



NATIONAL INSTITUTE OF TECHNOLOGY, TIRUCHIRAPPALLI – 620 015.  
OFFICE OF THE DEAN (ACADEMIC)

LIST OF COURSES OFFERED (M.Tech. / M.Sc. / MCA) / Odd Semester (2010)

**M.Tech. (ENERGY ENGINEERING)**

Code	Course of Study	Credit	Slot	Name of the Faculty
CL701	Environmental Engineering And Pollution Control	3	A	Dr. M. Premalatha
CL707	Thermal Engineering	3	C	From Chemical Engineering Department
CL703	Fuels And Combustion Technology	3	D	Dr. K. N. Sheeba
CL705	Energy Process Modeling & Simulation	3	E	Dr. H. J. Prabhu
CL717	Design of Heat Transfer Equipments	3	F	Dr. G. Arthanareeswaran
CL713	Environmental Impact Assessment and Economic Analysis	3	G	Dr. S. Saravanan
CL709	Environmental Engineering Laboratory	2	Q	Dr. H. J. Prabhu

**M. Tech. (CHEMICAL ENGINEERING)**

Code	Course of Study	Credit	Slot	Name of the Faculty
CL605	Bioprocess Engineering	3	A	Dr. H. J. Prabhu
CL603	Process Modeling & Simulation	3	B	Dr. A. Seshagiri Rao
CL601	Advanced Process control	3	C	Dr. T. K. Rathakrishnan
CL607	Chemical Reactor Analysis & Design	3	D	Dr. P. Sivashanmugam
CL608	Pintch Technology	3	E	Dr. J. Sarat Chandra babu
CL611	New Separation Techniques	3	F	Dr. K. M. Meera S. Begum

**M.Tech. (PROCESS CONTROL & INSTRUMENTATION)**

Code	Course of Study	Credit	Slot	Name of the Faculty
CL651	Instrumentation	3	A	Dr. G. Uma
CL603	Process Modeling and Simulation	3	B	Dr. A. Seshagiri Rao
CL601	Advanced Process Control	3	C	Dr. T. K. Radhakrishnan
CL653	Modern Control System	3	D	Dr. K. Dhanalakshmi
CL674	Chemical Process Flow sheeting	3	E	Dr. P. Kalai Selvi
CL661	Chemical process systems	3	F	Dr. M. Arivazhagan
CL659	Process Control Laboratory	2	P	Dr. T. K. Radhakrishnan

**M. Tech. (TRANSPORTATION ENGINEERING AND MANAGEMENT)**

Code	Course of Study	Credit	Slot	Name of the Faculty
MA601	Numerical Methods and Applied Statistics	3	A	Dr. Hemalatha Thiyagarajan
CE603	Transportation Systems	3	B	Dr. Samson Mathew
CE601	Highway Traffic Analysis and Design	3	C	Dr. S.Moses Santhakumar
CE602	Pavement Analysis and Design	3	D	Mrs. V. Sunitha
CE611	Geographical Information Systems and Remote Sensing	3	E	Dr. Nisha Radhakrishnan
HM712	Personnel Management and Labor laws	3	F	G. Nagasubramaniyan
CE604	Traffic and Pavement Engineering Laboratory	2	P	Mrs. V. Sunitha

**M. Tech. (STRUCTURAL ENGINEERING)**

Code	Course of Study	Credit	Slot	Name of the Faculty
MA751	Applied Mathematics	3	A	Dr. V. Shanthi
CE653	Structural Dynamics	3	B	Dr. K. Baskar
CE651	Theory of Elasticity and Plasticity	3	C	Dr. P. A. Krishnan
CE652	Matrix Methods of Structural Analysis	3	D	Dr. C. Natarajan
CE662	Analysis of Deep Foundation	3	E	Dr. S. Jayalakshmi
CE661	Advanced Concrete Technology	3	F	Dr. J. Karthikeyan
CE654	Structural Engineering Laboratory	2	Q	Dr. P. Jayabalan

**M. Tech. (ENVIRONMENTAL ENGINEERING)**

Code	Course of Study	Credit	Slot	Name of the Faculty
MA601	Numerical Methods and Applied Statistics	3	A	Dr. Hemalatha Thiyagarajan
CE702	Physico-chemical Process for Water and Wastewater Treatment	3	B	Dr. G. Swaminathan
CE703	Solid and Hazardous Waste Management	3	C	Dr. S. T. Ramesh
CE701	Environmental Chemistry and Microbiology	3	D	Dr. G. Swaminathan
CE715	Geographical Information Systems and Remote Sensing	3	E	Dr. Nisha Radhakrishnan
CE711	Water and Air Quality Models	3	F	Dr. R. Gandhimathi
CE704	Environmental Quality Measurements Laboratory	2	X	Dr. S. T. Ramesh

**M. Tech. (COMPUTER SCIENCE)**

Code	Course of Study	Credit	Slot	Name of the Faculty
CS705	Advanced Data Structures And Algorithms	3	A	Dr. K. Viswanathan Iyer
CS715	Advanced network principles and protocols	3	B	Dr. S Selvakumar
CS701	Advanced Concepts in Operating Systems	3	C	Dr. S. Mary Saira Bhanu
CS703	Parallel Computer Architecture	3	D	Prof. N. Ramasubramanian
CS711	Fault tolerant computing systems	3	E	Mrs. R. Leela Velusamy
CS713	Design and analysis of parallel algorithms	3	F	Dr. C. Mala
CS707	Software Systems Laboratory	2	Q	Dr. S. Mary Saira Bhanu

**M.Tech. (POWER ELECTRONICS)**

Code	Course of Study	Credit	Slot	Name of the Faculty
EE672	System Theory	3	A	Dr. V. Sankaranarayanan
EE654	Power Converters	3	B	Dr. K.Sundareswaran
MA603	Optimisation Techniques	3	C	From Maths Department
EE656	Industrial Control Electronics	3	D	Dr. N. Ammasaigounden
EE615	Analysis and Design of Artificial Neural Networks	3	E	Dr. Sishaj P.Simon
EE627	Digital Signal Processing & Applications	3	F	Dr.M.Jayabharatha Reddy
EE657	Power Converters Laboratory	2	P	Dr. G. Saravana Ilango Dr. N. Kumaresan

**M. Tech. (POWER SYSTEMS)**

Code	Course of Study	Credit	Slot	Name of the Faculty
EE601	Advanced Power System Analysis	3	A	Ms. M.Venkata Kirthiga
EE603	Power Conversion Techniques	3	B	Dr. C. Nagamani
MA603	Optimization Techniques	3	C	From Maths Department
EE605	Power System Stability	3	D	Dr. S.Arul Daniel
EE615	Analysis and Design of Artificial Neural Networks	3	E	Dr. Sishaj P.Simon
EE627	Digital Signal Processing & Applications	3	F	Dr. M. Jayabharatha Reddy

**M. Tech. (COMMUNICATION SYSTEMS)**

Code	Course of Study	Credit	Slot	Name of the Faculty
EC601	Probability and Stochastic Processes	3	A	Mr. E.S. Gopi
EC607	Microwave Circuits	3	B	Dr. S. Raghavan
EC661	Digital Signal Processing Structures for VLSI	3	C	Dr. G. Lakshminarayanan
EC605	High Speed Communication Networks	3	D	Prof. B. Malarkodi
EC603	Advanced Digital Signal Processing	3	E	Dr. P. Palanisamy
EC659	Modeling & Synthesis with Verilog HDL	3	F	Mr. G. Thavasi Raja
EC615	Digital Image Processing	3	G	Mr. R. Malmathanraj
EC609	Microwave and MIC Laboratory	2	Q	Dr. S. Raghavan / Ms. N. Gunavathi

**M. Tech. (VLSI SYSTEMS)**

Code	Course of Study	Credit	Slot	Name of the Faculty
EC653	Basics of VLSI	3	A	Ms. R. K. Kavitha
MA617	Graph Theory and Discrete Optimization	3	B	Dr. T. N. Janakiraman
EC661	Digital Signal Processing Structures for VLSI	3	C	Dr. G. Lakshminarayanan
EC655	Digital System Design	3	D	Ms. V. Sudha
EC651	Analog VLSI	3	E	Dr. B. Venkataramani
EC659	Modeling & Synthesis with Verilog HDL	3	F	Mr. G. Thavasi Raja
EC615	Digital Image Processing	3	G	Mr. R. Malmathanraj
EE605	High speed Communication networks	3		Prof. B. Malarkodi
EC657	HDL Programming Laboratory	2	Q	Dr. G. Lakshminarayanan

**M.Tech. (INDUSTRIAL SAFETY ENGINEERING)**

Code	Course of Study	Credit	Slot	Name of the Faculty
ME653	Safety Management	3	A	Dr. S. P. Sivapirakasam,
ME672	Environmental Pollution Control	3	B	Dr. S. Suresh
ME657	Safety in Chemical Industry	3	C	Mr. N. Sivashanmugam,
MA611	Probability and Statistics	4	D	Dr. R. Ponalagusamy
ME655	Occupational Health and Hygiene	4	E	BHEL
ME659	Regulation for Health, Safety & Environment	3	F	BHEL

**M.Tech. (THERMAL POWER ENGINEERING)**

Code	Course of Study	Credit	Slot	Name of the Faculty
ME605	Advanced Heat Transfer	3	A	Mr. S. Venkatachalapathy
ME601	Fuels, Combustion and Emission Control	3	B	Dr. J. Sarangan
ME607	Analysis of Thermal Power Cycles	3	C	Dr. AR. Veerappan
MA609	Mathematical Methods	3	D	Dr. V. Lakshmana Gomathi Nayagam
ME603	Advanced Fluid Mechanics	3	E	Dr. K. R. Balasubramanian
ME631	Analysis and Design of Pressure Vessels	3	F	Dr. L. A. Kumarasamidhas
ME633	Advanced IC Engines	3	F	Dr. R. Anand

**M.Tech. (MATERIALS SCIENCE AND ENGINEERING)**

Code	Course of Study	Credit	Slot	Name of the Faculty
MA613	Engineering Mathematics	4	A	Dr. K. Murugesan
MT601	Physical Metallurgy	3	B	Dr. V. Sivan
MT655	Thermodynamics and Kinetics	3	C	Dr. S. Natarajan
MT605	Materials Characterization	3	D	Dr. K. Siva Prasad
MT615	Selection of Materials	3	E	Mr. S. Jerome
MT655	Non Destructive Testing	3	F	Dr. S. P. Kumaresh Babu
MT613	Mechanical Behavior of Materials	3	G	Dr. K. S. Pandey
MT657	Metallography Laboratory	2	P	Dr. N. Ramesh Babu

**M.Tech. (WELDING ENGINEERING)**

Code	Course of Study	Credit	Slot	Name of the Faculty
MA613	Engineering Mathematics	3	A	Dr. K. Murugesan
MT601	Physical Metallurgy	3	B	Dr. V. Sivan
MT603	Welding Processes - I	3	C	Dr. S. Muthukumaran
MT605	Materials Characterization	3	D	Dr. K. Siva Prasad
MT615	Selection of Materials	3	E	Mr. S. Jerome
MT655	Non Destructive Testing	3	F	Dr. S. P. Kumaresh Babu
MT613	Mechanical Behavior of Materials	3	G	Dr. K. S. Pandey
MT619	Physical Metallurgy Laboratory	1	P	Dr. S. Kumaran

**M.Tech. (INDUSTRIAL ENGINEERING)**

Code	Course of Study	Credit	Slot	Name of the Faculty
PR651	Advanced Operations Research	3	A	Dr. A. Noorul Haq
PR653	Analysis and Control of Manufacturing Systems	3	B	Dr. P. Asokan
MA611	Probability and Statistics	4	C	Dr. R. Ponnalagusamy
PR664	Production Management System	3	D	Dr. P. Parthiban
PR663	Facilities Planning	3	E	Dr. R. Jeyapaul
PR669	Project Management	3	F	Dr. M. Duraiselvam
PR659	Operations Management Lab.	2	P	Dr. S. Kumanan Dr. R. Jeyapaul

**M. Tech. (MANUFACTURING TECHNOLOGY)**

Code	Course of Study	Credit	Slot	Name of the Faculty
PR605	Manufacturing Management	3	A	Mr. S. Prasanna Venkatesan
MA609	Mathematical Methods	3	B	Dr. V. Lakshmana Gomathi Nayagam
PR601	Tool Engineering and Design	3	C	Dr. S. Kumanan
PR603	Casting and Welding Technology	3	D	Dr. P. Sathiya
PR625	Materials Technology	3	E	Dr. R. Narayanasamy
PR611	Tolerance Technology	3	F	Dr. K. Panneerselvam
PR621	Finite Element Method	3	F	Dr. V. Senthilkumar

**M. Tech. (NON DESTRUCTIVE TESTING)**

Code	Course of Study	Credit	Slot	Name of the Faculty
PH601	Radiographic Testing and Radiation Safety	3		Dr. N. V. Giridharan
PH603	Basic Metallurgy and Fracture Mechanics	3		Dr. R. Justin Joseyphus
PH605	Surface NDE Methods	3		Dr. S. Manivannan
PH609	Fabrication Technology	3		Dr. N. Baskaran
PH611	Digital Signal Image Processing	3		Dr. D. Sastikumar
PH607	Practical – I [Radiography]	2		-

**M. Sc. (OPERATIONS RESEARCH AND COMPUTER APPLICATIONS)**

Code	Course of Study	Credit	Slot	Name of the Faculty
CA761	Probability, Statistics and Estimation	3	A	Mr. U. Srinivasulu Reddy
CA763	Discrete Mathematics	3	B	Dr. A.V. Reddy
MA615	Linear Programming and Simulation	3	C	Mr. U. Srinivasulu Reddy
CA767	Computer Organization and Architecture	3	D	Mrs. B. Janet
CA769	Programming in C and C++	3	E	Mrs. S. Sangeetha
CA751	Linear Programming Using LINDO and C	2	P	Mr. U. Srinivasulu Reddy
CA753	Programming Lab in C and C++	2	Q	Mrs. S. Sangeetha

**M. Sc. (CHEMISTRY)**

Code	Course of Study	Credit	Slot	Name of the Faculty
CH601	Stereochemistry and Reaction Mechanisms	4		Dr. S. Velmathi
CH603	Coordination and Transition Metal Chemistry	4		Dr. G. Venkatesh Prabhu
CH605	Quantum Chemistry and Group Theory	3		Dr. S. Anandan
CH607	Fundamentals of Analytical Chemistry	3		Dr. V. M. Biju
CH609	Organic Chemistry Practical (Quantitative Analysis)	2		Dr. S. Velmathi
CH611	Inorganic Chemistry Practical (Qualitative Analysis)	2		Dr. G. Venkatesh Prabhu

**M.Sc. (PHYSICS)**

<b>Code</b>	<b>Course of Study</b>	<b>Credit</b>	<b>Slot</b>	<b>Name of the Faculty</b>
PH651	Mathematical Physics	3	A	Dr. J. Hemalatha
PH653	Classical Mechanics	3	B	Dr. N. Baksaran
PH655	Quantum Mechanics	3	C	Dr. A. Chandrabose
PH657	Electronics	3	D	Dr. T. Balasubramanian
PH671	Digital Signal and Image Processing	3	E	Dr. D. Sastikumar
PH673	Programming in C and Numerical Methods	3	G	Dr. M. Ashok
PH659	Physics Laboratory - I	2	P	Dr. R. Sankaranarayanan

**MASTER OF COMPUTER APPLICATIONS**

<b>Code</b>	<b>Course of Study</b>	<b>Credit</b>	<b>Slot</b>	<b>Name of the Faculty</b>
CA711	Programming in C	3	A	Dr. Michael Arock
CA713	Discrete Mathematics	3	B	Dr. B. Ramadoss
CA715	Computer Organization and Architecture	3	C	Dr. A.V. Reddy
CA717	Accounting and Financial Management	3	D	Ms. V. Lavanya
MA621	Numerical and Statistical Methods	3	E	Dr. P.J.A. Alphonse
CA701	Numerical Computation and C Lab	2	P	Dr. P.J.A. Alphonse
CA703	Business Communication	2	Q	Dr. R. Gururaj

**Dr. S. T. Ramesh**  
**Associate Dean (Academic) / PG**