of experts in the field of welding. The students go through two semesters of course work learning various subjects related to Metallurgy / Welding. Third and Fourth semesters are dedicated exclusively to Project work.

The subjects on metallurgy include physical metallurgy and experimental techniques. The subjects on Welding include Welding Processes, Welding Metallurgy, Welding Codes and standards, Electrical aspects of Welding and Design of Weldments. The students are particularly encouraged to get a feel for various welding techniques and also get exposed to Failure Analysis.

15. MATERIALS SCIENCE

The M.Tech. (Materials Science) programme has been designed to meet the requirements of experts in the fields of Manufacturing, Material Development and Materials Research. The students go through two semesters of course work, learning various subjects related to Metallurgy / Material Science. Third and fourth semesters are dedicated exclusively to Project work.

The subjects on Metallurgy include Metallic Materials and Experimental Techniques. The subjects on Materials Science include Engineering Materials, Ceramic Materials, Polymers and Composites, and Electrical, Magnetic and Opto-electronic Materials. The students are particularly encouraged to get a feel for the latest developments in Engineering Materials.

16. MANUFACTURING TECHNOLOGY

Present day manufacturing industries need engineers having adeptness of know-how on the state-of-the art technologies. The special features of the course are the inclusion of subjects like Computer based machine tool technology, advanced foundry and welding technology, inspection techniques and gauging procedures, mechanics of metal forming, robotics, manufacturing management and computer based subjects like CAD / CAM, FMS, CIM and IMS tolerance technology, design for manufacture and assembly etc. The department has CAD / CAM laboratory equipped with UNIGRAPHICS, Pro/E, Ideas, Ansys and CNC laboratory equipped with sinumerik and Fanuc Control machines like PCMILL-55, PCTRUN-55, Vertical Machining Center (VMC), STC-15, Leadwell-T5 and Triac Machines.

17. INDUSTRIAL ENGINEERING

The Post-graduate programme in Industrial Engineering is designed with features on the techniques of Industrial Engineering like Materials Requirement Planning (MRP), Manufacturing Resource Planning (MRP II), Enterprise Resource Planning (ERP), Just in Time (JIT), Total Quality Control (TQC), (FMS), Work Design and Facilities Planning, advanced Operations Research, Analysis and control of manufacturing systems (ACMS), modelling and simulation etc., which are extensively being used in almost all types of industries for improving productivity. The department has a CAD / CAM Laboratory equipped with UNIGRAPHICS, PRO/F, Ideas and Ansys and simulation laboratory with software like CAFIMS, GPSS, Arena, Quest, etc. which are applicable for this programme.

18. NON-DESTRUCTIVE TESTING

NDT plays a vital role in the quality control of the products of various engineering industries and there is a great demand for professionally qualified NDT personnel in industry. Although NDT has been recognized as a unified field of technology for over 30 years there is no course offered in our country at present at a professional level in this area covering all its aspects. This four semester M.Tech. degree programme covers all aspects of NDT, both in theory and practice, at an advanced level. This programme is offered in collaboration with BHEL, Tiruchirappalli.

M.Sc. PROGRAMMES

1. APPLIED CHEMISTRY

Organic: Stereochemistry, Carbonyls, Carboxylic acids, Esters, Heterocyclics, Amines, Nitrocompounds, Phenols, Carbohydrates, Natural products, Molecular rearrangements, Reaction mechanisms and Dyes. Inorganic: Co-ordination Chemistry, Reaction mechanisms, Metal Carbonyls, Nitrosyls, Nuclear chemistry, Radioactivity, Solid state, Inorganic Polymers, Silicates, Clathrates, Safety matches, Acids and Bases, Pollution of air and water. Physical: Thermodynamics, Phase equiliburia, Electrochemistry, Chemical Kinetics, Catalysis, Acids and base, Photochemistry, Radiation Chemistry, Analytical: Laboratory hygiene and safety, Data analysis, Separation and purification Techniques, Principle of Volumetric and gravimetric analysis Thermal analysis.

2. OPERATIONS RESEARCH AND COMPUTER APPLICATIONS

The programme is a unique combination of Operations Research, Computer Applications and Management subjects. The two year Post Graduate programme consists of four semesters with equal weight age for subjects in areas of Operations Research and Computer Applications.

3. APPLIED PHYSICS

The programme emphasizes on basic physical Concepts of important and emerging areas of Science and Technology including Non/destructive Testing, Photonics, thin – film technology, nanoscience & technology, Non-linear applications and molecular bio physics. The department is complemented with good infrastructure and highly qualified and experienced faculty members to carryout post graduate projects as well as research work in the above areas.

CENTRAL LIBRARY

The Institute has a modern Central Library with more than one lakh documents consisting of Technical books, Reports, Indian Standard codes and back volumes of Journals. The Library subscribes to 320 periodicals besides a holding of 16000 Back volumes of journals. The Library also has a Book Bank Section with about 15,000 Text Books, a Reprographic (Xerox) Section, Educational Video Cassettes and 31 Audio Cassettes.

CD-ROM Work station:

At present 4 CD-ROM Work station (of which 3 are Multimedia Workstations) are set up in the Library. The Library subscribes to the following CD-ROMs which cover the entire engineering field and physics.

* DIALOG ON DISC/COMPENDEX PLUS (ENGINEERING INDEX)

* UMI/PROQUEST/INSPECT ON DISC from 1996 to the present.

Under the Centres of Excellence Scheme, the library has produced, the McGraw-Hill multimedia Encyclopedia of Science and Technology on CD-ROM, D.K. Multimedia and Principles of Instrumentation and Control (Fisher Rosemount Educational Services).

Besides these regular CD-ROM databases, the Library also has a collection of more than 50 CD-ROM databases from books and journals.

Library Automation

The Library functions such as Circulation Control systems/ Cataloguing systems and Serials control have been automated.

The Computer Support Group has developed an integration software package called LIRS+ for library Operations. At the first phase of LIRA+, the ON-line Public Access Catalogue (OPAC) has been implemented and made available to all the NITT LAN users. Automated circulation control system has been implemented in the second phase of LIRS+.

Special Services

The Library is providing the following special services besides the usual Library Services:

* Bulletin Board Services

* News Headlines with Weekly updates

* Current Awareness Services

* CD-ROM Search Services

* Audio-Visual Services (Educational video cassettes)

DUE DATE FOR PAYING THE FEES (Admission letter will have further details)

1. Institute fees (includes Institute fee, Hostel fee, Mess charge and Exam. Fee) can be paid without fine up to 21 days from the date of reopening of each semester. Remittance beyond the last date will be accepted with fine only. CANDIDATES JOINING NITT (New admissions) have to pay all fees at the TIME OF ADMISSION itself.

2. The names of such of those students who fail to pay the Institute fees by the above dates, will be struck off the rolls and will be readmitted only after full settlement of fees which are due. A readmission fee of Rs.400/- will also be charged.

MESS CHARGES (Admission letter will have further details)

A deposit will be collected once in six month at the rate of Rs.8,000/- per semester. The deposit for the first semester along with other hostel fees viz Rs.4,250/- should be remitted by the students in the form of Demand Draft drawn in favour of "Director", National Institute of Technology, Tiruchirappalli-620 015. at the time of reopening. Hostel accommodation will be provided only on the production of Demand Draft. For the subsequent semesters mess charge deposit viz Rs.8,000/- per semester should be remitted within 15 days from the commencement of each semester without fine and up to 25^{th} day with a fine of Rs.5/- per day. If this deposit is not paid within this period the defaulter will not be allowed to dine in the Mess.

INSTRUCTION FOR SENDING APPLICATION FOR ADMISSION

1. Application for admission to the National Institute of Technology, Tiruchirappalli, should be submitted to the Dean (Academic), National Institute of Technology, Tiruchirappalli-620 015, Tamil Nadu, so as to reach NITT on or before **4th May 2007.**

2. All entries in the application can be either typewritten or handwritten.

3. At the time of admission of the selected candidates if any of the filled up particulars in the application is found to be incorrect, the admission will be cancelled.

For each Department separate application along with the prescribed fee should be submitted, if the candidate wishes to be considered for more than one Department.

LAST DATE FOR RECEIPT OF FILLED UP APPLICATION IS MAY 4,2007

Note: The fees noted in the prospectus are tentative and subject to modification as per central Government directions and has to be confirmed at the time of admission.

Indicative Syllabus for Entrance Examination 2007

M.Sc. PROGRAMMES

The test will be of 90 Minutes duration and will have questions in the following areas.

1. OPERATIONS RESEARCH AND COMPUTER APPLICATIONS

45 Questions will be from undergraduate level Mathematics and Statistics. Topics are Calculus. Algebra, Sequences and Series, Co-ordinate Geometry, Matrices and Linear Algebra, vector Analysis, Real and Complex Analysis, Probability, Statistics, Estimation Linear Programming, Transportation and Assignment problems.

There will be 15 questions from Programming logic and deductive reasoning (analytical questions)

2. APPLIED CHEMISTRY

Organic : Stereochemistry, carbonyls, Carbosylic acids, esters, Hetercyclics, Amines, Nitrocompounds, Phenols, Carbohydrates, Natural Products, Molecular rearrangements, Reaction mechanisms and Dyes. Inorganic: Co-ordination Chemistry, Reaction mechanisms, Metal carbonyls, nitrosyls, Nuclear chemistry, Radioactivity, solid state, Inorganic polymers, silicates, Clathrates, Safety matches, Acids and Bases, Pollution of air and water. Physical : Thermodynamics, phase equiliburia, Electrochemistry, Chemical Kinetics, Catalysis, Acids and bases, Photochemistry, Radiation Chemistry. Analytical : laboratory hygiene and safety, Data analysis, Separation and purification Techniques, principle of Volumetric and gravimetric analysis, Thermal analysis.

3. APPLIED PHYSICS

Mathematics, Mechanics, Properties of Matter, Heat & Thermodynamics, Sound, Optics, Electricity & Magnetism, Electronics, Modern Physics, Computer Programming.

FEE STRUCTURE FOR 2007-2008 (Tentative)
INSTITUTE FEE / Per Annum

	Rs.	
PG Tuition fees	15,000/-	
Computer / Library fees	3,000/-	
Student Activity fees	3,000/-	
Admission fees	200/-	(at the time of admission only)
Deposits		
Caution Deposit fees	500/-	(at the time of admission only)
Library Deposit fees	3,000/-	(at the time of admission only) refundable.
Examination fees	700/-	Per annum
Total	25,400/-	

HOSTEL FEE

	Rs.	
Hostel Admission fees	500/-	(at the time of admission only)
Hostel Deposit	2,000/-	(at the time of admission only)refundable
Mess advance/Establishment charges/	8,000/-	per semester
Room rent/Electricity charges	1,750/-	per semester
Total	12,250/-	

In case of queries, contact deanac@nitt.edu

DIRECTOR